

**SOCIAL SCIENCE  
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# SOCIAL SCIENCE IN PERSPECTIVE

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## Remembering A Passionate Socialist

**B. Vivekanandan**

**Rahul Ramagundam, *The Life and Times of George Fernandes*,  
Gurugram, Penguin Randoms House India, 2022, pp.xxv+509+Index.**

George Fernandes, a legend in the Indian Socialist movement, was a stormy petrel in Indian politics and labour movement, known in India and abroad. He was a torch-bearer of freedom, equality and distributive justice, who struggled to advance the rights of the deprived sections of society, and of the victims of tyranny, authoritarianism and aggression, everywhere. He was a staunch supporter of the freedom of Tibet, and a great source of solace for the Burmese refugees who fled Myanmar in the wake of military dictatorship in that country. He was a great Commoner, and a good sensitive human being.

After a brief stay at a Seminary in Bangalore to become a priest in a church, he moved out of it, and went to Bombay to become an active socialist and trade unionist. In Bombay, he made his mark in the 1967 Lok Sabha elections, when he scored a shining victory over the Congress startwart, S.K. Patil, in Bombay South, and earned the eminence, of a “Giant Killer”. That was also the beginning of my contact with him in Delhi, which remained unbroken ever since. As a trade union leader, George Fernandes drew national and international attention, when he led a successful, 20-day long, All India Railway Men’s strike in May 1974. When he led this nationwide strike, he was the All India Chairman of the Socialist Party, and also the President of All India Railway Men’s Federation (AIRF).

George Fernandes’ underground activities during Indira Gandhi’s Emergency and dictatorship, in 1975-77, was also legendary. For about one year after the declaration of Emergency on 25 June 1977, he moved around, in disguise, all over the country, to build up resistance against the Emergency, until he was arrested, on 10 June 1976, from St. Paul’s Cathedral in Calcutta. During those journeys in disguise, he used the attires of a Punjabi Sikh with a beard and turban, or the attire of a priest in the church, or the garb of a Baba. And, generally, he met his trusted supporters at secluded places like medieval monuments, to give necessary instructions to resist the Emergency, and to get cyclostyled underground pamphlets distributed among the activists. In Delhi, he used to meet his supporters in woods near the IIT and New Meherauli.

The arrest and torture of George Fernandes, in June 1976, evoked strong international protest that, three top European Socialist Chancellors / Prime Ministers - Willy Brandt (Germany), Bruno Kreisky (Austria) and Olof Palme (Sweden) - sent a joint telegram to Indira Gandhi, to release George Fernandes from detention. But, she did not relent, which caused considerable displeasure in them. Pertinently, during the Emergency Dr. Bruno Kreisky gave assylum to Leila Fernandes, George Fernandes’ wife, and their two-and-a-half year old son, Sushanto, in Austria. A notable feature of George Fernandes was the element of Gandhiji embedded in his personality. Imbibing the spirit of Gandhiji, he led a simple, and unostentatious, personal life. Similarly, following the footsteps of Gandhiji, George became a champion of Cottage and Small-scale industries. The promotion of Cottage industries and Small-scale industries, and the reservation of a considerable number of consumer items for production in these sectors, complemented by the establishment of District Training Centres to impart training to people in rural areas to produce those products in those sectors, was the core of the Industrial Policy which he declared soon after he became the Industries Minister in Morarji Desai Government in 1977. Notably, no significant speech of George Fernandes ended without a reference to Gandhiji. Invariably, he looked at problems from the angle of the common man and deprived sections of society.

There was a human touch in his basic approach. It is on record that, as India's Defence Minister, he made 18 visits to the snow-clad Himalayan borders, and spent many days with our soldiers in the glaciers, and saw, first hand, their problems, including their hazardous walking through the snow. He wanted to protect our Jawans from such hazards in their patrolling, by providing them with snow scooters. On return from glaciers, when he sent a proposal to that effect, a senior official in his ministry opposed it. In response, in his characteristic way, George sent that dissenting senior official "on duty" to the glaciers in Himalayas for a few days, and made him to see the realities on the ground. On his return from "on duty" in the glaciers, the concerned official instantly signed the file, sanctioning snow scooters for Jawans on duty in glaciers.

His fight against the entrenched corruption in Defence purchases, with the involvement of some retired Chiefs-of-Staff, the corrupting influence of multinational companies like Coca cola, and the bar he imposed on India's big industrial houses, like Tatas and others, from manufacturing many consumer items like, soaps, detergents, etc, the production of which was reserved for Cottage and Small-scale industries, led to the emergence of a pack of powerful enemies against him, who systematically orchestrated disinformation campaign against him, including through sting operations, in the news papers to defame him, and to derail his policies, with certain degree of success. But, nothing could dent the reputation of his personal integrity.

In Rahul Ramagundam's book, *The Life and Times of George Fernandes*, the details of many of these developments are there. This 550- page bulky volume, split into 13 Chapters, has been presented in the mode of a biography of George Fernandes, with no due consideration for clarity and precision, which is expected in such a biography. The space for that laxity, is provided for in the title of the book itself. Instead of clearly chiselling out the "life and legacy" of George Fernandes, the author has kept the title imprecise as "Life and Times" of George Fernandes, providing space for interpolations of non-essential narratives, or of descriptions of minor actors or peripheral episodes.

According to the author, this book is the outcome of a 12 - year long study and research, based on more than 135 interviews about George Fernandes, in addition to his personal papers and other documents. And, as such, it is a painstaking study, which focuses on multiple facets of the activities of George Fernandes, in a span of six decades of his active political life, though the accuracy of all information in it cannot be taken for granted.

From the very beginning, the author seems to have had a misplaced understanding of George Fernandes. The lone opportunity the author got to meet with him was in 2009, when George was already under the grip of Alzheimers. And nothing happened at that meeting as well. That lack of understanding of George, and the negative attitude it engendered, made the author to derisively observe, in the first and second pages of the book, itself as follows:

It is said that the bungalow's [3 Krishna Menon Marg] gates during the times George lived there always remained flung open as a mark of socialist disdain for governmental trappings. It was a bungalow worth over Rs. 100 crore then; yet his quintessential image of a man of the streets, fighting and thriving in adversity and living frugally, had perplexedly persisted. (pp.1-2)

This lack of understanding of George's psyche and personality on the part of the author, and the negative mindset embedded in him, seems to have overshadowed the writing of this book. Chapter I, "All's Well That Ends Well", exemplifies it. No mature author would have thought of beginning his book with such a repugnant, and nauseating First Chapter, loaded with descriptions of defecation, and of intrigues and quarrels over the appropriation of properties and assets, a reading of which is apt to dissuade the reader from going into the next one. Moreover, in this first chapter itself, the central figure of the book is also shown in a poor light. If the curtain raiser presents such a bizarre picture, and if the central figure in the book also is presented in poor light, as is done in this book, it would constitute a big disincentive for reading other chapters of it.

The author concedes the nebulous character of his narrative in the book, when he says: "I am not just tracing the growth and development of a political personality in this book... my aim was to gather a comprehensive picture of India over those eighty years when George was born and brought up, became a

trade unionist, got affiliated with an ideology, developed a political ambition and then proceeded to attempt to fulfil it” (p.xxii). In tune with this stated framework, the author has used considerable space, in his attempt to contextualising events noted in the book, which, often, gives a hazy effect on the clarity and precision of the book. As a result, the picture of George Fernandes that comes out of this book is not as sharp as it should have been.

However, coming to the brass fact task of the book, Chapter 2, “A Christian Beginning”, and Chapter 3 “A Revolutionary Road”, give an account of George’s family background, his upbringing, joining a Seminary in Bangalore to become a priest in a Church, the circumstances which made him quit that Seminary and reached Bombay in 1950, for doing political and trade union work. The next four Chapters - “Bombay Days”. “A man More Dangerous Than the Communists”. “The Stepping Up”, and The Strike Man” - cover George’s ardent activities in Bombay, and elsewhere, until the clamp down of the Emergency, in June 1975, by Prime Minister Indira Gandhi. The narratives in them encompass his trade union activities in Bombay, his first successful electoral contest for the Bombay Municipal Corporation, in 1961, his job in the *Times of India*, his incarceration in the Nasik Jail in 1963, his election to the Lok Sabha, from Bombay South in 1967, after defeating the Congress heavyweight, S.K.Patil, the historic 20- days long, All India Railway strike, which he led in 1974, and so on. These chapters give also an account of split and fusion in the Socialist Party, and of the Goa liberation movement of 1955. Chapter 7 ends with Railway Minister Madhu Dandavate’s declaration, in 1977, reinstating all victims of the Railway Strike of May 1974.

The next three Chapters, 8, 9 and 10, “The Most Hunted Man”, “Where Is the Underground?”, and “Chained and Fettered”, focus on George’s underground activities during the Emergency, his arrest, detention and torture, with the foreboding of his contesting the 1977 Lok Sabha Election from Jail, and win it with a record margin of 3 lakhs votes, from Mussaffarpur, in Bihar. These are interesting, and informative Chapters in the book which greatly reveal the true personality of George Fernandes. These Chapters also give the selfish reasons behind Indira Gandhi’s Declaration of Emergency in 1975, and how George went underground and actively worked against it, travelled across the country in disguise, with the attire of a fisherman, priest, Sikh Sardarjee, etc., to organise resistance against the dictatorship during the Emergency. They give also the details of his hideouts, secret meeting places, preparation and distribution of underground pamphlets, and of his couriers and conduits during those dark days. They give the details of his arrest from St.Paul’s Cathedral in Calcutta, in June 1976, and the torture and humiliation metted out to him in Delhi’s Tihar Jail, and his production before the Delhi Metropolitan Magistrate, at Tees Hazari Court.

In page 299, there is a reference to the resignation of Babu Jagjivan Ram from Indira Gandhi’s Cabinet, and the Congress Party, in February 1977. Jagjivan Ram’s resignation announcement came in the morning of 2nd February 1977, the day in which George was to be produced before the Tees Hazari Court, where I had decided to go and meet George, and other co-accused in the Baroda Dynamite conspiracy case, like Dr.G.G.Parikh. Indeed, I was the one who conveyed this hot news to George Fernandes at Tees Hazari Court that day, with a predictive comment, “She [Indira Gandhi] is falling”. As soon as he heard it from me, he was thrilled. With sparkling eyes, he raised his left fist, cuffed with heavy iron chains hooked to his feet, and roared: “She must fall”. A press photographer, then present, took the photo of that captivating expression of George Fernandes that day, which became a world famous iconic photo of Fernandes.

