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### Editorial.....

It is heartening to note that our journal is able to sustain the enthusiasm and covering various facets of knowledge. It is our hope that IJMER would continue to live up to its fullest expectations savoring the thoughts of the intellectuals associated with its functioning .Our progress is steady and we are in a position now to receive evaluate and publish as many articles as we can. The response from the academicians and scholars is excellent and we are proud to acknowledge this stimulating aspect.

The writers with their rich research experience in the academic fields are contributing excellently and making IJMER march to progress as envisaged. The interdisciplinary topics bring in a spirit of immense participation enabling us to understand the relations in the growing competitive world. Our endeavour will be to keep IJMER as a perfect tool in making all its participants to work to unity with their thoughts and action.

The Editor thanks one and all for their input towards the growth of the **Knowledge Based Society**. All of us together are making continues efforts to make our predictions true in making IJMER, a Journal of Repute

**Dr.K.Victor Babu**  
**Editor-in-Chief**

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- (1) The old 'UGC Approved List of Journals' has been replaced with the new UGC-CARE Reference List of Quality Journals' (UGC-CARE List) and with effect from 14<sup>th</sup> June, 2019 research publications only from the journals indexed in UGC-CARE List should be considered prospectively for any academic purpose.
- (2) The Vice Chancellors, Selection Committees, Screening Committees, research supervisors and all/any expert(s) involved in academic/ performance evaluation and assessment are hereby advised to ensure that their decisions in the case of selections, promotions, credit-allotment, award of research degrees etc. must be based on the quality of published work rather than just numbers or a mere presence in peer reviewed or in old UGC Approved List of Journals which is available for reference on the UGC website.

(P.K. Thakur)

Secretary( Officiating)



## NEW TECHNIQUES FOR PRESERVATION OF MANUSCRIPT IN MODERN ERA

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### Introduction

India has a rich tradition of culture and ancient manuscripts are a repository of the multi-farious of knowledge<sup>1</sup>. Manuscripts have the basic historical proof and have great value of innovation. It can be created by one or more people. Libraries and manuscripts have a significant role in India for preserving the perishing manuscripts. They keep its convening, maintaining and providing access to the tradition of the country. With the gradual enlargement of style of writing and different type of writing materials were existed in India. Moreover some writing materials were also found like leaves, barks, stones, metals, wood, etc. Availability of material, nature and the purpose of writing, the writing materials changed from time to time.<sup>2</sup> The knowledge was preserved in both oral and written form for the future generations. Manuscripts are the original sources to know human historical background. For that there had numerous ways been available on various kinds of materials. The study of manuscripts reveals the social, cultural, historical, economic, artistic and aesthetic changes of development of our civilization.<sup>3</sup> Therefore we have to keep our culture and tradition as primary duty of us. Collecting and preserving the manuscripts is needed for today. Preserving of the Manuscripts is new idea of the knowledge of the human beings. These manuscripts available in different libraries, religious institutions and traditional houses etc. but they are deteriorating day by day. Manuscripts require special attention and care as it is a fragile nature. If due attention is not given for the preservation of manuscripts may disappear.

### Manuscripts

The word manuscript is derived from the Medieval Latin word ‘manu’ meaning ‘by hand’ and ‘scribere’ meaning ‘to write’<sup>4</sup>. According to Oxford English Dictionary, old English has the word “manuscribe” to denote writing with one’s own hand. Thus, any book or document written by hand is called manuscript. According to Harrod’s Librarians Glossary, “**Manuscript is a**

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<sup>1</sup> Introduction to Manuscriptology, Sivaganesha Murthy, P. 77

<sup>2</sup>Datta, B. K. (1970). New Delhi: Atma Ram and sons. P.104-106

<sup>3</sup>Saini, M. L. (1969). Manuscripts literature in Indian languages.ILA Bulletin, 5(1), 6.

<sup>4</sup> Brown, L. (Ed.). (1993). In The new shorter oxford English dictionary: On historical principles (3 rd edition) (Vol. 1).Oxford: Clarendon Press. P. 1691

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**document of any kind which is written by hand or text of a music or literary composition in hand written or typed script form and which in that form has not been reproduced in multiple copies.”<sup>5</sup>**For centuries, information has moved through human beings in various forms. Earlier information was oral and it was existed through handwritten records later. After came print technology in India, manuscripts have been allowing for distribution and preservation through this process.

### **Preservation**

The word preservation is now used as a wide sense of process in Manuscriptology. There is not much variation in the lexical meanings of the terms conservation and preservation and can be considered as synonyms.<sup>6</sup> Preservation generally means keeping an object from harmful effect such as loss, destruction etc. It is the important process of preservation for manuscripts. All actions of this process are taken for the deterioration of the manuscripts. It involves controlling the environment and conditions of use and may include treatment in order to maintain manuscripts. Varieties of collections of manuscripts are preserved as print and non-print materials for new generation. According to Harrod’s Librarian Glossary, **“All the management and financial considerations are including storage and accommodation provisions, staffing levels, policies, techniques and methods involving in preserving library and archive materials and the information contained in them”**.<sup>7</sup> Preservation activities are designed to minimize the physical and chemical deterioration of records and to prevent the loss of informational content. These activities include providing a stable environment for records of all media types of manuscripts. Using safe handling and storage methods, duplicating unstable materials to a stable media, copying potentially fragile materials into a usable format (e.g. microfilming or digitization), storing records in housings made from stable materials, repairing documents to maintain their original format etc were repaired.<sup>8</sup>

### **Conservation**

All actions of conservation are aimed at the preserving of manuscripts for the future. The purpose of conservation is to study, record, retain and restore the intervention. Conservation includes examination, documentation, preventive

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<sup>5</sup> Ray, P. (Comp.).(2005). Harrods’ librarians’ glossary and reference book (10th edition).England: Ashgate, P.445.

<sup>6</sup>V.Visalakshy, Fundamental of Manuscriptology, Dravidian Linguistics., P.87

<sup>7</sup>Ray, P. (Comp.) .(2005). op.cit.,p.555.

<sup>8</sup>Deshpande, N.J. ,&Panage, B. M. (1999), Digitalization of library materials. University News,

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conservation, preservation, restoration and reconstruction.<sup>9</sup> Conservation is the physical and chemical treatment of manuscripts. But in Manuscriptology the term conservation is used by many traditionalist to indicate the rectification of manuscripts so as to restore them, to the extent possible, to their original condition i.e., with restoration.<sup>10</sup> The purpose of conservation is to stabilize an object and to maintain it as close as possible to its original condition. The conservation is a term, which embraces three closed related term, preservation, protection and maintenance. According to Harrod's Librarian Glossary, "A term which denotes those specific policies and practices involving in protecting library and archive materials from deterioration, damage and decay including the methods and techniques devised by technical staff."<sup>11</sup> Conservators perform treatments the material as good as manner and they did not destroyed in their original form. They examine records and assess their condition and document treatments are given better than other performs on records. Treatment documentation is important factor of this process because it provides information to future archivists and conservators about what was done to records in the past. Some of the treatments that might be performed on a record include cleaning, removing damaging materials, mending tears, de-acidifying records at risk from acid deterioration, and providing custom housing made from stable materials.<sup>12</sup>

### Modern Techniques

Here more effective techniques were examined as traditionally but when Westerners came to India the traditional methods were diminished and begun the new examination of preserving the manuscripts in their new technology and their readymade chemical product. The traditional techniques of preservation came to be examined firstly in India by Portuguese, British and French colonist. Various modern techniques are practiced in libraries, museums and other manuscript repositories to preserve the manuscripts in India.

### Cleaning and Stains Removal

There were so many reasons for deterioration of the manuscripts. They are Faulty storage conditions, contact with water, dust and dirt. These are the main reason to stains on the manuscripts. Different methods have examined to clean and remove stains on the material.

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<sup>9</sup>Bodhke, P.S., &Nandurkar, K. N. (2003). Conservation of digital resources' H.K. Kaul&B. B. Das (Eds.), NACLIN, 14-17 October 2003, New Delhi: DELNET. P. 170-175

<sup>10</sup>Op.cit, visalakshy, p.87

<sup>11</sup> Ray, P. (Comp.). (2005). op.cit., p.165.

<sup>12</sup> U.S. National Archives, (n.d). Retrieved from <http://www.archives.gov/preservation/about.html>.



### **Dry Cleaning Method**

The dry cleaning methods are effective only to remove loose powdery dust, dirt, dead insect bodies or their eggs and fungus spores. Dry cleaning is done by brushing with the soft brush. Small hand held vacuum cleaner with brush as an attachment is also used to remove the dust from manuscripts. These methods can remove the surface stains and marks but dust stains penetrated into the paper fibres cannot be removed by dry methods.

### **Solvent Cleaning**

The stains and spots that cannot be removed by dry methods can be removed by treatment with solvent or by washing. The important solvents are ethyl alcohol, toluene, acetone, di-chloro ethylene, petroleum ether.<sup>13</sup> The stickiness of the leaves due to oil can be removed by acetone. The fungus on palm leaves can be cleaned with cotton swabs moistened with Restaurateur, ethanol. A wash in a mixture of glycerin and alcohol (1:1) can also be used for cleaning of palm leaves.<sup>14</sup>

### **Bleaching**

There are several stains on paper which are difficult to remove either by organic solvents or washing. The bleaching has been used for many years to remove such stains. It is also ruinous to many writing inks. Moreover, it does not add any strength to the paper treated, but may improve appearance.<sup>15</sup> Bleaching agents such as hypochlorites, chloramine-T, sodium chlorite (chlorine dioxide), potassium permagnate and hydrogen peroxide can be used for paper manuscripts.<sup>16</sup> Birch bark has natural stains and cannot be bleached.

### **Hypochlorites**

Hypochlorites are most common bleaching agents as these are cheap and can be easily manipulated. There are three types of hypochlorites, namely, potassium hypochlorite, calcium hypochlorite, and sodium hypochlorite. A freshly prepared 2% solution is used. It is necessary to wash chloramine-T from the paper as if it is retained in the paper, make it acidic. Although it is milder than hypochlorites, it may also fade ink and pigments.

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<sup>13</sup>Agrawal, O.P., &Barkeshli, M. (1984). Conservation of books, manuscripts and paperDocuments .Lucknow: INTACH, p. 112.

<sup>14</sup> Kishore, R. (1961). Preservation and repair of palm leaf manuscripts. The Indian Archives, 14, 72.

<sup>15</sup>Hummel, R.O., & Barrow, W. J. (1956).Lamination and other methods of restoration. Library Trends, 4(3), 259.

<sup>16</sup>Agrawal, O. P. (1984). op.cit., p.188.

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### **Chlorine Dioxide**

The other important bleaching agent used to remove water stains, foxing marks, mildew stains, etc. is chlorine dioxide. Get tens described three ways of employing sodium chloride. The simplest method is by giving bath in the mixture produced by adding formaldehyde solution to a solution of sodium chlorite in water. Secondly in soluble form, produced by dissolving the gas in water and this method of using dissolved chlorine dioxide is applied to the documents which cannot be immersed in water for longer duration and cannot tolerate washing later on. The third method is by using the chlorine dioxide gas. Special bleaching chamber is required for using chlorine dioxide gas.<sup>17</sup>

### **Hydrogen Peroxide**

A diluted solution of hydrogen peroxide has been used as a mild bleaching agent for manuscripts. A technique of preparing suspensions of hydrogen peroxide in ether is also used to make the action even milder and to ensure that it does not affect the writing or paint. The appearance of discolored palm leaves manuscripts are improved by bleaching with hydrogen peroxide.<sup>18</sup>

### **De-Acidification**

The process of neutralizing the acid in paper by raising its pH is called de-acidification. De-acidification does not return deteriorated paper to its original conditions, it simply aims to neutralize the acid in paper and add alkaline to it as a buffer to withstand future acid attack.<sup>19</sup> De-acidification process gas or liquid is introduced into a sealed chamber in which items to be de-acidified are stacked. A vacuum is introduced which forces the gas or liquid to penetrate throughout the items and react with the paper to neutralize the acid in it and leave an alkaline residue. Waste products are withdrawn from the chamber. The process requires scientific, technical and engineering expertise and expenses to establish. The de-acidification system for paper is divided into three important categories namely aqueous, non-aqueous and vapor-phase de - acidification.

### **Ammonia**

Kathpalia suggested the use of ammonia<sup>20</sup>. Manuscripts are exposed to vapours of ammonia in a closed chamber. Ammonia neutralizes the acidity

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<sup>17</sup>Gettens, R. J. (1952). The bleaching of stained and discoloured pictures on paper with sodium chlorite and chlorine dioxide. *Museum*, 5, 123-30.

<sup>18</sup>Agrawal, O. P. (1984).op.cit., p.43.

<sup>19</sup> Das, S. K. (2005). Indigenous practices and materials for conservation of manuscripts in libraries. In AnupamSah (Ed.) , *Indigenous Methods and Manuscript Preservation* (pp.159-168). New Delhi: National Mission for Manuscripts.

<sup>20</sup> Singh, R.S. (2000). *Conservation of documents in libraries archives and museum*. New



present in the paper. The neutralization is temporary, possibly because of the disassociation of ammonium salts. After sometime the ammonia volatilizes and documents become acidic again.

### **Flattening**

Flattening is the process of the removal of the folds, wrinkles or distortions. The document is wetted in the water bath, or with a moist brush, placed on smooth flat surface and folds is removed with a stiff flat brush and then is allowed to dry. Humidifying chamber is also used to damp the document. Afterwards the documents are placed between blotting paper and pressed slightly with hot iron till folds, creases and wrinkles are flattened.

### **Resizing**

All the papers are sized with animal glue, gelatin or starch, etc. during the process of its manufacturing. Sometimes on account of action of water, micro-organisms, the paper becomes weak due to decay of the sizing material. The strength of deteriorated paper is renewed by resizing. Resizing is done by dipping the sheet into a bath of 2% to 4% animal glue or gelatin.<sup>21</sup>

### **Minor Repairs**

Manuscripts which are slightly damaged can be repaired with tissue paper, impregnated tissue paper or with a paper pulp. For mending of tears a small strip of tissue is pasted from both sides of the tear. In order to mend the corners a handmade paper of similar thickness as the original is selected. The thickness of the original document as well as repair paper is reduced at the edges to be joined and a thin paste is applied on edges and is joined.

### **Reinforcement**

A fragile or a brittle manuscript due to different causes is to be reinforced physically to strengthen it for study, display or storage.

### **Reinforcement by Full Lining**

The manuscripts written on single side can be reinforced by pasting a Nepalese tissue paper, Japanese tissue paper or handmade rag paper at the back by dextrine, maida paste, starch paste or CMC paste. The size of the paper for full lining should be slightly larger than the size of the document to be pasted over. After the paste is dried, the oversize paper is trimmed to the size of the manuscript keeping a margin of 2-3 mm all around to safeguard the edges of the manuscripts.

### **Tissue Paper**

A manuscript on which writing is done on both sides and has not faded but show slight deterioration are reinforced with Japanese tissue paper by using

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Delhi: AdityaPrakashan, p.89.

<sup>21</sup>Hummel, R.O., & Barrow, W.J. (1956).Lamination and other methods of restoration. Library Trends, 4(3), 259-260.

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CMC paste or dextrin paste. Repairing is almost impossible when the palm leaf is damaged. Broken leaves can be protected by pasting tissue paper on both sides or keeping the pieces between glasses.

### **Chiffon Lamination**

Chiffon was used in early days for the repair of extremely brittle manuscripts. Chiffon piece is pasted on palm leaf with an adhesive containing dextrin and starch in a proportion of 1:1.

### **Inlaying or Framing**

Inlaying is the method of extending the margins of a single sheet of paper by framing it with a larger sheet. Since the rate of expansion and contraction due to change in temperature and humidity is seldom the same in two different papers, inlaying may result into the formation of undesirable cockles and a premature breakdown of original sheet. The process is slowing rather tedious and gives little added strength, is not a satisfactory method of restoration.

### **Lamination**

Paper documents which are written on both sides and are in bad state are repaired by lamination. Special equipment with controlled heat and pressure is used to laminate the paper. The cellulose acetate film developed in middle 1930 has a limited tear resistance. The process of lamination does not eliminate the harmful compounds frequently found in the paper which causes deterioration within the fibres. The lamination is not easily reversible and the high pressure and heat affects the documents. Hand lamination is also done by the use of acetone as a solvent without use of any special equipment and can avoid the danger of heat and pressure to the manuscript. In case of hand lamination the use of acetone can be harmful for the ink and dye which are affected by the acetone, and the same cannot be used.

### **Encapsulation**

Encapsulation is used for fragile items or where the heavy use is expected. The manuscript is encapsulated with the help of polyester film without using any chemical or heat and pressure. The manuscript is placed between two polyester films. The electrostatic charge of the polyester keeps the manuscript in position. The edges are sealed with double sided adhesive tape or using polyester sealing machine. It is completely reversible in nature without affecting the manuscripts. Encapsulation is safe for Palm leaf manuscripts, birch bark manuscripts as well as for paper manuscripts.<sup>22</sup>

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<sup>22</sup> Das, S.K. (2000). Encapsulation-an aid to modern conservation. Conservation of Cultural Property in India, 32& 33, 108.



## Conclusion

The art of preservation of manuscript is as old as history of man. Our predecessors had discovered the basic materials for writing and also reading process. They understood that plants and their products were better than other materials for writing and they used since ancient times for it and they kept as preservatives to manuscripts always. The original manuscripts were lost and did not get any from where in India. Discover of the microfilming was the advantage of preservation of manuscripts that it keeps as long period. India has a rich tradition of manuscript collection and its preservation method. Many various knowledge of India has flourished through the manuscripts. The field of knowledge spread across different parts of the world many years ago inspired by manuscripts. Some eminent scholars of the world collected manuscripts and they try to preserve it for new generation. But most of the manuscripts had not yet been found in different places. However, available manuscripts have been preserved by stakeholders as using many sources. Universities and other Institutions in Kerala are keeping a major role for preservation of manuscripts today. Two or three universities of Kerala are concentrating for preservation of manuscripts and they keep it as secured on the library by technology. Moreover they used various ways to protect the manuscripts. Depending on the weather conditions in Kerala, old methods of preserving and may also be modern techniques of manuscripts are no longer possible. Now the world of document preservation is gradually becoming more and more technology oriented. Therefore, it is necessary to protect them using the latest technology, i.e. it should preserved be digitalized.

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## GENERAL INSURANCE - AN OVERVIEW OF CUSTOMERS

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### Abstract

Now a days India is becoming a global economic power. Over the decades India has established itself in insurance market. The paper examines the criteria of customers towards general insurance. A study has been conducted to find out the influencing factor of the policy holders. Here, the customer's opinion on the various related statements were collected. The analysis of various factors has used to understand different types of policyholders or customers. This study helps to find out the various customers which have different expectations from the General Insurance companies.

### Introduction

Insurance is defined as the device of simple mechanism of some people who are exposed to the same level risks of suffering destruction of damage to their properties, that are likely to be caused by calamities like accident, fire, floods earthquakes etc. coming together and agreeing to share the loss sustained by one of the members, that is the loss of one or more members is spread among all Risk is uncertainty of financial loss. Risk must not be confused with loss itself which is the disappearance of value arising from a contingency. Every risk is bound with the loss of one or the other. The function of insurance is to spread the loss over a large number of person who have agreed to share the loss with one another the risk cannot be avoided but the loss can be distributed among different person. The larger number of person, the easier process of distribution of loss. In ancient times, the Insurance Companies collect the contribution in the form of premium even at the stage of agreeing to share the loss. The insurance is also define as a social device to accumulate funds to meet the uncertain losses arising through a certain risk to a person insured against the risk.

### Changes of General Insurance Industry -

The General Insurance sector is authorised by General Insurance Corporation & its subsidiaries due to Privatisation, Globalization & Labialization. General Insurance Corporation granted functional autonomy to



subsidiaries,GIC instructed to stop writing direct business & act as a Indian reinsure. The Intense competition brought about by deregulation has encouraged the industry to innovate in all areas. Aggressive marketing strategies by private sector insures have buyed consumers' awareness of risk and expanded the markets for products. Market forces to set premiums that are appropriate for exposuresand push insurers to differentiate their products & services. Innovations in distribution use of information technology have followed as public and private insures compete to market these products. Day by day increasing demand and novelty of business opportunities in the insurance market pushed more & more players to enter into this field.

#### **List of General Insurance Companies in India:-**

- 1) The Oriental Insurance Company Limited.
- 2) The New India Assurance Company Limited.
- 3) National Insurance Company Limited.
- 4) United India Insurance Company Limited.
- 5) Agriculture Insurance Company of India Limited.
- 6) Export Credit Guarantee Corporation Limited.
- 7) Royal Sundram Alliance Insurance Company Limited
- 8) Reliance General Insurance Company Limited
- 9) IFFCO Tokyo General Insurance Company Limited.
- 10) Tata AIG General Insurance Company Limited
- 11) Bajaj Allianz General Insurance Co. Ltd.
- 12) ICICI Lombard General Insurance Co. Ltd.
- 13) Appolo DKV Health Insurance Co. Ltd.
- 14) Future General India Insurance Co Ltd.
- 15) Universal Sompo General Insurance Co. Ltd.
- 16) Star Health & Allied Insurance Co. Ltd.
- 17) Cholamandalam General Insurance Co. Ltd.
- 18) HDFC - Chubb General Insurance Co. Ltd.
- 19) Shi Ram General Insurance Co. Ltd.
- 20) BhartiAxa General Insurance Co. Ltd.
- 21) Raheja QBE General Insurance Co. Ltd.

The insurance sector in India has come a full circle from a competitive market to nationalization and back to a liberalized market again. Agents are being trained to understand the needs of a client and then suggest the best policy that meets the client's needs, rather than just sell anything. Additional benefits can be bought in the form of riders as cover against deadly disease, surgeries and disability due to accident, the Thrust is now on pension plans because life expectancy is going up and only 10% of population has pension cover.



### Review of Literature -

Gobi s and Parthasarathy R (2011) in their paper suggested that India's trust with health insurance program goes back to the late 1940s and early 1950s when the Civil servants (Central Government Health Scheme) and formal sector workers were enrolled into a contributory but heavily subsidized health insurance programs. As part of liberalization of the economy since the early 1990s, the government opened up the insurance sector to private sector participation in the year 1999. India is a low-income country with 26% of population living below the poverty line and 35% illiterate population with skewed health risks. Insurance is limited to a small portion of total population.

Sharma Aparajita (2012) in her study aims to develop the managerial competency framework for the middle level managers of the general insurance sector in India. Secondary research provides the Overview of the existing generic competency models. The need was observed for a competency based framework in the insurance sector in India. Survey was conducted among ninety eight middle level managers of the public and private sector general insurance companies. The result showed the fourteen managerial competencies analytical skills, communication skills, creativity decision making ability to delegate, flexibility initiative, interpersonal skills, job, knowledge, leadership, managerial skills, ability to motivate, ability to plan and team communication skills, interpersonal skill and team management.

Shrivastava, Samir K. and Ray Anishek (2013) in their paper determines a set of marketing, financial and operational variables to predict benchmark financial strength of general insurance firms in India. It incorporates qualitative inputs from practicing managers and industry experts before carrying out quantitative modelling and analysis. The result of the paper suggests that the factors that most significantly influence Indian non-life insurers are lines as a business, the firm's market share, the premium growth rate, the underwriting performance and the claims incurred. Further the factors which have the strongest effect are market share, change in inflation rate, firm size, lines of business. Estimation of appropriate market/ economic parameters can be useful input for regulators.

In India General Insurance becomes the part of the financial sector and are expected to earn more profit though they are service oriented organisations. The recent economic reforms urge the General Insurance Companies to introduce various insurance products in order to make profits by directing the schemes at target group of customers. The need for development of various insurance schemes is thus once again recognized and it will now be possible to introduce a variety of need based various insurance products in our own market. This study will help the public and private Insurance Companies to analyse its



performance and totake corrective measures in the sphere of various Insurance products.

**Objectives of the study -**

To determine the factors which influence the customers while select the general insurancecompany & the policy insurance company.

**Database & Research methodology-**

The approach of this research is based on the secondary method of data collection, analysis of data and conclusions. This design is used to identify the factors that affect the mindset of the individuals while utilizing the services offered by theGeneral Insurance Companies. The factors that there were identified and studied across the different Satisfaction factors -

**Including factors.**

- 1) Courtesy of staff
- 2) Product price
- 3) Officers/Agents
- 4) Reminder for renewal
- 5) Response time
- 6) Claim settlement speed
- 7) Knowledge of the Customer
- 8) Product type
- 9) Attitude of surveyor
- 10) Motivation given by the officers
- 11) Guidance
- 12) Promptness in issuing the policy.
- 13) Contacts by the development officers
- 14) Agents attitude during claim settlement
- 15) Amount settle by the company
- 16) Moral Support
- 17) Bonus for next premium payment.
- 18) Convenient service
- 19) Claim settlement percentage
- 20) Benefits with the policy

**Level of Satisfaction of the products in General Insurance Policies**

S. No.	Factors	HS	S	N	DS	HDS
1.	Courtesy of Staff	225 (30%)	305 (40%)	116 (15.5%)	64 (8.5%)	40 (5.3%)



2.	Product price	329 (51.3%)	328 (43.7%)	55 (7.3%)	22 (2.9%)	16 (2.1%)
3.	Officers/Agents	385 (51.3%)	184 (24.5%)	113 (15.1%)	12 (1.6%)	56 (7.5%)
4.	Reminder for renewal	410 (54.7%)	156 (20.8%)	104 (13.9%)	47 (6.3%)	33 (4.4%)
5.	Response time	269 (35.9%)	188 (25.1%)	167 (22.3)	72 (9.6%)	54 (7.2%)
6.	Claim settlement speed	182 (24.3%)	227 (30.3%)	176 (23.5%)	114 (15.2%)	51 (6.8%)
7.	Knowledge of the Customer	173 (23.1%)	283 (37.7%)	143 (19.1%)	120 (16.0%)	31 (4.1%)
8.	Product type	177 (23.6%)	136 (18.1%)	180 (24.0%)	151 (20.1%)	106 (14.1%)
9.	Attitude of surveyor	224 (29.9%)	217 (28.9%)	107 (14.3%)	94 (12.3%)	108 (14.4%)
10.	Motivation given by the officers	222 (29.6%)	195 (26.0%)	150 (20.0%)	80 (10.7%)	103 (13.7%)
11.	Guidance	206 (27.5%)	153 (20.4%)	222 (29.6%)	118 (15.7%)	51 (6.8%)
12.	Promptness in issuing the policy.	171 (22.8%)	267 (35.6%)	158 (21.1%)	112 (14.9%)	42 (5.6%)
13.	Contacts by the development officers	282 (37.6%)	167 (22.3%)	128 (17.1%)	102 (13.6%)	71 (9.5%)
14.	Agents attitude during claim settlement	348 (46.4%)	229 (30.5%)	86 (11.5%)	29 (3.9%)	58 (7.7%)
15.	Amount settle by the company	273 (36.4%)	224 (29.9%)	97 (12.9%)	55 (7.3%)	101 (13.5%)
16.	Moral Support	334 (44.5%)	233 (31.1%)	111 (14.8%)	36 (4.8%)	36 (4.8%)
17.	Bonus for next premium payment.	154 (20.5%)	175 (22.3%)	209 (27.9%)	146 (19.5%)	66 (8.8%)
18.	Convenient service	281 (37.5%)	208 (27.7%)	109 (14.5%)	88 (11.7%)	64 (8.5%)
19.	Claim settlement percentage	162 (21.6%)	201 (26.8%)	164 (21.9%)	139 (18.5%)	84 (11.2%)
20.	Benefits with the policy	229 (30.5%)	159 (21.2%)	143 (19.1%)	121 (16.1%)	98 (13.1%)

HS:- Highly Satisfied

S:- Satisfied

N:- Negative

DS:- Dis-satisfied

HDS:- Highly Dis-satisfied

The conclusive research survey shows the perceptual importance & of the alcove factors in the mindset of customers. There are too many factors that are identified in every segment factor analysis, commonly referred to as a data reduction technique is being used to identify or in other words it is a set of



techniques, which by analyzing the relations between variables which explain much of the original data more economically.

The respondents are highly satisfied from product price, reminder for renewal of policy, Response time, Attitude of a surveyor, Motivation given by the officials, contacts, amount settled by the company, moral support. The respondents are satisfied towards the factors like Courtesy of staffs, speed in claim settlement, knowledge of the person, prompters in issuing the policy, office appearance, guidance, bonus for next premium payment. From the above study can be predicted that the above satisfying factors induce the policy holders to purchase the policies in general insurance.

### **Conclusion -**

Indian Insurance market has changed dramatically, at the same pace changes have been taking place in the government regulations and technology. The existing General Insurance companies introduce many new products in the market which have competitive advantage over the products, New innovative services to attract the customers by offering more bonus facilities and attractive services. Companies are consolidated & finding new innovative methods of customer satisfaction. Among all human relations in service-oriented industry, which is the vital force to run or rein any organization. This research is a rewarding Exercise to the researcher. The researcher will be delighted if the suggestions are implemented by the Public private General Insurance companies-

### **Suggestions -**

On the basis of research following recommendations can be made –

- 1) General Insurance Companies should concentrate towards young and middle aged customers and establish a good relationship by providing attractive services because of young respondents relationship goes longer & middle aged relationships create good relationship whenever they approach.
- 2) The respondents have received the detailed information of the General Insurance through their advertisement and company agents.
- 3) The General Insurance Companies, should give the proper intimation of the renewal of policies and giving proper response of company agents making false promises and misleading information to the customers in terms of premium amounts, due date and bonus facility.
- 4) Even though insurance companies have customer service sections and grievances redressed officers, they have not get the desired attention. These sections were created mainly due to the fact that the formalities are to be complied with as per the guidelines of Government. These sections have to be rejuvenated and given due importance.



- 5) The General insurance companies have concentrated mainly on personal accident and mediclaim schemes. Since the premium income under their two schemes constitutes more than 80% of the total premium income.

#### **Limitations of the study**

There are some limitations in doing this research. This research has been a single handed effect on the part of the researcher, and certain discrepancies might have accrued owing to the lack of specialized knowledge on this subject.

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## TOWARDS RECONCILING RELIGIOUS AND PROFANE SCIENCES: BEDIUZZAMAN SAID NURSI'S APPROACH

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### **Abstract**

Education is the basic factor which counts for the development of Civilization. It is such a crucial element of a society that plays an important role in building characters, behaviour and ideology of a nation. The failure to develop this element in a right fashion and consonance with the requirements of time may result in the decline or ultimately to the collapse of a society. Education and learning has always received great importance and respect in Muslim society. The Quran and the teachings of Prophet Muhammad (SAAS) laid the foundation for intense intellectual and educational activity. As a result of that intellectual fervour, many path-breaking discoveries were made by Muslims in early centuries. However, it is worth regretted that Muslims couldn't hold on to the momentum resulting in the erasure of the rationalist spirit of Muslims thereby leading to stagnation. Various Scholars have investigated the causes of such catastrophe and gave solution to this problem. Among them Said Nursi was a prominent one who strove for the revitalization and revival of education and expended all his efforts for the reforming of education system during his whole life. The paper is an endeavour to develop a proper understanding of Said Nursi's approach towards educational reforms and his efforts in uniting the different branches of Science.

**Key Words:** Education, Knowledge, Science, Madrassa, Reform, Quran, Scientific.

### **Introduction**

Education is an important instrument which counts for the development and social justice. An identity of a civilization is preserved by knowledge and contributions. According to H. G Wells "Civilization is in a race between education and catastrophe"<sup>i</sup> while Duerant says, "Education is the transmission of civilizations"<sup>ii</sup>. According to Syed AbulA'laMaududi: Education is the sum total of knowledge gained. A man who does not make use of these faculties falls behind others, whereas he who makes use of them excels. Similarly, a nation assumes leadership when it devotes itself unsparingly to the pursuit of knowledge handed down to it from the past as well as present.<sup>iii</sup> Knowledge



plays a vital role; in fact, it is an important factor which introduces the creator to the creation. The teachings of the Quran and Hadith laid zealous foundations of education. It was the result of such cogent belief that Muslim world has witnessed their past glory. It was the age when Muslims were torch bearers of Science and technology along with their religious beliefs. From the very first day of revelation Quran put emphasize on education. The first revelation received by Prophet Muhammad was about education and knowledge.<sup>iv</sup> Prophet Muhammad set himself a best example of an educator. He made great toils throughout his life in imparting education to the community; he did not fail to seize any opportunity for the purpose.<sup>v</sup> The Abbasid period witnessed the zenith of Muslim Contribution to science and technology. On one side, Number of Muslims led path breaking discoveries and on the other they compiled various religious texts so there was amalgamation of religious and mundane sciences. Nursi argued that, in the first five centuries of Islam, Muslims succeeded in uniting the science with religion, the intellect with the heart, the material with the spiritual.<sup>vi</sup> The prime factor and the foundation stone of the great Islamic legacy were the knowledge and intellectual tradition that flourished in the Muslim world. But when the Muslims went away from the right education it lost and missed everything. During 17<sup>th</sup> century west emerged with discoveries and contributions while Muslims remained backward due to dichotomy in education and as a result they did not compete with the challenges of modernity and faced many setbacks. The rationalist spirit was dimmed in the Muslim world due to the educational dichotomy thereby leading Muslims to stagnation.

### **Bediuzzaman Said Nursi (1877-1960)**

Various Scholars tried to reconcile and unite the different branches of sciences, among them Said Nursi was one of the charismatic personalities. Born in 1877<sup>vii</sup>, at NursBatlis in eastern Turkey, Said Nursi started his education at the age of 9. After some years, he left his village to pursue higher studies. He mastered the Islamic jurisprudence, oratory, philosophy, history, geography in a short time. He had a sharp and photographic memory as a result he memorised the Quran by heart and also some most important Arabic dictionaries. He studied science, mathematics and gained proficiency in some foreign languages.<sup>viii</sup> Said Nursi visited a number of Madrasas but his thirst was not quenched by any of the teachers or Madrassas.

Said Nursi was not satisfied with the then Madrassa education system as he found it incompatible with the consonance of modern age. He realized that the traditional form of Islamic theology was inadequate for answering the misgivings concerning Islam. In order to reform that existing system, he sought to establish a university in the form of Madrasat-ul-Zahra in eastern Anatolia. He



believed that educational reform could eradicate ignorance and backwardness and contribute to solve the social and political problems. Said Nursi's life witnessed the fall of great Ottoman Empire which left a great marks on his mind. Throughout his whole life, the wonderer of the age made tireless efforts to elevate the status of education among Muslim. Said Nursi was not satisfied with the system of education prevalent at that time in Turkey. Education was mostly imparted through dual institutions Maktab and Madrassa. The system offered by the former was western oriented whereas the later institution a classical Islamic education. During his time there was no system of education in the country offering both scientific and religious training. Maktab and Madarisas the places of popular education at that time seemed to carry pride in the separate curricula, each being critical of the other. In 1907 in Istanbul, he advocated the establishment of a university "Madrasat-ul-Zahra" in Eastern Anatolia where physical sciences would be taught along with the religious sciences. Through his writings (Risala-i-Nur), a commentary on the Quran, explains and expounds the "truth" in the light of Quran, besides covering numerous subjects such as concepts of belief and God, purpose of life and creation, life after death, human responsibility and accountability, justice and Worship.<sup>ix</sup>

### **Said Nursi's Approach of Reconciling Religion and Science:**

In order to meet the demands and Challenges of Modernity Said Nursi was well aware about the importance of science and technology. On the one side, Nursi was a firm believer of tawhid and on the other he realized the significance and necessity of science and technology. From the very early years of his life, Nursi saw the inadequacy of the classical Islamic Madrassa education system and the need for reconciliation between science and religion. Said Nursi maintained the view that in the future power would lie not in sword but in Science.<sup>x</sup> He tried to bring reason subordinate to revelation. The 20<sup>th</sup> century has witnessed unprecedented attacks on the foundations of faith by materialists in the name of science and advancement. Nursi responded to these attacks by utilizing all his efforts to save and strengthen belief which he viewed as the most essential affair for a better humanity. He believed that there is no hostility between science and religion. During his entire life Bediuzzaman tried for integration of Knowledge, his whole efforts were aimed to unite science with religion. Said Nursi believed that the education system of the society should be the integration of knowledge and faith. The downfall of Muslims marked strong impressions on his thought, for him educational dichotomy was responsible for the Muslim decline, he tried to fill the vacuum in different branches of sciences by endorsing that, Religion should be taught at modern schools and modern sciences at religious schools; in this way the people of the school will be protected from unbelief and those of



the Madrassa from fanaticism.<sup>xi</sup> All his endeavours were aimed to reform education system existing at that time, the wonderer of the age, tried to build Madrassa education on scientific notions with the aim to produce preachers to be both searching scholars so that they can prove what they claim and subtle philosophers so that they do not spoil the balance of the sharia, and to be eloquent and convincing.

Said Nursi was a distinctive interpreter of Quran, we found his interpretation of Quran scientific and spiritual in nature he tried to fuse, what the philosophers termed as “natural law”, with Tawhid. Nursi was convinced that religion did not consist of faith matters only but due to its comprehensiveness it is also connected with other sciences including Sociology, Politics and Economics etc. Nursi argued that God has two kinds of laws: one is the Sharia known by everybody; which is the group of laws comprising Gods laws issuing from his attribute of speech and regulating and governing man’s religious life or ordering the acts of the servants issuing from his free will. Nursi thought the reward or punishment in following it or not usually pertains to the afterlife. The other group of divine laws comprise those governing creation and life as a whole, which Nursi says issued from his attribute of free will and power; they are generally (incorrectly) called the “law of nature”. The first Sharia comprises of comprehensible laws while the second consists of nominal laws, which are wrongly called “The laws of nature”. The reward or punishment for them mostly pertains to this world.<sup>xii</sup> For him the main purpose of learning science is to understand the Quran and prove its truths. Nursi said, “In the future when reason, science and technology hold sway that will surely be the times the Quran will gain ascendancy, which relies on rational proofs and makes the reason confirm its pronouncement”<sup>xiii</sup>. He tried to bring spirituality into physical sciences. During his time there were three branches of schools: the first one was Maktab, where students could learn Funun-i-Madaniyah(modern sciences), No religious education was imparted in these institutions; the second one was Madrassa where only Ulum-u-Diniyah(Religious sciences) were taught on classical lines, the nature of these institutions were conservative in nature. They considered profane sciences hostile to sacred sciences; the third one was tekkes(Sufi lodges), there was no uniform system of education in these institutions; the education was imparted verbally by endorsing some Sufi practices. It was the dream of Said Nursi to combine these different branches of sciences. He tried to unite different education systems as he believed that the modern institutions produce nihilism whereas religious institutions produce rejectionists. He supposed religious education should be taught at modern schools and modern sciences at religious schools, in this way the people of the school will be protected from unbelief and those of the Madrasa from fanaticism<sup>xiv</sup>. All his efforts were aimed to bring spirituality into mundane

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sciences and intellectuality into sacred sciences. His goal was to bring mind in consonance with heart he believed that the light of conscience is religious science, the light of mind is Modern science; reconciliation of both manifests the truth. The student's skills develop further with these two sciences. When they are separated, from the former superstitions and from the latter corruption and scepticism is born<sup>xv</sup>. Nursi seemed to bring education system in accordance with the modern challenges and strived hard to formulate its relevance with contemporary times. As far as his view on modern education is concerned he was critique of Greek philosophy taught in modern schools which he believed was antiquated now however he has acknowledged the importance of other sciences taught there. Said Nursi desired to set up religious belief (Tawhid) in mundane sciences. Regarding religious institutions, he wanted to bring creativity in these institutions and in order to reform it Said Nursi tried to set Madrasa education on scientific notions so that it could meet the demands of modernity. His whole efforts were to build such education system that could produce the students who would be religiously convinced and scientifically sound and potent. 'The wonderer of the age' argued, "The people of Madrasa schools accuse the people of modern schools of weakness of beliefs due to their outward appearance. The people of modern schools regard the people of religious schools as insufficient and ignorant because they did not know about the new branches of science"<sup>xvi</sup>.

### **Madrasat-ul-Zahra: A Model Institution**

Said Nursi not only propagated and expounded his educational policy intellectually rather he strived hard and made industrious efforts to execute his educational plan practically by desiring to establish an institution "Madrasat-ul-Zahra" as a model of his educational policy. However, he did not complete its physical construction due to some circumstances prevailed at that time including the outbreak of World War I. Moreover, due to some political circumstances this innovative dream of Nursi was not realized. Nursi planned and sought funds for this project till 1951, however, after his sad demise in 1960; his followers forwarded his mission with good immense fervour. Said Nursi proposed to establish an institution that could cater the need of religion, science and morality. The purpose of his initiative was to produce a sincere and committed Muslim citizen in order to get rid of the crisis of the Muslim intelligentsia and to develop science and technology in the Muslim world<sup>xvii</sup>. His main aim was to develop Madrasat-ul-Zahra as an embodiment of tri-System of education in a holistic manner. The other intention of Said Nursi was to combat the three enemies of humankind i.e. ignorance, poverty and disunity in this single project<sup>xviii</sup>.



In the proposed system of his university to be established in eastern Anatolia, he encouraged a system where students would pursue interdisciplinary and multidisciplinary studies. Also, one of the ideas Nursi put forth for his Madrasat-ul-Zahrawas to adopt trilingual system, with Arabic being required, Kurdish being permissible and Turkish being necessary. To eradicate the lacunas in different branches of sciences Said Nursi made industrious endeavours to establish such an institution where the sciences of three schools i.e. the Maktab, the Madrasa and the tekkes, would be taught to the learners so that each could obliterate the deficiencies of the other. In other words, Said Nursi tried to transform educational system from “Single faculty institution” to “Multi faculty institution”.

### **Conclusion:**

Said Nursi devoted himself to what he felt to be the cause of Muslim backwardness and analyzed it thoroughly. He interpreted the sacred sources of Islam as an expression of rationality and reason. It could be said that Nursi was born in the age of transition in the Islamic world. His Islamic pursuit of knowledge was responsible for the blossoming of a culture of belief and rational scientific thinking that encompassed the sphere of both theory and practice. In order to meet the demands and Challenges of contemporary times, Said Nursi was well aware about the importance of science and technology. On the one side, Nursi was a firm believer of tawhid and on the other he realized the significance and necessity of science and technology. Said Nursi's all efforts were aimed to fill the lacunas between mundane and sacred sciences. The integration of religious and modern sciences was the tool used by Said Nursi to revitalize the Muslim culture and tradition. In other words, integration of both modules was the goal of Said Nursi. Nursi wanted the students to excel in the both fields; he wanted Muslims to be both scientifically and spiritually sound so that they can prove the facts through rational scientific thinking with conform to their faith. The faith and the religious values of students were the other main concerns of Nursi. He believed that only through faith based education Muslim world can regain its past glory. He argued that science will not become a blessing for mankind until it is not guided by religion. Therefore, he believed that the fundamental challenge for Muslim Scholars is to reconcile a conflict between religious faith and scientific investigations. He tried to bring mind in consonance with heart as he believed that the light of conscience is religious science and the light of mind is Modern sciences. It is worthy to mention that Said Nursi's educational formula provides an alternative to meet the demand and challenges of modern times.



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- <sup>xviii</sup>Michel. Thomas,2014,Insights from the Risale-I-Nur, Tughra Books, New Jersey, USA, p.67



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- 5- fnudj] jke/kjh fl g] l l-fr ds pkj v/; k; ] ykd Hkjr; izdk'ku] bykgkcn] 1/997 1/ i" B 75



## UNITED STATES TRUSTEES: AN OVERVIEW

**Dr. Binoy J. Kattadiyil and Adv. Ankita Agarwal**

ICSI IIP, an IPA of IBBI, New Delhi

### WHO ARE U.S. TRUSTEES?

In the USA, there are Chapter 7, 11 and 13 Trustees who are the equivalent to Insolvency Professionals and liquidators under Insolvency and Bankruptcy Code in India. Chapter 7 trustees oversee the liquidation/bankruptcy and Chapter 11 trustees overlook the reorganisation plan. The U.S. has a very debtor centric insolvency regime and thus in the cases of Chapter 11 there is complete control of 'debtor in possession' and trustees are only appointed by court in special circumstances (where fraud, abuse of power or mismanagement is detected).

A trustee is an officer of the Department of Justice who is appointed by the official U.S. Trustee to oversee the assets of the bankrupt debtor. Trustees play the role of a debtor in possession. A trustee is appointed in usually Chapter 7 and 13 bankruptcy cases and very rarely in cases of restructuring under Chapter 11 of the U.S. Bankruptcy Code. The administrative functions of these Trustees are overseen by the U.S. Trustee Program.

### DUTIES OF A TRUSTEE<sup>1</sup>

The duties of the trustee appointed in a Chapter 7 or Chapter 11 proceedings, are enumerated in the provisions 704 and 1106. Some of the duties are enumerated below. A Trustee has to:

- be accountable for all property received;
- if a purpose would be served, examine proofs of claims and object to the allowance of any claim that is improper;
- unless the court orders otherwise, furnish such information concerning the estate and the estate's administration as is requested by a party in interest;
- if the business of the debtor is authorized to be operated, file with the court, with the United States trustee, and with any governmental unit charged with responsibility for collection or determination of any tax arising out of such operation, periodic reports and summaries of the operation of such business, including a statement of receipts and

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<sup>1</sup>11 U.S. Code § 1106; 11 U.S. Code § 704



disbursements, and such other information as the United States trustee or the court requires; and

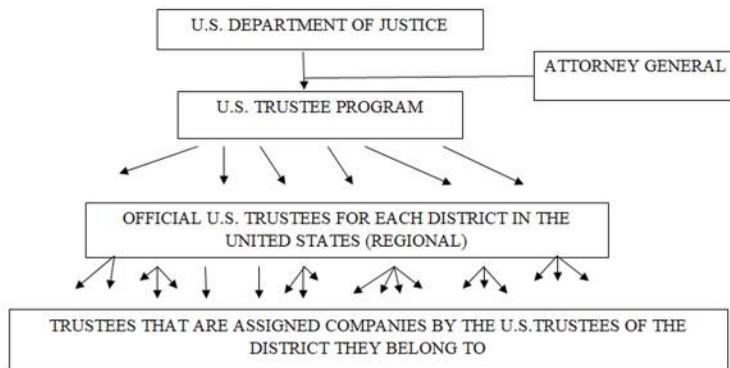
- make a final report and file a final account of the administration of the estate with the court and the United States trustee.
- if the debtor has not done so, file the list, schedule, and statement required under section 521(1) of this title 9
- except to the extent that the court orders otherwise, investigate the acts, conduct, assets, liabilities, and financial condition of the debtor, the operation of the debtor's business and the desirability of the continuance of such business, and any other matter relevant to the case or to the formulation of a plan;
- As soon as practicable –
  - i) file a statement of any investigation conducted under paragraph (3) of this subsection, including any fact ascertained pertaining to fraud, dishonesty, incompetence, misconduct, mismanagement, or irregularity in the management of the affairs of the debtor, or to a cause of action available to the estate;
  - ii) and transmit a copy or a summary of any such statement to any creditors' committee or equity security holders' committee, to any indenture trustee, and to such other entity as the court designates;
- as soon as practicable, file plan under section 1121 of title 11, file a report of why the trustee will not file a plan, or recommend conversion of the case to a case under chapter 7, 12 or 13 of this title or dismissal of the case;
- for any year for which the debtor has not filed a tax return required by law, furnish, without personal liability, such information as may be required by the governmental unit with which such tax return was to be filed, in light of the condition of the debtor's books and records and the availability of such information; and
- after confirmation of a plan, file such reports as are necessary or as the court orders.
- Trustees, receivers or managers of any property, including debtors in possession, may be sued, without leave of the court appointing them, with respect to any of their acts or transactions in carrying on business connected with such property. Such actions shall be subject to the general equity power of such court so far as the same may be necessary to the ends of justice, but this shall not deprive a litigant of his right to trial by jury

## ADMINISTRATION

Unlike the Indian Insolvency scenario, there are no agencies that U.S. Trustees are registered with or have to be registered with. Trustees fall under the Department of Justice in the U.S. government. The administrative systems functions within the bankruptcy system were given to U.S. Trustee Program. The U.S. Trustee Program is under the control of Attorney General.

The Attorney General is charged with the appointment of United States Trustees and Assistant United States Trustees. The Executive Office for U.S. Trustees (EOUST) in Washington, D.C., provides general policy and legal guidance, oversees the Program's substantive operations, and handles administrative functions. The Director of the Executive Office, whose authority derives from the Attorney General, oversees a staff comprised of the Offices of the Director, General Counsel, Criminal Enforcement, Administration, Oversight, Planning & Evaluation, and Information Technology. The Executive Office also provides administrative and management support to individual U.S. Trustee Offices in their implementation of Federal bankruptcy laws.

### The basic structure:



### U.S. Trustee Program<sup>2</sup>

The mission of the United States Trustee Program is to promote the integrity and efficiency of the bankruptcy system for the benefit of all stakeholders – debtors, creditors, and the public.<sup>3</sup>

The primary role of the U.S. Trustee Program is to serve as the "watchdog over the bankruptcy process."

**28 U.S.C. 3 586** provide, in pertinent part, that each United States Trustee shall:

<sup>2</sup><https://www.justice.gov/ust>

<sup>3</sup>USTP Mission Statement available at <https://www.justice.gov/ust/strategic-plan-mission>



- Establish, maintain, and supervise a panel of private trustees that are eligible and available to serve as trustees in cases under chapter 7 of title 11;
  - Serve as and perform the duties of a trustee in a case under title 11 when required under title 11 to serve as trustee in such a case;
  - Supervise the administration of cases and trustees in cases under chapter 7,11,12, or 13 of title 11 by, whenever the United States trustee considers it to be appropriate –
    - (A) (i) reviewing, in accordance with procedural guidelines adopted by the Executive Office of the United States Trustee (which guidelines shall be applied uniformly by the United States trustee except when circumstances warrant different treatment), applications filed for compensation and reimbursement under section 330 of title 11; and (ii) filing with the court comments with respect to such application and, if the United States Trustee considers it to be appropriate, objections to such application.
    - (B) monitoring plans and disclosure statements filed in cases under chapter 11 of title 11 and filing with the court, in connection with hearings under sections 1125 and 1128 of such title, comments with respect to such plans and disclosure statements;
    - (C) monitoring plans filed under chapters 12 and 13 of title 11 and filing with the court, in connection with hearings under sections 1224, 1229, 1324, and 1329 of such title, comments with respect to such plans;
    - (D) taking such action as the United States trustee deems to be appropriate to ensure that all reports, schedules, and fees required to be filed under title 11 and this title by the debtor are properly and timely filed;
    - (E) monitoring creditors' committees appointed under title 11;
    - (F) notifying the appropriate United States attorney of matters which relate to the Occurrence of any action which may constitute a crime under the laws of the United States and, on the request of the United States attorney, assisting the United States attorney in carrying out prosecutions based on such action;
    - (G) monitoring the progress of cases under title 11 and taking such actions as the United States trustee deems to be appropriate to prevent undue delay in such progress;
    - (H) and monitoring applications filed under section 327 of title 11 and, whenever the United States trustee deems it to be appropriate, filing with the court comments with respect to the approval of such applications;
      - deposit or invest under section 345 of title 11 money received as trustee in cases under title 11;
      - perform the duties prescribed for the United States trustee under title 11 and this title, and such duties consistent with title 11 and this title as the Attorney General may prescribe; and
-



- make such reports as the Attorney General directs.

The Program was established by the Bankruptcy Reform Act of 1978 as an effort encompassing 18 districts. It was expanded to 21 Regions nationwide, covering all Federal judicial districts except Alabama and North Carolina, by enactment of the Bankruptcy Judges, U.S. Trustees, & Family Farmer Bankruptcy Act of 1986<sup>4</sup>. The Program is funded by the United States Trustee System Fund, which consists primarily of fees paid by parties and businesses invoking Federal bankruptcy protection.

A quarterly fee shall be paid to the United States Trustee System Fund at Treasury in each case under chapter 11 (except small business cases) for each calendar quarter, or portion thereof, between the date a bankruptcy petition is filed and the date the court enters a final decree closing the case, dismisses the case, or converts the case to another chapter in bankruptcy.<sup>5</sup>

The USTP is entirely self-funded through user fees paid by bankruptcy debtors. All revenues are deposited into the United States Trustee System Fund. The Program may expend funds as appropriated by Congress. In FY 2007, approximately 50 percent of the funding was derived from quarterly fees in chapter 11 reorganization cases. The balance of the funds was derived from filing fees paid in chapters 7, 11, 12, and 13, as well as interest earnings and miscellaneous revenues.

The balance in the Fund as of September 30, 2019, was less than \$135 million. Funding for the USTP is approved by the Congress on request made by the Attorney General in form of an Appropriations Request.

### **Checks and Balances**

Similar to the concept of ‘related party’ in India, **a chapter 11 trustee or examiner must be a “disinterested person,” successfully complete a background investigation, and, in the case of a trustee, post a bond.** The trustee must be competent to perform the statutory duties set out in Section 1106 of the Bankruptcy Code as is determined by a questionnaire to be filled out by Trustee. Additional considerations for the selection will be based on the unique circumstances of the specific case. The unique circumstances of the case frequently dictate the terms of the court order directing the appointment.

When the United States Trustee files an application for court approval of the appointment of a trustee or examiner to a particular case, the application must be accompanied by an affidavit of the person being appointed. The application and affidavit must describe all of the connections of the proposed trustee or examiner to other persons involved in the case. This allows the bankruptcy

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<sup>4</sup>Pub. L. 99-554, 100 Stat. 3088, reprinted in part at 28 U.S.C. § 581, note

<sup>5</sup> 28 U.S.C. § 1930(a)(6)



judge to ensure that the person appointed satisfies all the requirements for appointment, particularly the requirement of disinterestedness.

The determination of “disinterestedness” does not end with the appointment. Any new connections that the trustee or examiner, or any professional employed by the trustee or examiner, establishes or discovers after appointment should be brought to the attention of the court and the United States Trustee through the filing of a supplemental verified statement.

### **Background Investigation**

All persons appointed to serve as trustees or examiners in chapter 11 matters must undergo a security background investigation. In addition to the initial application form, the appointee is required to complete an affidavit in a format prescribed by the Executive Office for United States Trustees and provide the information necessary for completion of name, fingerprint, tax, and credit checks. This information will be forwarded by the local Office of the United States Trustee to the Office of Review and Oversight (“ORO”), Executive Office for United States Trustees, within ten working days after an appointment is made. If additional or clarifying information is needed, ORO will contact the United States Trustee who will then notify the appointee. The resolution of questionable information may require an affidavit from the trustee or examiner, and or additional information or documents.

### **Bonds**

To qualify as a chapter 11 trustee, the trustee must post a bond in favor of the United States of America within five days after selection. The initial amount and sufficiency of the bond is determined by the United States Trustee, however, it is the trustee’s duty to monitor the bond and ensure that it is maintained in an appropriate amount throughout the pendency of the case. The United States Trustee can assist the trustee in obtaining a bond by providing contact with bonding companies used by other trustees. If the trustee wishes to obtain a bond from a different company, the trustee must ensure that the company appears on Treasury Circular 570, which lists those companies holding certificates of authority as acceptable sureties on federal bonds.

### **Reporting Requirements of Trustees**

The United States Trustee is responsible for supervising the administration of cases and trustees in cases under chapters 7, 11, 12, and 13 of the Bankruptcy Code<sup>6</sup>. In order to comply with this supervisory requirement, each region has established Operating Guidelines and Reporting Requirements for Chapter 11

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<sup>6</sup>28 U.S.C. § 586(a)(3)



Debtors and Trustees. The guidelines are established to assist a debtor in possession or a chapter 11 trustee in complying with section 1106 and 1107. The guidelines provide useful general information regarding noticing requirements; closing old bank accounts and opening new debtor in possession bank accounts; maintaining adequate insurance; filing monthly operating reports; paying taxes; employing professionals; and remitting quarterly fees. Regardless of when a chapter 11 trustee is appointed in a case, the guidelines apply. Failure to comply may be cause for the dismissal or conversion of the case to one under chapter 7. Therefore, a chapter 11 trustee should obtain a copy of the Operating Guidelines and Reporting Requirements established in the region in which the trustee has been appointed.<sup>7</sup>

### Monthly operating reports

These periodic reports are generally known as the Monthly Operating Reports. Form operating reports are generally included in the Operating Guidelines and Reporting Requirements and can be obtained from each office of the United States Trustee. These reports vary from region to region. The reports have been created to provide the court, the United States Trustee, and creditors with reliable, accurate information regarding the operations of the estate. **Monthly Operating Reports are required to be filed with the court, with a copy served on the United States Trustee on a calendar month basis on a specified date in the month following the reporting period. This date may vary from region to region. The report must also be served on any taxing authority.**<sup>8</sup>

The trustee is also required to file a report in lieu of a plan if a plan is not finalised and the company is going to liquidation under Chapter 7, a post confirmation report and a final report.<sup>9</sup>

### INSURANCE

The protection available to Trustees is to be taken individually by them by way of professional liability insurance.

A trustee does not qualify for appointment to a case until the trustee has filed with the court a bond in favor of the United States of America conditioned on the trustee's faithful performance of his or her official duties.<sup>10</sup> The United

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<sup>7</sup> Operating Guidelines and Reporting Requirements for Chapter 11 Debtors and Trustees, available at [https://www.justice.gov/ust-regions-r04/file/ch11\\_guidelines.pdf/download](https://www.justice.gov/ust-regions-r04/file/ch11_guidelines.pdf/download)

<sup>8</sup>Operating and Reporting Requirements of Chapter 11 Trustees available at [https://www.justice.gov/ust-regions-r15/file/sdca\\_chapter\\_11\\_orr.pdf/download](https://www.justice.gov/ust-regions-r15/file/sdca_chapter_11_orr.pdf/download)

<sup>9</sup>11 U.S.C. § 704(9)

<sup>10</sup>11 U.S.C. § 322(a).



States Trustee may authorize a blanket bond to cover multiple cases for one or more trustees.

The trustee is a principal on the bond, and all bonds are written in favor of the United States of America.<sup>11</sup> The bonding company will generally require indemnification from the trustee for any payments the bonding company is required to make to third parties. **Since the bond protects the estate beneficiaries and not the trustee, the trustee may wish to consider obtaining professional liability insurance and employee fidelity coverage.**

The trustee may recover appropriate portions of the bond premium as an administrative expense in the estates with assets subject to its protection. For blanket bonds, the trustee must allocate the blanket bond premium to all of the estates with assets covered by the bond. This includes all chapter 7 asset cases and any chapter 11 cases covered by the bond. The allocation methodology is approved by the United States Trustee, but the allocations are normally based on the funds on hand as of a particular date.

A blanket bond might not cover the trustee in a case that involves operating a business in chapter 7. In such instances, the trustee must consult the United States Trustee and bonding company for further information, including whether an individual case bond is appropriate.<sup>12</sup>

A claim on the trustee's bond is made via an adversary proceeding and may be commenced up to two years after the date on which the trustee is discharged. As soon as the trustee becomes aware of an incident which may give rise to a bond claim, the trustee must notify the United States Trustee and the bonding company.<sup>13</sup>

## Conclusion

Since the US Insolvency regime is a very debtor centric system, the safeguards and administrative guidelines available to the Trustees is minimal as compared to insolvency in regimes like India and United Kingdom. The appointment of trustees in Chapter 11 cases is only when the court feels there is a 'cause' which means extraordinary circumstances. Chapter 11 and 7 trustees work under the U.S. official trustee overseen by the Trustee Program. The ultimate authority is the Attorney General under the jurisdiction of the U.S. Department of justice.

For the purpose of monitoring these Trustees self declarations by way of filing of annual questionnaires and affidavits, are to be given. There are no provisions

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<sup>11</sup> Bond Policies for Chapter 11 Trustees available at [https://www.justice.gov/ust-regions-r06/file/01\\_ch7\\_bond\\_policies\\_0.pdf/download](https://www.justice.gov/ust-regions-r06/file/01_ch7_bond_policies_0.pdf/download)

<sup>12</sup>28 U.S.C. § 586.

<sup>13</sup>Ibid



for inspection, either routine or event based. The court of the Attorney General has the authority to remove any trustee from any assignment at any given time. As is clear, the cost of all investigations and background checks against such trustees are borne by USTP Fund wherein the debtor or assigned party in each case has to submit quarterly fees. If there is paucity of funds, the Attorney General makes a request for funds to the U.S. Government. The Trustees are all qualified individuals sharing their expertise whenever called on. There are various safeguards in place for both the debtor and the Trustee to build a symbiotic relationship between the two.

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## ANALYSIS OF JANUS GREEN B AND MANGANESE DIOXIDE USED AS A SUPRAVITAL STAIN

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### Abstract

Janus green B dye absorbs the light of suitable wavelength and gets excited to its first excited singlet state. This gets converted to its corresponding triplet state through intersystem crossing. On the other hand, the semiconductor also gets excited by absorbing light and an electron is excited from its valence band to conduction band leaving behind a hole. This hole abstracts an electron from  $\text{OH}^-$  ions generating OH free radical. The dye undergoes oxidative degradation by this OH radical. The participation of OH radical as an active oxidizing species was confirmed by using hydroxyl radical scavenger (2-propanol) which almost stops the bleaching reaction. In present work, coprecipitation method has been used for preparing NiS-ZnS and it is used for photobleaching of azure B. NiS-ZnS (1:5) photocatalyst was prepared by mixing equal amounts of  $\text{ZnSO}_4$  solution (M/2; Merck) and  $\text{NiSO}_4$  solution (M/10; Merck). To the above solution, solid  $\text{NH}_4\text{Cl}$  and aqueous solution of  $\text{NH}_4\text{OH}$  were added and freshly prepared  $\text{H}_2\text{S}$  gas was slowly passed through this mixture for 2 hours. The precipitates were washed with distilled water and dried at room temperature. Solution of dye was prepared in double distilled water. The photocatalytic bleaching of the dye solution was observed in presence of NiS-ZnS and ZnS (Merck). The photocatalytic bleaching of the dye was observed using different concentration of the dye, amount of semiconductor, pH and light intensities.

