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Employability Transitions and Self-Employment Opportunities

• Nitish Anand¹ • V. Mohankumar²

Abstract

Since long, government has been the biggest employer. However, in course of time due to the revolution in information technology, technical advancement and large-scale mechanization, use of manpower has been reduced and thereby machines have taken over. Simultaneously, private enterprises have entered the employment market and started playing a major role in providing employment to those who are technically well-trained and possess technological knowhow. This change in selection process has created a lot of competition and only those who are well qualified can get employment in the private sector. At the same time, the government sector started the process of downsizing its strength of employees, merging smaller units with other departments and closing some units/departments/offices which were found to be unnecessary. This was primarily done for economizing the expenditure. Considering the above, those who are not so competitive or possess skills as per the market needs are often left out to become unemployed. Hence, the only way to get oneself engaged or employed is through self-employment. The policy which relates to empowerment of youths' self-employment started long before, but the accelerated phase began only in the year 2014 with many schemes formulated and implemented by the government. There has been a saying that "instead of employment seeker, one must become the employment provider". To become self-employed, one must have not only the skill in hands but also have the intention to venture in a known field, or a field in which one has confidence to succeed. This article has explained the emerging needs of self-employment, given the current socio-economic scenario. It has employed the methodology of case studies quoted from life experiences of few persons, along with an analysis of secondary data collected from several scientific and non-scientific sources.

Keywords: *self-employment, entrepreneurship, unemployment, inter-generational transfer of skills, career promotion, permanency, educated youth, aptitude, endowment.*

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Introduction

Education is one of the important tools for inclusive development. It is not mere literacy (reading, writing and arithmetic) but acquisition of knowledge and its meaningful application for survival and progress through functional efficiency. History is a silent witness to the richness and profundity in acquisition of such knowledge, through universities at Nalanda, Vikramashila and Takshila which were cynosure for many centuries (Meghasthenes, Huen-T-Sang, and Fashion).

When India became independent in August 1947, the literacy rate of the country was only 14% and the female literacy was as low as 8%. Only one child out of three had an opportunity for enrolment in primary schools and educational deprivation was compounded by economic inequality, gender disparity and whims and caprices of a rigid stratified social order. In purely statistical terms, things have undoubtedly registered improvement as would be evident from the decennial census rates. According to it, India's average national rate of literacy is 73%, with wide disparities between urban and rural areas, male and female, well-endowed pockets, dry, drought prone and migration prone pockets. Soon after India achieved independence, the Indian rulers had chosen the path of progress for the country through planned economy, through which the five-year plans came into existence. Social development, including investment in education and health has no doubt received some attention along with investments in physical infrastructure, agriculture, industry etc. According to Prof. Amartya Sen, there are huge gaps, and we have miles to go before achieving education and health for all.

Over the years and in terms of number of schools, (7000), colleges (37,204) and universities (677) including universities for women, sports, skills and culture, institutions of national importance (51) training institutions, open learning and distance education impressive strides have been achieved even though the spread is uneven and a lot more remains to be achieved in terms of equity, uniformity and universality. The findings of scientific and technological progress for the benefit of the deprived sections of the society suggest that, learning has been made available, accessible and affordable encompassing agriculture, animal husbandry, veterinary, forest, fisheries and a host of other developmental areas. In view of rapid industrialization in the country amongst technological advancement, industry would undoubtedly need persons with technical knowhow and hence, technical training institutions (such as polytechnics, engineering schools and colleges) have also been opened and are being expanded at a rapid pace.

Objectives

The main objectives of the study are:

- To understand the concept of self-employment and its connection with education;
- To study the need of self-employment in contemporary India;
- To explore the major sectors for self-employment in India;
- To study the progression made towards promotion of self-employment;
- To understand the emerging need of self-employment, in the current socio-economic situation

Methodology

This article has adopted descriptive analytical method to explain the emerging needs of self-employment in the current context of socio-economic scenario. It has also employed the methodology of selected case studies quoted from the life experience of a few, along with selected secondary sources (scientific and non-scientific) analyzed, to understand the problems.

What is the Aim of Education?

The aim of education is to get knowledge and values of life which once used to be transmitted by the elders in the family in a non-formal way and teachers in schools through formal education. In modern days, the students do have easy access to knowledge, information, skills through their textbooks but the ultimate aim of this gain is more linked to obtaining employment, than anything else. Unfortunately, the emphasis in today's education is learning through a rote method and memorization and capacity to reproduce lessons learnt in the examination. The question here is: Do all those who are educated get employment? The answer is a big 'No'. When the answer is 'No', the next question is 'why?' 'Therefore, it is necessary that we must know the reasons so that remedies may eventually be found out. India is a vast sub-continent with 700,000 villages. Indian society is primarily agrarian. Traditionally majority of the population is dependent on agriculture and allied occupations. Regretfully, however agriculture as an occupation which is vulnerable to the vagaries of nature is becoming increasingly non-profitable, as people dependent on it in terms of percentage and absolute number is coming down. The contribution of agriculture to the national economy is now less than 20%. Migration from dry and drought prone rural pockets to urban and semi-urban areas in search of jobs, better wages, and better standard of living becomes the inevitable trend. In states like Kerala, agriculture is increasingly getting converted to plantations and elsewhere agricultural land is being increasingly converted for

non-agricultural use (like housing). The villages of India also had the tradition of division of labour through inter-generational transfer of skills from the adults to children, in which families/persons do specialized jobs which almost became traditional occupations of the succeeding generations. To mention a few are washer men, barbers, potters, cobblers, tailors, carpenters, agricultural labourers, etc. When children grew, they were involved in the family occupations which provided a lot of opportunities for guided training under the close watch of the elders. The younger generation got the best training and assured employment/self-employment through intergenerational transfer of skills.

This often resulted in child labour which remains questionable as a practice, as the son of a carpenter is not necessarily destined to be a carpenter. In a similar vein, children of cobblers and blacksmiths etc. are not necessarily destined to follow their parental occupation. There could be something bigger for them. After India got independence, the country started growing in almost all fields including education. The result was that many, who are educated, did not want to be in villages and do traditional jobs, started moving to urban and semi-urban centres, looking for white-collar jobs. This almost made the villages dependent on outside help, even for meetings trifling needs, which were otherwise self-contained units.

Governance and Emerging Needs of Self-Employment

In view of vast expansion of government machinery to plan and implement programmes/activities, many departments were created, which provided employment opportunities for the educated youth. As the government jobs not only provide regular monthly salary, but also economic security in the form of permanency, career promotion and post retirement benefits, the educated youth invariably preferred government jobs. This trend continued for long. However, in the wake of globalization and revolution in information technology which ushered in unprecedented economic opportunities, the trend started reversing and the educated youth started looking for jobs in the private sector (including multinational companies). This was on account of better job prospects in terms of income, which is essential for a decent livelihood. However, the recruitment in the private sector is strictly based on merit and efficiency and thereby is preceded by rigorous screening and multiple tests. In the meantime, administrative reforms in government sector took place and the government introduced computers in large number which took over the workload of many individuals. Also, economists started advising the government to minimize the non-essential, unplanned administrative expenditure or keep it to the barest minimum with a view to enhancing allocation to physical infrastructure.

Successive governments are no doubt interested in rapid industrialization and high GDP rate of growth of the economy, which is possible through high rate of saving, high rate of investment with a low rate of inflation and a low rate of fiscal deficit. Imponderables which are more external than internal, such as COVID 19 do not make realization of these objectives, always possible.

What, therefore, is the way out for people who want employment for income and a decent livelihood? The sector which is not fully explored is self-employment for which mere educational qualification is not enough. What is needed is skill and entrepreneurship. A few have desired skills and endowments, though in terms of number it is barely 5% while skills and endowments are required to be acquired by the majority. Government's urge and inclination to keep its manpower to the irreducible barest minimum by taking recourse to rationalization or downsizing, is undoubtedly one of the ways to bring down unproductive components of expenditure and to plough back the amount to more productive channels. These can be investment in physical infrastructure which together with economic reform and reforms in labour laws will invite foreign direct investment that will eventually open-up avenues of employment. The fact remains, that this will have an immediate impact on white collar employment, and this is what has precisely happened. Today, we have a sizeable number of educated youth who do not have access to avenues of employment which may be full, freely, chosen, productive and remunerative (ILO Convection No. 122 of 1964 which India has ratified as on 17.11.1998).

Technology Facilitation - Bridging the Gaps of Unemployment

To make matters worse, we are in an era of fourth industrial revolution which is being driven by the following ten technologies that are bound to transform industrial production. These are:

- Artificial intelligence
- Autonomous robots
- Simulation
- Big data and analysis
- Augmented reality
- Cloud computers
- Cyber security
- Additive manufacturing
- Horizontal and vertical integration

These technologies are impacting the entire production value chain from design to production and from productivity to speed and quality of production. They constitute a major threat to humanity. It is estimated that 400 to 800 million people

around the globe can be displaced by automation. We already have nearly 200 million people worldwide who are jobless according to a UN agency report. An additional 39 million people have simply given up looking for jobs. With global recession hitting the global economy hard, the number of the jobless is expected to rise substantially. ILO has spotlighted the current crisis as one of the reasons for acute youth unemployment. Around 73.8 million young people are unemployed worldwide, at the prime of youth. One inescapable conclusion which comes out of this extremely disquieting scenario is that there may have been exponential growth in the number of skill training institutions as also in the range, sweep and extent of large number of people receiving skill training in several skills/trades and becoming employable in the process. However employability is not getting converted to full, freely chosen, productive and remunerative employment. Because of the ruthless invasion unleashed by a deadly invisible enemy i.e., COVID-19 which has been the most tremble visitation on earth, Indian economy has been on a downslide (its GDP rate of growth has substantially come down and is currently negative), most of the sectors of economic activity have contracted and are not performing up to expectations.

In the wake of closure of large number of factories, mines, manufacturing as this - cement, steel, textile, fertilizer, panes, petroleum etc., and lakhs of people including 40 million inter-state migrant workmen have been rendered jobless. A process of reverse migration has started and over 50 lakh such workmen have been repatriated back to their native places, with the specter of unemployment and starvation death staring them in their face. Government of India has no doubt come forward with a package of reliefs to various distressed sectors of economic activity running to Rs. 20 lakh crores. A series of announcements have been made and series of measures initiated, to pump life into an otherwise sluggish and stagnant economy. Unemployment or underemployment is not a problem of individuals alone but also of the government as well. Unless able bodied persons work and earn their livelihood, the country cannot prosper well.

That is precisely the reason as to why government brought in an assured employment scheme for a certain number of days in a year through Mahatma Gandhi National Rural Employment Guarantee Programme (MNREGP), which was launched in February 2006. It has been responsible for generating crores of man days annually, in rural areas. An all-time high of Rs.1.00 lakh crore has recently been pumped into this world's single largest sweated sector employment programme (this is more than double the allocation which was being made for this programmes annually so far). Simultaneously, government also started providing support for skill development programmes so that the Indian population, particularly youth is

trained in chosen vocations, which could enable them to get employment or pave the way for self-employment. Soon after the new government came to power at the centre in the year 2014, it started giving the much-needed fillip to skill development programmes.

Meaning of Self-Employment

One must know the meaning of employment before delving into details about self-employment. There are several explanations on employment. However, as a ready reckoner for the information of readers, only a few are given below:

- (a) Employment is working for others, either on contract, or on regular basis for a monthly salary, or emolument. Such employment is also called wage employment and the serving organization can be government, semi-government, autonomous, non-government, industrial and mining establishments, factories, shops and commercial estates medium and small business enterprises, etc. People who are employed must comply with terms and conditions of employment as have been agreed upon, by both and face disciplinary action for wrongful act, if any. However, both white-collar and blue-collar employees have laws and regulations as also standing orders framed and certified under Industrial Employment (Standing orders) Act, 1946 protect them from discharge, dismissal, termination of employment, unilateral and un-authorized deduction from wages and various other forms of harassment (including sexual harassment).
- (b) Employment is a relationship between two parties, usually based on a contract where work is paid for, where one party, which may be a corporation, for profit, not-for-profit organization like NGO, cooperative or other entity is the employer, and the others are the employees.
- (c) Employment is not a simple term denoting the mere holding of a job for which wage is paid, or the operation of one's own business. Rather, it signifies the state of anyone who is doing what, under what circumstances, etc. Such a person is fully "employed".

What is Self-employment or Who is Self-employed?

There are again a few definitions regarding self-employment/self-employed. It may be appropriate that the readers know different meanings given by different persons for better understanding. The definitions are given below:

Self-employment

- Self-employment is the state of working for oneself rather than an employer.
- Self-employment is earning a person's living through doing something by oneself. In case of business, self-employment is the process of earning living through using own capital or borrowed resources, also using one's own knowledge, intelligence, efficiency and taking minimum risk.

Self-employed

- People generally find their own work rather than being provided with work by an employer, earning income from a trade or business that they operate.
- Generally, tax authorities will view a person as self-employed if the person chooses to be recognized as such, or is generating such income as would make that person liable to file a tax return under legislation in the relevant jurisdiction. In the real world, the critical issue for the taxing authorities is not that the person is trading but whether the person is deriving some income/profit from his/her economic activities which is potentially taxable. In other words, the activity of trading is likely to be ignored if there is no income/no profit.
- Is a situation in which an individual works for himself, instead of working for an employer that pays salary or wage co-terminus with self-employment? A self-employed individual earns his income through conducting profitable operations from a trade or business that he operates directly. Although the precise definition of self-employed varies among the Bureau of Labour Economics and Statistics, the Internal Revenue Service and private research firms Self-employed people generally include independent contractors, sole proprietors of business and those with partnerships in business.
- Being self-employed is a different situation than simply being a business owner. A business owner is someone who owns a company but does not work on day-to-day operations of the company. In contrast, a person who is self-employed owns his own business, of which he is also the primary or sole operator. Furthermore, there are often different taxation-related implications for being self-employed versus being a normal employee or a business owner.

Importance of Entrepreneurship in Self-Employment

Entrepreneurship means different things to different people. Some imagine

tech geniuses with Silicon Valley start-ups, while others picture small business owners opening their shop doors on the main street. Ultimately, entrepreneurship encompasses these and many other business ventures that share a commitment to turn an idea into a profitable business. People who are thinking about starting their own businesses should understand that successful entrepreneurship involves much more than having a great concept. Most people think that being an entrepreneur is all about coming up with an idea, but that is just one part. It is also important to know, right from the start, how one would reach interested customers in an effective and affordable way. Entrepreneurship is a much broader concept than the creation of a new business venture. At its core it is a mindset - a way of thinking and acting. It is about imagining new ways to solve problems and create value.

The most obvious example of entrepreneurship is starting a new business, capacity, and willingness to develop, organize and manage a business venture while being ready to wither the risks inherent in the venture which may eventually turn into a profit. In economics, entrepreneurship combined with land, labour, natural resources and capital can produce profit. Entrepreneurial spirit is characterized by innovation and risk-taking. Thus, it is an essential part of a nation's ability to survive, grow and prosper in an ever changing increasingly competitive global marketplace.

There are no specific traits and characteristics that every entrepreneur should own, but many do possess a few common ones. Successful entrepreneurs are typically confident and self-motivated. They are tenacious but understand their own limitations. Instead of following the status quo, entrepreneurs have a healthy disrespect for established rules and often set out to do things which others may not have the courage to do. They are also willing to fail and start again; what is otherwise called adventurism taking the lessons they have learned to create something new and innovative. An entrepreneur is someone who can entertain any idea, whether it is related to product and/or service, has the skill, will and courage to take extreme risks for turning idea into reality and bringing it to the market, as a useful product/service.

Important Tips for Becoming a Successful Entrepreneur

Those who wish to enter the field of entrepreneurship must keep in mind a few important tips which are as follows:

1. Learn from others' failures - Rather than admiring the small percentage of businesses that grow to become successful, study those that end-up failing which will greatly increase the chances of success, because most companies

have made common mistakes that have led to failure. Hence, the secret of success is to learn from the mistakes of others before making them yourself. This is relevant for any sector of human activity. One should always learn from the mistakes of the past, so that foundation of the present can be built and perspective for the future can be perceived.

2. Make sure this is what you want - As entrepreneurship entails so much hard work, it is critical to ensure that one is following the right path - this is something which everyone should really want, then think long-term, and be consistent and persistent. Most successful entrepreneurs failed multiple times before they finally found the business idea that took off and brought them success.
3. Solve problems - Entrepreneurs should always be in search of problems to solve, and not the other way around.
4. Be passionate - Successful entrepreneurs are driven primarily by a need for achievement and the desire to make a meaningful difference. The most important traits are passion and persistence, but these must not be confused with arrogance and stubbornness.
5. Get advice from those who have done it - Would-be business owners should try to find mentors who are successful, as well as to read books and acquire a complete command over the business they propose to launch to keep themselves abreast of changes which occur on the horizon, network with people they admire and investigate great educational programmes to help them throughout the process.

Characteristics and Skills Needed for Entrepreneurs to Succeed

Entrepreneurs are like gamblers and their chances of winning increase if they have right cards. Some of the characteristics and skills that help an entrepreneur to succeed are:

1. Tolerance for risk-taking - It is a necessary attribute for entrepreneurs. One can think of risk-taking as pursuing an activity even if there is a chance of negative fallout. Starting a business is risky, and more so when one is using one's own money. Sometimes one can spread the risk by convincing investors to come along for the new venture or by forming an entrepreneurial team. But, at the end of the day, one cannot avoid the risk of starting a new business and innovate.
2. Need creativity - Successful entrepreneurs innovate in one of the two ways. They can bring an entirely new product or service to the market, like the first cellular phone. On the other hand, they can radically improve upon

something in a dramatic way, just like the iPhone changed the world of smart phones.

3. Initiative - If entrepreneurs are not willing to start without being pushed, the new business will never get off the ground. One must take the initiative to start the business venture for which no one needs to convince him/her to act. Instead, he/she just acts with his/her own with courage, confidence, and resilience.
4. Independence - It is also a paramount attribute for entrepreneurs. Nobody holds an entrepreneur's hand, as they do not want any sort of handholding. Successful entrepreneurs must be willing to go alone and succeed or fail, based on their own efforts.

Most of the young people today look for employment opportunities instead of getting self-employed. The main reason for this attitude is the feeling of security which comes ordinarily through paid employment, whereas self-employment is connected to risk taking and is time consuming. It is not that everyone who desires to go for self-employment has entrepreneurial skill built in them. It is only the 'Wings of the Fire' (book written by Dr. APJ Abdul Kalam, former President of India) which ignite the persons and many a times skills are developed as an ongoing process. In this, the desire to acquire gets primacy. If one sees the history of today's entrepreneurs, many might have started the business in a simple way and in course of time became modest and big. The following is a select list of entrepreneurs in India, whom one must know:

Name	Associated Company
Achyuta Samanta	KIIT Group of Institutions
Ajay Piramal, Swati Piramal	Piramal Enterprises Ltd
Akshay Agrawal	ClassFever
Anand Mahindra	Mahindra and Mahindra
Anil Agarwal	Vedanta Resources
Ardeshir Godrej, Pirojsha Burjorji Godrej, Adi Godrej	Godrej Group
Arsh Shah Dilbagi	Arido
Ashok Soota	Happiest Minds Technologies
Azim Premji	Wipro
Baba Kalyani	Bharat Forge
Bhargav Sri Prakash	FriendsLearn
Bhavish Aggarwal	Ola Cabs

Brijmohan Lall Munjal	Hero Group
Chirag Kulkarni	Insightfully
Cyrus Vandrevala	Intrepid Capital Partners
Mukesh Ambani	Reliance Industries
Dilip Sanghvi	Sun Pharmaceutical
Ekta Kapoor	Balaji Tele lms
Faisal Farooqui	MouthShut.com
G. R. Gopinath	Air Deccan
Gautam Thapar	Avantha Group
Grandhi Mallikarjuna Rao	GMR Group
Gunupati Venkata Krishna Reddy	GVK Group
Harsh Songra	My child App
Jagdish Chandra Mahindra	Mahindra Group
Jamnalal Bajaj, Rahul Bajaj	Bajaj Group
Ratan Tata	Tata Group
Kalanithi Maran	Sun Group
Kallam Anji Reddy	Dr. Reddy's Laboratories
Karsanbhai Patel	Nirma
Kartikeya Sharma	India News
Khwaja Abdul Hamied	Cipla
Kiran Mazumdar-Shaw	Biocon
Kishore Biyani	Future Group
Kochouseph Chittilappilly	V-Guard Industries Ltd
Kumar Mangalam Birla	Aditya Birla Group
Kunwer Sachdev	Su-kam Power Systems
Lakshmi Mittal	ArcelorMittal
Laxmanrao Kirloskar	Kirloskar Group
Mangal Prabhat Lodha	Lodha Group
N. R. Narayana Murthy, N. S. Raghavan, Kris Gopalakrishnan, Nandan Nilekani	Infosys
Narendra Bansal and Keshav Bansal	Intex Technologies
Naveen Jain	Moon Express
Naveen Tewari	InMobi
Pranay Chulet	Quikr

Prannoy Roy	NDTV
Prathap C. Reddy	Apollo Hospitals
Ramoji Rao	Ramoji Group
Rohit Bansal and Kunal Bahl	Snapdeal
Sachin Bansal and Binny Bansal	Flipkart
Sanjay Govil	Infinite Computer Solutions
Shiv Nadar	HCL Technologies
Subrata Roy	Sahara India Pariwar
Sujayath Ali	Voonik
Sunil Mittal	Bharti Enterprises
V. G. Siddhartha	Café Coffee Day
Venugopal Dhoot	Videocon
Verghese Kurien	Amul
Vijay Shekhar Sharma	Paytm
Vishal Gondal	Indiagames
Walchand Hirachand	Walchand group

A few examples are given here to showcase how one is ready to take risks, for starting a business of his/her own and succeed due to own initiative, industriousness, vision and eager to fast forward their economic life.

Real Life Experiences

From Waste Picker to Entrepreneur

Annamma was a 10-year-old girl when she started following her grandmother, picking waste from the streets of Bengaluru city. Thirty years later, she has established herself as an entrepreneur in the very sector that her grandmother was struggling to make ends meet. She has become the first waste picker to buy a truck for door-to-door collection of dry waste in the city and is already looking to purchase a second vehicle soon. Her rise is nothing less than phenomenal. How could that happen? She said that when the civic body wanted waste pickers to start manning Dry Waste Collection Centres (DWCC), initially she was not confident of taking-up the task as she lived in a hut with no electricity and had a saving of only Rs.50,000/- to build a house. She got the courage and invested that lifetime saving to start a DWCC. The same centre has grown into a business today. She runs the DWCC for ward 101 (Kamakshipalya) for more than four years now, and it is a far cry from

her earlier life. Money was scarce when she used to roam around the streets for waste. But now at the DWCC, she deals with nearly two tons of dry waste every day. In view of her regular income, she availed a loan to build a three-bedroom house in Ullal Upanagar, the same place where she once lived in a hut. Her daughters who used streetlights to read the books then, have a separate study room now. Bruhat Bangalore Mahanagara Palike (BBMP) has recently given the responsibility of door-to-door collection of dry waste twice a week, to DWCCs in their respective wards. This entails expansion of DWCC operations and capital investments on vehicle and men. Annamma, who is one of the successful people in the sector, acted decisively and purchased a truck to start door-step collection of waste. She says that she does not know how to read and write but is good at mathematics because of the business that she runs. As the prices for plastic and paper waste have fallen recently, she wants to enormously increase the door-step collection for earning more. Annamma's determination is a lesson for others.

Prem Ganapathy – The Dosawala

Prem Ganapathy, born in Tamil Nadu was taken to Mumbai by a person who ran away leaving him at the Bandra Station. He neither knew anyone in Mumbai nor was he conversant with the local language. Fortunately, a person from Tamil Nadu who lives in Mumbai took pity and hence, guided him to a temple with an appeal to the worshippers to contribute money for his return ticket to Chennai. However, Prem not want to go back and decided to work in Mumbai itself at a restaurant, as a utensil cleaner.

After some time, he appealed to the owner of the restaurant to give him the job of a waiter as he studied up to class 10 which was not accepted by the owner. The reason for this was because of regional politics which he thought will create heart burning issues for the Marathi speaking residents. Hence, Prem decided to wait. Subsequently, when a Dosa Restaurant was opened in the neighbourhood, the owner offered him the job of a tea boy and he immediately joined. Prem became a huge hit with the customers because of his excellent customer service, initiatives and relationship that brought a business worth Rs.1000/- daily which was almost three times as compared to other boys. Prem's life suddenly started looking good. One day a customer told Prem, that he was planning to open a tea shop in Vashi (in Navi Mumbai) and wanted him to be his partner, where the owner would invest the money while Prem would run the shop. He immediately agreed and the shop started doing brisk business. However, in course of time the owner became greedy. It hurt him to share 50% of the profit with Prem. He threw him out and replaced Prem. Despite all odds, Prem was a different person who was never going to be defeated.

He took a small loan from his uncle and opened his own tea stall, with his brother. Unfortunately, the neighborhood residents objected. He then started a hand cart but that also did not work out. Then he found a spot and set-up a south Indian stall. He did not know anything about south Indian dishes but learnt by observation, trial, and error. The dosa stall was a huge hit and flourished during the five years from 1992-1997. But why was the tiny dosa stall so successful despite competition from other eateries in Mumbai? According to Prem it was its hygiene, proper appearance of the waiters and fresh ingredients which marked the difference from the rest.

He saved some money and instead of heading home he took the biggest risk of his life by opening a new shop near Vashi station and naming it as Dosa Plaza. His Chinese Plaza next to Dosa Plaza flopped miserably and shut down in three months. Undaunted, Prem realized some lessons from it. He applied those lessons in making Chinese cuisine available at his Dosa Plaza. He was passionate and invented a variety of dosas with Chinese style. The 108 types of dosas in his menu got him a lot of publicity. An encounter with a team member who was setting-up a food court in a mall advised him to take a stall at the food court. Prem was ready to grow and expand. His vision was to grow by better offerings and better customer service. He also took support of advertising agencies to create the brand identity including the logo, brands, menu card, waiters' dress etc. He started getting a lot of offers for franchising and had to find out the meaning of it and its *modus operandi*. Dosa Plaza currently has 26 outlets, out of which 5 are company owned. It has 150 employees with a turnover of Rs. 5 crores. All the branches are connected and there are training managers with proper manuals to maintain standards and uniform services. Merit is the only criterion and equality of treatment is the hallmark. All the employees regardless of the caste or region are treated equally. They are loyal and have grown with the company. The original team of cooks which was the part of the first Dosa venture is still with Prem. Currently he gets enquiries from US and Europe too for franchising opportunities.

Thyrocare Velumani

Dr. A. Velumani is famously called as Thyrocare's Velumani. He was born to a poor landless farmer in a small village called Appanaickenpatti Pudur of Sulur in Coimbatore District, Tamil Nadu. He was so poor that he sought government subsidy to attend school and college. Today, he is the owner of the world's largest thyroid testing company that boasts of 1122 outlets across India, Bangladesh, Nepal and the Middle East. Velumani has no car of his own and lives in a small living quarter above his large lab in Navi Mumbai. He started his career as a shift chemist at Gemini Capsules, a small pharmaceutical company in Coimbatore in 1979 and

earned a meager sum of Rs.150/- every month. The curtains came down on the company three years later and Velumani found himself without a job. Thereafter, he joined Bhabha Atomic Research Centre, Mumbai, from where he resigned after 14 years as he decided to channel his expertise in thyroid biochemistry to set-up testing labs. With Rs.1.00 lakh from his provident fund, Velumani, at the age of 37, opened a shop in Byculla, South Mumbai. Thyrocare is worth Rs.3377 crore (as of May 2016) and Velumani owns 64% stake in the company, which makes his net worth to be around Rs. 2158 crores.

Thyrocare is also working towards developing a subsidiary to focus on cancer screening through molecular imaging. To start a business of one's own depends on the interest and commitment, passion, background, endowment and skills of management, experience, financial resources, market needs, ability to solve problems and well-established connections.

Other Self-Employment Opportunities

There are ample opportunities for self-employment, but the choice of an individual depends much on his/her aptitude, preferences, interest, market needs and financial stability. Many self-employment opportunities are location based, and hence, one cannot generalize for all. An opportunity which is much needed at a particular place may not be the same in another place. However, a few self-employment opportunities as start-ups are given below:

1. **Tutorial Institute**

If you are a graduate or post-graduate in science, you can start a tutorial institute for the students of 10th and 12th standard as many students lag behind in science subjects and look for extra coaching. If your teaching is good and your students can understand well, you will get a good name in the market and your institute will be in great demand. Substantial income can be earned from such a venture. Students, who have taken commerce as a subject of study in school, may require extra tuition to understand the accounting procedures which are complicated for them. Hence, graduates in commerce can also start tutorial institutes.

2. **Home Tuition**

Science graduates or post-graduates are in great demand for home tuition. Some families prefer that their children receive home tuitions only. Hence, many graduates who undertake home tuitions are able to sustain their lives without getting money from their own parents, for pursuing higher studies or preparing for competitive examinations.

3. **Data Entry**
Data entry simply entails handing data for clients such as copying and pasting, uploading, and transferring files. These tasks are usually very tedious, and most business professionals are too busy to handle them. So, they would rather employ people to help them.
4. **Designing**
Many small publishing houses outsource the design work for which the amount is paid. This again is demanding work and at the same time gives good financial reward.
5. **Freelance Writing**
For budding writers, this is the perfect job. Usually, all one needs is the talent and a zeal to write within a deadline. There are a lot of companies that specialize in this kind of service and the best thing is that one can earn while sitting at home.
6. **Translation**
If you are fluent in two or more languages, you can help clients translate text from one language to another. You will find many open translation jobs on freelance outsourcing sites like elance.com and freelancer.com.
7. **Video Creation**
Videos are becoming the most widely adopted means of information dissemination over the web. Videos increase search engine visibility, and individuals and organizations now upload videos as a way of promoting their businesses.
8. **Affiliate Marketing**
Affiliate marketing is one of the most lucrative online businesses. This is how it works: advertise and review other people's products and services and earn a commission on each sale. The more one sells, the more profit one can make.
9. **Baby Sitting**
If someone loves babies and enjoys taking care of them, then one can make money by helping busy mothers, when they are off to work.
10. **Laundry Service**
One can earn quite well by starting a laundry business because there is a good market, regardless of the location.

11. **Graphic Design**
If a person is creative with pictures and colours, one can make money by working as a graphic designer. Website banner, company logos and book covers are all designed by professional graphic designers.
12. **Personal Computer (PC)/Mobile Phone Repair**
If a person has good technical knowledge regarding repair of electronic devices, one can undergo training to become a PC or mobile phone repair specialist. Repairing a PC or a mobile phone is a lucrative business, because almost everyone has such equipment.
13. **Website Designing**
If one is a creative designer with some basic HTML skills, he/she can train to become a website designer. Individuals and organizations are frequently in need of website designers and developers, to help them design and tweak their websites.
14. **Online Store**
One can earn well by setting-up own online stores and promoting them. Though promoting this business and attracting customers can be very tedious, it is very rewarding at the end.
15. **Cartoonist**
If one is a very good artist, he/she can make money by drawing interesting cartoons and comics for newspapers and magazines.
16. **Selling Used Products**
Most of the time, people readily sell used products for a very low price because they are no longer in need of them. However, some other people who may need these used items and are ready to pay more for the same. One can make a fortune by buying used products that people no longer need and resell the same to others who need them.
17. **Virtual Assistants**
Busy business owners and professionals rarely have time to handle tasks such as reading and replying to emails, preparing speeches and reports, transferring files and so on. One can earn quite well, by helping with such tasks. Interestingly, he/she can work as a virtual assistant for someone even without meeting them in person.

18. Professional Blogging

Starting a blog is another proven way to make money. So, if one has some knowledge and wants to share it with others or has some interest that he/she would like to discuss with an audience, starting a blog is a good bet.

19. App Development

The app industry is becoming one of the most lucrative markets in the tech world. Developers earn to 6-figures depending on the number of apps they develop and how useful people find those apps. If one is very good at coding and programming, he/she can make a fortune by developing apps. Some other businesses are also profitable and one start from the backyard of the house itself. These are:

(i) Rabbit Rearing

The domestic rabbits are prolific breeders which produce large quantities of tasty meat. Their rate of production is faster than that of pigs, goat, or sheep. Rabbits have very short gestation period (27-33) days and can rebreed immediately after giving birth. A breeding female can produce at least 5 times per year, with an average of 6 per time. If well managed under simple conditions around 25 (with 15% morality rate) can very well reach 35 kg within 5 to 6 months.

(ii) Party Equipment Rental

Renting party equipment has become big business, particularly in many big cities. Public address system, canopies, chairs, stage platform, ice block, drums, cooking utensils, tablecloth and other equipment are in hot demand by party organizers. The initial step should be to find out fees charged for items and for how long. Then one should investigate the cost of making or buying some of these items. All one needs to do, is to get in touch with the event managers in an area and make sure to inform the neighbors about the services being offered.

(iii) Horticulture and Gardening

Horticulture is the study or practice of growing flowers, fruits, and vegetables. It involves growing of lawns, plants, planting edges, orchard plantation, etc. One can start this business with zero capital also. By planting grasses or plants in a very small portion around the home and nurturing it well will be admired by people.

(iv) Chalk Production

Chalk piece is commonly used in all educational institutions and they are needed in large quantities. Chalk piece making can be done by using a small place in home or the backyard. Depending upon the quality of the chalk piece produced (less of dust and not frequently breaking into pieces), the demand will be more.

(v) Poultry

Poultry is a business that one can start from the backyard with 50 to 500 birds depending on the ability to invest money. The amount spent will be towards cost of birds, feed, and medicines. Waste management in poultry is vital. If not properly handled, it will adversely affect the growth, production, and bird performance. A single bird can give 730 eggs on an average in two years before it is sold off for a good price.

(vi) Ice Block Production

Ice block sales involve the use of deep freezer to make ice block in plastic containers or polythene bags. The business involves production of solid ice block by putting clean water in any small container to make different sizes of ice blocks available to consumers of different categories.

(vii) Eatables Making

People, right from children to elders enjoy eating snacks between heavy meals. Today many multinational companies start marketing these products in attractive packs, at a higher price. Small entrepreneurs also produce these items, the demand for which is ever increasing due to the practice of purchasing from outside rather than making it in houses. If one is interested, he/she can thrive well in this business, only if the products are tidy and tasty.

Conclusion

To conclude no business is bad. It is an adventure which can be taken if one has the aptitude, endowment, skills, experience, and the ability to manage production, distribution, labour and finances. People involved in the business of collecting and forwarding the waste material also earn a lot. For many it may be a dusty and smelly business. Those who are involved will tell you that this business is worth a gold mine. The choice is for the individual to make. Several schemes are available in support of small entrepreneurs who wish to start the business. However, one must come forward to avail the same. One must try to be an entrepreneur so that he/she can be an employment provider, than an employment seeker.

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Adult Literacy to Adult and Lifelong Learning - Status and Perspective

Prem Chand¹

Abstract

National Education Policy 2020 focuses on achieving universal foundational literacy and numeracy for all primary schools learners till grade 3 by 2025. It implies that the population of 7-9 age group by 2025 is likely to join the adult population of 15 years and above, as total literates in 2030. This paper presents status of literacy situation and its progress over the census years from 1981 to 2011 for adult population, by major age groups. An estimate of adult literacy situation in 2021 has been based on progression method of estimation from 2011 to 2021. Census data takes into account, the impact of literacy programmes as well. National literacy programmes have moved from literacy campaigns of NAEP (1978 onwards) to basic literacy, post literacy, continuing education of NLM (1988 onwards) along with functional literacy, equivalency programmes, vocational skills, quality of life programmes and Saakshar Bharat programme of 2009. However, besides contributing in terms of fundamental literacy, these programmes could not contribute much in terms of raising the level of literacy through equivalency efforts. Literacy rate of the youth population (age group 15-24) estimated at 92.6 percent in 2021 will take about 15 more years to reach universal literacy level. Literacy rate of adult population (age group 15 and over) is estimated at 75.5 percent in 2021 (with estimated 252 million illiterates). However, in particular age group 35 years and above with 200 million illiterates need special attention to achieve the Sustainable Development Goal 4 by 2030. A decent proficiency is needed in literacy and numeracy, which is sufficient to participate in a society with added emphasis on needs of girls, women and other marginalized sections.

Keywords: *universal access, age cohort, foundational literacy, progression method, decadal growth*

Introduction

National Education Policy 2020 aims at ensuring universal access to school education at all levels from pre-school to secondary. It also stipulates preparation

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of implementation plans by states for attaining universal foundational literacy and numeracy in all primary schools for all learners till grade 3 by 2025. This provision means that all children of the age group 6-8 will be enrolled in primary classes 1-3 and will achieve foundational literacy and numeracy by the year 2025. They will not join adulthood as illiterates. Census data on literacy is presented by age groups starting from 7-9, 10-14, 15-19 and so on. It is then classified by different levels of literacy starting from literate without educational levels, which includes those who became literate in the formal schooling system before completing primary level of education as well as those who acquired literacy without attending formal school. This level implies achievement of foundational literacy and numeracy. Other levels of literacy in census are primary, upper- primary, matriculation/higher secondary, diploma, degree etc.

Status of Achievement of Literacy by Different Age Groups

Those who are categorized as literates as per the census data would have acquired at least the first level of literacy i.e. they can both read and write with understanding in any language. The following table gives the status of important age groups with regard to their achievement of literacy from 1981 onwards. We can leave out the age group of 7-9, which as per the provisions of the New Education Policy 2020 will achieve universal foundational literacy by the year 2025-26.

Table 1

Status of Achievement of Literacy by Different Age Groups for 1981-2011 (figures in million)

Age group	Year	Literates	Illiterates	Literacy rate (%)
10 - 14	1981	48.44	37.47	56.38
	1991	67.89	30.81	68.79
	2001	102.02	22.83	81.71
	2011	120.96	11.75	91.15
15 - 24	1981	65.47	56.00	53.90
	1991	95.02	58.49	61.90
	2001	145.19	44.79	76.43
	2011	199.81	32.14	86.14
25 - 34	1981	41.97	51.14	45.07
	1991	64.84	62.80	50.80
	2001	101.75	55.95	64.51
	2011	143.05	46.96	75.28
35 and above	1981	56.59	130.58	30.27
	1991	95.56	149.49	39.00
	2001	158.54	158.79	49.96
	2011	237.97	178.48	57.14
15 and above	1981	164.23	237.95	40.83
	1991	255.42	270.78	48.54
	2001	405.47	259.53	60.97
	2011	580.83	257.58	69.28

Source: Prem Chand (2015). *Status and Trend of Literacy in India – Database for Literacy Programmes*
2011 New Delhi: Indian Adult Education Association

Age group 10 - 14: As seen from the above table, number of literates in the age group 10-14 increased from 48.44 million in 1981 to 120.96 million in 2011. Literacy rate improved from 56.38 percent in 1981 to 91.15 percent by 20; reducing the number of non-literates from 37.47 million in 1981 to 11.75 million in 2011. Increase in the literacy rate of age-group 10-14 is fully contributed by the educational facilities at primary education level.

Gross enrolment ratio for age group 6-10 at primary education level is already over 100+. But the net enrolment ratio was 95 as per the NSSO survey 75th Round. The New Education policy 2020 provides for attainment of universal foundational literacy for all learners till grade 3 by 2025. Age group 6-8 in corresponding grades 1-3 will reach age group 10-12 in four years and 12-14 age group in 6 years – hence they are expected to achieve universal literacy by 2030-31.