The last three chapters, “Janata Days”, “The Dogged years” and “They Hate My Guts” deal with the phase when George was in government, making polices and exercising power. He was a Cabinet Minister in governments headed by Morarji Desai, Viswanath Pratap Singh and Atal Behari Vajpayee, and held important portfolios like Industry, Railways and Defence. As the Industries Minister, the policy he adopted was attuned, basically, to the Gandhian approach to promote Cottage and Small-Scale Industries, create massive employment opportunities in the rural areas, and promote rural development. His basic approach was that, whatever can be produced by Small-scale and Cottage industries, must only be so produced. It increased the number of items reserved for production by the Small-scale and Cottage sector. He ventured to advance Gandhian ideas in the country’s production process. He favoured expansion of the public sector and a more limited role for

the private sector. Multi-national Companies, like Coca Cola and IBM, were made to fold up their operations in India.

In V.P.Singh's Government, George was Railway Minister and the Minister for Kashmir Affairs. Indeed, George was V.P.Singh's trusted trouble shooter. In the Government, headed by Atal Behari Vajpayee, George was the Defence Minister. As Defence Minister George had left an impressive record. His fight against organized corruption in Defence purchases, created powerful enemies, who made a sustained disinformation campaign against him, to malign him. But such attempts failed to diminish his standing in the country.

And, finally, due to Alzhymers and old age, he remained aloof from the public visibility till he breathed his last on 29 January 2019.

No doubt, this book has been written after consulting a lot of material and personal papers, and after holding interviews with a large number of knowledgeable persons. The author has given the details of all those sources. Many of them are opinionated and subjective, which might have been presented authentic and objective, capable also to mislead the author and prejudice his approach. This book is not free from such pitfalls. As one who knew George personally since 1967, it is easy to identify such opinionated observations, handy to present people in poor light on occasions. The negativity which peeps out, at times, in the narrative, seems to have been influenced by such information.

On the negative side, this book is ill-structured. If it is sensibly structured, the present first chapter of the book would have been its 12th Chapter. The present first Chapter is too poor to become the opening Chapter of this book. Similarly, in the book, quantity seems to have been given a higher consideration over quality. The bulky size of the book got higher importance than the clarity and precision in its writing. Indeed, it would have been more impressive if the author dispensed with unnecessary, descriptions of marginal actors and episodes, and avoided the surfeit of petty details, and brought the book's size down from its present 550 pages, to about 200 pages. The author's obsession with certain individuals, like Jaya Jaitley, and his built-in prejudice with some others, are quite explicit in the narrative.

Blind reliance on opinions expressed in interviews for analysis can lead an author in to mistaken assertions. In pages 249-50, there is a reference in this book that during the Emergency, in 1975-77, Leila Fernandes and Sushanto, wife and son of George Fernandes, took refuge in the United States. That is a conjecture. I know for certain that until October 1976, they were in Gopalpur-on-sea in Orissa. After the arrest and detention of George Fernandes in June 1976, Dr. Bruno Kreisky, then Chancellor of Austria, gave assylum to Leila and Sushanto in Austria in october 1976, along with the provision of a suitable job for maintenance. But, the author seems to be unaware of the fact that Leila and Sushanto were in Austria, and not in *the United States*. Such are the *faux pas* in this book, caused by the author's reliance on opinionated interviews with people, all and sundry. The springboard of several distasteful observations against George, and many others, in this book, seems to be such unreliable hearsays.

All said and done, despite the shortfalls which I have noted, this book is a valuable addition, which would help readers to understand George Fernandes in perspective. I appreciate the hardwork, the author has put in to write this book. It is worth reading.

# Utilisation Pattern of Remittance in India and Kerala

Dhanya G.S.

*India bagged top position in terms of receiving remittances. In India states like Kerala and U.P has the largest number of emigrants living outside India. Remittance has an important role in the development of several Indian states like Kerala, Goa and Punjab. According to International Organisation for Migration (IOM) international Remittance can be defined as “financial or in-kind transfers made by migrants directly to families or communities in their countries of origin”. India tops in terms of remittance recipient economy and has a total inward remittance of \$ 83 billion in 2020. It is important to study how remittance helps in achieving development as well as growth of economy in terms of consumption. The present study first tries to analyse trend in remittance flow and the utilisation pattern of remittance in India as well as Kerala. Kerala Migration Survey (KMS) 2018, world bank report, IOM were the major data source of the present study. The findings of the study shows that remittance is mainly used for day to day expenses, education, debt repayment, land purchase etc. There is lack of coherent policy measures to harness the benefit of remittance and most of the remittance are used for unproductive purposes.*

## Introduction

The United Nations recommendation on statistics of international migration defines” international migrant as “any person who has changed his/her country of usual residence for at least three months but less than one year) and long-term migrants (those who have done so for at least one year)”. Among the international migrants more than 40 percent were from Asia in 2020, Mexico was the second country of origin followed by Russia. The main country of destination for international migrants is The United States of America, since 1970(Migration and development brief 2022). In the year 2020 five countries emerged as the top remittance recipient countries, this includes India, China, Mexico, Philippines and Egypt. The contemporary flows from India are of two types ,one is the flow of skilled professionals, workers and students with tertiary and higher education qualification migrating to developed countries, second is the flow of semi-skilled and unskilled labourers going mainly to Gulf countries, Malaysia etc (Ministry of overseas Indian affairs, annual report 2012-2013). United Arab Emirates (UAE), United States of America (USA) and Saudi Arabia are the major destinations of Indians for the past two decades (RBI bulletin 2022).

Remittance can be defined as the amount of money in kind or cash, which migrants sent back to their home country for the use of their families and also for themselves (Keeley, 2009). According to the international Monetary fund, “For many countries money transfers from citizens working abroad are the lifeline for development”. Between 2022 and 2030 an estimated \$5.4 trillion USD will be sent by migrant workers back to their community of origin in developing countries (world bank report). Every 16<sup>th</sup> November is celebrated as family remittance day in order to commemorate the hardship undergone by individuals working abroad in order to support family and community with the money they sent back home. According to the United Nations Department for Economic and Social Affairs (UNDESA 2020) the international migrants worldwide was 281 million in 2020.

Remittance plays a vital role in the developing countries. During times of major economic crisis like global recession and covid 19 remittances continued to be resilient, (kpodar et.al 2021). It surpasses even the officially provided assistance for development and remains to be stable than any other source of financing (Ratha et.al 2011). Remittance has a major role in improving consumption. The increased flow of remittance

especially in developing countries helps to remove poverty. This is made possible through increased income and investment in education, health and other kind of assets and also it enables large access to a pool of knowledge (Adams 2011).

For developing countries like India remittance constitute a major source of income. It acts as a cushion or shock absorber for majority of households at times of crisis, the most recent one is the pandemic in 2021 and flood in 2018. According to World Migration Report 2022 there is an overall increase in remittances which amount to \$702 billion in 2020 from \$126 billion in 2000. Even though there were predictions of decrease in international remittances brought by covid-19, the world saw only a slight decline of 2.4 percent from the global total (International Organisation Of migration 2022). Emigration and remittance have major impact in the development as well as macro economic aspects of the country (Singh and Hari 2011). As a source of external finance, the remittance has a pivotal role. It can be considered as an engine of growth as remittances are a part of balance of payment and an increase in remittance can reduce BOP deficit. Through this it produces a good environment for foreign investment in the country (Singh and Hari 2011). The micro level impact of remittance is that remittance helps in smoothening consumption needs of the economy along with increased savings and investments

### **Review of literature**

Singh and Hari (2011) studies how remittance impacted the macro economic and development aspects of Indian economy. For the study variables like remittance data, GDP, PFCE, GDFC, savings, FDI, FII, export, import and balance of trade deficit has been analysed for the period ranging from 1971-2008. The study found that remittances show an upward trend over the last 15 years. The study discusses the significance of remittances in financing external development.

Kannan, Hari (2020) has in their study estimated foreign remittance to Kerala over a period of 75 years. The macro-economic impact on Kerala economy is evaluated through the estimation of remittance impact on consumption and savings. Remittance flow assumed significance in the 1980's when it was equivalent to 10%, this continued till early 1990's that is about 21-22%, but declined since 2014. The relation between per-capita consumption, percapita NSDP and MSI was made. The results shows that when income increases the average propensity to consume declines to the half of the per-capita NSDP and less than half of the percapita MSI. The savings rate in Kerala has increased tremendously since 1990. A higher growth in consumption was maintained between 1980 and 2012 when remittance growth outweighs NSDP and MSI.

Tumbe's (2011) study include a fact sheet regarding international and domestic remittance at the state level and across households using NSSO 64<sup>th</sup> round survey data. The study shows higher international remittance dependency of states in India like Kerala, Punjab and Goa. The domestic dependency was high in states of Bihar, Uttar Pradesh and Rajasthan. Another area of the study includes various uses of remittances in states and its role in impacting inequality in the source region. Kerala has the highest share of remittance that accounts for 40 percent of household remittance. The uses of remittances were highlighted in the paper along with the important aspect of remittance such as financial inclusion.

Mishra (2016) in his study mentions the impact of remittance on reducing poverty and the role of remittance in catalysing smaller business investments. The frequency of sending remittances determines its utilisation pattern, the larger the frequency and lesser amount means that the remittance is used for family maintenance and lesser the frequency and larger the amount then it was meant for investment purpose.

Amba Pande (2018) in her study mentioned the utilisation pattern of remittance by criticising the misutilisation of remittances through unproductive manner. A major portion of remittance money is used for family maintenance that includes food, education, health etc. A major portion goes in to bank deposits. The utilisation of remittance for investment purpose is very low. In the state of Kerala remittance have played an important role for its development. The remittance money was mainly utilised for improving the living standards of the recipient households instead of productive investments.

## Objectives of the study

- To analyse trends in remittance flow in India and Kerala
- To analyse utilisation pattern of remittance in India and Kerala

## Methodology

The study uses secondary data for analysis. The data was collected from various reports of NSSO 64<sup>th</sup> round report, international organisation for migration, journals, working papers and KMS data 2018. The study uses simple statistical analysis for the interpretation of the data.

## Migration Trends

According to Migration and development brief “the South Asia has witnessed a hike in the amount of remittance inflows of about 7 percent there by attaining \$157 billion in 2021”. Sometimes remittance flow is much higher than FDI that is three times higher than FDI. India’s remittance grew after the slow down at the rate of 8 percent (\$89 billion). It is the economic recovery in the United States and financial help extended at time of adverse situations to the families back home that lead to the economic recovery. U.S accounts for one fifth of Indian remittances. According to the estimates of United Nations Department of Economics and Social Affairs “India stood at the top position interms of international migrants in the world, accounting for 18 million Indians living abroad”. India is followed by Mexico (11 million), Russia (11 million), China (10 million) and Syria (8 million). Th countries that host largest number of migrants are UAE, US and Saudi Arabia (World Bank, Migration and Dvelopment Brief 2021).The major states like Maharashtra, Gujarat, Kerala and Punjab have registered highest flow of remittances. The remittances received from abroad in rural area was Rs.393854 and in urban areas it was Rs 412403. The major destination of migration from India is United States, U.K and Dubai and they accounted for half of the total migration. Major destination for emigrants in Kerala is towards Gulf countries.