**Keywords:** Janus Green B, Manganese Dioxide And Photocatalytic Bleaching.

### Introduction:

Janus green B is used as superavital stain. It will be observed that filamentous structures within the cytoplasm of the cell stained with this dye and he recognized that these structures were similar to the elementary filaments described by Altmann. Michaelis had specified that the diethyl derivative of Janus green B was necessary for supravital staining. Majority of oxides are white or off- white in colour and these compounds cannot be utilized as such because the absorption of solar radiations by these oxides is comparatively less and hence, some transition metal oxides may be used in photocatalytic treatment

of coloured water. Janus green B is a basic dye containing azo (-N=N-) group and hence, it is called azo dye also. Its molecular formula is  $C_{30}H_{31}ClN_6$  and molar mass is 511.06 g/mol., the structure of Janus green B is the normal timing and appearance of feather germs was perturbed by injecting the dye into the amniotic fluid of chick embryos at late stage 28, prior to the first appearance of feather germs. This treatment prevented feather germ morphogenesis in some regions while it delayed normal morphological development. The Janus green B effect lasted for approximately 98 hours. Feather regions, which normally form epidermal placodes during the period of treatment, showed the longest delays in subsequent feather germ formation and were the most likely to remain featherless. These results suggest that the epidermal placode stage is critical for feather germ formation. Janus green B appears to prevent feather germ morphogenesis by interfering with development prior to this critical stage. Since severely affected regions fail to recover their capacity to form feather germs, even after the period of sensitivity to the dye, a limited period of competence is suggested for feather germ formation. Amao et al. carried out photocatalytic degradation of a cationic surfactant cetylpyridinium chloride in presence of titanium dioxide suspension. Karunkaran used EDTA as an electron donor for photoreduction of methyl orange sensitized by CdS. The kinetic study of photodegradation of aberchrome-540 in various solvents was carried out by Mrowetz.

### Experimental :

**Material :** Janus green B (Loba chemie) and manganese dioxide (Qualigens) were used in present investigations.

**Apparatus :** Spectrophotometer (Systronics Model-104), solarimeter (CEL Model-SM 201) and digital pH meter (Systronics Model-371) were used for the measurement of absorbance, light intensity and pH, respectively.

**Procedure :** 0.0511 g janus green B was dissolved in 1000 mL doubly distilled water so that the concentration of dye solution was  $1.00 \times 10^{-4}$  M. It was used as a stock solution. This solution was further diluted.

The optical density of this dye solution was determined with the help of spectrophotometer at  $\lambda_{max} = 615$  nm. This dye solution was placed in equal amounts (50.0 mL) in four beakers.

- The first beaker containing janus green B solution was kept in dark.
- The second beaker containing janus green B solution was exposed to light.
- The fourth beaker containing janus green B solution and 0.60 g  $MnO_2$  was kept in dark, and

- The fourth beaker containing janus green B solution and 0.60 g MnO<sub>2</sub> was exposed to light.

After keeping these beakers for 4 hours, the optical density of the solution in each beaker was measured with the help of a spectrophotometer. It was found that the solutions of first three beakers had almost the same optical density while the solution of fourth beaker had a decrease in its initial value of optical density. From this observation, it becomes clear that this reaction requires presence of both; the light as well as semiconductor MnO<sub>2</sub>. Hence, this reaction is photocatalytic in nature. 50.0 mL of  $7.6 \times 10^{-6}$  M of janus green B was taken in a beaker and 0.60 g of MnO<sub>2</sub> was added to it. The pH of the reaction mixture was adjusted to 11.5. Then the solution was exposed to a 200 W tungsten lamp and aliquot of 2.0 mL was taken out from the reaction mixture at regular time intervals and its optical density was observed at 615 nm. It was observed that the concentration of janus green B decreases with increasing time of exposure. A plot of  $2 + \log$  O.D. against time was found to be linear. The rate constant was measured with the expression-  $k = 2.303 \times \text{slope}$ .

### Results and Discussion:

In recent years, newer methods are being reported for water purification like chemical, electrochemical, photochemical, etc. Heterogeneous photocatalysis for total oxidation of organic and inorganic water pollutants has been studied extensively. Such reactions have usually been carried out using TiO<sub>2</sub>, CdS, ZnO and ZnS. Several attempts have also been made to produce efficient photocatalytic materials. Hong et al. reported the synthesis of nanosized TiO<sub>2</sub>/SiO<sub>2</sub> particles in the micro-emulsion and their photocatalytic activity on the decomposition of p-nitrophenol was studied. Photoreduction of CO<sub>2</sub> over ZnS to 2- and 4-carbon acids was observed by Eggine et al. Porambo et al. studied the dopant effects on the photocatalytic activity of colloidal zinc sulphide semiconductor nanocrystals in the oxidation of 2-chlorophenol. Roy and De investigated the immobilization of CdS, SnS and mixed ZnS-CdS on filter paper and studied the effect of hydrogen production from alkaline Na<sub>2</sub>S/Na<sub>2</sub>S<sub>2</sub>O<sub>3</sub> solution. One et al. observed the characterization of K mixed V<sub>2</sub>O<sub>5</sub> catalyst and its use in oxidative dehydrogenation of propane.

A novel preparation of the three dimensionally macroporous M/Ti (M-Zr or Ta) mixed oxides nanoparticles with enhanced photocatalytic activity has been reported by Wang et al. Gou et al. reported the preparation and photocatalytic characterization of conjugated polymer/ZnS complex. It has extremely high photocatalytic activity for degradation of dyes. Reber and Rusek carried out the coprecipitation of CdS with silver sulphides. The randomized coupled oxides ZnO/SnO<sub>2</sub> in a molar ratio of 2 : 1 (Z<sub>2</sub>S) and 1: 1 (ZS) were prepared by using coprecipitation method and their photocatalytic activities were investigated by

Cun et al. Kobayashi et al. investigated the photocatalytic properties of alumina supported ZnS-CdS catalyst. Ren et al. studied the relationship between the coprecipitation mechanism, doping structure and physical properties of Zn<sub>(1-x)</sub>Co<sub>x</sub>S nanocrystallites

### Conclusion:

Coprecipitated NiS-ZnS exhibits higher photocatalytic activity ( $K=6.82 \times 10^{-5} \text{ sec}^{-1}$ ) than pure ZnS ( $k = 3.40 \times 10^{-6} \text{ sec}^{-1}$ ). The increase in photocatalytic activity of NiS-ZnS may be explained on the basis that in NiS-ZnS, NiS act as an impurity and increases the activity of ZnS.

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## IMPORTANCE OF OUTCOME BASED EDUCATION TO IMPROVE EDUCATIONAL QUALITY IN DIPLOMA LEVEL INSTITUTIONS

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### **Abstract**

Traditional education system is losing its importance due to globalization and rapid development in the technology. More skills are required in order to cope up with rapid fast growing technology. Diploma level educational institutions need to produce technicians suitable for growing demands of industry. Hence, it is necessary to shift slowly the educational environment from traditional education system to Outcome Based Education (OBE) system. The OBE is a student centered teaching and learning methodology that focuses on measuring student performance through outcomes. OBE specifies on what the students able to do successfully at the end of their learning experiences. This paper focuses on importance of outcome based education for enhancing educational quality in diploma level technical institutions keeping in view of OBE Curriculum, Course Outcomes (COs), Program Outcomes (POs) and Program Specific Outcomes (PSOs). This paper also analyzes OBE framework, mapping of COs with POs and PSOs as well as attainment process of outcomes. Further, some tools and methods for effective implementation of OBE are presented in this paper.

**Keywords:**Outcome Based Education, Program Outcomes, Course Outcomes, Program Specific Outcomes, OBE Curriculum

### **Introduction**

In the traditional education system, the teaching process is teacher centered, curriculum based and formal in which information or knowledge or skill is transmitted from teacher to the student. It belongs to the input part of learning process. On the other hand, OBE is a student centered teaching learning approach in which course delivery as well as assessment are planned in such a way to achieve stated Program Educational Objectives (PEOs) and Outcomes. OBE focuses on measuring and assessing student performances in the form of outcomes at different levels of educational program. The main purpose of OBE is to enhance the knowledge and skills of the learners. The OBE belongs to both input and output parts of teaching learning process. OBE model of accreditation focuses on outcomes of an educational program. OBE starts with an objective of what a student should able to do after the completion of program so as to ensure



that outcomes are attained. OBE is associated with Continuous Quality Improvement (CIQ) (Spady, William G 1994).

In the literature, Nakkeeran et al. (R. Nakkeeran et al.2018) stated the importance of OBE to advance educational quality and enhance global mobility. In their work, OBE system related to graduate level program is presented. An overview on outcome based education is presented in paper (DuradundiSawantBadkar and Dipak N Mudgal, 2017). Their approach describes how learning outcomes are used in the development of an information system curriculum. The trend review on Outcome Based Education is presented in paper (RashaEldeeb and NishaShatakumari, 2013). They analyzed OBE in medical education.

In this paper, our focus is mainly concerned with OBE frame work that suits diploma level educational institutions. Mapping of Cos with POs and PSOs and attainment process of outcomes is also presented in this paper. Further, this paper focuses on some tools and methods required for effective implementation of OBE.

### **Some Terms and Definitions of OBE**

**Course:** Course is defined as a theory, practical or theory cum practical subject studied in a semester. For Example: Engineering Mathematics, Electronic Components and Devices etc.

**Course Outcome (CO):**Course outcomes are statements that describe significant and essential learning that learners have achieved, and can reliably demonstrate at the end of a course. Generally four or more course outcomes may be specified for each course based on its weightage.

**Program:** Program is defined as the specialization or discipline of a Degree or Diploma. It is the interconnected arrangement of courses, co-curricular and extracurricular activities to accomplish predetermined objectives leading to the awarding of a degree or diploma. For Example: B.E., Electronics and Communication Engineering or Diploma in Mechanical Engineering etc.

**Program Outcomes (POs):**Program outcomes are narrower statements that describe what students are expected to be able to do by the time of graduation. POs are expected to be aligned closely with Graduate Attributes.

**Program Educational Objectives (PEOs):**Program Educational Objectives of a program are the broad statements that describe the expected career and professional achievements of technicians/graduates in their career, and are measured 4 to 5 years after diploma/graduation. PEOs are broad statements that describe the professional and career achievements.

**Program Specific Outcomes (PSOs):** Program Specific Outcomes are what the students should be able to do at the time of graduation with reference to a specific discipline. Usually there are two to four PSOs for a program.



**Graduate Attributes (GA):** The graduate attributes in numbers are exemplars of the attributes expected of a diploma program from an accredited program.

**Knowledge Levels for assessment of outcomes based on Blooms Taxonomy** (Bloom B, 1968):

**Knowledge:**It is the ability to remember the previously learned material/information.i.e. recall data or information

**Comprehension:**It is the ability to grasp the meaning of material.

**Application:** It is the ability to use learned material in new and concrete situations

**Analysis:**It is the ability to break down material/concept into its component parts/subsections so that its organizational structure may be understood

**Synthesis:** It is the ability to put parts/subsections together to form a new whole material/idea/concept/information

**Evaluation:** It is the ability to judge the value of material/concept/statement/creative material/ research reports for a given purpose i.e. make judgment about the value of ideas or materials.

**Comparison of Traditional and Outcome Based Education**

Traditional education system is rigid in syllabus where as OBE is flexible student centered approach for learning.Comparison of Traditional and Outcome Based Education System is shown in Table1.

<b>Traditional Education</b>	<b>Outcome Based Education</b>
Teacher centered in which teacher teaches as per curriculum content	Student centered in which teacher is a facilitator
Learners are passive	Learners are active
Grade/ Marks/ Rank based assessment	Desired outcome (goals) based assessment
Judgment methods are shaped from previous results	Continuous education
Summative assessment only	Both formative and summative assessment
Input part of teaching	Both input and output part of teaching and learning process
Teachers are responsible for learning and motivation depends on the personality and attention of teacher	Learners are responsible for their own learning and are motivated by feedback and assessment tools
Content based curriculum	Outcome based curriculum
Rigid curriculum process without involvement of stakeholders	Flexible with stakeholders participation



There is a gap between academics and industry	Gaps are filled with student activities assessment through rubrics, seminars, mini projects, projects, open ended experiments etc.
Lack of collaboration and group learning	Adaptive learning
Class room learning	Both class room as well as flipped learning
Improper mapping between objectives, activities and assessment	Proper mapping between objectives, activities and assessment
Less emphasis on soft skills	More emphasis on soft skills

Table 1. Comparison of Traditional and Outcome Based Education

**OBE Framework**

OBE is based upon teaching learning and assessment activities that focus on outcomes of learner. Outcome includes knowledge, skills and attitudes. Its focus is on evaluation of outcomes of program by stating the knowledge, skill and behavior of a diploma engineer expected to attain upon completion of program and after 4 to 5 years of diploma education. The OBE is associated with an international partnership and was initiated with Washington Accord ([https://en.wikipedia.org/wiki/Washington\\_Accord](https://en.wikipedia.org/wiki/Washington_Accord)). The Washington Accord ([https://en.wikipedia.org/wiki/Washington\\_Accord](https://en.wikipedia.org/wiki/Washington_Accord), <https://www.nbaind.org/>) is an international accreditation agreement for undergraduate professional engineering academic degrees between the bodies responsible for accreditation in its signatory countries and regions. Established in 1989, the full signatories as of 2018 are Australia, Canada, China, HongKong, India, Ireland, Japan, Korea, Malaysia, New Zealand, Pakistan, Peru, Philippines, Russia, Singapore, SouthAfrica, SriLanka, Taiwan, Turkey, the United Kingdom and the United States. The Accord recommends that graduates of programs accredited by any of the signatory bodies be recognized by the other bodies as having met the academic requirements for entry to the practice of engineering in the area of their jurisdiction. The Washington Accord encourages and facilitates the mobility of engineering graduates and professionals at international level. In OBE framework, curriculum, teaching learning process and various assessment tools are continuously monitored and enhanced through an evaluation process. OBE framework starts from obtaining lesson outcomes to unit outcomes to course outcomes to finally exit outcomes.

The traditional Educational Systems has input and the process. There are no specific outcomes. The teaching learning process is mainly on curriculum based and the assessment is through exams, unit tests, assignments which are quantitative. This system is shown in Fig.1.

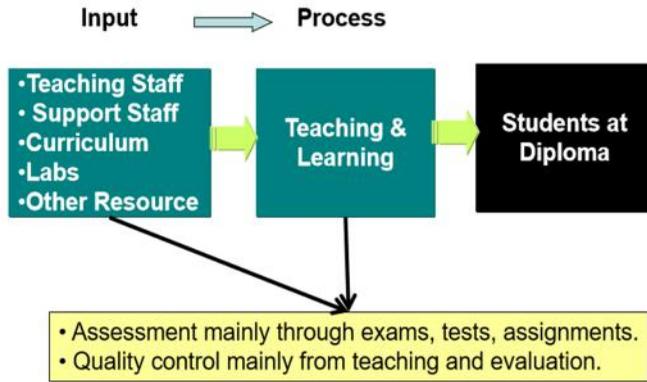


Fig.1. Traditional Education Process

On the other hand, OBE shifts from measuring inputs and the process and to include measuring outcomes. OBE Education Process is shown in Fig.2. This process shows the various inputs, outcomes both short term and long term outcomes as well as process to achieve outcomes.

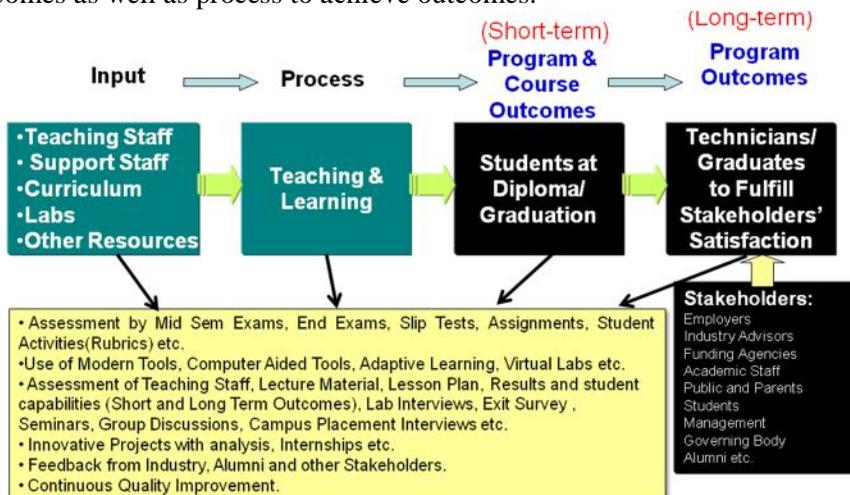


Fig.2. OBE Process

OBE system has inputs and measurable outputs(outcomes) as well as the process to achieve the outcomes. There is continuous quality improvement in OBE. Feedback from stakeholders is used to modify the process to finally

achieve the desired outcomes. Course delivery and planning is through various teaching methods, OBE curriculum, learning activities and various qualitative and quantitative assessment tools.

The structure of OBE framework (Spady, William 1994 and McNeir G, 1993) is shown in Fig.3. It consists of Outcomes, Assessment, Course Planning and Delivery and Continuous Quality Improvement. The main components of OBE outcomes are Vision and Mission, PEOs, POs and Cos. The OBE Assessment includes Course Assessment, Program Assessment and Institution Assessment. The process involved is Course Planning and Delivery and Continuous Improvement. OBE Education Process is shown in Fig.2. This process shows the various inputs, outcomes both short term and long term as well as process to achieve outcomes

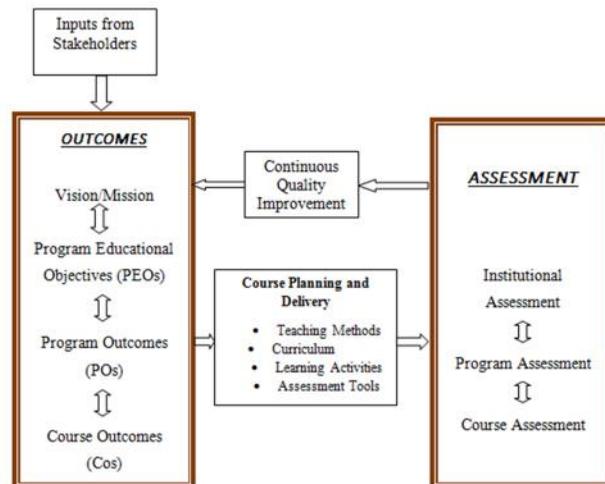


Fig.3. OBE Framework

**Vision and Mission:** Vision statement (<https://www.nbaind.org/>) typically indicates aspirations and Mission statement states the broad approach to achieve aspirations. Institute Vision and Mission statements [5] have been designed to ensure consistency with the department Vision and Mission statements. Vision and Mission statements are different from program to program and from institution to institution. Vision and mission statements are to be defined for institution as well as each program. The HOD and Principal with the active participation of faculty members and based on the continuous feedback from stakeholders develops the vision and mission statement of the department in alignment with Vision and Mission of the Institution. These statements are discussed further among faculty members before finalization. Finally, the



Vision and Mission are approved by the Academic Council and the Governing Council.

A sample vision and mission statements of Diploma level institution is given below.

**Vision of Institution:**To emerge as a leading technical institute by imparting required skills to make them professionally competent, employable and sensitize towards social problems.

**Mission of the Institution:** To ensure academic excellence to diploma students through effective teaching learning process and industrial training for making them professionally competent and socially sensitize students to solve real time problems

**Vision of the ECE Department:** To impart the educational environment in order to produce quality ECE diploma engineers with strong technical background both theoretical and practical and preparing them to serve as a valuable resource for industry and society

**Mission of the ECE Department:**

**M1.** To produce skilled ECE diploma engineers by providing best quality technical education with strong emphasis on hands on exposure so as to meet the specific objectives of curriculum

**M2.** To train the students in the areas of electronics and communication engineering as per the requirements of industry as well as to acquaint them the use of information and communication technology tools

**M3.** To ensure that the students are excelled with good academic discipline and professional competency

**M4.** To inculcate professional and ethical values among the students

**Program Educational Objectives:** Program Educational Objectives (PEOs) (<https://www.nbaind.org/>) are broad statements that describe the professional and career achievements that the program is preparing diploma students achieve within 3 to 5 years after their diploma education. These PEOs [2] are associated with the Vision and Mission statement of the department and are defined with the continuous feedback of Internal Stakeholders (Management, Governing Board Members, Faculty, Support Staff and Students etc.) and External Stakeholders (Employers Industry, Alumni, Funding Agencies, etc.). The PEOs will be assessed three to five years after the students graduated from college through a detailed study and employer's questionnaire surveys. Alumni inputs are obtained through extensive alumni surveys with follow-up email and telephone calls by the Department HOD and associated faculty. This feedback is condensed and presented to faculty at the final faculty meeting. The PEOs are measured through Employer Satisfaction Survey (yearly), Alumni Survey (yearly), Placement Records as well as higher education records. The data



obtained from the assessment will be used as basis for the improvement of the existing PEOs.

Some sample PEOs for Electronics and Communication Engineering Diploma Program are given below.

**PEO1:** To be able to promote, design, testing, analysis, product implementation and servicing of equipment in the field of ECE with strong technical skills.

**PEO2:** To be able to apply fundamental knowledge and technical skills of ECE principles to fulfill industry requirements

**PEO3:** To communicate effectively with good individual and team work, leadership skills and soft skills qualities in work space

**PEO4:** To be able to solve the real time problems in ECE field innovatively, creatively and ethically under supervision.

**Program Outcomes:** Graduate attributes also referred to as Program Outcomes are the main source of OBE. These Program Outcomes are stated by Washington Accord (<https://www.nbaind.org/> and International Engineering Alliance). 25 Years of the Washington Accord). These POs are 12 in total for graduate engineering program and 7 in total for diploma level technical educational institutions(<https://www.nbaind.org/>). The students entry into Diploma level technical programs are after completion of 10<sup>th</sup> class (SSC) through the rank obtained in the Polytechnic Entrance Examination conducted by various State Board of Technical Education and Training. The program duration is generally 3 years and may include industrial training. The POs for Diploma Level Institutions are listed below (<https://www.nbaind.org/>).

#### **Program Outcomes (POs)**

1. **Basic and Discipline specific knowledge:** Apply knowledge of basic mathematics, science and engineering fundamentals and engineering specialization to solve the engineering problems.

2. **Problem analysis:** Identify and analyze well-defined engineering problems using codified standard methods.

3. **Design/ development of solutions:** Design solutions for well-defined technical problems and assist with the design of systems components or processes to meet specified needs.

4. **Engineering Tools, Experimentation and Testing:** Apply modern engineering tools and appropriate technique to conduct standard tests and measurements.

5. **Engineering practices for society, sustainability and environment:** Apply appropriate technology in context of society, sustainability, environment and ethical practices.



6. **Project Management:** Use engineering management principles individually, as a team member or a leader to manage projects and effectively communicate about well-defined engineering activities.

7. **Life-long learning:** Ability to analyze individual needs and engage in updating in the context of technological changes.

**Program Specific Outcomes (PSOs):**

Program shall specify 2-4 Program Specific Outcomes (if any)

The PSOs are equivalent to POs but they are program specific. These (if any) are to be defined for each program and Cos to be mapped to PSOs along with POs.If the program is specific, 2 to 4 PSOs to be specified. Some sample PSOs are given below.

Diploma Electronics and Communication Engineering (ECE) program students will be able to:

**PSO1:** Design, implement and analyze electronic circuits for a given application

**PSO2:** Design, implement and analyze Communication Systems for a given specification

**PSO3:** Implement algorithms for processing Data Communication and multimedia data streams using a given engineering tool.

Diploma Mechanical Engineering Program students will be able to:

**PSO1:** Apply their knowledge in the domain of Engineering Mechanics, Thermal and Fluid Sciences to solve engineering problems utilizing advanced technology

**PSO2:** Successfully apply the principles of design, analysis and implementation of mechanical systems/processes which have been learnt as a part of curriculum.

**PSO3:** Develop and implement new ideas on product design and development with the help of modern CAD/CAM tools while ensuing best manufacturing practices.

**OBE Framework Mapping and Attainment of Outcomes**

In this section, Cos mapping with Pos and PSOs is presented. All the courses under academic program should have COs. These COs are to be designed as per OBE curriculum based on the requirement of POs. A sample set of COs for one theory course and one practical course of ECE program is given below. Course Outcome statement may be broken down into two main components. The first one is an action word that identifies the performance to be demonstrated and the second one is learning statement that specifies what learning will be demonstrated in the performance.A sample set of COs for Diploma ECE Theory Course of Mobile Communication is given below.

Upon completion of the course, the student should be able to

Course Outcome	
CO1	Interpret the Basic Concepts of Mobile Communication System
CO2	Explain Cellular System Design Fundamentals



CO3	Compare and use various Multiple Access Techniques
CO4	Comprehend Digital Cellular Mobile Systems
CO5	Apply Intelligent Cell Concept in Mobile Communication
CO6	Design, implement and analyze Modern Wireless Communication Systems

CO-PO, PSO mapping is shown in the form of matrix shown below

CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PSO1	PSO2	PSO3
CO1	3							2	2	
CO2	2							1		
CO3	1			2	3				1	
CO4	2		2	2				1		3
CO5	3	3	2	2	2	2	2			2
CO6	3	3	3	3	2	2	3		3	2

**Note:** If the correlation between CO and PO is high, enter the value 3 in the matrix. If the correlation between CO and PO is medium, enter the value 2 in the matrix. If the correlation between CO and PO is low, enter the value 1 in the matrix. If there is no correlation, leave the element of matrix. The values entered in the PO-CO matrix depends on the course, the student’s activities and the perception of the teacher and varies from teacher to teacher.

A sample set of COs for ECE Laboratory Course of MATLAB Practice is given below.

Course Outcome	
CO1	Practice with MATLAB Environment
CO2	Implement Programs using Arrays and Matrices
CO3	Demonstrate Skills using MATLAB to simulate generation of required signal
CO4	Apply MATLAB Programs to Design and Implement a Modulation Technique

The assessment methods need to be developed in such a way to achieve the specified program outcomes based on the identified course outcomes. The Board/ Institution need to develop various methods of assessment. The various assessment methods for measuring course outcomes for diploma level programs include Mid-I Exams, Mid-II exams, Semester End Examinations, Slip Tests, Assignments, Tutorials, Seminars, Laboratory tests, Project Work, Industrial Training Assessment, Rubrics for assessing skill upgradation( students activities) etc. The above methods of assessment belong to direct assessment. Indirect assessment of outcomes can also be made with the opinions of various stakeholders.

The process of attainment of COs, POs and PSOs starts from writing appropriate COs for each course of the program from first year to the entire period of the program. OBE curriculum should contain the course outcomes for all the courses along with CO-PO mapping. The Cos are to be defined based on



POs. Open ended experiments may be incorporated to map the Life Long Learning PO. Curriculum gaps may be identified and these are filled with the student activities for which rubrics can be used as an assessment tool. A correlation is established between COs and POs in the form of PO-CO matrix in a fixed scale value for example, 1 being the slight (low), 2 being moderate (medium) and 3 being substantial (high). A mapping matrix is prepared in this regard for every course in the program. The overall attainment of outcomes of a program (POs) is computed by adding direct attainment and indirect attainment values in a fixed proportion (for example 80% of direct attainment+20% of indirect attainment) and compared with the set value (desired value). The system should be improved so as to reach the set value. This should be done continuously till the attainment of set value. This is called the continuous quality improvement (CQI) and is the major strength of OBE system (Mehdi, Riyadh A. K, AbouNaaj, Mahmoud S, 2013 and Ashley Kranov, Michael Milligan, Joe Sussman, 2011).

### **Some Methods and Tools for Effective Implementation of OBE**

The adoption of OBE at Diploma and Graduate Engineering Institutions is considered to be a great step forward but, the actual success depends on the role of a teacher to ensure the quality of education. The various methods and tools that are required in addition to class room communication and laboratory instruction for effective implementation of OBE are presented in this section.

**OBE Curriculum:** OBE curriculum should clearly define the Unit Outcomes and Course Outcomes so as to match with POs. It may contain course outcomes that can define PSOs. PSOs are the additional strengths for a program. OBE curriculum should also incorporate the student activities and the assessment methods so that the curriculum should meet all the requirements of POs. OBE curriculum should be prepared by senior and experienced faculty in consultation with industry, stakeholders as well as faculty from NITTTRs etc.

**Adaptive Learning:** Adaptive learning is a tool for effective implementation of OBE. Adaptive learning is a computer-based online educational system that modifies the content of material in response to student performance. Adaptive learning ([https://en.wikipedia.org/wiki/Adaptive\\_learning](https://en.wikipedia.org/wiki/Adaptive_learning)) is an educational method which makes use of computer algorithms for interaction with learners and delivers customized resources and learning activities to address the unique needs of each learner.

**Flipped Learning:** Flipped classroom is a pedagogical approach in which the activities that have traditionally taken place inside the classroom take place outside the classroom and vice versa. The flipped classroom environment ensures that students become more active participants compared with in the traditional classroom. The trends and contents of flipped classroom research are



presented in paper (ZamzamiZainuddin and SitiHajarHalili, 2016). Their analysis found that various fields were practiced in the flipped classroom approach, and technology tools were used as the online platform for its practice. Analysis of the impacts showed that flipped classroom brought positive impacts toward students learning activities such as achievement, motivation, engagement, and interaction.

**Virtual Labs:** Group of IITs and other universities developed virtual Labs (<http://www.vlab.co.in/>) with an objective of providing remote-access to labs in various disciplines of Science and Engineering, and to provide a complete Learning Management System around the Virtual Labs where the students can avail the various tools for learning, including additional web-resources, video-lectures, animated demonstrations and self evaluation. The students and faculty can make use of virtual labs and acquire skills required as per growing demands of technology.

**MoodleCloud:** MoodleCloud(<https://moodlecloud.com/>) is an online learning environment to teach classes or to facilitate learning for educators, trainers or learners. MoodleCloud is the cloud hosted solution for learning environment. The main features are creating courses, mobile app support, scalable, certificates and web conferencing. This platform can be used for creating the courses, putting the course content in the courses, student enrollment, assessment and certification. Using this tool, teachers can create their own courses useful for enhancing the skills of students.

**Internships:** Internships(<https://www.aicte-india.org/>) are educational and career development opportunities, providing practical experience in a field. Internships help students to expose to industrial environment. It provides opportunities to learn understand and sharpen the real time technical / managerial skills required at the job. The students will get exposure to the latest developments in the technology. The internships help the learners to acquire individual and group learning skills.

**Learning Management System:** Learning Management System (LMS)([https://en.wikipedia.org/wiki/Learning\\_management\\_system](https://en.wikipedia.org/wiki/Learning_management_system), Ellis, Ryann K, 2009 and Davis B, Carmean C and Wagner E 2009) is a software application for the administration, documentation, tracking, reporting, and delivery of educational courses and training programs. The LMS concept is emerged from e-Learning concept. Using this system, computerization of teaching learning process can be done and can be used as documentary evidence.

**MOOCs:** Massive Open Online Courses (MOOCs)(<https://www.mooc.org/>) are free online courses available for anyone to enroll. MOOCs provide an affordable and flexible way to learn new skills, advance your career and deliver quality educational experiences. The students and faculty can enroll for MOOCs



for enhancing the skills. With the acquired skills, OBE can be better implemented.

**SWAYAM:** Government of India initiated SWAYAM programme (<https://swayam.gov.in/>) to achieve the education policy principles such as access, equity and quality. The objective of the program is to take the best teaching learning resources to all. This platform facilitates hosting of all the coursestaught in classrooms from 9<sup>th</sup>Classtill post-graduation to be accessed by anyone, anywhere at any time. All the courses are interactive and are prepared by the best teachers in the country. These courses are availablefree of cost to any learner. SWAYAM courses include video lectures, reading material, self assessment tests and an online discussion forum for clearing the doubts. SWAYAM courses are available free of cost to the learners. Learners willing to get a SWAYAM certificate (<https://swayam.gov.in/>) should register for the final exams with an exam fee and attend in person at designated centers on specified dates.

**NPTEL:** Group of IITs and IISc, Bangalore initiated the National Programme on Technology Enhanced Learning (NPTEL) (<https://nptel.ac.in/>). Students can learn and upgrade skills by viewing video lectures from NPTEL. NPTEL also provide online certification for different courses. The purpose of obtaining certificates is to make students employable in the industry or pursue higher education program.

**Rubrics:**A rubric is a qualitative assessment tool for the student activities. Skill upgradation can be achieved through student activities related to course outcomes for which rubrics can be used as assessment tools.**RubiStar** (<http://rubistar.4teachers.org/index.php>) is a free tool to help teachers create quality rubrics. Skill upgradation and rubrics can be used to fill the curriculum gaps.

**Techfests/ Project Demonstrations/Workshops:**Techfests help students to demonstrate their learnt experiences in the form of projects and demnostrations as well as to develop the creative and innovative ideas for implementation.Worhshops will enhance the students practical experiences in the latest technologies.

**Short Term Training Programmes:** Short Term training Programs can help the students to upgrade their skills to find a job. These programs are also useful to faculty to enhance their skills and to get promotion.

**Use of Skill Development Centers:**Skill Development Centers (SDCs) within the institution or outside the institution are useful for the students to bridge the gap between industry and educational institution. Students may be trained with some advanced courses in SDCs beyond the class room instruction. Certificates may be provided to the learners which will be an added advantage for their academics as well as job opportunities.



**Open Ended Experiments:** Open ended experiment in lab is where the students are given a chance and freedom to develop their own experiments without setting the guidelines from the laboratory manual. Open ended experiments make the students to think themselves and carry out the experiments. It improves higher order thinking abilities of students. Lifelong learning PO can be mapped with open ended experiments.

### **Conclusions**

This paper presents an overview on importance of outcome based education for enhancing educational quality in diploma level technical institutions. OBE is an educational system that focuses on what students can do or the qualities they should develop after they are taught. The process of OBE involves the restructuring of curriculum, assessment and reporting practices in education to reflect the achievement of high order learning. The purpose of OBE is what we teach rather it is what the students learn so as to increase the knowledge and skills of learners. OBE shifts from measuring inputs and process to include measuring the outcomes. The OBE is a student centered teaching in which student performance is measured through outcomes. OBE framework, mapping of COs with POs and PSOs as well as attainment process of outcomes is also analyzed in this paper. An overview on some tools and methods for effective implementation of OBE is also presented in this paper. The teacher should understand the OBE system and adopt methods accordingly for successful implementation of OBE. All of a sudden, it is somewhat difficult to change suddenly from traditional education to OBE. The traditional education is to be moved slowly towards implementation of OBE. Our future work will be more detailed analysis of tools and methods that should be equipped by both teachers as well as students for effective implementation of OBE. Role of a teacher for effective implementation of OBE will also be directed as future work.

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## A STUDY OF PUPIL TEACHERS' ATTITUDE TOWARDS TEACHER ELIGIBILITY TEST

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### **Abstract**

The present study revealed the pupil teachers' attitude towards teacher eligibility test. For this purpose descriptive survey method was used and the Investigator selected 120 pupil teachers pursuing B.Ed. in several education colleges stated in Patiala district via purpose, stratified and random techniques of sampling. Data was collected by "attitude towards teacher eligibility test scale" developed by the investigator herself. Descriptive statistics and t-test was used for analyzing and interpreting the data. The findings revealed that there was no significant difference in the attitude of male and female pupil teachers, married and unmarried pupil teachers towards teacher eligibility test but there was significant difference in the attitude of science and arts stream pupil teachers, urban and rural pupil teachers towards teacher eligibility test.

**Keywords:** Attitude, Education, Married, Pupil, Rural, Teacher, Urban, Unmarried.

### **1. Introduction**

The quality of instructors is, to huge degree, decided by who are pulled in to enter the calling and how they are prepared. The community anticipates instructors to be exceedingly subject- competent and capable in instructional method. Teacher's victory is decided not as it were by their aptitudes and procedures of instructing but too by their individual qualities and morals of instructing calling. So, an instructor ought to have useful and empowering state of mind towards instructing since it makes works the work simpler, satisfying and professionally fulfilling. The NCERT has chosen to make strides the quality in educator instruction by conducting TET (Teacher Eligibility Test) and it suggests to state governments to conduct the qualification test at state. The essential point of CTET and TET are to create quality educator instruction and diminishing the sum of jobless instructor. Quality teacher instruction is the requirement of the hour. Having a B.Ed. degree will now not be sufficient to gotten to be a school educator. Candidates got to score least 60 percent within the test to qualify for educator occupations at any private or government school. There's no bar on the number of endeavors by a trying instructor for getting a



CTET / PSTET certificates. Besides, a competitor can show up a moment time to progress the score. The legitimacy period of CTET qualifying certificate for arrangement will be seven a long time from the information of announcement of its result for all categories. To be qualified to require the CTET or any TET conducted by the states, one needs to have a degree or recognition in instruction (B.Ed. or D.Ed.) or be on the skirt of completing a degree within the year of taking a test. This kind of qualifying test can offer assistance them make strides the quality teacher's right from the enlistment organize. But their discernment towards that examination is imperative some time recently conducting it.

## 2. RELATED LITERATURE

Muppudathi (2014) centered on the positive and negative states of mind towards TET examination. For this reason, this quantitative inquire about was conducted with 220 instructors working in private schools with regulating overview strategy. The information was collected with a scale, a self-made instrument comprises of 30 both positive and negative things. The discoveries of this think about brought into light a few crucial reasons behind the demeanors displayed by the instructors with respect to TET, was primarily due to the significance of TET, its need, and the issues confronted by the instructors whereas going to TET. On the premise of the discoveries it is proposed that, as the test is required for getting instructing occupations in government schools, all the openings, assets and offices ought to be given to the understudy instructors amid their B.Ed. course for their proficient improvement and to fulfill and accomplish instructive objectives. It is fundamental to guarantee instructors with the fundamental inclination and capacity to meet the challenges of educating at the primary level. Lenka (2015) demonstrated that the understudies has a place to urban regions have positive state of mind towards TET than country ranges understudies and the planned instructors of science stream have positive state of mind towards TET. It was proposed that the specified assets and offices ought to be given to the pupil teachers amid their preparing to attain instructive goals. Lakshmi & Ashok (2017) arranged a study to know the views & demeanor towards educator qualification test among the school instructors. State of mind is basically characterized as sees, conclusions, thoughts, sentiments, fears, towards specific occasion. This paper is an endeavor to discover the State of mind towards educator qualification test among B. Ed learners. Within the display consider study strategy was utilized. The examiner embraced the overview strategy to consider the demeanor of B. Ed learners towards educator qualification test. Examiners chosen as it were 300 B. Ed learners as test in Coimbatore area utilizing stratified arbitrary testing. The findings uncover that there's a direct state of mind towards instructor qualification test among the chosen B. Ed learners in Coimbatore area. Thus, the



investigator decided to study the attitude of pupil teachers' attitude towards teacher eligibility test.

### **3. OBJECTIVES OF THE STUDY:**

1. To study the attitude of pupil teachers' towards teacher eligibility test in respect to their gender.
2. To study the attitude of pupil teachers' towards teacher eligibility test in respect to their locale.
3. To study the attitude of pupil teachers' towards teacher eligibility test in respect to their stream.
4. To study the attitude of pupil teachers' towards teacher eligibility test in respect to their marital status.

### **4. HYPOTHESES OF THE STUDY:**

The following null hypotheses were generated for this study:

1. There will be no significant difference in the attitude of male and female pupil teachers towards teacher eligibility test.
2. There will be no significant difference in the attitude of urban and rural pupil teachers towards teacher eligibility test.
3. There will be no significant difference in the attitude of science stream and arts stream' pupil teachers towards teacher eligibility test.
4. There will be no significant difference in the attitude of married and unmarried pupil teachers towards teacher eligibility test.

### **5. SIGNIFICANCE OF THE STUDY:**

This investigation focused on the attitude of pupil teachers towards teacher eligibility test. It can be valuable for making beneficial plans about quality teaching, teachers training programs and for quality upgrade. Hence, the study titled as

**“A STUDY OF THE ATTITUDE OF PUPIL TECAHERS TOWARDS TEACHER ELIGIBILTY TEST”**

### **6. OPERATIONAL DEFINITIONS OF THE STUDY:**

1. **Attitude:** It is the person degrees of like or dislike depending on the positive or negative perspectives that an individual perceives and he tend to act towards any circumstances concurring to his point o view.
2. **Pupil-teachers:** Pupil teachers are those students who are taking teacher training or pursuing B.Ed. / E.T.T. in teacher training institutions stated in Patiala district.



3. **Teacher Eligibility Test (TET):** it is the test conducted by central and state government on the pupil teachers for testing their eligibility for becoming future teachers.

#### **7. DELIMITATION OF THE STUDY:**

The present study is limited to 120 pupil teachers (60 male and 60 female) who were pursuing B.ED. And E.T.T. in science or arts stream from teacher training institutions stated in Patiala district.

#### **8. METHODOLGY OF THE STUDY**

8.1.**METHOD:** for this study, descriptive survey method was applied on the collected data.

8.2.**SAMPLE AND SAMPLING:** 120 pupil teachers (60 male and 60 female) were selected as a sample by purpose, stratified and random sampling techniques of science and arts stream.

8.3.**TOOL OF THE STUDY:** A self-made tool for assessing the attitude towards teacher eligibility test was used on the selected sample for data collection. The scale consists 30 items and the reliability was found by test-retest method which was 0.68. The validity of the test has been reported on the basis of a factor-analysis of the inter element scores.

8.4.**STATSTICAL TECHNIQUES:** mean, Median, mode, S.D. and t-test was applied to the collected data and analyzed the results.

#### **9. ANALYSIS AND INTERPRATATION OF THE DATA:**

Inside the show consider, the data has been collected utilizing standardized examine state of intellect scale. The data was classified, organized and analyzed. The examination of the data was carried out with the help of the crucial genuine tables and graphical representation. Keeping in see the objectives of the consider, endeavors were made to show the collected information in a true blue orchestrated shape in organize to create examination and illustration exact for fulfilling the result:

#### **ATTITUDE OF PUPILTEACHERS TOWRDS TEACHER ELIGIBILITY TEST IN RESPECT TO THEIR GENDER, LOCALE, STREAM AND MARITAL STATUS.**

To find out the significance difference in the attitude of pupil teachers towards teacher eligibility test, data was collected and converted into tabular form, after that descriptive analysis and t-test was applied on the data. The results are given below:

### **9.1 ATTITUDE OF PUPILTEACHERS TOWRDS TEACHER ELIGIBILITY TEST IN RESPECT TO THEIR GENDER.**

To study the significance difference in the attitude of male and female pupil teachers towards teacher eligibility test, t-test was applied and the results are given ahead in table 1.

Table 1

Sr.no.	Male P.T	Female P.T	t-test value	
1.Mean	80.2	81.8	1.03	NOT SIGNIFIA CNT
2.S.D.	8.12	7.89		
3.N	60	60		
Total	120			

It can be concluded vividly by the table-1 that the mean value for attitude scores towards TET of male P.T. is 80.2 and for female P.T. is 81.8 along with standard deviation 8.12 and 7.89 respectively. The t-value for the significant mean difference of the attitude score of male and female pupil teachers towards teacher eligibility test is 1.03, which is less than the table value at 0.05 and 0.01 level of significance and thus, the difference is not significant in the attitude score of male and female pupil teachers towards teacher eligibility test. Hence, the first hypotheses that “There will be no significant difference in the attitude of male and female pupil teachers towards teacher eligibility test” is accepted. But it can be also revealed by the mean attitude scores of male (80.2) and female (81.8) pupil teachers that the male pupil teachers perceive better attitude towards teacher eligibility test than female pupil teachers.

### **9.2.ATTITUDE OF PUPILTEACHERS TOWRDS TEACHER ELIGIBILITY TEST IN RESPECT TO THEIR LOCALE**

To study the significance difference in the attitude of urban and rural pupil teachers towards teacher eligibility test, t-test was applied and the results are given ahead in table 2.

Table 2

Sr.no.	Urban P.T	Rural P.T	t-test value	
1.Mean	86.2	81.4	2.93*	SIGNIFI ACNT AT 0.05
2.S.D.	8.14	9.84		
3.N	63	57		
Total	120			

It can be concluded vividly by the table-2 that the mean value for attitude scores towards TET of urban P.T. is 86.2 and for rural P.T. is 81.4 along with standard deviation 8.14 and 9.84 respectively. The t-value for the significant

mean difference of the attitude score of urban and rural pupil teachers towards teacher eligibility test is 2.93, which is greater than the table value at 0.05 level of significance and thus, the difference is significant in the attitude score of urban and rural pupil teachers towards teacher eligibility test. Hence, the second hypothesis that “There will be no significant difference in the attitude of urban and rural pupil teachers towards teacher eligibility test” is rejected. But it can be also revealed by the mean attitude scores of urban (86.2) and rural (81.4) pupil teachers that the urban pupil teachers perceive better attitude towards teacher eligibility test than rural pupil teachers.

### **9.3 ATTITUDE OF PUPILTEACHERS TOWRDS TEACHER ELIGIBILITY TEST IN RESPECT TO THEIR STREAM**

To study the significance difference in the attitude of science stream and arts stream pupil teachers towards teacher eligibility test, t-test was applied and the results are given ahead in table 3.

Table 3

Sr.no.	Scienc e P.T	Arts P.T	t-test value	
1.Me an	84.4	79.9	2.72*	SIGNIFI ACNT AT 0.05
2.S.D.	8.09	9.98		
3.N	65	55		
Total	120			

It can be concluded vividly by the table-3 that the mean value for attitude scores towards TET of science stream P.T. is 84.4 and for arts stream P.T. is 79.9 along with standard deviation 8.09 and 9.98 respectively. The t-value for the significant mean difference of the attitude score of science and arts stream pupil teachers towards teacher eligibility test is 2.72, which is greater than the table value at 0.05 level of significance and thus, the difference is significant in the attitude score of science and arts stream pupil teachers towards teacher eligibility test. Hence, the third hypothesis that “There will be no significant difference in the attitude of science and arts stream pupil teachers towards teacher eligibility test” is rejected. But it can be also revealed by the mean attitude scores of science (84.4) and arts (79.9) pupil teachers that the science stream pupil teachers perceive better attitude towards teacher eligibility test than arts stream pupil teachers.

### **9.4 ATTITUDE OF PUPILTEACHERS TOWRDS TEACHER ELIGIBILITY TEST IN RESPECT TO THEIR MARITAL STATUS**

To study the significance difference in the attitude of married and unmarried pupil teachers towards teacher eligibility test, t-test was applied and the results are given ahead in table 4.

Table 4

Sr.no.	Married P.T	Unmarried P.T	t-test value	
1.Mean	84.2	81.5	1.75	NOT SIGNIFIA CNT
2.S.D.	8.7	8.2		
3.N	56	64		
Total	120			

It can be concluded vividly by the table-4 that the mean value for attitude scores towards TET of married P.T. is 84.2 and for unmarried P.T. is 81.5 along with standard deviation 8.7 and 8.2 respectively. The t-value for the significant mean difference of the attitude score of married and unmarried pupil teachers towards teacher eligibility test is 1.75, which is less than the table value at 0.05 level of significance and thus, the difference is not significant in the attitude score of married and unmarried pupil teachers towards teacher eligibility test. Hence, the fourth hypothesis that “There will be no significant difference in the attitude of married and unmarried pupil teachers towards teacher eligibility test” is accepted. But it can be also revealed by the mean attitude scores of married (84.2) and unmarried (81.5) pupil teachers that the married pupil teachers perceive better attitude towards teacher eligibility test than unmarried pupil teachers.

#### 10. TESTING OF HYPOTHESES

1. The t-value for the significant mean difference of the attitude score of male and female pupil teachers towards teacher eligibility test is 1.03, which is less than the table value at 0.05 and 0.01 level of significance and thus, the difference is not significant in the attitude score of male and female pupil teachers towards teacher eligibility test. Hence, the first hypotheses that “**There will be no significant difference in the attitude of male and female pupil teachers towards teacher eligibility test**” is accepted.

2. The t-value for the significant mean difference of the attitude score of urban and rural pupil teachers towards teacher eligibility test is 2.93, which is greater than the table value at 0.05 level of significance and thus, the difference is significant in the attitude score of urban and rural pupil teachers towards teacher eligibility test. Hence, the second hypothesis that “**There will be no significant difference in the attitude of urban and rural pupil teachers towards teacher eligibility test**” is rejected.

3. The t-value for the significant mean difference of the attitude score of science and arts stream pupil teachers towards teacher eligibility test is 2.72, which is greater than the table value at 0.05 level of significance and thus, the difference is significant in the attitude score of science and arts stream pupil teachers towards teacher eligibility test. Hence, the third hypothesis that “**There**



**will be no significant difference in the attitude of science and arts stream pupil teachers towards teacher eligibility test” is rejected.**

4. The t-value for the significant mean difference of the attitude score of married and unmarried pupil teachers towards teacher eligibility test is 1.75, which is less than the table value at 0.05 level of significance and thus, the difference is not significant in the attitude score of married and unmarried pupil teachers towards teacher eligibility test. Hence, the fourth hypothesis that **“There will be no significant difference in the attitude of married and unmarried pupil teachers towards teacher eligibility test” is accepted.**

### **11. MAJOR FINDINGS OF THE STUDY:**

**By this study, the following results were declared:**

1. There was no significant difference in the attitude of male and female pupil teachers towards teacher eligibility test.
2. Male pupil teachers had better attitude towards teacher eligibility test than female pupil teachers.
3. There was significant difference in the attitude of urban and rural pupil teachers towards teacher eligibility test.
4. Urban pupil teachers had better attitude towards teacher eligibility test than rural pupil teachers.
5. There was significant difference in the attitude of science and arts stream pupil teachers towards teacher eligibility test.
6. Science stream pupil teachers had better attitude towards teacher eligibility test than arts stream pupil teachers.
7. There was no significant difference in the attitude of married and unmarried pupil teachers towards teacher eligibility test.
8. Married pupil teachers had better attitude towards teacher eligibility test than unmarried pupil teachers.

Hence, it can be said that all the teacher training institutions should prepare and train pupil teachers in such a way that they should not perceive any kind of negative attitude towards teacher eligibility test.

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## A CRAM ON MSMES WITH ALLUSION TO NEEDS SCHEME OF EMPOWERING WOMEN ENTREPRENEURS IN TAMIL NADU REGION

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### **Abstract**

This study is based on the development of MSMEs with regard NEED schemes to the women entrepreneurs in Vellore City. It enables to identify the new entrepreneurs for optimum utilization of resources, to find the financial assistance given by banks and its impact on MSMEs in Tamil Nadu. With demographical profile of entrepreneurs, primary data are collected with a well structures questionnaire, resources available in that locality, sources of raising fund, the amount of subsidy provided by NEEDS schemes, problems faced by entrepreneurs in marketing their products due to the big corporate. The questionnaire with the above-stated features is distributed to 50 entrepreneurs of Micro, Small and Medium scale enterprises under "NEEDS" schemes. Secondary data are collected from various sources such as books, E-sources, journals, and government reports. Relevant statistical tools are applied to measure the growth of the economy and outcome of the results generate employment opportunities to women entrepreneurs and support regional balanced development.

**Key Words:** Micro, Small and Medium Enterprises (MSME), The New Entrepreneur cum Enterprise Development Scheme (NEEDS), balanced development.

### **1. Introduction**

India has undergone various steps and institutional measures to promote a tradition of novelty and industrialist in the country. Today India is facing a serious issue in Job creation. With a considerable and exclusive demographic advantage, Tamil Nadu, on the other hand, has immense prospective to innovate, raise entrepreneurs and generate jobs for the assistance of the nation and the world.

In India Micro small medium sized enterprises constitutes more than 30% of GDP, thereby giving employment to more than 117 million Indians.



(The Times of India February 7th 2019). In the fast growing economy like ours, sectors play a transforming role, giving a favourable environmental to foster a sustainable, flexible and profitable framework. The study is on women entrepreneurs availing financial assistance under NEEDS Scheme in Vellore, Tamil Nadu.

### **1.1 THE INDIAN ECONOMY and ITS ROLE in MSMEs**

The NEEDS scheme was introduced by Financial Minister of India to groom the literate youth of Tamil Nadu to become the first generation entrepreneurs. Under this the government of Tamil Nadu provides all possible investment subsidies to the literate youth with any under graduation Degree,ITI, Diploma, Vocational Training from a renowned institution and in the age group of 21 to 35 years under universal group and 21 to 45 years under particular group wannabe to become an entrepreneurs would be entitled for financial assistance under this scheme. The project rate will not exceed more than Rs.1 crore. The capital subsidy of 25% of the project cost up to a maximum amount of Rs.25lakhs will be granted by the State Government. In 2019-20 budgets, Nirmala Sitharaman has taken initiatives for the discussion and measures were taken to resolve issues in relation to the MSME sector in India. Further she has taken crucial points on the discussion to lower the rate of 25 % Corporate Tax extended to companies with an annual turnover up to Rs 400 crore. The government will create a payment platform for MSMEs for filing of bills and payments. This will get rid of any delays in the making of payments and also enhance investments in MSMEs. “The Stand up India” Scheme has been extended up to the year 2025.

### **1.2 OBJECTIVES OF THE STUDY**

- To study the social economic profile of an entrepreneurs, awareness level of NEEDs schemes , firms activities and areas of business in Vellore , Tamil Nadu
- To spell out the factors that encourage women entrepreneur to initiative business under “NEED” scheme.
- To discuss the problems faced by MSMEs entrepreneurs in Vellore, Tamil Nadu.
- To identify measures to improve the act of women entrepreneurs under the “NEED” scheme.

### **1.3 SCOPE OF THE STUDY**

The entrepreneurs from Vellore district were selected for the study solely based on the situations that they had started their career either as low level employees of certain organizations or commenced their journey using their

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own investments and with the help of DIC. They initiated their own business and gradually picked it up due to their innovative entrepreneurship qualities and skills. The spirit of entrepreneurship held in their hearts and minds boosted their hopes and confidence which lead to the creation of budding entrepreneurs.

### **1.3 RESEARCH METHODOLOGY**

The area of Vellore district is 6077km<sup>2</sup>. The district has (8 taluks and 20 blocks) there are nine municipal towns, 27 panchayats and 753 village panchayats the total population of the district is 3,936,331 comprising 19,61,688 men 19,74,643 women as per 2011 census. The urban population consists 27.8% of the total population. The concentration of private sector largely lies within the Urban and Semi Urban areas and the remaining 72.2% are rural population who apart from this private organisation, are engaged in various business units such as fashion designing, interior decorating, imports and exports, media, agriculture, dairy products such as milk, yogurt, butter, cheese etc. stores management, DTP centres, libraries, stationeries, communication centres, etc.

### **1.4 SOURCES OF DATA**

In this report both primary data and secondary data are used. The primary data were gathered using a structured questionnaire. A questionnaire consisting of 20 questions was composed in order to meet the objectives of this study. The Secondary data were collected from books, journals, magazines, newspapers and various web sites.

### **1.5 SAMPLE SIZE AND SAMPLING METHOD**

The questioner was provided with 50 Entrepreneur from various industries in Vellore spread across rural, urban and semi urban areas and the sample size is limited to 50 Entrepreneurs.

### **1.6 AREA OF THE STUDY**

This study covers the entrepreneur who were benefited from the “NEED” scheme which was conducted in Vellore, Tamil Nadu.

### **1.7 METHODOLOGY**

This study is largely based on primary data, which was collected from the entrepreneurs through questionnaire in the district of Vellore, whereas the secondary data was collected from various other sources such as journals, magazines, books, articles and websites



## 1.8 ANALYSIS OF DATA

The primary data collected through the medium of questionnaire from the selected respondents are critically evaluated by applying statistical tools.

1. **Simple percentage analysis** is applied to find out the demographic profile of Entrepreneur benefited under the NEEDs scheme.
2. **Cross tab percentage analysis** is implemented to identify the relationship between the demographic profile and the details about the business carried down by the entrepreneurs.
3. **ANOVA** is used as an instrument for analyzing the influence of demographic variables on start up motives, problems faced by the entrepreneur and remedial measures taken for the improvement of the business.

## 1.9 LIMITATIONS OF THE STUDY

1. The primary data collection was a tedious process, because there was no existing basic information due to the scheme being a newly introduced .
2. Difficulty in acquiring relevant or accurate information due to the limited time duration of the research.
3. The Women Entrepreneurs are limited in the district of Vellore due to which the information gathered are not largely from the women entrepreneur's perspective.
4. The conditions put forward proved to be a hindrance in the search for qualified entrepreneurs. The condition that was placed in the hypothesis was a sample size that was set to have only fifty respondents, due to which there are possibilities of increased errors and bias.
5. The Government provided fund for trained entrepreneurs who seek financial assistance are relatively and the success rate is low.

## 2. REVIEW OF LITERATURE

**Vipin Koushal, Raman Sharma, Meenakshi Sharma, Ratika Sharma and Vivek Sharma ( 2017)** A bio-plastic is a plastic which are made out of polymers to a certain extent is obtained from biological sources such as straw, sugar cane, potato starch or the cellulose from trees and cotton. Though widespread research and new technologies have led to the invention of newer and safer plastics, the major consequences due to the usage of plastics are still inherent and impact is on the rise. The study concluded that effective policies and measures are to be taken to execute at the earliest to defend the environment.

**Uma Pujar (2014):-** The research had been conducted to know the workings of MSMEs sectors in increasing the employment rate in India. The



existence of MEMEs entrepreneurs helps in the growth of the economy by boosting the employment rate, and thus helping in the reduction of unemployment, regional disparities and scarcity of resources within the nation. These enterprises functions mainly on labour intensive work and less on capital intensive work and thus helping in the suppression of socio-economic issues such as unemployment, poverty and regional imbalances. The Government should ensure that such enterprises are provided with good infrastructure and sufficient fund for the promotion and development of this sector.

**Mary Kay Copeland (2010):-** The research have found that efficient and successful entrepreneurs are self leading with confidence, risk taking ability, great perception, inquisitiveness, tolerance of ambiguity, and uncertainty being the major contributing factors that influences the new businesses to work under the NEEDs scheme.

**Kulwant Singh Pathania and Surrender Singh Metha (2009)** in their book ‘Status, Problems and Challenges of Khadi Village Industries’ have attempted to study the working performance and other issues of KVI sector in Himachal Pradesh. They opined that shortage in the availability of lubricant from the finance perspective compelled the entrepreneurs to use second hand machineries, inferior and ineffective method of production.

**Madaswami (2004)** in his article ‘Creating More Employment in the Rural Areas’ pointed out that village and cottage industries provide instant huge employment and offer a method of ensuring a more reasonable distribution of national prosperity and facilitate valuable consumption of capital resource and skill. The central and state government offers motivated by various promotional schemes by self –employment. The study concluded by observing that sample units botched to gain fiscal support from Khadi and Village Industries Board because of cumbersome procedures involving such financial assistance.

**Van Stel and Caree (2004)** stated that Entrepreneurship is not restricted to any one particular industry, country or group of persons; as it exists within oneself along with their individual desire. The essence of entrepreneurship continues to live in all kinds of society and financial conditions. While the term usually refers to an entity, it is possible to find an organisation that is closed to the outside world, in terms of how they carry on their business and the way they grow.

### 3. DATA ANALYSIS AND INETERPRETATION

This the research intendeds to study the profile of Entrepreneurs benefited under the “NEEDS” scheme in Vellore district. The Simple percentage analysis is applied to describe the sample unit with respect to their demographic backgrounds. The DIC mainly focus on the demographic profile which helps them to ascertain the loan under the NEED scheme. After reviewing national and international literature the researcher has taken Gender, Marital Status, Age, Educational Qualification and Category.

#### Demographic profile of the Entrepreneurs in Vellore

Table No. 1

Profile	Components	Frequency	Percentage
Gender	Male	29	58
	Female	20	40
	Trans gender	1	2
Marital Status	Married	36	72
	Single	12	24
	Separated	1	2
	Divorced	1	2
Age	21-27	23	46
	28-37	14	28
	38-45	13	26
Education Qualification	Under graduate	18	36
	Post graduate	14	28
	Diploma	18	36
Category	Scheduled Caste/Tribe	9	18
	Most backward/backward	27	54
	Ex-Servicemen	3	6
	Physically Challenged	4	8
	Minority Group	1	2

Source: Primary data

From the table above, it is inferred that 58% of entrepreneurs are Male and 40% of the entrepreneurs are Female and remaining 2% of the entrepreneurs are Transgender. Majority of 72% of entrepreneurs are married. 46% of the entrepreneurs belong to the age group of 21-27 further 36% of the entrepreneurs are undergraduate and diploma to start their new venture and 54% of the entrepreneurs belong to most backward and backward caste.

Awareness of the scheme is created by several ways. The awareness of NEEDS schemes is by self awareness, awareness by DIC, reference by bank, friends and relatives are the main resource of by spreading awareness. Firms are classified under manufactures and service. Place of business plays a major role to an entrepreneur. Hence it is classified under rural are, semi rural and semi

urban area and urban area. The following frequency consists of activities social awareness, firm’s activity and place of business.

**Mode of awareness, firm’s activity and place of Business of the respondent.**

**Table No. 2**

Particulars	Components	Frequency	Percentage
Scheme awareness	By self	6	12
	Awareness by DIC	21	42
	Reference by bank	9	18
	Friends and Relatives	9	18
	By Internet	5	10
Firm’s activity	Manufacturer	34	68
	Service	16	32
Area	Rural area	13	26
	Urban area	28	56
	Semi rural/Urban area	9	18

Source: Primary data

From the table, it shows that 12% of the entrepreneurs are aware by self decision and 42% of the entrepreneurs are from the DIC and 18% of the entrepreneurs are from the bank officials and 18% of the entrepreneurs got information from their friends and relatives and 10% of the entrepreneurs are getting aware by internet. Around 68% of the entrepreneurs are engaged in the manufacturing business and whereas the remaining 32% of the entrepreneurs are engaged in service oriented business. 26% of the firms are established in the rural area and 56% of the firms are in urban area and 18% of firms are in semi urban or semi rural area. It can also be said that DIC plays a major role in promoting awareness about the manufacture oriented business. It shows that most of the entrepreneurs are interested in doing manufacture oriented business.