Age group 15 - 24: Literacy rate of the youth population for 15-24 age group improved from 53.9 percent in 1981 to 86.14 in 2011 giving an average decadal increase of over 10 percentage points. Number of literates increased from 65.47 million to 199.81 million over the three decades with an increase of over 200 percent. Number of illiterates however declined only by about 24 million during the same period.

By using the method of transition of lower age group cohorts to higher age group called progression method, youth literacy rate excluding the impact of literacy programmes is estimated to have improved from 86.14 percent in 2011 to 92.6 percent in 2021. This can be seen below:

Table 2
Estimate of Literacy Situation for Age Group 15-24 in 2021

Age cohort 2011	Age group 2021	Progression literacy rate	Estimated population 2021(million)	Estimated literates 2021(million)
5 - 9	15 -19	94	125.6	118.1
10 -14	20 -24	91.15	131.0	119.4
Total	15 -24	92.6	256.0	237.5

Source: Ibid Chapter 7

The above table indicates that the number of literates in the age group 15-24 would have gone up to 237.5 million by 2021, giving an increase of about 38 million during the decade. The number of illiterates would have come down to 19.1 million with a decrease of 13.0 million, as compared to a decline of 12.0 million during 2001-11. At the present rate, it may take another 15 years to eradicate the problem

of illiteracy for this age group. Thus, concerted efforts are required so that literacy can be achieved by 2030.

Age group 25-34: Literacy rate for the age group 25-34 was only 45.07 percent in 1981. During the three decades 1981-2011, it improved by over 30 percentage points. Number of literates increased by over 100 million during the same period, from 41.97 million in 1981 to 143.05 million in 2011. However the number of illiterates declined only marginally from 51.14 million in 1981 to 46.96 million in 2011. This was the result of higher non-literate population moving from lower age groups. Using the progression method, the literacy rate of age group 25-34 for 2021 is estimated at 86.07 percent. This can be seen below:

Table 3
Estimate of Literacy Situation for Age Group 25-34 in 2021

Age cohort 2011	Age group 2021	Progression literacy rate	Estimated population 2021(million)	Estimated literates 2021(million)
15 - 19	25 - 29	88.83	119.7	106.3
20 - 24	30 - 34	83.24	115.7	96.3
Total	25 - 34	86.07	235.4	202.6

Source: Ibid Chapter 7

The above table indicates that the number of literates would have gone up by about 60 million during the decade from 143.05 million in 2011 to 202.6 million in 2021. Number of non-literates is estimated to have declined from 46.96 million in 2011 to 32.8 million in 2021, giving a decline of about 14 million as compared to a decline of around 10 million during 2001-2011. At this rate it will take over two decades to achieve universal literacy for this age group.

Age group 35 years and above: Literacy rate of the age group 35 and above which was only 30.27 percent in 1981 improved to 57.14 percent in 2011, giving an increase of about 9 percentage points per decade. Number of literates during the same period increased from 56.69 million in 1981 to 237.97 million in 2011, an increase of over 180 million during the three decades. Number of non-literates of this age group continued to increase during each of the three decades from 130.58 million in 1981 to 149.49 in 1991 to 158.79 million in 2001 and to 178.48 million in 2011.

Progression method of estimating literacy situation indicates that the literacy rate would have gone only by 5.7 percentage points from 57.14 in 2011 to 62.8 in

2021 despite the fact that the number of literates would have gone up by around 100.0 million. Number of non-literates instead of declining would have again gone up by over 20 million from 178.48 million in 2011 to 200 million in 2021. This can be seen from the following table:

Table 4
Estimate of Literacy Situation for Age Group 35 and Above 2021(in million)

Age cohort	Progression literacy rate	Estimated population	Estimated literates
2011-2021	62.8	538.0	337.9

Estimated increase in the population of this age group from 416.45 million in 2011 to 538.0 million in 2021 gives a decadal increase of over 29 percentage points, as compared to a decadal growth of 17.7 percent for total population during 2001-11 and estimated at about 15.1 percent for 2011-21. Increase in life expectancy could be one of the important factors for this increase. Age group 15 years and above: Literacy rate of the adult population for the age group 15 years and above is monitored by UNESCO with respect to different countries and regions of the world. Literacy rate of this age group which increased from 40.83 percent in 1981 to 69.28 in 2011 was much lower than the global adult literacy rate of 84 percent for the period 2005-12.

As against the global literacy rate of about 86 percent in 2015, two regions namely Central and East Europe and Central Asia had nearly achieved universal adult literacy. Another two regions namely East Asia and the Pacific and Latin America and the Caribbean were moving towards the goal of universal literacy. North America and Western Europe Region fell in the category of higher adult literacy rates. Literacy rate of Arab States was 6 percentage points lower than the global literacy rate. South and West Asia with adult literacy rate of 69 percent and Sub Sahara Africa with merely 63 percent were lagging behind. India alone accounted for about one third of the total illiterates in the world.

Total number of adult literates in India which was 164.23 million in 1981 increased to 580.83 million in 2011. Despite this phenomenal increase in the number of literates, number of non-literates instead of going down increased by about 20 million from 237.95 million in 1981 to 257.58 million in 2011. Literacy rate of this age group increased from 40.83 percent in 1981 to 69.28 percent in 2011. 75th Round of the NSSO survey estimated adult literacy rate to be 73.9 percent for 2017. The following table gives an idea of the estimated literacy/illiteracy situation for the age group 15 and above for the year 2021 based on progression method of estimation.

The data indicates that the problem of illiteracy particularly for the age group 35 and above needs a strong and innovative government initiative, as promised in the National Education Policy 2020 (Para 21.4)

Table 5

Estimate of Literacy/Illiteracy Situation for Age Group 15 and Above Population 2021

Age group	Number of literates	Literacy rate	Number of non-literates	Percentage of non-literates
15-24	237.5	92.6	19.1	7.6
25-34	202.6	86.1	32.8	13.0
35+	337.9	62.8	200.1	79.4
Total	778.0	75.5	252.0	100.0

Sex, Caste and Regional Differentials in Adult Literacy

Apart from the size of the problem, sex, caste and regional differentials in literacy rates will also need to be taken into account. Female adult illiterates formed over two fifth of the total adult illiterates. Gender differential of 19.6 percentage point of 2011 and of 16.4 of 2017 might have declined further by 2021, but the programme needs to accord priority to females. Rural/ urban differential in adult literacy rates was 20.24 percentage points in 2011 which came down to 17.6 in 201. State wise differential was also high. It varied from 93.46 percent in Kerala to 55.41 percent in Bihar; with a difference of 38 percentage points in 2011 and from 95.7 percent in Kerala; to 61.3 percent in Andhra in 2017. Adult literacy rate of scheduled caste population was lower by about 9 percentage points while that of the scheduled tribe population was lower by 17 percentage points, as compared to the adult literacy rate of all communities in 2011.

Previous National Adult Literacy/Education Programmes

The national adult literacy/education programmes envisaged not only literacy and numeracy for adults, but also focused on functionality and awareness aspects. The first national programme called National Adult Education Programme (NAEP) of 1978 envisaged a combination of literacy, functionality and awareness as its important constituents; but during its implementation literacy aspect took the centre stage. Evaluation studies indicated that the achievement of the programme was mostly in terms of persons becoming literate. National Literacy Mission (NLM) 1988 adopted a comprehensive approach of providing basic literacy to adults through the famous Total Literacy Campaign (TLC) followed by Post Literacy and Continuing Education (CE) stages of the programme. 2009-10 Annual Report of

the Ministry of HRD reported that from 1988 onwards upto the end of the Tenth Five Year Plan, 126.64 million persons became literate. Literacy campaigns which reached out to 597 of the 600 districts at that time were in many cases successful in imparting not only literacy, but functionality and awareness aspects too. Post literacy projects which were sanctioned from 1991 onward and CE projects which were sanctioned from 1996 onwards, covered 502 and 328 district respectively. Efforts were made through these projects to retain the literacy gains of the adults and to provide library/reading rooms with local newspapers, charcha mandals, cultural and sports activities. These efforts lacked the vigour of the TLC campaigns in their implementation. Saakshar Bharat programme launched on 8th September 2009 sought not only to impart functional literacy to the deprived sections of the society by reducing gender, regional and social disparities in literacy, it also aimed at providing facilities for equivalency to formal education system, develop vocational skills to improve their earning and living conditions and to promote a learning society through continuing education. Saakshar Bharat programme moved from the adult literacy stage to adult education along the changing international concept of adult and lifelong learning. But this programme also lacked the important aspect of the Belem Declaration and Framework of Action (BFFA). It did not provide for developing or improving structures and mechanisms for their recognition, validation and accreditation of all forms of learning by establishing equivalency frameworks (Mishra). In its implementation, the Saakshar Bharat programme could not provide systematic facilities for equivalency programmes. The National Open School organized regular evaluation of basic literacy achievements, but it could not become a national programme of a large magnitude.

National Education Policy 2020

Past adult literacy/education programmes moved from foundational literacy and numeracy to basic literacy, post literacy, continuing education, equivalency to formal school education and lately to lifelong learning over the last three decades. But in the implementation of these programmes necessary inputs may not have become available to create impact of the equivalency and lifelong education programmes. Foundational literacy is essential but not adequate to ensure the benefits of literacy for individual, society and the nation. Our constitution by inserting Article 21A through 86th amendment in 2009, recognized the right to free and compulsory education of elementary level for all children upto the age of 14 years. Elementary level of education is considered essential for every citizen to make use of his education in improving his/her functionality and participate in society's and nation's development. National Family Health Surveys have shown that Total Fertility Rate, Infant Mortality Rate and other health indicators have direct relation with the levels

of literacy/education. The National Education Policy 2020 recognizes that the opportunity to obtain foundational literacy, education and pursue a livelihood must be viewed as basic rights of every citizen. It has therefore envisaged five types of programmes under its adult education sector: (1) Foundational literacy and numeracy; (2) Critical life skills (including financial literacy, digital literacy, commercial skills, health care and awareness, child care and education and family welfare); (3) Vocational skill development (with a view to obtaining local employment); (4) Basic education (including preparatory, middle and secondary stage equivalency); and (5) Continuing education (including engaging holistic adult education courses in arts, sciences, technology, culture, sports and recreation) as well as other topics of interest or use to local learners, such as more advanced material on critical life skills. It has included all important aspects of action plan, starting from an outstanding adult education curriculum framework to use of technology for strengthening these initiatives.

Conclusion

Census data over the decades has shown that India moved from a very low level of adult literacy to a moderate level of 69.28 percent by 2011 and 73.9 percent by 2017. Census 2021 has not yet been held. Even otherwise age group data on literacy from a census becomes available after a lapse of over one to two years. The estimates for 2021 indicate that literacy rate of youth population would have gone above to 92.6 percent and that of the 25-34 age group population would have reached near 86 percent. Literacy level of the older age group 35 and above with an estimated literacy rate of 62.8 percent with around 200 million illiterates in 2021, is still a big challenge. Adult education programmes in the mean time moved from foundational literacy and awareness to adult learning of different kinds, keeping with international concepts. Sustainable Development Goal 4 of the Incheon (South Korea) Declaration and Framework for Action, adopted on 21st May 2015 provides for ensuring inclusive and equitable quality of education and promoting lifelong learning opportunities for all by 2030. Target relating to youth and adult literacy lays down that by 2030, the entire youth and at least X % of adults reach a proficiency level in literacy and numeracy, sufficient enough to fully participate in the society, including girls, women and other marginalized sections. Other similar targets included are with respect to skills for work and skills for citizenship and sustainable development. National Education Policy 2020 has taken these targets into account. Effective implementation of the provisions of this new policy will need the required inputs, processes, commitment of the government and community participation etc. With the efforts envisaged in the new policy, India is likely to achieve the global target relating to all youth and about 80 percent of the adult population by 2030,

through the foundational literacy and numeracy and basic education programmes. The other targets are also expected to be attained to a large extent, through continuing education, vocational skill development and life skills development programmes under the policy.

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Gender Equality in Education in India - Gaps and Way Forward

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Abstract

There has been a significant improvement of literacy levels and more specifically for the girls, including the participation of females at all levels of education i.e. primary, upper primary, secondary, higher secondary and higher education in India. Female participation at school level has exceeded the male participation. However, at higher education level female enrolment is behind the male enrolment. Further, in Institutions of National Importance (INIs) and all professional courses except medical sciences, male participation is still dominant. The current article aims to find out the status of gender equality at all levels of education in India. Further, it brings out the existing gaps and also suggests the way forward for bridging that gap. The paper has tried to ascertain the conceptual framework of gender equality in education. Efforts have been made to collect evidences from educational data available in public domain at various platforms of national agencies/departments. A suitable analysis and logical conclusions have been drawn for suggesting the way forward. This article will be crucial for students, researchers, academicians as well as policy makers for making them aware about the current status of gender equality in education, for taking informed decisions in that matter.

Keywords: *education, gender equality, gross enrolment ratio, gender parity index, dropout rate*

Introduction

Education is a human right and an essential tool for achieving the goals of equality, development and peace. Non-discriminatory education benefits both girls and boys and thus ultimately contributes to equal relationships between women and men. Equality of access to and attainment of educational qualifications is

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necessary, if more women are to become agents of change. Literacy of women is important to improve health, nutrition and education in the family and to empower women for participation in decision-making as part of the society (UN Women, 1995). Women empowerment in a sustainable manner could be realized by bringing equality in education. The status of education of women could be proven by assessing various indicators of gender equality at different levels of education, right from effective literacy to school education and even at the higher education level. The data has been analyzed for bringing in a picture of gender equality in education system in India, including women workforce in education system. The gaps have been identified for suggesting the way forward. In India the data is collected through National Sample Survey (NSS) of National Sample Survey Organisation, Education Statistics at a Glance, Unified District Information System for Education (UDISE) and All India Survey of Higher Education (AISHE) of Ministry of Education etc. Before discussing the statistical evidence we have to understand the conceptual framework of gender equality and then gender equality in education.

Education and Gender Equality

In Indian context, education of women is improving each year and we are heading towards a situation of attaining gender equality in education, wherein men are being outnumbered by women. In the past decades, the enrolment of girls has been improved at various levels and so has the literacy level. Also the number of female teachers is increasing with respect to the total pool of teachers and it was almost equal at different levels of school education. Women can create a better community based on harmony and cooperation, achieved through a gender balance in education, health and employment. In the next section, gender balance in education sector including literacy will be discussed. The statistics presented in this paper provides for improvement in women education vis-à-vis men's education. Subsequently, a picture has emerged for their comparative improvement. Further, employment of women in educational institutions has been considered in the paper for finding the gender equality in workforce.

Effective Literacy and Gender Equality

Upon data analysis from National Sample Survey (NSS) it has been found that literacy rate (Age 7 and above) increased from 71.7 per cent in 2007-08 (NSS 64th round) to 77.7 per cent in 2018 (NSS 75th round). It was improved by 6.0 percentage points. For women, it has improved from 62.3 per cent to 70.3 per cent (an improvement of 8.0 percentage points) during the same period. The gender gap in literacy has been reduced from 18.2 in 2014 to 14.4 percentage points in 2018.

However, it is still a huge gender gap in effective literacy which needs special attention. The table below has reproduced comparative figures of literacy in 64th and 75th NSS rounds.

Table-1

Comparison of literacy rate (%) for persons in different age-group for rural and urban population

Table-1: Comparison of literacy rate (%) for persons in different age-group for rural and urban population									
Age	Literacy rate (%)								
	Rural			Urban			Rural + Urban		
	Male	Female	Person	Male	Female	Person	Male	Female	Person
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
2018 (NSS 75 th round)									
Age 7 and above	81.5	65.0	73.5	92.2	82.8	87.7	84.7	70.3	77.7
2007-08 (NSS 64 th round)									
Age 7 and above	77.0	56.7	67.0	89.9	78.1	84.3	80.5	62.3	71.7

Source: NSS K1b (71/25.2): Key of Social Consumption in India: Education (Pg. 8) and NSS KI (75/25.2): Key Indicators of Household Social Consumption on Education in India (P.11)

Though the gender gap is gradually reducing, however, India needs to travel a long distance for bridging that gap. This would not be possible unless some targeted scheme/programme with specific objectives is introduced and implemented in a mission mode, by involving all stakeholders. Near absolute literacy and in particular, women literacy is one of the crucial factors for reaping the fruit of true democracy in any country.

School Education and Gender Equality

If we look at school education, number of schools has increased from about 1.29 million in 2007-08 (Statistics of School Education, 2008-09) to about 1.5 million in 2019-20 (Ministry of Education, 2019-20). The access to schools has increased to nearly universal level. The total number of enrolment in schools has increased from about 237.3 million to 264.5 million³ during that period. The girls' enrollment has increased from 109.9 million to 127.1 million. It may also be inferred here, that out of 27.2 million increase in total enrollment -17.2 million are girls.

Gender parity is pivotal in analyzing participation of girls in education. There are various other indicators like gross enrollment ratio (GER), gender parity index (GPI) and dropout rates (gender comparable) at various levels in schools, which may proved to be deterministic factors for deciphering the status of gender equality and indicators of women development. Comparative GER at various levels of school education from 2007-08 to 2016-17 are given in table below:

³<https://dashboard.udiseplus.gov.in>

Table-2

Gross Enrolment Ratios (GER) at various levels of education in 2007-08 and 2016-17

2007-08*												
	Class I-V			Class VI-VIII			Class IX-X			Class XI-XII		
	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total
All categories	115.26	112.58	113.97	81.48	74.36	78.06	62.62	53.23	58.15	36.26	30.42	33.48
Scheduled caste (SC)	125.51	124.31	124.93	82.07	78.08	80.17	55.81	48.99	52.64	30.12	25.31	27.91
Scheduled tribes (ST)	136.42	130.60	133.57	81.09	70.16	75.81	48.84	37.22	43.27	24.25	16.20	20.33
2016-17**												
All categories	94.02	96.35	95.12	86.90	95.19	90.73	78.51	80.29	79.35	54.93	55.91	55.40
Scheduled caste (SC)	103.38	106.26	104.75	93.78	103.40	98.24	82.49	86.12	84.19	54.48	57.59	55.93
Scheduled tribes (ST)	102.61	100.58	101.62	94.56	96.99	95.72	72.65	74.39	73.48	42.71	42.62	42.67

*Statistics of School Education, MHRD (2007-08)**UDISE, Flash Statistics, NIEPA (2016-17)

As shown in table-2, the GER for girls in various social categories and at all the levels of education i.e. primary, upper primary, secondary and higher secondary were lower than boys in 2007-08. The trends were reversed in 2016-17 for all social categories and at all levels, except for STs at primary and higher secondary levels. Also it can be interpreted from here that the GER at higher secondary level has improved remarkably in 2016-17, as compared to 2007-08. However, this area still needs a lot of improvement. The GER for STs and specifically for girls is less than 50 per cent at higher secondary level, which is a matter of concern and an impediment in bringing gender equality in school education.

Table-3

Gender Parity Index (GPI) at various levels of education in 2007-08 and 2016-17

2007-08*					
	Class I-V	Class VI-VIII	Class IX-X	Class XI-XII	
All categories	0.98	0.91	0.96	0.85	0.84
Scheduled caste	0.99	0.95	0.98	0.88	0.84
Scheduled tribes	0.96	0.87	0.94	0.76	0.73
2016-17**					
All categories	1.02	1.10	1.05	1.02	1.02
Scheduled caste	1.02	1.09	1.05	1.03	1.06
Scheduled tribes	0.98	1.03	1.0	1.02	1.0

*Statistics of School Education, MHRD (2007-08)

**UDISE, Flash Statistics, NIEPA (2016-17)

Gender parity index is another important indicator for observing the status of gender equality in school education. Table-3 above represents the GPI which was less than 1.0 in the year 2007-08 for all social categories and for all the levels of

school education. However, 1.0 or more GPI in the year 2016-17 at all the educational levels in schools is indicative of huge improvement in girls' GER as compared to boys'. This is one of the positive signs and provides for a better future for girls, in school education.

Table-4
Dropout rate at various levels of education in 2007-08 and 2016-17

2007-08*									
	Class I-V			Class I-VIII			Class I-X		
	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total
All categories	25.70	24.41	25.09	43.72	41.34	42.68	56.55	57.33	56.71
Scheduled caste	34.37	24.52	30.09	53.56	51.12	52.47	68.05	68.90	68.42
Scheduled tribes	31.04	31.68	31.34	62.62	62.31	62.48	76.02	77.97	76.85
2016-17**									
	Class I-V			Class I-VIII			Class IX-X		
	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total
All categories	6.40	6.30	6.35	5.91	6.34	6.12	19.97	19.81	19.89
Scheduled caste	8.30	7.86	8.09	8.02	8.01	8.01	23.06	21.99	22.55
Scheduled tribes	8.57	8.51	8.54	8.86	8.90	8.88	27.41	26.51	26.97

*Statistics of School Education, MHRD (2007-08)**UDISE, Flash Statistics, NIEPA (2016-17)

Gender comparative dropout rate (DoR) is the indicator which represents the remaining students in schools and completion of that particular level of education, after taking admission. Table-4 represents DoR for different social categories and different levels of school education. Upon interpretation of data, it was found that the dropout rates have been reduced drastically from 2007-08 to 2016-17. Further, the girls' dropout except for ST in class I-VIII and class IX-X are lower than their male counterparts. The data in tables 2, 3 and 4 provides a trend for upward movement of performance of girls in school education. However, SCs and STs still need special attention. For the first time data on vocational education (VE) in secondary and higher secondary schools provided under National Skill Qualification Framework (NSQF) has been collected in UDISE, 2016-17. Upon perusal it was found that the enrolments in schools were 1.51 lakhs in 2015-16, of which about 47 per cent were girls. In 2016-17, VE enrolments were increased to 2.67 lakhs of which the girls were about 48 per cent. The participation of girls in VE has marginally increased⁴ (UDISE, 2016-17, P-345).

This increase is crucial in the sense that increased girls participation in VE will definitely increase women participation in workforce in different vocations. One

more crucial indicator of women teachers in schools could be crucial for ascertaining the women participation in workforce. The number of teachers has increased from 6.2 million in 2007-08⁵ to 9.69 million in 2019-20⁶. The percentage of female teachers in school education was about 41 percent in 2007-08 which has now increased to about 51 per cent in 2019-20. There is a scope of further improvement as it had been rightly observed in a working paper on 'Women Teachers Empowered in India: Teacher Training Through A Gender Lens', 2002, that "the women teachers are true role models and to be able to pass on the values of gender equity to girls and boys, they need to be able to facilitate their own empowerment in both private and public life." Increasing women participation in teaching professions at primary level is one of the healthy signs to bring our society an inch closer towards gender equality. The equality in education and women cannot be established in the absence of having a comparative analysis of higher education. Let's have a look at gender comparative status in higher education.

Higher Education and Gender Equality

Higher education deals with the education including certificate, diploma and degree courses after higher secondary school education. The workforce for school education is produced through the professional qualifications like Diploma in Education (D.Ed), or Bachelor of Education (B.Ed). Data from 'Educational Statistics at a Glance', MHRD, 2018 reveals that D.Ed. pass outs in 2015-16 were about 84 thousands, of which more than 55 per cent were females. Similarly, the B.Ed. pass outs were 5.28 lakhs of which 64 per cent were females in the same year. "A female role model can support and encourage girls to successfully complete their studies and maybe even continue studying to become teachers, themselves. She can also be there to listen to any problems and provide guidance when necessary. In schools where girls are in the minority, especially, the presence of one or more female teacher may also ensure protection for girls from unwanted attention from boys or male teachers, and even from sexual abuse and exploitation (UNESCO, 2008)." The higher women pass outs in teacher training courses in our country indicates that our education is heading towards increased women development/empowerment. Increase in enrolment of girls and reduction of DoR in schools can be linked with continuously increasing women teacher trainee and number of female teachers. Further, if we look at accessibility in higher education (HE), the higher educational institutions (HEI) have increased with a fast pace and doubled in the last decade. The number of universities has increased from 406 in 2007-08 to 993

⁴UDISE, Flash Statistics, NIEPA 2016-17

⁵Enumerated from Statistics of School Education, 2007-08

⁶<https://dashboard.udiseplus.gov.in>

in 2018-19. Out of 993 universities, 16 are exclusively for women. Similarly, number of colleges and standalone institutions have increased from 23099 to 51649, during same period. There are two crucial indicators which may be seen as markers of women empowerment - GER and student enrolment in higher education. The comparative picture of these two indicators between the year 2007-08 and 2018-19 are shown in table-5 below.

Table-5

Indicators of GER and enrolment (age group 18-23 years) in higher education comparison of 2007-08 and 2018-19

Year 2007-08*						
	GER			Enrolment in millions		
	Male	Female	Total	Male	Female	Total
All categories	15.2	10.7	13.1	10.6	6.6	17.2
Scheduled caste	13.2	8.6	11.0	1.5	0.9	2.4
Scheduled tribes	12.4	6.7	9.5	0.6	0.3	0.9
Year 2018-19**						
All categories	26.3	26.4	26.3	19.21	18.19	37.4
Schedule caste	22.7	23.3	23.0	2.84	2.73	5.57
Schedule tribes	17.9	16.5	17.2	1.05	1.02	2.07

Source: *Educational Statistics at a Glance, MHRD, 2018-19

**All India Survey on Higher Education, DHE, MHRD (2019)

Upon analysis of the figures given in the table-5 above it has been observed that there is almost 101 per cent increase in total GER for all categories from 2007-08 to 2018-19. The female percentage is about 147 per cent, which is more than double of 72 per cent increase in male enrolment. In case of SC, the total GER increase is 109 per cent while the same in case of female population is 171 per cent. It is nearly two and half times of 71 per cent of SC male GER increase during that period. The increase in GER for ST is accounted for 81 per cent and in case of female the same is about 146 per cent. Similar trend was observed in enrolment during the reference period. The total enrollment of all categories has been increased by 117 per cent. The same is increased by 176 per cent in case of females. The total SC enrolment increase is evidenced to 131 per cent and this is 203 per cent in case of females. The total ST enrolment increase is 130 per cent while in case of females it is 240 per cent. The figures above show that Indian higher education is rapidly heading towards gender equality. Another important indicator i.e. the GPI which shows tremendous improvement and has increased from 0.7, 0.65 and 0.78 in 2007-08 to 1.0, 1.02 and 0.92 in 2018-19 for all categories, SC and ST, respectively. Similarly, one more progressive indicator for drawing an inference in favour of women empowerment through higher education is number of female students per

100 male students. The number has increased from 85 in 2014-15 to 95 in 2018-19. The higher education opens the door of employment. The figures are giving encouraging signs of making more women ready for the employable workforce in the country. This will certainly ensure women development/empowerment by way of bringing gender equality in higher education. Despite almost all indicators providing an encouraging picture, an interesting fact is noticed in AISHE, 2018-19, which has a low share of female students in Institutions of National Importance (INIs).

The INIs are providing quality higher education and their alumni feel proud after passing out from there. Graduates from there are technically superior in quality, in their respective fields than their counterparts who graduated from other institutions. It can be inferred from this fact, that there is male supremacy in terms of enrolments in the premier institutions of the country which need special attention. This is essential to bring equality in terms of opportunity for girls, for quality higher education from INIs. Employment of women itself is one of the key indicators for proving gender equality. Besides other fields, teaching is one of the professions well taken up by women in our country. In previous sections, we have seen an upward moving trend of increase in percentage of women teachers in school education. Let us now have a comparative analysis of female teachers with their male counterparts during the period in question. It is observed that the total number of teachers has increased from 0.65 million in 2007-08 (Statistics of Higher and Technical Education, 2007-08) to 1.42 million in 2018-19 (AISHE, 2018-19). The data of female teachers in 2007-08 is not available. However, in 2018-19 the share of female teachers is 42.2 per cent. Another indicator which provides inputs towards female participation is workforce as non-teaching professionals in HEIs. In the year 2018-19, there were 73 female teachers per 100 male teachers. The average number of females per 100 male non-teaching staff stood at 49 which is not an encouraging figure (AISHE, 2019). Gender equality in workforce in HE will take its due time, as it is still male dominated. This grey area needs special attention since the female GERs and enrolments are moving upward with a fast pace.

Upon stream wise analysis of data, a true picture has emerged. It is observed that in some of the areas females are doing better while in other areas, they are struggling to come at par with their male counterparts. In 2018-19, the total number of students enrolled in Arts courses was 9.35 million out of which 53.03 per cent was for females. Science is second major stream with 4.71 million students out of which 51 per cent are females. Commerce is third major stream which accounts for 4.03 million students, of which 48.8 per cent are females. Engineering and Technology is the fourth major stream with 3.85 million student enrolment, where

female enrollment is only 28.9 per cent. This shows that commerce and Engineering and Technology are less preferred amongst female candidates. Medical Science stream shows a different picture altogether where comparatively more females are enrolled. Out of total 1.12 million students, females are 7.25 lakhs (60.62 per cent). Management stream has 6.5 lakhs students, of which only 37.69 per cent are female students. The students enrolled in Law stream are 3.98 lakhs, of which only 33.67 per cent are females. The above data shows that in the year 2018-19, the performance of women in terms of enrolment is better than male counterparts for Arts, Science and Medical Science streams. Conversely, they have poor performance in Commerce, Engineering and Technology, Management and Law streams. The best performance of female students is in Medical Science and the poorest performance is in Law stream. It may be inferred from here that except medical science, all other fields which give scope of higher employability are not well taken up by the female candidates. There may be a number of reasons including social stigma, course preference by females on the advice of parents, parents' favoritism for male children in professional courses etc. The truth is that gender equality cannot be fully realized unless all the fields are addressed equally.

Table-6

Student enrolment at different levels in higher education in the year 2011-12 and 2018-19*

Year	Ph. D.			M. Phil.			Post Graduation		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
2011-12	49296	32134	81430	15913	18241	34134	1236376	1115288	2351664
2018-19	95015	74102	169117	11623	19069	30692	1306690	1736745	3043335

* Source: All India Survey on Higher Education, 2018-19

If we compare data of 2011-12 and 2018-19 for enrollment in Ph.D., M Phil. and post graduation levels which opens the gates of employment in different specialized areas, it is understood that there is an overall improvement in the enrollment of women for all the three disciplines, more than their male counterparts. The total increase in Ph.D. scholars from 2011-12 to 2018-19 is 98 per cent. The female scholars increased by 131 per cent as compared to 93 per cent of male candidates. Further, there is an increase in the total number of students at post graduation level by 29 per cent during the same period. The female enrolment increased by 56 per cent while only 6 per cent increase is observed in case of male students. While there is increase in enrolments for PG and Ph.D., it is observed there is an overall decrease in M. Phil. courses. However, if we compare male and female M.Phil. enrolment data during the period, it is observed that females have done far better than the males. The female enrollments increased by 5 per cent while on the other hand there is a decrease of 27 per cent in the case of male

students. The total enrolment in M.Phil. course decreased by 10 per cent during that period. The reduction in enrollment in M.Phil. could be attributed to preference of the students to go for Ph.D. course.

We have development in women in terms of education at all the levels, right from literacy to school and finally higher education. It has been observed that there is an overall greater pace of women development in comparison to their male counterparts, during the period for which the data has been referred to. However, we have to cover a long distance to realize gender equality in education and also focus upon bringing equal or more number of women to the workforce. The dream of empowering women can only be realized by opening the doors of all fields and levels of education, equally for women too.

Critical Appraisal of Gender in Education

A lot of schemes/programmes of different Ministries/Departments of Government of India are providing momentum in bringing gender and social equality in the education sector. However, some of the areas still need special focus by involving all stakeholders including managers, planners and policy makers. It has been observed that the fruit of the schemes/programmes are not uniformly distributed across the country and females are more deprived of the benefits than their boys/male counterparts. The females have low literacy levels and there is still a huge gender gap in literacy despite of running several schemes/programmes, since independence. This needs special attention and introduction of some focused programme in mission mode or jet mode needs to be launched, in order to bring gender and social equality in terms of literacy and numeracy. There are many areas in education sector where females are leaders, who excel in their performances. Their performance is continuously increasing in school education and in employment as school teachers. Further, their performance is gradually increasing with respect to enrolment in vocational education. In higher education too their presence is continuously increasing, more specifically in Arts, Science and Medical fields. They have better GERs, GPIs, and lower DoRs at all the levels of school as well as higher education. In school education, the girls have achieved or even surpassed the equality. In higher education, they are heading towards the same. However, females continue to face various kinds of discrimination in gaining quality education. It has been evidenced from their lower enrolments in INIs. They are far behind men when it comes to enrolment in professional courses like Engineering, Management and Law. Further, low female presence in terms of enrolment in Commerce proves that they are facing deprivation in that area.

Special attention of all stakeholders is needed for ensuring near equal female enrolment in these areas. This will ensure opening of door of equal opportunities for women in the world of work, by making them employable in more numbers. The number of women universities is just 16 out of 993 in total. This is less than 2 per cent of the total. This number could be increased to at least 10 per cent. This will ensure participation of more female students in higher studies. Parents who hesitate in sending their female children to co-educational universities will happily become ready to get their daughters enrolled at women only universities. This will certainly bridge the gender gap in GER in higher education. Certain educative programmes for breaking gender stereotypes may also be introduced by different Departments/Ministries. Certain educational degrees like Ph.D. need special attention so that women can get equal opportunities in the field of research. Though women are doing better at almost all levels of education, in certain disciplines they need a favorable push so that gender bias is eliminated. True democracy could be realized only when there is no gender inequality, in all the spheres of our life including education.

Way Forward

Several schemes which encourage girl child education including the flagship scheme of Beti Bachao, Beti Padhao have been launched by Government of India. The scheme is intended to promote educational facilities for the girls in school education. Further, the National Scheme for Incentives for Girls at Secondary Education, Kasturba Gandhi Balika Vidyalaya (KGBV), UDAAN for Giving Wings to Girls Students, Single Girl Child Merit Scholarship Scheme, Girls Hostel Scheme at Higher Secondary Stage, Construction of Residential Quarters for Female Teachers in Secondary Schools, Special Programmes for Empowerment of Girls, Stipend for Girls with Disabilities are the programmes/schemes or the components of individual programmes/schemes in order to provide positive impetus towards educational development of girls. The increased enrolments and GER and reduced DoR of girls in school education is the result of these various schemes/programmes of Department of School Education and Literacy. Similarly, Women Colleges, Girls Hostel Scheme in already existing colleges, Model Residential Degree Colleges for Women, Self Defence Training programme, Higher Education for Women through Open and Distance Learning, Day Care Centres in Universities and Colleges, Post Graduate Indira Gandhi Scholarship for Single Girl Child for Pursuing Higher Education, Development of Women's Studies in Universities and Colleges, Post Doctoral Fellowship for Women, Scheme for Capacity Building of Women Managers in Higher Education, Pragati (Scholarship for Girls Students) in technical institutions, Women Hostels in Polytechnics are some of the good initiatives/schemes/

programmes launched by the Department of Higher Education for development of women education.

Further, the sustainable development goals (SDG) provide for creation of conducive educational facilities which are child, disabled, and gender-sensitive. This is well taken up by the Government of India through its schemes/programmes. All the initiatives of Department of School Education and Literacy and Department of Higher Education are bringing the society inch by inch, closer to gender equality and ensuring women development/empowerment through good quality education. Further, the Direct Benefit Transfers (DBT) to the poor, including women, in all sectors including education is thereby accelerating economic development of all sections of the society, more specifically creating a positive atmosphere for women education and their empowerment.⁷

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E-learning during the Pandemic: Students' Perceived Ease of Use and Attitudes

• Tanuja Khan¹ • Bharti Joshi²

Abstract

The study was carried out to get an understanding about students' perception of e-learning, during the recent pandemic. Perceptions were sought from 370 undergraduates, out of which 119 were males and 251 were females. This research was done mainly because with the advancement in technology, there are various software tools available, for making e-learning possible in an easy manner. The data was collected through online questionnaires. The finding of the research shows that majority of the science undergraduates regard e-learning to be a better approach for teaching-learning activities. Major finding of the study rests on e-learning having a direct impact on its perceived use and related attitudes. In fact, e-learning has emerged as a new way of enhancing the teaching-learning process, where various platforms have the capability of enhancing the learning output. The finding of this study can facilitate in policy making, aiming at various educational institutes to utilize such e-learning mechanisms for better teaching-learning processes.

Keywords: *pandemic, attitude towards e-learning, perceived ease, features of e-learning*

Introduction

Role of technology in human life is immense. During the current pandemic situation, technology has gained momentum due to the sudden closure of the educational institutes, and this in turn raises the challenges for students' learning process (Qiao *et al.*, 2021). During the lockdown, technology is serving as a solution for the entire learning process through various innovative platforms such as the learning management system (Ãããð³ẽĩãã *et al.*, 2021). It has provided the IT solutions not only for educators, but for evaluation processes too. Technology plays an ultimate

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role to minimize learning gaps which arose due to the pandemic. Educators and undergraduates across the world appreciated the digital platforms for learning (Albion, 2021). The reasons for appreciation are ease of use and learning flexibility, though few limitations are present too. These include social isolation and monotony due to digital classrooms (Elmer *et al.*, 2020). Another fact to be considered is that, digital learning had never been adopted before the pandemic, and now most of the educational institutes are exploring new approaches for its adoption. Further, digital teaching software is being explored by educators to bring about maximum ease for the learners. Digital learning is a recent development and the entire education system is in the process of adopting new teaching technology as well as its methodology.

Review of Literature

Perceived ease of use is the degree to which a person believes that using a particular system would be free from effort (Davis, 1993). Perceived ease of use influenced the student's intention, about the use of e-learning indirectly through the perceived usefulness (Stephan *et al.*, 2019). It also has a significant effect with students' attitude. Perceived ease of use has been tested to describe the acceptance of features, of e-learning (Sultan *et al.*, 2011). Various researches have applied models like TAM to find that the perceived ease of use has a significant effect on an individual's behavior of use of e-learning system (Scherer *et al.*, 2019). Attitude is defined as a person's positive or negative feeling about the given conditions. Success of any system depends on different types of factors, including the attitudes toward the system (Mikelia Preradoviae *et al.*, 2016). Moreover various researches have shown that knowledge of the educator's attitude of the technology helps in their task, which facilitates technology-integrated pedagogy (Al-zboon *et al.*, 2021). Similarly there are strong associations between a learner's attitude and perceived ease of use towards e-learning, in the teaching learning process. Based on the previous studies, we proposed a research study which can examine the impact of perceived ease of use and attitude towards e-learning.

Research Gap

The review of related literature reveals that most of the studies are taken to identify the learners' perception and their attitude toward e-learning during pandemic. Though there are various studies done in the same area, however none of the studies were performed with reference to perception and attitudes of the science undergraduate students.

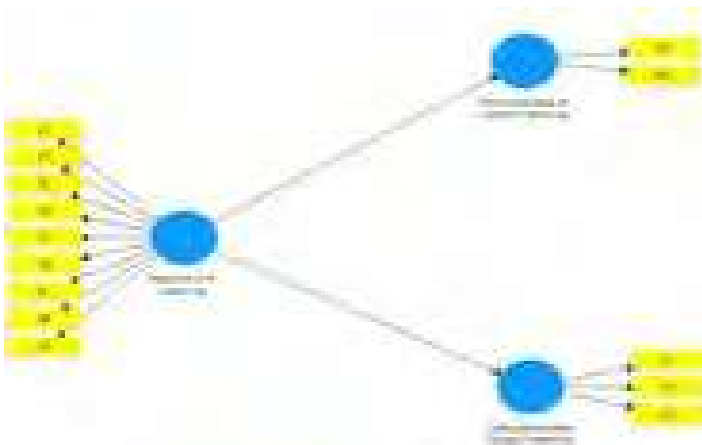
Research Questions

- What are the features of e-learning, according to science undergraduate students?
- What is the perceived usefulness of e-learning among science undergraduates, during COVID-19 lockdown?
- What is the attitude of science undergraduate students towards e-learning?