## Trends in remittance flow in India

**Table 1: Remittance to India since 1990(in US Billion dollars)**

Year	Remittance	Year	Remittance
1990-1991	2.10	2009-2010	51.60
1995-1996	8.50	2010-2011	66.10
1999-2000	12.07	2011-2012	67.60
2000-2001	12.85	2012-2013	70.39
2001-2002	15.48	2013-2014	66.3
2002-2003	16.39	2014-2015	62.7
2003-2004	21.61	2015-2016	65.302
2004-2005	20.25	2016-2017	80.00
2005-2006	24.55	2017-2018	79.00
2006-2007	29.10	2018-2019	83.30
2007-2008	37.20	2019-2020	83.00
2008-2009	51.60		

Source: World bank 2019

The table above shows trends in remittance flow in India. From the table we could see that the flow

of remittance in India shows an increasing trend after 1991 that is the post reform period. In the year 2008-2009, when the economy is hit by depression the remittance flow remains resilient. There are many factors that contributed to the increased flow of inward remittances, in the form of increase in crude oil prices, GDP improvement, depreciation of rupee against dollar and increased flow of remittances at times of disaster in Kerala. At times when world bank forecasted a 7 percent decline in remittance flow remittance remained resilient and showed an upward trend. The personal remittance accounts for 3.17 percentage of India's GDP and it was forecasted that the India's GDP will reach at \$123.88 billion in 2026. The main source of personal remittance is from United Arab Emirates, Saudi Arabia and United States.

**Table 2 : Utilisation Pattern of Remittance in India**

Purpose	2007-08			2008-09		
	Rural	Urban	Total	Rural	Urban	Total
Household Consumption	42.28	40.92	41.61	38.80	43.67	41.03
Education	3.83	3.47	3.65	3.71	3.36	3.55
Repay Debts	1.71	2.37	2.04	1.58	2.50	2.00
Purchase Land	0.35	0.12	0.24	0.32	0.19	0.26
Wedding	0.30	0.11	0.21	0.33	0.31	0.32
Build/Purchase/Renovate a House	2.79	1.88	2.34	2.39	1.15	1.82
Business Related	0.95	15.15	7.93	0.92	2.19	1.51
For Agricultural Production/and allied activities (dairy, fishery, plantation etc)	0.06	0.13	0.09	0.08	0.13	0.10
Deposits in Bank / Savings	5.58	11.71	8.59	5.00	14.50	9.39
Health Related Expenses	4.36	5.86	5.10	4.58	8.58	6.43
Others	37.78	18.28	28.21	42.40	23.42	33.60
<b>Grand Total</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>

Source: RBI press release 2012

From the above table we see that 41.6 per cent (2007-08) households and 41.03 percent (2008-2009) households uses remittances for households' consumption. Majority of remittances are utilised for household consumption both in rural and urban areas. Remittance used for Deposits in Banks/savings was at 8.59 in 2007-2008 and it increased to 9.39 in 2008-2009. The amount of remittances used for health-related expenses both in rural and urban areas stood at 5.10 in 2007-08 and 6.43 in 2008-09. The amount spent on education is very small, it stood at 3.65 percent in 2007-08 and 3.55 percent in 2008-09 collectively in rural and urban areas.

Percentage of households receiving international remittance in 2007-08 was 1.2 in India. With regard to the share of remittance on expenditure pattern, it was found that about 50 percent of household expenditure is met by the international remittance flow (Mahapatroa, Bailey, James and hutter, 2015). When compared to internal remittance recipient households the international remittance recipient households shows a significant difference in their consumption expenditure. The average annual expenditure of international remittance recipient households is higher (Rs70440) than non-recipient households (Rs.45265) (Mahapatroa, Bailey, James and hutter,2015). The mean annual expenditure of international remittance-receiving household is higher (Rs. 70440) than non-recipient household (Rs. 45265).

## NSSO Report on Migration and Remittance Utilisation.

According to NSSO report 2007-08 about 85 percent of international male migrants from rural areas and those engaged in economic activity do sent remittances to their home country and 74 percent of male emigrants from urban areas and those engaged in economic activity sent remittances to their home country. With regard to female emigrants having involved in economic activity, only 25 percent in rural areas sent remittances back home, while for urban areas it is 20 percent.

According to the 64<sup>th</sup> round of NSSO report households uses remittances for more than one purpose. Among those purposes 12 purposes were identified in order to understand the pattern at which the remittances were used for. Majority of remittances are used for the sole purpose of consumption expenditure both in rural and urban areas. It is found that 95 percentage of households in rural and 93 percent in urban areas use remittances for household consumption expenditure. Within consumer expenditure a huge proportion of remittance is used for food items, 76 percent of rural households and 73 percent of urban households spent remittance for food items. The other significant portion of remittance was used for health related expenses i.e., 38 percent of rural households and 36 percent for urban households spent remittance for this purpose. Next area of expenditure at which remittances were used was education (31 percent for rural and 34 percent for urban households). Debt repayment was the next in expenditure category using remittance, about 10 percent of rural households used remittance for this purpose. Savings comes next with regard to remittance utilisation, nearly 13 percent of households in Urban areas uses remittances for savings (NSSO, 64<sup>th</sup> round, 2007).

### Kerala Emigration Trends and Pattern of Utilisation of Remittances

Table.3 Major destination countries of emigration from Kerala.

Country	Thiruvananthapuram	Thrissur	Kochi
Abu Dhabi	22	93	9
Dubai	41	195	34
Saudi Arabia	17	17	43
Kuwait	10	79	11
Muscat	10	41	15
Oman	1	53	5
Qatar	4	139	15
Bahrain	3	18	10
Sharja - UAE	4	163	8
Iraq & Iran			
East Asia		25	
Latin America		1	
Sri Lanka			
USA	1	120	1
UK		62	
Canada	1	3	
Europe (not UK)	1	32	
Africa &	1	14	1

Australia/New Zealand		11	
USSR(disintegrated)		20	
Other (Specify)	1	1	3
Don't Know		7	
<b>Grand Total</b>	<b>117</b>	<b>1094</b>	<b>155</b>

It was at the start of 1970's Kerala witnessed higher rate of emigration. The main reason for the huge flow of emigrant to other countries is mainly due to the discovery of oil followed by oil boom in 1970's. While considering the present status of Kerala emigration, emigration rate shows a declining trend (KMS survey 2018). The number of emigrants fall to 21lakh in 2018, while it was 24 lakhs in 2013 that is a decline of 12 percent has been registered. About 10 percent of Kerala population is exposed to international migration (KMS 2018). Emigration is considered to be a catalyst for a country's development and growth. Kerala is the best example. The demographic dividend in Kerala helps to collect more foreign money instead of domestic production-oriented economy. The higher flow of remittance helps economy to achieve higher per-capita income which stood above the national average.

In Kerala, remittances play a crucial role in the economy, and the state has recorded a substantially high Human Development Index in spite of lagging behind in industrialisation and manufacturing. More than 2,500,000 Keralites have migrated to various countries over the years. A survey by the state government showed that remittances by the diaspora supported at least 5,000,000 people in the state, which has a population of 31.5 million. Inward remittances have increased the level of economic activities and the construction of houses on a large scale. It also helped many to move up the social ladder (Zachariah and Rajan, 2010). The Non-Resident Keralites Affairs Department (NORKA) was set up by the Government of Kerala in 1996.

The total remittance to Kerala during April 2017 and march 2018 was Rs. 85,092 crores (KMS,2018). Malappuram district saw the highest remittance inflow (21 percent) out of total remittance at the state level. Kollam comes second (15 percent) followed by Thrissur(11percent) and Thiruvananthapuram (10 percent). In Malappuram district remittances per household increased from 1,13,865 to Rs.1,81,781. Remittances per household is the highest in Malappuram (KMS data 2018).

While considering district wise emigrants from 2013 and 2018, there was a downward trend, there was a decline of 11 percent from 24 lakh to 21 lakh in terms of total number of emigrants in Kerala. Ernakulam district has shown the greatest decline of 72 percent. The following table shows district wise emigration in Kerala.

**Table : 4 District wise Emigration in Kerala**

<b>Districts</b>	<b>2013</b>	<b>2018</b>	<b>change</b>
Thiruvananthapuram	241727	137007	-104,720
Kollam	199933	240527	40594
Pathanamthitta	141343	109836	-868493
Alappuzha	93096	136857	43761
Kottayam	107931	166625	58694
Idukki	23967	32893	8926
Ernakulam	191373	53418	-137955
Thrissur	230081	241150	11069

Palakkad	70506	89063	18557
Malappuram	455696	406054	-49642
Kozhikode	226499	160691	-65808
Wayanad	22568	30650	8082
Kannur	291321	249834	-41487
Kasaragod	104334	67281	-37053

Source: KMS data 2018

From the table we can see that Malappuram has the highest number of emigrants but rate of growth shows a declining trend. Malappuram district in terms of emigrant flows, is followed by Kannur, Thrissur, Kollam, Kottayam etc.

**Table 5 : Remittance as a share of NSDP in Kerala**

Indicators	1998	2003	2008	2011	2014	2018
remittances	13652	18465	43288	49695	71142	85092
NSDP	53552	83783	140889	159144	196077	440515
Remittance as percentage of NSDP	25.5	22.0	30.7	31.2	36.3	19.3

KMS data 2018

Household remittances shows an upward trend from 2003 onwards. In 2008-09 remittance increased to 30.7 as percentage of NSDP. With the global financial crisis the economy panicked and as a reaction to this there took place a huge flow of remittance back to Kerala in order to help the family back home. The hike in remittance continued since 2014. Even though the remittance increased in absolute terms in the year 2018 from Rs.71142 to Rs85092, its share in NSDP showed a declining trend. This decline is mainly due to much higher growth in annual state income than in rupee remittances.

According to KMS survey total remittance is calculated by adding four components such as cash remittance, total money value of goods in the form of gifts, remittance which is meant to buy house car or land or any other properties, and money value for the special remittances. Due to unavailability of information from all the respondents an estimate of household remittance is made at Rs.30717, this amount stood as small fraction of the total remittances (KMS 2018). While considering trends in the household's remittance to Kerala it was shown (in KMS data 2018) that in 1998 the estimated remittance flow stood at 3530 crores and in 2003 it stood at Rs 7965, while in 2008 it was at 12511, in 2011 it stood at 15129, in 2013 it was 24374 and in 2018 it increased to 30717. Malappuram district has the highest percentage of households that received remittances in 2018.