**RELATIONSHIP BETWEEN GENDER AND START UP MOTIVES OF AN ENTERPRENEURS**

**H<sub>0</sub>:** There is no relationship between the gender and start up motives

**H<sub>1</sub>:** There is a relationship between the gender and start up motives

**Table No. 3**

Models		Sum of squares	DF	Mean square	F	Sig.
Become an entrepreneur	Between Groups	.071	2	.036	.032	.969
	Within Groups	52.509	47	1.117		
	<b>Total</b>	<b>52.580</b>	<b>49</b>			
Kind of work to do	Between Groups	.838	2	.419	.451	.640
	Within Groups					



	Within Groups	43.662	47	.929		
	<b>Total</b>	<b>44.500</b>	<b>49</b>			
Be your own boss	Between Groups	.882	2	.441	.428	.654
	Within Groups	48.398	47	1.030		
	<b>Total</b>	<b>49.280</b>	<b>49</b>			
Earn more money	Between Groups	.004	2	.002	.002	.998
	Within Groups	63.916	47	1.360		
	<b>Total</b>	<b>63.920</b>	<b>49</b>			
High position in society	Between Groups	3.827	2	1.913	1.303	.281
	Within Groups	68.993	47	1.468		
	<b>Total</b>	<b>72.820</b>	<b>49</b>			
Have more control	Between Groups	.521	2	.261	.216	.807
	Within Groups	56.759	47	1.208		
	<b>Total</b>	<b>57.280</b>	<b>49</b>			
Innovative	Between Groups	2.537	2	1.268	.757	.475
	Within Groups	78.743	47	1.675		
	<b>Total</b>	<b>81.280</b>	<b>49</b>			
Use special talents effectively	Between Groups	.362	2	.181	.133	.876
	Within Groups	64.138	47	1.365		
	<b>Total</b>	<b>64.500</b>	<b>49</b>			
Help society	Between Groups	1.188	2	.594	.529	.593
	Within Groups	52.812	47	1.124		
	<b>Total</b>	<b>54.000</b>	<b>49</b>			
Create job opportunity	Between Groups	.088	2	.044	.033	.967
	Within Groups	62.412	47	1.328		
	<b>Total</b>	<b>62.500</b>	<b>49</b>			

Source: Primary data

**Inference:**

The probability value in ANOVA for items are .281, .807, .475, .876, .593, .967. The P value of gender and start up motives is higher than the Hypothetical value of 0.05. Hence at 95% confidence level  $H_0$  is rejected. There is a relationship between the Gender and Start up motives.

**RELATIONSHIP BETWEEN EDUCATION AND PROBLEMS FACED BY ENTREPRENEURS**

$H_0$ : There is no relationship between education and problems faced by entrepreneurs.

**H<sub>1</sub>:** There is a relationship between education and problems faced by entrepreneurs.

**Table No. 4**

ANOVA						
Models		Sum of Squares	DF	Mean Square	F	Sig.
Inadequate of debt financing	Between Groups	6.974	2	3.487	2.149	.128
	Within Groups	76.246	47	1.622		
	<b>Total</b>	<b>83.220</b>	<b>49</b>			
Inadequate of venture capital	Between Groups	8.823	2	4.411	3.886	.027
	Within Groups	53.357	47	1.135		
	<b>Total</b>	<b>62.180</b>	<b>49</b>			
Suitable labour	Between Groups	8.423	2	4.211	2.215	.120
	Within Groups	89.357	47	1.901		
	<b>Total</b>	<b>97.780</b>	<b>49</b>			
Raw material	Between Groups	6.867	2	3.434	3.050	.057
	Within Groups	52.913	47	1.126		
	<b>Total</b>	<b>59.780</b>	<b>49</b>			
Market demand	Between Groups	6.601	2	3.300	1.913	.159
	Within Groups	81.079	47	1.725		
	<b>Total</b>	<b>87.680</b>	<b>49</b>			
Market information	Between Groups	3.921	2	1.961	1.352	.269
	Within Groups	68.159	47	1.450		
	<b>Total</b>	<b>72.080</b>	<b>49</b>			
Heavy competition	Between Groups	3.276	2	1.638	.819	.447
	Within Groups	93.944	47	1.999		
	<b>Total</b>	<b>97.220</b>	<b>49</b>			

Source: Primary data

**Inference:**

The Probability values in ANOVA are .128, .027,.120,.057,.159,.269,.447. The P value of Educational qualification and inadequate availability of debt financing (.128) is higher than the theoretical value of 0.05. Hence 95% confidence level of H<sub>0</sub> is rejected. There is an absolute relationship between the Educational qualification and hindrances faced by entrepreneurs due to inadequate supply of finance.

The P value of Educational qualification and inadequate availability of venture capital (.027) is lesser than the Hypothetical value of 0.05. Hence at 95% confidence level H<sub>0</sub> is accepted. There is no relationship between the Educational qualification and the inconveniences confronted by entrepreneurs.



The P value of Educational qualification and suitable labour (.120) is higher than the Hypothetical value of 0.05. Hence at 95% confidence level  $H_0$  is rejected. There is an absolute relationship between the Educational qualification and inconvenience confronted by entrepreneurs.

## **Findings**

### **Demographic profile**

In the demographic profile around 58% of entrepreneurs are male candidates. It shows that the male are more engrossed to start up their own ventures. In marital status 72% of the entrepreneurs are married in the marital status. About 46% of the respondents are belong to the age group of 21-27 which reflects that women entrepreneur are more benefited under the NEEDS scheme. In educational qualification 36% of the respondents are Graduate. In category 54% of the entrepreneurs are to most backward or backward caste. At the ownership land 58% of the entrepreneurs are having their NEEDs scheme 70% of the entrepreneur are attended the vocational training. 68% of the entrepreneurs are avail loan through the Public sector bank it shows that Public sector banks are being more interested to sanction under the NEEDs scheme.

### **Business Information**

In business information 42% of entrepreneurs are get awareness from the DIC. It reveals that DIC was involved more to create the awareness among the entrepreneurs to get benefited under the NEEDs scheme. Under the implementation of NEEDs scheme 68% of the entrepreneurs are engaged in the manufacturing business. This shows that manufacture oriented sector are more successful compared to the service oriented sector. At the view of legal status 76% of them are engaged in sole proprietorship. In area of the business 56% of the firm was located at the urban area.

### **ANOVA**

There is a relationship between the Gender and Start up motives. There is an absolute relationship between the Educational qualification and Problems faced by entrepreneurs.

### **Social Relevance and Anticipated Outcomes:**

Oxfam took an initiative on 22 January 2018 to support the statement that around 73 percent of the nation comes from the richest corner. It also added that from the population of around 670 million there was only an increase of 1 percent from the poorer section and it stated that up to 670 million Indians, who comprise the poorest half of the people, saw just one percent increase in their prosperity while the richest one percent cornered 73 percent of the countrywide profits generate in the country last year, according to anti-poverty charity Oxfam (by Zeenat Saberin 22 Jan 2018). This clearly states that large



scale industries such as Reliance, dominate the market crushing the growth of micro, small and medium enterprises in India. The same has been confirmed by Prabhat Patnaik, professor emeritus at the Centre for Economic Studies and Planning, Jawaharlal Nehru University, stated "It is a direct result of these neo-liberal policies whose modus operandi is to pamper the rich in the name of achieving higher growth," This has motivated the investigator to carryout study on Ideas for tomorrow's Entrepreneurs in replacement of plastic industries in Tamil Nadu. MSME Enterprises are naturally more labour rigorous than large corporate and provide fabulous employment probable at a very small capital cost. MSME also share a chief portion of industrial manufacture and export in India and play a crucial role in the enlargement of industrial economy. Therefore, to promote and develop MSMEs, government along with financial institutions facilitates promotion and development of enterprises through many incentives, schemes and subsidies.

- a) There will be effective utilization of local resources which leads to the growth of industrial sector.
- b) There will be increase in employment opportunities.
- c) MSMEs promote equitable distribution of wealth.
- d) It creates opportunities for entrepreneurship
- e) It generates foreign income by exporting of goods since MSMEs are exempted from tax.
- f) If entrepreneurs are engaged it will prevent migration of people looking for job opportunities.

Promoting the growth of entrepreneurs in replacement of plastic industries will create an eco-friendly environment

#### **IMPLICATIONS TOWARDS THE SOCIETY:**

**'Give youthful Entrepreneurs a possibility to prove, I'm glad to be a mentor,'**

**Ratan Tata.**

Holding to the words of Ratan Tata, this study stands to prove that finding alternative industries for plastic and by motivating MSMEs entrepreneurs will transform India into a place which enables setting up new businesses and promoting other sectors such as jute, cotton, paper, earthenware, bamboo and other cottage industries. Such budding entrepreneurs will turn into loyal citizens of the nation thinking what they can do for the nation rather than what the nation did for them. This increases employment opportunities promoting the micro small and medium enterprises. Promoting the MSMEs will help the nation focus on the unemployed and the weaker sections of the society rather than huge developed industries preventing accumulation of wealth and resources of the nation. This will lead to regional balanced development and rise in GDP.



### **Conclusion:**

The common theme through this research is to promote greater finance for MSMEs in India, and to look for innovative ways to overcome the current challenges faced by the entrepreneurs in this corporate dominated market which is critical for balanced national economic growth and eco-friendly environment which in turn reduces global warming. This study in an initiative to figure out different ways in which MSMEs can be developed industries. Given the size and scope of this market, the financial sector has a pivotal role to play in spreading their reach to the underserved segment facilitating sustainable growth and also to improve the standard of living of the people across Tamil Nadu, a state rich in both natural and man-made resources.

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## ROLE OF DR. B. R. AMBEDKAR IN JOURNALISM AND SOCIAL SECTOR

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It is clear that until every section of society does not get due representation in the media, the one-sided, solicitous and unbalanced dissemination of information will continue. It was to counter this imbalance that Ambedkar wanted Dalits to have their own media outlets. He believed that only Dalit journalism could battle injustice faced by Dalits. **Dr B. R. Ambedkar** was convinced that if Dalits were to be awakened and empowered, they needed to have publications of their own. It was with this objective in mind that he began publishing Marathi fortnightly Mooknayak on 31 January 1920. "Mooknayak" means the hero of the voiceless. Explaining the logic behind its publication, Ambedkar wrote in the editorial of Mooknayak's inaugural issue, "There is no better source than the newspaper to suggest the remedy against the injustice that is being done to our people in the present and will be done in the future, and also to discuss the ways and means for our progress in the future." In the same editorial, he wrote, "The Hindu society is just like a tower which has several stories without a ladder or entrance. The man who is born in the lower storey cannot enter the upper story however worthy he may be and the man who is born in the upper storey cannot be driven out into the lower storey however unworthy he may be ... The alienation produced by the absence of inter-dining and inter-caste marriages has fostered the feelings of touchables and untouchables so much that these touchable and untouchable castes, though a part of Hindu society, are in reality living in worlds apart." What Ambedkar wrote 97 years ago remains a bitter truth even today. As an institution, the media is seething with casteist biases, and because Savarnas dominate its upper echelons, the media ends up ignoring news related to injustice. The social background of media personnel has profound bearing on the selection and presentation of news. It is clear that until every section of society does not get due representation in the media, the one-sided, solicitous and unbalanced dissemination of information will continue. It was to counter this imbalance that Ambedkar wanted Dalits to have their own media outlets. He believed that only Dalit journalism could battle injustice faced by Dalits.

Ambedkar himself was quite vocal on this issue. In the issue dated 14 August 1920 of Mooknayak, he wrote, "Dogs and cats eat the leftovers of the Untouchables; they also eat the faeces of children. When these dogs and cats enter the homes of the touchables, these animals do not pollute them. They



touch these animals, they hug them. Even if these animals put their mouth into their plates, the touchables have no objection. But if an Untouchable comes to their home for some work and stands outside, the house owner shouts at him, “Keep away, the ‘khapda’ [earthen tile] for dumping the excrement of the child is kept there. Now, you will touch that, too?” These heart-rending lines hold up a mirror to Indian society even now. Ambedkar advocated due representation to the Dalits not only in the media but in all walks of life. In the editorial titled “This is not self-rule but rule over us” in the third issue of Mooknayak dated 28 February 1920, Ambedkar clearly said that if Swaraj materialized, Dalits should have a share in it. Ambedkar continued to reflect on Swaraj. The title of the editorial of the fifth issue of Mooknayak dated 27 March 1920 was “Our ascent to Swaraj, its evidence and its method”. Ambedkar had raised the following points in this particular editorial: (1) The future Indian state would not be authoritarian or republican but would be ruled by the people’s representatives. As such, for Swaraj it is essential to expand the right to vote and give caste-wise representation. (2) In the Hindu religion, some castes have been designated as higher and supreme and some lower and polluting. The people of lower castes lacking self-respect consider the upper castes worthy of being worshipped while the immoral members of upper castes consider the lower castes wretched. (3) The voters of upper caste would not vote for a Dalit candidate considering him lower but the non-Brahmins and outcastes would rush to fall at the feet of Brahmin candidates, taking it to be a golden opportunity for serving the Brahmins. (4) In case universal franchise is adopted, the electoral system should ensure caste-wise representation based on the proportion of each caste in the population. (5) If Swaraj is ushered in, all castes should share in the self-governance so that Swaraj does not become Brahmin Raj.

In all, Ambedkar wrote some 40 articles for Mooknayak, including a dozen editorials in its initial issues. All of them railed against casteist inequality. Mooknayak ceased publication in April 1923 due to a dispute between Ambedkar and its second editor Dhruvnath Gholap. Four years later, on 3 April 1927, Ambedkar launched his second Marathi fortnightly, Bahishkrit Bharat, which remained in publication till 1929. Babasaheb was well aware of the weaknesses of the Untouchables and did not fight shy of criticizing them. In the editorial of the second issue of Bahishkrit Bharat dated 22 April 1927, he wrote: “The conduct and thoughts won’t become pure, the seeds of awakening and progress would never sprout in the untouchable community. Nothing can sprout from the present rocky, barren state of mind. So, to become cultured, one should take to reading and writing.” Besides emphasizing the need for critical reasoning, Ambedkar had also vociferously raised the issue of reservations for



Dalits. In the editorial of the fourth issue of Bahishkrit Bharat dated 20 May 1927, Ambedkar wrote that progressives do not have a problem in accepting the fact that to take the backward classes forward, the latter should get priority in government jobs, but if the issue of God of wealth, Kuber, distributing his wealth equally to all comes up, even the progressives will gape in disbelief that an Ati-Shudra caste too gets his share. Like Forward Press, Justice News has also launched its website. In 2007, a group of Dalit intellectuals, senior journalists and social activists set up the People's Media Advocacy and Research Centre and launched the online edition of Dalit Media Watch. Now, it has been renamed Justice News. Its bulletin extensively covers atrocities against Dalits all over the country. The sources are different newspapers and credible information collected by the centre. This bulletin is issued daily in English and Hindi and is read by lakhs of readers in India and abroad. The National Commission for Scheduled Castes, the National Commission for Scheduled Tribes and the National Human Rights Commission, besides state governments, have been taking note of the news updates of the bulletins. They are aware of their duty to resist a trend that is destroying human sensibilities.

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## MYSTICAL JOURNEY OF EMILY DICKINSON AND MAHADEVI VERMA

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### **Abstract**

While much has been written about the feminine sensibility, the lyrical quality, the note of despair and loneliness caused by the frustration in worldly love, the mystical consciousness of Emily Dickinson from America and MahadeviVerma from India remains a less discovered theme to meditate upon. Quest for God realization is not region specific or time specific. The way of befriending and realizing God was entirely their own in case of Emily Dickinson and MahadeviVerma. This paper deals with both of them, with the things that unite them and with the things that divide them so far as the motif of spirituality is concerned. Deeper penetrations into the poetry of these two poets make me reflect that their origin and background may be different but the meeting point of the two is the same. Their poetry reveals mystical realization which show striking similarity to the typical features of the great mystical tradition from the time of Vedas to the present day. From the beginning poetry was an affair of their inner life.

### **Introduction**

While much has been written about the feminine sensibility, the lyrical quality, the note of despair and loneliness caused by the frustration in worldly love, the mystical consciousness of Emily Dickinson from America and MahadeviVerma from India remains a less discovered theme to meditate upon. Quest for God realization is not region specific or time specific. The way of befriending and realizing God was entirely their own in case of Emily Dickinson and MahadeviVerma. This paper deals with both of them, with the things that unite them and with the things that divide them so far as the motif of spirituality is concerned. Deeper penetrations into the poetry of these two poets make me reflect that their origin and background may be different but the meeting point of the two is the same. Their poetry reveals mystical realization which show striking similarity to the typical features of the great mystical tradition from the time of Vedas to the present day. From the beginning poetry was an affair of their inner life. Both Emily Dickinson and MahadeviVerma took the artist's path to peace and solitude which plays a very vital role in the inner development of a



spiritual seeker. They were in the process of soul- searching. The present paper is an attempt to reveal that the poems of Emily and Mahadevi are out and out an out pouring of the soul yearning for the divine lover or ParamPurush comparable in every way to medieval bhakti poetry. Both Emily Dickinson and Mahadevi Verma can be judged on the same line of a religious mystic as St. Theresa of Avila or Mirabai.

Poetry was the religion for Emily Dickinson and Mahadevi Verma. Words were sacrament for them. In the face of mortality and worldly sorrow religion seems to be the only rescue. In the Dickinson home religion was an inward matter. Her introspective mind worshipped not the church outside but the church within. Revolting from the harsh Calvinism of her immediate environment, Emily Dickinson in an amateur and home bred mysticism seeks solace and joy divine. The essence of Mahadevi Verma's poetry is her intense desire to commune alone with the divine lover. The landscape of Mahadevi's poetry is that of spirituality. Mahadevi is born and brought up in a family full of love, affection, prosperity and education. She has never tasted the flavor of pain and suffering. Mahadevi has received her taste for spirituality from her mother. At the age of only 7-8 years Mahadevi has been given in marriage with Dr. Swaroop Narayan Verma. It was the wish of her grandfather. She was not at all ready to accept it and decided to remain alone throughout her life. Spiritual quest was germinating in the adolescent mind of Emily Dickinson and Mahadevi Verma. During the period of spiritual childhood, Dickinson states her inability to locate and search God to whom she was supposed to pray. Emily firmly believed the biblical precept that the kingdom of God is within you. In spite of girlhood gossip and trivialities, religion seems to be the main subject in most of her twenty letters to her childhood friend, A. Root. The major cause that drove Dickinson into an inner life was a religious crisis she confronted in a family with a Calvinist, puritan background yet she personally was not tied to any fixed religious dogma. Mahadevi has also used her own style of writing mystical poetry which is quite different from her contemporaries. The goal of spiritual quest is imagined as sublime experience and hence as an elevated state requiring commitment and surrender to the Divine.

Immortality was a flood subject in the poetry of both Emily and Mahadevi. It was not a dogma for them. It was a metaphysical truth based on their direct experience of death. Emily projects serene faith in her own immortality. If she rejects the outer form of religion she is deeply absorbed in search for immortality. Several poems of Emily Dickinson tie this urge for immortality directly to the marriage experience. It yet remains to see if immortality unveils a third event to me. In another poem she would stress her own sense of preparedness to attain immortality. Mahadevi also envisions that she is reaching towards eternal communion. Alike Emily Dickinson she dressed herself in white



all the time. Her life is just like the life of a saint. We can see the image of a Yogini, Bhikhshuni or Sanyasini in her. A divine purity is to be seen in her poetic works. The spiritual trials that Emily Dickinson passed through at Mount Holyoke shaped her spiritual life. She never married, lived at home all her life. During much of her life she did live in seclusion. She was thirty six, by then she had given up seeing most people. The progressive phases of Mahadevi's poetic and personal life show a movement from wonder, confusion and turmoil to reflection, meditation and finally an emotional serenity, state of equanimity i.e. a quiet acceptance of the joys and sorrows of life.

A considerable number of poems employing the imagery of crumb and liquor supply the basic metaphor for the thought of spiritual quest which is noticeable in the initial poems of both Emily and Mahadevi. In its broader implications food became a spiritual nutrition, a kernel to be sought for spiritual salvation. The mystic poet wanders in search of having just a glimpse of the divine Being. The soul of a mystic poet finds everything of this mortal world unattractive and dull. Mahadevi says with earnestness,

Jo tum aajateikbar

Kitnikarunakitnesandesh

Pathme bich ban jateparag (Verma, Sandhini 36)

.....

Muskatasanketbharanabh

Ali kyapriyaane valehai (Verma, Sandhini 74)

Emily is also feeling the same spiritual sensation. She is restless from within to meet her divine husband. Each and every particle of nature is embedded with divine love. How beautifully she says:

The sun just touched the morning

The morning happy thing

Supposed that he had come to dwell

And life would all be a spring (Johnson 232)

The imagery is vibrant in the above lines. It connotes the ecstasy felt by the poet. Mahadevi is in quest of having just a glimpse of her *chir sunder*. The poet tries to communicate to her divine lover.

Kaisandeshpriyapahuchati

Main apne hi besudhpanmein

Likhtihunkuchkuchlikhjati (Verma, Neerja 49)

Emily Dickinson is using a metaphor of a beggar standing at the door of God. In a moment of deep absorption Emily is also sending her happy letter to her divine friend:

Going to Him! Happy letter!

Tell Him-

Tell Him the page I didn't write (Johnson 494)



Solitude was the first resort for both Emily and Mahadevi. Dickinson remains a spinster all her life. She was not willing to mix freely with members of the opposite sex throughout her life. We all know that in spiritual life one has to tread the path alone. These two woman poets enjoyed their privation most because they felt that in solitude alone they could have realization of the supreme self. Emily Dickinson's life was uneventful. She rarely crossed the outskirts of her home town Amherst. She confines herself largely to her house and transformed her own inner experience into her poetry. That Dickinson in her deep solitude had been writing poems very few of her friends knew. The withdrawal from the material world was deliberate because solitude was indispensable for the poet dedicated to the inner world. In one of her letters Emily wrote about that blissful moment when her savior initiated her. How to be absorbed in the bliss of divine contemplation... this keen desire occupied Emily most of the time. Contemplation is an integral part of the mystical life of a devotional poet. Mahadevi says:

Panthrahe do aparichit

Pranrahe do akela Verma, (Deepshikha 46)

Emily too observes:

It is a lonesome glee (Johnson 770)

The poetic endeavor is indeed a private affair shared only with God. The mystic poets view love as a sublime and divine experience. The image of God, the divine lover transporting the persona to eternity is a frequently used metaphor in mystical poetry of all times & climes. There is a gradual growth into a new being, a new self. Emily Dickinson tells us about her spiritual elevation:

The soul selects her own society

Then shuts the door (Johnson 303)

The poem describes something close to Zen enlightenment. It is only by renouncing the external world that we can return to our divine origin. For having a greater understanding of God and our relationship with Him is the basis of all spiritual life. Both Emily Dickinson and Meerabai have received that Indian mysticism in which there is madhuryabhava of Mira and Kabir. They knew God, Eternity, Immortality, Heaven and Infinity. To a mystic eternity does not mean an endless time. It means "a present" and "a now" which absorbs all possible here after. Several poems of Emily Dickinson tie this urge for immortality directly to the marriage experience. Dickinson's poetry became poetry of revelation. Dickinson's God is a personal God with whom she can share her inner most feelings and calls him as her bridegroom. It is a kind of mystic betrothal attained by the devotee with his 'Ishta' i.e. personal God. We can see the restlessness of Mahadevi to have divine communion. Mahadevi is reaching towards mahamilan: Durtumsehuakhandsuhaginibhihu (Verma, Neerja 14)



.....  
Sajanivishwakankanmujhko

AjkahegachirsuhaginiVerma,(Neerja 33)

We begin to feel the joy of divine communion more and more, worldly pleasure becomes dull, flat and flavourless to us. In the domain of Mahadevi's love poetry we do not find the self-surrender of a wife rather it is the love expression of a beloved. Being blessed by getting the divine light Mahadevi is marching forward in the path of divine love. She prefers to remain as 'Chir-sadhika' or 'chir-batohi'.

'sajanipriyake pad chinha mile(Verma ,Sandhini 104)

Hope of communion is the only support of the beloved. Mahadevi is worshipper of 'madhurybhava'. She addresses her divine love as 'sunder', 'chir sunder', 'pahun', 'atithi', 'karunamaya', Mere remembrances of the divine lover brings spiritual sensation in her whole being. Ali sihar- siharuthatasharir? Most beautifully she expresses here:

Priyamujhi me khogayaabdootkokisdeshbhejun?(Verma,Sandhini 125)

There is a common saying in the sametone: Peetampati jab likhun, jab koi hoy videsh/Tan mein man mein, Nain mein, unkokahansandesh?Mahadevi and Emily have attained the state of absorption in solitude which is the supreme goal of life.

Merishwasekartirahti nit priyakaabhinandanre(Verma,Neerja84)

Emily Dickinson's devotional mysticism is expressed in her characteristic cryptic style. Emily has made him her only prop or support or 'moor. All her restlessness for the world has given way to restlessness for God. A great transformation came over her. The inner transport was to be learnt only by suffering pain patiently. But Emily like the true transcendentalist has achieved it by transcending pain. In order to testify Dickinson's lover as God and the love poems as those of a mystic, we must concentrate on such poems:

Not in this world to see his face sounds long(Johnson 418)

The heart of Emily leaps up with joy when she beholds that the divine being lifts her up to perfection and sanctifies her soul.

I gave myself to Him-

And took Himself, for pay

The solemn contract of a life

Was ratified this way-(Johnson,580)

This is the true attitude of the mystic. In a poem Emily figures herself as a queen wedded to Him with the effect that the world stands- solemn- to me- as she feels the weight of being chosen.

I'm wife – I've Finished that-That other state(Johnson,199)

In another representative poem:

Given in marriage unto thee



Oh thou celestial host (Johnson,817)

Here we are reminded of a more emphatic utterance of kabir who imagines himself as the bride of divine husband. Mahadevi's love myth refers to herself as a "suhagin", a woman blessed with the security and comfort of having a loving immortal husband to care for her throughout. The lover has become a source of strength and emotional stability. Fortunate are those who have been gifted with the divine lover. The superb experience of seeing God face to face in everyday life floods the poet's consciousness. The sense of the mortal life and its limitations is swept off. We can see the poems of Emily as a pure mystical one in which she expresses her rarest of rare experience of the moment in which she was completely transformed by the magnetic touch of God. Emily Dickinson and Mahadevi Verma came to see their poetry as a divine activity. Poetic creation nourishes their soul. Rumi, a Persian poet states that the highest stage of love which leads to realization is the renunciation of all that is not divine. The mystic poets are ready to undergo all pain and suffering in the name of God. Emily is fearless when she says:

No Rack can torture me-

My soul- at liberty -(Johnson,384)

.....

Bind me -I still can sing (Johnson,1005)

Both Emily and Mahadevi recognize the pain of renunciation as a merit.

Kyun Mujhe priya ho nabandhan (Verma, Sandhini 100)

The moment divine realization takes place, there is the disappearance of bondage. Emily is undaunted by the waves of the ocean of becoming.

I'm ceded- I've stopped being theirs

Mine was the only one. (Johnson,508)

This is the same reverberation of Mira's words "Mere to Giridhar Gopal dusrona koi. We can notice another poem of Emily - the ultimate condensation of all that she wished to say of her sense of spiritual union with the supreme partner.

Of all the soul that stands create

I have elected one. (Johnson, 664)

In a state of ecstasy Emily writes:

`Tis so much joy! `Tis so much joy!

If I should fail what poverty (Johnson 172)

The main voice of life is bliss, bliss and bliss. Dickinson's meditation of God leads her to ascend to greater heights of spiritual consciousness. The act of writing poetry is a means of spiritual nourishment for her in the midst of a busy worldly life. The theme of Mahadevi's lyrics is similar to the bhajans of bhakti poetry. Mahadevi says ... Niraja and Sandhyageet express a mental state in which I began to experience spontaneously a sense of harmony in the midst of both joy and sorrow. (Verma Sandhyageet 3)



The bliss of divine love is the zenith of human existence .The acceptance of this truth should not be the foundation of the daily life of everyone in general.This kind of contemplation can help the reader to attain peace and joy in this mortal world .The highest teachings of Vedanta are accomplished in a wonderful style in the poetry of Dickinson and Mahadevi.SandhyaGeet of Mahadevi closes with an almost visionary poem in which Mahadevi seems finally to have found her beloved .The voice in her later poems of Dipshikha expresses the idea of love becoming cosmic love.Dickinson`s poetry became poetry of illumination .God clothed himself in the mystery of nature which is the perpetual radiation of God`s glory.Sunset for Emily Dickinson was a sacred experience .Dickinson and Mahadevi found their true spiritual realization in the creation of poetry which is a continual act of self discovery.It is divine joy which sings and speaks in their poetry. It is higher love which has reached a stage of fruition or ripeness.The heroic leap of these poets into the ocean of bliss is the expression of the ardent desire of a superior nature.

Priyamujheemeinkhogaya

Abdootkokisdeshbheju(Verma,Sandhini 125)

.....

Content of fading

Is enough for me

Fade I unto divinity(Johnson, 682)

The best realized genre poems came later, when turbulence created by self discoveries had subsided .Mahadevi expresses that she has become one with the divine as the ray and the light. In some representative lines of Emily Dickinson we hear an echo of ancient upanishadic wisdom through which the soul loses its individuality and unites in perfect identity with the param –purush:

The drop that wrestles in the sea

Forgets her own locality

As I towards thee(Johnson, 284)

.....

Atlast ,to be identified!

Atlast the lamps upon thy side

The rest of life to see (Johnson,174)

Such a serene and luminous expressions are scattered in Mahadevi too:

Path mera nirvana ban gaya

Pratipag shat vardan ban gaya(Verma,Sandhini 130)

Great poetry always leaves something unsaid and unexplored before the reader.The soul stirring poetry of Emily and Mahadevi has the capacity to transform and elevate our own lives.On and further on the quester of divine joy being inspired by Emily and Mahadevi will voyage forever.



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## ANALITICAL SIMULATION OF RENEWABLE ENERGY SYSTEMS

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### **Abstract**

This work presents the study of methodology for calculation the output and performances of a PV wind system. A Long term data of wind speed and solar radiation for every hour of the day were used. These data were used to calculate the average power generated by a PV-Wind installation for every hour of a typical day in a month. A load of a typical house in south of Algeria (desert area) was used as a load demand of the system. For a given load and a mixed multicriteria integer programming problem, the types and sizes of PV generator, wind turbine generators (WTG) and storage system was calculated based on the minimum cost of system. In our research, we investigated the genetic algorithm (GA) for optimally a PV-wind power system. We define that the objective function is the total cost, where the total cost is the sum of initial cost, an operation cost, and a maintenance cost. We determine an optimal configuration of wind generating systems, where total cost is more optimal using GA. A computer program has been developed to size system components in order to match the load of the site in the most cost. A cost of electricity, an overall system cost is also calculated for each configuration. The study was performed using a graphical user interface programmed in MATLAB/simulink environment.

**Keywords:** Renewable energy, Power Consumption and P.V.Wind System.

### **Introduction:**

The rapid depletion of fossil-fuel resources on a world has necessitated search for alternative energy sources. Wind energy has been considered as promising toward meeting the continually increasing demand for energy. The solar and wind sources of energy are inexhaustible, the conversion processes are pollution-free, and their availability is free. For isolated systems such as rural electrification, the solar or wind energy has been considered as attractive and preferred alternative sources. Generally the main objectives of the optimization design are power reliability and cost. In this work an optimal sizing method using the genetic algorithm (GA) is proposed. The types and sizes of PV generator, wind turbine generators, the number of batteries can be optimized

when sizing a standalone PV wind power system, which may be defined as a mixed multiple-criteria integer programming problem. We propose the optimum configurations for PV wind generating systems in residences using hourly data over a year. We assume that a residence is one house consuming average electrical energy. Genetic algorithm (GA) is used as an optimization method in this work. The purpose of this study is to minimize the objective function of GA. The objective function is the total cost of PV wind system. The purpose of methodology is to suggest a list of commercially available system devices, the optimal number and type of units ensuring that the 25-year round total system cost is minimized subject to the constraint that the load energy requirements are completely covered. The 25- year round total system cost is equal to the sum of the respective components capital and maintenance costs. The decision variables included in the optimization process are the number and type of PV, Wind turbine and batterie and installation height of the WGs. The minimization of cost (objective) function is implemented employing a genetic algorithms (GA) approach, which compared to conventional optimization methods, such as dynamic programming and gradient techniques, has the ability to attain the global optimum with relative computational simplicity. The present work provides the results of a study on the optimization of PV wind system to meet a certain load distribution. The method is applied to the satisfaction of a domestic load demand.

### System Configuration:

The configuration of stand alone PV wind power systems is shown in Fig. 1. In this work, we investigated the case that a system has PV module, wind turbine, batteries and inverter of stand alone energy conversion installation.

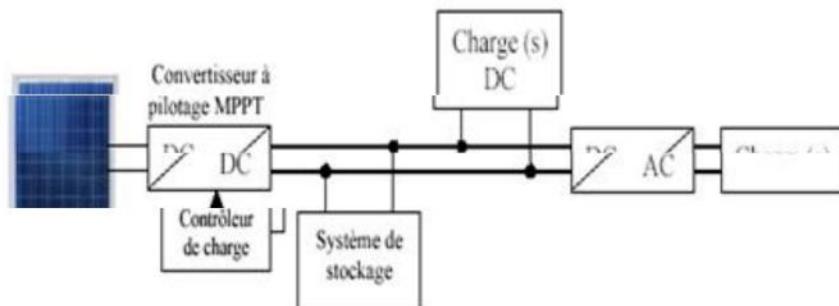


Fig. 1: PV wind system



### **Modelling of Photovoltaic system:**

Photovoltaic conversion is the direct transformation of solar energy into immediately usable direct electric current. From a technical standpoint, PV power systems have the potential to meet a large portion of energy demand worldwide. A PV generator consists of modules connected in series to increase the voltage and in parallel to increase electrical output (Fig.1). The relationship between current and voltage is expressed.

### **Modelling of wind energy system:**

Various modelling techniques are developed by researchers to model components of Wind system. Performance of individual component is either modelled by deterministic or probabilistic approaches. General methodology for modelling wind system components like wind turbine, machine generator, and inverter is described below:

**Modeling of the Wind Speed:** The wind speed is one of the most important variables in the modeling of a wind energy conversion chain and is the main input variable in the chain synoptic diagram. Consequently, the simulation's accuracy depends on the representation of wind speed. Unfortunately, it has a random behavior inducing a fluctuating characteristic. So, in order to reproduce accurately the wind speed dynamic behavior, two approaches can help us. The first consists in considering measurements of long duration on an actual wind site and the second consists on representing the wind characteristic by an analytical model. The first solution is obviously more precise. Nevertheless, it does not easily permit to simulate various types of configurations of wind sites. The speed of wind is a random process; therefore it should be described in terms of statistical methods. The wind speed data were recorded near the ground surface. To upgrade wind speed data to a particular hub height.

### **Conclusion**

A methodology of sizing standalone wind power systems using the genetic algorithm is proposed in this work. Studies have proved that the genetic algorithm converges very well and the methodology proposed is feasible for sizing standalone wind power systems. A procedure for optimizing the size of a wind-energy system was presented. The procedure was applied for the sizing of wind system that is considered to produce a power to domestic load. The analysis indicates that a wind system power output can be optimized to suit specific applications with variable or constant power loads. For the specific system considered in this study, the results indicate that the optimal wind system that resulted in the minimum capital cost. A methodology of sizing standalone PV power systems using the genetic algorithm is proposed in this work. Studies have proved that the genetic algorithm converges very well and the methodology proposed is feasible for sizing standalone PV power systems.



A procedure for optimizing the size of photovoltaic energy system was presented.

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## A STUDY ON BUYING BEHAVIOR OF WOMEN TOWARDS COSMETICS

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### **ABSTRACT:**

There is a general perception that cosmetics are generally purchased by women who are in different field believing that these products may improve their appearance and personality. Now a day's cosmetics become very essential among women's, irrespective of their education, occupation, and age. The reason behind this new trend is that there is an enlistment found in the economic condition of the people. But earlier majority of the population were below the poverty line. Women who used cosmetics products then were not respected by the society. This study focused on the "Buying Behaviour of Women towards Cosmetics".

**Keywords:** Cosmetics, Brand Loyalty, Consumer Behaviour

### **1.1 INTRODUCTION**

The Indian cosmetic industry has witnessed rapid growth over the last couple of decades. In that time the range of cosmetics and beauty products in India has widened tremendously. Indian competition have began to manufacture products to cater to an international need Herbal cosmetic from India have a great demand in the overseas market and many cosmetic product that are manufactured in India today are supplied to international suppliers of branded cosmetic product like the Baby shop. New facts that have been reveal that the industry of cosmetic products in India is growing at an average rate of almost twenty percent annually; this increase is attributed to two main factors. The first being the increase for the demand in Indian cost effective products and the second being the increased purchasing power of the average Indian.

There is also much reason for the increased demand for cosmetic product in particular. With the introduction of satellite television and a wide array of television channels as well as the internet, the average Indian consumer is constantly bombarded with advertisement and information on new cosmetic products which often translates into the desire to purchase them. A boom in the Indian people about their appearance and consequently contributed to an increase in the demand for cosmetic products.



Consumer buy products according to their needs, preferences and buying power. Consumer buying behaviour depends on his perception, self concepts social and cultural background and their age and family cycle, their attitude, beliefs values motivation personality, social class and many other factors that are both international and external. Specifically the attitude of consumer can have a significant effect on buying behaviour. This paper provides an overview of the cosmetic market and its importance and examines the influence of various parameters and brand loyalty on women's buying behaviour concerning cosmetics. This study will provide useful information to the business sector as well as dealers in relating sector

## 1.2 REVIEW OF LITERATURE

- Singh JD(1981)conducted a survey on "A study of brand loyalty in India

"The study concluded that Indian consumers have been found becoming more And more brand loyal. Depending upon the nature of the product, they have single

Or multiple brand loyalty is "quality of the product","habit of use "and "regular Availability "of the product.

- Debi Prasad Mukherjee(2012) conducted a study entitled "impact of celebrity

Endorsement on brand image". This study shows that consumers report higher self brand connection for brands with images that are consistent with the image of a celebrity that they aspire to be like, particularly in the case when the image of the celebrity and the brand match.

- Shahadkhan(2012) attitude is the conduct nature temperament ,through And way of behaving. It can be positive or negative and perform a very essential Function is purchasing a product.

- ALAshban and Burney(2001) found that cosmetics buying behaviour Literature in developing countries in general is inadequate and ambiguous. As it is known from theory of reason action and theory of planned behaviour attitude have considerable impact on behaviour.

## 1.3 SCOPE OF THE STUDY

The scope of the study was limited to Mayyil area , Kannur district ,Kerala and respondents are from the area.

## 1.4 OBJECTIVE OF THE STUDY

- To identify the important factors that determines the buying behaviour.
- To analyze the effect of media communication on buying behaviour.
- To know the marketing strategy influences the behaviour of the consumers.

### 1.5 METHODOLOGY OF THE STUDY

The present study “Buying Behavior of Women towards Cosmetics” has been designed as an analytical and descriptive one. Primary data was collected by using questionnaire. Secondary data was collected from various journals and books. Convenient sampling technique has been choosing for choosing 50 respondents.

### 1.6 HYPOTHESIS OF THE STUDY

HO. There is no significant relationship between age and kinds of purchase Of cosmetics products

### 1.7 DATA ANALYSIS AND INTERPRETATION

#### REASON FOR BUYING SPECIFIC BEAUTY PRODUCT

Table shows that 32 percentage of the respondent reviewed that good quality Is the reason for buying a specific beauty product. Only 6 percentage look for the Packing of the product.

TABLE 1

Choice	No .of respondent	Percentage
Good quality	16	32
Brand popularity	12	24
Price	10	20
Packing	3	6
Natural ingredient	9	18
Total	50	100

Source: field survey

#### KINDS OF COSMETICS PRODUCTS

Table shows that 42 percent of the respondents buy skin care beauty product And 38 percent of the respondent’s hair care beauty products only 8 percent of The respondent buy perfumes.

TABLE 2

	No.ofrespondent	percentage
Skincare	21	42
Haircare	19	38
Makeup	6	12
Perfumes	4	8
Total	50	100

Source:fieldsurvey

### REASON OF USING COSMETICS

Table reveals that 46 percent of the respondent use cosmetics for good looking, 3 percentage of the respondent use it is a fashion or trend and only 4 percentage of the respondents use cosmetics for to show one self modern.

**TABLE 3**

	No. of respondent	Percentage
Good looking	23	46
Fashion or trend	17	34
To show one self modern	2	4
Self respect	8	16
Total	50	100

Source: field survey

### MEDIA IMPACT ON BRAND SELECTION

The table reveals that Television has impact on 42 percentage of the respondent, newspaper impact on 10 percentage, magazine impact on 36 percentage and there is no impact on internet. Majority of respondents brand selection was influenced by television and news papers advertisement.

**TABLE 4**

	No of respondent	Percentage
Television	26	52
Magazine	18	36
Newspapers	5	10
Radio	-	-
Internet	1	2
Total	50	100

### CHI SQUIRE TEST

#### AGE AND KIND OF COSMETIC PURCHASE

To analyze whether there is any significant relation between age and kinds of Cosmetic purchase, a survey has been conducted among respondents. To analyze reveals that out of 13 respondents 7 were purchase skin care products, 3 were hair care product, 2 were make up products and 1 were perfumes. Out of 28 respondent 13 were purchase skin care products, 11 were hair care, 33 were make up products and 1 were purchase perfume type cosmetics. Out of 9 respondent 1 were purchase skin products , 5 of them purchase Perfumes.

The survey results are given in table 5

**TABLE 5**

Age	Kind of purchase				Total
	Skin care	Hair care	Make up	perfumes	
Below 20	7	3	2	1	13
20-40	13	11	3	1	28
40-60	1	5	1	2	9
Total	21	19	6	4	50

Source: field survey

Note: Figure in the brackets indicates expected frequency.

HO: There is no significant relationship between age and purchasing a particular Kind of product.  $X^2 = \sum (O-E)^2$

O=Observed frequency

E=Expected frequency

Calculation of z

O	E	(O-E) <sup>2</sup>	(O-E) <sup>2</sup> /E
7	5	4	0.8
13	12	1	0.08
1	4	9	2.25
3	5	4	.8
11	11	0	0
5	3	4	1.33
2	2	0	0
3	3	0	0
1	1	0	0
1	1	0	0
1	2	1	0.5
2	1	1	1
$\sum(O-E)^2/E$			6.76

Chi square value = 0.676

Degree of freedom = (r-1)(c-1)

= (3-1)(4-1) =6

Level of significance = 0.05

Table value = 12.592

The chi-square test shows that there is no significant relationship between age And purchasing a particular kind of product. As the above calculation chi square



Value (6.76) is less than table value (12.592) at 5 percent age level of significance

With degree of freedom, hence null hypothesis is accepted.

## **FINDINGS**

- Quality was found as most important factor for purchase of cosmetics by the respondent than price.
- Most of the customer buy skin care beauty product.
- Good looking is the main reason for using cosmetics.
- Television has found more impact on consumers and widely used for receiving information about products.
- Chi-square test shows there is no relationship between age and Purchasing a particular kind of cosmetic product .Chi square value is 6.76 is less than table value 12.592 so null hypotheses is accepted.

## **SUGGESTIONS**

- Cosmetic market becomes more complicated and competitive. So
- The display of cosmetic must be attractive. Then only the sale of cosmetic will be increasing.
- Advertisement has a significant influence in the demand inducement of cosmetics. Advertisement in urban areas is made through Medias like radio, TV, newspapers. etc. Internet facilities are also available to find out the latest cosmetics product. But in village advertisement are not sufficient. So steps should be taken to popularize the new cosmetic products there.
- More attention should be given to make cosmetics free of after effects.
- Maintain and continuous improve customer satisfaction for favourable buying behaviour outcome or buyer performance its importance to continuously understand consumer physiology.

## **CONCLUSION**

Modern market is highly competitive in nature. The consumer is the King in the market. The importance gained by the individual consumer in the present market compel the marketers to look the buying habits , preferences, taste, like and dislikes of consumers accordingly they need to revise its policies and marketing mix. The ever increasing population makes the use of cosmetics multiply considerably. So marketing of cosmetics becomes competitive. Advertisement through mass media like radio, TV, newspaper promote the sale of cosmetics in a larger scale .Research has been carried out to improve its



quality and new kind of Cosmetics products are coming to the market. Consumers expect quality Cosmetics at reasonable price. So it is the duty of the government , manufacturers and middleman to supply these necessities of life available in fair price. To put it in a nutshell as long as human being are there in this world, cosmetics would also exist and its marketing both in rural and Urban areas would have a bright future in the days to come.

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## MAHATMA GANDHI NATIONAL RURAL EMPLOYMENT GUARANTEE SCHEME

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The Mahatma Gandhi National Rural Employment Guarantee Act was notified by the Government of India on September, 2005 and was made effective w.e.f. 2nd February 2006. In the first phase, the National Rural Employment Guarantee scheme (NREGS) was introduced in 6 district on 2nd February, 2006. In second phase NREGS was started in 11 district w.e.f. 1-4-2007. Now in the third phase all the remaining districts of the State have been covered under the scheme w.e.f. 1.4.2008. The salient feature of the scheme is to provide for the enhancement of livelihood security of the households in rural areas of the State by providing 100 days of guaranteed wage employment in every financial year to every household whose adult members volunteer to do unskilled manual work. The Mahatma Gandhi National Rural Employment Guarantee Scheme is open to all rural households in the areas notified by the Government of India. The entitlement of 100 days of guaranteed employment in a financial year is in terms of a household. This entitlement of 100 days per year can be shared within the household.

All adult members of the household who registered can apply for work. To register, they have to:-

- a. Be local residents “local“implies residing within the gram panchayat.
- b. Be willing to do un-skilled manual work.
- c. Apply as a household at the local gram panchayat.

The application for registration can be given on plain paper or on the prescribed application format available at gram panchayat level or an oral request for registration can be made. The application should contain the names of those adult members of the household who are willing to do un-skilled manual work, and particulars such as age, sex and SC/ST status etc. After verification all particulars are entered in the registration register by the concerned Gram Panchayat. Every household is assigned a registration number. Job cards to every registered household are issued by the gram panchayat. The job cards are issued within a fortnight of the application for registration. Photographs of adult members who are applicants are attached to the job cards. The cost of job card and photographs is borne as part of the programme funds. The job card is valid for a period of 5 years.



Applications for work can be submitted to the gram panchayat as well as to the Programme Officer. Applications should be given in writing and a dated receipt for the application for work must be issued to the applicant. The applications for work must be for at least 14 days of continuous of work. Applicants who are provided work are to be intimated by means of letter sent to them at the address given in the job card and also by a public notice displayed at the offices of the gram panchayat. The wage employment to the applicant is to be provided within 15 days of the date of receipt of application. As stated in the Act (Schedule 1), contractors cannot be engaged in any manner in the execution of works.

As per schedule 1 of the Act the focus of the scheme is on the following works in their order of priority:-

- (i) Water Conservation and Water Harvesting works;
- (ii) Drought proofing works (including aforestation and tree plantation)
- (iii) Irrigation canals including micro and minor irrigation works;
- (iv) Provision of irrigation facility, horticulture plantation and land development facilities on land owned by the households belonging to the Scheduled Caste and Scheduled Tribes or to below poverty line families or to beneficiaries of land reforms or to the beneficiaries under the Indira Awas Yojana of the Government of India;
- (v) Renovation of traditional water bodies including desilting of tanks;
- (vi) Land developments works;
- (vii) Flood control and protection works including drainage in water logged areas;
- (viii) Rural connectivity to provide all-weather access; and
- (ix) Any other work which may be notified by the Government of India in consultation with the State Government.

a. Every person working under the scheme is entitled to wages at the minimum wage fixed by the State Government.

b. Equal wages are to be paid to both man and woman workers.

c. Workers are entitled to being paid on weekly basis and in any case within a fortnight of the date on which work was done (NREGA section :-

(i) If an applicant for employment under the scheme is not provided such employment within 15 days of receipt of his application seeking employment or from the date on which the employment has been sought in the case of advance application, whichever is later, he shall be entitled to a daily unemployment allowance which will be one fourth of the wage rate for the first thirty days during the financial year and one half of the wage rate for the remaining period of the financial year.

(ii) The payment of unemployment allowance is the liability of the State Government.



(iii) The liability of the State Government to pay unemployment allowance to a household during any financial year will cease as soon as:-

a. The applicant is directed by the Gram Panchayat or the Programme Officer to report for work ; or

b. The period for which employment is sought comes to an end and no member of the household of the applicant had turned up for employment ; or

c. The adult members of the household of the applicant have received in total at least 100 days of work within the financial year ; or

d. The household of the applicant has earned as much from the wages and unemployment allowance taken together which is equal to the wages for 100 days of work during the financial year.

The facilities of safe drinking water, shade for children and place of rest, first-aid-box-with adequate material for emergency treating for minor injuries and other health hazards connected with the works being performed shall be provided at the work site. In case the number of children below the age of six years accompanying the women working at any sites is five or more, one such woman may be deputed to look after such children. The women deputed to look after such children shall be paid the normal wages. The ratio of wage costs to material costs should be no less than the minimum norm of 60:40 stipulated in the Act. This ratio should be applied preferably at the Gram Panchayat, Block and District levels. The wages of skilled and semi skilled labourers should be included in the material costs.

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## STUDY OF PREVALENCE AND CORRELATES OF DEPRESSION AMONG COLLEGE YOUTHS

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### **Abstract**

Depression is highly prevalent in college going youth. Prevalence of depression is higher among engineering students as compare to medical. Students, whose families are not supportive, do not understand their problems and having parental conflicts are more prone to develop depression. Not pursuing a stream of own choice and dissatisfaction with current stream predisposes to depression. Family history of depression and recent history of any break up with special friend/close friend: significant risk factors for depression. Certain factors like parenting, education counselling should be focused upon among college students to decrease the prevalence of depression among youth. New policy and interventions must be started targeting to specific group according to their requirement. Special attention to family relationships and letting one pursue

**Keywords:** Prevalence, Depression and College Youths.

### **Introduction :**

Psychological and sociological factors play an important role in determining the well-being and quality of life. So any kind of disharmonizing factor like stress, loss, separation and other stressful life events can lead to disease prevalence. No other disorders are as common and impairing, have such an early onset, and affect such a large population of the whole life course as mental disorders. Out of this, Depression is one of the most important mental disorders. Depression worldwide is a major cause of morbidity commonly associated with a decline in social, occupational and interpersonal functioning. Depressive disorders cause a very high rate of diseases' burden now- a- days. It is a significant contributor to global burden of disease and affects people in all communities across the world. Today, depression is estimated to affect 350 million people. It is estimated that by the year 2020 if current trends for demographic and epidemiological transition continues, the burden of depression will increase to 5.7% of the total burden of the disease and it would be the second leading cause of disability adjusted life years (DALYs), second only to ischemic heart disease and by 2030, it is expected to be the largest contributor to



disease burden. Life time prevalence rates in most of the countries falling somewhere between 8 to 12%<sup>5</sup>. In South Asia, 11% of Disability Adjusted Life years and 27% of Years Lived with Disability are attributed to neuropsychiatric disease. Depression is the single most important neuropsychiatric contributors to years lived with disability. In India, studies among college students found prevalence of depression ranging from 21.5% to 71.25%<sup>8-10</sup>. In Bihar, prevalence of depression among college students was found to be 32.6%<sup>11</sup>. Depression can affect all ages, communities or race. Young people in their transition to adulthood particularly suffer from

depression, since late adolescence and early adulthood are the stages of life devoted to making major choices in multiple fields of their life. The challenges include exploring or developing their identity e.g. making career choices, navigating the transition from a state of full dependence to a state of semi dependence on their parents, creating social relationships in a different environment.

A relationship clearly exists between parenting style and a child's ability to adjust to and meet academic, emotional and social challenges. Parenting style is related to a child's ability to successfully adjust to college/university culture and demands. Authoritative parenting, parental care and parental monitoring could be the risk factors for depression. Harsh punishment or authoritarian decision-making may cause the young ones to feel low and depressed. At the college level, academic pressures are increasing day by day and at each successive level. Students are adjusting emotionally to complex life changes. The challenges of colleges, leaving home for the first time, learning to live independently, forming new relationships, and irregular sleep could be the risk factors for students and depression itself is

proven risk factor for absenteeism, educational under achievement and substance abuse. Their efforts to fit into the new environment of college, to maintain good grades along with

future planning often causes anxiety for a lot of students. Intensive use of information and communication and communication technology i.e. computers and mobile phones

also contribute as risk factor for depression.

#### **Material and Methods:**

This was a cross-sectional study using random sampling conducted from January 2019 to June 2019 in various educational institutes of district Madhepura, Bihar involving 200 subjects. For this, list of different colleges of under B.N.M.U. Madhepura was procured. Out of this list, one college from each of these two categories was selected randomly by lottery method. The study protocol was approved by Institutes Ethics Committee. Prior permission from the Principal/Head of institution of the participant colleges was taken. The



purpose of the study was explained to the participants and informed written consent was obtained from each. Sample from these colleges was taken from age group 18-24 years. Detailed history regarding age, gender, religion, caste, education, stream was recorded. History regarding personal habits, dietary preference, smoking, alcohol or any other drug consumption was also recorded. Patient health questionnaire (PHQ-9) was used to assess the prevalence of depression. The socio-economic status (SES) scale as described by Kuppu swamy which takes into account the education of the head of the family, occupation of the head of the family, and monthly income of the family was followed.

**Statistical analysis:** Statistical analyses were performed using the Statistical Package for the Social Science (SPSS) Version 15. Descriptive analyses were computed in terms of mean and standard deviation for continuous variables and frequency with percentage for nominal variables. Pearson's chi-square, chisquare with yate's correction and Fischer Exact value was used to compare categorical variables.

### **Results & Discussion :**

The mean age of the study sample was 20.84±1.6 years (range: 18-24years). Out of all studied subjects 81(40.5%) were male and 119(59.5%) were female. All the subjects were unmarried (100%), majority of them were urban residents (77.5%), from nuclear family (79.5%), belongs to Hindu religion (57%) and of middle socio-economic status (67%). The studied subjects were divided into two groups using patient health questionnaire (PHQ-9), one without depression (n=167) and another with depression (n=33). No significant differences between the two groups were observed in case of presence of friend circle, satisfaction with friendship, parents' over protectiveness and family history of chronic physical illness/disability. However, history of break up with close friend/ special friend (42.4%) parental conflicts (36.4%) and family history of depression (24.2%) were significantly higher among group with depression as compare to other one. Group with depression perceived their parents significantly less understanding and less supportive as compare to non-depressed group. The prevalence of depression is significantly higher among Hons group (22%) as compare to P.G. group (11%). There is no significant difference among both groups regarding satisfaction with grades/ marks and history of any ragging in the college. However, Group without depression is significantly more satisfied with their current stream (85%) and pursuing stream of their choice (86.8%). Factors related to internet use and depression presented, which shows that there is no significant difference related to internet use, its unavailability, friend's activities on social networking sites among group with depression and non- depressed one.



## Conclusion

Depression describes wide range of emotional lows from mere sadness to a pathological suicidal state. It can affect all ages, communities and race. The incidence of depressive symptoms has been increasing among college students. We undertook this study to determine the prevalence and correlates of depression among college going students of different colleges in B. N. Mandal University, Madhepura, Bihar. In a cross-sectional study, 200 subjects aged 18-24 years were studied from January 2019 to June. Demographic history, various risk factors and prevalence of depression were assessed using patient health questionnaire (PHQ-9). The relevant data was collected and analyzed. The overall prevalence of depression among college going students was found to be 16.5%. Among Hons and P.G. standard students, it was 11% and 22% respectively and Mean age of the subjects was 20.84+1.62. Out of all studied subjects 81(40.5%) were male and 119(59.5%) were female. All the subjects were unmarried (100%), majority of them were urban residents (77.5%), from nuclear family (79.5%), belongs to Hindu religion (57%) and of middle socio-economic status (67%). Family history of chronic physical disease and family history of depression were present in 14.5 and 13.5 per cent subjects, respectively. Family related and academic factors were the common risk factors for depression among students. More than one third subjects with depression were not satisfied with their current stream and perceived their parents not understanding. In view of these factors, there is a need to focus upon some aspects of parenting and education counseling among students to decrease the prevalence of depression among youth.