Conceptual Framework and Methodology

Sudden change in learning has significantly changed a learner's outlook for life, especially the education system. Learners have faced a lot of challenges due to the sudden change in our education system. This is owing to the shift from face-to-face learning mechanism to digital systems. The proposed framework has been conceptualized (Figure 1: Conceptual Framework) from the learner's point of view. Further, *features of e-learning*, *perceived use of e-learning* and *attitude towards e-learning* were considered as constructs for the study. Features of e-learning are considered as the independent variables. Perceived use of e-learning and attitude towards e-learning were considered as dependent variables. Reliability and validity of the self-constructed questionnaires was tested with the help of SEM (Structural Equation Model) software (Jr. *et al.*, 2017). Self-constructed questionnaires were then administered to 30 learners in a pilot study, to check the suitability of the said model. The analysis was done with SEM software (Jr. *et al.*, 2017). The study used both descriptive as well as inferential statistics.

Figure 1
Conceptual Framework



The questionnaire consisted of 18 items meant to collect information about demographics (04 items) and the research variables (14 items). The questionnaire was divided into two sections. The first section contained questions about demographic variables and other personal information. In the second section contained questions about the constructs included in the research. Constructs were measured by a five-point Likert scale. The instruments were measured on a 5-point Likert-type scale ranging from 1= strongly disagree to 5= strongly agree. Each of the variables contained different unique questions. The questionnaire items were analyzed using the SEM software (Jr. *et al.*, 2017). Following are the values for reliability and validity as shown in Table 1.1.

Table 1.1
Reliability and Validity

	Cronbach's Alpha	Rho_A	Composite Reliability	Average Variance Extracted (AVE)
<i>Features of e-learning</i>	0.875	0.882	0.901	0.535
<i>Perceived use of e-learning</i>	0.782	0.782	0.902	0.821
<i>Attitude towards e-learning</i>	0.831	0.841	0.899	0.748

All constructs in this study are first-order reflective. Measurement quality is verified by examining the constructs of reliability and validity. All the values of composite reliability indicators were higher than 0.7 and internal consistency was assessed via *Cronbach's Alpha Coefficient*. All values were above 0.8, indicating excellent (1.0–0.90) reliability for all the constructs used in the study. The average of variance extracted (AVE) was also examined for each construct and values were found to be substantially higher than Chin's (1998) suggested 0.5 thresholds. All the values of the construct were above the threshold values hence, the questionnaire used was appropriate for the study. Later on, the study included 370 respondents from two universities of India for the required data analysis.

Research Hypotheses

This study will attempt to explore the following research hypotheses based on the research model illustrated in figure 2.

- Hypothesis 1 (H1): E-Learning has a significant direct impact on the perceived use of e-learning of the learners.
- Hypothesis 2 (H2): E-Learning has a significant direct impact on the attitude towards e-learning of the learners.

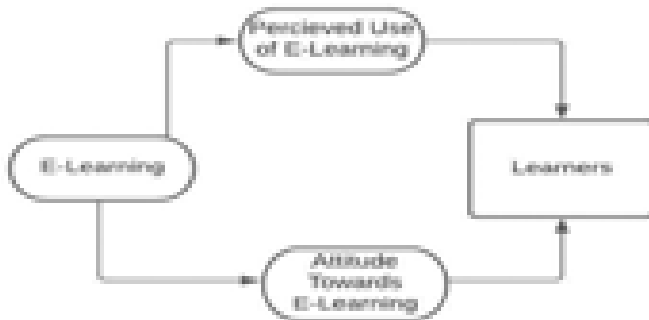


Figure 2: Construct Association

Structural Model Assessment

Structural Equation Model was employed in order to establish a relationship between the constructs and their prognostic significance. Bootstrapping process was employed with 500 bootstraps without changing the sign. This process helped in the identification of p-values for the framed hypotheses, of the present study.

Path Coefficient

Table 1.2
Mean, STDEV, T-Values, P-Values

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (O/STDEV)	P Values	Hypothesis
E-Learning → attitude towards e-learning	0.712	0.716	0.049	14.39	0.000	Supported
E-Learning → perceived use of e-learning	0.747	0.751	0.048	15.574	0.000	Supported

Interpretation of Hypothesis

The two hypotheses mentioned below have a positive significant relationship with the construct:

- E-Learning has a significant direct impact on the perceived use of e-learning of the learners.
- E-Learning has a significant direct impact on the attitude towards e-learning of the learners.

Conclusion and Discussion

This study was set out to analysis the students' perception about e-learning as they were the main beneficiaries of e-learning during the pandemic. The research shows that science undergraduate students believe in e-learning mode as a helpful tool for continuing studies during the pandemic. The research was done mainly because with advancement of technology, there are various software tools which are making e-learning possible in an easy manner. The finding of the research shows that majority of science undergraduates think that e-learning is better for learning, during pandemic like situations. Some major findings of the study reveal that e-learning has a significant direct impact on the perceived ease of use and attitude towards e-learning.

Recommendations and Future Scope

Since the pandemic has increased the scope of e-learning, this will make undergraduates students and teachers compare face-to-face and e-learning mechanisms side by side. This will make undergraduates students experience hybrid learning (combination of traditional and e-learning) which is their preferred choice of learning, as reflected in the study. Researchers also believe that there are some drawbacks of online learning such as internet connectivity, increased class strength, cost factors etc. Due to the ongoing pandemic situation, educational institutions need to explore other e-learning platforms so that undergraduate students do not suffer in any manner and therefore the future scope of research lies in determining whether the educational institutions give weightage to those employers who are working in area of e-learning and if institutes are taking a lead to develop their own e-learning platforms to launch Massive Open Online Courses (MOOCs).

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Vocational Education through *Jan Shikshan Sansthan*s (JSSs): A Study of JSS Jahangirpuri and Ghaziabad

Rahul Yadav¹

Abstract

In India, there are several efforts by Adult, Continuing Education and Extension programmes which have played a vital role in the overall development of human beings in the society. The adult education and lifelong learning is need based, flexible and gives second chance to learn for those who were not privileged earlier. Adult education promotes self-directed learning and that may be formal, non-formal or informal where any person can improve their general, occupational knowledge or skill. Andragogy has been applied in many teaching and learning situations ranging from workers' training and educational programmes. However, in India most of the vocational skill development training takes place in adult education and non-formal sectors. The key objective of vocational education is to help develop an individual's skill in a very specific field by giving them concrete experiences in specific vocational trade.

The research paper is an attempt to examine the vocational development aspects amongst beneficiaries of JSSs. This paper also explores vocational education, impact and skill development. The research design was selected to understand the research problem in depth. The researcher covered *Jan Shikshan Sansthan* (JSS) Jahangirpuri and Ghaziabad. Most of the beneficiaries of JSS are well aware about opportunities in similar vocational trade, environmental issues, schemes, local administration. The research shows that majority of the respondents believed that vocational skill helps to get jobs, improve status in community and bring about social change.

Keywords: *Jan Shikshan Sansthan* (JSS), adult education, lifelong learning, beneficiaries, skill development

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Introduction

The concept, policy and programme of adult education in India has undergone several but significant changes over the years. The changing policy of government of India, role of international organization like the UNESCO, the idea of Paulo Freire and the key role of prominent adult educators has been crucial. Now, skill is high priority in the area of adult education and lifelong learning. In area of adult education motivational aspect and personal growth is needed to get success in any programme. Personal growth towards self-fulfillment has been described as a “struggle for identity and human values” (Moustakas, 1969). Vocational education is always considered as a well organized learning experiences through institutionalized process used to educate or train people for purpose of employment or self-employment. In India, most of the vocational skill development training takes place in the non-formal sector with persons learning the skill on the job, with very little assistance and guidance from their masters /trainer/instructors. This type of training goes for many generations and they are engaged in the informal and unorganized sectors as contractual labourers. A lot of ancillary industries are mostly dependant on such workers. In India, 80% of the work force is engaged in informal sector.

Vocational education (education based on occupation) also known as career and skill development or technical and vocational education/training is education that prepares people for specific trades, crafts and carrier at various level from a trade, a craft, technician or a professional position in medical, accountancy, nursing, pharmacy etc. Craft vocation is usually based on manual or practical activities, traditionally non-academic related to a specific trade occupation. It is sometimes referred to as technical education because the trainees directly develop expertise in a particular group of techniques. The term skill development is quite old in our society and it plays an important role towards empowerment and transformation of our society. Education is a continuous, systematic and lifelong process through which a child or an adult acquires knowledge, experience, skill and attitude. As a general concept of andragogy, the methods which encourage learners to analyze their own experiences, self-direct their own knowledge, develop vocational skills, attitudes, or values tend to bring about personal growth; while pedagogy is a method of teaching-learning in formal academic manner. It is the process of development from childhood to the rest of life.

The word ‘skill’ is associated with employability especially for problem solving, self-management, critical thinking and communication. The core area of skill may include numeracy, literacy, awareness, communication, technological knowledge

and expertise. As per the census of 2011, the total population in the age group 15+ was 838.41 million (83.84 crore) out of which 257.58 million (25.76 crore) alone were illiterate. The number of illiterate in the age group 15-35 years was 79.10 million (7.91 crore) out of which 51.40 million (5.14 crore) were females and 27.70 million (2.77 crore) were males. This age group is considered to be productive and needs for attention in the area of skill development, as they are the breadwinners of their family and society. For the age group of 15-35 to be productive and an integral part of economic progress, they need to be skilled either by improving the existing skills for horizontal mobility or by acquiring additional skills for vertical mobility. Here nobody denies the importance of skilling youth, illiterate, neo-literate or drop outs from formal system to bring them to main stream development for socio-economic development. Our 50% population is below 25 years of age and 65% is below 35 years with a demographic dividend advantage. The skill may be hard or soft as it depends on need of beneficiaries. Although skill and development are integral terms in area of Adult, Continuing Education and Extension, *Jan Shikshan Sansthan*s (JSSs) provide more than 300 various skill training courses in various trades. Now in India, there is an opportunity to build technology based gateway and platform in rural India which can enable rural youth population to assist the corporate sectors. The corporate includes various sectors such as agriculture, healthcare, financial services, retail and communication.

***Jan Shikshan Sansthan*s (JSSs) and its Role in Vocational Development**

The *Shramik Vidyapeeths* (SVPs) came in India to impart vocational skill among industrial workers and their family members. In the context of socio economic development, this programme was conceived as responding to the vocational needs of various group of illiterates, neo-literates, drop-out, adults, women and adolescents who belong to deprived sections of the society including the unorganized workers. Popular courses conducted were basic electronics, tape recorder/transistors repairing, refrigeration and air conditioning, battery charging, house wiring, motor rewinding, tailoring and cutting, embroidery, carpentry, drawing and painting, candle/agarbatti making etc. As there was no standardized curriculum prepared centrally, the *Shramik Vidyapeeths* prepared the curriculum themselves which varied from one to the other. After completion of course, *Shramik Vidyapeeths* conducts learner evaluation and issues certificate. Most of the beneficiaries used to pursue self-employment or set-up own businesses. As skill oriented training was an integral part of continuing education programme, *Shramik Vidyapeeths* were organising vocational skill programmes for illiterates, neo-literates and drop-outs in urban areas. The government had decided to change the name of *Shramik Vidyapeeths* to *Jan Shikshan*

Sansthan (Institute of People's Education) and expand the operational areas from urban to rural areas. The annual coverage of the beneficiaries is around four lakhs (as per *JSS.gov.in*) out of which 85% are women. The scheme of *Jan Shikshan Sansthan* implemented through nongovernmental organization is fully funded by government of India. The cliental group to be catered to includes SCs, STs, OBCs, minorities and women. *Jan Shikshan Sansthans* cater to the vocational skill needs of different cliental group of illiterates, neo-literates. The training programmes are organized in a diversified manner and a flexible approach. The course fee is also nominal. *Jan Shikshan Sansthans* (*JSS*) organize vocational skill development training that may also be called as adult education institutions or adult technical training institutions.

The *JSSs* are famous for work in the area of adult, continuing education, extension and lifelong learning. Each *JSS* is an independent entity with a respective Board of Management (BOM). Hence it has a lot of freedom to run the institution with the overall framework given by government of India, as per the guidelines of the scheme. Now it comes under National Skill Development Corporation (NSDC) and its courses are maintained and monitored by the National Skill Qualification Framework (NSQF) and Directorate of *Jan Shikshan Sansthan* which was set up recently. The scheme was again reviewed by Indian Institution of Management (IIM) Lucknow in 2014 and it was recommended to continue this programme due to vocational need in the country. Thereafter, the *JSS* comes under Ministry of Skill Development and Entrepreneurship (MSDE) which is dedicated towards implementation of skill development programmes in country. On 2nd July 2018, *JSS* was transferred from Ministry of Human Resource Development (MHRD) to the Ministry of Skill Development and Entrepreneurship (MSDE).

Methodology of the Study

This research paper is an attempt to examine the vocational development among *Jan Shikshan Sansthans*' beneficiaries at Jahangirpuri and Ghaziabad center. Detailed information and data was collected through beneficiaries and their parents, trainers and administrative staff. In addition to focused group discussions, interviews were conducted. Two *Jan Shikshan Sansthans* have been selected from NCR as Jahangirpuri Delhi and Ghaziabad Uttar-Pradesh. A purposive sampling method was followed. A total of 100 beneficiaries were covered for study out of approximately 700 persons. The study focused on vocational development of beneficiaries of *Jan Shikshan Sansthan* (*JSS*) which is highly appreciated in the area of adult education in India.

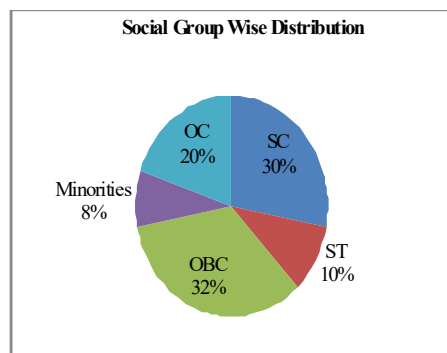
Objectives of the Study

- To analyze the background of beneficiaries and assess level of participation in *JSS* courses;
- To examine the status of skill, employment and awareness level of beneficiaries after completion of courses;
- To study how *JSS* vocational programme helps beneficiaries in getting employment and becoming self-employed.

The researcher has administered the tool to the selected samples individually and group. The sample has cooperated with the investigator and provided their responses. The researcher has carefully noted down and recorded their responses. The study strives to know the overall vocational development of beneficiaries, status of employment, their background, *JSS* functions etc.

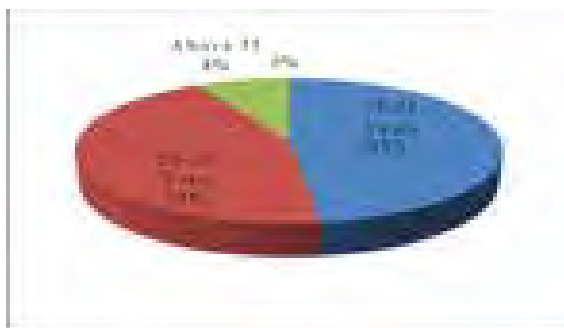
Background of Beneficiaries of JSSs

The beneficiaries of *JSS* are migrated population who come from various states of India. *JSS* welcomes those who belong to educationally and socially backward backgrounds, industrial labourers, especially women. Majority of the respondents belonged to other backward class (OBCs) where there was low percentage of scheduled tribes. The largest percentage of beneficiaries included the OBCs - 32% which is more than the scheduled caste of 30%. The division is in four categories of SC, ST, OBC and General. It is found that beneficiaries were aware about category/caste certificate due to compulsion by the government to get benefit of schemes. The minorities was only (8%) out of 100. The participation of general categories was 20% in various courses of *JSS*. The social group wise distribution of respondents is as follows:



Age-wise Distribution of Respondents

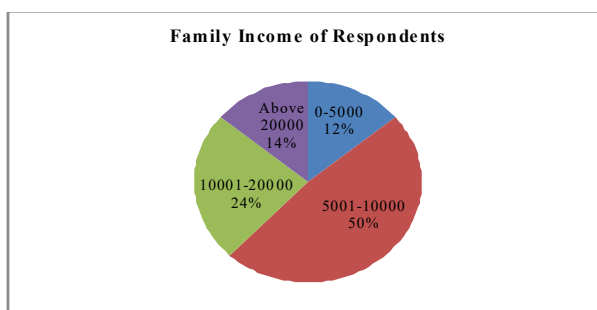
Majority of the respondents were in the age group 26-35 years. Only 8% belonged to above 35 years category. The youth population was aware about job and skill. As the *JSS* is now under Skill India mission and NSDC, Ministry of Skill Development and Entrepreneurship, the focus is on youth too.



Locality of Respondents

Locality	<i>JSS</i> Jahangirpuri	<i>JSS</i> Ghaziabad	Total	
			No.	Percentage
Urban	26	23	49	49%
Rural	05	09	14	14%
Slum	19	18	37	37%
Total	50	50	100	100%

The above table shows that most of the beneficiaries belonged to urban areas (49%) than slum areas (37%). 14% respondents belonged to rural areas. Nominal fee and distance from residence to the *JSS* centers was the main cause to get admission. Initially *JSS* was started in industrial area, however after completion of 25 years of establishment in 1993, it was evaluated by TATA Institution of Social Sciences, Mumbai and was recommended to extend branches/centers from urban areas to rural areas.



It can be seen that 50% respondents had a family income upto 10000 and 24% were earning up to 20000. There is a wide gap in the income level of the respondents. Medium income was between 5001-10000 (50%) and they were in majority as they mainly belonged to retail business families. The main occupation of family was permanent sweeper, office attendant, clerical staff employee in government or private organizations. This gap can be attributed to the family differences pertaining to education and skill opportunity.

Skill, Vocational Development and Employment

Trade-wise Distribution of Respondents

S. No.	Name of Trades	Duration of course	Numbers of beneficiaries	Total (Percentage)
1	Plumbing	03 Months	10	10%
2	Beautician	03 Months	16	16%
3	Computer	03 Months	13	13%
4	Dress making	06 Months	08	8%
5	Electrical technician	06 Months	08	8%
6	Fashion Designing	03 Months	10	10%
7	Screen printing	03 Months	08	8%
8	Tailoring and cutting	03 Months	15	15%
9	Stenography and typing	06 Months	07	7%
10	Painting	03 Months	05	5%
	Total		100	100%

The above table highlights the vocational training courses of respondents. It is found that course duration may vary as per the need in various JSSs. The trades of respondents who were interviewed include Tailoring and Cutting, Beautician, Computer course, Dress making, Electrical Technician, Fashion designing, Screen Printing, Plumbing, Stenography etc.

Sex-wise Distribution of Respondents by their Monthly Income Earned through Employment

S. No.	Monthly Income	Male	Female	Total	Percentage
1	Up to 5000	06	09	15	15%
2	Rs.5001-10000	16	19	35	35%
3	Rs.10001-20000	12	13	25	25%
4	20000 and above	08	07	15	15%
5	No income	05	05	10	10%
	Total	47	53	100	100%

It is observed that beneficiaries who did plumbing and electrical courses easily get employment. Many real estate companies, residential societies, colonies, government and private offices, commercial buildings suffer from shortage of workers. The beneficiaries get smart income through individuals or with contractor or seniors. The 15% beneficiaries with income of 20000 and above include the workforce in similar trade.

Awareness Level of Beneficiaries

S. No.	Particular	Knowledge/Attitude	Practice/Behaviour
		Total -100	Total -100
1	How to get personal/business loan	65(65%)	45 (45%)
2	Why is it necessary to immunize children?	72 (72%)	70 (70)
3	How illiterate and unskilled are face deprivation	84 (84%)	80 (80%)
4	How alcohol are harmful for health	76 (76%)	68 (68%)
5	Why is it necessary to stop chewing tobacco/smoking	92 (92%)	46 (46%)
6	Causes of AIDS/Dengue/Malaria infection	84 (84%)	76(76%)
7	Advantages if marriage is registered	66 (66%)	42 (42%)
8	How one is benefited by forming Self help Group?	55 (55%)	46 (46%)
9	How to get benefit from Governmental/Non - governmental socio economic development schemes	86 (86%)	72 (72%)
10	How use ICT tools in vocational/professional area	76 (76%)	60 (60%)

It may be observed that the general awareness of the beneficiaries about the issues indicated above is quite high ranging between 72% to 80%. Most of beneficiaries regularly use smart phones and internet as to easily get new information through various types of application. Most of the beneficiaries were well aware about environmental issues such as pollution causes, plantation, waste management and indoor plants. The community members had already benefited through rehabilitation centers.

Major Findings

- Most of the beneficiaries belonged to other backward classes of community and felt that without skills it is difficult to survive in NCR. The SC-ST and minorities also said that with the help of vocational training they can get avail opportunities;
- Majority of respondents had migrated from eastern states of India;
- The main cause behind joining the course was to ensure a job, improve social status and development;
- Majority of beneficiaries were unmarried. They were well aware about the upcoming economic challenges. They tried to settle their life with training

and employment/self-employment.

- The training was helpful to improve quality of life. Life enrichment education and awareness programmes of JSS were able to equip learners and the community with essential knowledge, attitude and values that enable them to improve quality of life as an individual and a member of community;
- Beneficiaries were less aware about legal issues or about personal or business loan, insurance rules, term and conditions and new start-ups;
- JSS provides special sessions for capacity building and placements;
- After completion of courses beneficiaries are associated with seniors and easily get sufficient income;
- The female beneficiaries availed flexible timing and close by branches, due to household duties;
- The courses such as beauty culture, tailoring and cutting have developed women entrepreneurs who started their own enterprises;
- The respondents who did plumbing, electrician, computer, typing, stenography usually get smart income through employment or co-employment.

Suggestions

- JSS comes under Ministry of Skill development and Entrepreneurship (MSDE) which is maintained and monitored by National Skill Qualification Framework (NSQF). Many new skill based short term courses like IT based, BPO, local traditional trades, travel and tourism, sports journalism, performing arts, radio broadcasting, counseling and guidance etc. could be started with collaboration of agencies and adult education departments of Universities and colleges;
- With the help of local governmental administration, vocational training courses should be advertised in local newspaper regularly and it must be ensured that 100% enrolment happens in each course. Further, the number of batches for the courses which are of high demand amongst women could be increased;
- During training period, project work and internship should be compulsorily endorsed;
- The new course in area of soft and hard skill could be conducted;
- The resource persons or instructors should be from industries of NCR;
- During discussion with JSS officials, it was revealed that salary was less than a government employee. Therefore, it can be revised as per need.

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Analyzing Skill Level and its Implication on the Job Security of Street Vendors in Shillong, Meghalaya

Ibadasuklin Kharshandi¹

Abstract

Skills are a key determinant of prosperity and well-being. Lack of skills and knowledge increases the risk of getting insecure jobs. Job insecurity makes the workers vulnerable to low and irregular wages, unsafe working conditions and a decline in their standard of living. Enhancing the knowledge and skills of workers is a step towards improving their job security and guaranteeing them with decent conditions of living. The present paper aims to analyse the skill level of street vendors in Shillong and its effect on their job security. The paper also intends to put forward appropriate suggestions to enhance the skill and job security of street vendors. Since statistics on the number and characteristics of street vendors is not available, a survey technique was adopted by the researcher to obtain a description of the street vendors under study. Proportionate stratified random sampling design was used for selecting the sample. A semi-structured interview schedule was constructed as a tool for data collection, from the street vendors. The findings of the study showed that majority of street vendors were women and had low level of education. Majority of the street vendors belonged to the productive age group of labour force in the economy, ranging from 25–54 years old. Majority of street vendors rated themselves of having good levels of skill with respect to basic literacy skills and low skill with respect to business skills and interpersonal skills. Moreover, majority of street vendors have low job security.

Keywords: *skills, education, job security, street vendors, Shillong*

Introduction

Skills are a key determinant of prosperity and well-being. Skills are not just a function of abilities and training of the worker, but also reflect the growth possibilities at work (UNECE, 2015). The possibilities to develop and use skills at work are thought to be central for job quality as they create greater opportunities for internal or external professional mobility, and for finding a new job in case of dismissal,

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thus increasing the general employability (Oinas, Anttila, Mustosmäki, and Nätti, 2012). Lack of skills and knowledge increases the risk of getting insecure jobs (Chowdhury, 2014). People with low or no skills are more likely to be engaged in temporary or precarious work, lacking career development opportunities. The ongoing loss of low-skilled, low productivity jobs will make it harder to integrate low-skilled people into the labour market (Johri, 2005). The relatively bad employment situation of unskilled workers should mean that job insecurity among this group is also greater (Erlinghagen, 2008). Job insecurity is a major source of ill-health and job dissatisfaction, has long-lasting impact on individuals and their household and creates tensions at home. Green (2006) defines job insecurity as the loss of welfare that comes from the uncertainty at work, and this insecurity may derive from either economic aspects of a job or from the content of the work itself. Uncertainty about the economic aspects of the job can involve more than just losing the job, losses can also occur in the current job through wage cuts, missed promotion opportunities etc., but it also involves uncertainty about the income stream in the current or future jobs (Dahl, Nesheim, and Olsen, 2009). Informal economy employment is often associated with low job security and other forms of work related security (Chowdhury, 2014). Most informal sector workers had very low or limited skills.

The low level of skills in their activities made them equally vulnerable to loss of jobs and low levels of income. A large proportion of workers also felt that due to their lack of education and skills, it was difficult to move into other alternative jobs (Unni and Rani, 2002). People having low education are more threatened about loss of job and fear of unemployment creates high level of insecurity (Sanyal, Hisam, and BaOmar, 2018). The inability of informal workers to invest in skills and knowledge seems to be a major factor leading to their insecurity.

This basically raises the need to focus on promotion strategies for increasing skills to improve the quality of employment, particularly among the vulnerable groups in the informal economy (Unni and Rani, 2002). Considering the threats and insecurities faced by workers in the informal economy, the present paper attempts to explore and analyse the skill level of street vendors in Shillong and further suggest appropriate strategies to enhance their skills and job security.

Objectives of the Study

1. To find out the street vendors' self-classification on their relative skill levels;
2. To analyse the level of job security of street vendors;
3. To suggest measures to enhance the skill and job security of street vendors.

Research Questions

1. How do the street vendors rate themselves with respect to their relative skill levels?
2. What is the level of job security of street vendors?

Review of Literature

A review of literature (Liimatainen, 2002; Suharto, 2002; Unni and Rani, 2002; NCEUS, 2007; Oosthuizen, 2008; Sekar, 2008; Karthikeyan and Mangaleswaran, 2013; Kotze, 2013; Birhane, 2015 and Husain, Yasmin and Islam, 2015) revealed that one of the major insecurities faced by the informal workers was the lack of education and skills. Sekar (2008) expressed the importance of numerical ability skills as reported by a large number of street vendors surveyed. Studies by Liimatainen (2002), Oosthuizen (2008), Kotze (2013) and Birhane (2015) pointed out that most street traders were keen to learn and to participate in training, to be able to better manage and grow their business. Birhane (2015) observed that educational training led to successful running of the business enterprises and helped street food vendors in Woreda of Addis Ketema Sub city, Ethiopia in writing down some records for proper planning of the businesses. Accordingly, education equipped business women with pricing skills, record keeping, communication skill and creativity like words of advertising. Furthermore, various literatures (Liimatainen, 2002; Oosthuizen, 2008; Pina, Kotin, Hausman, and Macharia, 2012; Denys and Karaki, 2013; Kotze, 2013 and Birhane, 2015) indicated the importance of life skills and business management skills such as skills to run a business, skills to manage income and expenses etc., for informal workers. Knowledge and skills in financial management is necessary to improve the conditions of the workers in the informal economy and to set up/ sustain a profitable small business. An article by Denys and Karaki (2013) on “Community Development and Skills for the Informal Economy in Jordan” pointed out the lack of legal protection for the informal workers which signify the need of other skills such as negotiation skills, networking and organisational skills, often less important in formal employment. Likewise, Oosthuizen (2008) and Kotze (2013) indicated that most workers desire to improve their communication skills on how to assert themselves, how to negotiate with suppliers or customers, how to solve conflicts and how to cope with and respond to life - threatening situations. Many workers want more information about the laws and policies that regulate the informal sector and skills to organise, to mobilise and speak up and act collectively so that their work will be better understood and valued, that instead of humiliation and defeat they can act for recognition, access to credit and basic services such as storage facilities and toilets (Kotze, 2013). The ILO

(2004) refers to job security as the sense of attachment to a particular job or range of tasks.

A working paper by Dahl *et al.* (2009) on “Quality of Work - Concept and Measurement” indicated that job insecurity is found to vary between countries, with business cycles, and is in general found to be much higher for temporary workers, low-skilled workers, for young workers and for men. Unni and Rani (2002) adopted a stratified random sampling procedure revealed that the inability of the informal workers to invest in skills and knowledge seems to be a major factor leading to their insecurity. The low level of skills in these activities made them equally vulnerable to loss of jobs and low levels of income. A large proportion of workers also felt that due to their lack of education and skills, it was difficult to move into other alternative jobs. The study also tried to find out if the workers viewed their current activities as providing them with opportunities for further advancement, certain perceptual questions regarding their future plans were asked. Not very surprisingly, at such low level of education and skills, about 73 per cent of the workers had no plan regarding their work during the coming five years and 72 per cent of them had no plans for expanding or changing the current activity after five years. The low levels of incomes generated by their current activities and the lack of securities did not allow them to think far ahead about the future. For most informal workers, work is a day-to-day means to live or to survive. Only a minority anticipated their future, and most of them anticipated a continuation of what they were doing now. A study by ILO (2004) on “Economic Security for a Better World” revealed that workers with more education and in jobs with more training are more likely to have job security - to face less discrimination, to have greater opportunities for upward mobility and, in the case of women, to be more likely to be able to take maternity leave without losing their jobs.

Research Methodology

Given the limitations of reliable data and lack of official record on the number and characteristics of street vendors in the present study area, a survey technique was adopted by the researcher to obtain a description of the street vendors under study. A preliminary survey was undertaken by the researcher in 2016 to collect some baseline information on the characteristics of the street vendors such as name, gender, ethnicity, vending duration and types of employment pattern. Street vendors are operating their vending activities in the seven towns of the Shillong Urban Agglomeration (SUA) namely, Shillong Municipal, Shillong Cantonment, Mawlai, Madanrtng, Nongthymmai, Nongmynsong and Pynthorumkhrah formed the population of the study. Altogether, the population of street vendors is 712. For the

purpose of selecting the sample, proportionate stratified random sampling design was used. The sampling fraction of the study was 50% of the total population (i.e., a sample of 357 street vendors were selected from a population of 712 street vendors). Thus, the sample of the study comprised of 357 street vendors operating their vending activities in the seven towns of the SUA.

A semi-structured interview schedule was constructed as a tool for data collection from the street vendors. The interview schedule consisted of questions on background information of street vendors, statements related to self-classification by relative skill levels and questions on job security. Altogether, there are 28 items in the research tool. The response category comprised of dichotomous response - 'Yes' or 'No', multiple choice single-response and three point response - 'Good', 'Medium' and 'Low'. Face to face interview with the street vendors were mostly done at the vending site and some interviews were conducted at the house of the street vendors. Interview with the street vendors were done slowly and meticulously, to ensure that the street vendors understand the questions easily and are able to give clear and suitable responses which were closely related to their circumstances. The researcher took around 30 minutes to 1 hour or more to complete each interview with the respondents, as the street vendors were attending their customers side by side.

Analysis and Interpretation of Data

The data collected from the field were systematically arranged, classified, tabulated and critically analysed. Percentages were calculated for interpreting the data.

Table 1.1
Employment Pattern of the Respondents

Employment Pattern	Frequency	Percentage
Vegetables	91	25.5
Fast food	60	16.8
Kwai dong and others	59	16.5
Clothes	46	12.9
Fruits	33	9.2
Meat	22	6.2
Tea and others	13	3.6
Shoes	13	3.6
Miscellaneous items	13	3.6
Bags	4	1.1
Others	3	0.8

Table 1.1 shows that most of the respondents were vegetable vendors (25.5%) followed by fast food vendors (16.8%) and vendors selling kwai dong (areca nut and betel leaf) and others (16.5%). Around 12.9% of the street vendors sell clothes,

9.2 % sell fruits and 6.2% sell meat. Equal percentages (3.6%) of the street vendors sell tea, shoes and miscellaneous items. A negligible percentage of street vendors were selling bags (1.1%) and others goods (0.8%) like ornaments, tobacco and bulb, ice-cream, house construction tools, furniture, CDs, kitchen equipments and torch lights, wallets, wrist watches etc. Table 1.2 indicates that women formed the largest group in street vending comprising of 71.1% in comparison to 28.9% men.

Table 1.2
Gender of the Respondents

Gender	Frequency	Percentage
Female	254	71.1
Male	103	28.9

Table 1.3
Ethnicity of the Respondents

Ethnicity	Frequency	Percentage
Tribal vendors	260	72.8
Non-tribal vendors	97	27.2

Table 1.3 reveals the dominant presence of tribal vendors (72.8%) in the vending activity as against 27.2 % non-tribal vendors.

Table 1.4
Age Group of the Respondents

Age Group	Frequency	Percentage
15 – 24 years	25	7.0
25 – 34 years	85	23.8
35 – 44 years	100	28.0
45 – 54 years	95	26.6
55 – 64 years	39	10.9
65 years and above	13	3.7

Table 1.4 reveals that most (28%) of the street vendors were between 35 - 44 years, 26.6% were 45 - 54 years, 23.8% were 25 - 34 years and only 3.7% were in the age group of 65 years and above.

Table 1.5
Educational Level of the Respondents

Educational Level	Frequency	Percentage
Illiterate	96	26.9
Pre-Primary	19	5.3
Lower Primary Class I to IV	79	22.1
Upper Primary Class V to VII	60	16.8
Secondary School Class VIII to X	82	23.0
Higher Secondary School Class XI to XII	15	4.2
Graduate	6	1.7

Table 1.5 indicates that majority of the respondents had low level of education as only 23% studied up to secondary level and 22.1% up to lower primary level whereas 26.9% of the respondents were illiterate.

Table 1.6
Self-classification by Relative Skill Levels

STATEMENTS	Good	Medium	Low
Basic Literacy Skills			
Calculating skills	315 (88.2%)	35 (9.8%)	7 (2.0%)
Reading skills	179 (50.1%)	88 (24.6%)	90 (25.2%)
Writing skills	154 (43.1%)	145 (40.6%)	58 (16.2%)
Business Skills			
Keeping records of income and expenditure	64 (17.9%)	18 (5.0%)	275 (77.0%)
Pricing the product competitively	213 (59.7%)	115 (32.2%)	29 (8.1%)
Marketing skills	308 (86.3%)	44 (12.3%)	5 (1.4%)
Advertising skill to entice customers	74 (20.7%)	52 (14.6%)	231 (64.7%)
Interpersonal Skills			
Persuade or influence customers to buy the products	45 (12.6%)	44 (12.3%)	268 (75.1%)
Relationship skills with customers	268 (75.1%)	85 (23.8%)	4 (1.1%)
Relationship skills with suppliers	133 (37.3%)	224 (62.7%)	0
Knowledge about the laws and policies that regulate your work	6 (1.7%)	48 (13.4%)	303 (84.9%)
Skills to interact confidently	323 (90.5%)	31 (8.7%)	3 (0.8%)
Negotiating skills	291 (81.5%)	51 (14.3%)	15 (4.2%)
Networking skills	15 (4.2%)	169 (47.3)	173 (48.5%)
Listening skills	339 (95.0%)	17 (4.8%)	1 (.3%)

Table 1.6 shows that with respect to *basic literacy skills*, 88.2% of the respondents consider themselves of having good skill level in doing basic calculation, ability to read (50.1%) and ability to write (43.1%). With respect to *business skills*, 77% of the respondents regard themselves to have low skill level in their ability to keep record of income and expenditure and in using words of advertising to entice customers (64.7%), whereas more than half of the respondents consider themselves of possessing good marketing skills (86.3%) and in their ability to price the product competitively (59.7%). With respect to *interpersonal skills*, 95% of the respondents consider themselves skilful in listening accurately, interacting confidently (90.5%), negotiating (81.5%) and keeping good relationship with customers (75.1%).

On the other hand, 84.9% of the respondents regard their skills to be of low level in their knowledge about the laws and policies that regulate their work and in their ability to persuade or influence customers to buy their products (75.1%). Around 62.7% of the respondents consider themselves to have medium skill level in their ability to keep good relationships with suppliers.

Table 1.7 reveals that majority (75.1%) of the respondents feel secure in their

street vending activity while 24.9% do not feel secure in their job. Most (26.6%) respondents feel secure in their job because they can support themselves and their family from the vending activity while 16.5% reported that the vending activity helps them in supplementing their family needs. An equal percentage (12.3%) of the respondents mentioned that they feel secure in this job because they have their own trading space and it is their own business. Around 7.3% of the respondents cited various reasons for feeling secure in this job which includes the earning is good, they have been vending for a long time, there is no need to pay rent, being a member of the Street Vendor Association makes them feel secure and there is no other alternative. The remaining 24.9% of the respondents do not feel secure in their job as they do not have a permanent place for vending (18.8%), no income security in the vending activity (4.5%), the vending place is not safe and suitable for them to do their job (1.1%) and absence of vending license (0.6%).

Table 1.7
Job Security of the Respondents

Job Security	Frequency	Percentage
Do you feel that your job is secure?		
Yes	268	75.1
No	89	24.9
If yes, why?		
I can support myself and my family from this business	95	26.6
I can supplement my family needs	59	16.5
I have my own trading space	44	12.3
It is my own business	44	12.3
Others	26	7.3
If no, why?		
I do not have a permanent place for vending	67	18.8
No income security	16	4.5
My vending place is not safe and suitable for me to do my job	4	1.1
I do not have a vending license	2	.6

Table 1.8
Job Security of the Respondents

Job Security	Frequency	Percentage
Do you think there is any chance for you of losing your job due to illness/ pregnancy?		
No	317	88.8
Yes	40	11.2
If yes, how would you rate the likelihood of this happening?		
Very likely	28	7.8
Quite likely	12	3.4
If no, why?		
I will send my family members to vend in my place	91	25.5
I have been vending here for a long time	80	22.4
Mutual understanding between the co-vendors	57	16.0
I have my own trading space	47	13.2
Others	42	11.8

Table 1.8 shows that majority (88.8%) of the respondents felt that they will not lose their job due to illness/ pregnancy indicating high job security while few (11.2%) respondents perceived that they might lose their job due to illness/ pregnancy. Out of the 88.8% respondents who felt that they will not lose their job due to illness/ pregnancy, 25.5% reported that they will send their family members to vend in their place, 22.4% mentioned that they have been vending there for a long time, 16% stated that the vendors share a mutual understanding between them and the co-vendors will look after their vending space in their absence, 13.2% reported that they have their own trading space and 11.8% cited various other reasons.

The other reasons cited by the respondents include the temporary space allocated by the concerned authority, acquiring permission from the landowner for the vending space, vendors being rarely absent from work, vendors hiring someone to manage the vending activity in their absence, and vendors continuing to work for as long as they can etc.