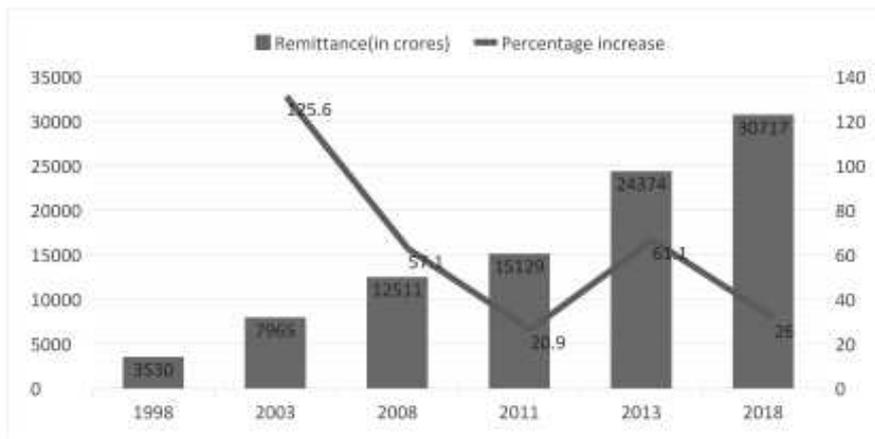
**Table : 6 Trends in household remittance from 1998 to 2018**

Years	Remittance (in crores)	Percentage increase
1998	3530	
2003	7965	125.6
2008	12511	57.1
2011	15129	20.9
2013	24374	61.1
2018	30717	26.0

Source: KMS 2018

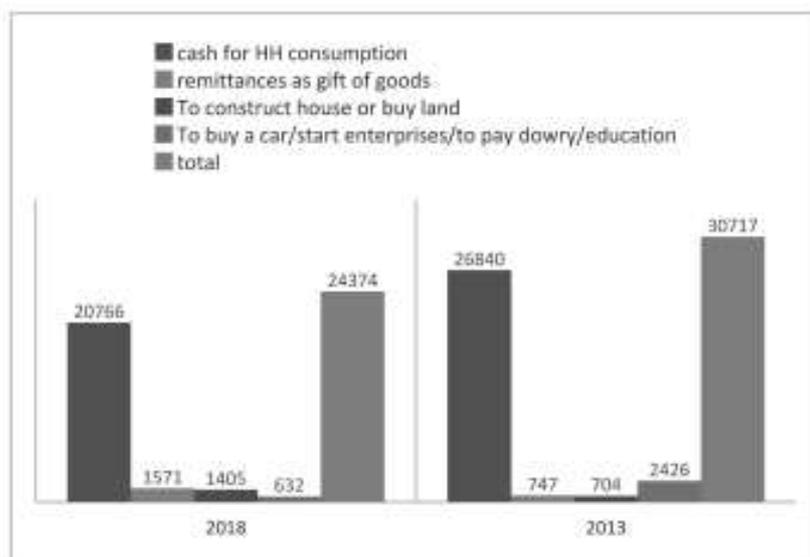
From the table we can see that rate of growth remittance came down in 2008, 2011 and 2018. The main reason for the declining trend is due to decrease in outflow of migrants. The other major reasons include nationalisation policies adopted by the foreign countries like Nitaquat, which made it difficult for the emigrants to get employment.

**Figure 1: Percentage increase in remittance**



From the figure we can see that the percentage increase in remittances during 2003 is the highest when compared to all others years.

**Figure 2: Components of household remittances**



Source: KMS data 2018

From the above chart we can say that major portion of remittance was meant for household consumption. The upcoming trend is that more people are interested in investing in the form of car purchase, starting enterprises, gold dowry and education.

**Utilisation of Household Remittance in Kerala**

According to KMS survey a lions share of remittances was used for daily living expenses, this accounts for 38 percent of total expenditure. About 19 percent of remittance is held in the form of cash in hand/bank and 12 percent are used to pay back debts and nearly 8 percent are used for the education of the children. The table below shows the utilisation pattern of remittance by households in Kerala in 2018

**Table 7 : Utilisation pattern of household remittance in Kerala**

	Sample	Percentage	Rs (in crores)
Day to day household expenses	169411319	37.6	11560
Children's education	34478571	7.7	2353
Payback debt	55952055	12.4	3818
Purchase house	11355004	2.5	775
Repair of house	26070440	5.8	1779
Purchase/improve land	10928900	2.4	746
Start new businesses	2243000	0.5	153
Donation to temple or church etc	4782560	1.1	326
Purchase gold	19566058	4.3	1335
Cash in hand/bank	86310973	19.2	5890
Others	29060470	6.5	1983
<b>Total</b>	<b>450159350</b>	<b>100.0</b>	<b>30717</b>

Source: KMS 2018

#### Possession of consumer durables

According to KMS data Non-Resident Keralites possess more consumer durables. The table given below shows the percentage of households in possession of consumer durables (NRK and Non-NRK).

**Table 8 : possession of consumer durables**

Properties	NRK	2018 Non-migrant	All	NRK	2013 Non-migrant	All
Motor car	32.0	23.6	24.9	22.3	15.9	17.7
Taxi, truck	7.4	7.1	6.9	6.6	6.4	6.5
Motor cycle	56.4	49.0	49.0	41.8	34.6	36.7
Mobile phone	94.4	91.4	88.3	92.7	86.8	88.6
Television	89.0	90.9	86.4	90.5	86.0	87.3
Refrigerator	84.6	63.9	67.0	72.0	48.5	55.4
Computer/laptop	20.3	15.3	16.0	26.6	18.0	20.5
Microwave oven	12.9	7.2	8.5	11.1	6.8	8.1
Net connection	18.5	13.4	14.3	14.7	10.0	11.3
Washing Machine	46.6	30.9	34.0	NA	NA	NA
Air conditioner	17.0	8.2	10.3	NA	NA	NA
Inverter	21.0	10.8	13.2	NA	NA	NA
Land phone	NA	NA	NA	53.1	37.7	42.1
MP3/DVD/VCD	NA	NA	NA	54.1	43.5	46.6

Source: KMS 2018

From the table it is evident that non-resident Keralites possess more consumer durable than non-migrant households. Majority of Non-resident households possess mobile phones (94.4) than non-NRI which possess

91.4 percent respectively. Second comes the television, for NRK it is 89.0 and for non-NRK it is 90.9, here more percent of non-NRK have television than NRK's. Third comes the refrigerator, NRK's possess more of refrigerators than non-NRKS.

## Conclusion

Remittance can be considered as life line for the Kerala economy as a whole as the economy is highly dependent on remittance income. Remittance helps in human capital development through increase in expenditure in education and health. With respect to trends of remittance flow in India it was shown that remittance stood resilient at times of serious economic downfalls even though there saw a decline in remittance flow in some years. Regarding the trend in remittance flow, India still remained as top remittance recipient economy in the world even though its share to GDP is very small. India's remittance shares to GDP stood at 3.1 percent (world bank report 2021). With respect to utilisation pattern 41.6 percent households uses remittance for household consumption followed by Bank deposits, health related expenses and education. Major remittance recipient state in India is Kerala. Kerala economy is highly reliant on the remittance flow, it outweighs even the foreign direct investment and acts as cushion at times of difficulties like depression, flood, pandemic etc. The percentage share of remittance in state GDP stood at 13.3 percent and remittance received per households stood at 4.84 percent in 20011-12 to 2019-20(Kannan, Hari,2020). According to Kerala economic review 2018, a lions share of remittance is used for daily household expenses (37.6 percent) followed by deposits in banks or cash in hand and paying back of debt.

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## **A Few Thoughts on Secularism and Democracy in India**

**Saurav Kumar Rai**

**Rajan Gurukkal (ed.). *Issues in Secularism and Democracy: Essays in Honour of K.N. Panikkar. Three Essays Collective.*  
Gurugram. 2022. x+63 pages. Rs. 350/-**

K.N. Panikkar is an important public intellectual of our time. An uncompromising fighter for socialism, democracy and secularism, he remains active both academically as well as at various other fronts. This little book is based on lectures delivered at a celebration in honour of Panikkar's 85<sup>th</sup> birthday. Edited by Rajaj Gurukkal, it contains four essays by equally important public intellectuals of the time – Romila Thapar, Irfan Habib, Prabhat Patnaik and Rajeev Bhargava.

The opening essay by Romila Thapar titled 'Secularism and Democracy' discusses two major issues. The first relates to whether the idea of secularism is alien to the Indian past and what we call the Indian tradition. The second discussion focuses on the centrality of secularism to modern democratic society. According to Thapar, the idea of secularism implies that religion should not determine the socio-political organization of society, its governance and its laws. It does not mean denial of religion as a legitimate belief system; rather it is the condition where institutions of civil society such as education, etc. as well as that of state are divorced from religion. So far as pre-modern India is concerned, argues Thapar, differentiation between religion and civil society was not alien to Indian thinking, but at the same time it was by no means distinct or characteristic to it (p. 5). The pre-modern Indian society always abhorred monolithic uniformity in religious affairs and displayed a rich tapestry of beliefs. In this course it acknowledged co-existence of various dissenting groups. Still none of the dissenting groups (except Charavaka and Lokayata which promoted atheism) argued in favour of complete dissociation of religion from institutions of civil society. Similarly, even the teachings of Bhakti saints like that of Kabir and Ravidas, argues Thapar, were distinctly important expressions not of secular ideas, but perhaps hinting at them (p. 7). However, according to Thapar, modern democratic society cannot thrive without staunch commitment to secularism. This is largely because democracy entails certain basic rights of every citizen, which is not possible until and unless complete autonomy from religion is obtained in matters governing the state and the civil society. It is here that Romila Thapar criticizes the very idea and project of Hindutva which not only undermines the fundamental characteristic of Indian tradition which is so much rooted in peaceful co-existence of multiple sects, but also threatens democracy by bringing religion in the domain of politics and public affairs.

The second essay by Irfan Habib cursorily delineates the intellectual heritage of national movement. Habib argues that many of the intellectual strands of national movement firmly believed that secularism alone could form the basis of national unity in a multi-religious society like that of India. Here Habib has delineated continuous evolution in the thoughts of Mahatma Gandhi as well. According to Habib, by 1940s, Gandhiji modified many of his ideas and positions taken in his seminal text *Hind Swaraj* largely to ensure the unity of Indian society. That is why, Habib suggests that it is particularly important for us to focus on his last days, namely, his 'finest hours', his crusade against communalism (p. 20).

The next two essays contained in the volume deal primarily with post-independence period. The essay by Prabhat Patnaik explores the political economy of the subversion of three fundamental tenets of Indian

constitution viz. democracy, secularism and socialism. According to Patnaik, the dawn of neo-liberalism on Indian soil in mid-1980s laid the foundation behind this subversion. This was the era when the sovereignty of the people got gradually replaced within a neo-liberal regime by the sovereignty of international capital. Hence, argues Patnaik, no matter which political party forms the government within the country, no matter how sanguine its pre-election promises to the people, as long as it does not take the country out of the vortex of global financial flows (and getting out of this vortex entails serious transitional costs), it cannot afford not to accede to what globalized capital demands (p. 27). Patnaik also links the rise and growth of neo-fascist regime in India to the crisis in neo-liberal regime. However, according to Patnaik, the current neo-fascism differs from classical fascism in one fundamental respect. It is enconced within the regime of globalization of finance and has to adjust to the hegemony of globalized finance, unlike in the 1930s when fascism had emerged in the context of national capital (p. 33). That is why, any attempt by the neo-fascist political regime to get the country out of the economic crisis, faces exactly the same hurdle that its non-fascist predecessors had faced. As a result, argues Patnaik, it is conceivable that neo-fascists may even lose power temporarily, if the elections are not rigged. But merely their electoral defeat will not resolve the extant economic crisis of neo-liberal regime and hence the neo-fascists will keep returning to power again and again.