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Hlxonxhirk ea 18 v/; k; rFkk 700 "ykd gA ftl ea ekuo thou ds mPre vkn"ka vls 0; ogkj rFkk eDr ikfr ds mik; ka dh 0; k[; k iLr; dh xbz gAbl xbfk dks l onk "ksh; k i'ukdkj : i "ksh ea fy [kk x; k gA igk. kka ea bl rjg dh "ksh dk i; klr iz kx miyC/k glrk gA xhirk dh eq; fo'kskrk ; g gSfd ; g mPp dksV dk nk"kuud xbfk gkus ij Hkh vl; on mifu'knka ds l eku "kkDr rFkk ,dkDr vj.; ea rlo ftKkl q xq rFkk f"k; ds chp ea foospur u gkdj ; q tS s v"kkDr {ks= ea , d ; ks} k dks nrl js xq ; ks} k us 0; kogkfjd l eL; k ds l eku/kkukFz iLr; fd; k gA bl minsk dk 0; kogkfjd thou l s v/W l Ecl/k gA xhirk mBuk&cBuk] [kkuk&i huk] df'k] 0; ki kj] ; q rFkk fo'k; Hksc vkfn l ka kfjd deka dks djus dh vuBh fof/k iLr; djrh gS ftl l s ekuo ek= thou ds l eLr dk; ka dks djrk gw/k Hlxoku- ; k ekk dks l jyrk l s vfkxr dj yrk gA Lo; a ds m)kj ds l kfk l Ei w/z ykd vFkz- l ekt] jk'v" , oa ekuo tkr dks mDr] l e) rFkk fn0; cukus ea l g; kx ns l drk gA olr; % xhirk ykd rFkk ijykd ea 0; kogkfjd , oa vk/; kRed thou ea nylk l g; kx vFok l keatL; ; k l ello; LFkfr djrh gA

Hlxonxhirk eaifriknr ie(k fl )Ur %

1/4 1/2 xhirk dk vknsk gSfd euq; dks vk/; kRed mlufr ds fy, eu vls bflnz ka dk fuxg djuk pfg, A fo'k; ka dk /; ku djr&djrseuq; dh muea vki fDr gks tkrh gA bl vki fDr l s dke ; k okl uk mRi l u ghrh gA Øsk l s ekg vls ekg l s l efr dk uk" k glrk gA Lefr&uk" k gkus l s cq) HkzV gks tkrh gS vls euq; dk iru glrk gA 1/4 1/2 i R; d 0; fDr dks pks og de] kxh gks ; k HkDr ; k Kkuh] eu vls bflnz ka dk fuxg djuk pfg; A

1/2 1/2 xhirk ea "LFkr i K" dh 0; k[; k djrs gq dgk x; k gSfd nq'kka dh ikfr ea ftl dk eu {kkkjfgg gS l q'kka dh ikfr ea ftl dh vki fDr Hkyhkkfr NW xbz rFkk ftl ds vuqkx] Hk; , oa Øsk fuor gks x, gS , d k 0; fDr fLFkr i K dgykrh gA



**n%ksoumfoXueuk%l fksqfoxrLig%**

**ohrjxkHk; Øks%FLFr/Meju: P; rAA 1/2½**

fLFr i k ml "kjk ; k v"kk oLrq dks i klr djs tks l Hkh vol jka ij Lugoftz gS vFKz~u rks og i l lu gsrk vj u }sk djrk gS ml dh cf) vKReLo: i ea fLFkj gPz gS, d k tkuuk pfg, A

**; %l oZ-kuffHLugLrrRiH; "kK"qEA**

**ukHuhfr u }Sv rL; iKk ifr'BrAA 1/3½**

xhrk ds f}rh; v/; k; ea fu'dke deZ kxh ds fy, fl f) vj vfl f) e l Qyrk vj vl Qyrk ea l e jgus dk minsk fn; k x; k gS vj bl h l eRo dks; kx dgk x; k gA

**l eRo; kx mP; rsA 1/4½**

bl idkj xhrk l ecf) ; k l eRo dh l k/kuk dks gj idkj ds l k/d ds fy, vko"; d ?kks'kr djrh gA

1/3½ xhrk ea l rr deZ djus dh vko"; drk ij tjk fn; k x; k gA xhrk ea mu ij kgrka dh fulnk dh xbz gS tks LoxZ vkfn dk ykk ndj ofnd vuqBku ; K vkfn djus dh fl Qkfj" k djrs gA xhrk deZ dks vfuok; Z vj vko"; d nkula ekurh gA xhrk ds f}rh; v/; k; ea i k.kh dks dkeu dk ifjr; kx djs l nD deZ djrs jgus dk vknsk fn; k x; k gA

**deZ; Øk/kdkjLrsek QysqdnkpuA**

**ek deDygrHkz rs l xksLodeL. kAA 1/5½**

vFKz~gS vt! rjk vf/kdkj deZ ea gh gS Qyka ea dHkh Hkh ugha gA vr% rE deDy ds fufelk er culs vj rfgkj deZ; kx ea Hkh vkl fDr ugha gkuh pfg, A bl "yk d ea vukl fDr dk eny fl ) klr fojeku gA xhrk ea deZ dk Qy D; k gA bl dh vj /; ku fn; sfcuk l rr-dk; Z djuk rFk vdeZ ds ifr vuqkx u j [kuk ; snks rF; ifr i kfnr fd; s x; s gA

bl l d k j ea dkbz Hkh ik.kh deZ k; u gkdj jg Hkh ugha l drk gA bl fo"o ea ik.kh vius vius xqkka ds vuq kj vko"; d : i l s dk; Z djrs gh jgrs gA

**u fg df"pr-(k.kefi tkrfu'BR; deDrA**

**dk; Zrsáo"K%deZ l o%idfrtSkKAA 1/6½**

xhrk ea ykd l xg dks nf'V j [krs gq Kkuh iq 'k dks Hkh vkl fDr R; kxdj l k/kj .k vkl fDr okyka ykka dh rjg deZ djus dk vknsk fn; k x; k gA fu'dke Hko l } Qykl fDr dk R; kxdj deZ djus dh ; g f"kk gh xhrk dk ekdyd minsk gA

**1/4½ Xhrk eafoHku eloz%**

xhrk dh nf'V l elo; kRed gA xhrk ekk i kfr ds fd l h ekxZ dk frjLdkj ugha djrhA bl ds foijhr ml us l Hkh ekxZ dh iz'ka k dh gS fdUr qml dk eq; ifrik | deZ kx gA

**xhrk vj ; kx %**

xhrk ea; kx dh ifjHkk'kk vu d idkj l snh xbz gA \*l eRo dk uke ; kx gA ^ \*deka ea dQkyrk dks gh ; kx dgrs gS ^; kx% de l q dskyeA\* xhrk ds ; kx "kcn dk l keld; vFKz vius dks yxkuk ; k tkk'ek gA bl idkj deZ ; kx dk vFKz gqk vius dks l kelft d dUK; ka dh ifrZ ea yxkuka 1/7½ Qykd k k j [kdkj dUK; cf) l s deZ djus dk uke gh deZ kx gA

, dklr ea eu vj bflnz ka dh fD; kvla dks jkd dj] fl j xhok vj "kj hj dks vpy fLFkj] "kkur gkdj] fpUk dh "k) ds fy, ; kx djuk pfg, A xhrk ea dgk x; k gS fd iki jfgr gkdj tks fur; ; kx k; k l djrk gS ml s c a l i "kz dk vkr; furd l q k i ktr gsk gA ijUr q, d s ; kxh dks Hkh deZ dk vuqBku ugha Nk'ek pfg, A vt! dks ; kxh cuuk pfg, A "rLekn-; kxh Hkkt" ijUr q bl dk vFKz ; q l s foedk gsk ugha gA xhrk ml ; kxh dh iz'ka k djrh gS tks l c idkj l sjgrk gqk Hkh , dRo & Hkkouk ea exu jgrk gA

**Xhrk vj KkuekZ %**



Xhrk ea Kkuekxl vls Kkfu; ka dh iz'ka k Hkh xhrk ea eDr d.B l s dh xbz gA Kku l sc<dj ifo= djus okyk dN Hkh ugha gS "ufg Klus l n'la ifo=feg fo l rS" KkufXu l Ei ukz deka dks HkLe l kr- dj nrh gS KkukXu% l oZek.k HLeR- d#rstA Kkuh iq 'k nS krk gvk l purk gvk l Nirk&l pkrk [kkrk gvk l k l yrk gvk vls l krk gvk ges'kk ; g l e>rk gSfd eadN ugha djrk] idfr ds rhu xqk gh l c dN dj jgs gA HkDrka ea Hkxoku- dks Kkuh HkDr l cl sfiz gA l kjh bPNkva dks R; kxdj eerk vls vga kj&jfgr tks iq 'k ?kerk gS og "kkar dks iklr glrk gA ; g caah fLFkr gS bl s iklr djds euq; dk ekq u'V gS tkrk gS %8@2@7172YA yfdu , d s fu%ig Kkuh dks Hkh xhrk ds er eB deR; kx djus dk vf/kdkj ugha gA Hkxoku- d' .k dgrs gA fd mlga l d kj ea dN djuk "ksk ugha gS dkbz iklr djus ; kx ; oLrq vikr ugha gS rks Hkh os ykoka ds l keus mnkgj .k j [kus ds fy, ykd l xgkfkZ de l djrs gA

**deZkZ%**

deZkZ xhrk dk eq; ifrik l gA Qyr% xhrk ml dh f'kk nrh gS vls ml dk l eFku djrh gA bl l Ecu/k ea xhrk dh igyh ekU; rk ; g gSfd l eLr deka dk R; kx l Etko ugha gA {k.k Hkj ds fy, Hkh dkbz fcuk de l fd; s ugha jg l drkA idfr ds xqkka }kj k foo" k gkdj gjd dks de l djus i Mfs gA de l fd; s fcuk thou&j {kk ; k thou&fuokZ Hkh ugha gS l drkA nu js; fn l c de l djuk NkM+ns rks l f'V pO dk pyuk dln gS tk; A ; K&l fgr iztk dks mRi lu djds iztki fr us dgk& bl l s rE norkva dks l urqV djkS nork rkgkj bPNk; j ijh djA de l on l s mRi lu gq gS vls on ca l } bl fy, l oB; kid ca fur; ; K ea ifrf'Br gA tks ca ds iofr' bl pO dk vuq j.k ugha djrk og ikih gA tks fl QZ vius fy, gh idkrs gS os iki dks gh [kkrs gA %8@10&13½

deka dk R; kx u djus ds i {k ea xhrk us rhl jk grq Hkh ; g fn; k gS fd ; K] nku vls ri l s l Ec) de l fo}kula dks ifo= djus okys gksr gA xhrk ds vuq kj ; s de l nB dj.kh; gS %8@5YA "kj h l } eu l } cQ) l s vls j fl QZ bfUnz ka l s Hkh ; ksch ykx vkl fDr dks R; kx dj vkrE'kd) ds fy, de l djrs gS %8@42]44½

Kkuekxl ; k Kku ; kx vls deZkZ ; k de l kx dks ckyd gh fHku dgrs gS u fd fo}kua fd l h , d ea Hkh fLFkr iq 'k nksuka ds Qy dk ykHk ikrk gA **vu l Jr% de Dyadk; a de l djkr ; %**

**l l B; kl h p ; kch p u fu j fXu p k O ; %A %8½**

tks deQy ea vkl fDr R; kxdj] dUkO; ] de l djrk gS ogh l B; kl h gS ogh ; ksch gA vfxu dks u j [kus okyk fO; kghu dN Hkh ugha gA xhrk ea Kku; kx] de l kx , oa HkDr; kx rhuka dks gh ekS k i ffr dk ekZ Lohdkj fd; k x; k gA ; gh xhrk dh l fg' .krk vls l ello; dh Hkkouk gA

**HkDrekZ%**

xhrk us , d vls de l kx dks Kkuekxl l s tkM+us dh dks "k" k djrh gS vls nu jh vls HkDrekZ l A gea vius dYkO; de l djrs gq mudk Qy Hkxoku- dks vfi r dj nu k pkfg, A deka dk vuqBku , d idkj dh Hkxoku- dh i ntk gA

**LodeZk reH; P; Zfl f) afo l hfr ekuo% %8@46½**

vls

**Los de l ; Hjr% l fl f) ay Hksuj% %8@45½**

viu&vius de l ea yxk gvk euq; fl f) vFkr- eDr dks iklr djrk gS ; fn ml dh ; g Hkkouk gS fd og vius deka }kj k Hkxoku- dh vpZuk %8@45½ dj jgk gA bl h ea de l kx vls HkDr; kx dk l ello; gA

euq; ; k rks ; g l e>dj fu'dke Hkko l s dYkO; &de l ; k Aps de l djs fd og euq; tkfr ds bfrgkl dks vlx s c<k jgk gS ; k fQj bl Hkkouk l s fd og Hkxoku- dks i l lu djus ds fy, de l dj jgk gA Hkxoku- dks i l lu djus dk mnas ; , d l kfk gh thou dks l kfkZ] ifo= vls A pk cukus okyk gA





dh LFkkiuk dj l dsxkA bl ds ckn ml dk gj deZ leLr ekuo tkfr ds fy, l ef) yk, xkA euq; viuh l kjh ckgjh ubZ l fpo/kkvka ds l kfk vkume; utj vk, xk vksj vkt dh os"od l eL; k, j tS & Hk[kejh] l kAnkf; d nax\$ ; q] ns'ka ds chp ?kkrd vl=ka dh c<rh gkM/ ujl gkj] ikfjokfjd >xM\$ vkfn l eL; kvka l snj gksdj , d u; k fodkl gkskA cl t: jr gS Jhen-Hkxonxhkr ds crk, j ekxZ ij pydj vkl Dr gq fcuk deZ dj ds ml s JSB cukus dhA fu'd'kz-% ge dg l drs gS fd xhkr dh f'k{k ty&iikr dh rjg mTToy vls l qi'V gA Hkxonxhkr 0; fDr; ka dks mi ns'k gh ugha nrh] ml dh dfBukb; ka l s l gkuHkfr Hkh idV djrh gA Hkxonxhkr ekurh gS fd eu dk fuxg djuk vl; Ur dfBu gS l kfk gh og crykrh gS fd vl; kl vls gS k; l s ml ij fu; U=.k fd; k tk l drk gA xhkr /keZ dh "kfDr ea iwZ fo"okl j [krh gS A ; g fo"okl 0; fDr dks "kfDr vls mRl kg inku djrk gA xhkr dk fo"ksk egRo ml dh eksyd food nf'V ds dkj .k gA ml ea l ello; dh idfr ikbz tkrh gA Hkxonxhkr ea d'.k dgrs gS fd ejs }kj k pkj ka o. ka dh l f'V xq kka vls deka ds foHkx ds vuq kj dh x; hA xhkr ea tle dh vi\$kk foHklu euq; ka ds xq kka vls deka ij vf/kd xls o gS tks vkt Hkh euq; ds fy, T; knk xka gks l drk gA

**I UnHkZ&**

1/4 1/2 Jhen-Hkxonxhkr 2@63

1/4 2/2 Jhen-Hkxonxhkr 2@56

1/4 3/2 Jhen-Hkxonxhkr 2@57

1/4 4/2 Jhen-Hkxonxhkr 2@48

1/4 5/2 Jhen-Hkxonxhkr 2@47

1/4 6/2 Jhen-Hkxonxhkr 3@5

1/4 7/2 ns, e- fgj ; Uuk% vkmVykbUI i'B 119

1/4 8/2 Jhen-Hkxonxhkr 6@1

1/4 9/2 xky ij ykd dY; k.k dk ekxZ gS xhkr% <https://www.lchok.in/culture/bhagavad-gita-is-the-passage-of-welfare-story/1524.htm/>.17fnl Ecj 2016 dks n\$kk x; ka

1/4 10/2 orZku ifji\$; ea xhkr dh ikl fxdrk & iekn d\$kj ; kno] International Journal of Hindi Research Volume 4; Issue 3; May 2018; Page No. 15-17

1/4 11/2 xhkr ds deZ kx dh orZku ikl fxdrk & dhfrZ Hkxj }kt

1/4 12/2 Hkxjrh; n"ku & rrb; l d\$ .k & n\$ jkt

1/4 13/2 Jhen-Hkxonxhkr & txnh"k l ddr i\$rdky; t; ij& MKW jktBnz id kn "kekZ



## STUDY OF GRAVITATIONAL FIELD EQUATIONS AND SOME IMPORTANT RESULTS OF RELATIVISTIC COSMOLOGY

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### Abstract

We have demonstrated that the physical understanding of the gravitational interaction in geometrical and field approaches is dramatically different. The consistent field approach predicts that the gravity force has an ordinary quantum nature and actually is presented by the sum of the attraction (spin 2) and repulsion (spin 0) components, which opens new possibilities for experimental study of the gravity. For practical cosmology, observational or experimental tests capable of distinguishing between these alternative ways to understand gravitational interaction are important, because the implications for cosmological models are dramatic. In particular, the crucial test of gravity physics will be a detection of the energy of gravity field both in static gravitating systems and in the case of free field in the form of gravitational waves. In the next paper we show that the classical relativistic gravity effects in the weak field are identical in both theories, though there are also specific effects of the field gravity which may distinguish it from general relativity: scalar gravitational waves, the translational motion of rotating bodies, the surface and the magnetic field of the relativistic compact bodies in "black hole candidates", and the cosmological gravitational red shift.

**Keywords:** Gravitational Field Equation, Cosmology And General Relativity.

### Introduction

The geometrical way to gravity physics was built by Einstein (1915, 1916) in his general relativity (GR). Wheeler termed this approach geometrodynamics, underlining the fact that geometry is not a passive background but becomes a dynamical physical entity that may be deformed, stretched and even spread in the form of gravitational waves. Geometrical gravity is related to the curvature of space-time itself while other physical interactions are related to the matter in the flat Minkowski space-time. The problem of the energy of the gravity field in general relativity has a long history, it was, in fact, born together with Einstein's equations. Hilbert (1917) was the first who noted that "I contended ... in general relativity ... no equations of energy ... corresponding to those in orthogonally invariant theories". Here "or-

thogonal invariance" refers to theories in the flat Minkowski space. Emmy Noether (1918), a pupil of Hilbert, proved that the symmetry of Minkowski space is the cause of the conservation of the energy-momentum tensor of a physical field. Many results of modern relativistic quantum field theories are based on this theorem. So the "prior geometry" of the Minkowski space in the field theories has the advantage that it guarantees the tensor character of the energy-momentum and its con-servation for the fields. In fact, Einstein & Grossmann (1913) came close to Noether's result when they wrote: "remarkably the conservation laws allow one to give a physical definition of the straight line, though in our theory there is no object or process modeling the straight line, like a light beam in ordinary relativity theory". In other words, they stated that the existence of conservation laws implies the flat Minkowski geometry. In the same article Einstein & Grossmann also emphasized that the gravity field must have an energy-momentum tensor as all other physical fields. However, in the final version of general relativity Einstein rejected this requirement in order to have a generally covariant gravity theory with no prior Minkowski geometry.

### Mathematical formulation of the problem

According to general relativity (GR) gravity is described by a metric tensor of a Riemannian space. The "field" equations in GR (Einstein-Hilbert equations) have the form (we use Landau & Lifshitz 1971 notations):

$$R^{ik} - \frac{1}{2} g^{ik} R = \frac{8\pi G}{c^4} T_m^{ik} ,$$

(1)

where  $R^*$  is the Ricci tensor,  $R$  is the scalar curvature,  $T_m^{ik}$  is the energy-momentum tensor (hereafter EMT) for all kind of matter and fields, including EMT of the dark energy and cosmological vacuum. The most important feature of the Einstein's equations is that the right part of eq.(1) does not include the energy-momentum of the gravity field itself, and this corresponds the fact that in GR the gravity is not a material field.

Due to the Bianchi identity, a direct mathematical consequence of Einstein's eq.(1) is that the covari-ant divergence of the EMT of the matter equals zero, i.e.

$$(T_m^{ik})_{;k} = \frac{1}{\sqrt{-g}} \frac{\partial(\sqrt{-g} T_m^{ik})}{\partial x^k} - \frac{1}{2} \frac{\partial g_{kl}}{\partial x_i} T_m^{kl} = 0 ,$$
 (2)

One is tempted to see in this expression a usual conservation law, but let us cite the famous, but often ignored statement by Landau & Lifshitz (1971, sect.101): "however, this equation does not generally express any conservation law whatever. This is related to the fact that in a gravitational field the four-momentum of the matter alone must not be conserved, but rather the four-momentum of matter plus gravitational field; the latter is not included in the expression for  $T^{ik}_m$

Mathematically this is because the integral  $\int T^{ik} \sqrt{-g} ds_k$  is conserved only if the condition  $\partial(\sqrt{-g} T^{ik}) / \partial x^k = 0$  is fulfilled, however the second term in eq.(2) generally does not allow it. To define a conserved total four-momentum for a gravitational field plus the matter within it, Landau & Lifshitz suggested the expression

$$\frac{\partial}{\partial x^k} (-g)(T_m^{ik} + t_g^{ik}) = 0 \quad ,$$

(3)

here  $t_g^{ik}$  is called the energy-momentum pseudo-tensor, which should describe energy density of the gravity field itself. It is important that the quantities  $t_g^{ik}$  do not constitute a tensor, i.e. they depend on the choice of the system of coordinates, and this fact leads to mentioned above confusions. There are many suggestions for the pseudo-tensor, among them Einstein's (non-symmetric) and Landau & Lifshitz's (symmetric) pseudo-tensors.

However, this way of introducing energy for the gravity field is physically inconsistent, as discussed in detail by Logunov & Folomeshkin (1977) and Logunov & Mestvirishvili (1989). Moreover Yilmaz (1992) has shown that due to the Freud identity for the pseudo-tensor, there is a difficulty with the definition of the gravitational acceleration.

### Conclusion

Einstein's equations become exactly Einstein's equations of General Relativity for either a closed or an open spatially homogeneous, isotropic  $\partial_i(\sqrt{-g} t_k^i) = 0$  space-time for the macroscopic geometry of a flat spatially homogeneous, isotropic space-time. This exact solution of the Macroscopic Gravity equations exhibits a very non-trivial phenomenon from the point of view of the general-relativistic cosmology. The macroscopic (averaged) cosmological evolution in a flat Universe is governed by the dynamical evolution equations for either a closed or an open Universe depending on the sign of the macroscopic energy density  $\rho_{grav}$  with a dark spatial curvature term  $k\rho_{grav}/3$ . From the observational point of view such a cosmological model gives a new paradigm to reconsider the standard cosmological interpretation and treatment of the observational data. Indeed, this macroscopic cosmological model has the Riemannian geometry of a



flat homogeneous, isotropic space-time. Therefore, all measurements and data are to be considered and designed for this geometry. The dynamical interpretation of the obtained data should be considered and treated for the cosmological evolution of either a closed or an open spatially homogeneous, isotropic Riemannian space-time.

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## A STUDY OF SELF HELP GROUPS (SHGs) IN JHARKHAND STATE

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### **Abstract**

National Rural Livelihoods Mission (NRLM) was launched by the Ministry of Rural Development (MORD), Government of India in June 2011. Aided in part through investment support by the World Bank, the Mission aims at creating efficient and effective institutional platforms of the rural poor enabling them to increase household income through sustainable livelihood enhancements and improved access to financial services. A **Self help group (SHG)** is a financial intermediary committee usually composed of 10 to 20 local member women or men. Generally Self-help groups are formed in Jharkhand. In this group people who are on daily wages, they form a group and from that group one person takes money and gives it to the needy members who make small regular savings contributions over a few months until there is enough money in the group to begin lending. Funds may then be lent back to the members or to others in the village for any purpose. In India, many SHGs are 'linked' to banks for the delivery of micro credit and many self help groups, especially in India, under NABARD's 'SHG Bank Linkage' program, borrow from banks once they have accumulated a base of their own capital. By aggregating their individual savings into a single deposit, self-help groups minimize the bank's transaction costs and generate an attractive volume of deposits. Through self-help groups, the bank can serve small rural depositors by paying them a market rate of interest. Mottos of the Self help group (SHG) are 1) Building Women's Capacities, 2) mobilization of communities into savings clubs and promotion to viable enterprises, financial literacy and inclusion.

**Keywords:** -Self help group (SHG), National Rural Livelihoods Mission (NRLM), NABARD, Micro-finance.

### **Introduction**

Self help groups (SHGs) in Jharkhand are small, economically homogeneous and affinity groups of poor people. The members come together to save some money regularly by mutually agreeing to contribute to a common fund. These groups intend to meet the emergency needs of their members by providing collateral free loans on terms decided by the group itself which generally is less than the market driven rate of interest. They practice collective decision making



and resolve conflict through collective leadership. These groups try to empower the previously deprived and powerless mass (mostly women) socially, economically and politically. SHGs emphasize face to face social interactions and personal responsibilities by Self help Group refers to self governed, peer controlled, informal group of people with same socio-economic background and having a desire to collectively perform common purposes. Here poor people voluntarily come together to save whatever amount they can save conveniently out of their earnings, to mutually agree to contribute to a common fund and to lend to the members for meeting their productive and emergent needs. Self help Groups have been able to mobilize small savings either on weekly or monthly basis from persons who were not expected to have any savings. They have been able to effectively recycle the resources generated among the members for meeting the emergent credit needs of members of the group. Self help group is a group formed by the community women or men which has specific number of members like 10 or 20. In such a group, the poorest women would come together for emergency, disaster, social reasons, economic support to each other have ease of conversation, social and economic interactions. An SHG is an informal association to enhance the member's financial security as primary focus and other common interest of members such as area development, awareness, motivation, leadership, training and associating in other social inter-mediation programs for the benefit of the entire community. For the development of institution, the organization works on various perspectives to uplift the standard of villages and to promote rural development. Support has ever played an active role in promoting "Women Empowerment" in the state of Jharkhand. With close consultation and partnership of several dynamic non-governmental organizations in four districts namely Hazaribag, Ramgarh, Koderma Bokaro, and Giridih, it is working towards empowering women and has been successful to organize 9781 active (WSHGs) in the last reporting year 2018. An SHG thus serves the credit needs of the deprived. Its function was saving and extending credit. The main aims of the Self help group (SHG) are 1) Building Women's Capacities, 2) mobilization of communities into savings clubs and promotion to viable enterprises, financial literacy and inclusion. Later, a group would go to a bank for loans, and still later, plan to start a social enterprise where the pooling of individuals' money happens. As per requirements One's money for all and all's money for one Member could take loans from the group, and return the amount with interest. The only discussion that the group would have to decide whether or not a member should be lent the amount; and to focus upon accounts and calculations that would determine the member's worth for credit. SHGs have been linked with local service banks and successfully opening income generating ventures in their villages, based on their interests. Support is working as a leading NGO



for 04 districts namely Hazaribag,Ramgarh,Koderma, Bokaro, and Giridih with NABARD.

### **Stages under the formation of self help groups (SHGs)**

Following are the stages of group formation under self help groups:-

#### **Forming Stage**

This is the first stage during which organizers explain the concept of Self Help Groups. After this introductory session, women usually agree to form a group.

#### **Storming Session**

In this stage, a lot of queries arise in the minds of SHG members. Their hidden anxieties and fears are expressed during the meeting and conflict between individual interests and group interest are also evident.

#### **Norms Stage**

In this stage, members begin to internalize the concept of “self – help”. The members try to understand the concept of meeting, interacting, contributing, saving and lending if a particular group by other group members.

#### **Performance Stage**

Both the task and maintenance functions of the group are clearly realized by the members of the group at this stage. The members approach the bankers for further credit and the group is perceived as a means for income generation and collective action.

### **Characteristics of self help groups**

The characteristics of this scheme are as follows:-

- I. The ideal size of an SHG is 10 to 20 members.
- II. Group need not be registered (Informal Group)
- III. Only one person from a family can become a member of an SHG.
- IV. There is no gender bias, the SHGs normally consists of either men or women. Mixed groups are generally not preferred.
- V. Women’s groups are generally found to perform better. They are better in savings and usually ensure proper use of loans.
- VI. The members should preferably have homogeneous background in terms of socio-economic status, common economic activity and interest.
- VII. To the existing SHGs, a new member can be included with the consent of all existing members.
- VIII. All members of SHG may not necessarily be below poverty line but it is desirable to cover more poor.

### **Objectives of the study:-**

- To formulate the self help groups in Jharkhand state.
- To present the percentage status of respondents in different age groups
- To present district wise status of self help groups in Jharkhand state.
- To present the status of Bank loans disbursed to Commercial Banks to SHGs during the year 2018-19 in Jharkhand.



- Savings of SHGs with Banks State-wise position as on 31st March 2019.

#### **Review of Literature:-**

SHGs were initially promoted by some NGOs in response to the failure of formal bank institutions to reach the poor households. The idea was based on prevalence of informal serving and credit groups in villages that enabled poor people to pool their money and lend it out to their members. The innovation of SHGs was in forming groups exclusively of the poor, having small group size and convincing formal banks to lend them **Prasad 2006**

To studied financial inclusion while incorporating the contribution of SHG-bank linkage program thereby highlighting multiplier effect of Self-help groups (SHGs). Financial inclusion was evaluated based on data on branch penetration, credit penetration and deposit penetration collected rural areas, branch penetration had stagnated, but credit and deposit penetration had improved with a promising improvement due to SHG-bank linkage program **Bhanot and Bapat 2016**

The study of found that local institutions play a significant role in formation of SHGs and NGOs play a greater role in mobilization of SHGs and facilitation of formation of groups and they also work as intermediary between SHGs and banks, and without this facilitation, the SHG is merely reduced to a savings group and the core objectives of SHG, namely empowerment and self-reliance are not realized. Further, wherever NGOs are involved, the SHGs have performed better in terms of saving mobilization and credit utilization. The surprising result was to find large number of groups formed by self initiatives of individuals, which indicated that SHGs formation is taking the shape of a movement, and this movement is not driven by only monetary considerations but also for solidarity purpose, which needs further investigation. **Dash & Joseph Mendon 2011**

To studied on recent trends in financial Inclusion in India and found that while granting loans most of the banks evaluate the assets owned by the concerned person which the poor people don't have. So the bank should evaluate the capability of the person who is taking that loan. This will inculcate a confidence in poor people that they are also credit worthy and able to return loans.**Lamba and gupta 2011**

To studied micro credit of SHGs found that the number of SHGs and amount of bank loans disbursement has increased. It was found that though the commercial banks were reluctant initially in financing the rural women entrepreneur they were liberal in sanctioning loans to establish micro enterprises in the rural areas and in return increased the status of women in their homes and in the society. **Mohanan and Alagupandian2012**

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The author in this research paper has attempted to study the level of financial access to banking services of the urban unorganized workforce and the reason for not accessing banking services in eastern region of India particularly in Jharkhand and found that most of the respondents have very little saving and they do not have an idea to open a bank account. Poor knowledge of the available banking services was one of the main constraints in linking with bank.**Patnaiket al 2015**

To Change Perspective of Impact on a Development Practitioner Realizing that SHGs are not merely credit-and-savings entities but have immense potential to be instruments of development and change is a huge discovery in the writer’s professional journey.**Mananpathak 2017**

To understanding the organization’s concept of an SHG and its role in development; my perspective changed completely. I now see a more holistic role for SHGs in development, and this has given me, as a Development Practitioner, a broader view of the potential of Self Help Groups.**KavitaKumari 2018**

**Methodology:-**

This study aims to analyze the status of Financial Inclusion through Self Help groups (SHGs) in Jharkhand. Secondary data will be used from the sources like,

1. Age of sample self help groups in year
2. District wise Profile status of SHGs in Jharkhand.
3. Bank loans disbursed to Commercial Banks to SHGs in Jharkhand
4. Savings of SHGs with Banks Region-wise/ State-wise position in India of Jharkhand

**Analysis and Interpretation:-**

Table no 01

AGE OF SAMPLE SHGs (in Years)

AGE OF GROUP	NUMBER OF RESPONDENTS		TOTAL
	OFFICE BEARERS	MEMBERS	
2 - 5 Years	33 (21.29%)	39 (25.16%)	72 (23.23%)
5 - 8 Years	88 (56.77%)	91 (58.71%)	179 (57.74%)
Above 8 Years	34 (21.94%)	25 (16.13%)	59 (19.03%)
<b>TOTAL</b>	<b>155(100.00%)</b>	<b>155(100.00%)</b>	<b>310(100.00%)</b>

Data sources by nrlm.gov.in



Table no 02

District wise Profile status of SHGs in Jharkhand

S. No	District name	Block Counts	SHGs count		SHGs with less than 05 Members
		Total Blocks	Numbers of Blocks where SHGs entry has Started	Total SHGs	
1	Bokaro	9	9	11426	1115
2	Chatra	12	12	9294	671
3	Deoghar	10	10	9113	544
4	Dhanbad	10	10	5843	253
5	Dumka	10	10	9612	724
6	East singhbum	11	11	13080	1255
7	Garhwa	20	20	7311	348
8	Giridih	13	13	14853	498
9	Godda	9	9	9021	575
10	Gumla	12	12	11265	780
11	Hazaribagh	16	16	10755	724
12	Jamtara	6	6	5775	253
13	Khunti	6	6	5663	630
14	Koderma	6	6	5687	492
15	Latehar	9	9	8263	617
16	Lohardaga	7	7	5083	414
17	Pakur	6	6	9336	593
18	Palamu	21	21	15874	1040
19	Ramgarh	6	6	5411	991
20	Ranchi	18	18	17915	1424

21	Sahebganj	9	9	7112	276
22	Saraikelakharsawan	9	9	7569	652
23	Simdega	10	10	5885	680
24	West singhbhum	18	18	13703	1165

Data sources by nrlm.gov.in

Table no 03

Bank loans disbursed to Commercial Banks to SHGs during the year 2018-19 for Jharkhand in India

S. No	Name of Bank	Total Loan Disbursed during the year		Out of Total - Loan disbursed to Exclusive Women SHGs		Out of Total - Loan disbursed under NRLM/SGSY		Out of Total SHGs Under NULM/SJSRY	
		No. of SHGs	Loans Disbursed	No. of SHGs	Loans Disbursed	No. of SHGs	Loans Disbursed	No. of SHGs	Loans Disbursed
01	Allahabad Bank	2092	2006.34	1069	1060.33	1840	1824.34	21	21.51
02	Andhra Bank	16	7.14	16	7.14	13	5.64	3	1.50
03	Bank of Baroda	1776	1666.18	931	864.00	241	159.56	9	3.25
04	Bank of India	7964	3921.00	7964	3921.00	7708	3785.00	226	114.00
05	Bank of Maharashtra	1	0.50	1	0.50	0	0.00	0	0.00
06	Canara Bank	2060	2133.11	2060	2133.11	2024	2102.56	6	3.03
07	Central Bank of India	897	426.34	72	20.33	72	20.33	0	0.00
08	Corporation Bank	0	0.00	0	0.00	0	0.00	0	0.00
09	Dena Bank	24	17.39	22	16.79	21	6.62	1	0.05
10	IDBI Bank Limited	239	129.75	228	100.65	216	103.86	0	0.00
11	Indian Bank	146	502.00	143	492.00	141	500.00	1	1.00
12	Indian Overseas Bank	261	142.19	186	100.77	186	100.77	0	0.00
13	Oriental Bank of Commerce	1	0.05	1	0.05	0	0.00	0	0.00
14	Punjab and Sind Bank	24	35.18	21	31.70	10	10.90	14	24.28
15	Punjab National	3224	1030.64	1129	230.59	2562	814.99	20	7.94

	Bank								
16	State Bank of India	4203	4048.00	4171	4017.00	3852	2616.00	0	0.00
17	Syndicate Bank	275	350.57	250	343.32	0	0.00	14	3.64
18	UCO Bank	325	255.50	314	250.21	301	231.59	24	23.91
19	Union Bank of India	2501	1770.00	2000	1600.00	1501	1400.00	0	0.00
20	United Bank of India	731	439.00	731	439.00	623	313.00	27	29.00
21	Vijaya Bank	244	119.10	243	119.10	95	50.60	6	3.20
	Total	27004	18999.98	21552	15747.59	21406	14045.76	372	236.31

Data sources by nrlm.gov.in

Table 04

Savings of SHGs with Banks Region-wise/ State-wise position as on 31 March 2019 in India

S - n o	Region- wise/ State-wise	Commercial Banks		Regional Banks		Rural Cooperative Banks		Total	
		No. of SHGs	Savings Amount	No. of SHGs	Savings Amount	No. of SHGs	Savings Amount	No. of SHGs	Savings Amount
01	Andaman & Nicobar	851	103.25	0	0.00	5005	1070.30	5856	1173.55
02	Bihar	332242	72179.66	437924	78679.00	29	1.05	770195	150859.71
03	Jharkhand	137712	18877.62	99920	10785.41	936	56.24	238568	29719.27
04	Odisha	378900	75445.16	198913	54299.39	85568	7758.1	663381	137502.71
05	West Bengal	483534	95295.71	277982	126382.44	214842	60221.49	976358	281899.64
	Total	1333239	261901.40	1014739	270146.24	306380	69107.24	2654358	601154.88

Data sources by Yojna.

On the basis of table 01 indicated only those SHGs which had completed at least two years of savings and credit linkage was selected for the study. A majority (76.77%) of the SHGs selected in the sample were functioning for more than five years. The rest are functioning for less than Eight years (23.23%). Majority of the groups were 8 years old because, in Jharkhand city self help groups were started from 2011 that's why most of the SHG's crossed 8 years.

On the basis of table no 02, District wise Profile status of SHGs in Jharkhand District namely Bokaro Block Counts Total Blocks 9 wherein SHGs entry Started Total SHGs 11426 SHGs and with less than 05 Members 1115, Chatra Block



Counts Total Blocks 12 wherein SHGs entry has Started SHGs 9294 SHGs with less than 05 Members 671, Deoghar Block Counts Total Blocks 10 SHGs wherein SHGs entry has Started Total SHGs 9113 SHGs and with less than 05 Members 544, Dhanbad Block Counts Total Blocks 10 SHGs wherein SHGs entry has Started SHGs 5843 SHGs and with less than 05 Members 253, Dumka Block Counts Total Blocks 10 SHGs wherein SHGs entry has Started SHGs 9612 SHGs and with less than 05 Members 724, East Singhbhum Block Counts Total Blocks 11 SHGs wherein SHGs entry has Started SHGs 13080 SHGs and with less than 05 Members 1255, Garhwa Block Counts Total Blocks 20 SHGs wherein SHGs entry has Started SHGs 7311 SHGs and with less than 05 Members 348, Giridih Block Counts Total Blocks 13 SHGs wherein SHGs entry has Started SHGs 14853 SHGs and with less than 05 Members 498, Godda Block Counts Total Blocks 9 SHGs wherein SHGs entry has Started SHGs 9021 SHGs and with less than 05 Members 575, Gumla Block Counts Total Blocks 12 SHGs wherein SHGs entry has Started SHGs 11265 SHGs and with less than 05 Members 780, Hazaribag Block Counts Total Blocks 16 SHGs wherein SHGs entry has Started SHGs 10755 SHGs and with less than 05 Members 724, Jamtara Block Counts Total Blocks 6 SHGs wherein SHGs entry has Started SHGs 5775 SHGs and with less than 05 Members 253, Khunti Block Counts Total Blocks 6 SHGs wherein SHGs entry has Started SHGs 5663 SHGs and with less than 05 Members 630, Koderma Block Counts Total Blocks 6 SHGs wherein SHGs entry has Started SHGs 5687 SHGs and with less than 05 Members 492, Latehar Block Counts Total Blocks 9 SHGs wherein SHGs entry has Started SHGs 8263 SHGs and with less than 05 Members 617, Lohardaga Block Counts Total Blocks 7 SHGs wherein SHGs entry has Started SHGs 5083 SHGs and with less than 05 Members 414, Pakur Block Counts Total Blocks 6 SHGs wherein SHGs entry has Started SHGs 9336 SHGs and with less than 05 Members 593, Palamu Block Counts Total Blocks 21 SHGs wherein SHGs entry has Started SHGs 15874 SHGs and with less than 05 Members 1040, Ramgarh Block Counts Total Blocks 6 SHGs wherein SHGs entry has Started SHGs 5411 SHGs and with less than 05 Members 991, Ranchi Block Counts Total Blocks 18 SHGs wherein SHGs entry has Started SHGs 17915 SHGs and with less than 05 Members 1424, Sahebgang Block Counts Total Blocks 9 SHGs wherein SHGs entry has Started SHGs 7112 SHGs and with less than 05 Members 276, Saraikeela Block Counts Total Blocks 9 SHGs wherein SHGs entry has Started SHGs 7569 SHGs and with less than 05 Members 652, Simdega Block Counts Total Blocks 10 SHGs wherein SHGs entry has Started SHGs 5885 SHGs and with less than 05 Members 680, and West Singhbhum Block Counts Total Blocks 18 SHGs wherein SHGs entry has Started SHGs 13703 SHGs and with less than 05 Members 1165.



On the basis of table no 03,by Allahabad Bank Total Loan Disbursed during the year 2018-19 for No. of SHGs 2092, Loan Disbursed 2006.34, Out of Total – Loan Disbursed to Exclusive Women SHGs for No. of SHGs 1069 Loan Disbursed 1060.33, Out of Total-Loan disbursed under NRLM/SGSY for No. of SHGs 1840 Loan Disbursed 1824.34, Out of Total SHGs Under NRLM/SGSY No. of SHGs 21 Loan Disbursed 21.51, by Andhra Bank Total Loan Disbursed during the year No. of SHGs 16 Loan Disbursed 7.14 Out of Total –Loan Disbursed to Exclusive Women SHGs No. of SHGs 16 Loan Disbursed 7.14 Out of Total-Loan disbursed under NRLM/SGSY No. of SHGs 13 Loan Disbursed 5.64 Out of Total SHGs Under NRLM/SGSY No. of SHGs 3 Loan Disbursed 1.50, Bank of Baroda Total Loan Disbursed during the year No. of SHGs 1776 Loan Disbursed 1666.18 Out of Total –Loan Disbursed to Exclusive Women SHGs No. of SHGs 931 Loan Disbursed 864.00 Out of Total-Loan disbursed under NRLM/SGSY No. of SHGs 241 Loan Disbursed 159.56 Out of Total SHGs Under NRLM/SGSY No. of SHGs 9 Loan Disbursed 3.25, Bank of India Total Loan Disbursed during the year No. of SHGs 7964 Loan Disbursed 3921.00 Out of Total –Loan Disbursed to Exclusive Women SHGs No. of SHGs 7964 Loan Disbursed 3921.00 Out of Total-Loan disbursed under NRLM/SGSY No. of SHGs 7708 Loan Disbursed 3785.00 Out of Total SHGs Under NRLM/SGSY No. of SHGs 226 Loan Disbursed 114.00, Bank of Maharashtra Total Loan Disbursed during the year No. of SHGs 1 Loan Disbursed 0.50 Out of Total –Loan Disbursed to Exclusive Women SHGs No. of SHGs 1 Loan Disbursed 0.50 Out of Total-Loan disbursed under NRLM/SGSY No. of SHGs 0 Loan Disbursed 0.00 Out of Total SHGs Under NRLM/SGSY No. of SHGs 0 Loan Disbursed 0.00,Canara Bank Total Loan Disbursed during the year No. of SHGs 2060 Loan Disbursed 2133.11 Out of Total –Loan Disbursed to Exclusive Women SHGs No. of SHGs 2060 Loan Disbursed 2133.11 Out of Total-Loan disbursed under NRLM/SGSY No. of SHGs 2024 Loan Disbursed 2102.56 Out of Total SHGs Under NRLM/SGSY No. of SHGs 6 Loan Disbursed 3.03, Central Bank of India Total Loan Disbursed during the year No. of SHGs 897 Loan Disbursed 426.34 Out of Total –Loan Disbursed to Exclusive Women SHGs No. of SHGs 72 Loan Disbursed 20.33 Out of Total-Loan disbursed under NRLM/SGSY No. of SHGs 72 Loan Disbursed 20.33 Out of Total SHGs Under NRLM/SGSY No. of SHGs 0 Loan Disbursed 0.00, Corporation Bank Total Loan Disbursed during the year No. of SHGs 0 Loan Disbursed0.00 Out of Total –Loan Disbursed to Exclusive Women SHGs No. of SHGs 0 Loan Disbursed 0.00 Out of Total-Loan disbursed under NRLM/SGSY No. of SHGs 0 Loan Disbursed 0.00 Out of Total SHGs Under NRLM/SGSY No. of SHGs 0 Loan Disbursed 0.00, Dena Bank Total Loan Disbursed during the year No. of SHGs 24 Loan Disbursed 17.39 Out of Total –Loan Disbursed to Exclusive Women SHGs No. of SHGs



22 Loan Disbursed 16.79 Out of Total-Loan disbursed under NRLM/SGSY No. of SHGs 21 Loan Disbursed 6.62 Out of Total SHGs Under NRLM/SGSY No. of SHGs 1 Loan Disbursed 0.05, IDBI Bank Limited Total Loan Disbursed during the year No. of SHGs 239 Loan Disbursed 129.75 Out of Total –Loan Disbursed to Exclusive Women SHGs No. of SHGs 228 Loan Disbursed 100.65 Out of Total-Loan disbursed under NRLM/SGSY No. of SHGs 216 Loan Disbursed 103.86 Out of Total SHGs Under NRLM/SGSY No. of SHGs 0 Loan Disbursed 0.00, Indian Bank Total Loan Disbursed during the year No. of SHGs 146 Loan Disbursed 502.00 Out of Total –Loan Disbursed to Exclusive Women SHGs No. of SHGs 143 Loan Disbursed 492.00 Out of Total-Loan disbursed under NRLM/SGSY No. of SHGs 141 Loan Disbursed 500.00 Out of Total SHGs Under NRLM/SGSY No. of SHGs 1 Loan Disbursed 1.00, Indian Overseas Bank Total Loan Disbursed during the year No. of SHGs 261 Loan Disbursed 142.19 Out of Total –Loan Disbursed to Exclusive Women SHGs No. of SHGs 186 Loan Disbursed 186 Out of Total-Loan disbursed under NRLM/SGSY No. of SHGs 100.77 Loan Disbursed 186 Out of Total SHGs Under NRLM/SGSY No. of SHGs 100.77 Loan Disbursed 0.00, Oriental Bank of Commerce Total Loan Disbursed during the year No. of SHGs 1 Loan Disbursed 0.05 Out of Total –Loan Disbursed to Exclusive Women SHGs No. of SHGs 1 Loan Disbursed 0.05 Out of Total-Loan disbursed under NRLM/SGSY No. of SHGs 0 Loan Disbursed 0.00 Out of Total SHGs Under NRLM/SGSY No. of SHGs 0 Loan Disbursed 0.00, Punjab and Sind Bank Total Loan Disbursed during the year No. of SHGs 24 Loan Disbursed 35.18 Out of Total –Loan Disbursed to Exclusive Women SHGs No. of SHGs 21 Loan Disbursed 31.70 Out of Total-Loan disbursed under NRLM/SGSY No. of SHGs 10 Loan Disbursed 10.90 Out of Total SHGs Under NRLM/SGSY No. of SHGs 14 Loan Disbursed 24.28, Punjab National Bank Total Loan Disbursed during the year No. of SHGs 3224 Loan Disbursed 1030.64 Out of Total –Loan Disbursed to Exclusive Women SHGs No. of SHGs 1129 Loan Disbursed 230.59 Out of Total-Loan disbursed under NRLM/SGSY No. of SHGs 2562 Loan Disbursed 814.99 Out of Total SHGs Under NRLM/SGSY No. of SHGs 20 Loan Disbursed 7.94, State Bank of India Total Loan Disbursed during the year No. of SHGs 4203 Loan Disbursed 4048.00 Out of Total –Loan Disbursed to Exclusive Women SHGs No. of SHGs 4171 Loan Disbursed 4017.00 Out of Total-Loan disbursed under NRLM/SGSY No. of SHGs 3852 Loan Disbursed 2616.00 Out of Total SHGs Under NRLM/SGSY No. of SHGs 0 Loan Disbursed 0.00, Syndicate Bank Total Loan Disbursed during the year No. of SHGs 275 Loan Disbursed 350.57 Out of Total –Loan Disbursed to Exclusive Women SHGs No. of SHGs 250 Loan Disbursed 343.32 Out of Total-Loan disbursed under NRLM/SGSY No. of SHGs 0 Loan Disbursed 0.00 Out of Total SHGs Under NRLM/SGSY No. of SHGs 14 Loan Disbursed 3.64, UCO



Bank Total Loan Disbursed during the year No. of SHGs 325 Loan Disbursed 255.50 Out of Total –Loan Disbursed to Exclusive Women SHGs No. of SHGs 314 Loan Disbursed 250.21 Out of Total-Loan disbursed under NRLM/SGSY No. of SHGs 301 Loan Disbursed 231.59 Out of Total SHGs Under NRLM/SGSY No. of SHGs 24 Loan Disbursed 23.91, Union Bank of India Total Loan Disbursed during the year No. of SHGs 2501 Loan Disbursed 1770.00 Out of Total –Loan Disbursed to Exclusive Women SHGs No. of SHGs 2000 Loan Disbursed 1600.00 Out of Total-Loan disbursed under NRLM/SGSY No. of SHGs 1501 Loan Disbursed 1400.00 Out of Total SHGs Under NRLM/SGSY No. of SHGs 0 Loan Disbursed 0.00, United Bank of India Total Loan Disbursed during the year No. of SHGs 731 Loan Disbursed 439.00 Out of Total –Loan Disbursed to Exclusive Women SHGs No. of SHGs 731 Loan Disbursed 439.00 Out of Total-Loan disbursed under NRLM/SGSY No. of SHGs 623 Loan Disbursed 313.00 Out of Total SHGs Under NRLM/SGSY No. of SHGs 27 Loan Disbursed 29.00, and Vijaya Bank Total Loan Disbursed during the year No. of SHGs 244 Loan Disbursed 119.10 Out of Total –Loan Disbursed to Exclusive Women SHGs No. of SHGs 243 Loan Disbursed 119.10 Out of Total-Loan disbursed under NRLM/SGSY No. of SHGs 95 Loan Disbursed 50.60 Out of Total SHGs Under NRLM/SGSY No. of SHGs 6 Loan Disbursed 3.20

On the basis of table no 04, under Commercial Banks Andaman & Nicobar has No. of SHGs 851 Savings Amount 103.25, Bihar has No. of SHGs 33224 Savings Amount 72179.66, Jharkhand has No. of SHGs 137712 Savings Amount 18877.62, Odisha has No. of SHGs 378900 Savings Amount 75445.16, West Bengal has No. of SHGs 483534 Savings Amount 95295.71, under Regional Rural Banks Andaman & Nicobar has No. of SHGs 0 Savings Amount 0.00, Bihar Regional Rural Banks has No. of SHGs 437924 Savings Amount 78679.00, Jharkhand Regional Rural Banks has No. of SHGs 99920 Savings Amount 10785.41, Odisha Regional Rural Banks has No. of SHGs 198913 Savings Amount 54299.39, and West Bengal Regional Rural Banks No. of SHGs 277982 Savings Amount 12632.44, under Cooperative Banks of Andaman & Nicobar has No. of SHGs 5005 Savings Amount 1070.30, Cooperative Banks of Bihar has No. of SHGs 29 Saving Amount 1.5, Cooperative Banks of Jharkhand has No. of SHGs 936 Saving Amount 56.24, Cooperative Banks of Odisha has No. of SHGs 85568 Saving Amount 7758.1, Cooperative Banks of West Bengal has No. of SHGs 214842 Saving Amount 60221.49, and under total Andaman & Nicobar has No. of 5856 SHGs and Savings Amount 1173.55, Bihar has No. of SHGs 770195 Savings Amount 150859.71, Jharkhand has No. of SHGs 238568 Savings Amount 29719.27, Odisha has No. of SHGs 663381 Savings Amount 137502.71, West Bengal has No. of SHGs 976358 Savings Amount 281899.64.



### **Conclusion:-**

The formulation of self help groups (SHGs) in Jharkhand state in different age of groups have the respective percentage of respondents for 2-5 Years 23.23 percentage, 5-8 Years 57.74 percentage, above 8 Years 19.03 percentage whereas the maximum percentage of respondent is for 5-8 years that is 57.74 percentage. The district wise status of self help groups (SHGs) in Jharkhand state is maximum for Palamu, Garhwa, Ranchi, West Singhbhum, Hazaribag respectively in terms of Numbers of self help groups (SHGs) in spite of starting program in Hazaribag, Bokaro, Ramgarh, Koderma and Giridih only whereas the percentage wise status goes for Pakur, Bokaro, East Singhbhum, Giridih and Godda respectively are leading districts.

Out of twenty one banks, the loan disbursed to commercial banks during the year 2018-19 to self help groups (SHGs) for Jharkhand in India, Indian bank, Punjab and Sind bank, Syndicate bank, Canara bank and State bank of India are leading whereas loan disbursed to Exclusive women SHGs are Punjab and Sind bank, Syndicate bank, Canara bank, Allahabad bank and State bank of India respectively.

The savings of self help groups (SHGs) with banks state wise position as on 31<sup>st</sup> march 2019 is 18877.62 for 137712 SHGs, 10785.41 for 99920 SHGs for Regional Rural banks and 56.24 for 936 SHGs for Co operative banks and overall savings 29719.27 for 238568 SHGs in Jharkhand state, West Bengal is at the top in terms of saving of SHGs with banks as on 31<sup>st</sup> march 2019 in India.

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## STUDY OF THE PERFORMANCE PROPERTIES OF SMALL ANTENNAS THROUGH MECHANICALLY GUIDED 3D ASSEMBLY

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### Abstract

To address demands for increased data transmission rates, electrically small antennas (ESAs) that simultaneously offer large frequency bandwidths and small physical sizes are of growing interest. 3D layouts are particularly important in this context and among various 3D ESAs, systems that adopt hemispherical shapes are very promising, because they can occupy the entire Chu-sphere and offer outstanding electrical performance. Researchers have developed a few different approaches to fabricate high-quality hemispherical ESAs, but most have static layouts and fixed operating frequencies. Here, a mechanically guided 3D assembly approach is introduced for the design and fabrication of deformable hemispherical ESAs that can offer tunable, dynamic properties to adapt to changes in environmental conditions. The strategy exploits controlled compressive buckling of strategically patterned 2D precursor structures, as a low-cost and high-yield scheme that can exploit conventional, planar processing technologies and commercially available platforms. Combined numerical simulations and experimental measurements show outstanding performance characteristics in terms of the quality factor and radiation efficiency. Application of external tensile strains to elastomeric substrates for these systems allows them to be reshaped and reversibly tuned through a wide range of center frequencies. Mechanical testing under different loading conditions demonstrates the ability of these ESAs to accommodate large deformations.

**Keywords:** Small Antennas, ESAs System & 3D Asembly.

### Introduction:

As mobile/wearable devices with wireless data communication capabilities become increasingly miniaturized, sophisticated, and ubiquitous, the interest in the development of antennas with large bandwidths and small sizes grows. Extensive academic and industrial studies focus on various designs

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for high efficiency electrically small antenna (ESA). An antenna is considered electrically small when its electrical size is less than 0.5, as defined by the value of  $ka$ , where  $k$  is the free space wavenumber ( $k = 2\pi a/\lambda$ , with  $\lambda$  being the wavelength) at the operating frequency, and  $a$  is the radius of the smallest sphere that circumscribes the antenna. The quality factor ( $Q$ ), given by the ratio of stored energy to radiated energy, is one of the most important metrics for the ESAs. A design goal is to achieve both a high radiation efficiency  $\eta_{\text{eff}}$  and a low  $Q$ . The Chu limit defines a fundamental lower bound for  $Q$ , given by  $Q_{\text{lb}} = \eta_{\text{eff}}[(1/ka)^3 + 1/(ka)]$ , where  $ka$  is the electrical size. This equation shows that the minimum attainable  $Q$  increases rapidly as  $ka$  decreases, thereby establishing practical challenges in the design of ESAs. The ratio  $Q/Q_{\text{lb}}$ , takes both  $Q$  and  $\eta_{\text{eff}}$  into account, and is, therefore, a widely used metric for the performance of ESAs. ESAs can be classified into two categories (planar and volumetric ESAs) according to the different geometries. Planar ESAs generally have limited efficiencies and bandwidths, due to their small volume occupation of the Chu-sphere. Volumetric ESAs overcome these limitations by offering relatively large volume occupation of the Chu-sphere, with resulting capabilities to substantially improve the performance. Among various designs in volumetric ESAs, those with spherical and/or hemispherical geometries can occupy the entire Chu-sphere, with the potential to achieve the lowest  $Q/Q_{\text{lb}}$ . The fabrication of volumetric ESAs, especially the (hemi)spherical ones, is, however, much more challenging than that for planar ESAs. For decades, researchers have sought routes to precise, low-cost, scalable production of (hemi)spherical ESAs. The simplest approach involves manually bending wires into desired configurations, but this method is intrinsically slow, labor intensive, and it offers limited accuracy in geometric control. 3D printing techniques offer impressive capabilities for rapid prototyping and can be exploited to realize hemispherical ESA, but significant increases in throughput are needed for massive production. The relatively low conductivity (e.g.,  $\approx 30\%$  of those based on deposition techniques) of the printed metallic materials represents an additional challenge to achieving high antenna efficiencies. Another scheme relies on direct transfer patterning as a multistep process to form ESAs on hemispherical substrates, starting with preparation of a mold, transferring metallic structures, followed by etching with a pulsed argon plasma and electroplating to complete the fabrication. This approach is interesting, but issues in process time, cost, and complexity require additional attention. Alternative schemes could offer important options, in this broader context, including those that offer additional capabilities in mechanical tunability to address requirements in wearable electronics and other areas. Designs based on liquid metal alloys and pressure induced tuning are of interest, although



potential for leakage of both the alloy and the gas may present practical challenges

### **Experimental :**

Here we leverage recently developed techniques in mechanical-guided 3D assembly to design and fabricate tunable hemispherical ESAs. This approach exploits well-developed semiconductor technologies to form 2D precursor structures that are then transformed into desired 3D configurations by controlled compressive buckling, in a deterministic manner consistent with predictive models based on finite element analysis (FEA). This scheme is appealing, compared with other 3D forming/assembly techniques, for its applicability to nearly any type of materials including semiconductors, metals, polymers, and their combinations, over length scales spanning from sub-micrometer to meter dimensions. This work demonstrates the utility of this assembly approach to achieve two different types of high-quality ESAs, meanderline-based hemispherical ESA (MHESA) and helix-based hemispherical ESA (HHESA), both of which have Q/Q<sub>lb</sub> very close to 1. Combined studies based on experimental measurements, mechanics modeling and electromagnetic simulations illustrate the key performance characteristics and the reversible tunability of the operating frequency. Cyclic testing under typical mechanical loads demonstrates the robustness of these devices and their ability to sustain extreme deformations. These results suggest simple, low-cost routes to mass production of high-performance, deformable ESAs, with diverse potential applications, including those in wearable and biointegrated electronics.

### **Results and Discussion:**

Electromagnetic simulations and measurements, allow quantitative evaluation of the antenna performance. The focus here is on the voltage standing wave ratio (VSWR) characteristics, which determine the impedance-matching with the transmission line. As the magnitude of VSWR approaches 1, the matching approaches an ideal value. The bandwidth (BW) of the antenna can be defined as the frequency range over which the VSWR remains below a specified threshold, and the fractional bandwidth (FBW) is defined as the bandwidth divided by the center frequency. This work uses a VSWR threshold of 5.828, which corresponds to the half-power bandwidth. The measured and simulated results of VSWR for the device, where good agreements can be observed. In particular, the measured center frequency is 1.08 GHz with a bandwidth of 135 MHz or a fractional bandwidth of 12.5%, consistent with the simulated results (center frequency: 1.085 GHz; bandwidth: 115 MHz; fractional bandwidth: 10.6%). The radiation efficiency is determined as 62% and 64%, according to the measurement and simulation, respectively. The



electrical size of this MHESA is  $ka = 0.36$ , confirming that the antenna is electrically small. According to the equation for  $Q_{lb}$  and the relation between  $Q$  and FBW, the ratio  $Q/Q_{lb}$  is 1.1, which indicates that this MHESA closely approaches the fundamental limit for  $Q$ , thereby suggesting nearly optimal performances. For completeness, the normalized radiation patterns obtained by simulation are presented and the impedance characteristics based on the measurement and simulation.

### Conclusion:

In summary, the results presented here illustrate the utility of mechanically guided 3D assembly in the design and fabrication of two different types of high-quality hemispherical ESAs, i.e., meanderline-based and helix-based hemispherical ESAs. Combined experimental and computational studies highlight the excellent performance characteristics of both systems, as evidenced by their ultralow ratio  $Q/Q_{lb}$  (1.1 for MHESA and 1.6 for HHESA). The demonstrated capabilities for tuning the working frequency over a wide range and for sustaining high levels of mechanical deformations suggest promising potential use in many different applications, including those in wireless wearables and biointegrated electronics. For such applications related to wearable and biointegrated electronics, the effect of human tissues (e.g., hand, skin) should be considered in the design. For example, the VSWR curve shifts left for both MHESA and HHESA, when putting a human hand over the antenna at a distance of 1 cm.

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## A STUDY ON CURRENT SCENARIO OF SELECTED SCHEMES OF MUTUAL FUND INDUSTRIES IN INDIA

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### Abstract

The research aims to bring out current scenario of selected schemes of mutual fund industries in India. The Current scenario and growth of mutual funds have been evaluated across category, sector and type of portfolio. On percent, compound annual growth rate (CAGR) and comparable market segment are the major tools realistic for scrutinizing growth in number of schemes, assets under management and capitals mobilized. The reference period ranges from April 2019 to December 2019. The study brings out that the mutual fund investors in India at current have as various schemes with variety of features such as dividend, growth, equity linked schemes, cumulative interest income, monthly income plans, money market schemes, sectoral plans, equity linked schemes, money market schemes, etc. Both open-end and close-end schemes have listed outstanding growth in fund mobilization. Exploration is done on basis of selected schemes of open end schemes of Mutual Fund Industries in India.

**Keyword:** Mutual Fund, Indian Mutual Fund Industry.

### 1. Introduction

India is in top economy in the world in terms of market potential and is placed above countries like France, Italy, Russia and the United Kingdom. All these make investment in India a productive option for the world. The investment market in India offers many possibilities for the investors as the level of purchasing power is improving over time. During last one decade approximately, role of Indian open-end fund industry as a big financial service in financial market has really been noteworthy. In fact, mutual funds have important segment of financial market of India, especially as a result of the initiatives



taken by Government of India for resolving problems concerning UTI's US-64 and liberalize tax liabilities on the incomes earned by the mutual funds. They now play a really significant role in channelizing the saving of many individuals into the investment in equity and debt instruments. The mutual funds are supply economies of scale, a better level of diversification, they supply liquidity, and that they are managed by professional investors. Primary structures of mutual funds contain open-end funds, unit investment trusts, and closed-end funds. An open-end fund may be a professionally managed investment fund that pools money from many investors to get securities. These investors could even be retail or institutional in nature. Some close-ended funds also resemble exchange traded funds as they're traded on stock exchanges to reinforce their liquidity. Mutual funds also are classified by their principal investments as market funds, bond or fixed income funds, stock or equity funds, hybrid funds or other. Funds can also be categorized as index funds, which are passively managed funds that match the performance of an index, or actively managed funds.

## **2. Mutual Fund in India**

The mutual fund industry in India started in 1963 with the formation of unit investment trust of India, at the initiative of the government of India and Reserve Bank of India. The history of mutual funds in India is often broadly divided into four distinct phases started in 1963 with unit investment trust of India, Government of India & RBI. Unit Trust of India (UTI) was recognized on 1963 by an Act of Parliament. It was set up by the Reserve Bank of India and performed under the Regulatory and administrative regulator of the Reserve Bank of India. First scheme thrown by UTI was Unit Scheme 1964. In 1988 UTI had Rs. 6,700 crores of Properties under Management. Second Phase - 1987-1993 (Entrance of Public Sector Funds) Public sector banks and Life Insurance Corporation of India (LIC) and General Insurance Corporation of India (GIC) caught the Entry in MF Industry in 1987. SBI was the first non-UTI Fund recognized in June 1987 followed by Canbank (Dec 87), Punjab National Bank (Aug 89), Indian Bank (Nov 89), Bank of India (Jun 90), Bank of Baroda (Oct 92). LIC established its mutual fund in



June 1989 though GIC had set up its mutual fund in December 1990. The mutual fund tradetook Assets Under Management of Rs.47,004 crores at the end of 1993. Third Phase -1993-2003 (Entrance of Private Sector Funds) A new period started in the Indian MF industry during 1993, giving the Indian investors a broader choice of fund relations. In 1993 first Mutual Fund Regulations came into being, under which all mutual funds, excluding UTI were to be registered and governed. The 1993 SEBI Regulations were relieved by a more inclusive and revised Regulations in 1996. The industry is now roles under the SEBI (Mutual Fund) Regulations 1996. 33 mutual funds with total assets of Rs. 1,21,805 croresat the end of January 2003. The Unit Trust of India with Rs.44,541 crores of assets under management was way fast of other mutual funds Contribution. Fourth Phase since February 2003 In February 2003, following the revoke of the Unit Trust of India Act 1963 UTI was divided into two separate entities. The Unit Trust of India with assets under management of Rs.29,835 crores as at the end of January 2003, representing largely, the assets of US 64 scheme, guaranteed return and definite other schemes. The Specified Undertaking of Unit Trust of India, operational under an administrator and under the rules enclosed by Government of India and does not come under the purview of the Mutual Fund Regulations. The UTIMutual Fund Ltd issubsidized by SBI, PNB, BOB and LIC. It is registered with SEBI and functions under the Mutual Fund Guidelines. compatible to the SEBI Mutual Fund Regulations, and with newfusions taking place among different private sector funds, the mutual fund industry has arrived its current phase of alliance and growth. As at the end of December, 2019, there were 38 funds. Till December, 2019 assets under management was Rs.2725932 crores under 1155 schemes in mutual fund in India.

### 3. Literature Review

Estimations of thesubsequent research works demonstration the brief wealth of contributions towards the performance evaluation of mutual fund, market timing, market scheme and stock selection capacities of fund managers.In period 1953 to 1958 theoriginal work on the mutual funds in U.S.A. was done by Friend in Wharton School of Finance and Commerce. The resulting is a brief account of research experiences



published in books, financial dairy, magazines and research journals by academicians, professionals and journalists explaining the concepts of mutual funds, its importance, features, schemes, important, investment pattern, method of understanding a mutual fund brochure, how to choose a scheme and consequence of IMFI in the economic development of India. Verma's book on mutual funds covers the theoretical and regulatory framework of the mutual funds in India with procedures for mutual fund selection. Peeush Ranjan Agarwal, Srivastava S K, Gupta L C were a few academicians and professionals who have deliberate the need for fundamental changes in the Indian financial system, development of mutual fund operations in India, regulatory framework and the influence of taxation on mutual fund performance. The investors could purchase stocks or bonds with greatly lower trading costs over mutual funds and enjoy the advantages of diversification and worse risk this opined by Sanjay Kant Khare (2007). The researcher identified that, with a higher savings rate of 29 percent, Changing savings into mutual funds sector has been growing quickly as retail investors were progressively keeping out of the primary and secondary market. Mutual funds have to enter into rural areas with diversified products, well corporate governance and concluded introduction of financial planners.

#### **4. Objectives of the Study**

1. To understand the concept of mutual fund in the financial system of India.
2. To ascertain the present scenario of the Indian mutual funds on asset under management.