Table 1.9
Job Security of the Respondents

Job Security	Frequency	Percentage
What is your vending activity going to be like in the next 12 months?		
I will continue to vend as I am doing now	227	63.6
I will expand my economic earning activity	76	21.3
I fear that I will lose my job and become unemployed	32	9.0
I will shift out of the current activity and start into a new one	17	4.8
Don't know/ Cannot say	5	1.4
Over the past 12 months, how was your income from work?		
Fluctuated	172	48.2
Regular	160	44.8
Very irregular	25	7.0
How do you perceive the acquisition of skills in street vending by others?		
Others could learn my skills with difficulty	218	61.1
Others could easily learn my skills	127	35.6
Cannot say	12	3.4

Table 1.9 reveals that with respect to the street vendors' perception about their vending activity in the next 12 months, 63.6% of the respondents reported that they will continue with their vending activity and 21.3% hope to expand their economic earning activity. Very few (9%) respondents fear that they will lose their job and become unemployed while 4.8% prefer to shift out of the current activity and start into a new one if they get a chance. However, 1.4% of the respondents refused to comment anything. The table also indicates that the street vendors have low job security with respect to their income from work during the past 12 months as 48.2% of the respondents reported fluctuation in their income while 44.8% informed that their income from work is regular but meagre. Very few respondents (7%) regard

their income from work to be very irregular. With respect to the street vendors perception of skills acquisition in street vending by others, 61.1% of the respondents reported that others could learn their skills with difficulty while 35.6% reported that others could easily learn their skills, denoting low job security.

Discussion of the Findings

In relation to self-classification by relative skill levels, the finding on *basic literacy skills* was found to differ from the findings of studies conducted by Liimatainen (2002), Suharto (2002), Unni and Rani (2002), NCEUS (2007), Oosthuizen (2008), Sekar (2008), Karthikeyan and Mangaleswaran (2013), Kotze (2013), Birhane (2015) and Husain, Yasmin and Islam (2015) as it indicated that one of the major insecurities faced by the informal workers was lack of education and skills. The majority of street vendors rated themselves to have good skills in doing basic calculation because the vending activity is operated by the street vendors as a small business and they may not face difficulty or error in doing minor calculations or transactions while dealing with customers. Less than half of the street vendors regard themselves to be proficient in their writing skills. This implies that the street vendors are able to write and sign their names. Considering the low educational level of street vendors, majority of them are still unable to write or sign their names confidently.

With respect to *business skills*, the finding differs with the findings of the studies conducted by Birhane (2015) in Woreda 8 of Addis Ketema Sub city, Ethiopia, Karthikeyan and Mangaleswaran (2013) in Tiruchirappalli District, Tamil Nadu, Pina *et al.* (2012) in Kenya, Liimatainen (2002) in Philippines and Unni and Rani (2002) in Gujarat, India as that revealed the lack of market skills and business skills by street vendors. The high percentage of street vendors rating themselves to have good marketing skills implies that the street vendors know their customers and understand the market demands.

Few percentages of street vendors regard themselves to be skilful in keeping record of income and expenditure implies the low literacy level among the street vendors. The lack of education restricts the street vendors to maintain simple records of income and expenditure. Owing to *interpersonal skills*, the finding corroborates to the findings of the studies conducted by Sekar (2008), Denys and Abu Karaki (2013) and Kotze (2013) which indicated that an overwhelming proportion of the street vendors felt that they have to speak clearly, accurately and be patient with the customers. The majority of street vendors rated themselves with good listening skills implying that they are able to give good concentration to their customer,

address the customer needs and queries in a quick and efficient manner, gain their trust and influence them to buy the goods/ products from them. The negligible proportion of street vendors equipped with the knowledge about the laws and policies that regulate their work implies the limited access to the rules, regulations and Act related to street vending. With respect to job security, the finding of the present study is similar to the observation made by Dahl *et al.* (2009) which indicated that job insecurity was found to be much higher for temporary workers, low-skilled workers, for young workers and for men. The large proportion of street vendors feeling secure about their job implies their ability to support themselves and their family from the vending activity. Many street vendors perceived that others could learn their vending skills with difficulty. This denotes high job security among street vendors and their probability of having an occupational niche. However, very few street vendors have their own trading space indicating low job security. Further, the low level of education and skills of street vendors do not provide much scope for their upward mobility such as expanding and upgrading their business, shifting to other good jobs which offers stability and better income. The lack of opportunity for professional mobility and having a stable position in the workplace implies that the majority of street vendors have low job security.

Suggestions

1. Literacy skills may be imparted to street vendors to enable them to write down, sign their own names and to equip them with critical life skills to solve their day to day problems;
2. Skill development training may be incorporated with literacy programmes to equip street vendors with relevant skills based on their occupation. Skill development training can be imparted on business skills such as keeping records of income and expenditure, pricing of products, marketing skills etc., and interpersonal skills such as skills to access information about policies, schemes, Acts related to street vending, networking skills etc.
3. As highlighted in the National Education Policy 2020, innovative measures may be adopted through adult education programmes to enable street vendors or any learners to carry out basic financial transactions,; fill out forms to apply for jobs, loans, services, etc.; comprehend public circulars and articles in the news media; comprehend directions and safety directives on the street, on medicines, etc.; help children with their education; be aware of one's basic rights and responsibilities as a citizen of India; and pursue employment in medium or high-productivity sectors that require literacy.
4. Street vendors may be trained to tap the multiple uses of technology for

improving their life and profession. Through the use of technology like mobile phones, street vendors can be trained to develop a network with their customers, suppliers, co-vendors and other stakeholders dealing business with them, promote marketing of their products, access varied information furnished by the government related to schemes, policies, Acts, guidelines, social assistance programmes etc. This will help street vendors to adapt to the change and take advantage of the technological benefits, in applying it to their line of work.

Conclusion

The development of relevant skills and knowledge is a major instrument for improved productivity, better working conditions, and the promotion of work related security in the informal economy (Liimatainen, 2002). As evident in the study, majority of street vendors were illiterate or had low level of education and low job security as their vending activity is not stable and does not offer opportunity for their advancement. Lack of education and skills was a major problem that prevents many street vendors to enter into gainful employment or to attain a good job. The street vendors were keen to improve their skills but did not have the resources or the opportunities to access required training. The government may allocate separate resources for the development of skills and knowledge of street vendors. Allocation of resources for the education and training of street vendors should be relevant to their needs, to enable them to apply the skills in any aspect of their work areas. The ability of street vendors to invest in skills and knowledge will enable them to move into other alternative jobs which offer better job security. It will also equip the street vendors with necessary knowledge and skills to expand their business and help them to graduate from the streets to kiosks and shop owners. Subsequently, the skills and knowledge acquired through training should provide opportunities for street vendors to move towards economically and socially rewarding jobs.

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Impact of Entrepreneurship Education in Promoting Entrepreneurial Aptitude - Perceptions of *SPMVV* Women Students

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Abstract

Entrepreneurship has gained momentum in the 21st Century as it cannot only reduce unemployment but also promote productivity thereby boosting the economy of the country. Hence, many of the higher educational institutions have introduced entrepreneurship education as one of the optional or core papers in their curriculum in various disciplines. Entrepreneurship education would not only provide theoretical knowledge but also enable the students in establishing the entrepreneurship mindset through developing entrepreneurial skills, behaviours, attitudes and further train them with entrepreneurial abilities. It also supports in starting their own business ventures or engaging in entrepreneurship activities. The results of the studies have shown that entrepreneurship education in higher learning institutions has positive perceptions on the students towards the said education. *Padmavati Mahila Visvavidyalaya (SPMVV)* is in the forefront for introducing entrepreneurship education as one of the subjects in its curriculum for all disciplines with different approaches in teaching and the evaluation method. Since there are so many benefits of entrepreneurship education, this university is not satisfied with its current performance. There is a perceived need to improve the curriculum from time to time. In the light of the above, an attempt has been made in this study to assess the perception of the *SPMVV* students towards entrepreneurship education and its impact on promotion of entrepreneurial aptitude. The results were presented in two sections viz., socio-economic and demographic profile of the sample and perception of the students towards entrepreneurship education.

Keywords: *entrepreneurship, education, entrepreneurial skills, abilities, productivity, economy*

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Entrepreneurship is one of the main factors to improve the economic development of a country as it creates wealth for the entrepreneurs. The ability to create job(s), reduce unemployment and create economic boom are among the main reasons why many countries are fostering and realizing the importance of entrepreneurship education (*Importance of Entrepreneurship Education*, 2004). The creation of new business ventures by the entrepreneurs generates new job opportunities, helps to stimulate the economy and drive for new enterprises of the country. McMullan (1988) emphasized the importance of entrepreneurship education to economic development and viewed it as one of the important elements of community support infrastructure (cited by Lekoko, 2012 from McMullan, 1988). The Global Entrepreneurship Monitor (GEM) found that most of the entrepreneurs began their career in entrepreneurship because they were left out and unemployed during the global recession (Bosma and Levie, 2010). Furthermore, many early entrepreneurs felt that there are many opportunities to start their business during the recession.

But the reality is that, many of the start-ups were closed due to the lack of entrepreneurial knowledge, skills and attitudes that are required to prosper in business. Many entrepreneurs face challenges not because of lack of opportunities and resources, but because of lack of required skills and business sense. Entrepreneurship education is, therefore, identified as an effective instrument to prepare university graduates to be successful in their career when they set up a new business venture or small/medium enterprise (SME). Innovation is one of the most important elements to acquire, when students learn about entrepreneurship education. Innovation will support them to stand out from other competitors with new and unique ideas and set up an SME successfully. In many industrial countries, some studies show that the SMEs play an important role in contribution to the economic and social life, apart from making a contribution to increase GDP and create jobs in those countries.

Keeping the above in view, *Padmavati Mahila Visvavidyalaya*, Tirupati has started a core paper on entrepreneurship education as an external optional for all the disciplines. The course is designed with both theory and practical aspects for the students. Further, students will be trained in such a way that they would be involved from production to marketing of the goods within and outside the campus. Though the course of entrepreneurship education in this University started a few years back, the teaching and assessment methods are yet to come up to the students' expectations. Since there are many benefits of entrepreneurship education, this University would not be content with the current performance and shall keep on improving the course content, both practically and theoretically. Apart from it, the University has established an incubation centre for the prospective women

entrepreneurs and started awareness and training programmes for infusing the entrepreneurial skills among different categories of women. In the light of the above, an attempt has been made in the present study to assess the perception of the students studying in the said University towards entrepreneurship education and its impact on the promotion of entrepreneurial aptitude among women. The objectives of the study are as follows:

Objectives of the Study

1. To identify the socio-economic profile of the *SPMVV* Students who responded to the study;
2. To assess the attitude of *SPMVV* students towards entrepreneurship education;
3. To find out the utility of the course as perceived by the *SPMVV* students;
4. To identify the nature of the problems faced by the students during the course;
5. To delineate the strategies to overcome the problems of the students during the course and promote entrepreneurship education;
6. To identify the impact of entrepreneurship education on promoting entrepreneurship aptitude among the women as perceived by the *SPMVV* students; and
7. To identify the strategies for better implementation of entrepreneurship education programmes at higher education institutions.

Tool Used for the Study

Keeping in view the advantages of the questionnaire, it has been constructed and administered on the study sample. The responses obtained from them have been collected and recorded verbatim. The responses of the sample are both qualitative and quantitative in nature.

Locale of the Study

Tirupati town is now internationally and nationally acknowledged as an important pilgrim centre, as also an educational hub in the Rayalaseema Region of Andhra Pradesh State. It has more than 8 Universities. *SPMVV* is the only Women's University for the two Telugu speaking States viz., Andhra Pradesh and Telangana wherein about 4000 students are pursuing their graduation and post-graduation courses.

As the study intends to collect the perception of the women students from the

University, it was decided to select the students who opted for entrepreneurship education. Hence the locale of the study is *SPMVV*.

Sampling

As the study is intended to collect the desired information from *SPMVV* students, the universe of the sample comprises of 300 students who opted the 'Entrepreneurship Education' paper as their elective paper. For the purpose of the present study, 27 students each from Arts, Science and Management were chosen as sample of the study by using simple random sampling technique.

Statistical Technique Used for the Study

The study being explorative in nature, simple percentiles were calculated for analysis of the data collected from the women students.

Findings of the Study

Entrepreneurship education aims to provide not only theoretical knowledge but also intends to assist the students to mould and equip themselves with entrepreneurial skills, behaviour, attitude, and further to train them with entrepreneurial abilities for starting their own business ventures or engaging in entrepreneurship activities. As the aim of the study is to assess the perception of the *SPMVV* students towards entrepreneurship education and its impact on the promotion of entrepreneurial aptitude, the results were presented in two sections viz., section I deals with the socio-economic and demographic profile of the sample and section II deals with the perception of the students towards entrepreneurship education and its impact on promoting entrepreneurial aptitude.

Section - I

Profile of the Sample

The characteristics of the sample show that more than half of the sample girls are less than twenty two years of age and less than half of them belong to more than twenty two years of age. The course-wise details show that, approximately an equal number of girls have been chosen purposefully as sample of the study. The caste-wise distribution of the sample shows that nearly one third of the sample is from backward class followed by scheduled caste, forward castes and scheduled tribes. The marital status of the girls shows that only ten percent are married and ninety percent are unmarried and the same trend prevails in the case of family structure. Only five percent belongs to joint families and ninety five percent belongs to nuclear

families. The place of residence of the girls shows that more than one third belongs to urban areas followed by rural and semi-urban areas. The family occupation of the sample girls shows that an equal number of girls are from agriculture and job holders' families followed by labour and business families. The family income of the sample girls reveals that about forty four percent of the sample girls is from less than Rs. 50,000/- per annum income group followed by Rs. 50001/- to 75000/-, Rs 75001/- to 100000/- and more than one lakh rupees per annum.

Table 1
Characteristics of the sample

S. No	Variable	Group	N	%
1	Age	Less than 22 years	48	59.26
		More than 22 years	33	40.74
2	Course	Arts	27	33.33
		Professional	27	33.33
		Science	27	33.33
3	Caste	OC	19	23.46
		BC	26	32.10
		SC	23	28.39
		ST	13	15.48
4	Marital status	Married	7	8.64
		Unmarried	74	91.36
5	Type of family	Joint	6	7.41
		Nuclear	75	92.59
6	Place of living	Rural	30	37.04
		Semi urban	22	27.16
		Urban	29	36.80
7	Family occupation	Agriculture	27	33.33
		Business	11	13.58
		Labour	16	19.75
		Employee	27	33.33
8	Family income	Less than Rs. 50000	35	43.21
		50001 - 75000	19	23.46
		75001 - 100000	15	18.52
		More than 100001	12	14.81

Section – II

Perception of the students towards impact of entrepreneurship education in promoting the entrepreneurial aptitude

An enquiry has been made to identify the perception of the *SPMVV* women students towards the impact of entrepreneurship education in promoting entrepreneurial aptitude among the women entrepreneurs as presented below. The students were asked to provide information about the incorporation of entrepreneurship as one of the core papers in their curriculum and its importance. The responses obtained from them have been pooled together and presented in the

following table. It is clear that majority of the girls have entrepreneurship education as one of the core papers in their curriculum. With regard to their opinion towards importance of entrepreneurship education, about eighty nine percent accepted that it should be incorporated. The reasons attributed for incorporation of entrepreneurship education in the curriculum are: (a) it inculcates innovative ideas for starting an enterprise; (b) it could help them to become job providers and just not job aspirants; (c) to inculcate entrepreneurial aptitude among the women; and (d) provide ideas about entrepreneurship and reduce the unemployment problem.

Table 2
Entrepreneurship Education in the curriculum and its necessity

S. No	Variable	Group	N	%
1	Having EE in curriculum	Yes	81	100.00
		No	0	0.00
2	Necessity of EE in curriculum	Yes	72	88.89
		No	9	11.11
3	Reasons for its necessity	Inculcate innovative ideas	71	87.65
		Provides idea about the EDP	21	25.93
		It could help them to become job providers	59	72.84
		Lessen the unemployment	20	24.69
		To inculcate entrepreneurial aptitude	35	43.21

Utility of entrepreneurship education

Table 3
Utility of Entrepreneurial Education

S. No	Variable	Group	N	%
1	Utility of EE	Yes	81	100.00
		No	0	0.00
2	How EE is useful?	Supports women	64	79.01
		Creates employment	57	70.37
		Women can live independently if they opt for it as their career	71	87.65

With regard to the utility of the entrepreneurship education in the curriculum, all the students accepted that it is useful. In a further probe about how it is useful, they were of the view that it will help the women to live independently if they opt for entrepreneurship as their career; it will support women and create self-employment.

Problems of the girls in understanding the course content

The girls were asked whether they have any problem in understanding the course

content. The given answers were pooled and presented in the following table.

Table 4
Problems of the girls in understanding the course content

S. No	Variable		Group	N	%
1	Problems in understanding the course content		Yes	69	85.19
			No	12	14.81
2	Problems	Course related	Curriculum is too tough	43	62.32
			Shortage of time	22	31.88
		Psychological	Fear of syllabus	27	39.13
			Fear of practicals and hectic schedule	16	23.19
		Others	All the content of the course is science related aspects	21	30.43

From the above table, it is clear that eighty five percent of the girls are facing problems in understanding the course content. After a further probe with regard to the problems, they informed that their problems are related to psychological fear, course related and others. The course related problems are: (a) curriculum is too tough: and (b) shortage of time available for completing the course. The psychological problems are fear of syllabus, practical assignments and the hectic schedule. Another problem is inability to understand the course content areas when the content is related to science which is difficult to understand by the non-science students.

Strategies adopted to overcome the problems in understanding the course content

Majority of the girls i.e., more than three fourth of the girls informed that they work hard to overcome their problem in understanding the course content followed by encouragement and extra effort of the teachers, encouragement from the family members and consultation with the experts in the field.

Table 5
Steps taken by the sample for overcoming the problems

S. No	Steps taken to overcome the problems	N =69	%
1	Worked hard	51	73.91
2	Encouraged by the elders at family	36	52.17
3	Encouraged by the teachers	23	33.33
4	Consulted experts in the field	18	26.09

After a further probe about how many of their classmates want to become entrepreneurs, it was revealed that majority of the students did not respond to this query. About twenty percent opined that one quarter of their classmates want to become entrepreneurs.

Table 6
Steps taken by the sample for overcoming the problems

S. No	Number of students wants to become entrepreneurs	N =69	%
1	25 percent of the classmates	16	19.75
2	Not answered	54	66.67

Suggestions for the promotion of entrepreneurship education as perceived by the students

The girls were further asked to suggest strategies for the promotion of entrepreneurship education in the higher educational institutions. The suggestions provided by them were pooled and presented in the following table. Majority of the girls suggested incorporation of the entrepreneurship education as one of the core subjects for all the disciplines to promote aptitude among the students to make it their future profession, followed by the incorporation of the practical training along with the theory, field exposure to be provided. Along with this, internships should be promoted and non-science components of entrepreneurship should also be incorporated along with the science subjects. Further, the present curriculum is designed only with the science subjects, which becomes difficult to understand.

Table 7
Suggestion for the promotion of entrepreneurship education

S. No	Suggestion	N	%
1	It should be incorporated as one of the subjects	71	87.65
2	Practical training should be provided	63	77.78
3	Field exposure should be incorporated	55	67.90
4	Internships need to be organized to train the students	55	67.90
5	Curriculum should be incorporated with the non-science components also	32	39.51

What the Study Suggests?

From the above findings, the following suggestions are made for the improvement of entrepreneurship education:

1. Universities need to take steps to incorporate entrepreneurship content in their syllabus so as to promote aptitude among the students to opt for it as an occupation;
2. UGC should also encourage higher educational institutions with the schemes to incorporate entrepreneurship education in the curriculum;
3. The programme should be designed with both theoretical and practical aspects;

4. There should be collaboration between the industry and institutions, for promotion of entrepreneurship education with a provision of internship as part of the curriculum.

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Role of Mass Media in Information Communication in Empowering towards Sustainable Development among Santals

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Abstract

Information is treated as a vital and powerful tool of socio-economic development, no less important than land, labour and capital towards empowerment of people towards attaining sustainable development (SD). Empowerment is the degree of autonomy and self-sufficiency, self-reliability, self-confidence in a democratic society for controlling their lifelong learning and quality of life. Access of right information at the right time in right form and ability of sharing information to others empowers people. Mass media in this regard plays a crucial role, as a vast portion of population may be reached through mass media. Present study conducted in four Santal villages of Birbhum district (West Bengal) with 100 Santals (50 males and 50 females) attempts to investigate the extent of use and utilization pattern of mass media in information seeking behavior, by the Santals of the study area. Finally, it suggests towards empowering the Santals for attaining sustainable development in the study area. In the study, a mixed reaction of the respondents has been received regarding the exposure to various mass media. Mean value of social awareness based on mass media of female Santals ($x_2 = 109.43$) was better than the male Santals ($x_1 = 106.18$). The 't' value of the study indicated that null hypothesis H_0 is rejected and alternative hypothesis H_1 is accepted. The Santals are incapable of developing themselves, through their own efforts. Many government schemes and initiatives remain still unutilised due to their illiteracy, neo-literacy, barrier of language, lack of guidance, unawareness about the programmes etc. They should be motivated to come out from their isolation and should be aware about various government initiatives. It was also observed that availability of mass media with the Santals is too limited. However, accessibility to this media is somewhat better among them. It was found that evening (between 1730 – 1800 hours) was the best time for exposing themselves to mass media. Folk items and formal discussions were the preferred format in terms of mass media. The study demands for coalition

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of traditional folk media with mass media, to improve their quality of life and attain empowerment.

Keywords: *information communication, mass media, information seeking behaviour, agriculture, self-help group employees, rural credits/loans, santals, visva-bharati*

Introduction

Development is a bridge between the hopes and dreams of people on one side of a coin, and realities of the world on the other side of the coin. Sustainable development (SD), as the term was defined in Brundtland Report^{1,2} is the ‘development that meets the needs of the present without compromising the ability of future generations to meet their own needs’.

According to the UN Food and Agriculture Organisations, SD is ‘management and conservation of the natural resources base and the orientation of technological and institutional change in such a manner as to ensure the attainment and continued satisfaction of human needs for present and future generations’³. SD ties together concern for carrying capacity of natural systems with the social challenges faced by humanity, creating opportunities for people to increase their skills, betterment of quality of living as well as reducing unemployment and poverty etc. for everyone—now and for generations to come. It contains two key concepts, firstly, the concept of ‘needs’, in particular the essential needs of the world’s poor, to which overriding priority should be given; and secondly, the idea of limitations imposed by the state of technology and social organisation on the environment’s ability to meet present and future needs¹. In this regard, people should be economically and socially empowered in gaining control over their own lives.

Though, due to the information explosion or information pollution, most of the information and the information sources or channels have been unused or unutilised because the people are confused about their actual information needs. Information access and information seeking behaviour (ISB) differs from person to person and varies among the user groups, based on their requirements. ISB is a type of communication behaviour, which is influenced by the kind of information requirements. Generally there are four types of information requirements: (i) Everyday information need, which is required to meet the daily activities and decision making; (ii) Current information need, which necessitates the need of up-to-date and right information in right form in right time in respective field; (iii) Exhaustive information need, which refers to need of any particular information in details; and

(iv) Catching-up information need, that refers to the requirement of information in simple and precise form⁴.

India holds the second largest tribal population in the world, followed by Africa. The tribal population of India is 10,42,81,034 constituting 8.6 percent of the total population and the decadal growth of the tribes was 23.7 percent during the period 2001-2011 (Census Report 2001 and 2011). As per Census 2011, in West Bengal, Scheduled Tribe (STs) numbering 5,296,953 persons constituted 5.8 percent of the entire population. According to the Constitution (ST) Order of 1950, as enumerated in its Schedule to Article 342, Santals are recognized and enlisted as ST in West Bengal and according to the Census 2001, Santals constitute more than half (51.8 percent) of the total ST population. After Independence, the first Prime Minister of India, Pandit Jawaharlal Nehru's 'Tribal Panchsheel' explained that there exists a false belief 'to call some people primitive and to think of ourselves as highly civilized' and proposed that the tribes should 'develop along the lines of their own genius'⁵. Since independence, several attempts for empowering the rural community towards attaining sustainable development have been taken by the governments, both states and central. But, it is painful that most of them remain untouched or never yielded fruitfully due to illiteracy and unawareness towards information by the tribals in general, and particularly the Santals. In this respect, mass media with their massive penetration as a vehicle as well as the primary means of communication can be exploited towards empowering the poor, illiterate or neo-literate rural community. The most preferable common platforms of mass media of the Santals are radio and television, as these are influential to the illiterate, neo-literate Santals because of having sight and hearing capabilities simultaneously. The tribes in general, and particularly the Santals must be fully encompassed by the government policy and integrated with the mainstream of the national culture in view of their socio-economic background traditions, norms and social relations. There is a need to create awareness about the conditions outside and also the advantages of coming out of their isolation. In this regard, mass media plays a crucial role for attaining empowerment towards sustainable development wherein providing right information to the right user at the right time and in right format, can bridge the information divide among rich and poor.

Statement of the Problem

The logic behind selecting the topic titled 'Role of Mass Media in Information Communication in Empowering towards Sustainable development among Santals' is most important as Santals are the third largest tribal community of India, first largest tribal community in West Bengal, in the district Birbhum and its community

development block Bolpur-Sriniketan. Thus, keeping the background of the study in mind, the present study is derived with the purpose of exploring the level of attitude and adjustment towards information communicated by mass media, and to find out whether there exists any gap based on gender in information seeking behaviour among the Santals under study.

Review of Related Literature

Parmar mentioned that for rural communication, traditional folk media has great importance⁶. Ahuja and Batra expressed that, the society has been changed due to communication media technologies with rapid speed with the usage of modern mass media like print, radio, films and TV⁷. Ansaloni observed that, 86.7% respondents had a habit of watching TV daily, 59.1% reading various specialized publication and 41.38% listening to radio daily⁸. Ramanathan and Shrinivasan stated that, our country needs a blending effect of mass media and traditional mode of communication for effective bridging of dissemination gap, since there is less of literates and limited reach of electronic media⁹. Anjali Pahad stated that only modern mass media can't adequately fulfill the needs that are expected from the tribal people and provide relevant information to the masses which can change the life style of the population¹⁰. Chapke and Bhagat reported that, in India having diversified cultures, traditions, customs, values and beliefs, traditional art forms like drama, puppetry, folk songs etc. can effectively be utilized in the national development to the rural masses, who emotionally believe in their old traditions¹¹.

Kalita and Singh mentioned that, village level workers were the most credible sources of information than any other information sources¹². They also observed that, farmers had negligible preference to both print and non-print mass media. Sinha¹³ recommended balanced combination of traditional and mass media for changing the attitude and adjustment of the Santals, about the ongoing situation around the world. Shalvee and Sambhav observed social media platforms like *Facebook*, *WhatsApp* etc. create panic with fake news or misinformation among the people¹⁴.

Objectives of the Study

The present study is undertaken comprising the following objectives:

- (i) To study the extent of use of mass media in information seeking behavior by the Santals of the study area;
- (ii) To investigate the utilization pattern of various mass media by the responding Santals in the study area; and

- (iii) To finally suggest towards empowering the Santals for attaining sustainable development in the study area.

Research Hypothesis

H₀: There exists a significant relationship in social awareness based on communication channels of information based on gender (males and females) among the Santals in the study area.

H₁: There does not exist any significant relationship in social awareness based on communication channels of information in the study area among the male and female Santals.

Research Methodology

The study was conducted in 4 villages, viz, Balipara, Kaliganj, Baganpara and Pearson Pally under Ruppur Gram Panchayat of Bolpur-Sriniketan Development Block, Birbhum district, West Bengal. These villages are within a radius of ± 1 Km. from Visva-Bharati, the first central university of independent India and within the close proximity to Santiniketan-Sriniketan Development Authority (SSDA). Most of the Santals of these villages enjoy the SHG scheme facilities provided by Visva-Bharati and the population reflects a mixed habitat of STs and general castes people. Respondents were selected randomly and limited to 100 only (50 males and 50 females) from the 4 villages. A pilot study was conducted with fifty respondents within the four selected villages in the month of July, 2019.

The present study was conducted from September, 2019 to February, 2020 and June, 2020 to February, 2021. The study wasn't conducted during the three months (i.e. March, 2021 to May, 2021) because during this period, majority of them were spending the workless days, physical distance was strictly maintained in the area, distribution of newspaper had been affected as the transport communication during the this period got down. Most people didn't take any risk pertaining to transmission of virus through newspaper or newspaper vendors during the lockdown period due to COVID-19 pandemic.

Questionnaire survey was applied to collect quantitative data regarding the basic situational background of the respondents like asset possession, media exposure and preference of media as a source of information seeking behavior as well as communication of information. SES scale of Udai Pareek (1964, latest updated 2014) was used to measure attitude and awareness of the Santals about mass media. Statistical tools used include: mean, standard deviation, and t-test.

Findings and Interpretation

Data was collected from 100 respondents from 4 selected villages under study (50 males and 50 females) and then each response was scored separately in an MS-Excel worksheet. The data has been interpreted below from Table 1 to 12. Table 1 represents the socio demographic data of the respondents of the present study. In age-wise distribution of the data, the age up to 11 years has been omitted as this is the age of school going children and they are mainly dependent on their family income of their guardians. Education level of the respondents depicts that majority of male respondents (26; 52.00%) and female respondents (24; 48.00%) have attended primary schooling. The finding also shows that 6 (12.00%) male respondents and 9 (18.00%) female respondents are still illiterate. Income of the male respondents between rupees 3000-5000 is highest (23; 46.00%) followed by 13 (26.00%) whose income lies between rupees 5000-8000. Among the female respondents, 17 (34.00%) persons have income below rupees 3000, whereas others have comparatively better income. Data regarding source of income depict that majority of male respondents (26; 52.00%) are daily labourers followed by farmers (14; 28.00%). Female respondents were mostly daily labourers (38; 76.00%).

Table 1
Socio demographic data of the respondents

Variables	Measures	Frequency	
		Male (N=50)	Female (N=50)
Age (in Years)	12—18	10 (20.00)	12 (24.00)
	18—24	12 (24.00)	13 (26.00)
	24—30	09 (18.00)	06 (12.00)
	30—34	07 (14.00)	08 (16.00)
	Above 34	12 (24.00)	11 (22.00)
Education	Illiterate	06 (12.00)	09 (18.00)
	Primary schooling	26 (52.00)	24 (48.00)
	Secondary pass	07 (14.00)	09 (18.00)
	Higher secondary pass	08 (16.00)	07 (14.00)
	Graduate and above	03 (06.00)	01 (02.00)
Income (Monthly; in Rs.)	Below 3000	12 (24.00)	17 (34.00)
	3000—5000	23 (46.00)	14 (28.00)
	5000—8000	13 (26.00)	16 (32.00)
	Above 8000	02 (04.00)	03 (06.00)
Source of income	Daily labour	20 (40.00)	38 (76.00)
	Farmer	14 (28.00)	0
	Livestock keeper	07 (14.00)	06 (12.00)
	Service (Govt./Private)	03 (06.00)	03 (06.00)
	Rickshaw/Van puller	03 (06.00)	0
	Toto driver	02 (04.00)	0
	Shopkeeper	01 (02.00)	03 (06.00)

Source: Survey by authors. Figure in the parenthesis indicates percentage of respondents.

In the present study, Table 2 enumerates the data about information seeking behaviour of the respondents. It was clearly observed that, need of information differs among the males and females responding Santals. Requirement of information was broadly divided into three sub-categories under the broad term empowerment, viz. social empowerment, economic empowerment and psychological empowerment. SHG activities, agriculture and rural credit/loans ranked first, second and third respectively. Santals of the study showed no interest regarding the information about mental fitness, as it ranked sixteenth.

Table 2
Information seeking behaviour of the respondents

Category	Respondents			Rank order	
	Male (%)	Female (%)	Total (%)	Rank	Total rank
Social empowerment					
Food and nutrition	09 (18.00)	15 (30.00)	24 (24.00)	1	XIII
Family planning	19 (38.00)	21 (42.00)	40 (40.00)	2	IX
Child development	12 (24.00)	13 (26.00)	25 (25.00)	3	XII
Govt. Progs. and schemes	26 (52.00)	28 (56.00)	54 (54.00)	1	V
Health and sanitation	08 (16.00)	06 (12.00)	14 (14.00)	4	XV
Economic empowerment					
Agriculture	26 (52.00)	41 (82.00)	67 (67.00)	2	II
Agriculture marketing	28 (56.00)	37 (74.00)	65 (65.00)	2	IV
Fertilisers	16 (32.00)	13 (26.00)	29 (29.00)	8	X
Soil improving	15 (30.00)	13 (26.00)	28 (28.00)	8	X
Livestock farming	17 (54.00)	26 (52.00)	43 (43.00)	5	VII
Animal breeding and diseases	09 (18.00)	14 (28.00)	23 (23.00)	10	XIV
Employment	29 (58.00)	16 (32.00)	45 (45.00)	4	VI
Savings	26 (52.00)	16 (32.00)	42 (42.00)	6	VIII
SHG activities	38 (76.00)	42 (84.00)	80 (80.00)	1	I
Rural credit/Loans	25 (50.00)	41 (82.00)	66 (66.00)	3	III
Psychological empowerment					
Mental fitness	07 (14.00)	06 (12.00)	13 (13.00)	5	XVI

Source: Survey by authors. Responses are mutually not exclusive.

Table 3 shows the data about the sources of information of the respondents under study, both formal and informal sources along with their respective rank scores and rank orders. The study reveals that the SHG leaders/members, which was the main informal source of information of the respondents also ranked first among all the sources of information. Among the formal sources of information, mobile phone was preferred by the respondents. TV, training programmes and radio ranked second, third and fourth respectively. It seems logical because SHG leaders/members are easily available for consulting and advising and always extent their assistance with their knowledge gained from mass media or their experiences. Beside SHG leaders/members, formals sources of information like mobile phones, TV, training programmes keep them updated and are much more influential for providing entertainment, disseminating information, inculcating socially accepted norms and values, and performing a general socialisation function. Finding also reveals that importance of TV as relevant source of information is more as compared to radio or newspaper.

Table 3
Sources of information of the respondents

Sources of information	Frequency of exposure									Total Score	Rank order	
	Less times			Whenever possible			Most of times				Rank	Total rank
	Male	Female	Total	Male	Female	Total	Male	Female	Total			
Informal sources of information												
Family members	08	12	20	16	22	38	11	11	22	113	3	V
Friends/Relatives	08	07	15	17	18	35	06	09	15	121	2	III
Village leaders	09	11	20	09	14	23	19	18	37	110	4	VIII
SHG leaders/members	03	04	07	08	15	23	02	05	07	142	1	I
Formal source of information												
Newspaper	12	08	20	08	12	20	07	08	15	101	5	IX
Radio	12	14	26	10	12	22	05	18	23	111	4	VII
Television	15	15	30	18	20	38	19	13	32	119	2	IV
Mobile phones	11	09	20	16	19	35	27	18	45	125	1	II
Training progs.	08	12	20	25	28	43	19	18	37	112	3	VI

Source: Survey by authors.

Table 4 depicts the satisfaction level of the respondents about different information sources. Study shows that, SHG leaders/members, village leaders were

found preferable information providers of the respondents, which ranked first and second respectively. However, mobile phone and training programmes, which ranked third and fourth, were found as most preferable formal source of information of the respondents. It is logical that SHG leaders/members, mobile phones and training programmes are more influential for the illiterate or neo-literate Santals.

Table 4
Satisfaction of the respondents about different information sources

Sources of information	Frequency of exposure									Total Score	Rank order	
	Less times			Whenever possible			Most of times				Rank	Total rank
	Male	Female	Total	Male	Female	Total	Male	Female	Total			
Informal sources of information												
Family members	13	19	32	28	22	50	16	12	18	77	4	VIII
Friends/Relatives	18	05	23	32	25	57	08	12	20	95	3	V
Village leaders	11	12	23	11	07	18	32	27	59	103	2	II
SHG leaders/members	08	10	18	08	12	20	28	34	62	118	1	I
Formal source of information												
Newspaper	22	23	45	12	18	30	14	11	25	71	5	IX
Radio	09	09	18	28	24	52	14	16	30	88	4	VII
Television	11	13	24	19	17	36	18	22	40	89	3	VI
Mobile phones	11	09	20	23	32	55	11	14	25	102	1	III
Training progs.	08	07	15	15	27	42	24	19	43	96	2	IV

Source: Survey by authors.

Table 5
Responses regarding exposure to newspaper by the respondents

No. of family having own subscription (N=200)				Frequency of reading newspaper (N=200)					
Subscription of newspaper		Non-subscription of newspaper		Read occasionally		Read regularly		Don't read/Can't read	
Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
09 (04.50)	01 (0.50)	91 (45.50)	99 (49.50)	42 (21.00)	49 (24.50)	21 (10.50)	04 (2.00)	43 (21.50)	41 (20.50)

Source: Survey by authors. Figure in the parenthesis indicates percentage of respondents.

Table 5 shows the number of newspaper subscribing families and the newspaper reading habits among the respondents. Only 10 (10.00%) respondents subscribe newspapers personally. Among the respondents, 30 (30.00%) don't and can't read newspaper. Only a very few educated elite (25; 25.00%) read newspaper regularly. Most of the occasional (45; 45.00%) and regular respondents (25; 25.00%) read

newspaper at the offices or householder's houses where they are engaged for work or while visiting the village shops.

Table 6 represents the number of radio owning families as well as listeners and non-listeners of radio among the sample respondents. It was found that only 12 (12.00%) families own radio and 88 (88.00%) families have no radio. A total of 30 (30.00%) and 23 (23.00%) listened to radio occasionally and regularly respectively, while 47 (47.00%) don't show their interest in listening radio. It was also observed that, respondents who don't have a personal radio listened to radio at their friend's or neighbour's houses or at the village shops.

Table 6
Responses regarding exposure to radio by the respondents

No. of family having own radio (N=200)				Frequency of reading radio (N=200)					
Ownership of radio		Having no radio		Listen occasionally		Listen regularly		Non-listener to radio	
Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
14 (07.00)	04 (02.00)	90 (45.00)	96 (48.00)	17 (08.50)	13 (06.50)	20 (10.00)	06 (03.00)	63 (31.50)	81 (40.50)

Source: Survey by authors. Figure in the parenthesis indicates percentage of respondents.

Tables 7 and 7A show the families having TV/having cable or DTH connections and their frequency of watching TV. Finding shows that the TV was the most preferred mass media for entertainment or being aware of empowerment. Most of the respondents had either cable connection or DTH connections for their TV, though most of them had moderate financial condition. Study reveals that, most of the respondents (65; 65.00%) regularly watched TV and 30 (30.00%) watched TV occasionally. Only 5 (5.00%) didn't show their interest in watching TV. It is logical that, as newspaper and radio cannot process voice and motion picture, TV is more influential for the illiterate or neo-literate Santals.

Table 7
Responses regarding exposure to television by the respondents

No. of family having own TV (N=200)				Frequency of reading TV (N=200)					
Ownership of TV		Having no TV		Listen occasionally		Listen regularly		Non-listener to radio	
Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
96 (48.00)	75 (37.50)	08 (04.00)	21 (10.50)	29 (14.50)	32 (16.00)	69 (34.50)	56 (28.00)	02 (01.00)	12 (06.00)

Table 7A

Responses regarding having own Cable/DTH services by the respondents

Having own Cable/DTH connection (N=200)					
Cable		DTH		Neither Cable/DTH	
Male	Female	Male	Female	Male	Female
77 (38.50)	76 (38.00)	12 (06.00)	08 (04.00)	21 (10.50)	26 (13.00)

Source: Survey by authors. Figure in the parenthesis indicates percentage of respondents.

Table 8 represents the findings about the willingness of the respondents about the minimum payment towards cable/DTH for watching TV. It is clear that 56 (56.00%) pay less than Rs. 200 followed by 28 (28.00%) who pay Rs. 200 to Rs. 300 per month. Most of them had access to private pay channels like ABP Ananda, Zee Bangla, Jalsha Movies, etc. besides the free channels such as National Channel (i.e. Doordarshan).