It is here that Patnaik proposes a New Deal in his essay to pull the country out of this politico-economic vortex. This New Deal is premised largely upon a set of fundamental economic rights such as right to food through a public distributions system, right to employment, right to free universal healthcare through a national health service, right to free universal education at least up to the secondary level, and right to a living old-age pension and adequate disability benefits (pp. 37-38). These, argues Patnaik, have to be financed through levying wealth tax on the top 1 per cent of the population.

The essay by Rajeev Bhargava similarly explores various stages of crises in Indian democracy which eventually brought the Hindutva forces at the centre. Bhargava interestingly argues that the Modi-led BJP did not come to power on the basis merely of religious nationalism. Instead it benefitted from the accumulation of populist elements in Indian democracy which constituted robustly democratic, demanding, interrogating, protesting, anti-government public. However, once the right wing elements came to power striding on populist waves they consolidated their hold by utterly distorting the shape of the public sphere. They also introduced deeper structural crisis in democracy by resorting to complete disconnection between elections and governance. Electoral politics is no longer affected by actual socio-economic decisions and policies of the government and their outcomes; rather it is reduced to polemics, buffoonery, posturing and personal charisma.

Overall, the present volume enables its reader to understand various issues in secularism and democracy in India from ancient to modern times. It is a must read for every conscious Indian citizen.

# Exploring Ecofeminism for Environmental Sustainability: An Action-based Approach

Namitha K. Bhat &  
Umajyothi V.

*Nature and women are closely connected in the sense that women work more in their natural habitat such as farm/land in order to raise their family and thus enhance their livelihood. Thus, environmental sustainability and women has a direct relationship. The idea of ecofeminism asserts a direct link between oppression of environment and subordination of women in a patriarchal society. Women tend to depend upon men despite of being the pillar of their family. The misappropriation of environment for economic and political gain has a devastating effect not only on environment but also on women. Women on the other hand are striving to raise their voice against such destruction through various movements and finding possible solutions to cure the injury already caused on the environment.*

## Introduction

Environment Sustainability is considered to be the main indicator for the survival of mankind. Sound and safe natural resources such as air to breathe, fresh water to drink, place to live are needed for the people, which are free from malicious and hazardous toxic substances in it. As every country in this century is concerned with economic development along with industrial revolution, we have witnessed more and more environmental damage caused including rapid growth in energy consumption, large scale pollution, deforestation, climate change etc. Now it is the need of the hour to act to reduce such impairments through sustainable practices which help to build thriving communities to make our future secure.

According to the United States Environmental Protection Agency environmental sustainability can be defined as ‘meeting today’s needs without compromising the ability of future generations to meet their needs’.

Inspite of many environmental regulations, the damage of environment is seen to be inevitable. The stage of prevention of this damage is nearly over and we are striving to cure the damage. It is in this context that we need to look into some of the basic necessities which will help to prevent such damages and preserve the environment.

Women play a vital role in the prevention as well as the cure of environmental damage. They are considered to be close to nature than men. The main reason behind such closeness is their nurturing behaviour, not only towards their dear and near ones, but also towards the nature. The potential skill of women to face and solve different issues is different from that of men, which is quite advantageous in the case of environmental protection also. The idea of Ecofeminism thus becomes very important which follows the notion of environment protection through women empowerment. The factors of ecofeminism itself revolves around environmental sustainability with certain ideologies. There are many ecofeminist movements in the world which highlights the struggle of women to preserve their natural habitat which not only helped them to be empowered but also conserve the habitat for their future generations.

## Objectives

1. To understand the idea of ecofeminism as an explanation for revamping the environment.
2. To examine major ecofeminist activism turned movements across the world for the protection of ecology.

## **Ecofeminism: An Overview**

Ecofeminism as a term and as a movement was coined by the French author and environmentalist Françoise d'Eaubonne in the year 1974 in her book "Feminism or Death". The term Ecofeminism shows all forms of the connection, harmony and dependency between ecology and women. It uses the basic tenets of feminism such as equality between genders, strong opposition of patriarchal form of society, respect of organic processes, holistic associations and the virtues of intuition and collaboration. D'Eaubonne gives an ultimatum and argues that the environmental crisis that is taking place everywhere is due to the hegemonic male society or the so-called patriarchal system followed. She argued that this form of societal structure is the pathway of deadly destruction of both people and planet and the solution for this is ecofeminism. It is the interlinked subordination of women and earth which formed the root cause of environmental crisis and women's subjugation around the world. Modernisation, globalisation and industrial civilisation led to environment crisis and this created a way for the formation of Ecofeminism thought and movement.

### **Main Principles of Ecofeminism**

The main aim of Ecofeminism is to describe the interconnection between gender domination and ecological domination and thereby attain liberation through theories, principles and movements. There are certain female and ecological principles which can pave the way for such liberation. Karren (2002) in her writings have given emphasis on both these principles, thereby comprehending core assumptions; which includes four aspects:

- there is an association between domination of women and domination of environment.
- this association need to be understood clearly to know their domination.
- there should always be an ecological perspective in the theories and actions of feminism.
- there should be a perspective of feminism in the resolution of environment problems.

Ecofeminism can be considered as female due to its female perspective and orientation. The role of women in household as well as in public domain is often undervalued. Ecofeminism as a study deals with the discrimination and domination faced by the women in the society; and also tries to find out the root cause of such domination, hierarchical discrimination and gender inequality faced by the females. Through such gender perspectives, not only the relationship between people is realised, the internal association between the domination of women and domination of nature can be examined.

Ecofeminism can also be considered as ecological due to its perspective associated with ecology. Ecology implies a study of environment; and helps us to understand how the organisms survive and live in their respective unique physical environments. It also studies the mutual dependence of these elements of ecosystem, how they balance and interact to survive. It also reflects the interaction and differences of individuals within the system. As a study of ecology, Ecofeminism acknowledges that all lives in the nature are linked to each other and the values of these lives lie in the diversity and abundance of life forms. Such form of mutual understanding between the lives emphasises the divergence between people and the nature and avoids monism and dominance relationship. Such multidimensional relationship does not acknowledge the individual view, but gives importance to the ecosystem as a whole.

To conclude, ecofeminism contributes a theoretical answer to the question of 'domination-liberation'. It criticises the perspective of social gender ecologically and explains the association of nature and gender domination while discarding the social and cultural patriarchal system in the society.

### **Origin of Ecofeminist Movement**

Until the advent of Ecofeminism theory in 1970s, the women's liberation movements and ecological movements were studied as two different problems. It was due to the origin of ecofeminism as theories and

movements that the problems related to ecology and women were combined and made possible for research. Ecofeminism became a significant thought and movement in 1980s.

To analyse the origin of Ecofeminist movement, there is a need to explore ecological movements known as Deep Ecology and Social Ecology. Deep Ecology has two basic principles: self-actualisation theory (the complete realization of the actual potential of a person and the full development of his abilities and appreciation for life- Maslow hierarchy of needs Theory) and ecosystem egalitarianism ('the reinterpretation of the future- research variable, level of crowding, so that general mammalian crowding and loss of life-equality is taken seriously, not only human crowding': Naess). Social Ecology explains the cause of ecological crisis as hierarchy. It gives importance to the social dimensions of the society. Hierarchy indicates the existence of two or more groups, in which one group has the power to dominate other groups. Social Ecology analyses the systems and practices in the society which in turn makes hierarchy and competition sustainable. Social Ecology explains that in a government-led society and in a patriarchal society, the basic method to solve domination is through the eradication of 'hierarchy and patriarchy to create a natural society' (Bookchin, 2008).

Ecofeminist belief has criticised both Deep Ecology and Social Ecology in the sense that Deep Ecology only takes into consideration the similarity and association between human beings and other living beings; it overlooks the distinction and the features between the two also. While, Social Ecology encompasses the domination from human domination on humanity to human domination on ecology, it also disregards the differences and features of human domination between non-hierarchical humans.

Ecofeminism brings together the theoretical essence of both feminism and ecology and is the combined product of ecological movement and women's liberation movement. As Ecofeminism is the joint effect of women and environment movements, it focuses on the ecological problems from a female point of view. It also applies female principles to ecological movement and promotes to develop women liberation from ecological principles.

Ecofeminism as a movement evolved in the West as a creation of peace, women's liberation and environment movements of the late 1970s and the early 1980s. Though the term was introduced by French Writer Françoise d'Eubonne in the year 1974, it was developed further by several ecofeminist writers and supporters such as Ynestra King, Val Plumwood, Greta Gaard, Susan Griffin, Wangari Muta Maathai, Vandana Siva, Beena Agarwal, just to name a few. It became a movement later in 1980, with an organisation and in the same year held the first ecofeminist conference - "Women and Life on Earth: Ecofeminism in the 80s", at Amherst, Massachusetts, US (Spretnak 1990).

According to Ynestra King: "Ecofeminism is about connectedness and wholeness of theory and practice... (it sees) the devastation of the earth and her beings by the corporate warriors, and the threat of nuclear annihilation by the military warriors as feminist concerns. It is the same masculinist mentality which would deny us our right to our own bodies and our own sexuality and which depends on multiple systems of dominance and state power to have its way" (King 1983).

If we look into the history, we can realise that every time whenever any change happens in the world which led to environment destruction, such as atomic attacks, nuclear developments which harms environments and living beings, developments in science and technology which paved the way for the destruction of mankind and environment; women were in forefront to protest. Such events and protests actually discovered the association between domination of women and domination of nature. It made us understand that liberation of women goes hand-in-hand with the liberation of nature. The philosopher Karen Warren (1987) rightly remarks: "Ecofeminism builds on the multiple perspectives of those whose perspectives are typically omitted or undervalued in dominant discourses, for example - Chipko women - in developing a global perspective on the role of male domination in the exploitation of women and nature (Datar 2011). An ecofeminist perspective is thereby...structurally pluralistic, inclusivist and contextualist, emphasizing through concrete example the crucial role *context* plays in understanding sexist and naturist practice" (Rao,2012).

## **Types of Ecofeminism**

After the advent of Ecofeminism, several schools emerged with their own ideas and ideologies. The ideas of earlier schools such as radical and cultural ecofeminism were criticised by other schools and as a result separate sub section schools were developed. All the schools focused at the reasons behind twin domination of women and nature and suggested solutions for their liberation.

**1. Radical Ecofeminism:** Radical Ecofeminists believe that it is because of the patriarchal nature and structure of the society which led to the degradation of both nature and women. While men are thought to be capable of establishing order in the society, the role of women and nature have been linked with negative and commodifiable traits. Such discrimination itself encourages the manipulation of women and nature for cheap labour and resources.