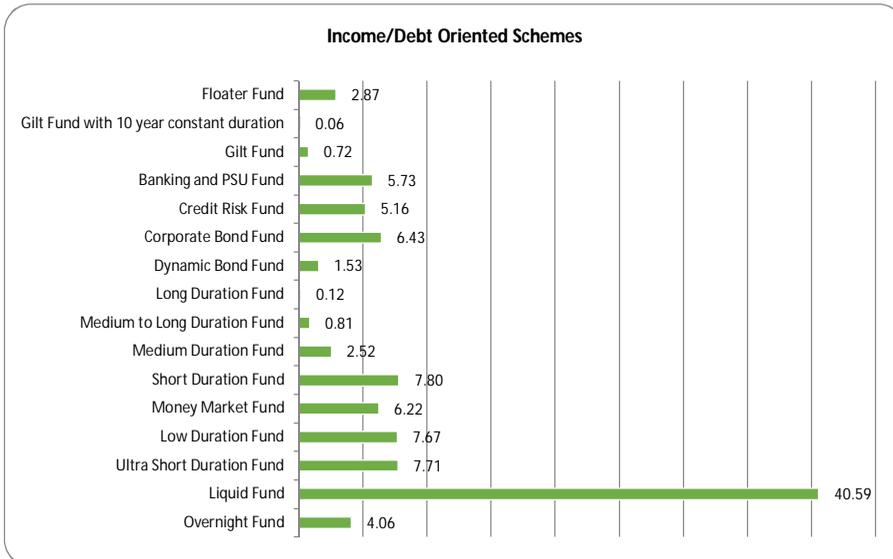
#### **5. Research Methodology**

Research is worked on completely on the collection of secondary data through different publicly available sources like newspapers, company websites, books, magazines, annual reports and journals. Also, the study aims to collect the evidences and figures of different mutual fund industry i.e. HDFC mutual fund, ICICI mutual fund, TEMPLETON mutual fund, RELIANCE mutual fund.

## 6. Result Analysis and Discussion

An open-end fund is an investment vehicle that users mutual funds, which permits for ongoing new assistances and withdrawals from investors of the pool. An open-end fund in India recent year has experienced some ups and downs in Growth/Equity Oriented Schemes and Hybrid Schemes due to the stock market fluctuations. Out of the entire five open ended scheme studied Solution Oriented Schemes has depicted almost perfect result in earnings per share by showing the actual and the trend line in a single straight line. An open-end fund or Scheme is on the growth track so investment in mutual fund now can facilitate the investor with attractive returns.

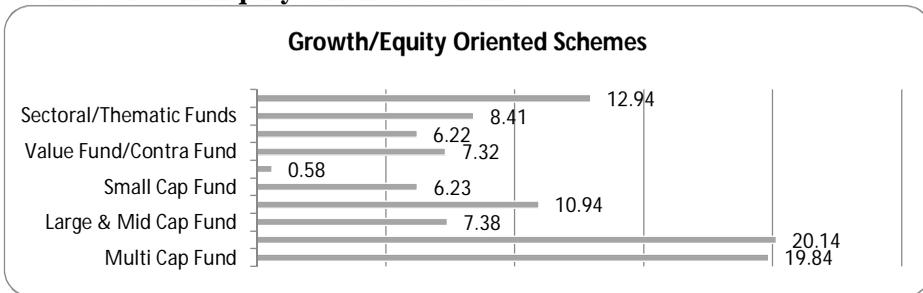
### 6.1. Income/Debt Oriented Schemes



Source: Securities and Exchange Board of India (SEBI), Dec 2019

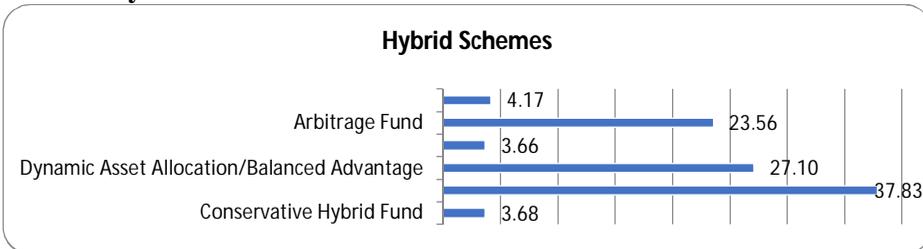
In Income/Debt Oriented Schemes of open ended Scheme, the aim of income funds is to provide regular and steady income to investors. Such schemes commonly invest in fixed income securities such as corporate debentures, Government securities, bonds and money market instruments. Such funds are less risky compared to equity schemes. Liquid fund which have the highest investment 40.59 % as compare to other fund and the gift fund with 10 year constant duration is very less 0.06 %.

### 1.1. Growth/Equity Oriented Schemes



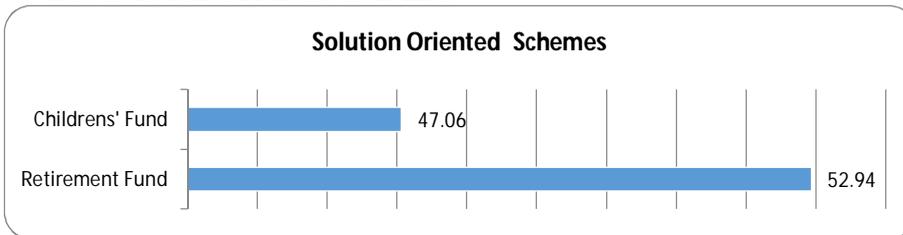
Source: Securities and Exchange Board of India (SEBI), Dec 2019  
Growth/Equity Oriented Schemes, this scheme normally invest a major part of their corpus in equities. Such funds have comparatively high risks. These schemes provide different opportunities to the investors like capital appreciation, dividend option etc. It observed with figure the large Cap Fund and Multi Cap Fund is 20.14% & 19.84 percentage respectively as high investment fund in scheme.

### 1.2. Hybrid Schemes



Source: Securities and Exchange Board of India (SEBI), Dec 2019  
In Open ended Schemes Hybrid Schemes is known for Monthly Income Plans, hybrid fund schemes that invest over 75% of their resources in treasury bills, money market bonds, debt instruments and other instruments are called debt-oriented hybrid schemes. The remaining 25% or less is invested in equity stocks on companies and cash/cash equivalents. Hybrid Fund /Aggressive hybrid Fund have reflected with very high investment (37.83%) as compare to other fund under this Scheme.

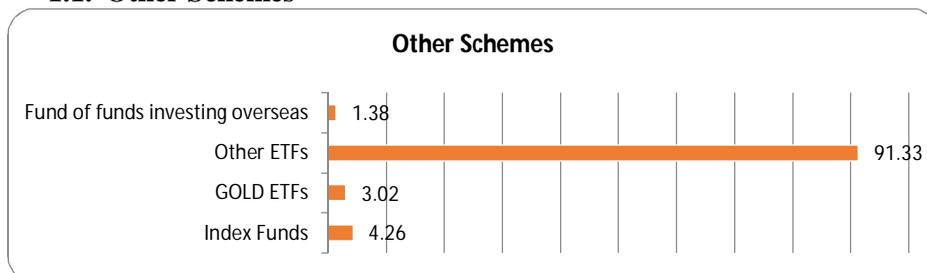
### 1.3. Solution Oriented Schemes



Source: Securities and Exchange Board of India (SEBI), Dec 2019

Earlier these schemes were considered as systematic equity or balanced schemes however with the current circular these are classified under the solution-oriented schemes. Solution-oriented schemes contain the schemes like childcare/gift or retirement schemes. The above table result show that the investor like the retirement fund for investment

### 1.1. Other Schemes



Source: Securities and Exchange Board of India (SEBI), Dec 2019

In open ended scheme, apart from above Scheme some of other Schemes are included like ETFs, Index Funds etc. An Exchange-Traded Fund (ETF) is an investment fund which is mostly operated on stock exchanges, much similar stocks. An ETF holds assets like commodities, or bonds, stocks and usually operates with an arbitrage mechanism designed to retain it trading on the brink of its net asset value, while deviations can occasionally occur. Most of the investor goes with the other ETFs upto 91.33 % and very less with the Funds of investing overseas

## 2. Concussion

Current state of Indian mutual funds market is; it has been amongst the wildest growing markets for mutual funds since 2004, witnessing a CAGR of 45% in the two year period from 2017-2019 as against the global average (Indian Mutual Fund Industry). As on January 31, 2020 Assets Under Management (AUM) of Indian Mutual Fund Industry are at



all time high and stood at 27,85,804 crore. In a span of 10 years, The AUM of the Indian MF Industry has grown from 7.59 trillion as on to 27.86 trillion during 31st January, 2010 to 31st January, 2020 more than 3½ fold increase. The MF Industry's AUM has grown from 11.81 trillion to 27.86 trillion during as on 31st January, 2015 to 31st January, 2020, about 2 ½ fold growth in a span of 5 years. The Industry's AUM had crossed the milestone of 10 Lakh Crore for the first time in May 2014 and in a short span of about three years, the AUM size had increased more than two folds and crossed 20 Lakh Crore for the first time in August 2017. The Industry AUM stood at 27.86 Lakh Crore as on 31st January, 2020.

This is 68th successive month observing rise in the number of folios. The total number of accounts as per mutual fund parlance as on January 31, 2020 stood at 8.85 crore, while the number of folios under Equity, Hybrid and Solution Oriented Schemes, wherein the maximum investment is from retail segment stood at 7.80 crore. The India has viewed significant growth in the past few years focused by several promising economic and demographic factors such as increasing income levels and the growing reach of Asset Management companies (AMCs). Now, India is watching a significant growth in the mutual fund market. The progress rate of Indian mutual fund industry is more than that of normal growth rate of the global average. Now India is one of the fastest rising markets for mutual fund. The future chance for Indian mutual fund industry is also very optimistic. It is due to the high unstable in the Indian stock market and also due to global decline. As companies the mutual fund are providing an eye-catching return to the stockholders with a better safe-guard.

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## DIMENSIONS OF ENTREPRENEURSHIP DISPARITY IN MSMES: AN INTER-DISTRICT AND INTER-STATE ANALYSIS WITH SPECIAL REFERENCE TO ODISHA

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### Abstract:

In a developing country like India, Micro, Small and Medium Enterprises (MSMEs) are one of the most vibrant and sensitive sectors. The significance of Micro, Small and Medium Enterprises (MSMEs) is attributable to its capacity of employment generation, low capital and technology requirement, use of traditional or inherited skill, use of local resources, mobilization of resources and exportability of products. The entrepreneurship in MSMEs plays a leading role in promoting equitable economic and social development of the country. Though MSMEs promotion has remained in focus of Indian development strategy in most of the Five-Year Plans, the progress of Indian MSMEs is not as expected due to several hurdles that they face. The existence of inequality in entrepreneurship of MSME sector is a major concern of bringing socio-economic equality in the country and particularly in Odisha.

This paper examines the existence of disparity in growth of MSMEs entrepreneurial activity throughout the length and breadth of the state Odisha as well as in India. More particularly it examines the changing dimension of entrepreneurship disparity in MSME sectors among different social groups of the country. This study also finds the important causes of existence of such entrepreneurial disparity in MSME sector. Statistical devices like average annual growth rate (AAGR), compound annual growth rate (CAGR), arithmetic mean and coefficient of variation (CV) have been used to analyse the secondary data collected from various trusted sources to find out entrepreneurship disparity in MSME sectors and to suggest possible measures for the reduction of this inequality in Odisha as well as India.

**Key Words:** MSMEs, Entrepreneurship Disparity, Social groups & Regional disparity.

**JEL Code:** L26

### 1. Introduction:

MSMEs have been accepted as the engine of economic growth and for promoting equitable development. The importance of Micro, Small and Medium



Enterprises (MSMEs) in the economic development of emerging country like India is widely acknowledged and promising high growth potential for the Indian economy. There are near about 51 million MSME units in India which employ about 117 million people in various sectors, constituting 40% of the total workforce. The share of MSMEs to the total Gross Domestic Product (GDP) of the country is about 37% and it also contributes to 43% of India's exports (Sinha, Mahajan, & Singh, 2019). These sectors foster entrepreneurship and bears high employment potentialities at comparatively lower capital cost. This sector has been recognised as a stimulator of socio-economic development and inclusive growth of the country as well as complements to large business sectors. According to Schumpeter, the entrepreneurial process is a major factor in economic development and the entrepreneur is the key to economic growth. (Arockiaraj&Chirsturaja, 2015) MSME introduced in Indian economy to reach the unreached. To reduce widening gap among developed regions and less developed regions, it was thought that MSME can establish manufacturing units and render services into the rural, semi-urban and backward areas. In the report of UNDP 2018 world ranking of the countries on the Human Development Index (HDI) of 189 countries delineate the list of countries that ranked poorest in their development and India ranked 130 amongst the list of countries. India is one of the victims of the acute and explosive problem of regional disparity. The peace and integrity of the nation are frightened by the problem of regional disparity (Subudhi, Das, & Kumar, 2019). The Indian states are found to be unevenly developed. The country still pictures the extreme regional disparity even after these six decades of the economic planning through the five-year plans whose main intention was to eradicate or eliminate the existing imbalances and difference in the development of the region. Moreover the state Odisha experiences a wide regional and social disparity in development even after seventy-two years of independence. The Odisha Economy Survey reports say that all the regions of the state are not uniformly developed. For socio-economic transformation of the state Odisha as well as the country, the MSME sectors is extremely crucial in addressing the objectives of bridging the rural-urban divide, reducing poverty and generating employment to the teeming millions.

According to MSMEs Development Act, 2006, a micro enterprise is where the investment in plant and machinery does not exceed twenty-five lakh rupees. A small enterprise is where the investment in plant and machinery is more than twenty-five lakh rupees but does not exceed five crore rupees. A medium enterprise is where the investment in plant and machinery is more than five crore rupees but does not exceed ten crore rupees. In the case of the enterprises engaged in rendering of services, a micro enterprise is where the investment in equipment does not exceed ten lakh rupees. A small enterprise is



where the investment in equipment is more than ten lakh rupees but does not exceed two crore rupees. A medium enterprise is where the investment in equipment is more than two crore rupees but does not exceed five crore rupees.

An MSME sector require less capital per unit of output and provides quick returns on investment due to shorter gestation period. They help to remove regional disparities by industrialization rural and backward areas. It helps to improve the standard of living in sub-urban and rural areas. These industries facilitate the growth of local entrepreneurs and self-employed professionals in small towns and villages and help to reduce pressure on the country's balance of payments through a substantial increase in exports. MSMEs are one of the most important sectors which add firmness to the economy of India. This sector deals with problems of unemployment, unequal distribution of wealth, regional disparities and maximizes its contribution to GDP.

## 2. Review of Literature:

(Manna & Mistri, 2018) in their study has examined district-wise distribution of MSME units in state West Bengal which reveals an uneven pattern of development where developed districts are in leading positions and the less developed hilly and western districts are lagging behind. This study suggests that establishment of co-operatives; loan giving institutions, steady source of raw materials, good market and Intellectual Property Rights on special cases will encourage entrepreneurs to invest in the lagging districts and opined that this measure in the long run will help to reduce regional imbalances. (Harani & Babu, 2017) has studied sustainability, for example environmental and energy efficiency concerns among MSMEs in India. This sector has exhibited enough resilience to sustain itself on the strength of our traditional skills and expertise and by infusion of new technologies, capital and innovative marketing strategies. This study reveals that appropriate strategies should be evolved for creation of an enabling ecosystem where these enterprises are able to access the benefits meant for them under a formal and friendly ecosystem and are further capable of meeting the emerging challenges of a globally competitive order. (Laha, 2014) This paper has studied to shed some lights on inter-state variation in the access to credit to promote entrepreneurial activity in India. In addition, some of the socio-economic determinants of varying level of financial access to enterprises across Indian states have been identified in the study. (Das, 2017) This paper has analysed the strengths, weaknesses, opportunities and threats of MSMEs in Rural Society of Odisha. The study is conducted in the District of Ganjam, which is one of the coastal districts of the state. MSMEs are facing many problems due to globalization and undue losses as compared to large businesses in dynamic business environment. It is required to make MSME entrepreneurs aware and inform these entrepreneurs so that they can get



the incentives for their enterprises as provided by the government. It will help MSME entrepreneurs to growth with equity and will boost up the process of rural industrialization and also to help in poverty eradication and employment generation.(Sen & Salim, 2016) This paper analyses the performance of MSME in terms of number of units, employment and investment in West Bengal and examines regional disparity through district wise performance of MSME in the state. It suggests that in order to facilitate growth in the micro, small and medium enterprises (MSMEs) sector, industrial clusters need to be created to ensure common facilities and governments financial assistance is to be properly reached to every corner of the state. Moreover state government should open special branches in backward districts for MSME sector to ensure increased flow of credit. (Kar, Subudhi, &Kar, 2016) This paper analyses the case of eastern-Odisha, India, studies some of the factors involved in enterprise formation and tries to investigate from an attitudinal perspective and tries to differentiate the proclivities of women with respect to men and tries to give a behavioural, attitudinal, psychological explanation to such differences. Women are more satisfied compared to men with respect to income, savings, social respect and overall satisfaction. This research points out distinctiveness between the genders in various processes, yet the proxy measure of growth is no different. This could possibly explain the reason for their lower degree of satisfaction. (Mukherjee, 1997)Pointed out that in Indian perspective the growth in number of units and employment has not been uniform. In his study, West Bengal was selected for study and growth rates were calculated by districts for unit and employment separately during 1971 to 1997. There exist a considerable difference in the rates across districts and the year to year growth rates do not fluctuate much overtime for any one district.

### **3. Objectives of the Study:**

This study has following objectives:

- To examine inter district disparity in MSME entrepreneurship of state Odisha.
- To examine the distribution of MSME entrepreneurship among different states of India.
- To analyse the disparity in MSME entrepreneurship among different social groups in India.

### **4. Data Sources and Methodology:**

Secondary data have been collected from different sources like Final Report of 4<sup>th</sup>All India Census of MSMEs, published Annual Report of MSMEs, Economic Survey of Odisha, Annual Report of SIDBI, Report of Department of MSME&T, journals, magazines, internet database, research papers and related

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books etc. For the purpose of this study, annual growth rate (AGR), arithmetic mean (AM), standard deviation (SD), coefficient of variation (CV) and simple bar diagrams have been used to analyse the data .

## 5. Analysis And Findings:

### 5.1: Inter-District Variation in Msmesentrepreneurship in Odisha

It is observed from table-1 that average annual growth rate (AGR) of MSME sectors from 1985-86 to 2016-17 is 8.02 percent but in most of the year annual average growth rate fall behind it except in year 1986-87, 2014-15, 2015-16 and 2016-17 which describes an uneven growth of MSME sectors throughout the state Odisha during this time period. It also describes the existence of variation i.e. CV equals to 86.25 in MSME setups in different year ranging from 1985-86 to 2016-17. There is almost all no significant change in annual growth rate of MSME units from year 1986-87 to 2013-14. So far as investment and employment generation in MSME sector are concerned, a high degree of variation is also observed, in investment coefficient of variation (CV) is equal to 182.86 percent and it is 127.59 percent in employment generation.

**Table-1: MSMEs units during year 1985-86 to 2016-17 in Odisha**

Year	Units of MSMEs Setup	Investment (Rs. In lakh)	Employment	AGR of MSMEs set up
1985-86	3482	4640.1	23424	-
1986-87	2513	4506.81	16977	13.4
1987-88	2292	4266.79	14828	7.8
1988-89	2096	4909.28	13917	6.6
1989-90	2025	4986.27	14049	6.2
1990-91	2249	6099.87	15657	6.3
1991-92	2233	5203.38	15545	5.9
1992-93	2117	5499.96	13344	5.4
1993-94	2311	5620.64	13807	5.4
1994-95	2327	6808.15	13096	5.2
1995-96	2507	7481.9	13019	5.3
1996-97	3098	10452.52	15629	6.2
1997-98	3186	13408.7	16716	6
1998-99	3184	19006.26	16776	5.6
1999-00	3473	16293.82	18608	5.3
2000-01	3676	15317.7	18115	5.9
2001-02	3919	16522.32	16582	5.9
2002-03	4008	15514.19	16302	5.7
2003-04	4431	17013.12	20547	5.6
2004-05	4511	24558.95	21898	5.4
2005-06	4786	27044.34	25142	5.7
2006-07	4556	27113.5	20839	5.1
2007-08	4710	29551.18	23301	5.1
2008-09	4806	22792.21	20996	4.9
2009-10	4907	29233.69	23195	4.81
2010-11	5016	39502.13	24451	4.69
2011-12	5505	50073.01	30387	4.92



2012-13	5931	43290.75	27104	5.05
2013-14	7009	66941	32136	5.68
2014-15	29866	226724	107011	22.92
2015-16	53920	297964	166731	33.66
2016-17	57783	303464	175221	26.99
A. Mean	7763.53	42868.89	31417.19	8.02
CV	173.94	182.86	127.59	86.25

Source: OdishaState Profile 2016-17 and 2017-18

Table -2 represents coefficient of variation, arithmetic mean and combined arithmetic mean of number of MSME set ups, investment and employment generation in different districts of Odisha from year 2009 to 2017. It is observed that range between arithmetic mean of number of MSMEs set up in different districts is 1765.13 units. It describes that the gap between highest average number of MSMEs establishment (1905.38 units) in Sundargarh districts and smallest average number of MSMEs establishment (140.25 units) in Malkangiri districts. The growth of MSME sectors is not uniform or consistence among as well as within the districts of Odisha. Highest variation (161.90) is experienced by Nuapara districts followed by Deogarh district with CV equals to 152.99 in MSMEs set up. There are seventeen districts in the state whose average of MSMEs set ups is below the state average (698.49 units). On the other hand fourteen districts have more inconsistency in MSMEs set up which is also greater than state average of variability i.e. 114.29 percent. The state average of investment in MSMEs sectors is 42.89 crore but nineteen districts in Odisha run behind this figure. The lowest average investment (5.23 crore) in MSME sector is in Malkangiri where as highest average investment (145.8 crore) has been done in Angul but more variability in investment (160.82 percent) is experienced in Angul districts in between year 2009 to 2017. There are fourteen districts of Odisha with more variation in investment than state average of coefficient of variation i.e. 102.87. The state average in employment generation by MSME sector is 2687.95 in between year 2009 to 2017 but there are eighteen districts lag behind this figure. The highest average of employment generation (11689.38) is recorded by Balangir districts and lowest (373.25) is experienced by Boudh. Fifteen districts of Odisha records with more inconsistency in employment generation which is also more than state average of coefficient of variation (102.5). It is observed that there is high degree of inter district variation in MSME establishment, investment as well as employment generation in state Odisha.



**Table-2: Inter district variation in MSMEs entrepreneurship in Odisha**

Sl.No	District Name	Units of MSMEs 2009-2017		Investment in MSMEs 2009-2017		Employment in MSMEs 2009-2017	
		A. Mean	CV	A. Mean	CV	A. Mean	CV
1	Bargarh	544.57	135.17	51.51	106.27	2082.14	121.22
2	Jharsuguda	516.75	124.01	37.42	105.30	1498.00	102.89
3	Sambalpur	1004.00	135.63	68.01	136.41	3521.25	138.71
4	Deogarh	304.00	152.99	9.09	91.00	1230.75	148.26
5	Sundargarh	1905.38	102.62	134.70	94.71	6759.50	85.92
6	Keonjhar	636.88	98.07	30.56	109.09	2054.25	82.58
7	Mayurbhanj	928.63	100.56	31.72	86.69	2690.13	82.32
8	Balasore	1108.00	101.51	51.11	130.37	3414.50	75.02
9	Bhadrak	809.38	106.81	36.47	96.64	2171.13	93.13
10	Kendrapara	552.75	119.61	18.05	91.94	1497.13	101.34
11	Jagatsinghpur	439.00	98.44	32.12	74.02	1805.13	65.97
12	Cuttack	1337.00	98.26	85.18	78.35	5237.50	85.64
13	Jajpur	984.63	93.46	55.10	104.07	3308.25	86.63
14	Dhenkanal	645.00	102.82	38.76	82.48	1451.75	44.87
15	Anugul	807.88	111.38	145.80	160.82	3315.25	103.51
16	Nayagarh	370.75	118.83	21.88	110.64	1300.38	104.58
17	Khordha	1360.50	98.76	106.36	80.90	5237.88	80.78
18	Puri	681.63	91.65	26.03	65.09	2409.50	62.09
19	Ganjam	1230.75	98.85	42.77	91.72	3573.63	84.61
20	Gajapati	192.88	94.18	9.91	77.15	660.75	66.86
21	Kandhamal	364.63	127.26	11.34	131.81	1037.88	118.57
22	Boudh	169.75	121.30	7.22	98.51	373.25	114.03
23	Sonepur	233.25	115.51	8.47	91.90	901.13	106.64
24	Balangir	849.63	107.06	46.84	84.20	11689.38	218.71
25	Nuapara	387.88	161.90	16.30	128.50	1060.63	152.47
26	Kalahandi	737.38	125.07	55.51	113.76	2871.63	117.68
27	Rayagada	659.75	107.83	40.44	107.17	2396.50	112.57
28	Nawarangpur	403.50	131.21	19.97	120.52	1525.75	109.65
29	Koraput	716.38	121.89	42.87	100.69	3010.13	87.16

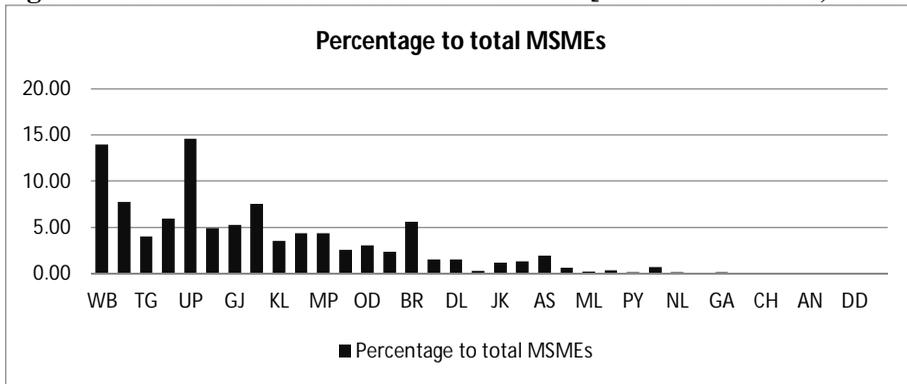
30	Malkangiri	140.25	133.16	5.23	114.32	553.38	120.42
	<b>Average</b>	<b>698.49</b>	<b>114.29</b>	<b>42.89</b>	<b>102.87</b>	<b>2687.95</b>	<b>102.5</b>

Source: Various issues of Odisha Economic Survey and Annual Report of MSME

### 5.2: Inter-State Entrepreneurial Disparity of Msme in India

It is examined from figure-1 that there is existence of inter-state disparity of MSME entrepreneurship among different states and union territories in India. The Uttar Pradesh records highest share of MSMEs (14.59%) of the country followed by 13.95 percentage of West Bengal among all states and UTs. Manipur records lowest share of MSMEs (0.28%) among all states in India. On the other hand Delhi records highest share of MSMEs (1.50%) and the share of Lakshadweep is very negligible among UTs of India.

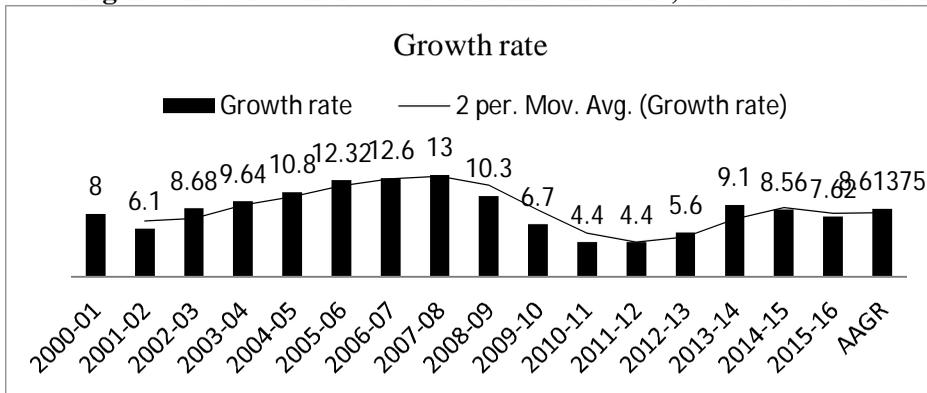
**Figure- 1: State-wise distribution of MSMEs [NSS 73rd Round, 2015-16]**



Source: Author’s Calculation from Annual Report of MSME 2017-18, Govt. of India.

The figure-2 represents the annual growth rate (AGR) of MSME from 2000-01 to 2015-16 in India. The growth rate of MSMEs has characterised with an increasing trend from 8.00 percent of year 2000-01 to 13 percent of year 2007-08. MSMEs suffers with a falling annual growth rate from 10.3 percent of year 2008-09 to 4.4 percent of year 2011-12 and then it shows an increasing trend for rest of the time period up to year 2015-16. Annual growth rates of MSMEs in most of the years within 2000-01 to 2015-16 remain below the average annual growth rate (8.61%) in India. It explains that MSME sector lacks uniform growth rate in the country.

**Figure- 2: Growth rate of MSMEs in India, 2000-01 to 2015-16**



Source: Annual Report of MSME 2017-18, Govt. of India.

### 5.3: Entrepreneurship Disparity of Msmes Among Social Groups of India

As per the 4th all India census of MSME: 2006-07, the analysis of enterprises owned by socially backward groups in each of the three segments of MSME sector reveals that the Micro sector had 50.42% of enterprises owned by socially backward group, whereas Small and Medium sectors had 17.28 % and 18.29 % of enterprises owned by socially backward groups respectively. It is observed from table-3 that scheduled tribe people holds 2.87 percent of ownership of MSME sectors in India where as it is 7.6 percent in case of scheduled caste and 38.28 percent for other backward caste people. Besides ST, SC and OBC categories other section of the Indian society occupies 51.26 percent of MSMEs ownership. It is also evident that in rural area ownership of MSMEs by SC and ST people is 10.2% and 4.02% respectively which more than that of urban area i.e. 5.45 % for SC and 1.92 % for STs. MSMEs ownership in urban area i.e. 58.81percent which is more than 42.11percent in rural area for other category population.

**Table-3: Distribution of enterprises among social groups in India, 4<sup>th</sup> All India Census of MSME: 2006-07**

Category wise distribution of MSMEs among social groups in India (in Percentage)					
Sector	SC	ST	OBC	Others	Total
Micro	7.88	2.94	39.6	49.58	100
Small	2.38	1.37	13.53	82.72	100
Medium	4.73	3.43	10.13	81.72	100
Total	7.6	2.87	38.28	51.26	100
Rural & Urban distribution of MSMEs among social groups in India (in Percentage)					
Rural	10.2	4.02	43.67	42.11	100
Urban	5.45	1.92	33.82	58.81	100
	7.6	2.87	38.28	51.26	100

**Source:** 4<sup>th</sup> All India Census of MSME: 2006-07 published by Development Commissioner of MSME, Ministry of MSMEs, Govt. of India

It is observed from table- 4 (as per NSS 73rd Round Report 2015-16) that scheduled tribe people holds 4.1 percent of ownership of MSME sectors in India where as it is 12.45 percent in case of scheduled caste and 49.72 percent for other backward caste people. Besides ST, SC and OBC categories other section of the Indian society occupies 32.95 percent of MSMEs ownership. Further it is observed that MSMEs owned by socially backward groups in each of the three important segments of MSME sectors has increased marginally from year 2006-07 to 2015-16. In rural area ownership of MSMEs by SC and ST people is 15.37% and 6.7% respectively which is more than that of urban area i.e. 9.45% for SC and 1.43% for STs. On the other hand MSMEs ownership in urban area i.e. 40.46% which is more than 25.62% in rural area for other category population in 2015-16.

**Table-4: Distribution of Enterprises among Social groups in India, NSS 73rd Round Report 2015-16**

Category Wise Distribution of MSMEs among Social groups in India (in Percentage)						
Sector	SC	ST	OBC	Others	Not known	All
Micro	12.48	4.11	49.83	32.79	0.79	100
Small	5.5	1.65	29.64	62.82	0.39	100
Medium	0	1.09	23.85	70.8	4.27	100
All	12.45	4.1	49.72	32.95	0.79	100
Rural & Urban Distribution of MSMEs among social groups in India (in Percentage)						
Sector	SC	ST	OBC	Others	Not known	All
Rural	15.37	6.7	51.59	25.62	0.72	100
Urban	9.45	1.43	47.8	40.46	0.86	100
All	12.45	4.1	49.72	32.95	0.79	100

**Source:** NSS 73rd Round Report 2015-16 published in Annual Report of MSME 2017-18, Govt. of India

## 6. Summary and Conclusion

Though MSMEs play a vital role in industrialization and economic growth, still face many challenges such as lack of availability and accessibility of credit, inadequate infrastructure, unskilled manpower, lack of administrative assistance, outdated technology and other regulatory issues. A wide range of inter-state disparity is visible in the MSMEs development in India. There is existence of more skewed distribution of composition of the MSMEs among different social groups in India. District level analysis of MSMEs in Odisha shows the undulation mode of development. Though MSME has high



potentiality, less developed districts of Odisha are not able to extract the fruits out of that. The existences of intra districts as well as inter districts variation in growth of MSME units, investment and employment generation as a secular phenomenon is found in state Odisha. It is mostly found in backward districts of Odisha where proper and required infrastructure is not available yet.

Therefore from policy perspectives, Government should focus on the issues of regional development of less development areas and must put major fund allocation in such areas in order to build the required infrastructure facility which will promote the establishment of MSME sectors and will encourage entrepreneurship in these backward areas. Innovations of new utilities of the products, availability of timely and cheap credit, steady source of raw materials, good market will encourage entrepreneurs to invest in the lagging districts. A big push investment in MSMEs is needed as a measure in the long run which will help to reduce regional imbalances and social inequality throughout the length and breadth of the country.

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## HUMAN RESOURCE MANAGEMENT PRACTICES IN STATE BANK OF INDIA – A STUDY OF WARANGAL DISTRICT

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### **Abstract**

State Bank of India is functioning under the challenges thrown in by market economy. To survive in the highly competitive scenario, managers are being pressurised to improve quality, increase productivity, cut down cost and eliminate inefficiency. The collective efforts of the employer and the employees assume relevance in this context. And this is where HR practices can play a crucial role. The success of the Banks depends not only on the satisfaction of their customers but also the satisfaction level of the employees working in the banks. The level of satisfaction of the bank employees can be ensured and enhanced by effective HR-practices adopted by the Banks. In this regard, the research has made an attempt to verify the HR-practices of one among the Public Sector Banks i.e., State Bank of India, situated in Warangal District of Telangana. The results of the study have been discussed in this paper. This research article to be critically examined of the theme of this paper Human Resource Management practices in the State Bank of India – A Study of Warangal District in Telangana State.

**Key Words :** Banks, HR-Practices, Public Sector, Financial Services, Customer Services, Innovative Practices, Work performance

### **Statement of the Problem**

“Human Resource are like natural resources. They are offer buried deep. You have to go looking for them. They are not just lying around on the surface.”

### **Ken Robinson**

Indian banking is the lifeline of the nation and its people. Banking has helped in developing the vital sectors of the economy and usher in a new dawn of progress on the Indian horizon. The sector has translated the hopes and aspirations of millions of people into reality. Today, Indian banks can



confidently compete with modern banks of the world. Before 20th century, usury, or lending money at a high rate of interest, was widely prevalent in rural India. Entry of Joint stock banks and development of Cooperative movement have taken over a good deal of business from the hands of the Indian money lenders, who although still exist, have lost their menacing teeth. In the Indian Banking System, Public Sector banks exist side by side with Private Sector banks and play a supplementary role in providing need based finance, especially for agricultural and agriculture –based operations including farming, cattle, milk, hatchery, personal finance etc. along with some small industries and self employment driven activities. The success of the Banks depends not only on the satisfaction of their customers but also the satisfaction level of the employees working in the banks. The level of satisfaction of the bank employees can be ensured and enhanced by effective HR-practices adopted by the Banks. In this connection, the author has made an attempt to verify the HR-practices of one among the Public Sector Banks situated in Warangal District of Telangana State. The results of the study have been discussed in this article.

### **Brief History of SBI**

The evolution of State Bank of India can be traced back to the first decade of the 19th century. It began with the establishment of the Bank of Calcutta in Calcutta, on 2 June 1806. The bank was redesigned as the Bank of Bengal, three years later, on 2 January 1809. It was the first ever joint-stock bank of the British India, established under the sponsorship of the Government of Bengal. Subsequently, the Bank of Bombay (established on 15 April 1840) and the Bank of Madras (established on 1 July 1843) followed the Bank of Bengal. These three banks dominated the modern banking scenario in India, until when they were amalgamated to form the Imperial Bank of India on 27th January 1921. The State Bank of India emerged as a pacesetter, with its operations carried out by the 480 offices comprising branches, sub offices and three Local Head Offices, inherited from the Imperial Bank. Instead of serving as mere repositories of the community's savings and lending to creditworthy parties, the State Bank of India catered to the needs of the customers, by banking purposefully. The bank served the heterogeneous financial needs of the planned economic development. The bank boasts of having as many as 14 local head offices and 57 Zonal Offices, located at major cities throughout India. It is recorded that SBI has about 10000 branches, well networked to cater to its customers throughout India.

As per the records of the SBI as on 31<sup>st</sup> January, 2020 the State Bank of India has 2,400 branches at National Level, 580 Branches in Overall Telangana State and total 120 Branches in Warangal District. All the branches



are fully equipped with computer and with online transactions, have a total 58,559 ATM's giving service for their consumers at National wide. SBI is one of the best public sector bank. It is the best bank for public services.

Human Resource Management is a modern term for what has traditionally been referred to as personal administration or personal management. Human resource management's function is to assist the general manager or the top management in keeping the employees satisfied with their jobs. Human Resource Management practices refers to organisation activities directed at managing the pool of human resource and ensuring that the resources are employed towards the fulfillment of organizational goals. Human Resource Management practices the activities, policies and practices involved in planning, obtaining, developing, utilizing, evaluating, maintaining, and retaining the appropriate numbers and skill mix of employees to achieve the organization's objectives. Presently banking sector are competing through implementing the unique HRM practices and due to the globalizations organizations adopt the most up-to-date HRM practices in order to achieve the organizational goals. Best HRM practices are valuable for both employee and employer; it plays an important role in supportive growth and competency of the Banking Sector.

The State Bank Group includes a network of eight banking subsidiaries and several non banking subsidiaries. Through the establishments, it offers various services including merchant banking services, fund management, factoring services, primary dealership in government securities, credit cards and insurance.

### **HR-Practices in SBI.**

Today's increasing complex and volatile business environment characterized by globalizations, liberalization and the transnational invasion have created enormous challenges to organizations. Efficient human resource management is one of the most essential requirements for survival in this competitive world. HRM practices refer to organizational activities directed at managing the pool of human resources and ensuring that the resources are employed towards the fulfillment of organizational goals. HRM deals with planning, acquiring the right people, retaining/developing the people, and managing people separation/exit. Therefore, the major challenge for any organization is to manage its human resources in such a manner that it can justify their need for the right jobs. Innovation is something that leads to reduction in cost of operations. It definitely results in increasing profitability and a better life for society.



### **Innovative Recruitment & Selection Practices**

This factor includes all those innovative HR practices which aim at attracting maximum number of highly talented applicants and selecting the best to achieve competitiveness.

**i) Pre –Defined and clear outlay of Recruitment and Selection** Respondents of the present study told that one of the major innovative HRM practices under this head is that there is a well-defined recruitment and selection policy in the banks. Earlier, only a few banks had a pattern of recruiting people through employee referrals. But now a day, a pre-defined policy of hiring people is available in most of the banks.

**ii) Selection of Professionals** Banks have also started selecting professionally qualified personnel, e.g. MBAs, CAs, Agricultural officers etc. for different posts. Earlier, only private sector banks were employing such professionals for their various departments, but now, public sector banks have also started using this practice.

**iii) Selection According To Service Attitude** Banks are giving due weightage to the service attitude and competence in the selection procedure these days. This policy is being adopted by the HR department of the banks keeping in mind the fact that employees with positive service attitude will work more efficiently and increase the business ultimately.

**iv) Holding on Policy** One of the major problems that the bank employees were facing in earlier times was that if they left the organization due to any work pressure or other reason, then they were not stopped or hold on by any employer. But now, even the regional or circle managers of the banks use a “Retention” policy for the employees so that they may not leave the bank quickly.

**v) Availability of Bank Communities on Social Networking Sites** Availability of bank communities on social networking sites is found to be another innovation in the recruitment process. Popularity of the social networking sites has forced all the sectors to have this facility enabling the members of the community to seek the necessary information and to be in touch with each other.

**vi). Checking the Profile of Candidates on These Sites** These days, most of the banks, especially private sector, have started using social networking sites for the purpose of recruitments. With the help of these communities, the HR department checks the candidate’s profile on social networking sites to decide the candidature for the job.

**vii) Result Oriented Policy of R&S** In the present scenario, the HR department of banks has also started formulating a result oriented recruitment and selection policy for their banks.

### **Management practices**

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**i) Performance Matrix** The very common innovative HR practice of performance management has been that the performance matrix or some other competency mapping models being used for employee's performance reviews. All private sector banks under the study are following this innovation in the performance management practices for a long time.

**ii) Goal Review Based Appraisal** The respondents under the study also exposed that goal reviews and competency review systems, the two common methods, are being used for appraising the performance of employees.

**iii) Appraisal on Fair Objective Data** The employees are being assessed for their fair objective data. These data may relate to their deposits, advances, NPAs, or profit per employee. These objectives and fair data helps the employers to appraise the employees without any biasness and good performers are benefitted from this.

**iv) 360 Degree Performance Appraisal** Another innovation is that they are reviewing the performance from multiple sources e.g. superiors, juniors, peers etc., i.e., 360 degree performance review system, which was not prevalent earlier, is being implemented in most of the banks.

**v) Option to Challenge the Appraisal** These days, the employees of a few banks have the power to challenge their appraisal done by the HR department or by their superiors, if they disagree on some issue. But for this, they need to represent to the higher levels with solid proofs and evidences.

**vi) Full Awareness of the Performance Appraisal Policy** Moreover, there is a complete awareness of the Performance Appraisal policy of HR department among all the staff members so that they are well aware of what they have done and what they should not have done.

### **Innovative Practices**

**i) Availability of Educational Opportunities at Workplace** Education related opportunities are being provided at the work place for the career enhancement of the bank employees. This has increased their dedication towards work in their present organizations. A few private banks just like AXIS bank are also providing opportunities to their employees to get enrolled to professional courses so as to enhance their skills as well as degrees.

**ii) Easy Approval to the Job Applications** This study identified that one latest innovation in the career development of employees is that the applications sent for the career opportunities outside the bank are being approved by the HR department and regional managers quickly, which were either verbally denied by the top management or delayed for approval.

**iii) Promoting on the Basis of Merit** Banks are also organizing written tests and interviews for the promotion process so that merit can be one of the criteria for promotions. A well-planned career development system along with internal



advancement opportunities based on merit, results in high motivation among employees, which has an impact on firm performance.

**iv) Providing timely Promotions** Fast track promotion process is also one common innovative practice identified in the study. Earlier the employees had to wait for years to get promotions. But these days, they get faster promotions, even in two to three years. Public sector banks like Punjab National Bank and Bank of India are using this technique to refill the higher posts quickly.

### **Motivational Practices**

**i) Using Music at Work Place** Use of music at workplace, to improve the performance, is one major innovation found in the study. SBI has introduced the concept of playing light music in its branches so that a calm and soothing environment can be provided to the employees as well as to the customers. Other banks too have started following this practice.

**ii) Providing Day Care Centers** There is an arrangement of day care centres in most of the surveyed banks for the children of employees, so that they have no difficulty in maintaining work life balance. In these day carecentres, they can drop their children while they are at work. This won't even divert their minds towards their family while working. Young mothers remain satisfied when their little ones are not far away from them.

**iii) Work Autonomy** In the last few years, greater work autonomy is also being provided to the bank employees. This helps them to work according to their best possible capability without any interference and they try to give their best. This is a kind of brain storming exercise through which the employers can get best out of the minds of their employees.

**iv) Making Available ESOPs** Availability of Employee Stock Option Plans is a practice which has been innovated in the banking sector for a last few years so that the employees feel that they are also the owners of the banks. This feeling makes the employees more loyal to their organization.

**v) Providing Loans at Discounted Rates** Availability of loans and advances at discounted rates to all the employees is also another common innovative HRM practice leading to motivation of the employees. They can get loans on simple interest for getting vehicles, constructing house or even educating their wards. This helps the employees financially and motivates them to increase their efficiency.

**vi) Giving an Option of Flexible Working Hours** Some of the banks are also providing flexible working hours to enhance the productivity of employees. Banking hours are generally common everywhere, but a few banks have started giving an option of flexible working hours in two different shifts so that the employees can work according to their comfort. HDFC bank is an example.



**vii) Organizing Stress Management Programs** Arrangement of stress management programmes, art of living classes, yoga sessions etc. are distinct innovations which have not been there in the banking system earlier. These practices are the best boosters and relaxers for the bank employees who are mostly under work pressure.

**viii) Encouraging Team Building Attitude** By encouraging team building attitude in the employees, the HR department of banks has started a new practice of motivating them. They work in teams and learn new skills. This increases their confidence and hence they feel more motivated.

**ix) Giving Best Employee Awards** Announcement of best employee awards was a common practice in the private sector banks, but these days, the public sector banks have also started the same practice to motivate their employees. Few banks have recently introduced the practice of writing the best employee's name on the display board in the regional centres or even in the branches of their banks. Better-motivated employees lead to higher individual achievement and improved organizational performance.

### **Development Climate in the Bank**

In the booming and blooming Indian economy all the industries are doing well in the market and Indian banks are also performing well comparatively. In the booming economy and the continuing expansion most of the banks facing challenges to perform well and it clearly brought out by the fact that, contrary to public perception, it is not just the new private sector banks that are doing well. There are few public sector banks are also doing well and got the place in top 10 best performing Indian banks. And it's worth mentioning that these public sector banks have performed so admirably in spite of the fact that they operate with many handicaps, such as strong unions and the inability to offer market salaries and incentives and burdened with huge workforce. The secret of success of any company simply depends on how they treat employees and keep them satisfied. For that they have design their human resource process like recruitment, selection, training and development, performance appraisal and other based on employee perspective in order to benefit them. In India the banking industry becoming more competitive than ever, private and public sector banking are competing each other to perform well. The executives of the bank are now in the position to modify their traditional human resources practice in to innovative human resource practices in order to meet the challenges from other competitive banks. Effective human resource practices relate to Bank's performance by contributing to employee and customer satisfaction, innovation, productivity and development of a favourable climate in the Banks.



In order to verify HR practices adopted by the chosen public sector bank in Warangal District, the following functions have been chosen by the author as attributes of HR-practices.

- Recruitment and selection
- Training and development
- Performance appraisal
- Career development
- Motivation
- Compensation management
- Grievance Handling.

The success of banks would depends upon the satisfaction of their customers and the efficiency of their employees. The success of the Banks operations could be enhanced by providing prompt services to the customers. On the other hand, the banks should ensure that the service providers (employees) in their banks are satisfied. Unless the employees of the banks are satisfied they can not make the customer of their Banks realize satisfaction. Therefore, every bank should design a well effective and sound HR – Practices system to keep the workforce satisfied to provide a satisfactory services to their customers. By keeping above in mind the below stated objectives have been framed for this research.

1. To explore the HR practices in State Bank of India, Warangal District.
2. To find out the satisfaction level of bank officers on HR practices of their banks.
3. To measure the relationship between the demographic characteristics of bank officers and their level of satisfaction on HR practices.
4. To offer suitable suggestions to increase the level of satisfaction of the Bank officers if needs.

#### **Variables chosen for the study**

- Demographic variables of Bank **Employees** (Age, Gender, Designation and Work Experience)
- HRM functions (Recruitment and Selection, Training and Development, Performance Appraisal, Career Development, Motivation, Compensation Management and Grievance Handling).

### Hypotheses of the study

1. Gender of the State Bank of India officers does not influence their satisfaction level on HR-practices.
2. There is no significant relationship between the age of the State Bank of India officers and their satisfaction level on HR-practices.
3. Designation of the State Bank of India officers does not have any influence on the satisfaction level on HR-practices.
4. The satisfaction level of the State Bank of India officers on HR-practices does not differ with respect to their work experience.

### Sample

State Bank of India among the public Sector Banks operate in Warangal District has been chosen for the study. In Warangal District 580 State Banks are functioning. 171 officers (Drawn 3 officers per Bank) of different age group, different gender, different designation and different length of work experience have been chosen as respondents for this study (**Table-I**) by using simple random sampling technique.

**Table – 1: Demographic Characteristics of SBI Officers**

Characteristics	N	%*
<b>Gender</b>		
Male	143	84
Female	28	16
<b>Age</b>		
Below 30 Years	23	13
31-50 Years	107	63
Above 50 years	41	24
<b>Designation</b>		
Assistant Manager	123	72
Branch Manager	26	15
Senior Manager	22	13
<b>Experience</b>		
Below 10 years	20	12
11-25 Years	117	68
Above 25 Years	34	20

\* Expressed in rounded off Percentage

### Data Collection Tool

Required data have been collected from the chosen respondents by using well structured schedule. The schedule contains the items related to the demographic variables of the employees and the major attributes of HR-practices namely recruitment and selection, training and development, performance appraisal, career development, motivation, compensation management and grievance handling.

**Table-II Results of ‘t’ Test for Gender and HR Practices**

HR Practices	Gender				‘t’ value	‘p’ value
	Male		Female			
	Mean	SD	Mean	SD		
	67.69	8.81	70.64	10.90	0.79	0.57

### Statistical Tools Used

- Percentage Analysis
- One-Way ANOVA
- ‘t’ test

### Analysis and Interpretations

It is found from the analysis of the data collected from the chosen officers of State Bank of India that all SBIs functioning in Warangal district follow HR-practices. However, the efficiency and the performance of the HR-practices differ among banks. Further the satisfaction level of the chosen employees for the study differs on the HR-practices adopted by the State Bank of India. To find the answer in order to accomplish the research objective “To measure the relationship between the demographic characteristics of bank officers and the level of their satisfaction on the HR practices”, the hypotheses framed for the study have been tested by using the statistical tools ‘t’ test and One-Way ANOVA. The summarized results of these tests are illustrated in **Tables II** and the same is discussed here.

### Findings and Suggestions

Data collected from the various cadres of bank officers were converted as percentage and mean scores. The careful analysis of the percentage and mean scores reveals interesting findings such as:

- Both male and female bank officers expressed almost the same level of satisfaction on “HR practices” followed in their respective Banks.



- □□ The older and younger bank officers fall in line with their level of satisfaction on “HR Practices” and middle aged bank officers expressed slightly low level of satisfaction on “HR practices” than their younger and older colleagues / counterparts.
- Among the bank officers, the Assistant Managers expressed slightly low level of satisfaction over “HR practices” than their superiors, namely Branch Managers and Senior Managers.
- The satisfaction level on “HR practices” of their banks expressed by highly experienced officers is found to be at higher level and at the same time the State Bank of India officers belong to low and medium experienced categories expressed almost same level of satisfaction toward the “HR practices” followed in their Banks.

### Suggestions

The outcome of the research study offers certain valid suggestions to the policy makers of the bank, SBI such as: The banks should review their performance appraisal system by conducting an opinion survey among their officers. The chosen bank officers expressed concern over compensation Management and Grievance Handling procedures. Therefore, the administrators of State Bank of India should look into the matter pertinent to compensation and grievance handling mechanism and redress their grievances on compensation. The existing HR practices of the chosen bank, the State Bank of India should be strengthened by incorporating the justifiable views of middle aged bank officers, the officers in the cadre of Assistant Managers level and low and medium experienced officers.

### Conclusion

The research study “**HUMAN RESOURCE MANAGEMENT PRACTICES IN STATE BANK OF INDIA – A STUDY OF WARANGAL DISTRICT**” carried out in State Bank of India situated in Warangal District discloses various facts, such as the chosen Banks (N=57) in Warangal District follow HR-practices. However, the efficiency and the performance of HR-practices differ among banks. The success of the banks basically depends on the development of the bank employees. Along with coherent development of the worker, technical infrastructure of the bank must be ensured to develop the effective of the employee. Considering the present dynamic global business environment. Though the bank officers insignificantly differ themselves in the level of satisfaction on HR practices on different functional areas of HRM of their banks, yet all are satisfied over the HR practices. Further the demographic characteristics Gender, Age, Designation and Work Experience do not influence



the level of satisfaction of the State Bank of India officers on the HR practices followed by the SBIs situated in Warangal District of Telangana State.

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## आंध्र का लोक-गीत साहित्य

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### 4 आंध्र का लोक-गीत साहित्य

लोकगीत के मुख्य लक्षण इस प्रकार हैं। १. अज्ञातकर्तृकता अर्थात् लेखक का पता न चलना सामूहिक कर्तृकता अर्थात् एक से अधिक कवियों की कृति होना। २. स्थिर रूप-रहितत्व अर्थात् गीत का रूप समय-समय पर बदलते रहना। ३. रचना-काल अज्ञात रहना। ४. जनता में मौखिक रूप से प्रचार पाना। ५. सहज शैली। ६. गेयता। ७. जवानी ही रचा जाना। ८. एक ही भाव की पुनरावृत्ति। ९. गीत की वस्तु का सर्वपरिचित होना। इसका तात्पर्य यह कदापि नहीं है कि हर लोकगीत में इन सभी गुणों की उपस्थिति आवश्यक है। इन सभी गुणों को समाहित करने वाले दो गुणों को गीतों में होना पर्याप्त है- अज्ञातकर्तृकता तथा विश्वजनीनता। इन गुणों के अनुसार प्राक्तन अशिक्षित मानव के मनोगत भावों की लयान्वित अभिव्यक्ति तथा कुशल पंडितों के द्वारा प्रणीत पदकविताएँ, लोकगीतों के अंतर्गत ही आते हैं। एक-एक गुणविशेष की कसौटी के इस निर्णय पर पहुँचने की अपेक्षा है कि कौन सा लोकगीत है अथवा कौन सा नहीं है, साहित्य के मूलभूत तत्वों के आधार पर स्थूलतः सारी कविता को दो भागों में विभाजित किया जा सकता है। ज्ञातशिल्प की कविता तथा अज्ञातशिल्प की कविता। ज्ञातशिल्पीय कविता की सर्जना प्रबुद्ध एवं भावुक कलाकार की सर्जना है, जिसका निर्माण प्रयत्न-पूर्वक होता है। अज्ञातशिल्पीय कविता किसी अशिक्षित जानपद व्यक्ति की सर्जना है जो अनायास अभिव्यक्त होती है और जवानी एक दूसरे को और एक प्रांत से दूसरे प्रांत को पहुँच जाती है। उसमें दिखायी देने वाली साज-सजावट और कलात्मक श्रृंगार सहज तथा अप्रयत्नसिद्ध है। प्रथम वर्ग की कविता एककर्तृक होती है, जब कि द्वितीय वर्ग की कविता अज्ञातकर्तृक अथवा अनेककर्तृक होती है। प्रथम सभ्यता-मंदार-संवासित है तो दूसरी पृथ्वी-गंधबुंधर है। पंडितों के विचार में प्रथम वर्ग की कविता द्वितीय का परिणत एवं परिष्कृत रूप ही है। आंध्र कविता भी इस परिणाम-क्रम से वंचित नहीं कही जा सकती। कई प्रमाणों के बल पर यह कहा जा सकता है कि तेलुगु का लोक-गीत साहित्य ही कालांतर में, देशी कविता में परिणत हुआ है। 'सीसमु' 'गीतमु', 'रगड', 'द्विपद', 'मध्याकर', 'तरुवोज' आदि देशज वृत्तों का आविर्भाव कतिपय लोकगीतों से माना जा सकता है।

लोकगीत-साहित्य का संवर्धन अति प्राचीन काल से तेलुगु प्रदेश में होता आया है, इस तथ्य के प्रमाण प्राज्ञ साहित्य में हमें कई स्थानों में मिलते हैं। सभी लोकगीत मात्रा छंदों में लिखे जाते हैं। आदिकवि **नन्नय्य** के पूर्व शिलालेखों में देशज वृत्त उपलब्ध होते हैं। 'नन्नय्य' ने स्वयं ही तरुवोज, 'मध्याकर', 'अकर', 'मधुराकर', नामक वृत्तों का प्रयोग किया था। 'नन्नेचोड' कवि ने अपने काव्य 'कुमारसंभव' में 'अंकमालिकलु', 'ऊयेलपाटलु', 'अलतुलु', 'गौड़गीतमुलु' 'रोकटिपाटलु' आदि लोगगीत विधाओं का उल्लेख किया था। इन लोकगीतों का सबसे अधिक उल्लेखन पालकुरिकि सोमनाथ की कृतियों में मिलता है। कहा जाता है कि आम जनता में उस युग में प्रचलित भक्ति-पूर्ण लोकगीत ही सोमनाथ की कविता की आधार-भूमि है। उन्होंने स्वयं यह माना है कि बसव के पुरातन भक्तों के गीत ही अपनी कृति की मातृका है। सोमनाथ के उल्लेखन में 'रोकटि पाटलु', 'तुम्पेद पदमुलु', 'प्रभात पदमुलु', 'पर्वत पदमुलु' 'आनंद पदमुलु', 'शंकर पदमुलु', 'निवालि पदमुलु', 'वालेशु पदमुलु', 'गोव्वि पदमुलु', 'वेन्नेल पदमुलु' आदि मिलते हैं। एगटि के काल-ज्ञान वचनों में, तुम्पेद पदमुलु, एलपदमुलु, पल्ले पाटलु आदि का प्रयोग किया गया था। लाक्षणिकों के द्वारा अभिहित 'नाचन सोमनाथ' के 'जाजरपाट' छंद में ही आज तक तेलंगाना के ग्रामवासी कामपूरिणा के अवसर पर लोकगीत गाते रहते हैं। 'दशकुमारचरित' में, केतत्रा ने कुछ गीतों का स्मरण किया, जो संस्कृत से मूल ग्रंथ में नहीं

हैं। श्रीनाथ ने यक्षगान तथा 'जाजरो का स्मरण किया था। मंचन शर्मा तथा टिड्डीभशेड्डि नामक दो मित्र 'ओरुगुडु नगर' देखने गये। वहाँ उन्होंने द्विपदप्रबंध शैली में वीरगीत गाने वाली एक वनिता को, परशुराम की कथाओं का गान करने वाले ववनील चक्रवर्ती को महालक्ष्मी तथा विष्णु के प्रेम को गाने वाली जक्कुओं की एक वनिता को देखा था। महाकवि पोतन्ना ने गोविंद पर लिखे गीतों का उल्लेख किया था और कोरवि गोपराजु ने 'वेन्नलगुडिपाट' का स्मरण किया। ताल्लपाक अन्नमाचार्य ने अपने युगानुकूल सभी लोकगीतों की शैली में संकीर्तनों की रचना की। इनकी पत्नी ताल्लपाक तिमक्का की कृति भी इसी लोकगीत-शैली में प्रणीत हुई। ताल्लपाक चिन्तिरुमलाचार्य ने न केवल पदों की रचना की, अपितु संकीर्तन-लक्षण भी लिखा था। लोकगीत न होते हुए भी ताल्लपाक कवियों की कृतियों में हमें गीतों के विविध रूप तथा लोकगीतों के क्रम-परिणाम अवश्य मिलते हैं। संकीर्तन पर रचित रीतिग्रंथों में 'एल्लु', 'गोव्विल्लु', 'चंदमाम पदमुलु', 'अर्धचंदिकलु' आदि गीतों के लक्षण बताये गये हैं। जैत्र यात्रा पर निकलने वाले महान सम्राट श्रीकृष्णदेवरायलु को एक लोकगीत से मिली हुई प्रेरणा संबंधी जनश्रुति को सब जानते हैं। स्वयं उस महाराज ने प्रातःकाल में अनेक गीत सुने। रुद्रकविप्रणीत 'सुग्रीवविजय' नामक यक्षगान में, कई प्रकार की गीत-शैलियाँ मिलती हैं। दामेरल वेंगल भूपाल ने 'जाजर पादलु', 'धवलमुलु', 'कल्याण गीत' आदि का जिक्र किया था। कदिरीपति नामक कवि ने 'सुव्वालु', 'शोभनमुलु', 'धवलालु', 'एल्लु', 'चर्खागीत', 'परशुराम गीत' का स्मरण किया। तंजौर नायक राजाओं के युग में रंगा जी, रामभद्रांब, विजय राघव नायक आदि ने पदकविता की रचना की। भद्रावल रामदास के पद लोकगीतों के रूप में आम जनता में प्रसिद्ध हुए। क्षेत्रव्यपद और त्यागराजु की संगीत-कृतियाँ, कर्णाटक संगीत के शिरोमाणिक्य हैं। अन्य उल्लेखनीय पद-रचयिताओं में एल्लूचि बालसरस्वती, कंकटि पापराजु, गोगुलपाटि कूर्मनाथ कवि, आलूरि कुप्पन आदि मुख्य हैं। पदकविता होने के बावजूद उनकी कविता यथोचित ग्राह्य भी है। यह कविता देशी कविता के अंतर्गत आती है। फिर भी लोकगीत विधा के परिणाम से अवगत होने के लिए सहायक सिद्ध होगी।

त्यागराजु के अनंतर, अनेकानेक ऐसे गीत हमें मिलते हैं, जिनकी रचना स्वयं ग्रामीणों ने की अथवा जिनका प्रचार जनपदों में हुआ है। इसमें संदेह नहीं कि कुछ लोकगीत काल से मिलित हुए होंगे। कोई भी वाङ्मय इस विप्लव से बच नहीं पाया है। सुरक्षित रखने वाले होते तो अवश्य 'यागेटि लक्ष्मय्यवचनमुलु' जैसी अति प्राचीन रचनाएँ कुछ उपलब्ध होती। प्राचीन ताडपत्र-ग्रंथों में कहीं-कहीं कतिपय गीत आज भी उपलब्ध होते हैं। मुद्रण-सौकर्य के अनंतर लोकगीत-साहित्य का कुछ अंश प्रकाश में आ सका। मुद्रित गीतों में अधिकांश तो आधुनिक ही हैं। मौखिक रूप में प्राप्त छोटे-छोटे गीतों का प्रकाशन आधुनिक उत्साही युवक कलाकारों के द्वारा संपन्न होने पर भी करणीयांश ही बहुत अधिक है। इन प्रकाशित लोकगीतों की संख्या लाखों की संख्या में होगी। अधिकतर लोकगीतों का उद्गम एवं नाश, जनता के जिह्वांचलों पर ही हो रहा है। यह पता लगाना कठिन ही है कि कौन-सा गीत कब का है और कितने परिवर्तनों नशिकार बना है। इस अखंड जातीय संपदा के संबंध में सर्वप्रथम आंध्रों को सचेत करने वाले महानुभाव सी.पी. ब्राउन थे। तीस वर्ष के अनंतर श्री जे.एल. वायल नामक एक पश्चिमी विद्वान ने लोकगीतों का संग्रह किया था। तदुपरांत बीसवीं शती के आरंभ में, उत्साही पंडित एवं प्रकाशक ने इन गीतों का संग्रह कर के प्रकाशित किया।