Table 8

Pay towards Cable/DTH services for TV by the respondents

Pay for Cable/DTH (per month)	Number of Respondents	
	Males	Females
Less than Rs. 200	16 (08.00)	26 (13.00)
Rs. 200 - Rs. 300	62 (31.00)	53 (26.50)
Rs. 300 - Rs. 400	17 (08.50)	19 (09.50)
Above Rs. 400	05 (02.50)	02 (01.00)

Source: Survey by authors. Figure in the parenthesis indicates percentage of respondents.

Table 9

Responses regarding exposure to mobile phones by the respondents

Having personal mobile phone (N = 200)				Frequency of exposure to mobile (N = 200)			
Having personal mobile phone		Having no personal mobile phone		Whenever possible		Most of the day	
Male	Female	Male	Female	Male	Female	Male	Female
89 (44.50)	79 (39.50)	11 (05.50)	21 (10.50)	16 (08.00)	30 (15.00)	84 (42.00)	70 (35.00)

Tables 9 and 9A present the number of respondents having personal mobile phone, own data connectivity and frequency of exposure to mobile phones. Findings shows that majority of the respondents had personal mobile phone (85; 85.00%) and data connection (60; 60.00%).

Most of the responding Santals (80; 80.00%) had exposure to mobile phones at almost all the times and only 15 (15.00%) were exposed to mobile phones whenever

possible. Respondents who don't have personal mobile phone get information from their friends, family members, neighbours or at the village shops. It was also observed that, some young respondents misused mobile phones. Most of the young respondents used their mobile phone for playing *Free Fire*, *Subway Surfers*, *Gully Rummy* etc. games and also expressed their opinion about earning money from such games.

Table 9A
Responses regarding having own data services by the respondents

Having own data services (N=200)		
Responses	Male	Female
Yes	77 (38.50)	58 (29.00)
No	23 (11.50)	42 (21.00)

Source: Survey by authors. Figure in the parenthesis indicates percentage of respondents.

Table 10 represents the findings about the willingness of the respondents about the minimum monthly payment towards recharge of mobile phones per month. It is clear that 46 (46.00%) respondents pay Rs. 100 to Rs. 200 followed by 18 (18.00%) respondents who pay Rs. 200 to Rs. 300 per month. Only 8 (8.00%) pay above Rs. 300 for recharge of their mobile phones. It is logical that, recently mobile phones have become interactive medium because of the possibility to reach audience personally at all time in the study villages.

Table 10
Pay for recharge of mobile phones by the respondents

Pay for data services (per month)	Number of Respondents	
	Male	Female
Less than Rs. 100	13 (06.50)	21 (10.50)
Rs. 100—Rs. 200	49 (24.50)	45 (22.50)
Rs. 200—Rs. 300	26 (13.00)	28 (14.00)
Above Rs. 300	12 (06.00)	06 (03.00)

Source: Survey by authors. Figure in the parenthesis indicates percentage of respondents.

Table 11 enumerates the finding of data regarding the preferences and opinions towards exposure to various mass media by the respondents. Findings depicts that 4 (4.00%) persons read newspaper or listen to radio or watch TV at any time. This may be because they don't have interest to such media or don't subscribe to newspaper or have no personal radio/TV. It was also observed that in the morning, they don't prefer to listen to radio or watch TV as this may be a busy hour for them. Evenings (1730 - 1800 Hrs.) were found to be the best time for reading newspaper or listening to radio or watching TV by majority of the respondents (43; 43.00%) followed by the time 1800 - 1900 Hrs (22; 22.00%). Agriculture related programme

Kishanvani is also broadcasted within this time slot every day.

Majority of the respondents (85; 85.00%) were exposed to various mass media in group while only (15; 15.00%) responded individually. Tea shop is the more preferred place for getting exposed to mass media by 45 (45.00%) respondents followed by 30 (30.00%) respondents. Folk item was found as most preferred format by 48 (48.00%) respondents followed by 12 (12.00%) who like formal discussions published or broadcasted through various mass media. Among the folk items, message received through colour and costume, practical demonstration, oral literature-cum-dramatic forms like folk music, dance or drama and social or ceremonial gathering like fairs or festivals constitute the integral part of Santal culture and are found productive, efficient and helps in sustainable use of available resources obtained around them towards changing their quality of life (QoL).

Table 11
Preferences/Opinions towards various mass media by the respondents

Preferences/Opinions	Number of respondents	
	Male	Female
Timing of reading/listening/watching		
0700—0800 Hrs.	06 (03.00)	10 (05.00)
0800—0900 Hrs.	06 (03.00)	06 (03.00)
1000—1030 Hrs.	12 (06.00)	08 (04.00)
1300—1400 Hrs.	04 (02.00)	02 (01.00)
1730—1800 Hrs.	36 (18.00)	40 (20.00)
1800—1900 Hrs.	30 (15.00)	26 (13.00)
Any time	06 (03.00)	08 (04.00)
Mode of reading/listening/watching		
Individually	30 (15.00)	20 (10.00)
In group	70 (35.00)	80 (40.00)
Place of reading/listening/watching		
Home	16 (08.00)	20 (10.00)
Club	43 (21.50)	46 (23.00)
Tea shop	32 (16.00)	22 (11.00)
Any other place	09 (04.50)	12 (06.00)
Preferred format of reading/listening/watching		
Formal discussion	19 (09.50)	09 (04.50)
Folk items	53 (26.50)	55 (27.50)
Interview	22 (11.00)	30 (15.00)
Feature	06 (03.00)	06 (03.00)

Source: Survey by authors. Figure in the parenthesis indicates percentage of respondents.

It is found from Table 11 that, the male and female Santals do not differ about social awareness based on mass media in the four Santal villages under study. It is also interesting to note that the mean of social awareness based on mass media of female Santals ($x_2 = 109.43$) is better than that of the male Santals ($x_1 = 106.18$). The

result of the study also indicates that, 't' is not significant at 0.05 level which indicates that male and female Santals of the study area do not differ about the mean adjustment ability. It is interesting to note that the mean adjustment ability score of the female Santals is slightly greater than of the male Santals. It may be concluded from the obtained results that male and female Santals do not differ significantly in their attitude and adjustment ability in the society. Thus, the null hypothesis (H_0) is rejected and alternative hypothesis H_1 is accepted.

Table 12 represents the analysis of data pertaining to the hypothesis of the study, to test:

H_0 : There does not exist any significant different in social awareness based on mass media between male and female Santals in the study area.

H_1 : The social awareness based on mass media of female Santals is greater than that of male Santals in the study area.

Table 12

'T'-test showing difference of awareness based on mass media between the male and female Santals

Sample	Mean (M)	S.D. (?)	S.E. (?)	t_{obs}	Df= (N-1)+(N-1), Where N=200	t	Conclusion
Male Santals	106.18	6.94	3.25	3.40	98	0.96	$t_{obs} > t_{0.05;98}$. H_0 rejected.
Female Santals	109.43	9.52					

Source: Findings from the survey by authors.

Conclusion and Suggestions

The present study depicts that Santals of the selected villages under study are not very dependent on forest for daily needs but unfortunately, most of them had medium level of information seeking and consumption behaviour due to their socio-economic backwardness, unemployment, massive poverty and illiteracy. On the basis of the finding of the present study, it may be concluded that reading newspaper, listening to radio or watching TV are casual in nature among the Santals of the four study villages of Birbhum district of West Bengal. Messages through entertainment, music, dance, costume, colour in folk drama like *Bhadu*, *Alkap*, folk music like *Tushu gan*, *Bhadu gan*, *Bolangan*, folk-rhymes like *Kabigan* and local *melas* (fairs), *Jatra* (open air opera performance) are still more popular, emotional and influential in providing entertainment, productive, sustainable use of their land as well as other available resources and disseminating information. This creates awareness and consciousness to the responding Santals over and above mass media like radio and TV, for its instant and constant appeal to the illiterate ore neo-literate masses. Among

the mass media, TV is more preferred than any other mass media as it has sight and hearing capabilities simultaneously. Among the major needs of the respondents towards empowerment were (i) SHG activities, (ii) Agriculture, (iii) Rural credit/Loans respectively. Majority of the respondents preferred to get exposed to various mass media in the evening from 1730-1900 Hrs.

Thus, this study, although limited to four Santal villages of Birbhum district of West Bengal, has implication in empowering towards sustainable development among the tribals, all over India. Keeping it in mind, modules of the radio or TV programmes may be designed based on the major needs assessment in specific areas preferred by the respondents. To overcome the language barrier, radio or TV programmes may be broadcasted in Santali language as per the 8th Schedule of Indian Constitution.

There is a need to subsidise the cost aspects related to recharge of cable/DTH connection and mobile phones. Publication and broadcast of these types of information should be increased through various mass media. Information of these categories should be highlighted as headings in newspapers and specific topics should be announced before time. More programmes should be broadcasted in radio and TV. Government, village leaders, extension agents, Panchayat members should pay more attention in organising audio-visual programmes at regular basis, in order to encourage them for developing awareness and consciousness towards consuming reliable and authentic information. This can lead to getting empowered towards sustainable development.

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A Study on *Kanyashree Prakalpa* at Community Block Level in West Bengal

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Abstract

Empowerment of women is a continuous process with many dimensions. One of the conditions of human development is equality of men and women and empowerment of women. The overall development of any country is impossible without the empowerment of women. There is a long history of discrimination and deprivation against women in different countries of the world. The contribution of women in the socio-economic development of every country is important. They play an important role in the family. Despite the significant presence of women in various sectors such as agriculture, industry, services, etc., most women in developing countries are among the poorest of the poor. Empowered women would be the plausible solution to all these inequalities and questions. If we can make women economically self-sufficient, it will be possible to eliminate this inequality between men and women. In this study, we have tried to analyze the perception about '*Kanyashree Prakalpa*' and its effect towards women empowerment, if any. For this study, a particular block named Chakdaha Community Block in Nadia district of West Bengal has been selected for rigorous quality assessment. During the assessment, a structured schedule consisting of 34 different questions was placed in front of the 100 female respondents who received a scholarship of Rs. 25,000/- (Twenty five thousand) from *Kanyashree Prakalpa* after attaining age of 18 years. After data collection, they have been statistically analyzed with the help of SPSS software. The study shows that the concept of women's empowerment depends largely on higher education, self-determination, economic and social development, and ultimately employment. Such studies will be able to comprehend the significance and authenticity of women empowerment, existing in the society.

Keywords: *women empowerment, Kanyashree Prakalpa, higher education, self-determination*

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Introduction

History tells that women were very ordinary and lead a traditional life. They lived in an environment where their thinking was forced to be narrow and controlled. It was beyond their imagination to think of an outside world. They did not even think about what they had to give to the world. Women living in such orthodox societies were told that marriage was their destiny and husband their lord. Their job was to serve the lord and obey the family. The male-dominated society and its anti-woman ideology are the main reasons for the backwardness of women. This society played a hostile role in the spread of women's education because their idea was that if women became educated, it would be a great loss for the society. That is why many girls were deprived of education. But now the situation has changed a lot. Society has realized that the overall development of the country is not possible only in a male-dominated system of governance. Women make up half of the world's population. So the involvement of this huge female race is needed for economic development. And this economic development will become the main source of women's empowerment. Women empowerment is the only solution to all their problems. The status of women in societies around the world is completely different from place to place. Some social and geographical cultures have largely influenced the status of women. In order to gradually improve the status of women, the UNO observes International Women's Day on March 8 every year.

In India, the state and central governments have taken a number of measures for the advancement of women. They have adopted various plans, programs and policies for the empowerment of women. Several projects have been launched so far. For example, Beti Bachao Beti Padhao, Sukanya Samriddhi Yojana, Kanyashree Prakalpa, Shikshashree Prakalpa, Rupashree Prakalpa etc. The main objective of this study is to understand the Kanyashree Prakalpa, one of the public services initiated by the Government of West Bengal since 2013. The subsidiary objective of the study is whether *Kanyashree Prakalpa* is able to contribute towards women empowerment. The *Kanyashree Prakalpa* is an initiative taken by the Government of West Bengal to improve the lives and conditions of girls by providing cash assistance initially to economically backward families but afterwards it has been extended to all female children after attaining age of 13 years, till they continue their education up to Master's level. The objectives of *Kanyashree Prakalpa* are to i) bring all female children back to school campus; ii) reduce the dropout rate; iii) reduce the early child marriage; iv) promote girls education; and v) encourage entrepreneurship as the first step towards women empowerment.

This scheme has three components:

- Annual scholarship of 1000 rupees for girls students having 13 to 18 years of age;
- One time scholarship of 25000 rupees after attaining the age of 18 years for unmarried girls students; and
- After 18 years, if girls continue their higher studies, they will receive a higher scholarship amount up to 2500 rupees.

The eligibility criteria for the annual scholarship are:

- The student must be over thirteen years of age and under eighteen years of age;
- The student must be literate in at least eighth grade;
- The family income of the student should be not more than one lakh twenty thousand rupees per annum; at present this condition has been removed. Any student studying in a government or government approved or government aided school will get this opportunity. At present private schools students are also being given this opportunity;
- The student must be unmarried.

The one-time scholarship eligibility criteria are:

- The student must be over eighteen years of age and under nineteen years of age on the day of application;
- The student should be studying in any subject of secondary, higher-secondary, technical, vocational, sports, etc. in a registered institution.

The scheme has received multiple national and international recognitions for its design and good governance features. In June, 2017 this public service of *Kanyashree Prakalpa* had received international recognition and the United Nations honored *Kanyashree Prakalpa* with the highest public service award. *Kanyashree* was ranked the best among 552 such social sector schemes from across 62 countries that were nominated for the coveted award. The success of these public services is based on the following components:

- Improve lives and status of the adolescent girls in the State;
- Provide financial help to girls from disadvantaged families to pursue higher studies (now it will cover every girl from state);
- Prevent child marriage;

- Improved outcomes in terms of their health (especially facilitate the prevention of infant and maternal mortality);
- Contribute towards empowerment of girls in the state to address the immeasurable benefits for the larger society as a whole.

In the district of Nadia in West Bengal, about 26,482 approved applications for *Kanyashree Prakalpa* were released every year and the figure has been increasing.

Literature Review

Empowerment may be defined as the process of removing the factors which cause powerlessness. Empowerment has been used to represent a wide range of concepts and to describe a proliferation of outcomes. The term has been used more often to advocate for certain types of policies and intervention strategies than to analyze them, as demonstrated by a number of documents from the United Nations (UNDAW 2001; UNICEF 1999). Kabeer (2001), whose definition is the most widely accepted, defines empowerment as “the expansion of people’s ability to make strategic life choices in a context where this ability was previously denied to them”. Bennett (2002) described empowerment as “the enhancement of assets and capabilities of diverse individuals and groups to engage, influence and hold accountable the institutions which affect them.” Keller and Mbwewe (1991) described women empowerment as “a process whereby women become able to organize themselves to increase their own self-reliance, to assert their independent right to make choices and to control resources which will assist in challenging and eliminating their own subordination”. The core of the meaning of women empowerment lies in the ability of a woman to control her own destiny. Almost all definitions of women empowerment include some reference to an expansion of choice and freedom to make decisions and take the actions necessary to shape life-outcomes (Malhotra and Schuler 2005).

Moser (1993) focused on the interrelationship between gender and development, the formulation of gender policy and the implementation of gender planning and practices. The work of Shields (1995) provided an exploratory framework to understand and develop the concept of empowerment both from a theoretical and practical perspective, with a particular focus on women’s perception of the meaning of empowerment in their lives. Anand and Sen (1995) tried to develop a measure of gender inequality. Pillarisetti and Gillivray (1998) mainly emphasized on the methodology of construction, composition and determinant of GEM. Bardhan and Klasen (1999) criticized GEM as an inadequate index of measuring women empowerment at the aggregate level. Malhotra *et al* (2002) in their paper prepared

for the World Bank highlighted methodological issues of measurement and analysis of women empowerment.

Chattopadhyay and Duflo (2001) in their paper used a policy of political reservation for women adopted in India to study the impact of women's leadership on policy decisions. They found that women were more likely to participate in the policy making process if the leader of the village community happened to be women. Mahanta (2002) sought to explain the question of women's access to or deprivation of basic human rights as the right to health, education and work, legal rights, rights of working women's, besides issues like domestic violence, all the while keeping the peculiar socio-cultural situation of the north east in mind. A workshop organized in 2003 by the Institute of Social Sciences and South Asia Partnership, Canada addressed the issues like "Proxy Women" who after being elected to Panchayat bodies were merely puppets in the hands of their husbands, relatives and other male Panchayat members; and emphasized on training program for their capacity building. Parashar (2004) examined how mother's empowerment in India is linked with child nutrition and immunization and suggested women to be empowered simultaneously along several different dimensions if they and their children were to benefit across the whole spectrum of their health and survival needs. Sridevi (2005) in her paper provided a scientific method to measure empowerment. Study of Cote de Ivoire revealed that increased female share in household income leads to increased spending on human development enhancing items (as quoted by Ranis and Stewart, 2005). Blumberg (2005) viewed that economic empowerment of women was the key to gender equality and well-being of a nation. This would not only enhance women's capacity of decision making but also lead to reduction in corruption, armed conflict and violence against females in the long run. Karat (2005) in her work discussed the issues of violence against women, their survival, political participation and emancipation.

Panda and Agarwal (2005) focused on the factor like women's property status in the context of her risk of marital violence and opined that if development means expansion of human capabilities, then freedom from domestic violence should be an integral part of any exercise for evaluating developmental progress. Desai and Thakkar (2007) in their work discussed women's political participation, legal rights and education as tools for their empowerment. Deepa Narayan (2007) made an attempt to measure women empowerment for different countries and regions by using self assessed points on a ten steps ladder of power and rights, where at the bottom of the ladder stood people who were completely powerless and without rights and on the top stood those who had a lot of power and rights.

Figueras (2008) in her work studied the effect of female political representation in State legislature on public goods, policy and expenditure in the context of India and opined that a politician's gender and social position matters for policy. Barkat (www.goodgovernance.org) while discussing the present status of women in Bangladesh opined that although women as mothers are held in high respect at the individual level, there was an unclear understanding of empowerment of women as a process of awareness and capacity building leading to greater participation in decision making and control over her own life. Thus, from the above review of literature it is evident that a number of studies have already been undertaken on women empowerment and related issues. The World Economic Forum (2005), in its first gender gap study placed India at 53rd position among 58 nations, which shows a significant gap in male and female achievements. In the same study, the rank of India in terms of political empowerment was 24th at both primary and grassroots level. The National Population Policy 2000 specifically identified the low status of women in India as an important barrier to the achievement of goals towards maternal and child welfare (G.O.I., 2000). NFHS-III (G.O.I., 2005-06) collected information on large number of indicators of women empowerment such as relative earnings of wives over their husbands', control over the use of these earnings, participation in household decision making, freedom of movement, gender role attitude, freedom from domestic violence, etc. Development of Alternatives with Women in a New Era (DAWN) has identified six pre-requisites for empowerment namely: resources (finance), knowledge and technology, skill-training and leadership on one side, democratic process, dialogue, participation in policy and decision-making and techniques for conflict resolution on the other (Sen and Grown, 1988).

Moser (1989) emphasized that the "empowerment approach differs from the equity approach not only in its origins from the equity approach and structure of women's oppression it identifies, but also in terms of the strategies it proposes to change the position of Third World women". The concept of the empowerment of women as a goal of development projects and programmes has been gaining wider acceptance in the 1990s. According to Kate Young (1988) the concept of empowerment, as used by development agencies, refers mainly to entrepreneurial self-reliance. Taking a critical view of the use of empowerment terminology by development agencies, Young states the term echoes the general emphasis within the mainstream on unleashing the capacity of individuals, to be more entrepreneurial and more self-reliant. It is closely allied to the current emphasis on individualistic values: people 'empowering themselves' by pulling themselves up by their bootstraps. The core of the women's empowerment framework is its argument that women's development can be viewed in terms of five levels of equality, of which

empowerment is an essential element at each level. The levels are welfare, access, conscientization, participation and control (Longwe, 1990). Keller and Mbewe (1991) defines empowerment as “a process whereby women become able to organize themselves to increase their own self reliance to assert their independent right to make choices and to control resources which will assist in challenging and eliminating their own subordination”. This is a participatory process that begins at the levels of home and community. A women’s movement of empowerment ultimately represents a challenge to the bureaucracy which is hierarchical, organized to impose decisions from the top down and is dominated by men anxious to preserve their power, both at home and in the larger society.

Sharma (1991) defines empowerment as ‘a process aimed at changing the nature and direction of systematic forces, which marginalize women and other disadvantaged sections in a given context’. According to Marilee Karl (1995) “empowerment is a process both individual and collective, since it is through involvement in groups the people most often begin to develop their awareness and the ability to organize to take action and bring about change”. Women’s empowerment can be viewed as a continuum of several interrelated and mutually reinforcing components. In short, empowerment is a process of awareness and capacity building leading to greater participation, to a greater decision-making power and control, and to transformative action. Kiran Devendra (1994) empowerment of women means “equipping women to be economically independent, self-reliant, have a positive self-esteem to enable them to face any difficult situation and they should be able to participate in developmental activities and in the process of decision-making”. Empowerment is a process of awareness and capacity building leading to greater participation, to greater decision-making power and control, and to transformative action (Karl, 1995). Empowerment is “the process of challenging existing power relations and of gaining greater control over the sources of power”.

Significance

This research will make women aware of their rights and how they can get out of their limited world. Those who thought that girls were confined to four walls would be corrected. Nowadays girls have achieved many prestigious positions in various fields. This work has given us many opportunities to observe in person, how girls have brought about change in themselves.

Objectives of the Study

1. To study the *Kanyashree Prakalpa* in West Bengal;

2. To evaluate the socio-economic improvement among the individuals with the help of *Kanyashree Prakalpa*;
3. To identify the influence of various factors on women empowerment;
4. To analyze the impact of *Kanyaashree Prakalpa* programme towards women empowerment.

Methodology of the Study

A community development block named Chakdaha in Nadia district has been selected for this study. In terms of quality, we have selected 100 girls who have already received financial support from the West Bengal government for the *Kanyashree* project. Throughout the assessment, data was collected through structured scheduling consisting of 34 questions including interviews. The data collected in this way has been statistically analyzed using correlation, regression, step-down method through with the help of SPSS software. The entire data was collected during November, 2018 to March, 2019.

Results and Discussion

Table 1
Correlation analysis between dependent variable effectiveness of Kanyashree one time grant (Y) and 21 casual variables

Variables	'r' Value
Educational status (X_1)	0.2019 *
Occupation of parents (X_3)	-.3120 **
Availability of Aadhaar card (X_6)	-.2047 *
Role of Schools in getting Kanyashree grant (X_{15})	0.2432 *
Access village library (X_{18})	-.2132 *
Role of public libraries towards public services (X_{19})	-.2251 *
Role of Gram Panchayats in getting Kanyashree grant (X_{20})	-.3141 **

Critical value (2-Tail, 0.05) = +or- 0.197

*Significant at 5% level

Critical value (2-Tail, 0.01) = +or- 0.256

** Significant at 1% level

The above calculations show how the independent variables are being influenced by the Kanyashree. One Time Grant (Y) which is crucial to the effect of the interrelationship. Educational statuses (X_1), viewing constructive results means girls participate very dynamically in education. This is because parents persuade them to study. If they do not allow their daughters to study, they will not get an allowance.

Occupation of parents (X_3) shows the negative result because the economic position of the parents in this region is not good. In the case of Availability of

Aadhaar card (X_9) presents negative reflection due to inadequate Aadhaar Kendra or they could not be aware of the importance of the Aadhaar card.

Role of Schools in getting Kanyashree grant (X_{15}), in that case shows positive result. This means that the school has explained the importance of Kanyashree grants. In this case, parents will also encourage their daughters to go to school. The main reason is that if they do not allow them to go to school, the daughters will be deprived of this allowance. Access to the village library (X_{18}) illustrates the negative outcome in this case. This is because most villages do not have a library. There are some libraries where there is no librarian. Most of the time, the library is closed. Role of public libraries towards public services (X_{19}) presents the negative effect as they do not contribute any inferences for getting Kanyashree one time grant.

Role of *Gram Panchayats* in getting Kanyashree grant (X_{20}) also confirms the negative figure. The idea of the *panchayat* members is that the Kanyashree project is entirely a school matter and they have no role, hence they did not show much interest in it. Thus, the negative result.

Table 2
Multiple Regression Analysis

Variables	" β " value	"t" value
Occupation of parents (X_3)	-282348	-2.152 *
Availability of Aadhaar card (X_9)	-242134	-2.166 *

Critical value (2-Tail, 0.05) = +or- 1.987 *Significant at 5% level
Critical value (2-Tail, 0.01) = +or- 2.637 ** Significant at 1% level

Multiple R	R Square	Adjusted R Square	Standard Error
0.61193	0.37352	0.21741	2.00807

Analysis of Variance

	DF	Sum of Squares	Mean Square
Regression	20	191.08108	9.55405
Residual	79	318.87892	4.03644

From Table 2 we can see that all twenty one (21) variables clarify their regression effects with \hat{a} and subsequent t values. It was observed that all twenty-one causal variables could explain 37.35 percent of the total collective effect ($R^2 = 0.37352$) towards the usefulness of the Kanyashree one-time grant (Y). Two of these variables are very important, such as Occupation of parents (X_3), and Availability of Aadhaar card (X_9) which explicate the result of total regression and predictor variables.

Table 3
Step-down Regression Model

Step I: X_3

Multiple R	R Square	Adjusted R Square	Standard Error
0.35342	0.13307	0.12422	2.11919

Step II: X_{20}

Multiple R	R Square	Adjusted R Square	Standard Error
0.45073	0.20414	0.18712	2.04563

By regression analysis from Table 3, it was found that after step 2, two variables are Occupation of parents (X_3), and Role of *Gram Panchayats* in getting *Kanyashree* grant (X_{20}) explained 20.41 percent of the total impacts, remaining nineteen (19) variables explain only about 17.16 percent of the overall effect.

Table 4

Correlation analysis between dependent variable the perception level of students on women empowerment (Z) and 22 casual variables

Variables	'r' Value
Monthly income of parents (X_4)	0.2390 *
Monthly income of family (X_5)	0.2187 *
Effectiveness of <i>Kanyashree</i> one time grant (X_{22})	-.2017 *

Critical value (2-Tail, 0.05) = +or- 0.197

*Significant at 5% level

Critical value (2-Tail, 0.01) = +or- 0.256

** Significant at 1% level

It can be seen that both monthly income of parents (X_4), and monthly income of family (X_5) prove their positive figures. The income of the people of this region is not very high but they always encourage their daughters to study.

Parents know that if they study well, there are many government projects from which scholarships can be obtained. This scholarship will help their daughters a lot for higher education. After completing high school or 18 years of age, they get an allowance of Rs. 25000/- from *Kanyashree Prakaalpa*.

Effectiveness of *Kanyashree* one time grants (X_{22}) demonstrates the negative image. This part shows the thoughts and realities of most parents. While collecting the data, it has been observed that a large part of Rs 25,000 was used by some

parents for their business, farming or house repairing.

Table 5
Multiple Regression Analysis

Variables	" β " value	"t" value
Effectiveness of Kanyashree one time grant (X_{22})	-.403848	-2.144 *
Role of public libraries in getting information towards women empowerment (X_{25})	-.232107	-1.998 *

Critical value (2-Tail, 0.05) = +or- 1.987

*Significant at 5% level

Critical value (2-Tail, 0.01) = +or- 2.637

**Significant at 1% level

Multiple R	R Square	Adjusted R Square	Standard Error
0.57259	0.32862	0.07664	0.99930

Analysis of Variance

	DF	Sum of Squares	Mean Square
Regression	27	35.13005	1.30111
Residual	72	71.86995	0.99819

F = 1.30347 Signif F = 0.1867

From Table 5 it is found that all twenty-two (22) variables display their regression effects with $\hat{\alpha}$ and corresponding t value. This could explain the 32.86 keeping the 22 resulting variables together as a percentage of total cumulative impact toward students' perception level ($R^2 = 0.32862$) on female empowerment (Z). Two variables were identified, such as Effectiveness of *Kanyashree* one time grant (X_{22}), and Role of public libraries in getting information towards women empowerment (X_{25}) which are the most important and explain the entire regression effect on the predictors.

Table 6
Step-down Regression Model

Step I: X_4

Multiple R	R Square	Adjusted R Square	Standard Error
0.24104	0.05810	0.04849	1.01410

Step II: X_{25}

Multiple R	R Square	Adjusted R Square	Standard Error
0.33125	0.10973	0.09137	0.99099

Step III: X_{16}

Multiple R	R Square	Adjusted R Square	Standard Error
0.40058	0.16047	0.13423	0.96733

Step IV: X_{27}

Multiple R	R Square	Adjusted R Square	Standard Error
0.45165	0.20399	0.17048	0.94687

Table 6 represents the step down regression model which was applied to differentiate the important independent variables. In that condition it was found that four variables i.e. monthly income of parents (X_4), role of public libraries in getting information towards women empowerment (X_{25}), are there any Kanyashree association in your village (X_{16}) and village libraries can encourage about job related work (X_{27}) had explained 20.39 per cent of the total effect. Thus, the residual 18 variables clarify only 12.47 percent for total effect of students' perception level on female empowerment.

Conclusion

Kanyashree Prakalpa in West Bengal is successful for many reasons. The DISE and UDISE data as collected and analyzed by NUEPA every year shows that there has been a gradual increase of female students since the inception of *Kanyashree Prakalpa*. UNICEF's study shows that the prevalence of girls getting married before age 18 has declined from 47 per cent to 27 per cent between 2005-2006 and 2015-2016. National Statistics (NFHS) illustrates that the early child marriage incidences are declining. We are not saying that *Kanyashree* is responsible for that but it is obvious that *Kanyashree Prakalpa* is one of the factors behind such decline. From data as well as practical visits of the block, it is not visible that Kanyashree one time grant is directly helping girls in their financial empowerment, though we have received positive feedback in other blocks of the district. But indirectly it helps in improving the socio-economic condition of the family at large, while using this money for house repairing, family business, and other purposes. We have not seen or heard any incidences of early child marriage in this block whereas it was seen in Murshidabad and South 24 Parganas districts of West Bengal. Finally, we may conclude that the *Kanyashree Prakalpa* is the benchmark for achieving its objectives, as far as public service is concerned. However, it can be said that the girls of West Bengal have been relieved from some of their hardships due to this project. This effort plays an effective role for those who want to pursue higher education in future, towards attainment of women empowerment.

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Manifestation of Lifelong Learning as a Common Good

Parinita Batra¹

Abstract

The core aspect of learning has evolved over time. Essence of lifelong learning is growing, which incorporates learning at all ages – from cradle to grave. It subsumes formal, non-formal and informal learning. Lifelong learning is seen as an imbued and imbibed aspect of our lives, as well as that which is focused on self-growth. The implication of this is that an explicit reference to schooling or education is no longer the prerogative of an elite person. Lifelong learning is regarded as an investment for, through and of life. In ordinary parlance, ‘common good’ refers to the different facilities which may be material, cultural or institutional that the members of a community provide, to all other members for fulfilling a relational obligation pertaining to interests that the members have in common. The term itself may refer either to the common interests of the members, or the facilities which serve common interests. The common good is therefore an important concept in political philosophy, as it plays a central role in developing reflections about the public and private dimensions of social life. This article reviews the literature and analyses various points of agreement among the traditional connotations of the common good. It further delves into the possibilities of establishing and reframing lifelong learning as a common good.

Keywords: *lifelong learning, common good, learning to live together, social justice, philosophy*

Introduction

The all-powerful and purposeful force driving us for the pursuit of living in a liberated state, as part of the knowledge economy can be characterized as learning. Learning is a stimulus that enriches us to be human. Since time immemorial, it has been observed that specific emphasis has been laid upon the idea of schooling being synonymous with education. Only knowledge and learning as a commodity

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for the benefit of the provider is not sufficient; rather a need for practical knowledge and wisdom is fundamental to becoming not only lifelong learners but indeed life-wide learners. Significantly, this is one of the indications of the change in term, from lifelong education to lifelong learning: education is a social institution provided by others, such as the government, the workplace but learning is individual and so it an individual's responsibility to direct his/her own learning (Searle, 1995).

The phenomenon of globalization along with the ever-evolving knowledge society, is posing extraordinary challenges for individuals in general. In such a scenario, lifelong learning serves as an empowering tool for individuals, to constantly adjust to and expand information. Lifelong learning comprises of all learning exercises embraced in a progressive manner all through an individual's life, with the aim of improving/acquiring knowledge, skills and competencies. Learning is not, and should not be comprehended to be isolated and restricted to school learning only. Without lifelong learning, the scope of people and communities to work on their aptitudes or to adjust to political, financial, ecological, innovative or social changes is significantly diminished.

The global commitment of “ensuring inclusive and equitable quality education and promoting lifelong learning opportunities for all” as envisioned in the Education 2030 Agenda highlights some intriguing realities (UNESCO, 2016). This provides an opportunity to reorient and recontextualize the *right to education* across the continuum from *right to schooling* to *right to lifelong learning*. It becomes essential to understand this in terms of creation of information, its controller, ways and processes of acquiring information/knowledge, validation of knowledge and finally, the ability to use the competencies gained. The questions to be then pondered upon are:

- *How does lifelong education differ from lifelong learning?*
- *What does lifelong learning entail when viewed from the standpoint of a common good?*

Time and again there have been constant affirmations of an integrated and a humanistic vision dependent on the educational principles, as a public good and as a human right (UNESCO, 2020). The report insists that it is essential to acknowledge lifelong learning as a human right that ensures the recognition, validation and accreditation of learning outcomes acquired in different contexts. Further, it highlights that this will enable easier negotiation of an individual in the realm of a social learning environment.

Delineating Lifelong Learning from Lifelong Education

It is essential to make a distinction between lifelong learning and lifelong education, as these two concepts are often conflated (Billett, 2003). The assumptions for lifelong education are usually relied upon the provision of experiences, which are shaped by various factors.

These include physical facilities, the curriculum framework, intended outcomes of the educational system, the type of resources, and the perspectives of the teachers involved in the teaching-learning processes. The intended outcomes for lifelong education are aimed at continuity in the society, albeit through individuals present as due learners. Lifelong education then becomes institution driven, that consists of specific forms, norms, and practices of the respective institutions (Billett, 2018). Lifelong education as an institutional fact (Searle, 1995) gets manifested in the experiences led by the state, with the sole purpose of suggesting specific norms and practices to bring about change in people.

In contrast, lifelong learning comprises of personal needs: such as what individuals know, can do and value. The sole intentions are shaped by individuals' personal choice, interest and subjectivity (Baldwin, 1894; Billett, 2009b; Malle, Moses, and Baldwin, 2001). The fact that individuals opt to learn in consonance with their own personal experiences, guarantees reinforcement of the new learning they acquire (Valsiner and van der Veer, 2000). Thus, inevitably those personal sets of factors, through individuals' experiences are to a huge extent, individual-dependent. This makes lifelong learning a personal process. As no two individuals' experiences are the same, lifelong learning processes become a personal fact. Lifelong learning serves individuals to constantly adjust and extend information, in order to apply the knowledge, skills and competencies gained. Furthermore, the Faure Report of 1972 established the two interrelated notions of learning society and lifelong education at a time when traditional education systems were being challenged (Faure, 1972). This was followed by the Delors Report of 1996, which proposed an integrated vision of education based on the two concepts of learning throughout life and the four pillars of learning - learning to know, learning to do, learning to live together, and learning to be (Delors, 1996).

Central Features of the Common Good

In both academic and non-academic spheres, the common good is confused with public good or a set of public goods. However, it is important to keep the two ideas separate. The common good (with the attached facilities) may resemble public

goods because they are often those facilities which are supposed to be open and available to everyone (for example: a public library). In this context, it is not possible to exclude those who do not contribute from enjoying the benefits. Nonetheless, the facilities constituting the common good are conceptually different from public goods as these facilities may not be a net benefit for each respective member of the community. These facilities form a special class of interests which all citizens are entitled to have in common, for instance, the interests which are the object of the civic relationship. Each member of the community will have various private interests too, along with these common interests. Hence, for any particular member of the community, the private interests affected by some facility may be more important from the standpoint of that person's egoistic rationality, than the interests which collectively belong to the special class of common interests. However, conception of the common good more specifically amounts to the ethical obligations of citizens in public life. According to Rousseau, a community following a proper order is "a form of association that will defend and protect the person and goods of each associate with the full common force" (Rousseau, 1997). Members of this community are united by a mutual concern based upon solidarity, which is focused on their common interests in physical security and property. He goes on to say that, "one cannot injure one of the members without attacking the body, and still less can one injure the body without the members being affected" (Rousseau, 1997). Members in a community co-exist as part of a social relationship. This relationship requires them to think and act in ways that takes into concern, a certain form of mutual concern. The common good necessarily defines this form of concern. The common good incorporates basic requirements of social justice, as all members of the community must provide one another with basic rights and freedom; which is not bound to get exploited. The common good in this holistic sense, goes beyond the basic requirement of justice, as it assumes citizens to maintain certain aspects of conduct, on the grounds of preserving common interests.

The Common Good Perspective for Lifelong Learning

The idea of a 'common good' has also been linked to the idea of justice by many philosophers. Further, most philosophers also believe that in the context of interaction, persons must transcend their own personal concerns and reasons, from the standpoint of the *common good*. Prominent examples include being democratic, making collective decisions, sharing burden, pooling for resources. For instance, consider a situation where soldiers volunteer to fight during a war. When they go to a battlefield and fight for the public, upon their return we can help and treat their wounds as a component of an aggregate weight/burden which everyone must bear. This can include giving complimentary clinical or medical support along with a

recovery kit. John Rawls, a renowned political philosopher has endorsed that individuals from a political network have a social commitment to think about the interests joined to the 'position of equal citizenship' which all residents share. Rawls utilizes the expression 'the common good' to allude to the entirety of social conditions that are in response to the interests, connected to the situation of equal citizenship. The 'common good' accordingly to Rawls, additionally comprises of providing mechanisms about job possibilities, establishing legal provisions for being able to choose an occupation freely, and building a system of education (public or private) that does not undermine the motivation or talent inherent in persons, irrespective of their family background (Rawls, 1971).

In '*Embracing a culture of lifelong learning: contribution to the Futures of Education initiative*', UNESCO states that an enabling environment is essential, if a culture of lifelong learning is to be established.

There are ten major components that have been identified for developing a culture of lifelong learning (UNESCO, 2020):

1. Recognizing the holistic character of lifelong learning;
2. Promoting trans-disciplinary research and inter-sectoral collaboration for lifelong learning;
3. Placing vulnerable groups at the core of the lifelong learning goals;
4. Establishing lifelong learning as a common good;
5. Ensuring greater and equitable access to learning technology;
6. Transforming schools and universities into lifelong learning institutions;
7. Recognizing as well as promoting the collective dimensions of learning;
8. Encouraging and supporting local lifelong learning initiatives, including learning cities;
9. Reengineering and revitalizing workplace learning;
10. Recognizing lifelong learning as a human right.