**2. Cultural Ecofeminism:** Cultural Ecofeminists believe that the discrimination of nature and women is due to their social culture; which itself is done by male. According to them, women tend to have more intimate relationship with nature because of their gender roles (eg. Family nurturer, food provider etc.) and their biology (eg. menstruation, pregnancy, lactation etc.). Such relation tends women to have more connection with the environment and they will be more sensitive towards the sanctity and degradation of environment.

**3. Spiritual Ecofeminism:** The emergence of spiritual ecofeminism is connected with the archaeology. The discovery of matriarchal culture added more knowledge to spiritual ecofeminism. They believe that God and its religion are patriarchal in nature. So, in order to prevent the women's position and environment from getting degraded, they encouraged the Goddess Psychomotor. They thought this technique as their turning point of revival. They gave importance to the worship of Goddess, encouraged women and nature as the sacred religious beliefs and replaced politics with religions. Other ecofeminists, however, criticised spiritual ecofeminism in the context that they are following a mythical way without considering the real social and ecological problems of the world.

**4. Social Ecofeminism :** Social Ecofeminists criticise the logic of spiritual ecofeminists and are considered to be the left-wing of ecofeminism. They admit that the economic and political conditions in the society are the root causes of gender and nature domination; and that if changes are made in eco-political set up, major issues can be solved. Social Ecofeminism emphasises to eliminate the existing patriarchal system and all forms of hierarchy from the society so as to yield nature-women liberation. For this, socio-economic reforms are to be made.

**5. Socialist Ecofeminism:** This school advocates that the twin domination of nature and women is caused due to the dual oppression of private ownership and patriarchy. There are evidences from history that the private ownership increases men's interests which in turn surges men's domination over women. It can also be seen that the materialistic basis of capitalist system led to the formation of patriarchy and patriarchal form gave predominant power to men to rule over women. So socialist revolution by eradicating capitalist patriarchy is needed to solve this issue. By analysing the theoretical aspects of socialist ecofeminism, twin domination of nature-women can be solved practically.

## **Ecofeminism as a Movement for Environment Sustainability**

Several academicians/writers of ecofeminism have argued Ecofeminism as a movement-it can be a socialist movement. There are several historical and noteworthy ecofeminist movements in the world which can justify this and which led to a drastic positive change in the position of women as well as in the condition of environment. Writers such as Nash (1989), Salleh (1992), Cuomo (1991), Lahar (1991) have described ecofeminism as in their respective works. Likewise, Eisler (1990), Quinby (1990) have described ecofeminism as a Socialist movement. Several actions from the part of women to protect environment have gained momentum and later became socialist movement.

## Love Canal Movement- USA

Love Canal Movement is associated with Love Canal Tragedy in the area near Niagara Falls, New York. This tragedy can be quoted as one of the examples of violation of environment rules; which involved hazardous chemical waste pollution not only causing serious damage to the flora and fauna of the region, but also to human health.

Love Canal was dug as part of hydroelectric power generation in 1890s, but was left unused for decades. Later it became a dumping centre of hazardous urban and chemical waste generated during World War II. This land along with Canal was purchased by the Hooker Chemical Company in 1942. The Company did land lining using clay and dumped hazardous chemical wastes of approximately 21000 tons using barrels and covered them with more clay. Later in 1953, this land was purchased by the Niagara Falls School Board. The surrounding area was constructed as housing area.

As the School was under construction, the clay (used for land lining) was breached, which resulted in the damage of metal barrels causing the leakage of chemical waste to the surrounding area. This (slowly) harmfully affected the trees and gardens of the area, bicycle tyres/rubber soles of children's shoes disintegrated into noxious puddles; thus, saturating strong unbearable smell in the air. The residents complained about this from late 1950s throughout 1970s. This leakage in fact affected the health of residents with high rates of miscarriages, birth defects, chromosome damage etc.

In August 1978, Love Canal Homeowners Association (LCHA) was established as a voice of community to solve the environmental crisis of the area. LCHA consisted of around 500 families residing in the Love Canal Landfill. These families included the blue-collar workers with an average annual income of \$10,000-\$25,000, working in local chemical industries. This association had another group, viz, the Love Canal Parents Movement which was established in June by Mrs. Lois Gibbs. She was a resident there and her children were attending in the 99<sup>th</sup> Street School. She was unaware of dumping at first but began to notice the changes in environment and gained information about the issue from news articles on the land filling and effects of hazardous wastes to the school and surrounding region. Reporter Michael Brown from the Niagara Gazette reported this issue of chemical seepage in the year 1976. He gathered samples for testing and found out the impact of hazardous chemicals in the region. Mrs. Gibbs, with the information gathered became very concerned for her family's health. Her son also had severe health issues such as epilepsy, asthma, reduction of white blood cells in the blood etc. She approached the school authorities with notes from two physicians to transfer her son to another school; which was rejected by the authorities by stating that if it is not safe for her child, then it will be unsafe for other children also. She became more concerned and began to enquire with other parents regarding the health issues of their children and it was shocking to conclude that almost the entire community was affected with the poisonous chemicals.

Mrs. Gibbs then started to develop strategies with the help of her neighbours and started the association LCHA. Thus, the grassroot movement was formed to fight for their families and home and all the people from neighbourhood offered all sorts of help to her. She also came to be known as the Mother of Superfund. She led the association to battle against the local, state and federal governments. Her organisation conducted several rallies across the State, raised funds, held research and collected information regarding the harmful effects of those chemicals, they also organised public lectures and speeches on the ill effects of the carcinogen chemicals on both human beings and living organisms of the earth. They also sought help from the media to defend their rights and confront the bureaucratic government and forced them to relocate the families of Love Canal. This continued for two years and their tireless efforts resulted in their success, as President Jimmy Carter announced that the government will purchase the Love Canal Land at the fair market value- a combined value of \$15million. The federal government then relocated more than 800 families from the Love Canal land and made arrangements for the cleaning up of the land.

Through this movement, Mrs. Gibbs is considered as Human Rights Hero and thousands of people

across the country seek advice and suggestions on the problems related to toxic hazardous chemical wastes in their areas. As a result, she established the Citizens Clearing house for Hazardous Waste in 1980, which later became the Centre for Health, Environment and Justice.

The organisation, in fact, advanced other 'environment justice' movements in places like Warren County, North Carolina and PCB landfill. Mrs. Gibbs work was very much appreciated by nationals as well as people across the world. Her continuous strive paved the way for the creation of the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) in 1980 and the Emergency Planning and Community Rights to Know Act in 1986. She along with her organisation have helped many grassroot groups in eradicating pollution causing chemicals and preventing such landfill sites to develop. She is also keen in providing all possible help to the needy and leads several campaigns to educate citizens for the necessity of clean, healthy and hygienic environment and giving priority to the health and safety of their children.

### **Chipko Movement- India**

Another striking ecofeminist movement can be quoted from India viz, Chipko Movement is considered to be one of the biggest movements to conserve forests in India. This movement took place because of the increase in floods and landslides in the regions of Uttarakhand, which happened due to the wide spread deforestation in the name of urbanisation. The most affected due to this deforestation were women of the region, since they were in charge of cultivation, livestock and their family. This movement originated in the year 1973 in the Utttar Pradesh's Chamoli district(now Uttarakhand) for the purpose of protecting trees and maintaining ecological balance in the region. This movement, in no time spread to the other regions of North India.

The name 'Chipko' means 'to embrace' and the movement involved hugging trees by the natives especially women, to protect them from being cut down. They also encircled the trees to prevent them being hacked.

The original Chipko Andolan (Movement) dates back to 18<sup>th</sup> century (260 years back)and is associated with Rajasthan's Bishnoi Community. This movement was headed by Smt. Amrita Devi with the help of villagers to protect trees, which was their source of livelihood. King of Jodhpur, Maharaja Abhay Singh ordered his soldiers to cut down the trees to build a palace. The soldiers in an attempt to fell down the trees had to encounter the brave Amrita Devi who did not allow them to cut the trees. In order to protect the trees, she grabbed a tree, which angered the soldiers and, in a fist, they attacked her causing her death. A group of 363 people from 84 different villages encountered the same fate as her while protecting the forest. After this incidence, the regretful King ordered to stop the cutting down of trees and later apologised to Bishnois. He even ordered to stop deforestation in the region and banned hunting in the forest nearby. This original movement was known as 'angalwaltha', the Garhwali word for embrace, later named as 'Chipko', the word adopted from Hindi language.

The modern Chipko movement started after 1963 China border conflict. The State's vast forest resources triggered many foreign logging companies to cut down the trees for infrastructural development. But the natives depended on the forest for food and fuel. The vast deforestation led to widespread flood and landslides. One more reason added fuel to the fire. The villagers were angered with the government policy which did not give permission to the locals and farmers to use the trees for fuel or fodder and for other purposes. But an Allahabad based sports manufacturing company was given permission to use the trees to make sports equipment which happened to provoke the natives and thus the movement was started. This movement was led by the environmentalist and Gandhian social activist Chandi Prasad Bhatt, under the cooperative organisation, Dasholi Gram Swarajya Sangh, near the village of Mandal in 1973. Bhatt is considered to be the pioneer behind the modern Chipko Movement. But this movement can be called ecofeminist movement because majority of the protesters included women, not only from the Mandal Village but also from the neighbouring villages. Some of the women leaders from different villages who led the movement included Gaura Devi, Suraksha Devi, Sudesha Devi, Bachni Devi, Virushka Devi and others.

The movement gained momentum under another environmentalist and Gandhian activist, Sunderlal Bahuguna, who protested against the cutting down of trees in Uttarakhand and helped to bring the movement to prominence through a 5000 Km. trans-Himalaya March from 1981 to 1983 seeking support from villagers throughout. He was closely associated with Smt. Gaura Devi also in this movement.

Gaura Devi, who also is considered to be a forerunner of this movement, was a native of Reni Village, near Alaknanda River, lived with her only son and their livelihood completely depended upon the food and wood from the forest nearby. Upon hearing the news of felling trees of the forest by the loggers, she along with 27 other women of the village decided to protest it by confronting them, they challenged the loggers to shoot them instead of cutting the trees. They considered the forest as 'Vandevta' (God of Forest) and their 'Maika' (mother's house). They raised the slogan 'Our bodies before our trees'. After sometime, women from other villages also joined them. They started the campaign by hugging the trees, despite abusive behaviour and menace from the loggers. They guarded the trees day and night, men also joined them in this course; thus, compelling the loggers to leave the place. In the wake of Chipko Movement Gaura Devi was elected as the leader of Mahila Mangal Dal (Women's Welfare Association) of the Village.