आज तक उपलब्ध प्रकाशित और अप्रकाशित लोकगीतों का अध्ययन सुविधा की दृष्टि से हम कतिपय वर्गों में विभाजन कर सकते हैं।

**पौराणिक गीत:** लोकगीत भी अभिजात साहित्य की भाँति विविध पुराण एवं इतिहास से संबद्ध हैं। इस वर्ग

के लोकगीत सर्वाधिक प्रचार में हैं। वास्तव में तेलुगु में अनूदित 'रामायण', 'महाभारत' आदि ग्रंथों में मूलातिरिक्त अनेकानेक कथाएँ हैं। इस प्रकार की कई अतिरिक्त कथाएँ हमें लोक-साहित्य में भी उपलब्ध होने से यह बताना कठिन हो जाता है कि इन अतिरिक्त कथाओं का प्रथम उद्गम-स्थान पंडितों का अभिजात साहित्य है अथवा लोक-साहित्य जिसकी देखादेखी पंडितों ने इन कथाओं को आपने शिष्ट साहित्य में भी अपनाया है। लोकगीत-साहित्य में हम लगभग सभी मूलातिशायी पौराणिक कथाओं को पा सकते हैं। बात यह है कि पौराणिक कथाओं में ग्रामीण जनता की आत्मा सहज ही रमती है। अतः ये समय-समय पर इन कथाओं में अपनी रुचि के अनुकूल नये परिवर्तन लाते रहते हैं। इस वर्ग के लोकगीत-साहित्य में, कूचकोंड रामायणमु शारद रामायणमु, धर्मपुरि रामायणमु, रामायणकथासुधारणवमु, मोक्षगुंड रामायणमु, सूक्ष्मरामायणमु, संक्षेपरामायणमु, गुत्तेनदीवि रामायणमु, चिट्टि रामायणमु, श्रीरामदंडमु, रामायण गोखिपाट, श्रीराम जाविलि, अडवि, शांत पेड्डिल, सेतु गोविंद नाम जैसी कृतियाँ, रामायण कथासुधासार की मनोहर लहरें हैं। विद्विक्कूचि रामायण जैसी रचनाएँ जो प्रातः समय गायी जाती थीं। न जाने कितनी संख्या में लुप्त हो गयी हैं। इनके अतिरिक्त अनेकानेक ऐसी कृतियाँ हैं, इनमें रामायण कथा के किसी एक अंश को ले कर चली हैं। इन लोकगीतों की भाषा में, अभिव्यक्त भावों में नियोजित कल्पनाओं में, सभी में ग्रामीण सभ्यता की गंध महक उठती है।

रामायण-कथाओं के बाद महाभारत की कथाएँ उल्लेखनीय हैं। इसमें 'नलचरित्र' 'देवयानी चरित्र', 'सुभद्राकल्याणमु', 'सुभद्र सारे', 'धर्मराजु का द्यूत', 'द्रौपदी के चीर', 'विराट पर्व', 'पद्मव्यूहमु', 'विश्वरूपमु', 'भगवद्गीत कथागीतमु', 'शशिरेखापरिणयमु', 'गयोपाख्यानमु', 'पराशर मत्स्यगंधि संवादमु' आदि उल्लेखनीय हैं। बृहद् लोकगीतों में जो ग्रामीणों की जिह्वाओं पर हैं, विराटशल्यपर्व, उत्तर-दक्षिणगोग्रहणमुलु स्मरणीय हैं। इसी प्रकार अनेक भागवत संबंधी कथाओं को भी ग्रामीण लोग गाते रहते हैं।

इन लोकगीतों में सर्वत्र अनुभूतिमान सत्य यह है कि ये ग्रामीण कवि अपनी काव्य-वस्तु के साथ तादात्म्य की स्थापना करते हैं और उनकी भक्ति, वर्णित देवी-देवताओं के प्रति अत्यंत निर्मल और निष्ठापूर्ण है। मूल कथाओं में और लोकगीतों के इतिवृत्त में उपलब्ध विपर्ययों के पीछे ग्रामीणों की मनोवृत्तियों का हाथ साफ़ लक्षित होता है।

**ऐतिहासिक लोकगीत** : लोकगीत-साहित्य में, ऐतिहासिक गीतों का एक विशिष्ट स्थान है। वस्तु, शैली तथा कथा-कथन-पद्धति में, अन्य लोकगीतों से ये विलक्षणता रखते हैं। इन्हीं को वीरगीत कहा जाता है। ऐतिहासिक वीरगीतों का आविर्भाव, वीरतापूर्ण घटनाओं के तुरंत बाद होता है। उस वीरतापूर्ण प्रसंगों को आँखों से देख कर अथवा सुन कर कोई एक जानपद व्यक्ति आवेश के साथ गाता है। वह गीत सर्वत्र व्याप्त होता है। इस प्रचार के कारण गीत के कलेवर और इतिवृत्त में परिवर्तन होता है। इन ग्रामीणों की वाणी हमें, नवीनगीतों में पुराने गीतों के कुछ अंश मिल जाते हैं। वास्तव में आरंभ में इन गीतों में ऐतिहासिक तथ्यों के मिलने की संभावना है। परंतु कालांतर में नवीन कल्पनाएँ गीत में घर कर लेती हैं, जिससे इतिहास आच्छादित हो जाता है। अंत में इतना रूप-परिवर्तन हो जाता है कि ये अपनी ऐतिहासिकता को खो कर केवल दंतकथाओं में परिवर्तित हो जाते हैं। ऐतिहासिक वीरगीतों का तथा अन्य लोकगीतों के लक्ष्य भिन्न हैं। वीरगीत न केवल उत्साह और उल्लास के लिए अपितुज्ञान के लिए भी गाये जाते हैं। आंध्रों में वीरता का आवेश अधिक पाया जाता है। अतएव आंध्र प्रदेश में, वीरपूजाएँ खूब चलती हैं। अन्य लोकगीतों की भाँति ही तेलुगु प्रदेश में, ऐतिहासिक गीत भी अधिक संख्या में पाये जाते हैं। स्वर्गीय सुरवरम् प्रताप रेड्डी के मतनुसार तेलंगाना में ही मियासाब, सोभनाद्रि, रामेश्वर राव, रानि शंकरम्मा, सर्ववेंकट रेड्डी कुमार रामुडु,

कर्नूलु नवावु आदि वीरों की कथाएँ प्रचलित हैं। इनके अतिरिक्त सदाशिव रेड्डी, पर्वताल मल्लारेड्डी, सर्वायि पापडु, बल्थूरि कोंडल रायडु जैसे वीरों की कहानियाँ भी वीरात्मक लोकगीतों में उपलब्ध होते हैं। इतिहास के अनुसार सर्वप्रथम वीरगीतों में 'पलनाटि चरित्रमु' का एक महत्वपूर्ण स्थान है। 'श्रीनाथरचित' बालचंद्र को युद्ध ही अब तक प्रकाशित हुआ है। प्राच्यलिखित पुस्तक -भंडार में, इन वीरों की अनेक कथाएँ अप्रकाशित अवस्था में पड़ी हुई हैं।

आध्यात्मिक लोकगीत : भक्ति, कर्म तथाज्ञानपरक लोकगीत तेलुगु में लाखों की संख्या में हैं। भक्तिपरक गीतों के हम दो विभाग कर सकते हैं। १. शैव गीत २. वैष्णव शैव गीत। प्राचीन शैव गीतों में आज भी कुछ उपलब्ध होते हैं। ताडपाक कवियों की कृतियाँ, क्षेत्रय्य के श्रृंगारीपद, त्यागराजु की कृतियाँ, परिमलरंग के पद, 'घट्टपल्ल', 'धर्मपुरी', छत्रपुरी की 'जावलियाँ', संगीतज्ञों की संपदा बन गयी है। अध्यात्मरामायण के कीर्तन आम जनता तथा गायकों की संपदा हैं। श्रीमीण जनता में अत्यधिक आदर पाने वाले थे भद्राचल रामदास। हरिदास घर-घर भीख माँगते समय त्पु नरसिंहदासु, परांकुशदासु, निट्टल प्रकाश दासु, तांटकमु वेंकटदासु जैसे भक्तों के गीतों का गायन करते रहते हैं। संकीर्तन, पद, मेलुकोलुपुलु (जागरण-गीत) अथवा प्रभात-गीत, लालि-गीत, जोल पाटलु, कोलाट गीत, मंगलारात्रिक गीत आदि भक्ति-गीतों में समाहित हो जाते हैं। 'कोलाट' गीतों में, मधुर भक्ति का प्राधान्य रहता है। इनमें संगीत और साहित्य के साथ, कुछ नृत्य भी रहता है। पालकुरिकि के द्वारा वर्णित प्रभातपद जागरण-गीत हो सकते हैं। इसे भूपाल गीत भी कहा जाता है। कारण यह है कि ये गीत प्रायः भूपाल राग में गाये जाते हैं। वेदांतपरक जागरण-गीत भी हैं। श्रीकृष्णपरक गीतों में मधुर भक्ति अनुभवगम्य होती है। आरती के गीत सभी देवी-देवताओं पर उपलब्ध होते हैं। ये वर्णन के रूप में, स्तोत्रों के रूप में तथा सेवा के रूप में उपलब्ध हैं।

भक्ति-गीतों की तरह वेदांतपरक गीत भी बड़ी संख्या में हैं। वेदांत विषय को अथवा तत्व को प्राधान्य देने से ये गीत तत्व-गीत अथवा 'तत्त्व-मुलु' भी कहे जाते हैं। ये तत्व-गीत अधिकांशतः अद्वैत मत के होते हैं। ध्यान देने योग्य बात यह है कि इन तत्व-गीतों के प्रणेता अधिकतर अब्राह्मण ही हैं। अद्वैत में जीव-ब्रह्मैक्य का सिद्धांत प्रतिष्ठित है। अतः वेदांत-वियोग विचार में समाज में पाये जाने वाले निम्नोन्त के लिए अथवा विषमताओं के लिए स्थान नहीं है। इसलिए अधिकारी विद्वान ज्ञान-प्राप्ति के लिए तथा अनधिकारी जन आत्म-संतोष के लिए इन 'तत्वों' का गायन किया करते हैं। अग्र वर्णों के आधार पर विचार, पूजा-विधान आदि की आलोचना इन 'तत्व-गीतों' में पायी जाती है। इन गीतों में रहस्यात्मक भावनाएँ भी निहित हैं।

व्रत और त्योहारों के द्वारा तत्संबंधी गीत-साहित्य भी तेलुगु में है। व्रत और पर्व, दोनों महिलाओं में अत्यंत प्रचलित हैं। अतः स्त्री-गीतों के रूप में इस प्रकार का साहित्य सुरक्षित है। अनुमान किया जा सकता है कि नन्नय्य के समय से ले कर ये व्रत और पर्व प्रचलन में हैं। मुख्यतः स्त्रियों और शूद्रों को पूजा का अधिकार दिलाने के लिए इनकी आयोजना की गयी। महिलाओं और अन्य अब्राह्मण जातियों को यह सुविधा वीर शैव और वीर वैष्णव जैसे सुधारात्मक आंदोलन व फलस्वरूप मिला होगा। मदनद्वादशी व्रत, नित्यदान व्रत, दीपदान व्रत, पञ्चव्रत, चातुर्मास्य व्रत, कृत्तिक दीप व्रत, वरलक्ष्मी व्रत, कामेश्वरी व्रत, श्रावण शुक्रवार व्रत, श्रावण मंगलवार व्रत आदि से संबद्ध अनेकानेक लोकगीत बहुत प्रसिद्ध हुए हैं। इनमें कामेश्वरी गीत का जिक्र 'क्रीडाभिराम' में मिलता है। लक्ष्मी-गौरी व्रत अग्रजातियों की महिलाओं के लिए हों, तो समाज के निम्न वर्गों की माहंलाओं के लिए एल्लम्मा, मैसम्मा, पोचम्मा, बालम्मा आदि क्षुद्र देवताओं की पूजाएँ हैं। इन देवताओं की सेवाएँ ग्रामों में, भवनी लोग करते हैं। एल्लम्मा ही रेणुका देवी है।

'क्रीडाभिराम' में परशुराम की कथाओं का जिक्र है।

**महिला-गीत :** जीवन की यात्रा में स्त्री का ही अधिक प्राधान्य है। उसी प्रकार गृह-जीवन में कविता के आलंबन भी अधिकतर महिलाएँ ही हैं। इन गीतों को हम महिला-गीत कह सकते हैं। इन गीतों में कल्पना की अपेक्षा यथार्थ के लिए अधिक स्थान है। मातृत्व की भावना ने न जाने कितने गीतों को जन्म दिया है। इन गीतों में संतान के लिए तरसने वाली स्त्रियों की हार्दिक वेदना, उनसे रखे जाने वाले व्रत, मनौतियाँ, बंध्या स्त्रियों की दयनीय स्थिति आदि वर्णित हैं। संतान के साथ ही लालि पाटलु, जोलपाटलु आदि फूट निकलते हैं। इनमें महिलाएँ अपनी संतान को राम, कृष्ण अथवा शंकर के रूप में देखती हैं। लड़की हो तो सीता, रुक्मिणी अथवा पार्वती के रूप में देखी जाती है। गृहस्थ जीवन का महत्वपूर्ण प्रथम चरण विवाह को लेकर, न जाने कितने भावभीने मधुर गीतों की सर्जना हुई है। इन विवाह-गीतों के अनेकानेक अवांतर भेद भी हैं। विवाह के विभिन्न अवसरों पर आधारित आचारों के अनुसार ये गीत रचे गये हैं। यही नहीं, विवाह की हरेक छोटी-मोटी प्रथा को ले कर अनेक गीत रचे गये हैं। महिलाओं के लिए आचार-संहिता का उपदेश देने वाले कई गीत हैं। सास, ननद आदि के द्वारा अत्याचारों का करना चाहिए, ननदों, अड़ोस-पड़ोस से किस प्रकार का आचरण करना चाहिए, इन सभी की वर्णन कहीं-कहीं इन गीतों में मिलता है। निष्कर्ष यह है कि इन महिला-गीतों में हमें आंध्र के सामाजिक जीवन का अधिकांश चित्रण मिलता है।

**श्रमिक गीत :** कई साहित्यिक विद्वानों की मान्यता है कि कविता के माध्यम से न केवल मन को उल्लास की उपलब्धि होती है। मनुष्य के स्वभाव में आदिम काल से ही यह गुण पाया जाता है कि वह काम करते समय अपने श्रम को विस्मरण करने के लिए, लयान्वित रूप में कुछ न कुछ गुनगुनाता रहता है। कुछ लोगों ने इस प्रकार की साहित्यिक सर्जना को श्रमिक-साहित्य कहा है। सामूहिक रूप में इसकी सर्जना होती है। कुछ लोगों ने इस साहित्य को कार्मिक-कर्षक साहित्य नाम से अभिहित किया है। इन श्रमिक गीतों की वस्तु विविध और अनंत होती है। श्रृंगार, भक्ति, वेदांत, स्थानीय घटनाओं का वर्णन, विषादपूर्ण वृत्त, सभी इन गीतों में पाये जाते हैं। श्रमिक, भक्ति, वेदांत, स्थानीय घटनाओं का वर्णन, विषादपूर्ण वृत्त, सभी इन गीतों में पाये जाते हैं। श्रमिक-गीत आम तौर पर अपनी श्रमानुकूल लय से शोभित होते हैं। श्रमिक गीतों की और एक विशेषता यह है कि उनमें 'लिविडो' का अनुकरण होता है। इन्द्रिय-सुखों के स्मरण से श्रमजीवी सुख का अनुभव करते हैं। अतएव इन गीतों में एंद्रिय भोगों का अतिवेलवर्णन हुआ करता है। जादूगर के गीतों में जिस प्रकार जनता को आकृष्ट करने के लिए, असभ्य श्रृंगार को प्रश्रय मिलता है। इस प्रकार के ग्राम्य श्रृंगारात्मक गीत कुछ 'धुमधुमापाटलु' नाम से प्रकाशित हुए हैं।

**बाल-गीत:** लोकगत-साहित्य में बाल-गीतों के लिए एक विशिष्ट स्थान है। ये दो प्रकार के हैं - बालकों के लिए बड़ों द्वारा रचित गीत और बालकों द्वारा ही लिखे, एक पीढ़ी दर पीढ़ी जबानी पहुँचने वाले गीत। पुनः बड़ों द्वारा लिखे गये गीतों में दो भाग हैं। बच्चों को सुलाने के लिए अथवा चुमकारने-पुचकारने के लिए उपयुक्त गीत तथा बच्चों को ही इतिवृत्त बनाकर अथवा किसी मनोहारी विषय का ग्रहण करके उसके वर्णन द्वारा बच्चों को आह्लादित करने के हेतु लिखे गये गीत। लालि पाटलु अथवा जोलपाटलु का आनंद बच्चे अनुभव नहीं कर सकते। उनमें निहित संगीत-तत्व से बच्चे सो जाते हैं या आश्वस्त होते हैं। यही उन गीतों का प्रयोजन है। दूसरे वर्ग के गीत बच्चों के कुछ बड़े होने तक काम में आते हैं और वे भी उनको कुछ समय तक गाने लगते हैं। तदनंतर वे स्वयं उस शैली में गीत गुनगुनाने लगते हैं। बड़ों के गीतों से बच्चे क्रमशः नाद, लय तथा अभिनय सीखने लगते हैं। नाद से बच्चे आकृष्ट होते

हैं। लय से उनका उत्साहवर्धन होता है तथा अभिनय से उनका शरीर पुष्ट होता है। चार-पाँच वर्षों की उमर तक पहुँचते-पहुँचते बच्चे अपने आप गुनगुनाने लगते हैं। बच्चों के निजी गीतों को भी हम दो वर्गों में बाँट सकते हैं। बड़ों के अनुकरण पर उन्हीं के गीतों में कुछ अपनी ओर से जोड़ना और एक नया गीत बनाना तथा अपनी प्रतिभा के आधार पर नये गीतों को लिखना। पहले वर्ग के गीत समय के साथ अर्थविहीन बन जाते हैं। इसीलिए इन गीतों को नान्सेंस राइम्स कहते हैं। बड़ों के द्वारा बच्चों के लिए लिखित गीत 'नर्सरी राइम्स' कहे जाते हैं। चार साल की उमर से ही बच्चों का सारा जीवन क्रीडामय बन जाता है। इनमें भी लड़कों के खेल अलग और लड़कियों के खेल अलग हैं और कुछ खेल ऐसे हैं, जिनको दोनों मिल कर खेला करते हैं। इन विभिन्न क्रीड़ाओं के आधार पर तदनुकूल अनेक क्रीडा-गीतों की रचना हुई।

**श्रृंगार-गीत** : लोकगीतात्मक साहित्य में कई गीत श्रृंगार प्रधान हैं। इन लोकगीतों के श्रृंगार के संबंध में चर्चा चलाने कि इनमें प्रतिपादित श्रृंगार स्वकीय है अथवा परकीय, उत्तम नायिकानिष्ठ है अथवा ग्रामीण नायिकानिष्ठ अनावश्यक ही नहीं अपितु कोई माने भी नहीं रखता। प्राकृत अथवा ग्राम्य श्रृंगार के प्रसंगों में अभिजात साहित्य के लक्षणों को ढूँढ़ना बुद्धिमत्ता नहीं है। कारण यह है कि जानपद कवियों के द्वारा वर्णित सीताराम के श्रृंगार भी प्राकृत गंध से परिमल है। इस साहित्य की सर्वोपरि विशेषता यह है कि इसमें पात्रों के द्वारा श्री प्राकृत जनों के ही मनोभाव व्यक्त होते हैं, उन-उन पात्रों के भाव कदापि नहीं। किसी भी गीत को लीजिए, उसमें आपको प्राकृत जनों के प्रेम कलाप, उनके सहज वर्तलाप, साधारण सामाजिक नियमों का उल्लंघन आदि ही दिखायी देते हैं। जीवन का यथातथात्मक नम्र रूप ही उनमें दर्शन देगा। लोकगीतों में न औचित्य-विचार है, न तदनुकूल पात्र-पोषण अथवा चरित्र-चित्रण है। इन धर्मों का अभाव ही लोकगीत-साहित्य की शोभा है। इस साहित्य में सभ्य श्रृंगार, ग्राम्य श्रृंगार, औचित्य, चरित्र-पोषण अथवा हनन, रसाभास अथवा रस का संयक नियोजन, सभी परस्पर विरुद्ध धर्म समांतर रूप में चला करते हैं। फिर भी कुछ लोकगीतों में धर्म पर आधारित सभ्य श्रृंगार का वर्णन हुआ है। इनमें 'सीता का क्रोध' 'सीता की पहचान', 'उर्मिला की निद्रा' आदि उल्लेखनीय हैं। ये गीत मनोहारीभावों से संबलित हैं। सुंदरकांड नामक पद में वियोग श्रृंगार का सुंदर वर्णन हुआ है। महाभारत संबंधी लोकगीतात्मक कथाओं में, 'नलचरित्र', 'सुभद्राकल्याणमु', 'शशिरेखापरिणयमु', 'देवयानि-चरित्रमु' श्रृंगारप्रधान काव्य हैं। भागवत संबंधी अनेक लोकगीतात्मक कृतियाँ श्रृंगार रस से ओतप्रोत हैं। देसिंगु राजुकथा, बोव्विलि कथा, सदाशिवरेड्डी कथा आदि वीररसात्मक ऐतिहासिक लोकगीतों में भी उन-उन दंपतियों का प्रेम-वर्णन बहुत ही ऋजुतापूर्ण और मनोहारी लगता है। लक्ष्मम्मा, सन्यासम्मा, भंडपेट पापम्मा, नल्लतंगाल, एरुकल नांचारि, वीरराजम्मा, इन महिला प्रधान ऐतिहासिक लोकगीतों में धर्मावलंबी प्रेम का सुंदर वर्णन मिलता है। 'गंगा-विवाह' में शिव जी दक्षिण नायक के रूप में अभिवर्णित हुए हैं। सुराभांडेश्वरम में परकीय श्रृंगार का आयोजन है। 'वरदराजु विवाह', 'आंडाल चरित्रमु', 'वेंकटेश्वर का शिकार', 'चेंचेतकथा' आदि लोकगीतों में श्रृंगार अंगी है। श्रृंगारप्रधान छोटे-छोटे लोकगीतों में, चलमोहन रंगा, वेंकटय्या चंद्रम्मा पाट, नारायणम्मा पाट, सिरिसिरि मुव्व, रंगम् पद आदि उल्लेखनीय हैं और वे प्रकाशित भी हुए हैं। तेलंगाना में, कामपूर्णमा के अवसर पर गाये जाने वाले सभी लोकगीत श्रृंगार कला खंड ही हैं।

**अद्भुत कथाएँ** : प्राकृत जनों में अद्भुत रसाभिनवेश अधिक होता है। साधारण विषयों में भी असाधारणता का समावेश उनको अभीष्ट होता है। विनोद के साथ, भक्ति अथवा भय भी इन अतिमानवीय कल्पनाओं से आदमी

के मन में घर कर लेते हैं। दुष्कर प्रसंगों में किसी अद्भुत करिश्मे द्वारा समस्या का समाधान निकाला जाता है। समस्या का समाधान करने वाले उपकरण साधारणतया कोई मंत्रदंड, देवी-देवताओं के वरदान, बीजाक्षर, महिमापूर्ण खंडाऊ आदि होते हैं। किसी असाधारण शक्ति के द्वारा, जीवन की कठिन समस्याओं के समाधान की आकांक्षा रखना मानव-मनोविज्ञान का नैसर्गिक गुण है। इसी मनोविज्ञान के आधार पर ग्रामीण कवियों ने इन लोकगीतों में अतिमानवीय कल्पनाएँ की हैं। अद्भुत लोकगीतात्मक कथाओं में सबसे अधिक प्रचलित कथा 'बालनागम्मा' की है। इस कथा का कार्यस्थल महबूब नगर जिले का पानुगल्लु ग्राम है। यह स्थानीय रामायण कथा जैसी है। अविश्वसनीय अद्भुत और आश्चर्यकारी घटनाओं से यह कथा भरी हुई है। 'कम्मवारि पणति' नामक लोकगीतात्मक कथा भी अपनी अद्भुतता के लिए प्रसिद्ध है। 'पसल बालराजु' कथा में वर्णांतर विवाह का वर्णन मिलता है। गांधारी कथा भी अपने आश्चर्यकारी रोमांच के लिए प्रसिद्ध है। इस वर्ग के अन्य गीतात्मक कथानकों में धर्मागद पामुपाट, कांभोजे राजु कथा, बालराजु कथा जैसी कथाएँ, प्राकृत जनों में सत्य और धर्म की महत्ता और उपादेयता का उपदेश दे कर उनकी जीवनियों को समुच्चल बनाने वाले हैं।

**करुणरसात्मक गीत-साहित्य :** प्राकृत जन शृंगार के अनंतर अद्भुत और करुण को ही अधिक प्राधान्य देते हैं। मानव के नित्य जीवन में दुख की मात्रा ही अधिक है। अतः जानपद कवियों ने दुख का प्रभावांकन अपने गीतों में सहज रूप से किया है। यहाँ भी इन कवियों में अभिजात साहित्य-प्राप्त आदर्शवादिता अथवा औचित्य की भावना नगण्य है। अपने वीरों के वीर कृत्यों पर उत्साहित हो जाना तथा उनके दुर्मरणों पर आँसू बहाना इन कवियों का काम रहा। उत्साह और करुण, इन दो भावों से वे सहज ही उद्भिन्न हो जाते हैं। आंध्र के लोकगीत-साहित्य में करुणाप्रधान एवं चित्त को द्रवोभूत करने वाले अनेकानेक गीतात्मक कथानक मिलते हैं। सास की निर्ममता के कारण अथवा पतिदेव के अत्याचारों के कारण ननदीं अथवा जेटानी या देवरानी की निष्ठुरता के कारण पिस जाने वाली औरत की कथाएँ आंध्र लोकगीतात्मक साहित्य-समुद्र में उठने वाली अश्रुवीचियाँ हैं। वास्तविक घटनाओं को कल्पना से अतिरंजित करना लोक-साहित्य के कवियों के लिए बायें हाथ का खेल है। स्थानीय करुणात्मक इतिवृत्तों में 'कन्यकॉव कथा' का एक विशिष्ट स्थान है। यह कथानक अति प्राचीन है। 'कामभकथा' का प्रचार 'पिच्चुक कुंद्लु' नामक घुमक्कड़ जाति में बहुत है। यथार्थवादी दृष्टिकोण से घटना का वास्तविक चित्रण लक्ष्मम्मा कथा में हम पाते हैं। लक्ष्मम्मा की सहन-शक्ति त्याग-निरति, तेलुगु जाति के लिए गर्व करने योग्य वस्तुएँ हैं। 'संन्यासम्मा' कथा में अविभक्त परिवार में कनिष्ठों से अनुभूत कष्टों का वर्णन है। करुणरसात्मक लोकगीतों में सती नारियों के कथानकों का अपना अलग महत्व माना जाता है। 'कामम्मा कथा', 'पापम्मा कथा', 'श्रृंवरपु', 'कोट एरुकम्मा कथा', 'संन्यासम्मा कथा', 'तिरुपतम्मा कथा' जैसी सतियों को कथाएँ प्रकाशित हुई हैं। सती-प्रथा के निषेधा के बाद इन स्त्रियों के द्वारा अतीव प्रयत्न कर के सहगमन किया जाना निस्संदेह रोमांचकारी घटनाएँ हैं। यह इन नारियों की विशेषता है। प्राकृत जनों का विश्वास है कि ये पतिव्रता स्त्रियाँ, अवश्य जनों की कामनाओं की पूर्ति करती हैं। 'नल्लतंगाल' की कथा तमिलनाडु से संबद्ध है। 'वीरराजम्मा' कथा पलनाटि सीमा की है। तेलंगाना में 'एरुकल नांचारि कथा', 'रामुलम्मा कथा', 'सरोजिनी' तथा, 'मूसि पोंगु कथा' आदि करुणात्मक लोकगीत-कथानक बहुत ही प्रसिद्ध हैं।

**हास्य-गीत :** सुख-दुःखों की अनुभूति की मात्रा अमीरों और गरीबों, दोनों के लिए बराबर है। सुख का बाह्य लक्षण हँसी है, तो दुख का रोदन है। ये भी दोनों के लिए समान हैं। एवंविध सुखसूचक हँसी का प्रदर्शन लोकगीत-

साहित्य में कहीं-कहीं किया गया है। शांतगोविंद नामों में 'ऋष्यश्रृंग', अडवि गोविंद नामों में 'कुंभ कर्ण', सूक्ष्मरामायण में, 'शूर्पणखा' जैसे पात्र हास्य के अच्छे आलंबन हैं। 'सीतगडिय' नामक गीत में हास्य तथा श्रृंगार का सुखद समावेश हुआ है। सीता की हास्योक्तियाँ व्याहार के उदाहरण माने जा सकते हैं।

**लोकगीत और पिंगल :** प्रागन्त्रय युग से ले कर आज तक सुनायी देने वाले हमारे देशी छंदोविधान सब पदपूर्ण हैं। इस देशी रचना में मात्राबद्ध वृत्तों का ही प्रयोग होता है। यह संगीतानुकूल लय से शोभित होती है। इनमें कुछ तमिल, कन्नड तथा तेलुगु में समान रूप से प्रयुक्त होते हैं। उदाहरण के लिए तमिल के ओरुड मोवे, कूरंभोवे, तोडे आदि वृत्तों से तथा कन्नड के 'भामिनी पट्टपदि', 'भोगपट्टपदि', 'वार्थिक पट्टपदि', 'ललित', 'मंदानिल', 'छंदोवसंत' से सहशता रखने वाले गीत आंध्र के लोकगीतों में हैं। अभिजात साहित्य के पिंगल-विधान के आधार पर लोकगीतों का अध्ययन पूरा नहीं हो पाता। वास्तव में यह समझना उचित होगा कि लोकगीतों में उपलब्ध कतिपय रचना-शैलियों को अपना कर तथा उनको परिष्कृत कर के तथा सँवार के अभिजात साहित्य के कवियों ने देशी वृत्तों का आविष्कार किया है। इन्हीं परिष्कृत छंदों और वृत्तों का ही उल्लेख विन्नकोट पेद्दना से ले कर अप्पकवि तक के लाक्षणिकों ने अपनी पिंगल संबंधी कृतियों में किया है। संगीत का भी विभाजन पूर्वलाक्षणिकों ने (भरत, मत्तंग, शारड, गदेव जैसे) किया है और उन्होंने देशी विभाजन के अंतर्गत कई प्रयोगों का जिक्र किया था। जाने तेलुगु लोकगीतों में प्रचलित 'एलपद' उन लाक्षणिकों को कितना रुचिकर प्रतीत हुआ है। उन सबने इसका प्रसंग खूब चलाया था। लगता है कि हमारे 'जाजरगीत' ही संस्कृत में चर्चरी गीत बने। अतः देशी छंदों के स्रोतरूप लोकगीतों को न अभिजात साहित्य के छंदो-विधान के आधार पर आँकना उचित है, न अन्य सीमित मानदंडों के आधार पर। तत्व की बात यह है कि प्राकृत जनों के द्वारा इतनी विविधता के साथ लोकगीतों का आविर्भाव नहीं हो सकता। कितने ही गीत उन्होंने क्यों न गाया हो, कितने ही मनोभावों को उन्होंने क्यों न आविष्कृत किया हो, फिर भी यही मानना पड़ता है कि कुछ ही परिमित लय-तालबद्ध रागों में इनकी रचना हुई होगी।

हमारा लोकगीत-साहित्य अब तक बहुत कुछ लुप्त हो गया है। अतः हमारा पवित्र कर्तव्य यह है कि जो अवशिष्ट है, कम से कम उसकी रक्षा हम करें। आजकल लोकगीतात्मक शैली का प्रयोग राजनीति-क्षेत्र के कार्यकर्ता कर रहे हैं। उनका यह प्रयत्न प्रशंसनीय है। स्वतंत्रता के आंदोलन में तथा समाज-सुधार के आंदोलनों में अनेकानेक लोकगीत आविष्कृत हुए हैं। सामयिक प्रयोजन से लिखे गये इन गीतों का प्रभाव जनता पर पड़ा है। इसका परिणाम यह हुआ है कि आज लोकगीत और लोक-साहित्य आदर के साथ देखा जा रहा है। एक समय था जब यह साहित्य के अंतर्गत गिना ही नहीं जाता था। अब लोक-साहित्य इस घृणित अवस्था से उबर गया है। समाज-विज्ञान के विद्वान इस साहित्य का उपयोग कर रहे हैं। पंडित और समालोचक इस साहित्य में से अनेकांश अपने कथन की पुष्टि में दे रहे हैं। सिद्धहस्त कवि इस साहित्य में प्राप्त इतिवृत्त के आधार पर नये काव्यों का निर्माण कर सकते हैं। सामाजिक और सांस्कृतिक अध्ययन के लिए लोक-साहित्य अनुपम सहायता पहुँचा रहा है। पंचवर्षीय योजनाओं के प्रचार के लिए लोकगीत-शैली का प्रयोग लाभ के साथ किया जा सकता है। यह जनता को प्रबुद्ध करने वाला बहुत ही प्रबल उपकरण है। पश्चिमी विद्वान और उत्तर भारत के विद्वान तथा गवेषक लोक-साहित्य के अध्ययन, संकलन, संपादन आदि दिशाओं में बहुत दूर अभियान कर चुके हैं। यदि तेलुगु का विद्वत्समाज इस दिशा में इतोधिक ध्यान देता तो आंध्र जनता, आंध्र-भाषा तथा आंध्र-संस्कृति आदि के लिए एक वरदान प्रमाणित होगा।

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## A STUDY OF SOCIO ECONOMIC CODITIONS OF AGRICULTURAL LANDLESS LABOURERS IN RAMANAGARA DISTRICT- AN ANALYSIS

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### Introduction and Design of the Study

In India, agricultural development is a necessary adjunct of economic development. In these economics, the pace of economic development largely brings out the accelerated development of agricultural sector. Adam Smith, in his "wealth of nations" argued, almost two centuries ago, that agricultural output, in its widest senses, is the basic working capital of the nation in its critical stages of growth. This proposition is still true in the case of all less - developed countries. Agriculture is ever destined with the law of diminishing returns. As such, one cannot develop very fast by putting more and more of additional doses of capital and other kinds of inputs. Yet, the element of labour has its own proverbial say to cause and effect radical returns and is ever crucial in revolutionizing the total average and marginal productivity of agriculture

Agricultural labours are mostly economically and socially backward people. They are divided into four types:

- a. Landless labourers who are attached to the landlords.
- b. Landless labourers who are personally independent but who work exclusively for others,
- c. Small farmers with tiny bits of land who devote most of their time working to others land
- d. Farmers who have economic holdings but who have one or more of their children and dependants working for other prosperous farmers

The rural society in India typically consists of two broad sections, the landless and the land owning households. The landlessness has increased in recent years, and has become a source of great public concern. Chandra in his article looks at the changing level of landlessness in different parts of rural India, both conceptually and empirically.

Landlessness can be visualized in three different ways, in terms of

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1. Number of rural households owning no arable land,
2. Number of households operating no land and
3. Number of agricultural labour households.

Agricultural workers constitute the most neglected class in the Indian rural structure. Their income is low and employment irregular. Since they possess no skill or training they have no alternative employment opportunities. Socially a large number of agricultural workers belong to schedule castes and schedule tribes. Therefore, they are an oppressed class. They are not organized and cannot fight for their rights. Because of all these reasons their economic level has failed to improve even after four and a half decades of planning. It seems the planning process has by passed them. Despite these difficulties, various attempts have been made to define agricultural labour by different experts and committees appointed by the Indian Government from time to time. The First Agricultural Labour Enquiry Committee of 1950 - 1951 regarded those people as agricultural workers who do not work against payment of wages all the year round. This definition was incomplete. Accordingly, the Committee laid down that those people should be regarded as agricultural workers, under the category of agricultural workers who possessed some land or were rural artisans but who worked 50 per cent or more as agricultural labour as their main occupation and such families should be classified as agricultural labour households.

The Second Agricultural Labour Enquiry Committee of 1956-1957 took a broad view of agricultural activities to include those workers also who were engaged in allied activities like animal husbandry, dairy, poultry, piggery, etc., The Second Committee submitted that to know whether a household is an agricultural labour means to examine their main source of income. If more than 50 per cent of its income is derived as wages for work rendered in agriculture, only then it could be classified as agricultural labour household. The changeover from 'work' to income seems to be more scientific. However, even this definition is not without flaws. It often happens that the head of the household goes to city to work in the unorganized sector on a temporary basis or finds job in some public construction programmed, whereas other members of his family remain in the village and continue to work in agriculture payment of wages.

According to the National Labour Commission, a major portion of income of agriculture workers is in the form of wages. Generally they are unskilled and unorganized person. In the census of India 1961, all who worked on the farms of others and received payment either in money or kind (or both) were considered as agricultural labourers. In 2001 census excluded those who worked



on the farms of others from agricultural labourers and considered that as secondary occupation.

All those persons who derive a major part of their income as payment for work performed on the farms of others can be designated as agricultural workers. For a major part of the year they should work on the land of others for wages.

Agriculture is the main occupation in India involving more than two - thirds of the people and it is not merely a business proportion but a traditional way of life. In the past, the agricultural system was within the parameters of sustainable development. Having enjoyed the benefits of the Green Revolution for the past three decades, India is now confronted with a big challenge and the unsustainability of the present system of agriculture. The present situation agriculture is not a traditional way of life and it is a business.

### **Decline of Cottage Industries and Village Handicrafts**

There was a rapid decline of cottage industries and village handicrafts during the British period and modern industries were set up to take their place. The British adopted various measures to destroy the traditional industries of Indian origin and they were least interested in providing alternative employment opportunities to the skilled and unskilled workers engaged in these industries.

### **Eviction of small farmers and Tenants from Land**

In Rytowari areas in South India, land initially belonged to the farmers. However with an increase in the number of intermediaries the land started slipping out the hands of small of farmers and they were forced either to adopt the status of tenants or work as agricultural labourers. It is found that landless agricultural labourers are concentrated heavily in irrigated villages than in rain-fed villages.

### **Uneconomic Holdings**

The process of subdivision and fragmentation of holdings, which is mainly a consequence of the law of inheritance and decline of joint family system continued unabated for a long period of time.

### **Increase in Indebtedness**

The increasing indebtedness of small farmers in rural areas is also responsible for increasing the number of agricultural workers. The money lenders and mahajans often advance loan with the purpose of grabbing the land of small farmers. They adopt various malpractices like charging exorbitant rates of interest, manipulation of accounts etc.



## **Spread of the Use of Money and Exchange System**

The rapid spread of the use of money and development of the exchange system has changed the entire complexion of agriculture.

## **Capitalist Agriculture**

Because of multiplicity of factors which operated in this country during the last three decades capitalist agriculture has received a big boost. Abolition of intermediaries, technological development in agriculture, cheap co-operative credit, expansion of marketing facilities and the pricing policy of the government have all the created favourable condition for the development of capitalist agriculture.

## **Agricultural labour**

It is rather difficult to define the term "Agriculture Labour". The first Agriculture labour Enquiry Committee defined this as "those people who are engaged in raising crops on payment of wages". But the second Agricultural Labour Enquiry Committee enlarged the definition of agricultural labour to include "those who are engaged in other agricultural occupations like dairy farming, horticulture, raising of livestock, bees and poultry etc.

As far as India is concerned the definition is not adequate because it is not possible to completely separate those who work on wages from others. These people do not work on wage throughout the year but only for seasonal. Therefore the first agricultural labour enquiry committee used the concept of "Agriculture labour household". If half or more members of a household have wage employment in agriculture then that household should be termed as "Agricultural labour household". But the second Agricultural Labour enquiry committee substituted income criteria and said that an "Agriculture labour household" is one whose main source of income is wages from agriculture and related activity.

According to the National Commission on Labour, "An agricultural labour is one" who is basically unskilled and unorganized and has little for its livelihood other than personal labour. Thus persons whose main source of income is wage employment fall in this category. It consists of two sub categories Landless labour and

(i) Very small and sub marginal holding, is wage employment. Landless labour, in turn can be classified into two broad categories

- (a) Permanent labour attached to cultivate household and
- (b) Casual Labour "Permanent or attached labourers

Generally work on annual or seasonal basis and they work on some sort of contract hand temporary or casual labourers are engaged only during peak period of work" their employment is provisional and they are paid at the market rate. They are not attached to any landlord.

The population statistics of India defined that Agricultural labour is a person who works in another person's land for agricultural produce. Such a person has no risk in cultivation as he merely works in another person's land for wages. An agricultural labour has no right of lease or contract on land on which he works.

### **Problems of Landless Agricultural Labour**

The problem of agricultural landless labourers was increasing year after year and in order to evaluate the economic conditions of this class. The First Agricultural Labour Enquiry was conducted in the year 1950-1951 by the Ministry of Labour. The enquiries revealed the following problems of agricultural landless labourers.

- **LOW WAGE RATE**

Wage is the main problem in this sector. Through agricultural wages have been revised upward several times since independence the legislations are poorly implemented. For instance wages in U.P, Bahar, Orisa and M. Pranges from Rs.20. to 30 per day per man compared to the wage range between Rs. 7.50 and Rs. 9.50 in Punjab and haryana there is exploitation by landowners low wages generate the vicious cycle of poverty.

- **LARGE SIZED FAMILIES**

The number of members increased in the families are other problems of landless agricultural labours. Their income earning available sources only in the field of agriculture land.

- **LOW SOCIAL STATUS**

The incomes of agricultural labourers are very limited. So their standard of living is not improved way social status of the labourers are very low level compare with other income group of people.

- **NO SOCIAL SECURITY**

Agriculture workers in the country do not have any social security. The existing legislations are also not enforced permanently by concerned authorities.



## **Reasons for Poor Economic Conditions of Agricultural Labour**

### **1. Unorganized**

Agricultural workers are illiterate and ignorant they live in scattered villages hence they could not be organized in unions in urban areas workers could generally organize themselves.

### **2. Seasonal Employment**

The agricultural labourers do not have continuous work. On an average a farm labourer finds employment for about 197 days in a year and for the rest of the year they are unemployed. Agricultural labourers cannot get continuous work throughout the year. It is one of the important problems of agricultural labourers.

### **3. Paucity of Non-Agricultural Jobs**

Paucity of non-agricultural occupations in villages is another important factor for the low wages and poor economic conditions of the farm labourers. For one thing, the growing pressure of population is increasingly felt in rural areas and the number of landless labourers is steadily increasing. For another, the absence of any other occupation in rural areas and lack of inter-regional mobility have been responsible for worsening the pressure of population on land.

### **4. Rural Indebtedness**

Agricultural labour is heavily indebted. Normally, the farm labourers borrow from the land owners under whom they work. Since they have no security to offer they pledge themselves to the moneylenders and rich landlords and become bonded labourers in many areas. Naturally they are forced to accept lower wages.

Thus, partly because of factors beyond their control and partly because of their inherent bargaining weakness the farm labourers have been getting very low wages and have a miserable sub-human life.

### **5. Impact of technology used in agricultural lands**

The introduction of machines in farm sectors had its own impact on the landless agricultural labour with the difficulties faced in agricultural production during the year 1956-57 which continued in the year 1990. High yield variety programmes, intensive agriculture area programme and agricultural demonstration programme were introduced in year 1960. Government thus started the green revolution. As a result of all the modernization programmes



and modernization and technological transformation only the rich farmers are benefited but large section of the rural population which possessed very small land holdings and a sizeable possessed very small land could not gain any benefit and similarly the areas with low potential for agriculture could not develop.

### **Objectives of the Study**

1. To examine the causes of landlessness and to study the general level of wage differential function among the landless agriculture labourers.
2. To find out the structure of income and expenditure patterns of the landless agriculture labourers.
3. To analysis the levels of assets and liabilities of landless agriculture labourers.
4. To estimate the extent of poverty of landless agricultural labourers.
5. To examine the problems faced by the landless agriculture labourers and to offer suitable solutions.
6. To examine the role of governments in the economic upliftment of landless agricultural labourers and to suggest additional measures to be followed by governments.

### **Hypotheses of the Study**

1. There is no significant relationship between age and daily wages.
2. There is no significant relationship between age and wages system.

## **RESEARCH METHODOLOGY**

### **Research**

Research is thus “Systematized effort to gain new knowledge”. Research Methodology is a way to systematically solve the research problem. It may be understand as a science of studying how research is done scientifically. In research it is responsibility of the researcher to expose the research decision to evaluate before they implemented. The researcher has to specify very clearly and precisely what decisions he selects them so other can evaluate on it.

### **Research Design**

A research design is a blue print for fulfilling objectives and answering questions. “A research design is the arrangement of conditions for collections and analysis of data in a manner that aims to combine relevance to the research purpose with economy in procedures”.



### **Sample Size**

A sample is a part of the target population carefully selected from the universe to constitute a sample. From the population the researcher has taken 200 respondents.

### **Sample design**

Convenient sampling was used to select the samples from the population.

### **Data collection**

The information collected from both Primary data and Secondary data.

### **Sources of Data**

The study is primarily analytical in nature. A few statistical devices have been used as aids to the study. The percentages of average levels of employment, income, consumption, assets and liabilities of landless agricultural labour households have been worked out to estimate the relative shares of different components of income.

### **Period of the Study**

The period of the study was extended over the year 2017-19

### **Statistical tool**

The following are the statistical tools used for the study.

### **Chi – Square Test**

Chi – Square test is applied in statistics to test the goodness of fit to verify the distribution of observed data with assumed theoretical distribution. Thus, Chi – Square test describes the discrepancy between theory and observation.

### **ANOVA Test**

Analysis of variance (ANOVA) is a statistical method for partitioning the total variation of a set of data into components associated with recognized sources of variation. Usually, the variance is splinted into two parts

1. Variance between the samples( or Groups)
2. Variance within the samples (or Groups)

The classification according to one factor and two factors are respectively called One-way classification and Two-way classification.



### **Limitation of the study**

Due to constraints of time and resources, the present study is limited to cover only in Ramanagara district selected at the rate of 2 villages from Ramanagara District is spread over a vast area.

Under the scheduled interviews with the selected landless agricultural labourers in the selected villages, the researcher had to struggle in view of problems of illiteracy and poor memory power. Data under expenditure were not accurately furnished by them since they did not maintain any book of accounts or dairies. As such, the researcher had to arrive at an overall or an average estimation of expenditure from their oral commitments. The data under income to follow the foot prints of expenditure.

The ecological and economic conditions of any kind of worker in any period change. As such, the limited period and area of study covered by this thesis and the findings arrived there from may fail to withstand the test of time and space. It may vary from area to area and time to time.

Under the data of income and expenditure, certain factors have been purposely ignored. If the members of households fall below the age group of ten and age group of sixty-five and above, they were excluded from the angle of income and not from the angle of expenditure. Further, the school going population of the selected households were taken into account in the treatment of expenditure, assets and liabilities.

Though the bonded agricultural labourers have been relieved of their bondage from their feudal lords in the district under the law in force, yet, the element of bondage has taken a new shape in different forms i.e. pannaiall system. Under this system, the landless agricultural labourers have to serve and work under old feudal masters.

### **Findings, Suggestions and Conclusion**

#### **Anova Test**

Majorities (12%) of respondents are getting daily wage range 101-200 and they are in the age category of 31-40 years.

Majority (18%) of the respondents is get wages in the basis of daily wage and they are age category in 31-40 years.

### **Chi- Square Test**

The calculated value of  $\chi^2$  (19.5) is more than the table value (16.9). Hence the null hypothesis is rejected. Therefore, there is a significant relationship between the age group of the respondents and daily wages.

The calculated value of  $\chi^2$  (3.449) is less than the table value (16.9). Hence the null hypothesis is accepted. Therefore, there is no significant relationship between the age and wages system.

### **Suggestions**

In the light of these findings the following suggestions are presented below

1. A social factor acts as obstacles. In order to eliminate these socio-economic and cultural barriers, female children and women should be educated through formal and non-formal channels. The voluntary agencies have also got a significant role to play in this regard.
2. More importance must be given to the female in family also to improve the status of female agricultural labours.
3. Since agricultural labourers are unaware of various social welfare legislations and provisions available to various social divisions, the voluntary agencies in collaboration with Governments must give wide publicity through community organization. Particularly the Minimum Wages Act (1948) should be effectively implemented.
4. Normally women agricultural labourers receive lower wage than the men even in doing identical jobs, although there is constitutional backing in the form of equal wage for equal work. The Government must effectively enforce the concerned Act.
5. Co-operation of agricultural labourers in the local self governing institution must be extended in order to provide representations to this section.
6. In the National Commission on rural labour, representation to agricultural labourer must be provided, so that their economics interest is protected.
7. Recently the concepts of SHG,( SELF HELP GROUP) is pronounced more. But it mainly concentrates on women alone. The focus on men is also necessary at this moment.

The Government should take necessary Legislative measures were taken to confer occupation rights of house sites and agricultural land for the rehabilitations of landless labourers, the newly reclaimed lands were distributed to the landless labourer

### **Conclusion**

The Government of India conducted agricultural Labour Enquiry and Rural Labour Enquiries. The main objectives of these Enquiries have been to

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collect vital information on the Socio-Economic conditions of Rural Agricultural Landless Labourers. These enquiries formulate the policy measures to uplift the economic life of population in Rural areas.

The wage employment programs and employment guarantee scheme of **MAHATHMA GANDHI RURAL EMPLOYMENT GUARANTEE SCHEME** regulates the right direction to ensure livelihood security to the agricultural labourers. This Scheme Safeguard the agricultural landless labours' sources of income earnings and improve standard of living.

A technology which best suit and fulfill the requirement of agricultural labours should be promoted in the direction of sustainable agricultural without affecting livelihood security of agricultural labour in India. A balanced approach towards capital intensive technology without affecting the interest of manual labour is the need of the hour in the Indian context.

**Age and Daily Wages of the Respondents**

(ANOVA Two way Table)

S. No	Age	Range of Wages				Total
		Upto100	101-200	201-300	Above 301	
1.	Upto-30	8(2.25)	25(7.2)	7(6.3)	52.25	45
2.	31-40	13(3.75)	38(12)	20(10.5)	53.75	75
3.	41-50	21(2.75)	12(8.8)	32(7.7)	9(2.75)	55
4.	Above 50	21(1.25)	5(4)	11(3.5)	7(1.25)	25
	Total	25	80	70	25	200

Source: primary data

**Age and Daily Wages of the Respondents**

(Chi-square test)

Factors	Calculated value	Table value	Degree of freedom	Level of significance
Age group	19.5	16.9	9	5%

Age and Wages system of the respondents  
(ANOVA Two way Table)

S.No	Age	Wages System				Total
		Daily Wages	Weekly Wages	Monthly Salary	Contact Wages	
1.	Up to 30	32.5(10.8)	5(2.7)	2.5(1.8)	5(2.7)	45
2.	31-40	42.5(18)	12.5(4.5)	7.5(3)	12.5(4.5)	75
3.	41-50	35(13.2)	7.5(3.3)	5(2.2)	7.5(3.3)	55
4.	Above 51	10(6)	5(1.5)	5(1)	5(1.5)	25
	Total	120	30	20	30	200

Source: primary data

Age and Wage system of the respondents  
(Chi-square test)

Factors	Calculated value	Table value	Degree of freedom	Level of significance
Age	3.449	16.9	9	5%

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## THE STUDY OF GENDER AND SANITATION PROBLEMS AMONG WOMEN HEALTH AND HYGIENE IN BANGALORE SLUMS- A SOCIOLOGICAL STUDY

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### Abstract

Bengaluru city faces severe challenges in providing sanitation infrastructure for the urban poor. Similarly, we have villages in North Karnataka that encounter problems of toilet access and related challenges. This paper addresses concerns both in city and rural contexts. We surveyed 400 respondents across 20 slums and 500 respondents in six districts of North Karnataka through survey instruments and focus group discussions (FGDs) to understand the problems with respect to toilet access and usage. Open defecation (OD) prevails in spite of several interventions made. In the urban contexts, lack of usage was largely due to technical discrepancies, behavioural concerns, space issue, water scarcity and poor maintenance of toilets. In the rural contexts, apart from water scarcity, restricted space, poor maintenance, cultural habits and financial constraints dominated non-usage of toilets. This paper captures these issues in-depth and provides some options in technologies and improved governance based on study findings and review of case studies. In the urban areas too, the topography of the slum location, operation and maintenance and apt technology plays an important role while in the rural areas, promoting education and awareness creates a positive impact on usage of toilets. Also, institutionalizing the process of construction with transparency and accountability at various stages matters to ensure proper construction of toilets.

**Key Words:** Toilet Access, Urban Sanitation, Rural Sanitation

### Introduction

The 2030 Agenda has emphasized 'Water and Sanitation' as an important component by devoting Sustainable Development Goal (SDG) 6 for water and sanitation, besides linking it to other goals on health, food security, climate change and many others. In sum, SDG 6 demands a clear vision to ensure universal access to drinking water and sanitation while addressing issues pertaining to quality, supply and improving water management to protect ecosystems and build resilience. So far, several agencies have worked on



providing safe water and sanitation across the globe including UNICEF, the Bill and Melinda Gates Foundation, Water Aid, World Vision, WASH. Meanwhile, smaller start-up companies like Synergy, BlueEnergy, SeeSaw, have all initiated several projects. Additionally, we have several governments and NGOs that have taken action to ensure safe water and improvised sanitation infrastructure. However, achieving complete access to safe water and sanitation amenities remains a distant dream.

India has also been afflicted from these problems and several studies have indicated them, time and again. 48% of the total Indian population defecates in the open and India ranks among the first 12 countries practicing open defecation (Krishna Prasad, 2014). Despite significant public investment in urban sanitation, over 37 million people in Indian cities resort to open defecation. The 2011 Census of India provides some startling results. Nearly 12% of urban households resort to OD and another 8% use public or shared toilet facilities. The conditions are far worse in smaller cities (population below 100,000), with OD rates around 22%. As per 2011 Census of India, only 30.7% had toilet facility compared to 81.4% urban households indicating the gravity of the rural circumstances.

Another observation has been that, urban sanitation was comparatively less focused upon compared to water supply, besides, bulk of the finances were allocated towards water infrastructure. Besides, more emphasis was also on rural sanitation as rural areas had relatively less number of toilets compared to urban areas. However, in spite of having more number of toilets, it is not that urban areas are exempt from open defecation for varied reasons. The recent Swachh Bharat Abhiyan aims to clean India by 2019 and focuses on two submissions – rural and urban. The urban component will be initiated over a five year period and within 4041 statutory towns with an expected total cost of Rs. 62,009 crores with 14,623 crores contributed by government. SBA's goal for urban India includes elimination of OD, transition towards pour flush toilets, removal of manual scavenging; behavioural change regarding sanitation practices (Diligent Media, 2014). We also need to understand that challenges vary across the rural and urban contexts, for instance, land tenure or proliferation of slums that are not notified or recognised by government is applicable to cities only.

Given this backdrop, the current paper is organised as follows – situation analysis of Bengaluru's slums in accessing toilets in Section I and in

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Section II of the paper we look at the intervention made by Infosys Foundation for improving access to toilets in Northern districts of Karnataka. Our paper will bring to the fore some key concerns highlighting constraints in the technology adopted, problems encountered and its acceptance. We will also discuss some of the interesting initiatives that have aided in technology redesign and improved governance. After reviewing these two cases and based on review of best practices in other parts of the country, we arrive at some solutions that call for improved nuances in governance to meet the key aspiration of eradicating open defecation. Our study findings in Bangalore city (representing slums) and North Karnataka (representing rural areas) reiterates the fact that we will not be able to adopt a one-size-fits-all approach, rather, a context based approach considering social, economic, cultural, geographical and technical aspects, in attaining the SDG in the context of water and sanitation. Water and sanitation are linked; however, we will be discussing sanitation explicitly and toilet concerns in specific. The case studies discussed will throw light on generalising issues that may be applicable to other contexts as well. There are several common issues but some are specific to rural and urban areas. Hence, we will discuss them separately.

### **Review of Literature**

Bengaluru is one of the fastest growing cities and fifth largest city in India. Bengaluru's population has grown immensely (84,49,944 as per 2011 census). Similar to any other metropolitan cities, rapid urbanisation has posed serious challenges to urban planning and management in providing infrastructure and other civic amenities like housing, electricity, water and sanitation in the urban areas (Ahluwalia, 2011; Bhagat, 2011; Kundu, 2011, Kulkarni and Ramachandra, 2006).

Few independent studies have highlighted sanitation concerns faced by the urban poor in Bengaluru city. Benjamin (2000) observes that women are forced to use open fields for defecation and face harassment from drunken men making it unsafe. Kala Sridhar and Venu Reddy (2011) see the need for a policy to incentivise and influence the entry of private service providers into slums. Study by Mythri Sarva Seva Samithi (2012), highlights 40% slum population did not have access to toilets. There are instances of sharing one toilet by 100 people and sharing nine toilets by 200 people (in Tasker Town, Shivajinagar). Besides, these-toilets tend to become unusable due to lack of maintenance, a matter of serious concern. Public health experts and other studies have pointed out that large sections of the urban poor are denied access to toilets. Extent of night soil disposed into rain water drains is of serious concern that could cause



implications on health. An official report, in 1994, (Ravindra, 1997) says around 1,13,000 houses were without toilets, while 17,500 had dry toilets.

Siddharth Agarwal, et al (2010) conducted a study of 312 mothers of infants aged 2-4 months in 11 slums of Indore, India, were interviewed to assess birth preparedness and complication readiness (BPACR) among them. The mothers were asked whether they followed the desired four steps while pregnant: identified a trained birth attendant, identified a health facility, arranged for transport, and saved money for emergency. It will be important to increase the competency of slum-based traditional birth attendants, along with promoting institutional deliveries.

Vijay M Sarode (2010) examined utilization of health services available to the women in the slums on hilly area in Mumbai and also checks whether non utilization of antenatal care (ANC) and having reproductive health problems during pregnancy create complications during child delivery vis-à-vis standard of living index constructed from household amenities, housing quality, drinking water, electricity and toilet facilities. This study uses primary data collected using cluster sampling of a sample size of 346 reproductive women who have given at least one live birth prior to the survey on the education of the study women, antenatal care indicators, antenatal check-ups and reproductive health problems during pregnancy and complications during child delivery among the slum dwellers of Ramabai Nagar was studied. This paper suggests that awareness is very much required at every stage of ANC particularly to illiterate women with low SLI category in the slums in order to ensure reproductive health during pregnancy.

Balaiah Donta, et al (2012) conducted a study to assess the awareness of cervical cancer among couples, data were collected from two urban slums community in Mumbai. A total of 1958 married women aged from 18 to 49 and their husbands were selected using simple random sampling. Women (37.7%) were significantly more aware of cervical cancer than husbands (8.7%). A slight agreement (kappa statistics=0.16) was observed between husbands and wives on awareness of cervical cancer. Significantly higher percentages of wives were aware of pap smear test than husbands. Overall, awareness of cervical cancer and pap smear test among couples is low. There is need to educate and motivate both of them to participate in cervical cancer screening program.

Kiranmai, et al (2012) stated that women's health is increasingly recognized as an area that has emerged because of an increase in women's demand for unique health care services that consider gender, life circumstances, education, and religion, economic and socio-cultural environments. The three



major constructs related to comprehensive women's health outcomes include personal factors, the health system factors, and social, economic and cultural factors. The present work is a cross-sectional study designed to examine the perceived and actual health status and health practices of women aged 18 to 64 years during the period December to March 2012. The health status survey a structured questionnaire was used. The results indicate that the perceived health condition by the women is good as a fact that in spite of many health effects they were not in medication and doesn't visit a doctor.

Makade, et al (2012) conducted a survey to study the awareness, practices, preferred method of contraception, emergency contraceptive and Medical Termination of Pregnancy (MTP) and Awareness of family planning services in the vicinity and also decision making regarding contraceptive use. Total 342 married women were interviewed in the local language using a pre-tested questionnaire. It was found that 87.7% of women were aware of at least one method of contraception. 68.4% women were using a contraceptive at the time of study. 14% women were unaware of any health care facility providing contraceptives in the vicinity. Knowledge and practice of Emergency Contraceptive was very low. Although there is high level of awareness, contraceptive use is not very high. New methods of motivating people to adopt and sustain Family Planning methods should be considered.

### **Objectives of the Study:**

The present study is made:

- To review of the studies that are made on female health status and problems in slum areas in India
- To examine the demographic characteristics of slum dwellers.
- To know the living conditions available for women in the slum areas.
- To study the health and nutrition level of women slum dwellers.
- To explore the use of contraceptive by women in slums.
- To see the various policy measures and programs initiated by the government for women.