The fourth component, i.e. '*establishing lifelong learning as a common good*' serves as a qualifying factor, in order to support the realization of an enabling environment for a culture of lifelong learning. Traditionally, education has been regarded as a responsibility of the state, for the public. Education then becomes a public good. The notion of public good has its roots in economics, which emphasizes on the need to consume goods in such a manner that it does not hamper the consumption levels of another person. However, over the years, there have been many developments wherein access to knowledge is gaining prominence through formal system of education along with use of technology. Also, there is significant

growth of privatization seen in the field of education, which is by far accessible to the advantageous groups of the society. Therefore, there seems to be coherence in the idea for greater accessibility, accountability and affordability especially for the marginalized. For example, in cases where a state fails to ensure universal education through absence of trained faculty members for students, the sufferers are majorly the disadvantaged groups of a society. In such a scenario, it becomes imperative to involve other individuals, communities, civil society organizations who can take charge and ensure our right to education (UNESCO, 2016).

During the course of privatization of education, the lines are blurring between what construes as public and private education. Hence, there is a need to realign and reestablish education as a common good, which protects the role of a state in providing education and at the same time, engage in a collective endeavor through various stakeholders. This will enable in preservation of interests of the public, for societal development.

Conclusion

Learning to live together is a perfectly ordinary thing that presupposes learning how to live side by side, with other people. It is considered to be an essential part of lifelong learning, as well as an important purpose of lifelong education. According to Nietzsche's philosophy of 'eternal recurrence', learning to live together depends on learning to see beyond a perspective which is preoccupied with one's own self-interests and egoistic satisfaction (Nietzsche, 1968). Further, his philosophy's ontological interpretation can be defined as a way of being, of all things. Nietzsche gave a whole new imperative of existence by implying that we must live and conduct ourselves in such a manner, which makes us desire our constant return to those specific set of realities, beyond transcendence. In the axiological sense, he laid emphasis on the idea that if eternal return is the correct measure to value things, then a person would make all efforts to ensure that those essential values are intact and constantly maintained. The *Delors Report* too maintains that self-awareness or recognition of individual learners must form an essential prerequisite to be aware or recognize others. Ivan Illich had also propounded an innovative way by suggesting that a 'learning web' must be created, which connects people with the resources they need, pointing towards a need to shift from traditional education to varied lifelong learning possibilities (Illich, 1971). In the light of this, it is an opportune time to move from the notion of education as a 'public good' to a 'common good' since the latter will better quip each and every other member of the society to indulge in the process of lifelong learning in its wider aspect. The transition to a 'common good' can only be realized when everyone participates together and whole-

heartedly in the process of learning, irrespective of any public or private origin. Further, when lifelong learning gets established as a 'common good' it will ensure an intrinsic commonality and a binding effect between production and consumption of learning while encompassing knowledge, skills, attitudes and competencies.

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Livelihood Opportunity to Urban Poor through Guaranteed Employment Schemes during COVID-19 Pandemic in India: A Study of Himachal and Jharkhand

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Abstract

Economic shutdowns due to the COVID-19 pandemic have had negative impacts on urban economy in general and on the livelihood of urban poor in particular. Informal workers represent 61% of all workers globally - a total of 2 billion workers worldwide. Of these, an estimated 1.6 billion which is 80% could see their livelihoods destroyed due to the lockdowns and related shelter-at-home restrictions in response to COVID-19. City dwellers particularly the poor informal sector workers have taken the maximum brunt of the pandemic. Lockdowns, social distancing norms, shutting down of markets, factories and allied activities have paralyzed the work opportunities for these sections of urban populations. Urban unemployment which was in stress, got sharpened further during the initial weeks of the pandemic. During the pandemic many states like Orissa, Jharkhand, Kerala and Himachal Pradesh took proactive action apart from the union government to minimise the distresses of the urban poor by introducing urban employment guarantee schemes in different names. The present paper is an effort to study the experiences of two states i.e., Himachal Pradesh and Jharkhand on the basis of secondary data collected from the departments of urban development.

Keywords: *Pandemic, mmsagy, msy, Himachal Pradesh, Jharkhand, urban employment guarantee yojana*

Introduction

Long-term economic shutdowns due to the COVID-19 pandemic have had negative impacts on the urban economy. According to a Centre for Monitoring

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Indian Economy (CMIE) report, India's lockdown order led to a jump in unemployment rate from 21 per cent to 26 per cent in mid-April and a weekly decline in labour market participation (*The Economic Times*, 2020, April 29). Using a section of the National Disaster Management Act (NDMA), 2005, the Ministry of Home Affairs (MHA) issued a number of advisories to state governments, including order for restricting the movement of migrants along with the provisions that must be made for them (Minister of Home Affairs, March 29, April 3). State governments were tasked with providing temporary shelters with basic amenities for migrants who remained in destination areas, return migrants were to be kept in quarantine for 14 days in home states, landlords were asked to defer rents for migrants, and employers were asked to give them wages for the period of the lockdown. Historically, pandemics have hit minorities and people at the bottom of the socio-economic spectrum disproportionately (Wade, 2020; Duggal, 2020). They often suffer more from pre-existing conditions due to more exposure to risks, economic difficulties, and limited access to services (Wade, 2020). The rapid spread of COVID-19 has exposed some of these old problems and inequalities in a new light (Kihato and Landau, 2020). The plight of the poorest sections of society, particularly migrants who were trudging miles to be back home, had lost their daily wages and were dependent on either government support or private charity for food and shelter.

Response of the Government towards Urban Poor during Pandemic

As the pandemic began spreading its tentacles first in major cities and towns, both Centre and States were quick to announce a number of initiatives in the forms of cash transfers, food ration, temporary shelters apart from enlarging the existing flagship programs to lessen the hardship. The union government announced an immediate 1.7 lakh crore economic package (for both rural and urban populations) under the existing *Prime Minister Garib Kalyan Yojana (PMGKY)* to ensure free food and a limited cash transfer support was extended to the most vulnerable citizens, many of whom were residing in urban areas. For instance, cash transfers included Rs.1000 to be provided to nearly 30 million poor pensioners, widows and disabled and a Rs.500 monthly deposit to be made to 200 million women holding *Jan Dhan* accounts (both components for a period of 3 months). Beyond cash, the government extended food rations to 800 million beneficiaries registered under the National Food Security Act. Further, to reach out to the urban poor, the government extended a free grain entitlement of 5kg rice/wheat per person and 1kg chickpeas per household to an estimated 80 million migrants (who were not covered under National Food Security Act or State Public Distribution System). In the second tranche of economic relief package announced in June, the Union government launched a number of tailor-made schemes to address the woes of urban poor. Among these was the easy

access to credit provision for street vendors who were to be provided with an initial working capital of up to Rs 10,000 to restart businesses that took the brunt of the lockdown. The intervention aimed at supporting 50 lakh such vendors and providing liquidity up to Rs 5000 crores. Given that access to housing remains a major concern for urban poor especially the migrant workers, affordable rental housing scheme was curated under the existing flagship program called the *Prime Minister Awas Yojana*. The idea was to convert government-funded housing in cities to rental complexes through public-private partnerships. Additionally, efforts were made to generate employment opportunities for the urban poor during the pandemic through Self Help Groups (SHGs) that can produce face masks and hand sanitizers. Beyond the Centre, most state governments have launched their programs and initiatives to lessen the hardships of urban poor and migrant workers. States like Kerala, Himachal Pradesh, Jharkhand, Odisha, Tamil Nadu, Telangana were far more proactive than the Centre on this. In this paper we are discussing about Himachal Pradesh and Jharkhand where their respective state governments announced Urban Wage Employment Initiative for urban informal labour to carry out the work identified by the Urban Local Bodies (Observer Research Foundation, 2020).

URBAN EMPLOYMENT GUARANTEE SCHEMES BY HIMACHAL PRADESH: *Mukhya Mantri Shahri Ajeevika Guarantee Yojana (MMSAGY)*

The governor, Himachal Pradesh keeping in view the scenario of Covid-19 pandemic was pleased to notify the scheme known as *Mukhya Mantri Shahri Ajeevika Guarantee Yojana (MMSAGY)* to enhance livelihood security in urban areas by providing 120 days of guaranteed wage employment to every household in the financial year 2020-21.

Objective of the Scheme: The objective of the scheme is to enhance livelihood security in urban areas by providing 120 days of guaranteed wage employment to every household in a financial year.

Goals of MMSAGY: To ensure livelihood security to urban household by providing a guaranteed employment for 120 days; to facilitate skill enhancement of persons engaged in waged labour jobs; to provide them better livelihood opportunity; to set up their own enterprises by imparting entrepreneurship training as well as subsidy linked credit linkages; and to strengthen urban infrastructure and provisioning of quality civic amenities in the urban local bodies (ULB).

Eligibility Criteria for the MMSAGY Yojana: All adult members of the household who register under this scheme will be eligible to work. To register they

have to be: local resident of the ULB (they should be residing within the jurisdiction of the ULB either in their own house or on rent); willing to do unskilled work at projects being executed or in sanitation services being provided by the ULB; household must comprise of husband, wife and their minor children. However, only adult members of household shall be eligible to work. The upper age limit for providing work shall be 65 years.

Components of MMSAGY

Guaranteed Employment: It will aim to provide guaranteed 120 days employment to eligible beneficiaries in urban local bodies to ensure livelihood security. The ULBs shall not employ an eligible beneficiary for more than 120 days in any financial year.

Maximum Period of Employment: The maximum period for which employment will be provided to a household shall be 120 days.

Skill Training: The eligible beneficiaries under this scheme will also be provided skill training under *Deen Dyal Antodaya - National Urban Livelihood Mission (DAY-NULM)*, to create further opportunities for better livelihood.

Bank Linkage: The eligible beneficiary skilled under this scheme will be facilitated to apply for loans under DAY-NULM.

Coverage and Duration: The scheme will be implemented in all ULBs and cantonment boards (CBs) in Himachal Pradesh. The scheme shall initially be operational till 31.03.2021.

Application Procedure: Any eligible beneficiary may apply to get registered with the ULB as per Annexure-B. Application can also be filled online at portal specified for the purpose. All eligible beneficiaries of a household will be registered through a single application only. No separate applications are required.

Permissible Activities: All eligible beneficiaries will be employed in the following permissible activities in ULBs. In any ongoing or new admissible work under any Government of H.P. /Government of India scheme for which funds are available with ULB. In any admissible work under 15th Finance Commission or 5th State Finance Commission for which grant-in-aid provided to the ULBs. Sanitation Work/Services as admissible under Solid Waste Management Rules, 2016 and *Swachh Bharat Mission (SBM)*. The ULBs shall not start any muster-roll linked

work/activity under this scheme and shall get eligible beneficiary employed only in the works specified as per 7 (a). The ULBs shall make enabling provision in all new contracts to be awarded for engaging eligible beneficiaries under *MMSAGY* as unskilled workers by the implementing agency. For the works already awarded, the ULBs will coordinate with implementing agency to whom, the work has been awarded for engaging the registered eligible beneficiaries under *MMSAGY*.

Payment of Wages: Eligible beneficiary under the scheme will be entitled to a minimum wage notified by the state government. Equal wages are to be paid to both male and female workers. Wages will be directly deposited in the bank account of eligible beneficiaries by the ULBs on fortnightly basis, not later than 7 days after completion of 15 days employment. The payment of wages as prescribed will be made after due verification of the attendance by the junior engineer or any other officer/official authorized by the ULB. The payment made above will be adjusted/deducted from the bills of the implementing agency before making its payment.

Skill Training under *DAY-NULM*: The eligible beneficiary will be provided skill training with entitlement to minimum wage as notified by the government up to a maximum of four weeks, only after doing wage employment of 30 days under *MMSAGY*.

Bank Linkage: The eligible beneficiary provided skill training above, willing to start their own enterprise will be linked to the banks under Self-Employment Programme (SEP) of *DAY-NULM*.

Power to Review: The state government may review and amend these guidelines at any time for its smooth implementation in the ULBs.

URBAN EMPLOYMENT GUARANTEE SCHEMES BY JHARKHAND: *Mukhyamantri Shramik (Shahri Rozgar Manjuri for Kamgar)*

Jharkhand government has launched a new *Mukhyamantri Shramik (Shahri Rozgar Manjuri for Kamgar) Yojana* job card for poor people in urban areas. Under this scheme, the Jharkhand government will provide employment to urban unskilled labourers. If the government is unable to provide employment, they will be given unemployment allowance. Under this scheme, labourers will be provided work for at least 100 days, just like Mahatma Gandhi Employment Guarantee Scheme. Amid the coronavirus lockdown, a large number of migrant labourers had lost their jobs and returned to their native states. Now it is the responsibility of the respective state governments to ensure that these migrant workers get employment in their own states.

Eligibility Criteria for (MSY) Shramik Yojana Jharkhand: The person should be of 18 years and above. He/she should be staying in urban areas since April 1, 2015. Applicant shouldn't have the *MNREGA* card in rural areas. Daily wage workers, staying in government shelters, for the last three years would be eligible for the new scheme.

Major Benefits: Employment will be given to the migrant labourers returned to Jharkhand, through the scheme. In this, both skilled and unskilled labourers will be provided equal employment opportunities. Employment will be given for at least 100 days. Applicants will be given employment cards and information will be written about what work they will do and for how long they will stay employed. Any person older than 18 years will be able to avail the benefit of the scheme, only if he is a resident of the state. Online and offline applications can be made under the scheme.

Key Features of Scheme: The new Jharkhand CM Job Guarantee Scheme for Urban Poor will help the migrant workers who returned to urban Jharkhand after the corona outbreak. More than 5 lakh migrant workers stuck outside the state returned to Jharkhand since May 1 during the coronavirus pandemic spread. The Jharkhand state rural development department has done a skill mapping of 2.5 lakh workers. It was revealed that 30% of workers who returned from different states were unskilled labourers.

Objectives of Mukhyamantri Shramik Scheme: The main objective of *Mukhyamantri Shramik* is to enhance livelihood security in Jharkhand State by providing a guaranteed 100 days wage employment in a financial year.

Mukhyamantri Shramik Yojana: Jharkhand government has launched a job guarantee scheme called *Mukhyamantri Shramik Yojana*. Under the Yojana, urban workers are able to demand a maximum of 100 days of work.

Features of the Scheme

Wages: The wages under Yojana are likely to be at least 40 percent higher than Rs. 194 a day provided under the *MGNREGA* program in the state. The minimum wage per day in Jharkhand ranges from Rs 274.81 to Rs 438.39 based on the skill of the workers. The wages will be credited to the bank account of workers, either after work or within seven days of the completion of work. In any situation, the payment has to be made within 15 days of the completion of work.

Nature of Work: The work will be demand-based and divided into categories like cleanliness, water harvesting, tree plantation, public works construction or repair and managing shelter homes, etc. Workers will be paid the minimum wage as notified by the state government.

Unemployment Allowance: The scheme will also have a provision for unemployment allowance, where a person who has asked for work does not get it within 15 days will be liable to be paid one-fourth of the minimum wage as an allowance for the first month, half the wage in the second month, and the full minimum wage amount in the third month of no work.

Job Cards: Urban workers will also be registered and they would be provided job cards. A special website is also being designed, similar to the website functions of *MGNREGS*.

Implementation: The scheme will be implemented by the urban development and housing department through the state urban livelihood mission. Municipal commissioners, executive offices, or special officers of municipal bodies will be the nodal officer of the scheme (<https://msy.jharkhand.gov.in/>).

Implementation of Urban Employment Guarantee Scheme in Himachal Pradesh

The implementation and performance of urban employment guarantee schemes namely *MMSAGY* in the ten districts in the state of Himachal Pradesh is as under: -

Table 1
Registration and Issued Job Cards under *MMSAGY*

Sr. No.	District	Urban poor/BPL	Total registered	No. of applicants issued job card
1.	Shimla	3348	518 (15.4%)	398 (76.8%)
2.	Una	1951	557 (28.5%)	460 (82.5%)
3.	Hamirpur	915	68 (7.4%)	53 (77.3%)
4.	Bilaspur	1062	377(35.4%)	377(100%)
5.	Solan	1137	22 (1.9%)	22 (100%)
6.	Sirmour	1550	396 (25.5%)	392(98.9%)
7.	Mandi	2095	747 (35.6%)	555 (74.2%)
8.	Kangra	2267	924 (40.7%)	739 (79.9%)
9.	Kullu	470	102 (21.7%)	35 (34.3%)
10.	Chamba	1180	360 (30.5%)	289(80.2%)
Total		15975	4071 (25.4%)	3320(81.5%)

Source: Department of Urban Development, Himachal Pradesh, November, 2020

There are 15975 urban poor as per the records of state urban development

department out which 25.4 per cent have registered for this scheme. Out of 4071 total registered applicants, various municipal bodies issued the job cards to 3320 applicants which constitute 81.5 per cent. The highest applications for the registration were received in district Kangra (40.7 percent) followed by Mandi (35.6 percent), Bilaspur (35.4 percent) and Chamba (30.5 percent). The district Bilaspur and Solan were the two districts that issued the job cards to all their registered applicants, followed by Sirmaur (98.9 percent), Una (82.5 percent), Chamba (80.2 percent). However, the applications for the registration under this scheme were very less.

Table 2
Assigned Work and Types of Work under *MMSAGY*

Sr. No.	District	No. of applicants assigned work	No. of beneficiaries accepted/refused		Work type	
			Denied	Agreed	Infrastructure	Sanitation
1.	Shimla	398	157(39.4%)	241(60.5%)	52(21.5%)	189(78.4%)
2.	Una	450	364(80.8%)	86(19.1%)	19(22%)	67(78%)
3.	Hamirpur	40	0	40(100%)	30(75%)	10(25%)
4.	Bilaspur	337	0	337(100%)	156(46.2%)	181(53.7%)
5.	Solan	22	10(45.4%)	12(54.5%)	0	12(100%)
6.	Sirmour	392	94(23.9%)	298(76%)	272(91.2%)	26(8.7%)
7.	Mandi	550	14(2.5%)	536(97.4%)	355(66.2%)	181(33.7%)
8.	Kangra	567	91(16%)	476(83.9%)	79(16.5%)	397(83.4%)
9.	Kullu	5	1(2%)	4(8%)	0	4(100%)
10.	Chamba	102	0	102(100%)	353(3.3%)	67(65.6%)
Total		2863	731(25.5%)	2132(74.4%)	998(46.8%)	1134(53.1%)

Source: Urban Development Department, Government of HP, 2020

The previous table showed that there were of total 3320 applicants who received job cards from their respective urban local bodies. The applicants to whom the job cards were issued, 86.2 percent of them were assigned the work under the *MMSAGY* and the card holders who agreed to work under this scheme was 74.4 percent. However, about one fourth card holders denied the assignments.

The work type which was offered to the applicants of *MMSAGY* - 53.1 per cent was related to sanitation and 46.8 per cent was related to infrastructure development.

Implementation of Urban Employment Guarantee Scheme in Jharkhand

The implementation and performance of *Mukhyamantri Shramik Yojana*, the urban employment guarantee scheme in Jharkhand is as under:

Table 3
District Wise Performance of *MSY* in Jharkhand

Sr. No.	District	Job card applications received	Issued job card	Demand for work application received	No. of job card holders' assigned work
1.	Bokaro	353	140(39.6%)	24	20 (83.3%)
2.	Chatra	127	65 (51.1%)	11	11 (100%)
3.	Deoghar	2681	1916(71.4%)	14	13(92.8%)
4.	Dhanbad	3703	1827 (49.9%)	132	117(88.6%)
5.	Dumka	152	92 (60.5%)	9	0
6.	East Singhbhum	629	451(71.7%)	55	40(72.7%)
7.	Garhwa	1170	981 (83.8%)	3	0
8.	Giridih	245	77 (31.4%)	5	5(100%)
9.	Godda	323	128(39.6%)	11	9 (81.8%)
10.	Gumla	162	122 (51.8%)	0	0
11.	Hazaribagh	231	106 (45.8%)	34	34(100%)
12.	Jamtara	342	105 (30.7%)	4	1 (25%)
13.	Khunti	88	77 (87.5%)	20	20(100%)
14.	Kodarma	199	146(73.3%)	12	11(91.6%)
15.	Latehar	83	59 (71%)	11	11 (100%)
16.	Lohardaga	74	53 (71.6%)	30	24 (80%)
17.	Pakur	84	49 (58.3%)	6	6 (100%)
18.	Palamu	636	475(74.6%)	55	48(87.2%)
19.	PashchimiSinghbhum	102	65 (63.7%)	6	0
20.	Ramgarh	373	118(31.6%)	19	19(100%)
21.	Ranchi	2058	1263(61.3%)	44	14(31.8%)
22.	Sahibganj	697	523 (77%)	28	22(78.5%)
23.	SaraikelaKharsawan	234	147 (62.8%)	32	32 (100%)
24.	Simdega	157	143 (91%)	66	41 (62.1%)
Total		14,903	9,245 (62%)	631(6.82%)	498 (78.9%)

Source: Department of Urban Development, Himachal Pradesh, 2020

The application received for job card of *MSY* was 14903 and till November, 2020 the urban development of the state issued the same cards to 62 per cent applicants. However, very few job card holders demanded work under this scheme which constitute to 6.82 per cent. The work was assigned to 78.9 per cent job holders who applied for the same. Among 24 districts Gumla was the district where 122 applicants received job cards under *MSY* out of total 162 applicants, but not even single card holder applied for the job or work assignments. There were three districts Dumka, Garhah, and PashchimiSighbhum where the respective ULBs were not able to assign the work under *MSY* to even a single applicant.

Conclusion

The experience of implementation and performance of urban employment guarantee schemes reveals that these schemes have been launched by the respective

state governments in response to the COVID-19 crises for compensating urban poor in the jurisdiction of related urban local bodies. Data of selected two states shows, that the people in Himachal Pradesh and Jharkhand have shown interest in the scheme as they have been applied for the issue of job cards. After applying and getting job cards, very less card holders showed interest to demand or apply for work. Registration under urban employment scheme by urban poor is only one forth in both the states. This shows less involvement of people under urban employment guarantee programme which was an initiative to overcome the problem of unemployment during the time of Covid-19. Less people are registered under the schemes and benefits of the scheme have not fully reached maximum number of people in the urban areas. So, in this matter government should take necessary steps to increase the registration under these schemes. Job cards issued to registered applicants by the Himachal Pradesh government, is more in number as compared to Jharkhand. The work assigned to job card holders is also more in Himachal as compared to Jharkhand. Work assigned to job card holders under urban employment schemes is related to sanitation and infrastructure. Although the performance of Himachal is better than Jharkhand, still a large group of people in both the states are not getting benefits of the scheme as expected. Therefore, the government should ensure that the work is assigned to all the applicants who have applied for work and this can be achieved through effective management of different urban local bodies of the states towards urban employment guarantee scheme. The implementing agencies i.e., department of urban development in the selected states have been able to provide jobs to the applicants related to sanitation and infrastructure, moreover the share of sanitation is big.

The employment guarantee schemes would be highly beneficial to job providers and applicants if the possibilities are explored as are in *MGNREGA*. Many skilled or semi-skilled people have been in trouble due to COVID-19 situation in the urban area, therefore the possibility is to be explored to cover such probable applicants under this scheme instead of just unskilled persons. This scheme is an initiative by the state government on temporary basis in response to unemployment during Covid-19. Right now, no separate fund is provided to this scheme. After looking at the application received for registration under this scheme in Himachal and Jharkhand, it is suggested that such type of schemes should be introduced in the Parliament too, so that these can be launched at the national level as has been in the case of *MGNREGA*.

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Assessing the Attitude of University Students towards E-learning: A Case Study of Tezpur University

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Abstract

The main purpose of the study is to examine the attitude towards e-learning, among the university students. In addition, the focus is to determine the differences and relationship ($\alpha = 0.05$) between the means of university students' attitude towards e-learning that may be due to gender, habitat, age, education level, stream of study, time management regulation, technical self efficacy, time dedicated in e-learning per day, academic performance and level of satisfaction. In this study the researcher has adopted a normative survey research design. All the undergraduate and postgraduate students studying in the university were considered as the population for this study. Out of the population, 260 university students studying in Tezpur University were selected using random sampling technique. A 5-point Likert questionnaire (Dimpal Rani's *Attitude towards e-learning scale*) comprised of 65 items was used to collect the data. The scores ranged from 65 to 325. There was no significant difference in the attitude towards e-learning among the university students with respect to gender, habitat, stream of study, education level, time management regulation, age, time dedicated in e-learning per day, academic performance and level of satisfaction. However, there was a significant difference in the technical self-efficacy for using online platform and the attitude towards e-learning among the university students.

Keywords: e-learning, online platform, technical efficacy, satisfaction

Introduction

Globally, Covid -19 pandemic outbreak changed the system in all aspects. To tackle the situation, e-learning has become the vital stream for educating the learners in most of the higher education institutions. Most of the universities are providing online courses, as students are using e-learning platforms. As Sahu (2020) reported,

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faculty members of world renowned universities have begun to get instructor certifications to deliver online-teaching to their students. At the same time, faculty and staff members are learning how to use online learning platforms. Previously, they were using only the face-to face teaching medium. However, the shift to online mode has raised many queries in terms of quality of education. Due to this sudden unexpected shift, the teaching-learning environment change has affected both teachers and students. Proper understanding of the e-learning teaching environment is essential to provide effective teaching. The success or effectiveness of any learning platform is based on whether the learners feel comfortable and satisfied. This satisfaction is influenced by how learners perceive the benefits from that learning platform.

As Pilli *et al.* (2014) rightly highlighted, many universities that applied e-learning services faced many difficulties in terms of adopting successful scenarios including the acceptance and effectiveness of delivering courses. Many argue that e-learning; as a new learning technology will definitely and significantly contribute to the learning environment. In fact, technology advances day after day, while traditional methods, such as tutorials and face-to-face lectures, are still strongly dominant in most of the universities, educational arenas and of course, the Tezpur University being one of them. On the other hand, the Tezpur University is intensively investing in learning technologies to facilitate greater quality enhancements in students' learning experiences. In fact, understanding the students' attitude towards e-learning is essential to ensure whether university students reap the benefits of the teaching learning environment or not. Consequently, this study intends to investigate factors affecting the attitude towards the use of e-learning systems at Tezpur University.

Review of Relevant Literature

Some studies related to the relevant literature have been highlighted as follows: Ghatak and Das (2021) found that most of the students have positive attitudes towards e-learning and male students studying in science stream and belonging to rural areas have a comparatively better degree of positive attitudes towards e-learning. Nagar (2020) found that the sudden swap to online mode of learning significantly affects the perception of students as most of them were first time users. Nuere *et.al.*(2020) during pandemic conducted a study and came to the conclusion that universities conducting online classes have minimal problems working in new conditions in Spain; the quality of online teaching tools strongly affect the quality of the process. Krishnapartia (2020) found fair assessment of student's perception in e-learning which may grant a good precedent in the implementation of ful online learning due to physical isolation caused by the COVID-19 pandemic. Ahmed and

Osman (2020) confirmed that virtual environments contribute to improving student participation and interaction in learning. However, the study recommended the necessity of having mechanisms that increase students' interest in virtual learning and reduce the challenges facing both students and teachers. Markus (2020) showed that the learners perceived online learning as very helpful and their perception of online learning was good in the midst of COVID-19 pandemic. He also highlighted some challenges faced during the online education such as: internet access, financial issue, and online learning implementation. Shahzad *et al.* (2020) found that the service quality, system quality, information quality, user satisfaction, system use are predictor for e-learning portal success. The results revealed that system quality has a positive relationship with user satisfaction, and user satisfaction has a positive relationship with e-learning portals.

Further, Bhaumik and Priyadarsinini (2020) concluded that most of the learners did not find online learning to be effective and techno-pedagogical approach of teachers along with digital skills of both teachers and learners needs improvement. Smith and Mcdermott (2019) concluded that most of the learners preferred online mode of learning to other types, as it provides more flexibility in learning, time management, and courses globally. Another piece of research work by Malkawi *et.al.* (2020) found no significant difference with regards to students' gender, residential location, college. However, the results imply that there is a statistically significant difference in students' satisfaction levels and attitudes towards e-learning and virtual classes for the independent variable of educational levels. Adresi (2020) found that female students preferred computers, and male students preferred mobiles. There was no significant difference in attitude towards learning by gender and classes. The effect of disrupting the learning and teaching normal procedures could be observed on the general performance of students, maybe through changes in the passing percentage of students in examinations as discussed by (Sentema, 2020).

Li and Lalani (2020) recounted that some students without reliable internet access and/or technology struggle to participate in digital learning; this gap is seen across countries and between income brackets within countries. For some who have access with the right technology, there is evidence that learning online can be more effective but its effectiveness varies amongst age groups. Obeidat (2020) study showed no significant difference in students' responses to the categories or aspects due to gender, residential area, and the type of institution they graduated from. However, they revealed significant differences between Arts and Information Technology students' responses. Komwar (2017) study results show that the college students had positive attitudes towards e-learning, wherein gender and habitat made no significant difference. Takkar and Joshi (2017) showed that there is a high positive

attitude of diploma engineering students towards e-learning and it is not affected by gender, locality or social category of students. The extensive study of literature review finds that numerous studies have been done to understand the attitude towards e-learning. However, all the studies had taken only undergraduates or postgraduates separately as a sample, concentrating more on students' dimensions, course dimension, technology dimension, design dimension, instructor dimension, and environment dimension. Further researchers have found the influence of two or three demographic factors on attitude towards e-learning. Researchers confirmed that the factors of gender, habitat, age, education level, stream of study, time management regulation, technical self-efficacy to handle online platforms, time dedicated in e-learning per day, academic performance and level of satisfaction towards e-learning are best predictors of e-learning satisfaction. This study is a humble attempt to investigate the influence of these factors on attitudes towards e-learning, among the undergraduate and postgraduate students.

Research Questions

This present study seeks to find answers to the following questions:

- What is the level of attitude towards e-learning among the university students?
- Are there any statistically significant differences ($\alpha = 0.05$) between the means of university students' attitude towards e-learning due to gender, habitat, age, education level, stream of study, time management regulation, technical self-efficacy to handle online platforms, time dedicated in e-learning per day, academic performance and level of satisfaction towards e-learning?
- Are there any statistically significant relationships ($\alpha = 0.05$) between the means of university students' attitude towards e-learning due to gender, habitat, age, education level, stream of study, time management regulation, technical self-efficacy to handle online platforms, time dedicated in e-learning per day, academic performance and level of satisfaction towards e-learning?

Hypotheses of the Study

Based on the research questions the following hypothesis is framed:

- The attitude towards e-learning among the university students do not fall in the moderate levels;

- There are no statistically significant differences ($\alpha=0.05$) between the means of university students' attitude towards e-learning due to gender, habitat, age, education level, stream of study, time management regulation, technical self-efficacy to handle online platforms, time dedicated in e-learning per day, academic performance and level of satisfaction towards e-learning;
- There are no statistically significant relationships ($\alpha=0.05$) between the means of university students' attitude towards e-learning due to gender, habitat, age, education level, stream of study, time management regulation, technical self-efficacy to handle online platforms, time dedicated in e-learning per day, academic performance and level of satisfaction towards e-learning.

Research Methodology

In this study, the researcher has adopted a normative survey research design. All the undergraduate and postgraduate students studying in the university were considered as the population for this study. Out of the population, 260 university students studying in Tezpur University were selected using random sampling technique. A 5-point Likert questionnaire (Dimpal Rani's *Attitude towards e-learning scale*) comprised of 65 items was used to collect the data. The scores ranged from 65 to 325.

Respondents' Demographic Profile

As apparent from table 1, 260 responses received were considered for data analysis for which the demographics were 28% males and 72% females. In that 73% of respondents belonged to rural and 27% belonged to urban habitat. 63 % of the students were from arts stream and 37% were from science stream. In the same manner, 62% were undergraduates and 24% were postgraduates.

The respondents were asked to mention their time management regulation behaviour modified due to e-learning practices, for which 76% respondents believed that they were affected and 24% revealed that they were not affected. The majority of the respondents were between 22 and 24 years which made up 74% of the respondents. The rest 12% of the respondents ranged between 19 to 21 years; remaining 14% fell between 25 and 27 years of age.

In terms of technical self-efficacy to handle online platforms, 60% of the students felt that their efficacy was below the average category, 27% felt they have average efficacy and 13% felt they had high efficacy. 20% of the respondents dedicated

between 2 hours to 3 hours towards e-learning per day; 43% of the respondents dedicated more than 3 hours to 5 hours towards e-learning per day; and 37% of the respondents dedicated more than 5 hours towards e-learning per day. The respondents were asked to mention their overall grade CGPA of last semester. 9% of them were above 8.5 (Ist class with distinction). Majority of the respondents (83%) were between the above 6.5 and below 8.5 (Ist class); and 8 % were above 5 and below 6.5 CGPA (IInd class). Finally they were also asked to mention the level of satisfaction towards e- learning for which 61% of respondents expressed below moderate satisfaction; 27 % showed moderate satisfaction and only 13 % showed high satisfaction.

Table 1
Showing the respondents' demographic profile

Variable	Sub-group	N	Percentage
Gender	Male	73	28
	Female	187	72
Habitat	Urban	69	27
	Rural	191	73
Stream of study	Arts	163	63
	Science	97	37
Education level	Under graduate	99	38
	Post graduate	161	62
Time management regulation	Not affected	63	24
	Affected	197	76
Age (in years)	19-21	32	12
	22-24	192	74
	25-27	36	14
Technical self-efficacy to handle online platforms	High	33	13
	Average	69	27
	Below average	158	60
Time dedicated in e-learning per day (in hours)	>2 - < 3	52	20
	>3 - < 5	113	43
	more than 5	95	37
Academic performance (CGPA)	I st class with distinction	23	9
	I st class	216	83
	II nd class	21	8
Students' level of satisfaction with e-learning	Below moderate	159	61
	Moderate	69	27
	Highly	33	13

Data Analysis and Findings

Data was analysed with the help of SPSS programme. To describe the respondents' responses to the survey, percentage, mean and standard deviation were estimated.

Hypothesis 1 was verified with the help of establishing a cut-off point. Here the cut of point was mean $\pm 1s$. It means university students who fall in the mean $\pm 1s$ (when result lies between 237 to 325) will be considered to have more favourable attitudes; falling in between mean $\pm 1s$ (when result lies between 179 - 237) will be considered to have favourable attitude; and falling in mean - 1s (when result lies below 65 until 179) will be considered to have an unfavourable attitude.

Table 2
Attitude of university students towards e-learning

E-Learning Attitude Levels	N	Percentage	Mean	S.D
More favourable	45	17	249.80	11.476
Moderately favourable	171	66	208.71	18.364
Unfavourable	44	17	166.57	8.429
Total	260	100	208.69	29.165

From table 2, it is evident that majority of the university students (66%) have moderately favourable attitude towards e-learning; 17% of them show more favourable attitudes; and 17% of them show unfavourable attitudes towards e-learning.

Table 3
Variable wise descriptive results and t-value for attitude of university students towards e-learning

Variable	Sub-group	N	Mean	SD	t-value (df=258)	Sig.(2 tailed)
Gender	Male	73	208.82	30.18	0.163	0.871
	Female	187	208.88	28.83		
Habitat	Urban	69	209.04	26.71	0.116	0.907
	Rural	191	208.57	30.06		
Stream of study	Arts	163	208.33	28.13	0.258	0.796
	Science	97	209.30	30.96		
Education level	Undergraduate	99	211.02	29.52	1.009	0.314
	Postgraduate	161	207.26	28.93		
Time management regulation	Not affected	63	209.85	28.07	1.130	0.259
	Affected	197	205.09	32.30		

From table 3, it is evident that in the case of male students, the mean of the scores in attitude towards e-learning was 208.82 with SD being 30.18. In the case of female respondents, it was 208.88 with SD being 28.83. The 't' ratio in respect of the two means was 1.63 ($p=0.875>0.05$) which was not significant at 0.05 level. Therefore, the null hypothesis that "there is no significant difference in the attitude towards e-learning among the university students with respect to gender" is accepted. Comparing the mean scores showed that both male and female university students

showed the same extent of attitude towards e-learning. Likewise, in the case of university students belonging to urban habitat, the mean of the scores in attitude towards e-learning was 209.04 with SD 26.71 and in the case of students belonging to rural habitat, mean score was 208.57 with SD 30.06. The 't' ratio in respect of the two means was 0.116, ($p=0.907>0.05$) which was not significant at 0.05 level. Therefore, the null hypothesis that "there is no significant difference in the attitude towards e-learning among the university students with respect to habitat" stands accepted. Comparing the mean scores shows that university students belonging to urban habitat showed more favourable attitudes towards e-learning than their rural counterpart. In the case of university students' stream of study, the mean of the scores in attitude towards e-learning of arts stream was 208.33 with SD 28.13 and in the case of science stream respondents, it was 209.30 with SD 30.96. The 't' ratio in respect of the two means was 0.258, ($p=0.796>0.05$), which was not significant at 0.05 level. Therefore, the null hypothesis that "there was no significant difference in the attitude towards e-learning among the university students with respect to stream of study" stands accepted.

Comparing the mean scores shows that university students belonging to science stream showed more favourable attitudes towards e-learning, than their arts stream counterpart. In the case of university students' education level, the mean of the scores in attitude towards e-learning of undergraduate students was 211.02 with SD 29.52 and in the case of postgraduate respondents, it was 207.26 with SD 28.93. The 't' ratio in respect of the two means was 1.009, ($p=0.314>0.05$), which was not significant at 0.05 level. Therefore, the null hypothesis that "there was no significant difference in the attitude towards e-learning among the university students with respect to education level" stands accepted.

Comparing the mean scores shows that undergraduate students showed more favourable attitudes towards e-learning, than their postgraduate counterpart. Concerning university students' time management regulation behaviour, the mean of the scores in attitude towards e-learning of students whose belief did not get affected was 209.85 with SD 28.07 and in the case of students, whose believe got affected was 205.09 with SD 32.30. The 't' ratio in respect of the two means was 1.130, ($p=0.259>0.05$), which was not significant at 0.05 level. Therefore, the null hypothesis that "there was no significant difference in the attitude towards e-learning among the university students with respect to time management regulation behaviour" stands accepted. Comparing the mean scores shows that university students who revealed that e-learning did not affect the time management regulation showed more favourable attitudes towards e-learning, than their counterpart. A one way group analysis of variance was conducted to evaluate the impact of age, technical

self- efficacy to handle online platforms, time dedicated in e-learning per day (in hours), academic performance and level of students' satisfaction with e-learning on e-learning attitudes among university students.

Table 4

Variable wise descriptive results and f-value for attitude of university students towards e-learning

Variable	Sub-group	N	Mean	SD	f-value (df=258)	Sig.(2 tailed)
Age (in years)	19-21	32	209.75	26.15	1.645	0.195
	22-24	192	207.04	28.22		
	25-27	36	216.55	35.50		
Technical self- efficacy to handle online platforms	High	33	183.52	20.76	132.27	0.001
	Average	69	182.59	18.45		
	Below average	158	225.35	21.36		
Time dedicated in e- learning per day (in hours)	>2 - < 3	52	210.81	26.65	1.601	0.204
	>3 - < 5	113	205.04	30.52		
	more than 5	95	211.88	28.62		
Academic performance	I st class with distinction	23	208.39	25.55	2.492	0.085
	I st class	216	210.03	29.72		
	II nd class	21	195.24	24.29		
Students' level of satisfaction with e- learning	Below moderate	159	208.14	28.37	1.257	0.286
	Moderate	69	206.48	31.16		
	Highly	33	215.97	28.16		

It is inferred from table 4, by determining one-way ANOVA ($F(2,257) = 1,645$, $p = 0.195$) that it was not significant at 0.05 level. Therefore, the null hypothesis that "there was no significant difference in the attitude towards e-learning among the university students with respect to age" stands accepted. Comparing the mean scores shows that university students who belonged to the age group of 25 and lesser than 27, showed more favourable attitudes towards e-learning than their counterpart. Likewise, in the case of technical self-efficacy to handle online platforms, the one-way ANOVA ($F(2,257) = 132.27$, $p = 0.001$) was significant at 0.05 level. Therefore, the null hypothesis that "there is no significant difference in the attitude towards e-learning among the university students with respect to age" does not stand accepted. Hence, it indicated that there was significant difference in the attitude towards e-learning among the university students with respect to age. Tukey's post hoc test revealed that the e-learning attitude of university students was statistically significant in high technical self-efficacy to handle online platforms (183.52 ± 20 , $p = .0001$) and average technical-self efficacy to handle online platforms (182.59 ± 18.45 , $p = 0.001$) group compared to the below average high technical self-efficacy to handle online platforms (225.35 ± 21.36 , $p=0.099$).