Another protest was induced after this incident. The strike occurred due the action of the government in which more than 680 ha forest area was auctioned for Rs.47 lakhs to Jagmohan Bhalla, a contractor from Rishikesh. He tried to chop the trees using his labourers. But women of village came to forefront against this and the loggers were not even able to enter the site. This event became a turning point of Chipko Movement and the State government was forced to set up a 9-member Committee to conduct a study about these incidents. The Committee was chaired by Delhi-based Botanist Sri. Virendra Kumar and the members included Govind Singh Negi (MLA-CPI), Chandi Prasad Bhatt, Govind Singh Rawat (head of Joshimath). The Committee reported a 10-year ban on commercial forestry in Reni and nearby 1200 sq.km. of the upper catchment of Alaknanda River. The ban was again extended for another 10 years in 1985.

There was another significant step leading to the formation of Van Nigam, a state-owned forest corporation, which aims at handling all sorts of forest mistreatment from anyone.

### **Green Belt Movement-Kenya**

Professor Wangari Muta Maathai was awarded Nobel Peace Prize in the year 2004 for her contribution and achievements in the movement which took initiative to plant millions of trees in Kenya and parts of Africa. The main aim of the movement was to restore ecosystem, empower women, promote environment sustainability and sustainable livelihoods and endorse democracy. Professor Wangari Maathai, born in the rural village of Ithite, Nyeri, Kenya in 1940, to peasant parents. Even though she excelled in her studies, it was very difficult for her family to support her in providing proper education. But with her brother's help and through consistent persuasion, she could graduate from high school. She later received scholarship to attend Mount St. Scholastica College (now Benedictine College) in Kansas, USA and in 1964, she received her Bachelor of Science degree in Biology. Later she completed her Masters in Biological Science from the University of Pittsburg. She was a research assistant at University College of Nairobi. When she reached the University to join the job, she was informed that the job was given to someone else. She believed that this happened because of the gender and tribal bias. Later she received another job opportunity as research assistant in the University of Giessen, in Germany. She was able to complete her doctoral research in 1971 from the University of Giessen and University of Munich, becoming the first Eastern African woman to complete PhD in veterinary anatomy.

In mid 1970s Maathai, while visiting her native place was flabbergasted at the ecological changes happened there- the drying up of water sheds, tendency of disappearance of streams, slow transformation of land into desert. Upon enquiry, she found that the ecological changes at her place was due to deforestation-forests being cut down for the advancement of commercial crops and fast-growing exotic trees that resulted in the degradation of water system as well as soil. She gathered information from her fellow female villagers

and came to the conclusion that the most affected category of this ecological change was that of women in the village who completely depended upon nature for the nurturing of family. The linkage between environmental degradation and the necessity of the community was soon drawn.

Maathai was aware that if such degradation is to be reduced, the first and foremost step should be the enhancement of nature through planting of trees. This further will help replenishing of the soil, later protect watersheds and drying up of land. She at first set up a plant nursery in Karura forest, Nairobi. She gave proper training and other facilities to plant trees and grow seedlings under different conditions to the village women. These women began to grow seedlings and plant trees accordingly. At the same time, Maathai started giving awareness to the people by attending various agricultural shows, exhibitions etc. One such event was that of Annual Agriculture show of 1975, in which she introduced the programme by bringing the seedlings and saplings for sale. Many people were interested in the Programme, but she realised that unless follow-up was made, there will not be any result in her plan. She was not ready to give up and with the support from National Council of Women of Kenya, she established Green Belt Movement in 1977. At first the Government foresters did not have the trust that the uneducated rural women can bring about such changes and they can grow forest with their own effort. Those women formed small groups, started their toil by collecting different variety of seeds and saplings from existing forest part and planted those in the available small tins and cans and broken cups. They made proper arrangements for the further growth of those plants and planted them on private lands later. Upon watching their hard work, Maathai decided to pay an amount of less than \$10 cents (a nominal amount) to these women who were unemployed and which made them to earn a few for their family. This actually made these women independent and gave strength to express their views in their households and communities.

The hardwork of Maathai was recognised and her GBM received a significant fund from United Nations Development Fund for Women (UNIFEM) in the year 1981. This paved the way for expanding her programme and support women involved in this movement. In 1986 she received support from United Nations Environment Programme and the GBM was expanded across the region and formed Pan African Green Belt Network. This network aims at providing training and hands on experience to the grassroot environment and development projects. A number of countries including Ethiopia, Tanzania, Uganda, Rwanda and other African Countries joined the project. Over the years, GBM has upsurged their activities and focus was also given in other areas like the cultivation of nutritious and indigenous foods, low tech but effective ways to harvest and store rainwater, entrepreneurship training and giving awareness on reproductive health and HIV/AIDS prevention. In early 1990s the GBM also started a civic and environmental education programme. The aim of the programme was to create connections between the personal actions of the people and the problems they encounter in the environment and society. With the help of this programme, they will be able to overcome those hindrances and move forward without any fear or troubles.

Through her movement, she held many campaigns to save Kenya's green spaces and forests. She even held campaign against the ruling party of Kenya in order to protect Uruhu Park, Nairobi and she along with the GBM activists had to face serious consequences like confinement to bars, serious death threats etc. With determination and hard work, they overcome the crisis and were even able to legalise the opposition political parties. Even though the corrupt officials tried to destroy their measures in Karura Forest, with immense support from GB activists, she was able to stop them and today the forest stands vast and green.

Wangari Maathai had to encounter many difficulties on the way towards environment sustainability, peace and democracy in her country. She was put behind bars several times. But strived to come forward as a member of Parliament in 2002, she was also appointed as the Minister of Environment and Natural Resources. During this time, with her unending and hardcore trail, the local green belt groups and the Forest Department had raised and transplanted over 2 lakh native tree seedlings in the Aberdare Forest in Kenya which is a habitat for rare and endangered species of flora and fauna.

The GBM is the best example of ecofeminist movement to protect environment that deeply linked human rights and democracy for the survival of mankind. Wangari Maathai has received numerous awards and recognition from several national and international organisations. After her death in 2011, the GBM established a foundation in her name, Wangari Maathai Foundation in 2015 to provide support for the projects and movements which gives importance to the values, legacy, vision and commitment of Maathai to protect environment, democracy and peace in the society.

## Conclusion

Apart from the above given ecofeminist movements, there are numerous other movements by women across the world which are famous for environment protection. These movements are remarkable but against environment destruction in their own terms and perspectives. Examples can be cited way back from earlier centuries also. Developed as well as less Developed Countries have the examples of such movements. WARN (Women of All Red Nations) can be quoted as a women movement in which Native American women stood against the uranium mining of native lands which severely affected the environment of their locality. Women's Pentagon Action took place in Washington DC in 1980 to protest against war, militarism and nuclear weapons that are detrimental to mankind as well as ecology. Exemplary movements like Circle of Life Foundation (Julia Butterfly Hill, USA), Indigenous Women's Network (Winone LaDuke, USA), Friends of Earth (Mei Ng, Hongkong), Navadhanya Movement, Research Foundation for Science, Technology and Ecology (Vandana Shiva, India), Centre for Independent Ecological Programmes, Appiko Movement (Panduranga Hegde along with village and tribal women, India), CIEP (Maria Cherkasova, Russia), Narmada Bachao Andolan, NBA (Medha Patkar, India), Jane Goodall Institute for Wildlife Research Education and Conservation (Jane Goodall, London), Silent Valley Movement (Sugatha Kumary, India), NoDAPL, No Dakota Access Pipeline (La Donna Brave Bull Allard and Bobbi Jean Three Legs, Dakota), Uttarakhand Nadi Bachao Abhiyan (Radha Bhatt, India), Van Suraksha Samiti (Jamuna Tudu, India) are some of the other noteworthy women movements across the world.

Not to mention, women are vital players in environment protection. They act as caretakers of their family, and play critical role for household and community energy needs. Studies show that proper awareness and environment education to women will result in better ways of conserving energy resources far more efficiently than men. Being close to nature mentally and physically, they can understand environment better and find methods to solve environmental issues.

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# Patent Trolls: The Concept and Solutions – An Analysis across Different Jurisdictions

Raju Narayana Swamy

*Patent trolls are a menace and impede the innovation environment in a country. They use patents as lawful weapons. The usual strategy is to maintain a basket of patents till the technology matures and then start litigation. The patents they register are broad and unclear so that multiple companies can be targeted. Trolls use their patent titles to try to compel individuals, businesses and non profits to pay them fees for use of ordinary items of daily use (like office equipments, printers, Wi-Fi routers) and even go to the extent of threatening mobile phone apps developers. Patents are not that easy to understand, litigation takes time and as companies are left with no other solution, they end up signing a non-disclosure agreement with the troll and by paying them a part of the revenue accordingly. The need of the hour is to weed out the concept of trolls by redefining IP rights and obligations. This calls for reformation in both the legislative and judicial branches.*

## Introduction

Patent Troll is a negative term. First coined in the 1990s, the term has no legal definition. It is also called non- practicing entity or nonproducing entity (NPE) or patent holding company or patent shark. The term arose in reference to trolls in Norwegian folktales who extract tolls from travellers passing over bridges. It is generally attributed to Peter Detkin, former Assistant Counsel of Intel who explained the concept as “companies that buy rather than create patents and then extract disproportionately high license fees by threatening expensive litigation in the alternative.”<sup>1</sup> Some others are of the view that the term originated from an educational video called the Patents Video produced in 1994 by Paula Natasha Chavez, a US IP Law Attorney. Britannica Encyclopaedia defines patent troll as a “pejorative term for a company found most open in the American information technology industry that uses a portfolio of patents not to produce products but solely to collect licensing fees or settlement on patent infringement from other companies.”<sup>2</sup>

Put in simple terms, patent trolls are entities that neither develop new technologies nor use technologies to provide goods or services to the market. They accumulate patents related to one area, do not produce any products, sue a large a number of defendants together and claim a percentage of the total revenue from the product. Even though their patent may cover a small area of technology, the award granted can amount to millions for a successful product. Thus trolls are extortive entities conducting deceptive abuse and possibly unlawful behaviour in connection with patent litigation. The fact that whenever an individual or company gets sued by a troll, the burden of proof for not infringing the patent is on the defendant compounds the problem.

Patent trolls acquire patents mainly for licensing purposes.<sup>3</sup> They neither use the patent for their own production nor for follow-up innovations.<sup>4</sup> Thus trolling is the abuse of exclusive rights where by patent holders themselves do not use their products and further prevent others from creating similar ones.<sup>5</sup> In fact, there are four broad business models followed by trolls:

- a) Trolls could be companies which purchase controversial patents from others merely for the purpose of asserting them.
- b) A troll could be a company that originally sold products, but has either completely or partially closed its operations.