### **Methodology and Data Sources**

We collected both qualitative and quantitative data, reviewed studies on sanitation, secondary data was collected from concerned departments Bruhat Bengaluru Mahanagara Palike, (BBMP), Bengaluru Water Supply and Sewerage Board (BWSSB), Karnataka Slum Development Board (KSDB), Corporate initiated schemes, and NGO initiated Sulabh Shauchalaya Schemes and other case studies. Interviews and discussions were held with government officials and other personnel of the corporates and NGOs. Both structured and

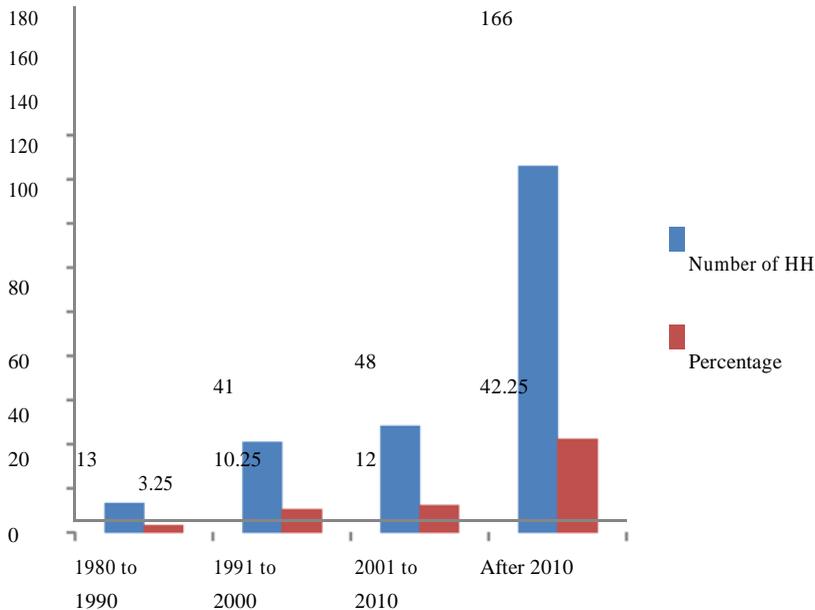


semi-structured survey instruments (questionnaires/ checklists) were designed for stakeholders, group level meetings and individual interactions. 10 declared and 10 undeclared slums were identified across all zones of the city representing ownership of land (government land and private land), slums with migrant population only, location (slums located beside railway lines, alongside of sewage drain), slums without access to toilets, having access to public toilets, pay and use toilets and slums that are benefited with housing schemes.

### **Augmenting Toilet Structures**

We observed that various schemes have been implemented by the State and Central governments to provide toilet access by providing financial assistance for constructing houses with toilet facilities besides individual toilets. It can be seen that the total number of individual toilets constructed in the study area has increased after 2010 (Figure 1). The data collected during the household survey indicates that 42% of individual toilets were constructed after 2010 which may be attributed to the implementation of various government schemes viz, Basic Services for the Urban Poor (BSUP) and Integrated Housing and Slum Development Scheme (IHSD) under Jawaharlal Nehru Urban Renewal Mission (JnNURM). In addition, recently under the World Bank sponsored project Karnataka Municipal Reforms Project (KMRP) implemented by BWSSB, toilets have been constructed in several slums. Innovative initiative like e-toilets installation in public spaces and vicinity of slums have aided to a certain extent in providing access pay and use option, besides making it convenient as it has several automated features. Besides the schemes, various government initiatives and NGOs have promoted awareness on hygiene via Nirmal Bharat Abhiyan, Swachh Bharat Mission etc., thus motivating people to construct toilets. Another reason for increase in private toilets built by residents own costs in slums may be attributed to the non-availability of space for open defecation making it an everyday challenge, resultant effect of enormous growth of built up area in Bengaluru. Also, when people can afford, they do not want to suffer inconveniences caused due to lack of access to toilets. This fact is also reiterated by Dasra 2012 where he makes a comparison to rural areas and urban areas. Households in urban areas have a demand of and value for toilets, with increasing population growth and scarcity of land, not only land is mostly unavailable for open defecation, the act of open defecation and the embarrassment of security issues of such an act are more easily observed.

Figure : Toilet Construction over Time



Source: Primary Survey, 2018

In 45.5% of the households with individual toilets, toilets were constructed on their own and 21.5% have received financial support either from the State or Central government under various schemes (only in notified slums). In non-notified slums, majority of the toilets are self-constructed, excepting a few which have been constructed with the help of World Bank scheme KMRP implemented by BWSSB. Under KMRP project, the beneficiaries are to contribute for construction. However, under JNNURM, VAMBAY, people have contributed 10% of the total cost of house construction which varied between Rs.28,000 and Rs.36,000 across slums.

We observed that a majority of the surveyed households have access to individual toilets<sup>3</sup>. Having individual toilets is constructive as households with individual toilets feel less beleaguered as compared to those that use public or shared toilets. Besides, it also motivates all the members within households to

use toilets. Individual toilets are largely used by households owning them. In few cases, we observed that though households have toilets at home, some members of the family, particularly men, do not make use of them and are comfortable with open spaces to relieve themselves.

**Table : Type of Toilets Used and Practice of Open Defecation**

Type of toilets	Percent	Notified	Non-notified
Individual/own Toilet	67.0	75	59
Public toilet	7.2	10	4.5
Shared toilet	12.3	2.5	22
Open space	13.5	12.5	14.5
Total	100.0	100	100

Source: Primary Survey, 2018

### **Constraints in eradicating Open Defecation**

Open defecation prevailed for varied reasons in the study area. For instance, in Hakki pikki colony with a population of around 2000, all 208 households (except 3 or 4 households) defecate in the open areas as they do not have access to any type of toilet. Similarly, in Shivapura slum, LBS nagar slum, Yelahanka A K colony slum, around 50% of the households do not have access to any kind of toilets facility and hence practice open defecation (see Map 1). This stands supported by a survey conducted in 2013 by Bengaluru Urban zilla panchayat (ZP) which highlights that 34,656 households in Bengaluru Urban district do not have access to toilets and hence, resort to open defecation. Some of the reasons are lack of space to construct toilets, inadequate number of public toilets, unused toilets due to poor maintenance etc. People largely complained about inconvenience caused as they have to travel long distances in search of open spaces which adds to stress, safety concerns for women, inconvenience to children and the aged, particularly in the late evenings.

### **Inadequate number of toilets**

Inadequate number of toilets is another issue because of which slum dwellers depend on open spaces. 9 slums have partial access to toilets i.e., few households have access to individual toilets or shared toilets and not to public toilets. They are forced to opt for open defecation in view of water shortage and drainage problems. For instance, Gulbarga slum is a non-notified slum where 50 HHs out of a total of 325 HHs, have constructed own individual toilets<sup>4</sup>. The rest of the slum dwellers defecate in nearby open spaces.



### Water scarcity affects Toilet Usage

Inadequate water availability affected toilet usage as water access and availability is a matter of concern across most of the slums. Although the slum dwellers have access to water, it is not sufficient to meet their requirements completely; 32.75% of the respondents have reported water insufficiency. Another reason for not being able to access water is the motor related problems faced by households (vertical structures). Households living on the second and third floors have to depend on motors for lifting water to overhead tanks. Motors get frequently damaged and require frequent repairs, additional costs that are a burden.

### Behavioural Problems

It is observed that, there are a small percentage of men who prefer to defecate in the open as they do not feel comfortable to use toilets. This is a cultural factor as migrants from rural areas who have settled in Bengaluru still continue with the habit of using open spaces for defecation. 15% of women respondents have expressed inconvenience with regard to the use of toilets, particularly when men are around the public toilets. The behavioural aspects of toilet usage are influenced by educational levels as well. The educational levels of the respondents are low, however, the educated, particularly the youth, prefer and insist on individual construction.

### Poor maintenance of Public toilets leads to open defecation

People are not satisfied with public toilets due to poor maintenance (76%) and water scarcity (24%) and hence, resort to open defecation (Table 2). Besides, respondents especially find it inconvenient to use public toilets because their usage is subject to restricted timings (closed by 9 pm), leaving people with no choice other than defecating in the open. Other inconveniences include poor lighting facilities and lack of sufficient water/no water (Gandhi grama slum). Another major reason of inconvenience caused to the users was standing in long queues during the rush hours.

The condition of public toilets in some of the slums is extremely poor. However, in some of the slums, they are maintained well - LBS nagar, for example.

**Table 2: Reasons for Not Satisfied with Public Toilets**

Reasons	Number of HH	Percent
Poor maintenance and hygiene	22	76
Water scarcity	7	24
Total	29	100

Source: Primary Survey, 2015



In Gangodanahalli slum, few households are dependent on a community toilet located nearby. In Nayandahalli, Swatantrapalya and Gandhinagar slums, though the residents own houses with individual toilets, due to frequent blockage of sanitary pipes, dependency on community toilets is relatively high. Public toilets are an alternative option, not a preferable choice. Major reasons for dependency on public toilets -

- (a) Lack of space for construct own toilets in (LBS Nagar, Swatantrapalya, Jayaram slum (3.2%) as they are located in highly congested, densely populated areas with small houses.
- (b) Individual toilets are too small to use
- (c) Financial constraints to have their own toilet (2.2%)
- (d) Water scarcity

### **Poor Hygiene**

Hygienic conditions varied across and within slums as also across households. The cultures of keeping the immediate surroundings clean vary extensively. Newly constructed vertical structures looked like 'concrete slums'. Tendency to misuse common areas to dump belongings, store firewood, heat water etc. makes the place untidy. Few households had kept their houses and surroundings clean and tidy. Instances of renovating the houses to suit their tastes by redoing flooring, painting walls etc. at their own cost were also observed. Given the overall conditions of the slums, there is a large scope for intervention in creating awareness to maintain a minimum level of hygiene.

40% of the respondents took a bath every day as access to water is good in their slums. While 42% take a bath on alternate days as the water is supplied on alternate days. In these households, there was no adequate space to store water. Few slums face acute water scarcity problems and the residents have bath once in three days (17%) or once in a week

(1.2%). It is well known that hand washing practices plays an important role in preventing the transmission of several diseases. 98.2% of the respondents washed their hands prior to cooking, while 97.2% of the respondents washed their hands prior to eating. 68% of respondents used soap to wash their hands, which depended on the type of occupation they are involved in. People engaged in construction and sanitation activities tend to use soap whereas those engaged in sorting out metals, paper waste, etc. washed hands with plain water.

To sum up, numbers of toilets have increased but usage is affected due to several factors. It is important that all aspects of functionality of toilets are



ensured for effective usage. There is need for improved governance in providing more options to construct toilets that suit local contexts. People are receptive and involving them to consider innovative options would make way for open defecation free city.

individual households, institutions, and community toilet were included. Stratified Random Sampling was adopted for covering geographical area representing villages, technology, land holding size, institutions. Villages thus selected were representative of toilets constructed in terms of highest, medium and lowest numbers. The districts covered were Gulbarga, Yadgir, Bidar, Raichur, Bijapur and Koppal. Responses were collected from 500 households (5% of the sample) representative of cross-sections of the society- caste wise, income-wise, with and without water connection. The representation was also extended to various types of beneficiaries - households, institutions and biogas connected users. Besides, discussions were held with initiators and Nirmal Grama Samithis, Panchayat representatives and Contractors.

### **Insufficient space**

Insufficient space was a major constraint for households in rural areas, as reflected by 27.70 % of respondents having limited space for construction of private toilets. Besides, in many of the villages, the village layout was not well planned and haphazard. Hence, community toilets and group toilets were preferred. Cultural factors/belief systems and preferences determined the location and usage of toilets which had to be accommodated within the limited space. For instance, several households i.e. 85 % had preferred to have toilets built outside their houses as compared to 14% of households wanting to have toilets constructed inside their houses.

### **Misconceptions**

People felt that the soak pits would get filled up soon if used every day. Another reason was their speculation regarding water leakage caused while flushing toilets might flow out of the toilet. These misconceptions mainly hamper the usage rate of toilets in many villages. In certain cases, this belief increased the construction cost of toilets as people constructed pits thrice in size to the prescribed one. To address these issues, explaining to the beneficiaries more about the technical aspects of the structure became important.

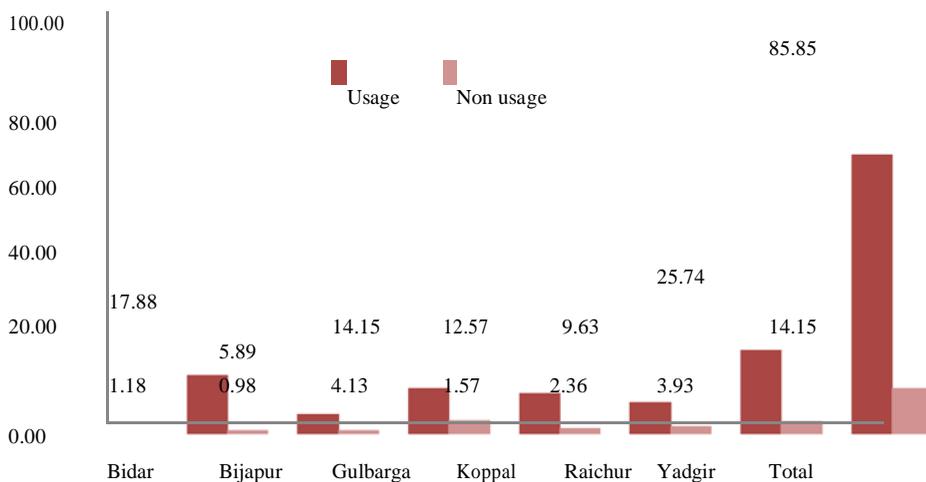
### **Adapting to new habits was a challenge**

We also observed that it was difficult for people to change their set habits. Several reasons that people expressed were (i) felt restricted in a closed environment (ii) felt self-conscious to enter a toilet (iii) Felt scared (iv) men felt

open defecation was more comfortable; (v) Younger women preferred to defecate openly as that is the only time freedom they have available for them for interactions with peers and sharing (vi) children were not used to using toilets (vii) used to open defecation and so difficult to break the practice; (viii) the concept of using a small room for defecation causes discomfort; (ix) restricted ventilation and no fresh air in closed rooms

There was gradual change observed in the usage of toilets among all sections of the society with an increase in the percentage of people using toilets i.e. 85.8% of households. Among the family members' women and elderly were using toilets regularly as compared, 6.48 % of men using toilets rarely (during rainy season/ill health) and 3.54 % during night time. 14.15 % of households not using toilets are a matter of concern.

**Figure : Status of Toilet Usage across the Districts (%)**



Source: Primary survey

### Parishudh Approach

Involving and participation of all stakeholders from the initiation of the project has led to good governance of the PI. The process of implementation includes components of replicability, awareness and design. The processes were



planned in collaboration with a local NGO via, identification of villages, feasible design options, finances, coalition, time frames, bank procedures, and coverage and so on. Progress tracking and monitoring strategies were planned for ensuring transparency and accountability. An Advisory Committee supervised the work progress and provided suggestions. Anticipating risks in view of failure, strategies to overcome them were planned. As for Legal and Contract Management, all the legal MOUs had been signed for ensuring conflict-free management and quality work assurance. Schedules and Formats had been so designed as to ensure clarity and progress in respect of all aspects of work-construction, finance and quality. Awareness creation and management of specific goals and approaches were the other important components that worked towards ensuring sustainability of the project.

**Innovativeness in Convincing the Beneficiaries** - The team used various innovative ways to motivate the beneficiaries. For instance, team members reached out to people of lower caste groups and convinced them to construct toilets. Once the lower caste households constructed toilets, they would use this as a means to convince the upper caste families informing them about the completed toilets among the lower caste households. Thus, the team indirectly, used the construction of toilets as a status symbol. Similarly, they would speak to the newly wedded grooms to ensure safety and privacy for their young wives. This appealed to majority of the young men and they constructed toilets immediately.

The team involved at all stages till the construction of toilets was complete including the delivery of incentives. Issues arising during the construction phase would be rectified and proper guidance provided throughout. The team would visit the households 5 times at various stages from initiation to completion. This ensured confidence among the beneficiaries, leading to increased enrolments for toilet construction. Exposure Visits to Model Villages of village leaders to villages that had achieved 100% sanitation motivated them to initiate the program in their respective villages.

**Special Awareness Drives** – People living in villages have great respect to religious Gurus. PI involved local Gurujis and their associates to deliver speeches on sanitation. Five such exclusive sessions were held. Besides, even in all public meetings, the significance of sanitation was stressed, not missing any opportunity to promote sanitation.

**Involving Volunteers** - Volunteers from Infosys Foundation, Bangalore visited households in villages during weekends promoting importance of sanitation.

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Children were also involved as agents of change. A competition on rural hygiene and sanitation was conducted in January 2012 in 1200 schools across five districts of North Karnataka. Over 10,000 students from 500+ schools participated in the essay, speech and drawing competitions.

### **Improving Financial Management**

It would be useful to think of innovative ways to improve finances to improve toilet usage and also use toilet complexes and drawn from review of best practices that are applicable to Bengaluru. Financial assistance may be provided for the construction of individual toilets by agencies, Banks or any other financial institutions with proper tie-ups. The success stories have depicted that this has been a positive initiative, particularly with women. Defining contributions wherein households can be given the option of contributions either in cash or kind. Besides, people can be employed for monitoring the maintenance of toilets. This model has been successful in Tamil Nadu. The usual practice in respect of operations and maintenance is to levy user charges wherein evasion of payment is an issue. There is scope for collecting funds well in advance and the use of token system has worked well mostly. Another interesting approach is to tap Corporate Social Responsibility<sup>7</sup> Funds for improving Toilet Access. There are various initiatives in water and sanitation sector in the country, for instance- Housing and Urban Development Corporation Limited (HUDCO) is also undertaking several CSR activities. Specific to toilet infrastructure, HUDCO has extended support for construction of Community/Pay and Use Toilets in Kotputli, Kota, Rajasthan, Seemapuri, Delhi, Bangalore Rural Dist, Karnataka etc.

Several other corporates like TCS, Toyota Kirloskar, Bharti Foundation and Ambuja Cements are constructing toilets. Specific to Bengaluru, Wipro Limited has constructed toilet blocks in the government school of Vivekanagar. In the case of PI, financing for toilet construction and building trust with people was a challenging responsibility. It was important for the Parishudh coordinators to enable that the promised subsidy reached them on time to ensure trust and confidence among the people. The focus was to motivate people to construct toilets; hence, all ways were explored to complete the task.

Several institutions and interventions are involved in providing improved sanitation facilities; however, complete sanitation access is yet to be achieved in Bengaluru city. The findings of the study highlight the complexities involved in providing toilet access, reasons for the persistence of open defecation across the study slums and the major problems encountered with no



access to toilets. It is possible to improve toilet access and usage in slums if the interventions if appropriate interventions are made. In totality, sanitation challenge is complex and has to be addressed holistically to attain the goal.

### **Suggestions**

The following are the major Suggestions for the study

- Most of the slums identified for the study area were low lying areas and inundated during rainy seasons. Measures should be taken to raise their level in order to avoid problems of flooding and sledging in such slums.
- The open drains alongside the road should either be provided with removable covers or appropriate arrangements should be made for their regular cleaning so as to avoid accumulation of sewage.
- Local government should provide more facility of public latrines for prevention of water and land pollution.
- Local government should undertake measures to improve the physical environment of the dwelling places, proper drainage, sewerage system and adequate water supply.
- Slum clinic or mobile clinic van should be arranged for treatment of common morbidities and health promotional activities.
- Local government should develop strategies to prevent the formation of new slums. These should include access to affordable land, reasonably priced materials, employment opportunities and basic infrastructures.

### **Conclusion**

Victimization of women is very common in slums and the usual situation is one of women enduring it. A Participatory Impact Assessment Study on the status of women was carried out in the four slums using a number of Participatory Rapid Assessment/Participatory Analysis and Learning Methods exercises such as Focus Group Discussions and Semi-Structured Interviews; before and after the exercise, social mapping, livelihood analysis, matrix scoring and cause-effect analysis were performed. The factors responsible for bringing changes to the lives of the slum women, which have also affected their status, are analyzed by the women themselves and this helped them greatly in becoming independent and further helped their development. However, according to most slum dwellers such activities take place in very small selective areas. There is a need for expanding such activities. In this context the role of NGOs is very important.

Providing access to toilets is one of the sanitation aspects that need to be addressed urgently to improve health and wellbeing of urban and rural poor. Several issues discussed have highlighted the concerns related to toilet access among the poor. Based on our study, we have highlighted several policy options



suitable to both urban and rural contexts. To sum up, we see there is large scope for improvement in governance and it needs to be holistic inclusive of socio-economic and cultural dimensions keeping in view local contexts and their connectedness with the respective institutions providing sanitation facilities. Focus should be more on the demand, requirement, convenience rather than quantification. Innovation in awareness and communication plays a significant role while stakeholder participation is crucial as preferences matter. There is large scope for innovative options like newly initiated e-toilets role in Bengaluru, drawn from Kerala's experience. Using technology to improve database besides transparency and accountability is an interesting option. Similarly, the biogas option that was successful in few villages can be popularised, it has worked successfully in urban slum of Chennai as well. Intervention in rural contexts proved to have positive implications on health and wellbeing of people, particularly women.

It is extremely important to invest in more services such as reorienting and sensitizing doctors/nurses, additional beds in government hospitals, well-equipped dispensaries, and maternity clinics near slums and settlements inhabited by the poorer sections. For the poor, private doctors are approachable for small ailments or coughs/ cold, but free services at government hospitals are always the option in case of severe health problems. Being close to government hospitals and dispensaries is a positive factor, but more information regarding health, reproduction, availability of better government resources for illnesses for both men and women need to be appropriately addressed. Education can play a vital role in influencing women's knowledge about nutrition, hygiene, and health. Sometimes respondents are found to be conscious about food habit but cannot afford healthy food, which is expensive for them.

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## INCLUSIVE STRATEGIES AND TECHNIQUES FOR ECONOMIC DEVELOPMENT OF SOCIALLY EXCLUDED SC COMMUNITIES IN KARNATAKA

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### Abstract

Scheduled castes are most backward castes in Hyderabad-Karnataka region. Though, Government has formulated many of the welfare schemes for the empowerment of scheduled castes, still their position is vulnerable as they are socially discriminated, exploited, suffering from poverty, illiteracy, etc. Hence, to analyze the socio-economic conditions of scheduled castes the present study is made. Totally 450 respondents were interviewed to collect the primary data. The findings revealed that majority of the respondents were suffered from discrimination, caste based inequality, exploitation, poverty, etc. Hence, it is suggested to provide higher education and employment to scheduled castes living in backward areas. Further, it is essential that the NGOs should look into the problems of scheduled castes in Bangalore Rural district.

**Keywords:** Dalits, Development, discrimination, Karnataka

### Introduction:

Indian society is a heterogeneous, wherein people belonging to various castes and communities reside. The people of Indi-an society are divided on the basis of castes. Caste system is based on Varna System where the Brahmins are at the top of the hierarchy, followed by Vysyas, Kshatriyas and Sudras. Those people who are outside thevarna system are known as Avarnas or Antajas or Panchamas of Chandalas<sup>1</sup>. They are external in the sense that they were required to stay outside the village settlement. The concept of pollution attached to them was responsible for treating or categorizing them as Scheduled Castes.

The constitutional safeguards have apparently helped Dalits in protecting their legitimate interests and accelerated their socio-economic development. The credit for incorporating these safeguards in the Constitution of India goes to Dr.B.R.Ambedkar. Several policies and programmes were formulated and implemented in the post-independence era to facilitate the



empowerment of Dalits who have remained as excluded sections of Indian society historically and structurally. The builders of Indian Republic and founding fathers of our Constitution had considered it necessary to provide specific safeguards in the constitution for the uplift of Dalits who are weak, vulnerable and oppressed communities in India mainly due to existing caste system, social order, economic order, political order and a combination of various circumstances. The Constitutional safeguards for Dalits relate to the removal of the disabilities as well as positive measures to enable them to acquire a dignified position in the national life. It is distressing to note that the gains of development have not yet reached the intended classes to the desired extent. Despite various measures to improve the socio-economic conditions of Dalits, they remain excluded from the mainstream of national life. The inclusive development of Dalits has been widely discussed, debated and investigated in India in the present times. The policy makers, administrators and other stakeholders are sensitized about the development of Dalits in India. The present article is based on the qualitative analysis of social change and development of Dalits who are the most marginalized sections of Indian society.

#### **A. Dalits in the Post-Independence Era**

The new democratic republic was made aware of its responsibility towards the welfare of Dalits and other weaker sections of society thanks to the revolutionary struggle launched by Ambedkar. The constitutional safeguards have apparently helped Dalits in protecting their legitimate interests and accelerated their socio-economic development. The credit for incorporating these safeguards in the Constitution of India goes to Ambedkar, Chairman of the Drafting Committee of the Constitution. To Baba Saheb Ambedkar, nothing was dearer than the welfare of the downtrodden communities (Shankaran, 2000:08).

#### **B. Constitutional Safeguards**

The list of Scheduled Castes was notified by the President of India in accordance with the provisions in Articles 341 of the Indian Constitution in 1950. In order to belong to a Scheduled Caste, a person must profess either a Hindu or a Sikh or a Buddhist religion. The list of Scheduled Tribes was notified by the President of India in accordance with the provisions in Article 342 of the Indian Constitution. Religion is not a bar in the case of Scheduled Tribes.

The constitutional safeguards for the members of the Scheduled Castes and Scheduled Tribes relate to the removal of the disabilities as well as positive measures to enable them to acquire a dignified position in the national life. The Constitution of India came into effect on January 26, 1950. An important part of



the Constitution and of great significance to the women and weaker sections is the Directive Principles of State Policy which are fundamental in the governance of the country (Chandra and Singh, 2003:05).

Article 14 of the Constitution guarantees equality before the law and equal protection of rights. Article 15 prohibits discrimination on the grounds of religion, caste, sex or place of birth as well as disabilities in regard to access to public places and also specifically lay down that nothing shall prevent the State from making any special provision for the advancement of any socially and educationally backward classes of citizens or Dalits. Article 16 provides for equality of opportunity in the matter of public employment with specific provision for reservation of appointments or posts in respect of any backward class of citizens. Article 17 abolishes untouchability forbidding its practice in any form and making the enforcement of any disability arising out of untouchability a punishable wrong. Article 23 prohibits traffic in human beings and forced labour. Article 24 bars the employment of children below 14 years in any factory or mine or hazardous occupations. Article 38 envisages a social order and justice in social, economic and political spheres of national life.

### **Reservation Benefits**

The founding fathers of Indian Constitution formulated and implemented reservation policy in order to provide institutional support for the progress of the Dalits and other weaker sections of the society. Reservation is a special regulative policy adopted by the Central, State Governments and Union Territories to ensure institutional support for the development of these deprived sections of the society.

Reservation has been rightly viewed as a protective discrimination which represents affirmative State action to redress the wounds of disabilities and disadvantages among the weaker sections of India. It is primarily intended to reduce the sufferings of the segregated and excluded weaker sections of Indian society. It also fundamentally seeks to compensate the so called natural inferiors for past privations and is wedded to off-set the inherited disadvantages of weak social capital endowments.

The reservation policy had originated in the form of Montague-Chelmsford Reforms in 1919. The British Government decided to earmark certain quota in government jobs for minority communities in 1925. The British Government also issued necessary instructions in 1934 to reserve a definite percentage of vacancies for the depressed classes (described in the Government of India Act of 1935 as Scheduled Castes). This policy was review in 1942 and it was found



that representation of Dalits in public services was not substantial. The Government issued orders in August, 1943, reserving 8.5 per cent of vacancies for them and proposed to consider the question of raising this percentage as soon as a sufficient number of qualified candidates from the Scheduled Castes were available. In June, 1946, however, the percentage of vacancies reserved in favour of Scheduled Castes was raised from 8.5 per cent to 12.5 per cent. The reservation of 12.5 per cent for Scheduled Castes and 5 per cent for Scheduled Tribes continued after the coming into force of the Constitution of India. These percentages were subsequently enhanced in 1970 to 15 per cent for Scheduled Castes and 7.5 per cent for the Scheduled Tribes. Presently, there is a reservation of 15 per cent for Scheduled Castes, 7.5 per cent for Scheduled Tribes and 27 per cent for Other Backward Classes in all the posts under the control of Central Government and Central Public Undertakings. Similar reservations have also been provided in the posts and services under the State Governments/ Union territories. The percentage of such reservations which has been kept in the proportion to the population of these communities varies from state to state. The UPA government had planned to implement reservation policy in respect of promotion of Dalits. The reservation benefits can be classified into educational, employment and political categories. The Article 335 of the Constitution states that the claims of the Dalits shall be taken into consideration while making appointments. This article also provides for relaxation of age limits, reduction in examination fees for entry into government services, lowering down of educational and other qualifications and provision of pre-examination coaching.

Articles 330, 332 and 334 provide for reservation of seats for Scheduled Castes and Scheduled Tribes in the Lok Sabha and the State Assemblies. The number of seats result for them shall bear the same proportion to the total number of seats allotted to that State or Union Territory in the House of people as the population of the Scheduled Castes and Scheduled Tribes based on the preceding census. Accordingly, 106 out of 545 seats are reserved for the members of SC/ST communities. A similar reservation of seats has been provided in the State Assemblies under Article 332. Initially, preservation was provided for a period of 10 years but subsequently the time has been extended after the expiry of every 10 years.

Reservation along with order measures of protection and upliftment of the weaker sections of society, should be viewed as an instrument of larger social policy of the State addressed to a long term goal of creating a civil society through extending effective citizenship right to the vast sections of the population who have been historically deprived and marginalized (Sheth,



1987:09). The primary objective of the reservation policy is to eradicate the social, educational, economic and political inequalities which have existed from time immemorial in different social segments of Indian society (Brahme, 2001:03).

Reservation policy is an embodiment of Constitutional priorities of the independent of India to the goals of social and economic equality. Ultimately, the reservation policy seeks to lift to the socially and economically deprived sections of society from a situation of backwardness (Bhat, 2005:02).

Even after 69 years of independence, a majority of Scheduled Castes and Scheduled Tribes in India could not enjoy the benefit of primary education. A negligible percentage of them receive higher education in the present times according to the latest statistics. The implementation of the policy of reservation in employment has not been satisfactory since a majority of them are not able to reach the prescribed percentage of reservation mainly due to poverty, lack of education, professional experience and specialization. The political reservation has not really

#### **A. Dalits in the Post – Independence Era**

Several policies and programmes were formulated and implemented in the post-independence era to facilitate the empowerment of Dalits who have remained as excluded sections of Indian society historically and structurally. The policy makers, administrators and other stakeholders are sensitized about the development of Dalits in India.

Series of welfare measures for the educational, social and economic development of Dalits have been undertaken since the First Five Year Plan in accordance with the constitutional provisions. Until Fourth Five Year Plan, the special programmes for Dalits were undertaken under the „Backward Classes Sector“. The new strategy for the integrated development of Dalits was adopted in the name of Special Component Plan, Special Central Assistance and the Scheduled Caste Development Corporations which were adopted during the Fifth and Sixth Five Year Plan (Chaurasia, 1990:06).

During the last six decades of planned development, India’s economy has registered commendable progress in a number of sectors of national development. Despite launching of special schemes / programmes for Dalits in the post – independence era, they are still trailing behind in comparison to other sections of society economically and otherwise (Arles, 2001:01)



The statistics reveal that while the outlays for Scheduled Castes and Scheduled Tribes have been around 3 percent till the Fifth Plan. The plan outlays shot upto 3.41 percent in the Six Plan and 4.02 per cent in the Seventh plan. Undisputedly, the two special plans have been responsible raising the earlier depressingly low level of investment for the two scheduled communities.

The economic planning in India started in 1951 with First Five Year Plan. In the First Five Year Plan schemes were largely confined to education and allotment of agricultural land. The same policy continued in Second Five Year Plan. In the Third Five Year Plan, education received high priority with additional emphasis on technical and vocational training and education. Among the schemes for economic development, stress was laid on the allotment of agricultural land, special financial support to Scheduled Caste farmers, village artisans, traditional craft and small scale industries. In the Fourth and Fifth Five Year Plans emphasis on economic and educational programmes continued. In the Sixth Five Year Plan significant modification was made in the strategy and methodology in the development of Scheduled Castes and Tribes. Special component plan was adopted to provide beneficiary – oriented developmental support. In the Seventh and Eighth Five Year Plans, emphasis remained on beneficiary – oriented programmes of socio-economic development. In Ninth Five Year Plan, emphasis was placed on empowering the landless rural SC families and providing legislative support for ownership of land. These measures thus intend to provide some source of income and also to build the human resource capabilities of Scheduled Caste persons (Thorat, 2000:11).

The Tenth Five Year Plan (2002-2007) and Eleventh Five Year Plan (2007-2012) also continued the empowerment – oriented programmes for Scheduled Castes and Scheduled Tribes. However, the outlay for the empowerment of Dalits is not in accordance with their population and magnitude of poverty and under-privileged status. The prominent programmes which have been implemented in the post-independence era for the development of Dalits include Million Wells Scheme, Indira Awas Yojana, Ambedkar Chikitsa Yojana, Ambedkar Samajik Samata Kendra Yojana, national scholarship scheme for Dalit students, financial assistance to Dalits students, establishment of Ambedkar centers, centrally sponsored scheme of hostels for SC/ST boys and girls, scheme of upgradation of merit of SC/ST students, residential schools for SC/ST students, provision of loans to SC/ST people under micro finance scheme, provision of loans to family of Safai Karmachari on low interest rate, national scheme of liberation and rehabilitation of scavengers and their dependence and so on.



From the very dawn of the independence, the governments have been taking certain remedial steps for the upliftment of the socio-economic status of Dalits in India. The state has put in place laws, policies and programmes without which even the modest progress in the overall situation would not have been possible. However, these welfare measures are quite inadequate and have to be more effectively implemented in order to enable the Dalits to overcome the continued subordination, exclusion and exploitation in India society.

The extreme economic backwardness, social retardation and virtual stagnation have aggravated the situation for ages and pushed the Scheduled Castes and Scheduled Tribes to large scale exploitation. Proper social and economic status is very vital to progress in a caste – ridden society like ours. It is because of this that the Scheduled Castes and Scheduled Tribes have no major say in the politico – ritual activities. Caste plays an important role in Indian society at every stage. Caste is also taken into consideration at every stage of human life and almost all activities revolve round the pivot of caste (Chaurasia, 1990:06).

A very large section of Scheduled Castes are engaged in rural and urban informal or unorganized sector. High incidence of landless and near landless households among the Scheduled Castes has created an enormously high level of manual wage labour among them. With high incidence of wage labour associated with high unemployment, under-employment rates, the Scheduled Castes are suffering more from low income, low consumption and high incidence of poverty. This comparative account of the economic position of the Scheduled Castes and others does provide convincing evidence on the continuing economic inequalities associated with castes. It is thus beyond doubt that the historical impact of traditional caste based restrictions on the ownership of property, employment of occupation are still visible to significant extent. The protection against economic discrimination that the Scheduled Castes received in government and public sector is nearly absent in private organized or unorganized sectors. Hence, the extension of protection in the form reservation in jobs or other forms in agriculture and urban industrial sector is necessary (Thorat, 2000:11).

There are more than 3743 castes and sub-castes in Indian Society. The caste system is characterized by a status hierarchy, the scheduled castes or the so-called untouchables are at the base, in fact, at the lowest of the social and ritual status. These sections had, on account of their low social and ritual status, been subjected to a variety of disabilities under the traditional caste system. All



through the ages, the Scheduled Castes had suffered from social injustice and exploitation. They were denied all privileges and benefits as had been enjoyed by the upper castes. Their entries into temples of upper castes, public places, educational institutions, etc. were restricted. On account of their being on the lowest rung of the social ladder, they were forced to take up unclean and menial occupations and jobs, which yielded low incomes. They were associated with a variety of specialized traditional occupations such as scavenging, cobbling, disposal of carcass, basketry, etc. As a consequence, these castes have remained socially, economically and educationally, politically and culturally back-ward for several centuries.

During British period, many of the socio-political reform movements were organized to empower the weaker sections especially, scheduled castes and after independence, the Constitution emphasize social equality, that is equality irrespective of race, caste, religion or gender. Consequently, to achieve equality and social justice, reservation in education and employment was provided to the scheduled castes. Due to these efforts of the government, scheduled castes are getting education and employment in society and thereby showing development. Still, the conditions of scheduled castes are vulnerable in backward areas like Hyderabad-Karnataka region. Hence, the present study was made to assess the socio-economic conditions of scheduled castes in Bangalore Rural district, which is Karnataka.

### **Objectives of the Study:**

#### **The present study is made:**

- To look economic conditions of the scheduled caste groups in Karnataka;
- To know Schemes for the scheduled castes in society
- To study the economic conditions of scheduled castes in Bangalore Rural district.

### **Scope and Methodology:**

The present study was began with literature search and books, journals, web sites, research reports, etc were studied to get theoretical background to the topic and based on theoretical background selected 450 respondents from different castes such as Holeya, Madiga, Dhor, etc living in Bangalore Rural district. Bangalore Rural district and got privilege under Section 371(J) of the Indian Constitution. The scheduled caste respondents from different occupational back-grounds were interviewed to collect primary data on their socio-economic conditions. Both villages and urban areas were covered to select and interview the respondents and collected primary data is analyzed, interpreted and discussed as under.

### 1. Gender-wise Distribution of the Respondents:

It is noted that the information was collected from the respondents of both the gender. The gender-wise distribution of the respondents is shown as under.

**Table No. 1. Gender-wise Distribution of the Respondents**

Particulars	Frequency	Percentage
Male	294	65.3
Female	156	34.6
Total	450	100

It is noted from the above table that of all the respondents 294 (65.3%) are males, whereas the remaining 156 (34.6%) are female respondents.

### 2. Age-wise Distribution of Respondents:

Age of the respondents plays a significant role in the knowledge and awareness about socio-economic, educational, religious and such other aspects. Further, it also helps to know about the knowledge and expertise in their occupation. Hence, the information collected on the age of the respondents is presented in the following table.

**Table No. 2. Age-wise Distribution of the Respondents**

Particulars	Frequency	Percentage
Below 25 Years	37	8.2
26 to 40 Years	151	33.5
40 to 60 Years	143	31.7
Above 60 Years	119	26.4
Total	450	100

Age of the respondents revealed that 151 (33.5%) of the respondents are between the age of 26 to 40 years followed by, 143 (31.7%) are between the age group of 40 to 60 years, 119 (26.4%) are of above 60 years and 37 (8.2%) are of be-low 25 years. To collect information from all the age groups, the respondents of different age groups were surveyed.

### 3. Occupation of the Respondents:

Occupation of the respondents shows the work doing for the livelihood. Earlier all the occupations were based on the caste of the respondents. But, due to globalization, there is increase in education and employment opportunities and

as such, the new employment opportunities made the different castes to take up other professions based on their education. The information on occupations of the respondents covered under the study is presented in the following table.

**Table No. 3. Occupation of the Respondents**

Particulars	Frequency	Percentage
Agriculture	138	30.6
Industry/ Business	45	10.0
Service Sector/ Formal Employment	73	16.2
Seasonal/ Informal Sector employment/ Caste Based Occupations	194	43.1
Any Other	--	--
Total	450	100

The occupations of the respondents shows that majority, that is 194 (43.1%) are engaged in seasonal, informal sector employment and caste based occupations followed by, 138 (30.6%) are engaged in agriculture, 73 (16.2%) are engaged in service sector and formal employment and the remaining 45 (10.0%) are engaged in industry/ business respectively.

**4. Conditions of Scheduled Castes Due to Welfare Policies of Government:**

The Government has provided many schemes to ameliorate the conditions of Scheduled Castes. As such, many of the castes have developed by getting education and employment in different sectors. As such their socio-economic conditions also improved considerably. In this respect, opinions were collected from the respondents that whether the conditions of scheduled castes improved or not and the collected data is tabulated as under.

**Table No. 4. Conditions of Scheduled Castes Due to Welfare Policies of the Government**

Particulars	Frequency	Percentage
Improved Considerably	173	38.4
Has Not Improved	199	44.2
It is as Bad as Before	43	9.5
Can't Say	35	7.8
Total	450	100



On the developmental conditions of the scheduled castes due to the welfare schemes of the government, of the total respondents covered under the present study, 173 (38.4%) have expressed that the conditions of the scheduled castes is improved considerably, 199 (44.2%) have stated that the conditions of scheduled castes has not improved, 43 (9.5%) have opined that the conditions of scheduled castes is as bad as before and the remaining 35 (7.8%) have not expressed their views on the same. Here the respondents have expressed their dissatisfaction about the social welfare policies of the government, as majority have not gained due to welfare policies formulated for the scheduled castes.

### 5. Faced Bad Situations due to Caste:

The scheduled castes are discriminated, alienated and treated unequal in the society since immemorial days, even though legislations have been already passed by the government to curb such practices. Hence, it was asked to the respondents that whether they have faced any of such bad situations in their life and the collected information is shown as under.

**Table No. 5. Faced Bad Situations due to Caste**

Particulars	Frequency	Percentage
Social Discrimination/ Alienation	128	28.4
Restrictions to Enter Public Places	56	12.4
Lower Treatment at Religious, Cultural and Public Functions	256	56.9
Atrocities from Forward Caste People	31	6.9
Not Faced Any Bad Situations	92	20.4
Total	450	100

It is observed from the above table that, a few of the respondents have faced more than one type of bad situations and a few of the respondents have not at all

faced such bad situations in the society due to their caste. Of all the respondents, 128 (28.4%) have experienced social discrimination and alienation, 56 (12.4%) have faced restrictions to enter into public places, 256 (56.9%) have faced lower treatment at religious, cultural and public functions, 31 (6.9%) have faced atrocities from forward caste people and about 92 (20.4%) have not faced any of such bad situations in their life due to their caste. It is highlighted that even though social discrimination and lower treatment of the scheduled castes have banned long back, still it exists in the society as majority have faced such situations in their life.

### **6.Change in Socio-economic and Educational Conditions of Scheduled Castes since Independence:**

It is noted that the scheduled castes were depressed and deprived in different aspects of the society since immemorial days. However, after the independence, the government has passed much legislation and curbed inequality of the scheduled castes and took measures for the development of the scheduled castes. Hence, it was asked to the respondents that whether there are any change of socio-economic and educational conditions of the scheduled castes since independence and the collected information is tabulated as under.

**Table No. 6. Change in Socio-economic and Educational Conditions of Scheduled Castes since Independence**

Particulars	Frequency	Percentage
Fully Improved	85	18.9
Improved to a Greater extent	113	25.1
No Change	184	40.9
Worse than Before	68	15.1
Total	450	100

On the change of scheduled castes in socio-economic and educational conditions due to government efforts since independence, 85 (18.9%) of the respondents have expressed that it is fully improved, 113 (25.1%) of the respondents have stated that the socio-economic and educational conditions of

the scheduled castes is improved to a greater extent since independence, 184 (40.9%) have remarked that there is no change in socio-economic and educational conditions of the scheduled castes and surprisingly, 68 (15.1%) of the respondents have responded that the socio-economic and educational conditions of the scheduled caste is worse.

### 7. Barriers to the Overall Development of Scheduled Castes:

8. It was asked to the respondents to furnish the barriers for the overall development of the Scheduled Castes in Bangalore Rural district and the collected information is tabulated as under.

9.

#### 10. Table No. 7. Barriers to the Overall Development of Scheduled Castes

Particulars	Frequency	Percentage
Inadequate Caste based Reservation	105	23.3
Regional Imbalance	58	12.9
Negligence of the Scheduled castes	32	7.1
Social Barriers	255	56.7
Natural Factors	--	--
Any Other	--	--
Total	450	100

11.

12. On the barriers to the overall development of the Scheduled Castes, among all the respondents, 105 (23.3%) have agreed that there is inadequate caste based reservation, 58 (12.9%) have expressed that there is regional imbalance, 32 (7.1%) have stated that there is negligence of the scheduled castes and majority, that is 255 (56.7%) have remarked that there are social barriers such as untouchability, social discrimination, inequality, etc.

### 13. 8. Monthly Income:

14. Information on the average monthly income of the respondents reveals the economic power and economic conditions of the respondents as well as their families. The information collected on the average monthly income of the respondents is presented in the following table.

15.

**16. Table No. 8. Monthly Income**

Particulars	Frequency	Percentage
Less than Rs. 5000	98	21.8
Rs. 5001 to Rs. 10000	278	61.8
Rs. 10001 to Rs. 25000	63	14.0
Rs. 25001 to Rs. 50000	11	2.4
More than Rs. 50000	--	--
Total	450	100

17.

18. Average monthly income of all the respondents covered under the study revealed that, the monthly income of 278 (61.8%) of the respondents is between Rs. 5001 to Rs. 10000 followed by, the monthly income of 98 (21.8%) of the respondents is less than Rs. 5000, that of 63 (14.0%) of the respondents is between Rs. 10001 to Rs. 25000 and the monthly income of 11 (2.4%) of the respondents is between Rs. 25001 to Rs. 50000 respectively. The monthly income of the respondents clearly shows that the major portions of the respondents are living below poverty line.

19.

**20. 9. Worth of Properties Owned:**

21. The information was collected on the worth or value of all the properties owned by the respondents and presented in the following table.

**22. Table No. 9. Worth of Properties Owned**

Particulars	Frequency	Percentage
Up to Rs. 50000	124	27.5
Rs. 50001 to Rs. 1 lakh	143	31.8
Rs. 1 lakh to Rs. 2.5 lakhs	30	6.6
Rs. 2.5 lakhs to Rs.5 lakhs	38	8.4
More than Rs. 5 lakhs	29	6.4
Nil	86	19.1



Total	450	100

The worth of properties owned by the respondents shows that, 124 (27.5%) have owned properties worth up to Rs. 50000, 143 (31.8%) have owned properties worth between Rs. 50001 to Rs. 1 lakh, 30 (6.6%) have owned properties worth between Rs. 1 lakh to Rs. 2.5 lakhs, 38 (8.4%) have owned properties worth between Rs. 2.5 lakhs to Rs. 5 lakhs, 29 (6.4%) have owned properties worth more than Rs. 5 lakhs and 86 (19.1%) have not owned any properties.

### Discussion and Conclusion:

Though, government formulated legislations to curb discrimination based on caste, harassment, atrocities and untouchability, in few areas, still it is prevailed. It is also highlighted that many of the scheduled castes are facing bad incidents in public places due to their castes. Many of the scheduled castes are suffering from deprivation in socio-economic and educational aspects. The monthly income of majority of the scheduled castes is very low as they are living below poverty line and are working still in unorganized sector or caste based occupations. Hence, there is need to intervene to the problems of the scheduled castes.

To sum up, it is emphasized to provide free and compulsory higher education to the scheduled castes. There is essential need to organize awareness campaigns against the social in-equality, social discrimination, atrocities and untouchability practiced against the scheduled castes. For this purpose, the social welfare organizations should come forward to address and solve the problems of the scheduled castes. It is also suggested to the scheduled castes to organize themselves in the association irrespective of their individual communities, so as to protect their interests themselves. It is on the part of the government at the local level to address the problems of the scheduled castes in Bangalore Rural District

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**A STUDY ON VARIOUS ELEMENTS OF HUMAN RESOURCE  
MANAGEMENT PRACTICES IN DIFFERENT CONTEXTS:  
THEORETICAL APPROACH**

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**Abstract**

The rapid rise of multinational Corporations (MNCs) from emerging economies has led to greater interest and urgency in developing a better understanding of the deployment and diffusion of managerial strategies from their perspective and without assuming the prevailing any kind of ethnocentric orthodoxy. This paper develops a conceptual framework of global HR strategies and practices in MNCs from emerging economies across their subsidiaries in both developed and developing markets. In this paper, we widen the horizon of International HRM to include HRM strategies and practices from emerging economies. The purpose of the paper is to explore how HRM strategy of the MNCs in emerging economies is formed and how it operates in practice. First, we outline the issues relating to emerging MNCs. Second, we develop a conceptual framework of global HR strategies and practices in MNCS from emerging economies. This provides managerial insights and guidance into the motives, strategic opportunities and constraints in cross national transfer of HR policies and practices.

**Key words:** HRM strategies, HRM Policies, International HRM, MNC

**Introduction**

Starting with generic contribution to the body of knowledge that over the past few decades a number of factors have contributed to the growth of international business. These include the development of major global institutions (such as the World Bank, the International Monetary Fund, World Trade Organisation); large trading blocs (for example, the European Union, North American Free Trade Agreement); developments in information technology, communication and transportation; liberalisation of economies by most developing countries; rapid growth of the multinational enterprise (MNE); globalisation; increased levels of foreign direct investments (FDI) to different parts of the world; and increased number of cross-border mergers and acquisitions (M&A) activities. Alongside are a number both of 'push' factors (such as market saturation, increasing costs) and 'pull' factors (for example, infrastructure, availability of



cheap resources and financial subsidies in specific parts of the world such as China). As a result of such developments, businesses world-wide have become highly interdependent on each other, and it has now become an imperative for managers to work in an international context.

From the scenario, it is now clear that strategic human resource management (SHRM) plays an important role towards the success of an organisation, and to discuss that the approach is threefold: first, to understand the case of the requirement of SHRM from an international perspective; second, to analyse and present an overview regarding the scenario of SHRM from this perspective; and third, to highlight the main challenges faced by the field of SHRM in the global context. In order to deepen understanding of such an analysis in the right context, it is important first to examine issues related to the main differences between domestic HRM and international HRM (IHRM). What are the main perspectives on IHRM? Why it is timely to study SHRM from an international perspective? What are the core debates in the field of IHRM and their implications on SHRM?

### **Explanation on SHRM in global context**

Along with an increase in cross-border strategic alliances, there is also a regular increase in the number of expatriates (see Briscoe and Schuler, 2007). And, similar to the performance of strategic alliances, the failure rate of expatriates is also significant (at times around 50 percent). On average one expatriate assignment for roughly two years costs an MNE about a million dollars. Brewster et al. (2007) highlight how a more strategic approach to managing expatriates can help in minimising their failure rates.

A related factor is the opening of markets by most developing countries to foreign companies, which creates immense opportunities and challenges for HRM researchers to examine the status of SHRM. For example, China liberalised its economic policies in 1978 and India in 1991, as a result of which these countries have become very attractive for foreign direct investments and now host many MNEs' operations. There is some information on the contribution of HR in MNEs operating in emerging markets (see, for example, Bjorkman and Lu, 1999; Hannon et al., 1995) and also on some in emerging markets (see Budhwar, 2004), but there is a strong need to conduct more research to obtain a more comprehensive picture of the scene.

Apart from globalisation, other prominent terms include 'outsourcing' and global movement of human resources, which are becoming topics of hot debate in various circles. In the case of outsourcing, from an HR perspective, the challenges emerge from different sides such as which jobs to outsource, how to manage captive units (for example, back offices created by MNEs in countries like India), how to retain, motivate and manage human resources in Western



firms that are continuously outsourcing jobs overseas. The creation of free trade economic areas and trading blocs (for example, the European Union) is now allowing people to move more freely across nations and work (a good example is that of large number of Poles moving to UK). In 2006 alone, close to 200 million people globally were working outside the country of their origin (BBC, 2006). Also, there is a strong emerging trend in the increase of ‘self-initiated repatriates’ going back to their countries of origin (for example, to Ireland, India and China). The majority of such individuals are well experienced with good core competencies, and their proper management could be beneficial for their respective countries and organisations. At present, there is no data about this.

When people from different countries move internationally, they obviously contribute to increasing diversity and multiculturalism across the globe. Howritz et al. (2002) highlight the complexities involved in managing such diverse workforces and the challenges for the HR function. There is emerging research evidence highlighting how management of diversity at the workplace can help organisations to achieve competitive advantage and the clear role of SHRM in this regard (see Tatli, 2005). Such developments certainly raise the need to examine SHRM from an international perspective.

### **SHRM: an MNE perspective**

Perhaps one of the most dominant dilemmas that pervades debates on how to manage human resources in international operations is that of ‘global integration’ (standardisation) versus ‘differentiation’ (local responsiveness). This sums up the need for subsidiaries to adapt to local conditions and also the need to integrate across the MNE as a whole. The swing factors for emphasising either one or both aspects of this dilemma come from the environment, mainly externally, in the form of pressures to comply or make tradeoffs (Lawrence and Lorsch, 1969) and to coordinate HR activities between an MNE’s headquarters and its subsidiaries (Evans et al., 2002; Rosenzweig, 2006). Prahalad and Doz (1987) highlight this integration / differentiation dilemma to explain the challenges faced by MNEs while pursuing global vision and also meeting local needs. Bartlett and Ghoshal (1989) have added the dimension of simultaneously achieving global standardisation and local responsiveness as a ‘transnational solution’ while facilitating global learning and sharing of best practices. Such a solution rises above trying merely to create a balance of opposing pressures, and perhaps offers a template for HRM to play both a proactive and strategic role in helping MNEs to achieve their ambitions.



## Factors affecting strategic move and a proposed framework

Schuler et al. (1993) suggest an integrated contingency framework for evaluating strategic international HRM. They identify two sets of factors determining strategic international HRM in MNEs. These are: exogenous factors (industry characteristics and country / region characteristics) and endogenous factors (structure of international operations, headquarters international operations, competitive strategy and experience in managing international operations). It is important to note that these factors are competitive in nature, and barring country / region characteristics, operate at the organisational level. Schuler et al.'s theoretical framework is complicated as it links these factors to both strategic MNE components (such as inter-unit linkages, i.e. how MNEs manage their various operations and internal linkages) and the different strategic international HRM issues faced (i.e. how MNEs effectively operate within the confines of local laws, politics, culture and economy). They differentiate three strategic international HRM functions: orientation, resources and location; four strategic international HRM policies and practices: staffing, appraising, compensation and developing; and five MNE concerns and goals: competitiveness, efficiency, local responsiveness, flexibility and learning, and transfer. Based on these complicated connections, Schuler et al. (1993) present a number of theoretical propositions that need to be tested to support the proposed contingencies.

De Cieri and Dowling (2006), building on Schuler et al.'s (1993) work provide a framework for SHRM in MNEs. This includes the influence of both external factors (industry characteristics, global, regional and national characteristics and inter-organisational networks and alliances) and internal ones (such as MNE structure, MNE strategy, corporate governance, headquarters' international orientation and organisational culture) on SHRM and MNE concerns and goals (such as efficiency, flexibility, competitiveness and balance of global integration and local responsiveness). Though it seems to be a comprehensive framework to examine SHRM issues in MNEs, it is highly prescriptive and needs the support of empirical investigation to prove the applicability of its different aspects.

Budhwar and associates (see Budhwar and Sparrow, 1998; 2002; Budhwar and Debrah, 2001) propose an integrative framework for cross-national HRM comparisons. Basically, they highlight the main factors and variables that influence HRM in different cross-national contexts. They divide these determinants of HRM into three categories: national factors (involving national culture, national institutions, business sectors and dynamic business environment); contingent variables (such as age, size, nature, ownership, life cycle stage of organisation); and organisational strategies (such as those



proposed by Miles and Snow, 1984 and Porter, 1985) and policies related to primary HR functions and internal labour markets. Budhwar and Khatri (2000) and Budhwar and Sparrow (1998) demonstrate the applicability of this framework in successfully revealing the scenario of SHRM both in India and Britain.

### **Strategic Integration**

Moving beyond the integration / differentiation debate, Bird and Beechler (2007) propose an alternative approach focusing on the ‘consistency’ required between an MNE and subsidiary business strategy, and between an MNE and subsidiary HRM practices. This twin need for consistency is determined by both the strategies adopted by the MNE (for example, cost leadership and product differentiation) and the nature of international competition in which it is involved (i.e. multi-domestic competition, which is independent of competition in other countries, and global competition between countries). For example, global industries pursuing a cost leadership strategy will demand greater coordination, hence implying more pressure for internal consistency and to be highly integrated with the parent (i.e. there is more need for consistency between the parent and subsidiary business strategy). On the other hand, subsidiaries of MNEs adopting a product differentiation strategy in multi-domestic industries are more likely to be less integrated with the headquarters (i.e. can do with less consistency between the parent and subsidiary business strategy).

In the case of HRM strategy alignment between headquarters (parent) and subsidiaries, HRM constitutes the most decentralised of an MNE’s functions, but given the pressures of the dynamic business environment from globalisation (and other factors), Bird and Beechler (2007) propose the need for greater coordination and consistency between the two (i.e. parent and subsidiary). Unlike the abovementioned consistency between parent and subsidiary business strategy, in the case of HRM strategy the situation can be opposite, i.e. MNEs pursuing a cost leadership strategy in multi-domestic industry will strive for consistency between parent and subsidiaries as the firm needs to modify its practices from country to country to achieve similar results (i.e. cost advantage) and accordingly needs guidance from the headquarters to develop appropriate HRM systems for specific subsidiaries. On the other hand, MNEs pursuing a product differentiation strategy in multi-domestic industries International HRM, will experience less pressure for parent–subsidiary HRM consistency.

### **Acknowledging empirical investigation**

We provide information from empirical investigations in foreign operations of

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MNEs in different settings regarding the extent to which their HRM contributes to improving organisational performance. Over the years, studies have examined the nature of HRM practices found in foreign-owned subsidiaries of MNEs (see, for example, Gunnigle et al., 2002; Rosenzweig and Nohria, 1994). Rosenzweig and Nohria (1994) investigated whether HRM practices resemble local firms or their headquarters, finding that out of six HRM practices four were closer to local practices. A study of foreign-owned subsidiaries in Taiwan (Hannon et al., 1995) also showed that the HRM practices of MNEs overall were more localised than globally standardised, indicating stronger local than international institutional pressures. Similar results emerge from a recent examination by Bjorkman and Budhwar (2007) about the kind of HRM practices being implemented in 76 Indian subsidiaries of overseas firms. Their results show that local adaptation of HRM practices is positively related with the performance of foreign firms operating in India. Some scholars have also argued that MNEs sometimes blend global standardisation with local responsiveness (Taylor et al., 1996).

### **SHRM: A cross-cultural comparative perspective**

As mentioned above, both cross-national comparative HRM and cross-cultural HRM analysis are included within the cross-cultural comparative perspective. The scenario regarding SHRM from different national settings is presented along with a culture-based analysis of it. First we focus on the key debate within SHRM, i.e. the extent to which it helps to improve organisational performance. The majority of the research within this area has been conducted within a US and UK context. In order to conduct meaningful research on this theme, it is important to be aware of the key components needed to investigate the impact of HRM on firms' performance. Katou and Budhwar (2006; 2007) present a list of different aspects of an operation model useful for examining linkages between SHRM and firms' performance. These include: HRM policies and practices, business strategies, controls (such as size, age and life cycle stage of the organisation), organisational performance (such as effectiveness, efficiency, quality) and HRM outcomes (such as skills, attitudes, behaviours).

### **Recruitment and Selection, and Performance Management**

We also address two HR operational activities, employee selection and individual performance management and appraisal. We have chosen them because:

1. We have good evidence for their effect on organizational performance. The evidence for employee selection is particularly robust (Schmidt and Hunter, 1977). The evidence for performance management is also robust, although oblique: it documents the effect of objective setting and feedback on

performance, both central features of performance management (Walters, 1995).

2. Both are relevant to Evans and Rauch's research. Employee selection is one of the two 'Weberian' elements on which they focus, and performance management is implicit in their second element, predictable career progression. Moreover, we have seen already that WDR 1997 emphasized merit-based selection, and it also appears in several of the surveys that Kaufmann and Kraay draw on.
3. We know from previous studies that there are substantial national differences in the practice of performance management. Countries as far apart as Denmark and Japan have resisted the Anglo Saxon model that focuses exclusively on the individual's performance (Brewster and Hegewisch, 1994; Love et al., 1994; Milliman et al., 1998).

Readers who are boggling at the apparent implication that the elaborate SHRM model and associated HRM practices are widely applied, or even applicable, in developing country governments should be reassured that the question of applicability is one which our study explicitly poses.

### **Internationalisation and restructuring in MNCs**

The reorganisation of production

The exploration of the paper is the manner and extent to which MNCs operating in the manufacturing sector are relocating and segmenting their production across borders as they internationalise in order to take advantage of low-cost labour. Debate over how MNCs are behaving in this regard is ongoing. On the one hand, advocates of globalisation argue that MNCs have an unfettered ability to transfer capital from one country to another in order to seek out low-cost labour market advantages (see Hirst and Thompson, 1996). On the other, there are those who suggest that this view is far too simplistic. Recent research in the automotive parts sector by Meardi et al. (2006) for example, shows the complexity of this issue. Firstly, the authors make an important distinction between two difference types of production relocation between high- and low-cost sites, namely, direct and indirect. Direct relocation, as the term suggests, involves the physical transfer of production activity from one location to another and is, contrary to the predictions of the globalisation thesis, a relatively rare occurrence. In contrast, indirect relocation is said to occur when a company invests in production facilities based in low-cost countries in preference to its existing sites in higher-cost areas. As the authors point out, in terms of measuring the occurrence of indirect relocation within MNCs, this is something very difficult to assess due to the dynamic nature of companies' investment decisions.



Meardi et al. go on to suggest that a company's scope for direct and indirect production relocation is contingent upon a range of different factors. One factor concerns a company's motivation for foreign direct investment and whether it is market or efficiency-seeking. If a firm is positioning in order to enter new markets, the potential scope for production relocation is much less than if a firm is efficiency-seeking. A second factor relates to whether a company seeks only low-cost labour advantages or whether it has other requirements, such as the need for specific labour skills, labour flexibility and high productivity, issues which add to the complexity of relocation decisions. A third factor concerns whether a company chooses to segment its production between high- and low-cost sites or to standardise and make common its production across locations, with the potential scope for relocation being much greater under the former scenario. A final factor concerns the extent to which companies are driven to locate according to the requirements of their customers or whether they have autonomy over location decisions. Companies which have the latter, have greater scope to relocate to lower-cost locations.

When considering the nature of this type of restructuring in MNCs as they internationalise, a further aspect which requires further research, and which this paper investigates, is the spatial scope of that restructuring. The ongoing debate over what shapes MNC behaviour has been traditionally rather polarised between the impact of globalisation and a focus on the national influence. In one respect there is a strongly held notion that globalisation means that national economies are becoming increasingly irrelevant and thus MNCs, which are genuinely footloose, will locate and relocate their operations around the world in order to obtain the highest returns (e.g. Bartlett and Ghoshal, 1998). Conversely, there is continuing debate about the extent to which MNCs are embedded in their country of origin and how the process of internationalisation is shaped by the cultural, legal and institutional constraints of the 'national business system' (Whitley, 1991; Morgan et al., 2001; Ferner and Quintanilla, 2002).