There was no statistically significant difference between the high and average high technical self-efficacy to handle online platforms groups. The effect sizes calculated using eta squared was 0.516. It is evident that 51% of all variances in technical self-efficacy to handle online platforms, (having a strong effect) were attributed to e-learning attitudes of university students.

Concerning the case of time dedicated in e-learning per day (in hours) the calculated one-way ANOVA ($F(2,257) = 1,601, p = 0.204$) was not significant at 0.05 level. Therefore, the null hypothesis that “there was no significant difference in the attitude towards e-learning among the university students with respect to time dedicated in e-learning per day (in hours)” stands accepted. Comparing the mean scores shows that a university student who spends more than 5 hours for study showed more favourable attitudes towards e-learning, than their counterpart. Regarding the case of academic performance, one-way ANOVA ($F(2,257) = 2.492, p = 0.085$) was not significant at 0.05 level. Therefore, the null hypothesis that “there is no significant difference in the attitude towards e-learning among the university students with respect to academic performance” stands accepted. Comparing the mean scores shows that university students who got 1st class (above 6.5 and less than 8.5 CGPA) showed more favourable attitudes towards e-learning, than their counterpart.

Concerning the case of level of students’ satisfaction with e- learning, the one-way ANOVA ($F(2,257) = 1.257, p = 0.286$) was not significant at 0.05 level. Therefore, the null hypothesis that “there is no significant difference in the attitude towards e-learning among the university students with respect to level of student’s satisfaction with e- learning” stands accepted. Comparing the mean scores shows that university students who have high level of student’s satisfaction with e- learning showed more favourable attitudes towards e-learning than their counterpart.

Table 5
Correlation across the variables and attitude towards e-learning

V a r i a b l e s	N	P e a r s o n C o r r e l a t i o n	S i g. (2 - t a i l e d)
G e n d e r	2 6 0	0 . 0 1 0	0 . 8 7 1
H a b i t a t	2 6 0	0 . 0 0 7	0 . 9 0 7
S t r e a m o f s t u d y	2 6 0	0 . 0 1 6	0 . 7 9 6
E d u c a t i o n l e v e l	2 6 0	0 . 0 6 3	0 . 3 1 4
T i m e m a n a g e m e n t r e g u l a t i o n	2 6 0	0 . 0 7 0	0 . 2 5 9
A g e	2 6 0	0 . 0 6 4	0 . 3 0 1
T e c h n i c a l s e l f - e f f i c a c y t o h a n d l e o n l i n e p l a t f o r m s	2 6 0	0 . 6 4 5	0 . 0 0 1
T i m e d e d i c a t e d i n e - l e a r n i n g	2 6 0	0 . 0 3 5	0 . 5 7 6
A c a d e m i c p e r f o r m a n c e	2 6 0	0 . 0 8 9	0 . 1 5 5
L e v e l o f s a t i s f a c t i o n w i t h e - l e a r n i n g	2 6 0	0 . 0 6 1	0 . 3 2 7

Conclusion

E-learning plays a significant role in the growth of education sector and offers flexibility, time as well as space according to the demands of students' preferences in learning and interest. The main aim of the present research was to examine the university students' attitude towards e-learning and to determine the factors that influence it. The analyses of the study showed that university students have moderately favourable attitudes towards e-learning and there was no significant difference in the attitudes towards e-learning among the university students with respect to gender, habitat, stream of study, education level, time management regulation, age, time dedicated in e-learning per day, academic performance and level of satisfaction towards e-learning.

However, there was a significant difference in the technical self-efficacy to use online platform and attitudes towards e-learning among the university students. Also, there was no correlation of attitude towards e-learning among the university students with respect to gender, habitat, stream of study, education level, time management regulation, age, time dedicated in e-learning per day, academic performance and level of satisfaction towards e-learning. Further, there was a correlation existing among technical self-efficacy to use online platform and attitudes towards e-learning among the university students. Based on the findings of the study, it is understood that there is a need to provide necessary trainings for improving the technical self-efficacy to handle online platforms which act as an important predictor of students' satisfaction towards e-learning. The result obtained from this study may further enlighten the policy makers, university's administration, and other important stakeholders to create awareness for facilitating the level of e-learning services, support and socialization aspects for students.

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Online Education during Covid-19 Pandemic: A Contradiction at Grassroots Level

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Abstract

Covid-19 pandemic has severely affected the usual classroom teaching learning process, at all levels of education as it continued through an alternative online mode of teaching. A qualitative study was conducted in a tribal dominated region to assess the feasibility and effectiveness of online education.. The results show that access to online education was limited and smart phones were the most commonly used digital tool. In turn, poor internet connectivity has made it difficult to impart online classes effectively. Science subjects and subjects involving mathematical calculations were found to be difficult. Hence, online mode of teaching seems to be in-equitable and less effective at the grassroots level.

Keywords: online education, teaching-learning process, ICT, pandemic, Covid-19

Introduction

Education is the most powerful tool for socio-economic transformation and an inevitable component of human development. Educational achievement and skills greatly influence economic opportunity, employment prospects and standard of living (Drèze and Sen 2013). Education generally refers to “developing knowledge, skill or character of individuals imparted through a process of learning such as self-study, attendance in formal or informal educational institutions, etc. (GoI, 2020).” Indian education system is dominated by classroom teaching where teaching-learning process is imparted through face-to-face active participation of both students and teachers. Due to Covid-19 pandemic, the usual mode of education suffered as there was a nation-wide lockdown. As a result, the career of millions of students got jeopardised as it affected the formal teaching learning process and other academic activities including examinations and evaluations.

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Teaching learning is a seamless process, so during Covid-19 period the usual class room teaching learning activities got substituted with a new and innovative teaching method, known as online mode of teaching, where teaching learning is delivered through smart phones and computers connected with an active internet. Through technology, virtual classes are being conducted by the teachers at almost all levels of education, but the bigger question is how far the online mode of teaching would be feasible and effective, as compared to usual classroom teaching. In this regard an attempt has been made to study the effectiveness of online learning during this pandemic period. This was done by critically analysing few seminal studies on online education and conducting a qualitative study at micro level among teachers and students engaged at a leading higher secondary school in a tribal dominated aspirational district of Odisha.

Scope of Digital Infrastructure for Online Learning in India

To impart online education the essential tools are computers or smart phones connected with an active internet and the availability of electricity to run the services. Assuming that availability of electricity is round the clock, now it is the availability of computers, smart phones, internet facility and the pre-requisite knowledge to operate these devices as the key inputs for delivering online education. With respect to the availability of computers, a recent NSS study shows that in 2017-18 only 10.7% households in India possess computers with wider rural (4.4%)-urban (23.4%) variations.

As per the definition of NSS, computer includes devices such as, desktop, laptop, notebook, netbook, palm top and tablets, but does not include smart phones. Similarly, at all India level 23.8% households having internet facility; 14.9% in rural areas and 42% in urban areas. In Odisha, the availability of computer (3.4%) and internet facility (10%) was about half of the national average (Table 1). At all India level 16.5% and 20.1% population in the age group of 5 and above, had the ability to operate a computer and internet respectively with substantial rural urban variations. The corresponding figures in Odisha were nearly half of the all India average (Table 1). In 2017-18, at all India level, 33.6% and 40.4% population in the age group of 15-29 years were able to operate a computer and use internet, respectively. The corresponding figures in rural areas were 23.7% and 30.4% and in urban areas were 56% and 63.2%. There exists a large gender gap across all age groups with respect to ability to operate a computer and ability to use internet. Less percentage of female population had the pre-requisite knowledge to operate computers and internet as compared to the male population (GoI, 2020).

Table 1
Households with Computer and Internet Facility in India and Odisha, 2017-18

Households with Computer and Internet Facility in India and Odisha, 2017-18				
	Availability of computer (%)		Availability of internet facility (%)	
Sector	Odisha	India	Odisha	India
Rural	1.8	4.4	5.8	14.9
Urban	17.2	23.4	31.2	42.0
Total	4.3	10.7	10.0	23.8
Persons with Age 5 years and above with <i>Ability to operate computer</i> and <i>Ability to use internet</i> in India and Odisha, 2017-18				
	Ability to operate computer (%)		Ability to use internet (%)	
Sector	Odisha	India	Odisha	India
Rural	5.2	9.9	7.4	13.0
Urban	25.5	32.4	29.3	37.1
Total	8.5	16.5	10.9	20.1

Source: NSS 75th round Survey 2017-18, MoSPI, GoI, 2020

Note 1: Household with internet facility meant that the internet was generally available for use by all members of the household at any time, regardless of whether it was actually used. The connection and devices may or may not be owned by the household but both should be possessed by the household.

Note 2: Ability to use internet meant that the household member was able to use internet browser for website navigation, using e-mail and social networking applications, etc., to find, evaluate and communicate information.

The 2017-18 NSS study on social consumption on education, gives information on the availability of computers which does not include smart phones, presently considered as the most common device used for online education. Whereas, NSS 2014 study on social consumption on education gives data on the availability of computers which includes smart phones also. In 2014, at all India level, nearly 6% rural households and 29% urban households possessed computers, while nearly 2% in rural Odisha and 21% in urban Odisha possessed computers (Table 2). The availability of computer and internet facility also varies across household MPCE (monthly per capita consumption expenditure) quintile which is often taken as a proxy variable for household economic status.

Table 2
Availability of Computers and Internet Facility in India and Odisha, 2014

Availability of Computers and Internet Facility in India and Odisha, 2014				
	Households with availability of computers (%)		Households with availability of internet facility (%)	
Sector	Odisha	India	Odisha	India
Rural	2.1	6.2	8.7	16.1
Urban	20.7	29.2	37.6	48.7

Source: NSS 71st round Survey, 2014, MoSPI, GoI, 2016

Table 3
Availability of Computers and Internet by MPCE Quintile in India and Odisha, 2017-18

Availability of Computers and Internet by MPCE Quintile in India and Odisha, 2017-18				
	India			
	Households with availability of computers (%)		Households with availability of internet facility (%)	
MPCE Quintile	Rural	Urban	Rural	Urban
1 st Quintile	1.6	7.5	6.6	19.8
2 nd Quintile	2.4	9.9	9.2	29.4
3 rd Quintile	3.3	16.0	12.4	38.0
4 th Quintile	3.4	24.0	15.0	46.3
5 th Quintile	9.9	45.5	27.1	61.6
	Odisha			
	Households with availability of computers (%)		Households with availability of internet facility (%)	
MPCE Quintile	Rural	Urban	Rural	Urban
1 st Quintile	0.9	7.9	2.4	8.8
2 nd Quintile	0.4	2.1	2.8	11.3
3 rd Quintile	1.5	13.5	5.3	25.1
4 th Quintile	1.6	19.5	5.3	33.3
5 th Quintile	4.0	34.8	11.8	62.7

Source: NSS 75th round Survey 2017-18, MoSPI, GoI, 2020

Note: MPCE (monthly per capita consumption expenditure)

The availability of computer and internet facility was comparatively lower for households belonging to lower MPCE quintiles than upper MPCE quintiles (Table 3). The availability of digital infrastructure for online education also varies across major states of India. The availability of computer (35%) and internet facility (55.7%) was highest in Delhi, and lowest in the state of Odisha (availability of computer was

4.3% and availability of internet facility was 10%). The percentage of population in the age group of 5 and above with ability to operate computer was highest in Delhi (42.8%) and lowest in Bihar (8%), followed by Jharkhand (8.2%) and Odisha (8.5%). Similarly, the ability to use internet was highest in Delhi - 50.5% and lowest in Odisha - 10.95% (GoI, 2020).

Studies Conducted on Status of Online Education during the First Wave of Pandemic

A study on the status of online education was conducted during the first wave of pandemic by National Council of Educational Research and Training (NCERT) by collecting data from teachers, school principals, parents, and students belonging to Central Board of Secondary Education (CBSE), Kendriya Vidyalaya Sangathan (KVS) and Nabodaya Vidyalay Sangathan (NVS) through Google survey. The total number of participants in the survey were 34598 persons comprising 18188 students, 3543 teachers, 253 school principals and 12614 parents from the above three types of schools which sought information on participants' opinion about online education, use of different technology and subjects in which students faced difficulties.

The analysis was done organisation wise on different issues related to online education. Findings show that around 27% students (CBSE, KVS and NVS) belonging to class VIII to XII could not access online classes during Covid-19 pandemic because of non-availability of smart phones and laptops. Principals and parents cited erratic and lack of power supply as another hindrance in online education.

The opinion of students and teachers on online mode of education can be understood as follows: 21.1% students in CBSE schools, 37% students in NVS and 38.8% students in KVS found that online mode of teaching was joyful, whereas for teachers the corresponding figures were 31.2%, 37% and 29.6%. Online mode of education was difficult and burdensome for 38.9% students in CBSE, 28% students in NVS and 32.4% in KVS, whereas, the corresponding figures for teachers were 20.5%, 13% and 16.8%. Smart phone was found to be the most common digital tool used in transacting online education both for teachers and students. Students were facing the maximum problem in understanding science and mathematics subjects. About half of the students did not have text books. Teachers and students were not conversant in the online mode of teaching. This study highlights the issues of online education only in the elite centralised schools of the country (GoI, 2020).

Another study was conducted by Oxfam India during May to July, 2020 to

examine the impact of pandemic on access to education, modes of delivery of education and problems faced by students and teachers in online education across five EAG (Empowered Action Group) states of Odisha, Bihar, Jharkhand, Chhattisgarh and Uttar Pradesh. Data was collected by rapid assessment survey from close to 1200 parents and 500 teachers both of government and private schools using telephonic and interview method. Findings show that 41% parents whose children were in private schools and 20% parents whose children were in government schools reported that education was delivered during lockdown. In private schools *Whats App* (57%) was the most commonly used medium for online education followed by *YouTube*, *Zoom* and phone conversations. 82% parents whose children were in private schools faced difficulties while supporting their children's online education and the major difficulties were not having internet connection, unable to afford data and poor internet speed and signal issues. While imparting online education, signals and internet speed were the biggest issues both in government and private schools. More than 80% children in government schools had not received any text books for the academic year 2020-21.

In government schools 84% teachers struggled to deliver education through digital mediums and half of the teachers were facing internet related problems such as poor signal and data expenses whereas, 40% teachers did not have any digital device to deliver online education. 80% teachers in Uttar Pradesh and 67% teachers in Chhattisgarh did not have any digital device to conduct online classes. Overall 20% teachers received orientation on digital education, while in Bihar and Jharkhand it was less than 5% and the challenges to access online education were similar in both government and private schools. So in these five EAG states, the access to online education was limited during lockdown and majority of parents faced difficulties while supporting their children for online education. While imparting online education the major problems were internet related problems, such as inability to afford data expenses, limited digital access by teachers and lack of orientation for online education (Oxfam India, 2020).

Status of Online Education in a Tribal Dominated Aspirational District

To study the status of online education during the first wave of pandemic period, a micro level qualitative study was conducted among teachers and students engaged in online teaching learning process. The area of study was a leading higher secondary school in a tribal dominated aspirational district of Odisha. Students enrolled in that school mostly belonged to the districts of Koraput, Malkangiri, Rayagada and Nabarangpur which form part of the well known KBK (Kalahandi-Balangir-Koraput) region. Most of the districts in KBK region come under aspirational districts and are

dominated by tribal population and topographically hilly area. In 2011 census, the share of both scheduled tribe and scheduled caste population constitutes around 65-80% in each of the four districts and the overall literacy rate was below 50% with wider gender variations. Most of the students of that school belong to rural areas, low socio-economic status and are first generation learners. Feedback was collected from students through telephonic interview and direct interview from teachers during the second week of September, 2020. Open-ended questions on online classes were asked from students who were regular attendees, such as: whether the online classes are interesting for them or are they enjoying it?; which digital tools they are using for online classes; number of classes attended; number of hours they spend for online classes; and the problems being faced by them due to online mode of teaching. Likewise, teachers were also asked their opinion about online mode of teaching, such as: whether they are enjoying the mode of teaching; type of difficulties faced and other related issues.

Issues and Effectiveness of Online Education: From Students' Perspective

From qualitative analysis it was found that only around 10-20% of students in different subjects were attending online classes regularly. Among those who were not attending the classes, the major causes were non-availability of smart phones and internet. At the beginning of online classes, students were found to be excited and enjoying the classes as it was a new learning experience for them. They got to know the use of *Google Meet* and *Zoom* applications and use of mobile/internet for study purposes that made them happy and excited, but later on most of the students found online classes to be boring and difficult. It was found that almost all students were attending classes with smart phones. The number of classes attended by the students per day varied from 3-4 and altogether they were spending around 4-5 hours daily with their mobile phones for attending classes and watching educational videos shared by their teachers.

In terms of the various problems encountered by the students while attending online classes, it was found that poor internet connection/network problem was the biggest hindrance in the way of online learning. Most of the time, students had to move out of their home to get a network signal. Some students even moved 1-2 kilometres away from their home to get a network signal and some climbed up the hill tops and other high rise buildings to get a signal. From local print media, it was found that students from this region were risking their life by climbing up trees and water tanks to get a signal, since most of them lived in hilly areas where internet connectivity was always an issue. Similarly, during rainy season there is hardly any network connection along with erratic electricity supply.

During classes students are always complaining of '*inability to listen*', which makes the teaching-learning process very tedious and unpleasant, both for the teachers and students. Most of the students using smart phones for attending classes did not have access to the smart phones at all times as they belonged to their parents or elderly household members. Similarly financial problem was also an issue, as students struggled to get at least Rs.150-200 for monthly internet packs to get connected for online classes. Though parents supported their children for online classes, Covid-19 has made many parents unemployed. As a result they cannot afford the internet expenses. The students who attend two-three classes on a daily basis continuously feel fatigued and complain of eye-strain.

Due to long use of smart phones, heating issue also arises. Report from print media shows that a student's smart phone got exploded while attending online classes, but luckily she escaped unhurt. Students now find that online mode is neither comfortable nor enjoyable and they have difficulty in understanding many concepts as there is limited scope for active participation along with restricted use of teaching aids like black/white board. Similarly, most of the students do not have books which further make it more difficult to link with what is taught in online mode. When asked about what they have missed so far by not attending face-to-face classroom teaching, most of them reported that they are missing classes, teachers, and their friends for academic and non-academic interactions, the college campus, and many more fun activities that form an integral part of a student's life. They opined that the usual classroom teaching-learning process is the best and the most effective method of teaching. Further, they believe that online education cannot be a close substitute for it. In the end, they hoped that the institutions reopen soon.

Issues and Effectiveness of Online Education: From Teachers' Perspective

Teaching-learning process through online mode was also a new experience for most of the teachers as they used *Google Meet* and *Zoom* application for the first time.. Initially teachers struggled to use online setup for teaching as pointed out by most of them. After learning how to integrate technology in teaching-learning process, they oriented the same to their students over phone. Teachers were also enjoying the online classes in the beginning as it was a new learning experience for them. But as time passed, it became boring and many teachers found it difficult to deliver the content up to the mark like the usual classroom teaching method. Neither any standard online teaching modules were available for teachers, nor were they oriented on it earlier.

Teaching of science subjects and subjects involving mathematical calculations and graphs was difficult for teachers to transact in online mode. Frequent internet connection problems made the process even more difficult.. During the online classes it was hard to control the unwanted activities of students as compared to usual class room teaching. Students attended classes according to their own will by leaving the online session and re-joining in short intervals. .. So this type of unwanted activity used to distract the entire teaching-learning process. Teachers reported that “some enrolled students were not attending classes for reasons like not having their own smart phones, poor internet connections, inability to afford internet packs and mere disinterest.” For those who did not enrol for online classes the reasons were non-availability of digital tools such as smart phones, computers and internet facility.

Discussion and Conclusion

Online mode of education has excluded a majority of the students from teaching – learning process during this pandemic period as there is limited access to smart phones, computers, internet facility and poor internet connection. Digital divide is also apparent across rural-urban and economic groups. The challenges are also many for those who are using the digital platform for online learning. Poor internet connectivity is the major obstacle for implementation of online teaching-learning processes. Further, lack of conducive environment adds to it. Most of the students and teachers were not well versed with digital technology for online teaching learning; therefore they need to be oriented with new technology. The policy recommendation of National Education Policy (NEP) 2020 says that an alternative mode of quality education using digital technology should be readily available during epidemic and pandemic when traditional and in-person modes of education are not possible, along with addressing its potential risks and dangers.

In rural areas, the limited access to digital devices and internet facility can be increased by rigorous *Digital India* campaign, availability of affordable computing devices (NEP,2020) and providing broad band services in all villages by 2022 under the National Broadband Mission (NBM, 2019). This will adequately address the concerns of equity for online education purposes It also emphasises the need for suitable training modules for teachers to impart online education effectively (NEP, 2020).Though, parents are trying their best to support their children for online education in all possible manners, both students and parents lack in essential technical knowledge of how to operate smart phones for online classes. As per a report, a guardian purchased a new smart phone and visited the school to learn its basic operations for his son’s online classes. In another case, a guardian sold his cow to purchase a smart phone to support his daughter with online classes.

Similarly in another case, a single mother from a tribal district purchased a smart phone by spending her hard earned money to facilitate her daughter's online classes. Though she got the smart phone, she failed to use it as she lacked the essential knowledge to operate it. In tribal regions, the limited availability and accessibility to digital devices makes it difficult to impart online education for all. Therefore unless and until the digital coverage (i.e., computers, smart phones and internet connectivity) in the country is improved, particularly among the disadvantaged population; it is hardly possible to universalize the online education during pandemic situations. As per *Unlock 4.0* guidelines, declared on 21st September 2020, the central government allowed to open schools, but it left the decision on states for determining whether to open or not. Only senior students from class IX to XII were allowed to come to school on voluntary basis if they needed any guidance from their teachers after obtaining written permissions from their parents. At the same time online classes continued (MHA, GoI, 2020). It was expected that parents would not allow their children to attend school, fearing the risk of infection so restoration of usual classroom teaching learning took more time and it was only during the month of November and December that different state governments allowed offline classes for students of grades IX-XII in a phased manner.

In January 2021, Odisha government made 100 days classroom teaching mandatory for students of class 10th and 12th before appearing in the board exams. Therefore, offline classes continued with full vigour from January to mid-April, 2021. However, with the advent of second wave of Covid-19 pandemic, the offline classes were suspended once again. This hampered the examination process as many examination boards either suspended or cancelled the examination. In this situation the whole educational system suffered a lot.

In the light of this, the need of the hour is to strengthen the online mode of education by equipping teachers with better online teaching aids, online based teaching methodology, modified pedagogy and allowing penetration of affordable online teaching devices with internet connection. In future our education system should be robust and ready with this alternative mode of online education so that a seamless teaching-learning process continues without affecting millions of students. "In the meantime, the existing digital platforms and ongoing ICT-based educational initiatives must be optimized and expanded, to meet the current and future challenges in providing quality education for all (Draft NEP, 2020; Page 58)."

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Structure of Workforce in Kerala: An Analysis Based on Census 1991-2011

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Abstract

The present article examines the trend in the growth of workforce and the change in its structure, in Kerala during the last three decades using census data. The analysis indicates that the work participation rate for women was lower than that of men during 1991-2011. We know that women of Kerala outperform their male counterparts in many developmental indicators, but the study reveals that male workers outnumbered female workers in Kerala during the study period. The gender-based participation rate during 1991-2001 shows a gradual decline for participation of women in the workforce during 1991-2001 and a slight increase in the female work participation rate during 2001-11. This increase indicates a good symbol of economic prosperity. Incremental workforce, especially the male, reduced to marginal workers category. The occupational distribution of the workforce shows that cultivators were declining. In Kerala, less diversity is noted in the industrial category of main workers.

Keywords: *workforce, occupational distribution, entropy, diversity*

Introduction

People, workforce and employment are closely linked within the size, composition and distribution of the population. This changes the demographic structure of the labour force. In turn, a change in the size of the labour force, level of employment and job opportunities will affect components of changing population, particularly fertility and migration (UN: 1976). The workforce participation rate is a useful measure of economic activity that is computed as the ratio of total workers to the total population, expressed as a percentage. Work participation rate is an indicator of employment status and the workforce has a key role in the economy of the region. The proportion of workers engaged in various occupations depicts the socio-economic development of a region. Occupation is usually related to agriculture, industry and service sectors. However, occupation and industry are clearly two distinct points of

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view, from which the economic activity of the population may be regarded. The first one is what the individual does, and the second one shows the position of the worker in the economic structure of the country. Occupation is the type of work performed by an individual while the industry is the branch of economic activity, to which he is connected. Workers are then categorized as main workers and marginal workers. Those who work for more than 6 months (183 days) in the reference period are called main workers. Workers who work for less than 6 months (183 days) in the reference period are termed as marginal workers. Workers are distributed according to the occupation in which they are engaged. They are broadly categorized under four types which predominantly include cultivators, agricultural laborers, household industrial workers, and other workers.

A person involved in the cultivation of land owned or leased from government, private persons or other institutions for money or share of the harvest are cultivators. Agricultural laborers are people who work on another person's land for wages, which can be in terms of money, kind or share. The household industry is an industry run by one or more members of a household at home or within the village in rural areas and in urban areas it's only within the boundaries of the house where the household lives in. All workers other than those who are not in the above categories are called the other workers. Thus, the present study is an attempt to explore the district-wise patterns of work participation rate in Kerala and districts, during the period 1991 to 2011 by sex and residence.

The industrial diversity in Kerala and its districts have also been analyzed for the period 1991-2011. The main objectives of this paper are as follows:

- To analyse the trends and patterns of work participation by total, main and marginal category of workers in Kerala, and its districts during 1991-2011 based on crude work participation rates by sex and residence;
- To study the composition of work participation rate by three broad age groups (5-14, 15-59 and 60+) at the district level in Kerala during 1991-2011;
- To compare the distribution of the main workers in the four industrial groups during 1991, 2001 as well as 2011 and the rate of change in the distribution in Kerala;
- To study the industrial diversity in Kerala during 1991-2011.

Data and Methodology

The data for the study is taken from census publications. The study analyses

workforce data in Kerala and its district levels. The crude work participation rate is used to analyse the trends and patterns of work participation by total (sum of the main and marginal), main and marginal category of workers in Kerala and its districts. It is computed as the ratio of total workers to the total population, multiplied by 100. To calculate the age-wise work participation rate, the age group was clubbed into three broad categories: age group of 5-14 as child workers, age group of 15-59 as adult workers and age group of 60+ as old age workers. Age-specific work participation rate is computed as the ratio of total workers of the specified age group to the total population in that age group multiplied by 100. In this study percentage distribution by four industrial categories of main workers i.e. cultivators, agricultural laborers, household industry and other workers is also estimated for Kerala, during the period 1991-2011.

To study the diversification of the industrial structure, the *entropy score* is used.

Entropy score is calculated as:

$$E = -\sum P_j \log P_j \text{ where } 0 \leq P_j \leq 1, j=1, 2, 3$$

P_j = proportion of person in each group

E = zero, when one of the P_j 's is one and all others, are zero. The maximum value of E is reached when all P_j 's are equal.

Results

Trend and Pattern of Work Participation Rate

This section analyzed the work participation rate and its rate of change for total workers (main + marginal), main workers, and marginal workers separately by sex and place of residence in Kerala and its districts during the period 1991 to 2011.

Work Participation Rate of Total Workers by Sex (1991-2011)

It is clear from the table that the overall work participation rate in Kerala increased from 31.4 percent in 1991 to 32.3 percent in 2001 and 34.8 percent in 2011. Looking at the male participation rate, it was 47.3 percent in 1991 and 50.2 percent in 2001. In 2011, it was 52.7 percent. It is clear that the work participation rate of men increased significantly during the 1991-2011 decade. Among the districts, Idukki has the highest participation rate of the entire census years conducted followed by Wayanad. Most people work in the two hilly areas of Wayanad and Idukki.

Table 1
Work Participation Rate of Total Workers by Sex in Kerala and Districts 1991-2011

State/District	1991			2001			2011		
	T	M	F	T	M	F	T	M	F
Kasargod	33.4	46.1	21.0	34.7	49.1	21.0	35.4	51.7	20.3
Kannur	28.9	44.7	13.8	31.8	49.9	15.3	32.7	51.6	16.0
Wayanad	38.8	53.2	23.8	39.5	55.8	23.2	41.6	56.9	26.8
Kozhikode	26.6	44.6	9.0	27.9	48.7	8.2	30.7	51.1	12.2
Malappuram	24.3	40.7	8.7	24.1	42.8	6.6	25.8	45.8	7.6
Palakkadu	35.5	48.6	23.1	36.1	52.0	21.2	37.0	54.9	20.4
Thrissur	31.9	47.2	17.9	32.1	50.6	15.2	35.1	53.3	18.7
Ernakulam	33.9	51.5	15.4	36.0	55.1	17.2	38.1	56.4	20.2
Idukki	39.7	55.2	23.8	43.2	58.1	28.1	46.6	60	33.2
Kottayam	31.2	50.4	12.1	32.9	52.2	14.0	37.3	54.8	20.4
Alappuzha	34.1	46.8	22.0	34.3	49.4	20.3	37.8	53.0	24.0
Pathanamthitta	29.7	48.0	12.5	29.7	47.5	13.4	32.8	50.2	17.5
Kollam	32.1	47.7	17.0	32.1	48.4	16.8	34.6	51.7	19.3
Trivandrum	32.6	50.2	15.6	32.4	51.4	14.5	37.3	54.6	21.4
Kerala	31.4	47.3	15.9	32.3	50.2	15.4	34.8	52.7	18.2

Malappuram district has the lowest participation rate. Idukki has the highest male work participation rate.

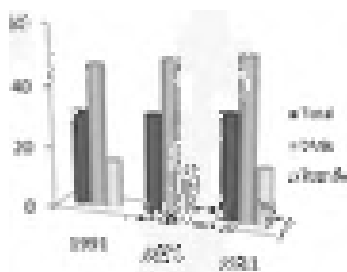


Fig 1:- Work Participation Rate of Total Workers by Sex, Kerala

Figure 1 shows the work participation rate of total workers by sex in Kerala. It is observed that work participation rate has gradually increased from 1991 to 2011 but at the same time, there is a little increase in male and female work participation rates during the same period. In the study period, male workers outnumber female workers in Kerala.

Work Participation Rate of Main Workers (1991-2011)

The study of work participation rates based on main workers shows the extent of fully employed workers. The work participation rate of main workers gives an idea of the participation of the population in profitable employment activities. The employment participation rate of main workers in Kerala and its districts during 1991-2011 is presented in Table 2.

Table 2
Work Participation Rate of Main Workers by Sex

State/District	1991			2001			2011		
	T	M	F	T	M	F	T	M	F
Kasargod	30.47	43.57	17.7	27.2	48.8	14.0	28.5	48.1	14.3
Kannur	26.22	41.97	11.21	26	47.9	10.6	27.5	46.8	11.5
Wayanad	33.84	49.33	17.8	28.2	50.1	13.3	32.2	49.1	17.3
Kozhikode	23.24	40.32	6.61	21.9	48.6	5.4	24.4	47.7	7.2
Malappuram	21.69	37.66	6.51	19.1	48.4	4.3	20.7	47.7	4.8
Palakkadu	33.01	46.56	20.24	29.4	48.4	15.2	31.2	48.4	15.3
Thrissur	31.96	47.18	17.94	27.2	47.8	11.5	29.8	47.4	13.6
Ernakulam	31.00	49.08	12.93	29.5	49.5	12.1	32.3	49.3	15
Idukki	36.10	52.39	19.38	35.5	50.2	20.6	37.5	49.8	23.1
Kottayam	29.38	48.54	10.27	27.6	49.4	10.4	30.6	49	14.0
Alappuzha	30.11	43.43	17.43	25.9	48.1	13.4	28.0	47.6	14.5
Pathanamthitta	27.06	46.05	9.19	23.2	47.8	9.1	24.5	46.9	11.0
Kollam	27.94	44.18	12.25	25.3	48.3	12.7	26.4	47.3	13.4
Trivandrum	30.16	48.12	12.81	25.3	48.5	10.6	27.9	47.9	13.1
Kerala	28.53	44.80	12.81	25.9	48.6	10.8	27.9	48.0	12.4

The table shows that the work participation rate in Kerala declined from 28.53 percent in 1991 to 25.9 percent in 2001, but during 2001-11, the work participation rate increased slightly (27.9 percent). The male work participation rate is very high, as compared to women and the male participation rate has increased from 44.80 percent to 48.0 percent during 1991-2011.

The gender-based work participation rate during 1991-2001 shows a gradual decline in the participation of women in the workforce during 1991-2001 and a slight increase in the female work participation rate during 2001-11. Idukki has the highest rate among the districts. Malappuram has the lowest rates from 1991-2011. In terms of male work participation rate, Idukki district has the highest percentage of male workers in the 1991, 2001 and 2011 census years.

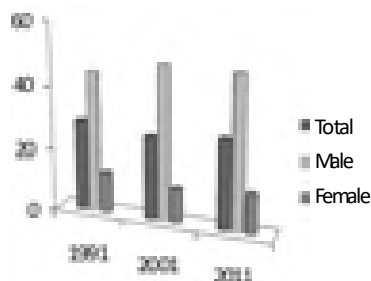


Fig 2:- Work Participation Rate of Main Workers by Sex

Figure 2 shows the work participation rate of main workers by sex in Kerala. It is observed that the work participation rate has gradually increased from 1991 to 2011 but at the same time, there is a little increase in male and female work participation rates during the same period. In the study period, male workers outnumber female workers in Kerala.

Work Participation Rate of Marginal Workers

Table 3

Work Participation Rate of Marginal Workers by Sex in Kerala and Districts 1991-2011

State/District	1991			2001			2011		
	T	M	F	T	M	F	T	M	F
Kasargod	2.9	2.5	3.3	7.5	8.1	6.9	6.9	7.9	6.0
Kannur	2.7	2.7	2.6	5.8	7.1	4.7	5.2	5.9	4.5
Wayanad	4.9	3.9	6.0	11.4	12.9	9.9	9.4	9.3	9.5
Kozhikode	3.3	4.3	2.4	6.0	9.3	2.8	6.3	7.8	4.9
Malappuram	2.6	3.0	2.2	5.0	7.9	2.3	5.1	7.6	2.8
Palakkadu	2.5	2.0	2.9	6.7	7.6	6.0	5.9	6.8	5.1
Thrissur	2.6	2.4	2.7	4.9	6.2	3.7	5.3	5.6	5.1
Ernakulam	2.4	2.4	2.5	6.5	7.9	5.1	5.7	6.2	5.3
Idukki	3.6	2.8	4.5	7.7	7.9	7.5	9.1	8.0	10.1
Kottayam	1.9	1.8	1.9	5.3	7.0	3.5	6.6	6.9	6.4
Alappuzha	4.0	3.4	4.5	8.4	10.0	6.9	9.8	10.1	9.5
Pathanamthitta	2.7	2.0	3.3	6.5	9.0	4.2	8.3	10.4	6.5
Kollam	4.2	3.5	4.8	6.7	9.6	4.1	8.2	10.8	5.9
Trivandrum	2.5	2.1	2.8	7.1	10.5	3.9	9.4	10.6	8.3
Kerala	2.9	2.7	3.0	6.4	8.4	4.5	6.9	7.9	5.9

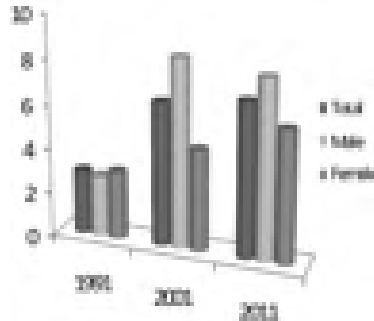


Fig 3:- Work Participation Rate of Marginal Workers by Sex

Table 3 shows that the work participation rate of marginal workers in Kerala increased from 2.90 percent in 1991 to 6.43 percent in 2001 and 6.85 percent in 2011. If we look at the male participation rate, the rate increased during the 1991-2001 decade but declined again. Women marginal workers in Kerala are increasing throughout the study period. The progress of the marginal labor rate in Kerala is very clear from figure 3.

Work Participation Rate by Broad Age Groups

Percentage of Workers in Age Group 5-14 to Total Population in the Age Group 5-14

Table 4
Work Participation Rate of Age Group 5-14

State/District	1991			2001			2011		
	T	M	F	T	M	F	T	M	F
Kasargod	1.3	0.9	1.7	1.1	1.5	1.2	1.5	1.7	1.4
Kannur	0.3	0.3	0.3	0.5	0.9	0.4	0.7	0.8	0.6
Wayanad	1.1	1.2	1.1	0.9	1.4	0.7	0.9	1.0	0.7
Kozhikode	0.3	0.4	0.2	0.4	0.6	0.2	0.6	0.7	0.5
Malappuram	0.4	0.5	0.2	0.3	0.6	0.2	0.6	0.7	0.5
Palakkadu	1.1	1.2	1.1	0.8	1.2	0.6	0.7	0.8	0.6
Thrissur	0.8	0.9	0.6	0.4	0.5	0.3	0.6	0.7	0.5
Emakulam	0.6	0.8	0.4	0.5	0.7	0.4	0.7	0.8	0.7
Idukki	0.7	0.7	0.7	0.8	1.2	0.8	1.3	1.3	1.2
Kottayam	0.4	0.5	0.3	0.3	0.4	0.2	0.8	0.9	0.7
Alappuzha	0.3	0.3	0.4	0.3	0.5	0.3	1.0	1.1	0.9
Pathanamthitta	0.3	0.4	0.3	0.4	0.6	0.3	0.9	1.0	0.8
Kollam	0.5	0.6	0.4	0.3	0.5	0.3	0.9	1.0	0.8
Trivandrum	0.7	0.7	0.6	0.5	0.8	0.4	1.5	1.6	1.4
Kerala	0.6	0.6	0.5	0.5	0.7	0.4	0.8	0.9	0.7

According to table 4, the employment of children between the ages 5 and 14 decreased during the period 1991-2001 and increased slightly again during 2001-2011. In Kerala, the incidence of child labour with many districts reported less than 1 percentage and it is low as compared to other states. The reason for this may be high literacy, free and compulsory education. According to the 2011 census, Kasaragod, Thiruvananthapuram, and Idukki districts have the highest number of child laborers. Child labor is more prevalent in males than in females. Most of the districts in Kerala are also showing the same trend. In Kerala in the case of female workers, the number of child laborers is less than their counterparts. It can be noted from the table that Kasargod, Idukki, and Thiruvananthapuram district had reported above 1 percentage share of girl workers in 2011.

Percentage of Workers in the Age Group 15-59 to Total Population in the Age Group 15-59

The high proportion of the working-age group (15-59 years) is considered as a demographic bonus that contributes to the development of a state. Table 8 shows that the percentage of working men and women in Kerala during the period 2001-2011, i.e. 15-59 years, had increased. However, there was a slight decline during 1991-2001.

Table 5
Work Participation Rate of Age Group 15-59

State/District	1991			2001			2011		
	T	M	F	T	M	F	T	M	F
Kasargod	53.8	74.7	34.0	52.1	74.0	31.7	50.9	75.0	29.2
Kannur	44.7	69.5	21.6	46.4	73.4	22.1	46.5	74.6	22.6
Wayanad	60.1	81.4	37.9	57.5	80.6	34.4	59.1	80.6	38.6
Kozhikode	40.4	68.2	13.7	40.8	71.7	12.0	44.1	74.3	17.5
Malappuram	41.7	71.7	14.8	38.7	70.1	10.4	39.1	71.2	11.3
Palakkadu	55.4	76.1	36.2	52.9	76.7	30.8	52.7	78.4	28.8
Thrissur	47.2	70.2	26.5	46.5	73.4	22.1	49.7	75.6	26.6
Emakulam	47.8	72.9	22.3	50.9	77.3	24.6	53.4	78.1	29.0
Idukki	58.0	79.5	35.9	60.4	80.3	40.4	63.2	80.2	46.2
Kottayam	44.4	71.1	17.8	46.7	73.5	20.4	52.4	75.9	29.7
Alappuzha	49.1	67.6	31.7	48.7	70.6	28.7	53.1	74.7	33.8
Pathanamthitta	42.7	69.5	18.5	42.1	67.8	19.3	46.0	70.3	25.1
Kollam	46.9	69.8	25.3	45.9	69.2	24.3	48.6	73.0	27.4
Trivandrum	47.5	73.5	22.7	46.3	73.8	20.7	51.4	75.8	29.5
Kerala	47.3	71.8	24.0	47.0	73.4	22.5	49.4	75.3	26.0

For the age group 15-59, WPR at the state level was 47 percent during the period 1991-2001 and it was 49 percent during 2001-11 periods. The table shows that this rate for females is quite low in Kerala, as compared to males and it declined further from 24 percent in 1991 to 22.5 percent in 2001. It again increased to 26

percent during the period 2001-2011. During 1991 and in 2001-2011 period, Wayanad and Idukki have the highest percentage of WPR for the age group 15-59 respectively. Malappuram has the least. Only five districts namely Kannur, Kozhikode, Ernakulam, Idukki and Kottayam show an increasing trend of WPR among working age population during 1991-2001. However, during the period 2001-2011, all the districts except Kasaragod and Palakkad showed an increasing trend of labor participation in the age group of 15-59 years.

Percentage of Workers in the Age Group 60+ to Total Population in the Age Group 60+

Table 6
Work Participation Rates of Age Group 60+

State/District	1991			2001			2011		
	T	M	F	T	M	F	T	M	F
Kasaragod	27.9	48.0	9.1	25.3	37.8	8.5	26.8	42.0	11.2
Kannur	23.1	41.9	7.6	22.1	30.4	8.8	23.1	46.0	9.6
Wayanad	32.6	54.4	10.7	31.4	46.9	12.0	35.2	40.7	16.5
Kozhikode	22.3	41.0	6.3	19.1	29.5	4.8	20.9	57.0	5.8
Malappuram	23.5	43.6	6.1	19.2	30.2	4.6	20.0	39.1	4.6
Palakkadu	27.4	47.5	15.1	28.7	35.8	15.5	27.6	38.8	14.7
Thrissur	24.5	42.4	10.3	20.8	28.0	8.2	23.0	43.7	9.4
Ernakulam	25.0	44.1	8.8	22.6	31.9	8.8	23.3	40.7	9.0
Idukki	33.4	56.1	9.5	34.5	51.7	14.4	39.7	40.6	21.2
Kottayam	25.8	46.8	6.2	23.6	36.4	7.2	25.3	60.7	9.6
Alappuzha	28.6	43.9	15.7	23.6	29.0	13.0	25.0	43.9	13.5
Pathanamthitta	28.4	51.4	7.1	23.0	35.7	7.1	21.6	39.2	7.4
Kollam	28.4	49.1	10.1	21.1	30.8	7.3	23.2	38.7	9.0
Trivandrum	26.9	46.0	10.3	22.2	31.3	8.8	26.0	40.5	12.1
Kerala	26.3	45.7	9.6	22.9	32.5	8.8	24.4	42.6	10.1

The above table shows the employment participation of the elderly in Kerala from 1991 to 2011. The work participation rate of the elderly in Kerala is low. During the census period, it was found that more than only 20 percent of the elderly are employed. This low WPR in Kerala may be due to the relatively better social security system and relatively low level of poverty in the state. The employment participation rate of older men is higher than that of women. Census 2011 shows that the employment participation rate among older women is increasing as compared to the 2001 census. Idukki has the highest employment participation rate of senior citizens during the 1991-2011 census years. The work participation rate of older persons in the state in 1991 was 26.3 percent, which declined in 2001 to 22.9 percent, and again was increased to 24.40 in 2011. During 1991-2001, the work participation rate of senior citizens in Kerala, irrespective of gender, declined. The work participation rate continues to be high in the case of older men, as compared to older women. The low physical stamina of females and their higher participation in household activities may be the reasons for their low participation in employment during old age (Rajan and Mathews, 2006).

Occupational Structure of Workforce

As already explained, in the 1991 to 2011 censuses the total main workers are classified into four groups: cultivators; agricultural labourers; household industry; and other workers together viz. livestock, forestry, fishing, hunting, mining and quarrying, manufacturing, processing, servicing and repairs, construction, trade and commerce, transport storage and communication and other services. Hence, a comparison of the distribution of workers for each of the four groups separately for 1991, 2001 and 2011 has been worked out for total, rural, and urban areas of Kerala and is given in the following tables.

Table 7
Percentage of Main Workers in the Industrial Category - I (Cultivators)

T/R/U	1991			2001			2011			%change during 1991-01			%change during 2001-11		
	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F
Total	12.2	14.2	5.6	7.1	8.0	4.0	5.8	6.5	3.7	-42.0	-43.7	-28.1	-18.3	-18.8	-7.5
Rural	15.1	17.7	6.5	9.4	10.6	5.1	9.8	11.0	6.0	-37.7	-40.2	-21.9	4.3	3.8	17.6
Urban	4.0	4.4	2.4	1.1	1.2	0.8	1.4	1.6	0.9	-72.2	-72.5	-66.1	27.3	33.3	12.5

Table 7 shows that between the periods 1991 to 2001, the percentage of cultivators decreased and again it decreased in 2011. On the other hand, a constant decline can be noted in the proportion of workers engaged in cultivating, in Kerala during 1991-2011. The gender-wise participation clearly shows that the percentage of male and female cultivators showed a negative change in the percentage during 1991-11. The table again reveals an increase in the workforce of cultivators in Kerala during 2001 and 2011, in rural as well as in urban areas irrespective of sex.

With regard to the agricultural sector, it was found that during 1991-11 there was a negative change in their percentage irrespective of gender. During the period, 2001-11 showed a negative rate of change regardless of gender in all rural areas. However, there is a positive change rate for men living in urban Kerala and a negative change rate for women living in urban areas. The decline in employment in the agricultural sector among the industrial category in Kerala is evident, with more attention being paid to urban women. It appears that unnecessary female workforce from rural areas might have joined the informal sector in urban areas, construction sector being the most important channel of such alternative employment.

Table 8
Percentage of Main Workers in the Industrial Category - II (Agricultural Labourers)

T/R/U	1991			2001			2011			% change during 1991-01			% change during 2001-11		
	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F
Total	25.5	22.4	36.1	12.4	11.1	17.3	9.9	8.8	13.5	-51.4	-50.4	-52.1	-2.02	-20.7	-22.0
Rural	30.6	27	42.2	15.8	14.2	21.6	15.4	13.6	21.1	-48.4	-47.4	-48.8	-2.5	-4.2	-2.3
Urban	11	9.7	15.8	3.2	2.8	4.7	3.6	3.5	4.1	-70.9	-71.1	-70.3	12.5	25.0	-12.8

Table 9
Percentage of Main Workers in the Industrial Category - V (a) Household Industry

T/R/U	1991			2001			2011			% change during 1991-01			% change during 2001-11		
	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F
Total	2.6	1.6	5.9	3.3	2.5	6.5	2.1	1.8	3.1	26.9	56.3	10.2	-36.4	-28.0	-52.3
Rural	2.5	1.5	5.6	3.4	2.4	6.7	2.1	1.8	3.0	36.0	60	19.6	-38.2	-25.0	-55.2
Urban	2.9	1.7	7.2	3.3	5.7	5.8	2.1	1.8	3.2	13.8	58.8	-19.4	-36.4	-33.3	-44.8

In the household industrial category, the workers experienced a positive rate of change in their percentage during 1991-01 (both males and females) except urban females, irrespective of their place of residence. Urban women employed in the household industry in Kerala declined from 7.2% in 1991 to 5.8% in 2001. During 2001-11, both males and females irrespective of their place of residence experienced a decline in their percentage. The explanation given for this decline is that some of the traditional industries in Kerala, such as handloom, coir and beedi, which once flourished as household industries, are gradually becoming non-household industries as part of a large cooperative sector. It should be noted here that women workers outnumber male workers in the household industry.

All workers, other than cultivators, agricultural labourers or workers in the household industry are classified as 'other workers'. In other words, 'other workers' is a diverse combination of different economic activities. The analysis revealed that 'other workers' show the maximum share of economic sector in Kerala during 1991-2011. Most of the 'other workers' in Kerala are in urban areas. During the 1991 to 2001 census decade, there was a huge increase in the number of 'other workers', regardless of gender. It should be noted that the percentage of female workers in the other workforce in 1991-01 and 2001-11 was higher than that of male workers. However, increases in employment in this sector to some extent, includes the growth of the informal sector in the state. This may be one of the

reasons for the high increase in the female workforce participation rate in the 'other worker' category as well as to a certain extent also responsible for the increase in urban area.

Table 10
Percentage of Main Workers in the Industrial Category - Other Workers

T/R/ U	1991			2001			2011			% change during 1991-01			% change during 2001-11		
	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F
Total	59.6	61.8	52.4	77.1	78.5	72.3	82.2	82.9	79.7	29.4	27.0	38.0	6.6	5.6	10.2
Rural	51.9	53.8	45.7	71.4	72.8	66.6	72.7	73.6	69.9	37.6	35.3	45.7	1.8	1.1	5.0
Urban	82.2	84.2	74.7	92.4	93.4	88.7	92.8	93.1	91.9	12.4	10.9	18.7	0.4	-0.3	3.6

Occupational Diversification of Workers in Kerala-1991-2011

In this section, as discussed in the methodology, entropy score is the measure used to find out the industrial diversity.

Table 11
Entropy Score of the Industrial Composition of Workers in Kerala (1991-2011)

State	Year	Total			Rural			Urban		
		T	M	F	T	M	F	T	M	F
Kerala	1991	1.01	0.98	1.03	1.08	1.06	1.06	0.63	0.58	0.79
	2001	0.76	0.73	0.84	0.87	0.84	0.93	0.35	0.31	0.46
	2011	0.64	0.62	0.68	0.83	0.81	0.85	0.33	0.32	0.36

Looking into the entropy score of Kerala, it is found that, diversity in the industrial category of main workers has decreased during the decade 1991-2011. In Kerala, the sex-wise entropy scores (E_i) reveal that the diversity is high among females than among males in all the periods. Irrespective of sexes, the value of the entropy score is declining to show chances of decline in diversity. The place of residence-wise entropy scores (E_i) has shown that the diversity is more in rural areas from 1991 to 2011, and in urban areas, it is lowest in all the periods. Among females, it declined in urban Kerala, during the 1991-2011 periods.

Conclusion

This paper seeks to shed light on the trends and patterns of labour force participation in Kerala and to identify the industrial diversity. An examination and

data on the participation of workers in Kerala during the 1991-2011 census gives the following results. During the 20 years from 1991 to 2011, the work participation rate in Kerala increased and in the same decade, the rate of men increased significantly. Female workers have a much lower participation rate than their male counterparts. In Kerala, only 35 percent of the population is in the working force in 2011. It is a 7.7 percent increase in the work participation rate over the period 2001-2011, where the work participation rate was only 31.4 percent in 1991 and 32.3 percent in 2001. The study reveals that the work participation rate for women was lower than that of men during 1991-2011. We know that women of Kerala outperform their male counterparts in many developmental indicators, but the study reveals that male workers outnumbered female workers in Kerala during the study period. However, in the 2011 census for females, the work participation rate of 18 percent is far below the all-India figure of 26 percent. Work participation rates of main workers revealed that the male work participation rates are the highest compared to that of females and there was an increase in the participation rate from 44.80 percent to 48.0 percent. The gender-based participation rate during 1991-2001 shows a gradual decline in the participation of women in the workforce during 1991-2001 and a slight increase in the female work participation rate during 2001-11. This increase indicates a good symbol of economic prosperity. The work participation rate of marginal workers in Kerala increased from 1991 to 2011. If we look at the male participation rate, the rate increased during the 1991-2001 decade but declined again. Women marginal workers in Kerala are increasing throughout the study period. The study showed the progress of the marginal labor rate in Kerala. Thus, from the above statistics it can be concluded that while in Kerala, the female work participation as main workers declined, the rates of female marginal workers were showed a constant increase during (1991-2011), including during (2011-2001). This indicates a disappointing fact that the number of women working was comparatively for less time of the year, as compared to the men working for the longer part of the year.

The Census 2011 showed that Kasargod, Thiruvananthapuram, and Idukki districts have the highest incidence of child labor in Kerala. Most of the districts in Kerala demonstrate this trend, but males show a higher incidence of child labor than females. Kasargod has the highest proportion of male child workers, which had more than 0.15 percent of male child workers in 2011 than in 2001. Women belonging to 15-59 age groups have much lower labour force participation rate than that of the corresponding age group of males. In 2011, the percentage of male total workers in the age group 15-59 was highest in Wayanad (80.6 percent) followed by Idukki (80.2 percent), but it was highest in Idukki (46.2 percent) followed by Wayanad (38.6 percent). According to the results in 2011, work participation rate of elderly females is increasing as compared to previous census. The study showed that

workforce participation of the elderly in Kerala declined from 1991 to 2011. The work participation rate of elderly men is higher than that of women. More than 20 percent of the elderly were involved in work, during the entire study period.

During 1991-01, the rate of change in the percentage of the cultivators is negative for the total, male and females. Rural and urban areas also experienced a negative rate of change in the percentage, irrespective of sex. The decade 2001-11 gives a negative rate of change in the percentage of workers (cultivating category), for both male as well as female workers. After comparing rural and urban areas of Kerala it is seen that, the rate of change is positive for the total, male and females. However, the positive rate of change is more among urban workers as compared to their rural counterparts. Regarding the agricultural sector, it is found that the period of 1991-01 experienced a negative rate of change in their percentage, irrespective of sex and place of residence. During the period 2001-11, both total and rural areas showed a negative rate of change irrespective of sex. However, males who lived in urban Kerala had a positive rate of change and females who resided in urban areas had a negative rate of change. In the household industrial category, the workers experienced a positive rate of change in their percentage during 1991-01 for both males and females, irrespective of their place of residence. During 2001-11, both males and females irrespective of their place of residence experienced a negative rate of change in their percentages.

Other workers showed the maximum share of economic categories in Kerala during 1991-2011 and most of the 'other workers' in Kerala were in the urban areas. During the census decade from 1991 to 2001, there was a huge rise in 'other workers' category regardless of gender. Also, in 'other workers' category percentage change of women workers during the decades 1991-01 and 2001-11 was higher than that of male workers. Increases in employment in this sector to some extent included the growth of the informal sector in the state and this may be one of the reasons for the high increase in the female workforce participation under the 'other workers' category.

In Kerala, diversity in the industrial category of main workers has decreased during the decade 1991-2011, even though there is less diversity. Males are more than females in the category of workers but diversity is high among females. Irrespective of sexes, the diversity showed the chances of decline. Moreover, the diversity is more in rural areas than the urban areas. Therefore, measures should be taken by the planners and policymakers to absorb more women in modern large enterprises and thereby expand economic development.

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Sustainability through Imparting Education and Skills - An Experience of *Jan Shikshan Sansthan*

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Abstract

Sustainable development through adult education and skilling is very important and has a long history. Various reports have mentioned the need to include vocational education/skills for empowerment of youth in the educational system. *Jan Shikshan Sansthan*, a vocational education programme started as *Shramik Vidya Peeth* in later 1960 s. Afterwards the scheme was changed to *Jan Shikshan Sansthan (JSS)*, meaning Institute of People's Education. *Jan Shikshan Sansthans* are working at district levels under the sponsorship of Ministry of Skill Development and Entrepreneurship, government of India as a registered society. Each *Jan Shikshan Sansthan* administers with a Board of Management with a representation of central, state and district administration and representation of experts from different sectors. Each JSS has freedom for innovation and enriching their activities for the benefit of needy communities. *Jan Shikshan Sansthan* Malappuram proved its success line through decentralization and community ownership of the targeted society. This was done with the help of collaboration, convergence and innovations. Sustainable development can be ensured in the local community only through the participatory approach of development. Lack of skilling opportunities is a gap in India's rural sector and there is a need to bridge this gap through planned skill development projects. Various schemes are implemented in this sector but none of them have attained the final goal. Lakhs of ordinary rural youth are facing unemployment and under employment in India. The youth can become productive assets through appropriate skilling programmes. The SDG goals defined by the UN which mainly focus on 'no poverty' and 'zero hunger' can be achieved through the livelihood programmes, like *Jan Shikshan Sansthans*.

Keywords: *sustainable development goals (SDG), Vidya - earn while learn, Unnathi, talking pen*

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Introduction

India has undergone significant economic growth and increased political democratization in recent decades. These developments, coupled with increased state investment in education, through, for example, comprehensive educational programs such as the National Literacy Mission and the Sarva Shiksha Abhiyan elementary education initiative, have greatly improved educational opportunities for all citizens. Despite access to primary education being now almost universal, learning outcomes remain poor. Less than 10 per cent of the working-age population has completed secondary education, leaving a significant portion of the population without the skills or knowledge necessary for gainful employment (World Bank, n.d.). Although the state of Kerala has one of the highest literacy rates in the country (National Census, 2011), poor literacy remains a major issue among the traditionally disadvantaged groups such as women, ethnic minorities, scheduled tribes (the official designation given to groups of historically disadvantaged indigenous people in India) and migrants, who often live in financially under- developed and marginalized communities. This situation is evident among the 4.5 million inhabitants of Kerala's Malappuram district, where deep-rooted challenges such as endemic poverty and acute shortages of learning resources and professional teachers persist, despite national educational efforts and initiatives.

Organizational Overview: *Jan Shikshan Sansthan*

When they were first established, *JSSs* offered programs for industrial workers in urban areas in order to upgrade their vocational skills. Nowadays, *JSSs* serve both rural and urban populations and seek to consolidate the gains of past literacy campaigns, while improving the quality of participants' lives, through the provision of vocational training for disadvantaged and marginalized populations. Jan Shikshan Sansthans started as an Institute of People's education in later 1960s and functioned under the Ministry of Human Resource Development, Government of India upto 2018. Later it got shifted to Ministry of Skill Development and Entrepreneurship to focus on imparting skills and livelihood promotion. Presently 233 *JSSs* are working throughout India and the government is planning to establish more *JSSs* for increasing rural employment.

Individual *JSS* organizations function as district-level resource support agencies, organizing vocational training programs for people who have recently acquired basic

literacy skills or whose skills are inadequate. The philosophy of the JSS centers is built on the idea, that basic literacy can be meaningful for individuals only when they can use it in day-to-day life and to earning a living. JSSs are, therefore, important non-governmental organizations offering essential training in vocational skills to learners. In some locations, JSSs also run continuing education centers. This case study focuses on one particular program operated by *Jan Shikshan Sansthan*, Malappuram.

Programme Overview

Jan Shikshan Sansthan, Malappuram's Vocational Skill Development Training program was set up in 2006 as an effort to provide literacy and vocational training to socio-economically disadvantaged and marginalized communities in the Malappuram district of Kerala. The program has served about 50,000 learners since inception. JSS Malappuram proved its success through innovative programmes like literacy with technology oriented electronic pens which is more attractive for tribal communities along with value addition of forest tribal products. This projects lead to empowering the tribal communities. Collaboration and convergence with local, state and national governments, financial institutions, banks were done for strengthening the organization of Self Help Groups (SHG) and Joint Liability Groups (JLG) of JSS Malappuram. 'Unnathi' - a comprehensive sustainable development programme for coastal communities of Malappuram is an innovative project of JSS Malappuram which provided sustainable income for thousands of families in the most vulnerable coastal belt through education, skilling and financial inclusion.

'Vidya' - earn while you learn is an another programme of JSS Malappuram for the tribal youth, through adult, continuing education and skilling. These projects and innovations made its way to bag the National Award in 2014 and UNESCO Confucius International Literacy Prize in 2016. The Tagore Literacy Award in 2017 was also conferred to JSS Malappuram. The program aims to empower adults from marginalized populations through linked literacy and vocational training. It endeavors to provide participants with the skills and knowledge they need, for leading fulfilling and sustainable lives. The following strategies are used to achieve its vision:

- To provide vocational training for the illiterates, neo-literates and school dropouts in their own door steps as per the learning environment of the beneficiaries;
- To create an inclusive learning ecosystem for the sustainable skills and

livelihood promotion to the weaker section of the society;

- To bring community ownership through participatory approach of learning and to promote the socio- economic development;

The programme's embedded literacy curriculum is adapted to local needs, resources and contexts. Demand-driven and relevant programming is developed through the Participatory Rural Appraisal (PRA) process (described below), which ensures that the content is relevant to learners' livelihoods and socio- cultural realities, dealing with topics such as health, hygiene, agriculture and finance. The programme supports literacy training and the opportunity to attain standards equivalent to fourth, seventh and tenth grade (primary to lower secondary school) alongside vocational skills development with the collaboration of Kerala State Literacy Mission (this agency is the recognized authority to certify upto the 12th standard). Its vocational training offer is diverse and appeals to a variety of local industries, from food processing training to textile production with the certification of skill proficiency.

The program is in collaboration with the National Bank for Agricultural and Rural Development, financial institutions, banks, and local government offers financial and technical entrepreneurship support to participants, on completion of their vocational training. As a result, many have started their own income-generating ventures or are now gainfully employed. The program also targeted primarily learners with visual impairments and/or other special needs, women, and people from scheduled tribes in the region.

Aims and Objectives

By developing literacy and life skills alongside vocational training, the program aims to equip its participants to succeed in living a better life. Its specific aims are to: support literacy-linked vocational and skills development training to the illiterates, neo-literates and school dropouts by ensuring continuing education for disadvantaged and marginalized groups, including women, visually impaired people and people from scheduled tribes (scheduled tribes involved in the program include the Cholanaikars, Kattunaikar, Paniyas and Muthuvan); provide life enrichment courses that cover health topics and help strengthen 'soft skills'; collaborate with various international, national, state and district government and non- governmental institutions to improve the welfare of impoverished communities; and bring about sustainable development at grassroots level, especially amongst marginalized communities.

Programme Implementation: Approaches and Methodologies

Instruction is offered in the regional language *Malayalam* and all the materials are developed in simple language by including theory and practical portions. A nationally approved curriculum by covering all the aspects of the program is divided on hourly based teaching learning parameters as per the National Standard Qualifications Framework (NSQF). The duration of the program is fixed on the basis of its curriculum. Most of the courses are designed on the basis of the local requirements and demand driven from the local economy. The literacy program uses locally developed supplementary materials written in the local language to enhance the understandings of the technical words. The program makes use of technology such as LCD projectors, computers and audio-visual equipment. The Braille literacy materials are available for learners with visual impairments. All the students keep a journal, called 'My Learning Document', in which daily activities and progress can be tracked. The journal tracks activities and sessions, and includes feedback from the learner and teacher, as well as additional remarks related to a student's learning curve. Resource persons help learners with no or low literacy skills to track their progress with this tool, which also serves as a motivating factor as students can see their progress and set further learning goals. The journal also helps trainers identify the needs/progress of their students and tailor instruction for their individual needs. Vocational training programs vary from courses which teach simple vocational skills, such as chalk and soap making, to food-processing training.

The skill development courses are subsidized by the government for weaker sections of the society. Learners from scheduled tribes and caste receive full fee exemption. Computer courses are also offered to the needy groups for understanding and getting familiarized with the modern technology. The programmes are embedded with vocational skill classes, are learner-centered and designed around a participatory and activity-based approach to learning. Vocational training courses are 60 per cent practical and 40 per cent theory based. As part of each training course, the centre provides supplementary sessions in subjects such as financial education, health promotion, sanitation, human rights and life enrichment education. The curriculum, developed by the National Skill Development Agency, is tailored to the needs and conditions of the area in which the program operates. Locally sourced raw materials, provided by the centre, are used during skills development training to make consumables such as soap, candles and jam. Training in apparels, beauty and wellness, food processing, honey cultivation, embroidery works, paintings etc. are also provided to the beneficiaries as per the skill gap analysis in different areas. The potentiality of

getting employed after the training is also considered for selecting the courses. Most of the trained beneficiaries in vocational program have started their own income-generating ventures, such as producing goods with locally-sourced materials. Classes are held in schools, anganwadis, mahila mandals and other suitable places provided by the local bodies. Most of the training centres provided by the community are free of cost, ensure maximum infrastructure facilities and basic amenities.

Recruitment and Training of Facilitators

The qualified trainers have diplomas from various government recognized institutes and are also trained by JSS for Training of Trainers (ToTs) programme in different sectors. This is conducted by the Sector Skill Council or JSS with the collaboration of pioneer institutes of state and central governments. The ToTs is done in residential mode to cover all theory and practical sessions. Assessment and certification is also done as part of the ToTs programme. Soft skills, adult learning methods, strategies in the class rooms are also taught during the programme. The trainers work for 2-4 hours per day and get an honorarium. The overall performance of a beneficiary can be determined on the basis of a trainer's performance.

Assessment

An evidence based assessment system is followed by JSS for ensuring transparency and quality of the training programme. After completion of the course, the centralized portal automatically informs the proposed date of assessment. An external assessor with the presence of an observer, appointed by each JSS conducts the assessment in three parts: theory, practical and viva voce. The results are uploaded on the portal along with the geo-tagged photographs. After the declaration of the results, each beneficiary gets a certificate with a QR code.

Monitoring and Evaluation

The programme uses a management information system (MIS) to facilitate communication between the training centre, programme officers and the director. The MIS is also used to collect and share data about learners' performance. At the heart of the MIS is a form that facilitators fill out and the programme coordinators collect and submit to the programme's district-level agency. Monitoring and evaluation are integral to the programme. Both learners and facilitators engage in an ongoing learning assessment.

At the onset and upon completion of the programme, students conduct a self-evaluation of their degree of skill proficiency according to performance indicators set by teachers and administrators. 'My Learning Document' provides information about student progress and challenges, and enables the facilitator to tailor instruction according to the needs of students during the programme. Trainers' performance is assessed through observation and monitoring by programme coordinators. The MIS also collects information about trainers.

Impact

The programme has made life-changing differences to learners and their families. Since its inception in 2006, it has reported a number of key achievements. Approximately 50,000 participants have received vocational training. 43,100 programme participants are now working and earning around 5,000 to 50,000 INR monthly (approximately US \$76.31 to US \$223.85), as indicated by a tracking system that collects data through follow-up meetings at various intervals following completion of the programmes. 500 Self Help Groups (SHG - ten to twenty members of the same village who support each other during the program, and pool their savings until there is enough capital to begin lending within the village) and Joint Liability Groups (JLG - four to ten people from the same village who form a group for the purpose of accessing a collateral-free loan from a bank). The number of savings accounts and the amount of savings in each account has increased. Health promotion campaigns, on issues such as hand-washing and immunity vaccination awareness, have reduced the outbreak of disease among scheduled tribes.

The programme has resulted in an increase of employed women in the district. More female learners and alumnae report helping their children and other family members to acquire literacy skills, creating an even greater impact in their communities. Participants have gained knowledge with regard to laws and their rights through the life enrichment education curriculum. Communities have become more sustainable and self-sufficient through vegetable farming and microenterprises. The dropout rate has dramatically lowered. Young learners who have completed the entrepreneurship trainings have started their own ventures through various schemes of state government, central government and private firms. Women who have completed the programme have initiated their own business dealings in areas of textile, jewellery making and other crafts. People with special needs have better chances of being employed through acquisition of literacy and vocational skills. The

programme is increasing in scope and plans to continue expanding through grassroots efforts. In the words of a participant, *"I had poor education and was not outgoing type of a person. Now, I help my family financially and feel independent. Since I feel so confident, I have also become one of the decision-makers in my family."*

Challenges

Although it has made a major contribution to serve disadvantaged and marginalized groups in the region, the programme also faces a number of challenges. These include: difficulties in accessing quality training and resources due to financial constraints. JSS is not able to adequately remunerate trainers in the same way as other non-formal education organizations in India. This poses a problem for teacher retention. Overcoming negative attitudes towards learning among historically disenfranchised populations and reaching out to people from scheduled tribes in remote and geographically inaccessible areas are also some issues. So far, this challenge has been addressed by providing individual villagers with skills training so that they can in turn impart those skills within their respective villages. Translating technical terms for skills development into local languages has presented some difficulties for the programme too. To overcome this, JSS uses videos, LCD projectors, labs, charts and sketches to illustrate terms. Identifying markets for programme-produced goods is a challenge. Furthermore, accessing resources for the development and implementation of programs continues to be a struggle. The centre needs to improve technological training and reach out to scheduled tribes with improved strategies.

Sustainability

Jan Shikshan Sansthan, Malappuram, like all JSS institutions, is a non-governmental organization. It is funded by the government along with other forms of self-financing, such as revenue earned through selling products produced within the programme and collecting nominal tuition fees from students who are able to pay. The centre has national and local partnerships with ministries, NGOs and industry. The success of the programme and sustainability in the region is due to its approach and philosophy. It is demand-driven and designed to address needs identified through participatory rural assessment and analysis, which is conducted at the beginning and throughout the programme. Furthermore, the programme ensures community ownership and partnership through grassroots interventions that include the support of local communities. Such interventions take the form of self-help groups and joint

liability groups. In spite of all these sustainable practices, insufficient funding remains a barrier for further expansion of the programme.

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Book Review

The University I Served: By K. Venkata Reddy, K. C. N. Printers, Tirupati, 2020

Reddappa Reddy¹

The book entitled '*The University I Served*' was released on 8th October, 2020 as a mark of celebration on the author's 90th birthday. The book consists of the author's early life memories and initiatives as the Chief Executive of Sri Krishnadevaraya University, which aimed at building the University in terms of innovative schemes and launch of socially relevant courses at the postgraduate level. The book delves into aspects of how the author solved problems of students and hostel workers; the way he was able to approach the local/national bodies to get financial support for the University; and lastly how the newly launched initiatives and courses benefitted the students.

The book comprises of eight chapters. Specifically, Chapter I details the academic credentials of the author, his involvement during the independence movement (non-cooperative movement) for which he was arrested and sentenced to Chittoor Central Jail as a freedom fighter, back then. Later on, he described his inclination towards obtaining an undergraduate and postgraduate as well a Ph.D. degree and diploma from University of Madras and Sri Venkateswara University, Tirupati respectively. Further, his educational qualifications led him to begin his career as a Lecturer at Tirumala Tirupati Devasthanam (TTD) College and Andhra University, Visakhapatnam, for a short period though.

Chapter II provides the genesis of Sri Krishnadevaraya University, Anantapur along with the trials and tribulations faced by him in the overall development. As he was instrumental to the process, a strong foundation was laid by mobilising funds from Tirumala Tirupati Devasthanams (TTD), Rayalaseema Development Board for infrastructural expansion pertaining to physical education, bio-sciences, library and Bhuvana Vijayam (Auditorium). He served as the Chief Warden besides assuming duties in the Department of Rural Development, which involved conducting village surveys, undertaking projects, publishing books, teaching at postgraduate level and guiding M.Phil and Ph.D scholars.

¹ **Former Director**, Department of Adult Education, S.V. University, Tirupati

In Chapter III, the author has narrated the elevation of Sri Krishnadevaraya University, earlier a postgraduate center in July 1981. The historical significance of the University's name, stemming from Sri Krishnadevaraya, an emperor of the Vijayanagara Empire was explained. The author elucidated his role as Registrar of the University, on request of the first Vice Chancellor, Dr. M. Abel. He further described his role towards regularization of the services of hostel workers, which led to growth of the University.

Chapter IV provides a detailed account of the author's tenure as a Vice-Chancellor, the problems he was confronted with and the important institutional changes brought about by him. At the beginning of the Chapter, he has described the ways in which the administration was streamlined by choosing the right persons for the key positions such as the Registrar and Controller of Exams. At the end, he mentioned the ways through which he was able to resolve problems like transportation issues faced by the students.

Chapter V focuses on the important events conducted towards the development of the University. The major initiatives included the celebration of the Nehru centenary, organization of a national seminar with honorable guests such as the Former President of India - Sri Neelam Sanjeeva Reddy and Former Governor of U.P. - Sri Bazawada Gopala Reddy, execution of a one day consortium of bankers to discuss banking management, carrying out the convocations of the University, hosting of Andhra Pradesh's Vice-Chancellors' conference and implementation of national and international level seminars on *Plasto Rayalaseema 1990*, *Commonwealth Studies*, *Grassroots Planning and Rural Development*.

Chapter VI deals with important initiatives launched by the author as a Vice-Chancellor. Some of these cited were: establishment of a Centre for Rayalaseema Development Studies, provision of work experience as part of the curriculum, establishing linkages with industry bodies, appointment of a liaison officer to pursue the University Grants Commission (UGC) affairs at Delhi, reformation of the evaluation system, creation of a police station on campus, set up of a Student Counseling and Employment Guidance Cell, constitution of the Student Welfare Committee, promotion of social forestry, implementation of various literacy drives, coordination with the affiliated colleges and the like.

Chapter VII unearths the essential courses launched by the author, which aimed at creating a better society. First, a major achievement as quoted by him included, setting up of the Institute of Management Studies, for which financial aid was taken from AITBE under the Ministry of Human Resources, Government of India, New

Delhi. The author expressed that after the inauguration of the Institute, a sanction for three Professors, five Readers and seven Lecturers was duly passed. Similarly, in the existing Department of Mathematics, which was offering Computer Science course, a separate Department of Computer Science was created with the support of qualified faculty. Next, a new Department of Public Administration was established from Department of Economics, Department of Applied Economics and the Department of Political Science which offered courses in related disciplines. Further, new courses of study were initiated from the existing Departments like M.Sc. Electronics (Department of Physics), MSW (Department of Rural Development), M.L.I.Sc. (Department of Library Science) and self-funding courses like M.Sc. Sericulture (Departments of Botany and Zoology), M.P.Ed. (Department of Physical Education) etc. The author expressed his happiness for the successful mid-term appraisal conducted by the UGC, due to the efforts towards formation of multiple Departments. Lastly, he expressed gratitude for special guest speaker/keynote speaker invitations received by him, even after he was released from his official duties.

The author based on his vast academic as well as administrative experience, provided certain steps towards a better system of education keeping in mind the demands of 21st century labour market, as part of the concluding chapter (Chapter VIII). The steps for reformation encompassed, changes in the course structure of all disciplines at all levels of education, making education socially relevant and purposeful based upon Gandhiji's concept of classroom instruction. Then, the author also voices the need to acquire work-related skills, practical experiences, multi-disciplinary competencies, that can enhance employability aspects in one or more specialized areas of interest, as per recommendations mentioned in the Draft New Education Policy, 2019. The inclusion of a vocational stream along with MPC and BiPC streams in all colleges could potentially improve the quality of education at elementary school level and at the same time maintain the integrity of higher education system. In his opinion, proposal of vocational courses from sixth grade onwards may not be a desirable proposition, as the students that young may not be able to understand the significance of vocational education.

He has also suggested that the present pattern of 10+2+3 be changed into 11+2+3 with vocational courses being offered in VIII and IX grades as compulsory subjects. According to him, along with mother tongue, English language too needs to be taught from 5th grade onwards. In conclusion, the author has appreciated the role of academic bodies such as the NCERT, CBSE, SCERTs, Boards of Intermediate Education, UGC, and Boards of Studies of different courses in higher education sector. He holds that such academic bodies have the power to advocate for

progressive steps which can lead to development of a holistic system of education, equipping the students with necessary skills needed for self employment or assured paid employment. In order to propose a comprehensive strategy for the betterment of the education system, he has provided suggestions for strengthening of the NCERT; listed out ten steps to ensure better execution of educational protocols; recommended for strengthening of engineering education by the AICTE; and reinforced recruitment of qualified teachers with a commitment for teaching at all levels.

Perhaps the greatest strength of the book lies in its simple usage of language and style of presentation. Finally, the book is a treasure-house of information relating to experiences and challenges faced with respect to institution building. The book summarizes different obstacles faced by the author and the subsequent success achieved by mitigating those hurdles. The author has put together many constructive suggestions, which will help in improving the quality of education from primary level to university level. This book has the capability of inspiring budding teachers and academic administrators, to pursue the path of excellence and work towards institution building.

GUIDELINES FOR SUBMISSION OF MANUSCRIPT

The manuscripts should be in ENGLISH. The length should be around 3000-4000 words for articles and 700-800 words for book reviews. All research articles should provide an abstract in 200-250 words, stating aims, objectives, methodology and main finding of the study with 4-6 keywords. The abstract should be written clearly avoiding long, complicated sentences and jargon. Citations should not appear in the abstract. The references in the main text should be identified by a superscript arabic numeral and details given at the bottom of the same page. For books, include the name of author/s, year of publication in brackets, title of publication in italics, place of publication and name of publisher. For articles, include surnames and initials of all authors, year of publication in brackets, complete title of article, name of the journal in italics, volume number and page number as follows:

Book

Shah, S. Y. & Choudhary, K.C. eds. (2016). *International Dimensions on Adult and Lifelong Education*. New Delhi: International Institute of Adult and Lifelong Education.

Article

Sork, Thomas J. (2016). The Place of Ethics and the Ethics of Place in Adult and Lifelong Education. *Indian Journal of Adult Education*. (77) 3. 5-18.

Chapter in a Book

Subha Rao, I.V. (2002). A New Approach to Literacy Assessment in India. In Madhu Singh (ed.) *Institutionalising Lifelong Learning*. Hamburg: UNESCO Institute For Education.

Online Resources

While quoting online sources, source of documents and date of retrieval should be given.

For further information on citing references, follow the guidelines provided by the *Manual of the American Psychological Association* (APA 7th edition) which is commonly used in education, psychology and other social sciences. For details, see - apastyle.apa.org.

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The Indian Adult Education Association founded in 1939, aims at improving the quality of life through education, which it visualizes as a continuous and lifelong process. It directs its efforts towards accelerating adult education as a process, a programme and a movement.

The Association co-ordinates activities of various agencies – governmental and voluntary, national and international – engaged in similar pursuits. It organizes conferences, seminars and undertakes surveys and research projects. It endeavors to update and sharpen the awareness of its members by bringing to them expert views and experiences in adult education from all over the world. In pursuit of the policy, the Association has instituted the Nehru Literacy Award and Tagore Literacy Award for outstanding contribution to the promotion of Adult Education and Women's Literacy in the country respectively. It has also instituted Dr. Zakir Husain Memorial Lecture, which is delivered every year by an educationist of eminence.

The Association has brought out many publications on themes related to adult education, including Hindi editions of several UNESCO publications. It brings out the Indian Journal of Adult Education, Proudth Shiksha and IAEA Newsletter.

The Association acts as the Indian arm of the International Council for Adult Education, International Literacy Association and the Asian-South Pacific Association for Basic and Adult Education. Its membership is open to all individuals and institutions who believe in the aims and objectives of the Association.

It's headquarters is located in Shafiq Memorial, IAEA House at 17-B, Indraprastha Estate, New Delhi - 110 002.