In a recent publication, Ferner et al. (2006) consider how intermediate levels of analysis directly above and below the national business system have been largely neglected and hence there is a need to become more sophisticated in our analysis of what shapes MNC internationalisation activity. One level of potential influence that remains highly under-researched is that of the region. In his 1969 work, Perlmutter describes three distinct strategic dispositions in an MNC; ethnocentrism, polycentrism and geocentrism. Later a further predisposition was added, that of regiocentrism (Heenan and Perlmutter, 1979) and represents a distinctive regional orientation to the way MNCs choose to operate. In spite of this addition to Perlmutter's typology over twenty five years



ago, the regional influence upon MNC activity has remained largely neglected by researchers.

However, there are some recent studies which have highlighted the significance of the region in shaping the cross-border production relocation and segmentation behaviour of MNCs. Edwards (2003) for example explains that studies have shown how the creation and extension of regional trade blocs in areas such as Europe and North America have given MNCs fresh incentives to review their cost structures on a regional basis and develop pan-regional strategies involving the rationalisation of sites and the closure of plants in higher cost countries. Similarly, Marginson (1994) considers how regional economic integration in the EU has made it easier for MNCs to segment their operations across countries within the region, placing more labour intensive, low-skilled work in those countries that seek to attract FDI based on a low-cost and deregulated labour force and retaining more capital intensive, high-skilled work in the high-cost countries in the west and Scandinavia.

#### Organisation and management restructuring

The second issue considered by this paper concerns the nature of organisational and management restructuring in manufacturing based MNCs as they internationalise and the spatial scope of that restructuring. According to Bartlett and Ghoshal (1998), as MNCs internationalise they need to move towards an 'integrated network' or 'transnational' structure. This enables a company to follow a more effective multi-dimensional business strategy aimed at the simultaneous achievement of efficient operations, local responsiveness and company-wide organisational learning.

Rugman (2005) is one author who is critical of Bartlett and Ghoshal's omission in considering the influence of the region in shaping MNC strategy as these firms internationalise and move towards transnational. He argues that, as a company internationalises, it is not always easy to implement global strategies. Aspects of administrative heritage and the socialisation of the physiology and psychology of the organisation can act as obstacles and therefore MNCs may find it easier to take a more regional approach to strategy. In a similar vein, Verdin et al. (2003) consider how an MNC might follow a regional strategy as an 'undershooting' strategy which allows a company to take a 'step by step' approach on the path to globalisation. Such an approach allows a company to keep a check on its progress as it internationalises and to test, amend and improve its strategy along the way. Whilst highlighting the importance of recognising different choices in spatial logic, these authors suggest that MNCs will adopt either a global or a regional strategy and structure as they internationalise. However, a further possibility, to be examined in this paper, is that MNCs are actually adopting a dual or 'hybrid' logic, combining a mix of a



regional and global approach to their organisational and management structures to support their internationalisation strategies.

#### HRM restructuring

The next issue to be addressed in this paper is concerned with how HRM is evolving in response to business restructuring and furthermore, whether any restructuring is following a regional or global logic. The adoption of multi-dimensional business strategies by MNCs as they move towards transnational has significant implications for the structure of HR, as such an approach requires an increasingly more sophisticated and integrated HR system to support it (e.g. Bartlett and Ghoshal, 1998; Boxall and Purcell, 2003; Legge, 2005; Scullion and Paauwe, 2005). In light of this, there is a strand of literature that considers how the nature of HRM in MNCs might evolve in order to more effectively support a move towards transnational.

#### Discussion and Conclusion

One area of potential change concerns corporate HR taking on more centralised control over HRM. A study by Scullion and Starkey (2000) for example, which looked at the role of corporate HR in UK MNCs, found that some companies could be classified as transition firms. These were firms that were in the process of shifting away from a decentralised approach to HR, taking greater control over management development and the management of expatriates, leading the authors to conclude how such 'recentralisation' might be a new trend within MNCs.

Linked to the notion of control, Bartlett and Ghoshal (1998) also consider how in the transnational company, corporate HR needs to achieve more strategic coordination of HR activities on a global basis. This involves the creation and management of synergies and networks across the organisation and ensuring that mechanisms are in place to diffuse knowledge throughout the company (Boxall and Purcell, 2003; Legge, 2005).

A further structural change that may occur as firms move towards the transnational 'network' is that subsidiaries that are located outside of an MNC's home-country have the opportunity to develop specialist and even strategic roles (Bartlett and Ghoshal, 1998). In terms of HR, this represents a further area of potential change as companies internationalise which the paper will consider, with overseas subsidiaries developing roles as strategic partners, specialising in areas of HRM policy and practice development and reverse diffusing best practice throughout the company. Whilst the literature relating to HRM restructuring offers plenty of insight into how the nature of HRM might change in response to business restructuring, how the spatial scope of HRM restructuring might evolve within MNCs is very much neglected.



Finally, it could be concluded as whether business and HRM restructuring in MNCs originating from difference regions is occurring in a manner which reflects a more convergent or divergent approach. In the political economy literature, Hay (2000) suggests that an effect of regional economic integration is that national capitalisms are likely to converge intra-regionally and diverge inter-regionally. This is because regional level institutional structures, policy and laws ‘mediate, refract and filter’ globalisation pressures and shape responses at the national level by narrowing room for manoeuvre domestically. It is well known from the literature that MNCs continue to be highly influenced by their home-country national business systems and thus it is possible that at the level of the firm, regionalisation will cause convergence in activity between firms originating from the same region, but divergence inter-regionally.

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## नासिरा शर्मा कृत 'पारिजात' उपन्यास में सांस्कृतिक दृष्टि

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सारांश :-

संस्कृति शब्द का प्रयोग एक विशिष्ट अर्थ में होता है, जिसका अभिप्राय मानव जाति के रहन-सहन, आचार-विचार, भावनाओं, विश्वास, विचारों तथा विभिन्न प्रकार की उपलब्धियों के समग्र रूप से हैं। संस्कृति के दो विशिष्ट पहलू माने जाते हैं जो आपस में एक-दूसरे से जुड़े हुए हैं। एक ओर संस्कृति मनुष्य की क्षमता, कुशलता, जीवन के आदर्शों एवं प्रतिमानों को दर्शाती है, तो दूसरी ओर वह मनुष्य की भौतिक उपलब्धियों से भी हमें अवगत कराती है। इससे ही मनुष्य अपनी मूलभूत आवश्यकताओं को पूरा करने में सफल हुआ है। संस्कृति के कारण ही मनुष्य, विकास की प्रक्रिया में अन्य जीवों की अपेक्षा अधिक सफल और विकसित प्राणी हैं।

संस्कृति शब्द दो शब्दों से मिलकर बना है – सम तथा कृति। 'सम' उपसर्ग का अर्थ है 'अच्छा' तथा 'कृति' शब्द का अर्थ है करना। हिन्दी में संस्कृति शब्द अंग्रेजी के 'कल्चर' शब्द लैटिन भाषा के 'Colere' शब्द से बना है जिसका अर्थ है जोतना। 'आक्सफोर्ड डिक्शनरी' में 'कल्चर' शब्द की परिभाषा इस प्रकार है – "मन का शिक्षण तथा परीक्षण, जिनसे रुचि एवं व्यवहारिक आचरण का निर्माण होता है, संस्कृति के उपादान है। संस्कृति सभ्यता का बौद्धिक पाश्वर है, जिससे हम सर्वोत्तम के साथ अपना संसर्ग स्थापित करते हैं।"<sup>1</sup>

शोध प्रविधि :- इस शोध पत्र में प्राथमिक एवं द्वितीयक शोध सामाग्री के द्वारा अध्ययन किया गया है। इसके साथ-साथ विद्वानों का मार्गदर्शन, पत्र-पत्रिकाओं के अध्ययन को समाहित किया गया है।

क्रोबर एवं क्लकहॉल के शब्दों में – "संस्कृति व्यवहार के प्रतिरूपों, स्पष्ट तथा अस्पष्ट के मिलने से बनती है जो मानवीय समूहों को विशिष्ट उपलब्धियों के रूप में प्रतीकों के द्वारा प्राप्त किया जाता है और हस्तांतरित होता है।"<sup>2</sup>

किम्बाल यंग का मत है – “संस्कृति के अंतर्गत मनुष्य की सम्पूर्ण सामाजिक विरासत एक पीढ़ी से दूसरी पीढ़ी को हस्तांतरित होने वाला समस्त आशाओं और अनुभवों की सम्पूर्णता का समावेश होता है।”<sup>3</sup>

उद्देश्य :-

अतः परिभाषाओं के विश्लेषण से ज्ञात हो जाता है कि संस्कृति एक सामाजिक विरासत है, जो एक पीढ़ी से दूसरी पीढ़ी में स्वतः हस्तांतरित होती है।

स्त्री रचनाकारों में अपनी विशिष्ट पहचान रखने वाली वरिष्ठ लेखिका नासिरा शर्मा पहली मुस्लिम महिला हैं जिन्हें साहित्य अकादमी द्वारा पुरस्कृत किया गया। नासिरा शर्मा कृत उपन्यास ‘पारिजात’ को जीवन का महाआख्यान या जिंदगीनामा कहा जा सकता है। सन् 2016 में साहित्य अकादमी पुरस्कार से सम्मानित होने वाले उपन्यास में मानव कर्तव्य की गूँज आरम्भ से अंत तक व्याप्त है। ‘पारिजात’ उपन्यास एक ऐसी कृति है जो गंगा-जमुनी संस्कृति को परत-दर-परत खोलती है तथा मानवीय संबंधों एवं भावों को भाषा के माध्यम से पाठक के अन्दर जीवित रूप में उपस्थित करती है। लेखिका ने इस कृति के माध्यम से भारतीय इतिहास का अन्वेषण किया है तथा अनेक तथ्यों, विवरणों, ज्ञात-अज्ञात जानकारियों के माध्यम से सच्चाइयों का उद्घाटन किया है यह हिन्दू-मुस्लिम की साझी संस्कृति का लम्बा इतिहास है साथ ही भारतीय एवं पाश्चात्य छवि तथा गुरु-शिष्य के संबंधों व समुदाय विशेष के लिए पाश्चात्य पूर्वाग्रह से चोट खाई हुई संवेदनाओं को एक नवीन आयाम देने वाली महत्वपूर्ण रचना है।

समस्या :-

‘पारिजात’ (रोहन का पुत्र) यद्यपि उपन्यास की नजरों से ओझल हुआ प्रतीत होता है किन्तु यह प्रहलाद दत्त, नुसरत और जुफिकार तीनों प्रगाढ़ मित्र परिवारों का अकेला वारिस है। ये तीनों परिवार हिन्दू-मुस्लिम सांस्कृतिक एकता के साक्षात् प्रतिबिम्ब हैं। तीनों परिवारों के मध्य अकेली लड़की रुही के जन्मोत्सव को ये सभी मिलकर मनाते हैं। रुही को तीनों परिवार अपनी ही बेटा मानते थे – “यह मेरी बेटा है।” प्रहलाद दत्त रुही को देख कहते – “यह चाँद तो मेरा है।” जुफिकार उसे गोद

में ले उछालते – “लड़कियाँ घर की रौनक होती हैं।” ..... चारों बच्चे इस मोहब्बत के पालने में झूला झूलते हुए बड़े हुए, जहाँ सबके घर के दरवाजे इनके लिए खुले थे और सारे घर इनके अपने थे।”<sup>4</sup>

समाधान :-

उपर्युक्त उदाहरण में लेखिका ने हिन्दू-मुस्लिम सांस्कृतिक एकता को दर्शाया है।

‘पारिजात’ उपन्यास के अंतर्गत कर्बला के युद्ध की घटना को केन्द्र में रखते हुए रोहन को पता चलता है कि वह हुसैनी ब्राह्मण समुदाय से है जिसका संबंध हिन्दू और मुस्लिम दोनों से माना जाता है, जो मिली-जुली संस्कृतियों की मिसाल था। रोहन अपनी संस्कृति एवं सांस्कृतिक विविधता से परिचित होने के लिए तथा अपने बेटे ‘पारिजात’ के लिए वह हुसैनी ब्राह्मणों के मूल पर रिसर्च करके पता लगाता है कि हुसैनी ब्राह्मण – “न हिन्दू थे, न मुस्लिम।”<sup>5</sup> इन्हें न किसी मुसलमान ने चुनौती दी है, न ही किसी हिन्दू ने।

अतः लेखिका ने यह स्पष्ट कर दिया है कि यह मिली-जुली संस्कृति का ही एक हिस्सा थे। यह भी सत्य है कि हमारी यह मिली-जुली संस्कृति पाश्चात्य सभ्यता से तो बेहतर है।

नासिरा शर्मा ने ‘पारिजात’ उपन्यास में मुहर्रम को हिन्दू मुस्लिम एकता का प्रतीक बताकर उसका सुन्दर चित्रण प्रस्तुत तो किया ही है, साथ ही हुसैनी ब्राह्मण के माध्यम से अरब की धरती का संबंध बड़े कलात्मक ढंग से हिन्दुस्तान से जोड़ा है। हुसैन की दुआओं से साहिब सिंह दत्त को सात बेटे मिले थे, उन सातों बेटों को यज़ीद की लौटती फौज से हुसैन का सर नेजे से लेने के लिए लड़ते हुए कुर्बान कर दिए थे। लोक विश्वास के अनुसार – “हुसैन ने जंग बंद करने और हिन्दुस्तान जाने की बात यज़ीद से कही थी।”<sup>6</sup>

कर्बला की घटने वाली घटना को लेकर हिन्दुस्तान में जो मर्सिये लिखे गए उनके लेखक मुसलमानों के साथ-साथ हिन्दू धर्म के भी लोग थे जैसे – सरदार

किशनलाल और नथानीलाल! इसलिए हिन्दुस्तान के मर्सिया किशनलाल जी तमन्ना करते हैं –

“भारत में अगर आ जाता हृदय में उतारा जाता।

चाँद बनि हाशिम का धोखे से न यूँ मारा जाता।”<sup>7</sup>

लेखिका ने किशनलाल जी की यह तमन्ना भारत की अनेकता में एकता की प्रवृत्ति और हृदय की विशालता को दर्शाती है।

निष्कर्ष :-

उपर्युक्त उपन्यास का पात्र रोहन पाश्चात्य सभ्यता के आकर्षण में बंधकर अपने देश से पलायन कर गया था और वहीं एक विदेशी महिला से विवाह भी कर लिया था। अपने मार्ग से भटककर वह जीवन की उपयोगिता को भूल चुका था। तब उसकी सोच कुछ ऐसी थी – “मगर तब तक वह अपने देश, अपने समाज, अपने माँ-बाप, रिश्तेदारों को बहुत घटिया और दकियानूस समझता था ..... उसका बस चलता तो शायद वह अपने को ‘गोरा’ नस्ल बताने में फख्र महसूस करता। अब कम से कम बेटा तो अंग्रेजों की तरह परवरिश पाएगा।”<sup>8</sup>

प्रस्तुत उद्धरण के माध्यम से स्पष्ट हो जाता है कि रोहन का पश्चिमी सभ्यता की तरफ आकर्षित होना और फिर आगे चलकर उसके भ्रम का टूटना पश्चिमीकरण के खतरों से भी आगाह करता है।

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## MOLECULAR PHYLOGENY AND POPULATION STRUCTURE OF EXHIPPOLYSMATA ENSIROSTRIS FROM WEST COAST OF MAHARASHTRA USING MITOCHONDRIAL COI GENE

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### Abstract

Exhippolysmataensirostris is the only species recorded in Area 51 from genus Exhippolysmata, Family Lysmatidae. The purpose of this study was to apply DNA Barcoding technique to support molecular taxonomy by generating protein coding gene, Cytochrome C Oxidase Subunit I (COI) gene databases. The specimens were collected from major fish landing centres of Mumbai region. Genomic DNA was isolated, COI gene was amplified by PCR method and sequenced. Accession numbers MH744809, MH925306, MK341171 were allotted by the NCBI for submitted sequences and are the first record of species published from Fishing Area 51. Generated genetic barcodes were used to study population genetics by aligning protein sequences using Multalin tool. Phylogenetic tree was constructed by Neighbor-Joining method using MEGA software which expresses the interspecific relationship with respect to COI gene. The pairwise distance estimated supports the phylogeny tree. Based on the alignment pattern of protein sequence, the studied species Exhippolysmataensirostris collected from different sites around Mumbai region could possibly belong to the same population. Hence this study supports the classical taxonomy by generating genetic databases.

**Keywords:** DNA Barcoding, Exhippolysmataensirostris, COI gene, Molecular Taxonomy, Molecular Phylogeny.

### Introduction

The progress of molecular science introduced a replacement approach, that relies on nucleotide sequence variabilities among species.

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DNA barcoding is the widely used technique, first proposed by researchers at University of Guelph in Ontario, Canada in 2003. DNA barcode generated from a taxonomically unknown organism is matched against a reference gene library to identify the species (Hebert, et al., 2003a; Hebert, et al., 2003b). Generated COI barcodes can be statistically analyzed to study population genetics and molecular evolution. DNA barcoding is the technique of sequencing a short fragment of mitochondrial DNA generating a 'DNA barcode'. DNA barcode generated from a taxonomically unknown organism is then matched against a reference library of barcodes of known species source in order to identify the species. Since 2004 a universal consortium has been promoting DNA barcoding as a worldwide standard for well-ordered recognizable pieces of proof for taxonomist (Savolainen et al., 2005). It has become a new research hotspot in recent years to obtain DNA barcode fragments which can be used to restructure the phylogenetic relationships of biological groups (Wu et al., 2019).

DNA barcoding guarantees quick, correct species identifications by focusing analysis on a brief standardized section of the genome (Hebert, Cywinska, et al., 2003). In addition, DNA barcoding also provides reliable method for identification of larval forms, damaged specimens and processed food. **It will help to open up the treasury of biological knowledge and increase community interest in conservation biology and understanding evolution. DNA barcoding is essential because if phenotypic differences do not really discriminate satisfactorily with species or if species have polymorphic life cycles and/or have pronounced genetic recombination. For prawns, DNA barcoding is a useful tool for species identification and plays an imperative role in the evaluation of non-described and cryptic species.**

The progress of the molecular science introduced a replacement approach, the relies on nucleotide sequence variabilities among species. (I. Ramadan & A., 2012). Main advantage of DNA barcoding over conventional species distinguishing proof strategies is the capacity to effectively recognize creatures from any stage of life cycle. DNA barcoding has this limit on the grounds that intraspecific variety in DNA



barcodes is commonly much lower than interspecific variety between DNA barcodes (Savolainen et al., 2005), and vitally, in light of the fact that a creature's DNA barcodes does not change as the life form advances from one life phase onto the next. The honesty of DNA sequences through replication and creature development is essential to their role as the "blueprint of life" ("Righting the Wrongs," 2006).

Mitochondrial gene COI have been found useful for correlation between taxonomic ranks and molecular divergence in molecular studies. From several studies, a 650-bp fragment of the mitochondrial gene cytochrome c oxidase subunit I (COI) has been chosen as the standard barcoding marker as it provides strong species-level resolution, high interspecific variation, low intraspecific variation, and relatively universal primers (Hebert, Cywinska, et al., 2003; Smith et al., 2006) for varied animal groups including birds (Hebert et al., 2004), fishes (Ward et al., 2005) and Lepidoptera (Hajibabaei et al., 2006). It is also be used for detection of cryptic species (Ni et al., 2012) and for the identification of fish products (Daniel C. Carvalho et al., 2011; Daniel Cardoso Carvalho et al., 2015). Mitochondrial genomes are considered to have a faster evolutionary rate than nuclear genomes (Brown et al., 1979) and regarded as a suitable study tool for systematics and molecular genetics (Moritz et al., 1987; Page & Holmes, 1998) as it is maternally inherited without recombination through egg cytoplasm (Dawid & Blackler, 1972). In 1998, Batuecas et al. in their study of the genome first obtained the mitochondrial DNA from crustacea - *Artemia*.

Crustaceans have enormous morphological and ecological diversity therefore are tough to spot with traditional approaches and need facilities of skilled taxonomists. Order Decapoda and subphylum Crustacean are most studied group because of its enormous diversity. The classical taxonomy is categorized on the basis of morphological characters, but the data is insufficient to achieve authentication and phylogenetic relationship of species. DNA barcodes produced from a taxonomically doubtful lifeform is a coordinated against a reference library of barcodes of known species source to recognize the species. It has grown to be a modern investigate hotspot in current time to get DNA barcode parts



which can be utilized to rebuild the phylogenetic relationship of biological collections (Wu et al., 2019).

A great diversity of organisms is seen in marine, freshwater and semiterrestrial ecology from order Decapoda especially from crustaceans which represent metazoan group. Crustaceans have enormous morphological and ecological diversity so are difficult to identify with traditional approaches and require help of expert taxonomists. Crustaceans includes crabs, shrimps, lobsters, and stomatopods are ecologically and economically very important group of invertebrates majorly in fishing. Non-penaeids shrimps which are small delicate crustaceans get contribution in economy as well as ecologically as it carries on vital factor in marine food chain.

Around 71% of earth is covered by marine water from which Indian Ocean itself contributes 20% of the world's total ocean area. It is the third largest ocean after the Pacific and the Atlantic Ocean. It is stretched around 70.56 million square kilometres and 6,400 kilometres wide at the equator. It consist of many water bodies namely the Andaman Sea, the Gulf of Oman, the Arabian Sea, the Flores Sea, the Gulf of Aden, the Great Australian Bight, the Java Sea, the Bay of Bengal, the Persian Gulf, the Mozambique channel, the Red Sea, the Savu Sea, the Timor Sea and the Strait of Malacca (Oceans: Indian Ocean—The World Factbook—Central Intelligence Agency, n.d.). The north-western part of the ocean, Arabian Sea covers overall area of about 3,862,000 square kilometres (Arabian Sea | sea, Indian Ocean, n.d.). There is a vast marine biodiversity perceived in the ocean because of the tremendous geographical and climatic variation. Great diversity of flora and fauna observed and recorded but many more yet to be discovered. It is the home and breeding ground of range of animals from small isopods to largest mammal i.e. whale. The Food and Agricultural Organisation (FAO) had divided marine water bodies into 19 different major fishing zones and allotted them with numbers called as fishing areas. The Indian Ocean consist of three different fishing areas such as 51, 57 and 58; named as Western Indian Ocean, Eastern Indian Ocean and Indian Ocean, Antarctic respectively. Western Indian Ocean, Fishing area 51

envelops the east coast of Africa and Madagascar, the west coast of India, Arabian Sea, Red Sea, Persian Gulf and the south coast of the Arabian Peninsula.

Mumbai as the metropolitan city of Maharashtra. Fishing crafts from throughout western coast of Maharashtra are brought to three main landing centers of Mumbai. New Ferry Wharf (BhauchaDhakka) from southeast Mumbai, Versova from northwest part of Mumbai and Sassoon Dock which is the terminal point of the Mumbai suburban were the collection sites. This fish landing centers are historical and were built back 18th century and before that for trading purpose. Fishing area of New Ferry Wharf jetty is towards north i.e. Gujarat-Maharashtra region whereas marine catch is brought to Sassoon dock from southern area i.e. till Ratnagiri-Goa and landing on Versova are from overall western coast from Gujarat till Goa.

This research encourages the incorporation of phylogenetic investigation, ecology, and barcoding technology and develops our understanding of evolutionary biology and other related disciplines.

## Material and Method

### Sample collection and identification

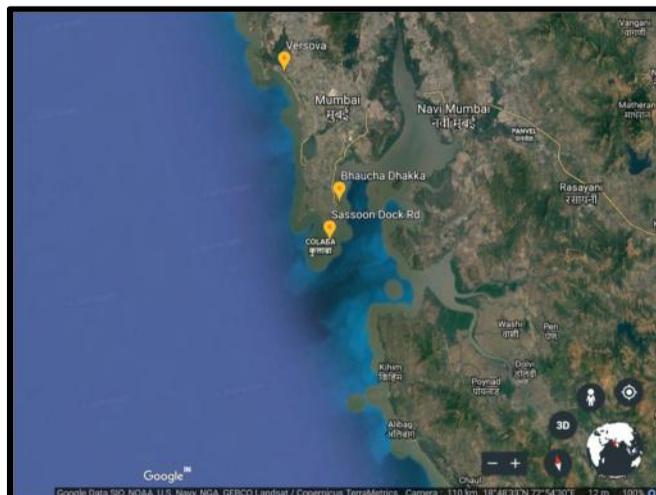


Figure No. 1. Collection sites- Versova, New Ferry Warf (BhauchaDhakka) and Sassoon Dock Samples were collected from the listed major fish landing centers, Versova, New Ferry Warf and Sassoon Dock. Samples were collected early morning so get fresh from June to December 2017. Around 200 specimens were collected and were morphologically identified using field identification keys (Fischer et al. 1984). Collected samples were morphologically identified using field identification keys. The specimens were morphologically authenticated with a certificate by CMFRI, Mumbai.

### **Morphological studies & Molecular analyses**

The specimens of *E. ensirostris* were collected and submitted to Central Marine Fisheries Research Institute, Mumbai for authentication. Shrimp samples were carried to the lab in ice container to maintain its freshness. Fresh muscle tissues are preferred to treat as it effects the quality of DNA. DNA was extracted by standardizing modified CTAB method(Doyle & Doyle, 1987, 1990) with respect to shrimp and further purification by RNase treatment. Genomic DNA was quantified using NANO DROP 2000/200c at 260nm. Agarose Gel Electrophoresis (AGE) technique is used to check the purity of extracted genomic DNA on 0.8% gel.

Polymerase Chain Reaction (PCR) technique was used for the amplification of mitochondrial COI gene using primer LCO1490 (5'-GGTCAACAAATCATAAAGATATTGG-3' and HCO2198 (5'-TAAACTTCAGGGTGACCAAAAAATCA-3') (Folmer et al 1994) in GeneAmp 9700 Applied Biosystem thermal cycler. The reaction volume 25  $\mu$ L contains,100 ng concentration of DNA, 2.5  $\mu$ l of 10X buffer, 2  $\mu$ l of 10 mM dNTP, 1 $\mu$ l of Taq Polymerase and 10 p.mol of each primer. Cycling parameter was optimized as, pre-running at 96 $^{\circ}$ C for 5 minutes, followed by 35 cycles of denaturation at 95 $^{\circ}$ C for 30 seconds, annealing at 50 $^{\circ}$ C for 30 seconds and extension at 72 $^{\circ}$ C for 30 seconds, and followed by final extension at 72 $^{\circ}$ C for10 minutes. Amplified COI gene product was determinedby 1.5% AGE and documented in GEL Documentation System. DNA Sequencing was performed by Sanger's Sequencing Method, from Eurofins, Bangalore, India.

The sequences were analysed and trimmed by Chromas 2.6.4 version software. The sequences were aligned by using Multi Align (Multalin interface page n.d.) software online tool to verify the similarities between the sequences. Forward and reverse sequences were merged by Emboss merger online tool. Basic Local Alignment Search Tool (BLAST) which is an algorithm was performed to compare a sequence with a library or database of sequences. Identification and comparison of the similar protein sequences, BLASTx was carried out. The nucleotide sequences were translated into protein sequence or amino acid sequence using EXPASY (online) software.

The raw sequence data of *E. ensirostris* COI gene were analysed and edited by different bioinformatic tools and software. The raw forward and reverse sequences were trimmed by Chromas Version 2.6.6. (Technelysium Pty Ltd, available from the URL <http://technelysium.com.au/>) software, aligned by Multiple Alignment online software (Multalin interface page, n.d.) and merged by online tool Emboss Merger. The comparison algorithm Basic Local Alignment Search Tool (BLAST) was performed to compare studied sequences with GenBank or database of sequences. The partial mitochondrial COI gene sequences of *E. ensirostris* were deposited in International database NCBI BankIt/GenBank and were published by Accession numbers MH744809, MH925306 and MK341171. The COI sequences of other species belongs to family Lysmata was retrieved from GenBank data bases. MEGA 7 software was used to construct phylogenetic relationships among selected shrimp species.

## Result and Discussion

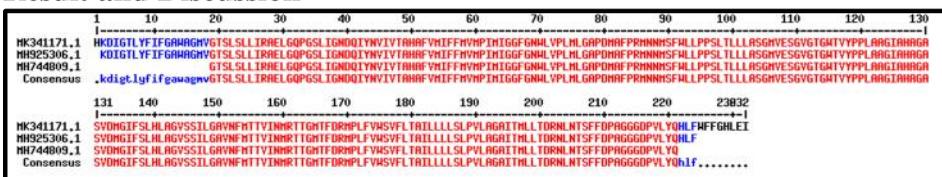


Figure number 1. The multiple alignment result represents the protein sequence alignment of COI gene of *E. ensirostris* collected from three different fish landing areas of Mumbai.

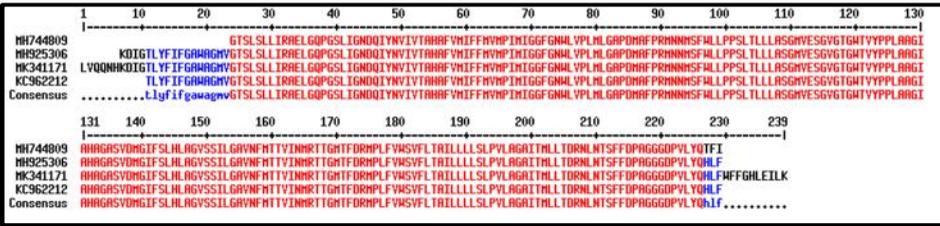


Figure No. 2 The multiple alignment result represents the protein sequence alignment of COI gene of *E. ensirostris* collected from three different fish landing areas of Mumbai compared with other part of world US

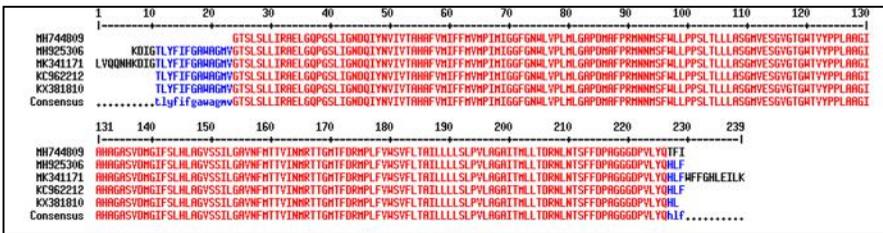


Figure No. 3The multiple alignment result represents the protein sequence alignment of COI gene of *E. ensirostris* collected from three different fish landing areas of Mumbai compared with *E. ensirostris* found in other area and subspecies *E. ensirostrisensirostris*

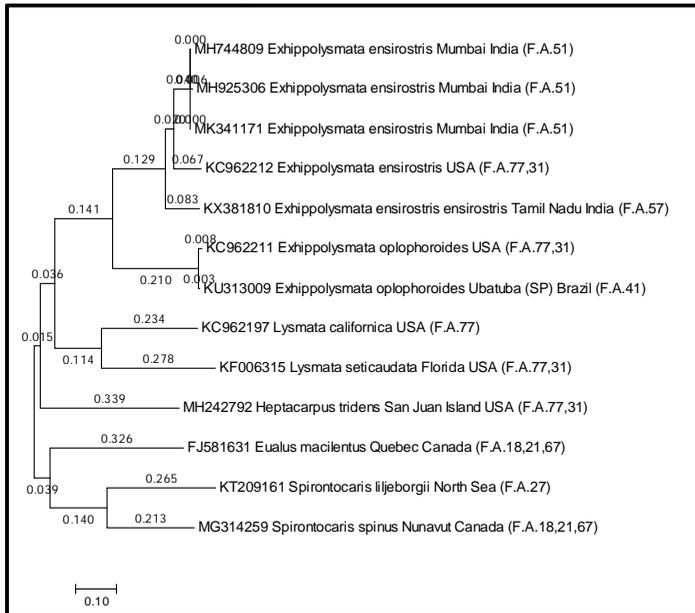


Figure No. 4 Phylogenetic tree showing interspecific relationship between *Exhippolysmata ensirostris* and other members in Family Hippolytidae related to COI gene

	1	2	3	4	5	6	7	8	9	10	11	12	13
1 MH744809 <i>Exhippolysmata ensirostris</i> Mumbai, India (F.A.51)													
2 MH925306 <i>Exhippolysmata ensirostris</i> Mumbai, India (F.A.51)	0.005												
3 MK341171 <i>Exhippolysmata ensirostris</i> Mumbai India (F.A.51)	0.000	0.005											
4 KC962212 <i>Exhippolysmata ensirostris</i> USA (F.A.7731)	0.107	0.113	0.107										
5 KX381810 <i>Exhippolysmata ensirostris ensirostris</i> Tamil Nadu, India (F.A.57)	0.144	0.150	0.144	0.169									
6 KC962211 <i>Exhippolysmata oplophoroides</i> USA (F.A.7731)	0.395	0.403	0.395	0.460	0.444								
7 KU313009 <i>Exhippolysmata oplophoroides</i> Ubatuba (SP), Brazil (F.A.41)	0.395	0.403	0.395	0.444	0.427	0.011							
8 KC962197 <i>Lysmata californica</i> USA (F.A.77)	0.688	0.699	0.688	0.709	0.699	0.667	0.656						
9 KF006315 <i>Lysmata seticaudata</i> Florida, USA (F.A.7731)	0.765	0.777	0.765	0.699	0.720	0.709	0.699	0.513					
10 FJ581631 <i>Eualus macilentus</i> Quebec, Canada (F.A.182167)	0.720	0.720	0.720	0.765	0.754	0.742	0.742	0.800	0.849				
11 MH242792 <i>Heptacarpus tridens</i> San Juan Island, USA (F.A.7731)	0.688	0.699	0.688	0.720	0.731	0.788	0.788	0.731	0.754	0.812			
12 KT209161 <i>Spirontocaris lilljeborgii</i> North Sea (F.A.27)	0.824	0.824	0.824	0.849	0.837	0.914	0.927	0.849	0.914	0.709	0.699		
13 MG314259 <i>Spirontocaris spinus</i> Nunavut, Canada (F.A.182167)	0.812	0.824	0.812	0.765	0.800	0.914	0.900	0.720	0.731	0.699	0.656	0.478	

Table No. 1 Pairwise Distance matrix using Poisson correction model of amino acid sequences.

Multiple alignment was carried out to study the intraspecific relation between *E. ensirostris* collected from various sites to infer population genetics of *E. ensirostris*. The homologous gene COI of *E. ensirostris* from various sites MH744809, MH925306 and MK341171 are from the same gene pool (Fig No. 1). Multiple alignment tool also reveals the relation between geographically isolated species. The zoogeographical study was carried out between *E. ensirostris* found in F.A.51 and 77,31 (Fig No. 2). They were found to be from the same population and poor genetic diversity seen in water bodies as there is not yet isolation of water mass on the globe. There are two subspecies of *E. ensirostris* and the one *E. ensirostris ensirostris* carries the similar conservative COI gene (Fig No.3) that of its parent.

The phylogenetic tree built with the help of Pairwise Distance matrix of *E. ensirostris* and 10 other species sequences (Fig No.5). The cladogram constructed by nucleotide sequence translated to protein sequence with the help of Neighbor-joining method. The constructed tree illustrates two major clades. One group with the *Spirontocaris lilljeborgii* and *Spirontocaris spinus* whereas another group is formed by the remaining



Exhippolysmataensirostris subgroup, Exhippolysmataoplophoroides, Eualusmacilentus and Lysmatacalifornica. Pairwise distribution was constructed by the amino acid substitution per site from between sequences using Poisson correction method. The 3 sequences of *E.ensirostris* studied from different sites shows close intraspecific relation with each other. *E.ensirostris* from USA (Fishing Area 77,31) shows divergence of 0.107-0.113 with *E.ensirostris* from Fishing Area 51. *E.oplophoroides* from USA and Brazil found to be the most recent ancestor with the divergence of 0.395-0.460 followed by *L.californica* and *L.seticaudata*. *Spirontocaris lilljeborgii* and *S.spinus* forms monophyletic group with recent ancestor *Eualusmacilentus*. The optimal tree is shown with the sum of branch length = 2.704 and 187 positions in the final dataset. The nucleotide frequencies are 25.82% (A), 32.89% (T/U), 22.30% (C), and 18.99% (G) with overall mean distance of 0.201. The transition/transversion rate ratios are  $k1 = 2.084$  (purines) and  $k2 = 3.654$  (pyrimidines). The overall transition/transversion bias is  $R = 1.497$ , where  $R = [A * G * k1 + T * C * k2] / [(A + G) * (T + C)]$ . The species with respect to gene COI show homogeneous among lineages. The composition distance with the number of differences between sequences of *E.ensirostris* found in different fishing areas are 0.091-0.107 and 0.035-0.043 with respect to protein and nucleotide sequences respectively.

The order Decapoda is the largest consisting of more than 10,000 species from class Malacostraca. This order includes most familiar crustaceans, such as shrimp, lobsters, crayfish, and crabs. The name Decapoda means 10 legs, or five pairs of legs. The common characters consist of a carapace covers the body, the head and thorax region together are called the cephalothorax, the head consist of a pair of stalk compound eyes and the carapace of abdomen is made up of 6 segments. Distinct morphological character like pattern of overlapping segments are seen in this families. Family Lysmata belongs to the infra order Caridea, the only group which shows distinct remarkable character, the second abdominal segment overlaps the first and third segment. The taxonomy is categorized on morphological basis but morphological data are insufficient to conclude phylogenetic relationship.



MEGA 7 was used to evaluate the phylogenetic relationships among selected species which represent family Lysmata. The phylogenetic tree constructed from NJ method suggested the evolution of homologous protein coding COI gene. After studying, the phylogeny trees describe that the family Penaeidae and Sergestidae are monophyletic group or sister taxa which satisfies the theory that this both families belong to suborder Dendrobranchiata, infraorderPenaidea and superfamily Penaeoidea. The phylogeny tree drawn from16S gene derives that Family Palaemonidae and Hippolytidae are monophyletic group as they belong to infraorderCaridea. But they don't fall under same superfamily, this reason cannot be neglected when phylogeny tree constructed from COI gene doesn't show any close relation between them. Population study is usually studied regarding morphological characters but now a days it can be supported by genetical records. Species found in different areas are morphologically and genetically identical or not can be proved by molecular alignments. The population of *E. ensirostris* found in different areas of Maharashtra coastal region was studied using Multalin tool ("Multalin interface page," n.d.). The multi alignment report shows that all these three species collected from different areas of Mumbai are identical. They are morphologically identical and shows genetical likeness. Phylogenetic tree is constructed by calculating distance matrix between individual taxa. Pairwise distance values estimated shows distance between individual species and help to place them in phylogenetic tree. The Pairwise distance was calculated with Poisson correction model. The distance estimated from COI gene and shows that zoogeographically isolated *E. ensirostris* belongs to the same population.

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## TRIBAL EDUCATIONAL DEVELOPMENT IN ANDHRA PRADESH – A PERSPECTIVE

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### **Abstract**

Social and economic justice, equality of status and opportunities, assurance of the individual's dignity are insured by the Constitution of India for all the citizens among other things. The constitution of India is enriched with several provisions for schedule castes and schedule tribes to safeguard and promote their cultural, social, educational, and economic interests in order to bring them in the mainstream of the nation. However, traditional tribal societies are undergoing a rapid change with the mainstreaming policy of the Indian government. For the tribal communities the process of becoming a part of the mainstream has meant a declining control on their resources and erosion of their cultural heritage. The major issue affecting the tribals in India is displacement: not merely displacement by large projects but resource displacement, thus violating the basic survival rights of tribal communities. Tribal areas reveal a high degree of land alienation. Non-tribals have invaded tribal protected areas. Deforestation, mainly due to exploitation of forests for industrial purposes, is another manifestation of resource displacement. This has resulted in decreasing access to forest resources by tribal communities. This paper to be discussed Tribal Education Development in Andhra Pradesh.

**Keywords:** Social & Economic Status, Schedule Tribes, A.P. Government, Visakhapatnam, Education Development.

### **Statement of the Problem:**

**“A tribe is a group of people connected to one another, connected to a leader, and connected to an idea. For millions of years, human beings have been part of one tribe or another. A group needs only two things to be a tribe: a shared interest and a way to communicate.”**

**— Seth Godin,**



The total number of tribal communities recognized by the government as Scheduled Tribes is 572 in number. Scheduled Tribes are those tribal communities who have been listed so by the President of India in keeping with Articles 341 and 342 of the Constitution. These tribal communities mainly live in Scheduled Areas, or those outlying areas, which during the British times did not come under the direct purview of civil, criminal and revenue administration.

However, traditional tribal societies are undergoing a rapid change with the mainstreaming policy of the Indian government. For the tribal communities the process of becoming a part of the mainstream has meant a declining control on their resources and erosion of their cultural heritage. The major issue affecting the tribals in India is displacement: not merely displacement by large projects but resource displacement, thus violating the basic survival rights of tribal communities. Tribal areas reveal a high degree of land alienation. Non-tribals have invaded tribal protected areas. Deforestation, mainly due to exploitation of forests for industrial purposes, is another manifestation of resource displacement. This has resulted in decreasing access to forest resources by tribal communities. With increasing globalization and privatization, the land rights of tribal areas is under even greater threat since these are regions, which have a high natural resource base and has tremendous potential to meet multiple market demands. Added to resource displacement is project displacement where development projects have threatened the livelihood needs of tribal communities. More than 40 per cent of displaced persons of all large development projects are tribals.

More importantly displacement has been accompanied by erosion of the identity of tribal communities, which is being subsumed within the dominant culture. There is a breakdown in their own community institutions, which hitherto safeguarded their resources, traditional practices and values. In the process the richness and wealth of their knowledge systems, identity and survival with integrity is being destroyed.

Although there are protective laws governing tribal areas these laws are being circumvented or not implemented in spirit. For example the Fifth Schedule of the Constitution of India which is a protective legal framework for tribal areas is under threat of being amended due to the mining lobby in India which is keen to exploit the minerals from the habitats of tribal people. The forest laws and land acquisition laws also run counter to the land rights of tribal communities. The government programmes especially earmarked for tribal areas do not reach the people for whom they are meant due to ineffective implementation systems.



### **The Education in the Tribal Areas of Andhra Pradesh:**

The population of tribal people in Andhra Pradesh is 4,199,481 (6.3 per cent) of the State's population. The literacy rate for total population of the State as per the 1991 Census was 44 per cent (male 55 per cent and female 33 per cent) and these figures have gone up to 61 per cent (male 71 per cent and female 51 per cent) in the 2001 Census, apparently due to the intensive literacy drives initiated by the State government. The corresponding literacy rate among the tribal population was 17 per cent (male 25 per cent and female 9 per cent) as per the 2011 Census and 22 per cent in the 2015 Census. This reveals the gap between the general population and the tribal communities.

Although the statistics show a vast change in literacy levels, the issue of literacy depends on how it is defined and the extent to which it is enabling in qualitative terms. While there are special programmes initiated for adult education, the implementation process is far from effective. Fifty-four years after Independence on November 28, 2001 the Government enacted the 93rd Amendment to the Constitution making the Right to Education a Fundamental Right. It puts the onus of sending children to school on parents rather than the State. It is not enough to talk of fundamental rights and fundamental duties of the citizens. It is equally necessary to dwell on the fundamental duties of the government. The extent to which this enactment will be increasingly backed by resource allocation will be the test of the seriousness of purpose of the government to implement the law.

It is pertinent to look at the education scenario of Andhra Pradesh in this context. As far as elementary education is concerned, the government has undertaken several measures to reach out to tribal communities, such as the Girijana Vidya Vikas Kendras (GWKs) with standards I and II in areas where 'primitive tribal communities' reside; mandal (sub-district) level elementary schools; special residential schools called Ashram Schools mainly in tribal areas; the 'Alternative Schools' etc., and monitoring systems such as the School Complex System. There have also been some special programmes such as bridge courses and back to school initiatives for dropouts. For adult literacy, the State has launched a special programme known as 'Akshara Sankranthi' which is for 'adults' above 15 years of age.

All these attempts fall far short of the specific educational needs in tribal areas. Apart from access to education is the issue of quality of the education process. Many of the existing schools do not have adequate number of teachers. The quality of teaching leaves much to be desired let alone the content, which does not take into account the tribal reality situation.



### **Defining 'Education' in the Tribal Context**

For us 'education' is an integral part of the empowerment process. Empowerment of the tribal community means capacitating tribal communities to secure access and control of their land, forest and water resources as well as sustain and promote viable alternatives for security of their livelihoods. Empowerment thus is an interactive process whereby tribal communities are enabled to participate actively in local governance (decision making that affects their own life situation).

It is in this context that we need to define the role of adult education. For us, educating tribal communities in a more concrete sense means to facilitate processes, which will enable tribal representatives to:

1. Develop an analytical capacity for assessing their external and internal environment impacting on their own communities;
2. develop confidence and capacity to articulate their interests and perspective thereby participating in decision making processes leading to better governance;
3. develop skills to initiate local relevant alternatives to improve livelihoods and challenge external pressures;
4. value self and community history with a critical appreciation of traditional knowledge systems.

We do recognize that adult literacy constitutes an important part of adult education and we have made some attempts in this direction. From 1992-1997 we facilitated tribal youth to take up night schools as a part of the government drive for adult literacy. Several of the trainers were absorbed into the State-run literacy programme initiated in 1998.

However, our major involvement has been with young adults who have been dropouts of the school system. School dropouts have very little opportunities for further education. The percentage of enrolment in schools is 79 per cent (89 per cent for male and 68 per cent for female). But the dropout rate among the tribals is as much as 71 per cent while for the general population it is only 65 per cent. The ambitious ones tend to be frustrated with an alienating education experience and some of them often land up joining extremist groups in the area.

Mainstream educational institutions do not 'educate' because the curriculum does not give due consideration to the rich traditional knowledge and value systems prevalent within tribal societies These institutions do not create an opportunity to develop and learn skills which are relevant to the needs,



lifestyle and aspirations of tribal communities. We believe that it is important to invest in the youth because it is they who are going to steer the future of tribal societies. Hence we have been focusing on 'alternative education' mainly with tribal youth.

Yuva Parichay was a one-year process initiated in 1991 and discontinued in 1998 after the training programme was decentralized. The trainees were drawn from tribal areas of 7 districts in North Andhra Pradesh. Each batch ranged from 30 - 40 trainees in the age group between 18-25 years. The minimum educational qualification was basic reading and writing skills or those who had dropped out after completing Standard V.

The need for initiating an educational process with youth emerged in 1989 when the land rights of tribal communities were under tremendous threat because the State was seeking to repeal a land regulation in favour of tribal communities. During this time a campaign against the repeal of the law was initiated all over the state by several concerned organizations. An analysis however of the campaign revealed that local tribal youth although involved in the campaign, did not demonstrate an understanding of a broader vision of tribal rights.

The thrust of the training was to facilitate a relevant response and a meaningful educational process, which took into consideration the problem situation, the tribal learner and the principles of learning. Over a period of time the programme content underwent several changes. In time equal emphasis was paid to learning skills on micro alternatives and on exploring values.

#### **Advocacy in tribal areas today:**

- Decreasing access and control over natural resources on which the survival of the tribal communities depend
- Lack of access to basic services: health, education and infrastructure
- Violation of their identity rights leading to cultural erosion
- Encroachment of their right to self-governance

From our experience it is clear that we need to recognize that major learning in the tribal context takes place through struggles on issues focusing on human rights of tribal communities. The development of general awareness of multiple stakeholders is crucial for perspective building on tribal reality. More specifically, structured, systematic training initiatives for developing change agents add lasting value on internalizing learning processes. Also, education on alternatives, which challenge the existing processes of development, is crucial from the perspective of sustainable livelihood.



Hence as stated before, it is imperative that indigenous 'education' must be an integral part of the empowerment process. For a lasting impact, youth must be the centre of development activity. Therefore the need to invest in the education of young men and women in tribal areas. Governance functions in the future will be played by today's youth so the direction of development of tribal areas depends on them.

### **Adult Education Processes**

1. human rights education especially in the current context where there is an increasing threat to access and control of natural resources by indigenous communities;
2. development of skills to initiate and sustain relevant micro alternatives that address livelihood issues from a long term perspective and
3. Value based education with critical appreciation of traditional knowledge systems and relevant responses to the changing external environment.

### **Strategies for empowerment**

Need to create special opportunities to respond to the educational needs' of women. Consequences of the development processes are not neutral. They militate more against women than men and hence tend to result in greater negative effects on women. Loss of access and control of resources in tribal areas tend to push women out of productive activities. This also affects adversely their status in their family and community as their participation in the economy decreases. Lack of basic services, particularly related to health and education makes women especially vulnerable. Moreover, atrocities on women are on the increase, as tribal areas become accessible to outsiders and commercially oriented activities. The major strategy to address this issue is to educate the 'panchayat' representatives to safeguard the position of women In the areas under their jurisdiction.

Need to develop an informed cadre of tribal citizens in law related processes is vital. A critical understanding of the customary laws and the legal provisions in the tribal context is necessary to achieve social justice. The legal machinery in the current circumstances is either insensitive or manipulative in character.

In order to safeguard human rights and ensure enlightened governance there is a need for a special focus on educating elected leaders on relevant laws,

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their role and functions. In the light of the specific application of the 73<sup>rd</sup> Amendment of the Indian Constitution to tribal areas, a pertinent law known as the Panchayat (Extension to Schedule Areas Act) was enacted in 1996. This Act facilitates the participation of the 'gram sabha' and the panchayat leaders in playing a role in governance issues at the grassroots level. Several NGOs all over the country have taken this up as a challenge. However, the point remains that respective State governments are slow to act. For example in Andhra Pradesh even the rules and regulations pertaining to the Act are not framed as yet!

### **What Need to be done?**

Tribal institutions of secondary education are irrelevant and do not 'educate'. The main reason for this is that the content of education does not take into account their traditional knowledge systems, an understanding of their own environment which is rich in natural resources, relevant skills to provide access and control of their environment and a recognition of their own identity as tribal communities. Also where relevant, a major concern is the need for providing primary education in their mother tongue in order to create an opportunity for them to enhance their learning capacities. Mainstream educational institutions tend to create an alienated group of youngsters with few opportunities to use their capacities. There is a need to review the relevance of curriculum and methodologies of education currently in the tribal context. More specifically we need to campaign for a policy, which takes into consideration the learning needs of tribal youth dropouts at the school and pre university levels.

### **Summing up**

Need to strengthen literacy levels by promoting opportunities for reading at the grassroots level. Even daily newspapers hardly reach remote villages. Decentralized libraries run by literate youth could be one initiative. Any educational process has to be sustained through creating conditions for being updated on current events and how they impact local communities. This means that processes of creative literacy must be accompanied by follow up measures whereby avenues for deliberation and some reading material is made available on a continuous basis.

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2. <http://www.indiankanoon.org/doc/1186468/>
3. <http://www.indiankanoon.org/doc/25951781/>



## आचार्यदुर्गादत्तस्य ग्रन्थानां वर्तमान समाजस्य सन्देशः

मुकेश कुमारः

विद्यावारिधिः

आचार्यदुर्गादत्तशास्त्रिणां जन्म काङ्गड़ाजनपदस्य "देहरा" इति उपजनपदान्तर्गत "नलेटी" ग्रामेऽभवत्। एतेषां पितृचरणाः बाल्यकाले एव पञ्चतत्त्वम् उपगताः। निर्धनता प्रताडिताः एते महानुभावाः तथापि स्वाध्याये सङ्लग्नाः सन् विविधकाव्यानां रचनाः अकुर्वन्। अतः साधूक्तं वर्तते यत् -

**"क्रियासिद्धिः सत्वे भवति महतां नोपकरणे"**

अतः शास्त्रिणां यथा स्वभावः आसीत् राष्ट्रप्रेमभावनया , यथा ते कर्मठाः स्वाध्यायसंलग्नाः , युक्ताः आसन् तथैव तेषां रचनाः वर्तन्ते। एतेषां रचनासु प्रमुखाः रचनाः याः वर्तन्ते ताः , वियोगवल्लरी , वत्सला , संस्कृतकाव्यकुञ्जम् , मधुवर्षणम् , राष्ट्रपथप्रदर्शनम् - सन्ति तर्जनी च। , बृहत्सप्तपदी

एताः रचनाः कविना समाजस्य वैरुष्यं दृष्ट्वा ग्रथिताः। युगयुगेभ्यः अध्यात्मवादप्रधानभारतभूमौ दुर्भाग्यतः लब्धप्रसरं भौतिकवादं अभिलक्ष्य मानवीयमूलानञ्च अवमूलनमवलोक्य एतैः कविभिः श्लाघ्यः प्रयासः कृतः। अयं प्रयासः राष्ट्रं समुद्धर्तुं सदैवधर्मं सेत्स्यतीति मामकीनः विश्वासः।

नवोढानाम् अकाले , मद्यपानावगुणः , अद्य राष्ट्रहितं निराहृत्य मनुष्येषु पदधानलालसा स्थले उग्रवादः प्रवर्धमानः दृश्यते। -कालग्रासनिमित्तभूता दायदप्रथा स्थले

एभिरवगुणैरेव क्षुब्धहृदयः एष कवि राष्ट्रवासिनः सत्पथि प्रवर्तयितुं एतानि हृद्यानि काव्यानि लोकोपकाराय निबद्धवान् इति धन्योऽयं कविः। आचार्याणां काव्यस्य भाषा शैली , वा नितरां सरला प्रवाहमयी च वर्तते। शास्त्रिवर्माणां साहित्यं न केवलं स्वदेशभूमिपरिधिनिबद्धम् अपितु सकलसंस्मृतिमावेषु विश्वभ्रातृत्वभावनाम् अपि उद्घोषयति। -दिङ्गमात्रमत्र प्रस्तूयते

राष्ट्रपथप्रदर्शने यथा-

**धूम्रपानन्तु छात्राणां विषतुल्यं सदा भवेत्।**

**इदं भो वर्जयेत्प्राज्ञः स छात्रः शोभनो मतः॥**

**प्रातः स्नात्वा शुचिर्भूत्वा देवं भजति नित्यशः।**

**आरभते ततः कार्यं छात्रोऽसौ शोभनो मतः॥<sup>1</sup>**

एतेषु पद्येषु कविना भविष्यमाणा राष्ट्र नेतृणां चारित्रिकोन्नतेः उपदेशः प्रदत्तः वर्तते। "मातृ देवे भवपितृ देवो भव , "इति।

युवानः यदि मादकपदार्थानां सेवनं , उपनिषदः सन्देशः स्वकाव्यकौशलेन नवीकृतः। पुनश्च करिष्यन्ति तर्हि ते स्वजीवनं राष्ट्रं च गतेपातयन्ति अतःतैः एते दुर्गुणाः सर्वथा त्याज्याः , -इति। अनेन सह कविना सुप्रसिद्धस्य पञ्चतन्त्रस्य पद्यस्य भावः प्रदर्शितः

<sup>1</sup> -०क्षो , राष्ट्रपथप्रदर्शनम् २५०.१० , ४४.११ , २१.१ , १.

अभिवादनशीलस्य नित्यं वृद्धोपसेविनः।  
चत्वारि तस्य वर्धन्ते आयुर्विद्यायशोर्बलम्॥<sup>2</sup>

एवमेव मधुवर्षणे यथा-

केचित्पापा मति विरहिताः सङ्ग्रहे सन्ति लीना  
अर्थं कर्तुं दशगुणमितं निर्दयं तेऽपि दण्ड्याः।  
जानन्त्येत् प्रिय न कुटिला राष्ट्ररक्षा न चेत्स्या  
न्न प्राणानां दयित भविता रक्षकं भूरि वित्तम्।।  
स्वादिष्टा ये सुमधुरतमाः सन्ति लोके पदार्था-  
स्त्यागं तेषां सबलमनसा सर्वथाऽहं करिष्ये।  
भोक्ष्ये तावत् सलवणमिदं केवलं भोजनं मे  
यावद् भूत्वा समरविजयी संस्तुतो नैषि गेहम्॥<sup>3</sup>

एषु पद्येषु कविना पर्वतप्रदेशीय नवोढानां स्वलत्वं प्रदर्शितं वर्तते। तासां स्वामिनः यदा तदा ताभिः एताः उक्त्य उक्ताः। अयं उपदेशः आधुनिक ,समराङ्गणं प्रति गच्छन्तः भवन्ति नारीणां कृते वर्तते यत् ताभिरपि उत्साहेन प्रसन्नमुद्रया च स्वराष्ट्र रक्षणाय स्वस्वामिनः समराय प्रेषणीयाः। संस्कृतकाव्यकुञ्जं यथा-

राष्ट्रस्य भक्तौ सकलाग्रगण्यः सेवाप्रसङ्गे पुरतोऽखिलानाम्।  
परिश्रमेऽप्यस्ति न पृष्ठभागे हिमाचलो नाम शुभः प्रदेशः॥<sup>4</sup>  
अद्यापि केचिद् विलपन्ति लोकाः शून्योदरा ग्रासकृते भ्रमन्ति।  
हे राम ! हे राम ! च संवदन्तो जागारयन्तेधनिनः प्रसुप्तवान्॥<sup>5</sup>

जय जय मातृभूमे ! जय जय भारतभूमे!

कणकणव्याप्तव्याप्त,नवनवज्ञानविवर्धितकोषे ,मुकुटधरे -सुषमे हिमालयनग -

जय जय मातृभूमे! जय जय भारतभूमे!

शूरजन -शुभ्रकीर्ति -धवल,मनोहरे -हरितृणकान्ति ,धरातले -चन्द्रकिरणधवल ,

जय जय मातृभूमे! जय जय भारतभूमे!

रिपुदलमानसरित्स्रोतज्जालितचरणे जय जय मातृभूमे ,निहनने -! जय जय भारतभूमे!<sup>6</sup>

एतेषु काव्यबन्धेषु कविना जनेषु राष्ट्रभावना जागरणाय प्रयासः कृतः वर्तते। यः जनः राष्ट्रभावनया अनुप्रणितः न भवति सः जनः न देशभक्तः परं हिमाचलप्रदेशीयाः जनाः अहमहमिकभावनया राष्ट्राय अग्रे आयान्ति। स्वजीवनस्य सर्वस्वमपि अर्पयन्ति। यथा भवभूति विरचिते उत्तररामचरिते श्रीरामस्य इयमुक्तिः-

स्नेहं दयां च सौख्यञ्च यदि वा जानकीमपि।

<sup>2</sup> पञ्चतन्त्रम्।

<sup>3</sup> -०क्षो ,सर्गः सङ्ख्या ,मधुवर्षणः२५०.४ ,३२.२ ,३८.

<sup>4</sup> -०क्षो ,प्रथमसोपानम् ,संस्कृतकाव्यकुञ्जम्,१९

<sup>5</sup> संस्कृतकाव्यकुञ्जम् -०क्षो ,चतुर्दशसोपानम् ,१

<sup>6</sup> मातृवन्दना। ,पञ्चविंशतिसोपानम् -संस्कृतकाव्यकुञ्जम्



आराधनाय लोकानां मुञ्जतो नास्ति मे व्यथा।<sup>7</sup>

यथा अभिज्ञानशाकुन्तले चतुर्थाङ्के कण्वः ऋषिः शकुन्तलां पति ग्रहप्रेषणसमये उपदिशति यथा-

शुश्रुषस्व गुरून् कुरु प्रिय सखी वृत्तिं सपत्नीजने

भर्तुर्विप्रकृतापि रोषणतया मा स्म प्रतीपं गमः।

भूयिष्ठं भव दक्षिणा परिजने भाग्येष्वनुत्सेकिनी

यान्त्येवं गृहिणीपदं युवतयो वामाः कुलस्याधयः।<sup>8</sup>

एवञ्च कविः दानस्य महत्त्वमपि प्रतिपादयति। कीदृशस्य दानस्य कीदृशं महत्त्वं भवति। कः दानः कदा अधिकपुण्यदायी भवति।

**बृहत्सप्तपदी यथा-**

श्रुतकीर्तिं मनस्यचिन्तयत् -“किं विधवाकरो न कङ्कणार्हः? चेच्छीवनमरणे ईश्वरायते तदा वैधव्ये युवत्याः को दोषः। किं वैधव्यं नारीभिरुपाज्यते क्रीयते वा ? का नारी वैधव्यं कामयते। अथ च संसृतौ वैधव्यं नैककं पदं प्रसारयति। एतेन सहायान्ति एतत्परिवारमता विविधापदः। यथा दारिद्र्यं ,श्वशुरकुलकटाक्षाः ,कार्याक्षमता ,वाक्कुटुता ,विवेकशून्यता ,मतिमान्द्यं ,दैत्यं , वदविर ,सागरतरङ्गं ,मिथ्यालाञ्छनानि ,दुश्चरितैर्दुरीक्षणं प्रवहंश्चाशु प्रवाहः”<sup>9</sup>

इत्यस्मिन् गद्यभागे कविना समाजे विधवाभिः सह जायमानस्य दुर्व्यवहारस्य प्रति समाजायऽपि दोषः न अयमुपदेशः पदतः यत् एषः दुर्व्यवहारः न समीचीनः यतोहि तत्र विधवायाः को वर्तते। अयं प्रकृत्याः नियमः अस्ति।

**तर्जन्यां यथा-**

नारीभिः सकला एव सह्यन्ते तीव्रवेदनाः।

दुश्शीलता परं पत्युः सोढुं ताभिर्न पार्यते।<sup>10</sup>

पुत्र प्रतारणा आता वञ्चिताः स्म वयं खलु।

अनया सह नायातं यथाचिन्तत कौतुकम्।<sup>11</sup>

एतेषु पद्येषु कविः समाजाय इदमुपदिशति यत् दयादप्रथा न समीचीना। एषा प्रथा अस्माकं समाजं कीटमिव खादन् अस्ति। अतः अस्याः प्रथायाः समाजे कुत्रापि स्थानं नास्ति।

<sup>7</sup> उत्तररामचरितम्।

<sup>8</sup> चतुर्थाङ्कः। ,अभिज्ञानशाकुन्तलम्

<sup>9</sup> ९८ -पृष्ठसङ्ख्या ,बृहत्सप्तपदी

<sup>10</sup> -०क्षो ,चतुर्थसर्गः ,तर्जनी १०६

<sup>11</sup> -०क्षो ,तृतीयसर्गः ,तर्जनी १०९