- c) Trolls could be the agents that assert patents on behalf of patent owners
- d) Trolls could be law firms that help clients to exploit their IP for which they take contingency fees<sup>6</sup>

Buying a patent (usually from a bankrupt company at an auction) with the intent of suing a competing company is a usual modus operandi. One analogy for a patent trolls actions would be earning the right to charge tolls on a road without performing any improvement to the roadway. Another analogy is that unlike an innovator who uses the land to raise a crop, a troll merely aims at excluding people there from. Using a patent to collect money from other companies predates the invention of the computer. American Inventor George Selden is frequently cited as an early example of a patent troll. From 1903-1911, Selden, who never built a car, used his patent on the automobiles to collect royalties from other automobile companies. Ray Niro is another well known patent troll. In 18 years of patent litigation, he sued 235 companies and made a fortune of 315 million dollars. Patent trolls are a menace and impede the innovation environment in a country. They use patents as lawful weapons. The usual strategy is to maintain a basket of patents till the technology matures and then start litigation. The patents they register are broad and unclear so that multiple companies can be targeted. Trolls use their patent titles to try to compel individuals, businesses and non profits to pay them fees for use of ordinary items of daily use (like office equipments, printers, Wi-Fi routers) and even go to the extent of threatening mobile phone apps developers. Patents are not that easy to understand, litigation takes time and as companies are left with no other solution, they end up signing a non-disclosure agreement with the troll and by paying them a part of the revenue accordingly.

It needs to be mentioned here that when universities or non-profit research institutions file claims for protection of unutilized patents, it is not considered an act of trolling. It also needs to be pointed out that a producer need not actually practice the patent to avoid being called a troll. The crucial question is whether it is enforcing its patent in a market in which it participates. As an example, a patentee might manufacture a product that can either use a widget or gadget. The patentee has patents on both, but decides to use only widgets in its products. While the patentee does not practice the gadget patents, it is not a troll.

Policing of patent trolls is remarkably tricky as a game power from the strength of the very patent protection regimes they reside in. The situation is even more complicated as trolls are usually firms consisting of patent professionals and lawyers with pooled experience in patent law and litigation as the trolls threaten litigation, the alleged infringer even if in a position to defend himself may prefer to settle the matter out of court to avoid the time and cost involved in litigation. Usually the license fee demanded by the troll is less than the cost and effort involved in litigation and the alleged infringer gives in to the demands of the troll. This vicious cycle continues as the troll can use this money to buy more patents and in the name of infringement target more companies.<sup>7</sup>

### **Patent Trolls in the US**

The recent case of Labrador Diagnostics LLC Vs Biofire Diagnostics LLC etal filed in the US District Court for the District of Delaware against the coronavirus tests over the allegation of patent infringement reveals the dark side of IP laws in that country. In this case a patent troll (Labrador Diagnostics LLC) alleged infringement against the companies making and distributing virus tests throughout the country. Appallingly, such actions are rampant where companies like Labrador Diagnostics take advantage of the law and keep the masses from getting access to COVID-19 tests and treatments.

Mention must also be made here of the patent infringement suit filed by NTP (a patent troll) in a US District Court against Apple, Google, Microsoft, Motorola, HTC and LG alleging that the companies are liable for infringing eight of its patent relating to sending emails over wireless network. Add to these the fact that NTP had earlier won a 612 million dollar damage award against Research in Motion which sells blackberry devices and the hurdles posed to large companies can very well be imagined.

Patent trolling is a growing problem in the US - particularly in the IT industry - mainly because of the judicial system and the laws. First, US is the hub for technological innovation and the Patent Office is flooded with applications. Due to the sheer volume and time constraint, patent examiners grant a patents when there is a doubt. This gives room for trolls to file broad and vague patents. Second, the US legal system states that the respective parties must bear their own cost. This is diametrically opposite to the situation in many other jurisdictions, where the losing party covers the cost of litigation of the winning party - wholly or partly. This is less of a deterrent for trolls to take part in excessive litigation. However it needs to be mentioned here that in April 2016 the final ruling in the court case Octane Fitness LLC Vs ICON Health & Fitness Inc filed in the US Supreme Court made it easier for the court to impose legal expenses of both parties on the losers in patent claim court cases in the future. Third, the US traditionally follows a system in which the first person to invent a product was entitled to a patent unlike in many countries where the first person to file a patent is the one who receives it. Thus in the American system, someone who invented a product but neither patented nor manufactured it could bring a suit against a later inventor who was more successful at making and patenting the same product. However with the US moving to a first file system in 2011, the activities of patent trolls as a backdrop of the first file system have been largely contained. Fourth, relative unavailability of compulsory licensing works to the benefit of trolls.

Patent trolls may also take advantage of a judicial reluctance to employ the equitable doctrines of laches and estoppel when considering infringement claims. Also injunctive relief in US is very generous. After eBay Vs Merc Exchange, there may be a shift towards a more restrained use of injunctions, but this is not necessarily the case.

Mention needs to be made here that patent trolling in US may also involve venue shopping. A classic example is the report that 45% of the patent cases in 2015 were filed in the Eastern District of Texas. This must be read with a fact that the said district was home to a judge with both patent expertise and a track record of favouring plaintiffs. This practice has been curbed to a certain extent by the US Supreme Court's final ruling in the 2017 case TC Heartland LLC Vs Craft Foods Group Brands LLC.<sup>8</sup>This decision brings a sigh of relief as many cases can now be moved away from plaintiff - friendly districts to much more neutral districts where the defendants stand a chance of having a fairer outcome.

No discussion on patent trolls in the US would be complete without a mention on their decline during the period from 2013-2017 which was largely attributable to post-patent grant review mechanisms. Moreover the Supreme Court's decision in Alice Corp Vs CLS Bank Internal affords the much-needed relief by allowing defendants to challenge overboard, abstract patents and have suits decided early. But all is not well today. Currently there is an increase in abusive litigation as the review mechanisms are under threat. PTAB for instance is increasingly exercising discretion and refusing to consider meritorious IPR's. The potential for abuse of this discretion has increased in the wake of the Supreme Court's decision in United States Vs Arthrex Inc. In a fight for ruling, the Court afforded the PTO Director of the USPTO the ability to review and overrule the decisions of the patent judges of the PTAB.

Critics are of the view that the trend of increase in patent troll litigation can be reversed only by focusing on the quality and balance in patent law. One way to accomplish this is to make use of the information about the quality of the patent that every prosecution generates - the patent file history. Called the file wrapper, the prosecution history of each patent is a record of all communications and documentation involved in the patent examination process. If that wrapper is filled with examiner's repeated rejections to certain claims and the inventor repeatedly appeals those rejections, it suggests low quality. Needless to say, a defendant should be allowed to point to such a wrapper early in the case to rebut the patent's inherent presumption of validity. Better yet, such a wrapper could trigger withdrawal of the presumption of validity which the plaintiff would then have to affirmatively plead.

## **Patent Trolls and the European Patent System**

The European patent system holds both incentives and disincentives for patent trolls. The system is unique in that there is a central patent office for grant of patents which are then valid across all European Patent Convention member states, but disposal of infringement suits is national rather than centralised. Thus if a European patent is infringed anywhere in Germany and the German Courts uphold the infringement, it does not imply that the same patent will be deemed infringed automatically in other member nations too. This is a big disincentive for a troll. It is also worth mentioning that the potential costs of litigating in Europe are lower in quantum vis-a-vis US. This prima facie seems like a potential incentive for trolling, but may also translate in to the fact that infringers would be more willing to take up litigation and fight it out rather than settle out of Court. Even the damages that are awarded in Europe are a lot lower as compared to US. Thus a patent owner is less likely to initiate litigation against an assumed infringer in Europe as he will not get significant damages out of the proceedings even if he won. Also contingency fee is not allowed in Europe. Moreover, stringent laws in EU make it almost impossible for patent trolls to exist. But EU is not free from patent trolls. This is a result of the imbalances in the European patent system which PAE's are looking to exploit. These imbalances include

- a) injunctions automatically awarded upon a finding of infringement
- b) low quality patents &
- c) lack of transparency in Court proceedings

In fact majority of the infringement cases are filed in Germany and France. Statistics show that in Germany 20% of all law suits are patent infringement law suits. Factually trolling involving European entities may be evinced by way of mentioning the dispute between Infineon, a German chip manufacturer and Rambus, a US memory manufacturer. The end result was a settlement for \$ 23.5 million to be paid by Infineon to Rambus for two years.

## **The Indian Legal System and Patent Trolls**

Patent trolling was quite prevalent in India in the information technology and communication sectors prior to the enactment of the amendment in 2005, but it sharply declined after the amendment. Though the Patents Act 1970 does not specifically prohibit patent trolls<sup>9</sup>, this problem is curbed through several provisions in the Act. Many argue that US and EU could learn from India and adopt these safeguards which include

### **a) Post-grant opposition**

As per Section 25(2), any person interested can file a post-grant opposition within 12 months of the date of publication of the grant of a patent on any of the grounds specified therein by giving a notice of opposition to the Controller. Thus even after the grant of a patent it can be challenged. This post-grant opposition is an inbuilt hindrance to the menace of patent trolls.

### **b) IPAB (Intellectual Property Appellate Board)**

This specialised board ensures speedy disposal of IP disputes and reduces the cost of litigation. This allows small companies targeted by patent trolls to defend themselves without worrying about the high cost involved therein. Mention must be made here of the judgment IPAB revoking two patents belonging to Bharat Bhogilal Patel in the case of M/s Aditi Manufacturing Co. M/s. Bharat Bhogilal Patel.<sup>10</sup> This patentee can be regarded as a classic patent troll and held two patents - one for a process of manufacturing engraved design articles on metals or non-metals and another for an improved laser marking and engraving machine. The IPAB held as follows: "In the present case, prior arts have the features of the invention and there is nothing new in the features that have been claimed as new." The highlight of the case is that the patent troll involved did not file any civil suit for infringement, but instance filed complaints with the Customs authorities

at various ports of entry requesting them to seize the import consignments on the ground that they infringed their patents.

In a similar case, the IPAB revoked a patent belonging to one Ramkumar in the case of Spice and Samsung Vs Somasundar Ramkumar.<sup>11</sup> The patent related to mobile phones with a plurality of SIM cards allocated to different communication networks and revocation was sought u/s 64(1) of the Patents Act 1970. The IPAB held that not only the invention was anticipated by prior art, but also that the amendments carried out during the prosecution of the application in specification, drawings and claims extended the scope of the disclosed matter which is particularly prohibited by Section 59. The applicants were also able to establish through various prior art references the obviousness in the Respondent's patent. It is worth mentioning here that Ramkumar can be considered as a classic patent troll.

#### **c) Section 13(4) of the Patents Act**

This provision expressly states that the validity of a patent is not guaranteed by its grant.<sup>12</sup> As there is no presumptions as to the validity of a patent, the burden of proving it in a patent infringement suit vests in the patentee. This is likely to discourage trolls.

#### **d) Compulsory License**

The essence of this provision is that in case of non-working of a patent, the public is deprived of its use and benefits. A period of three years from granting of patent is given beyond which an application can be made for grant of compulsory license. This mechanism reprimands trolls that fail to exploit their patents or put them to work. But criticisms are galore that this provision gives patent trolls a time frame of three years to purchase a patent and harass companies with law suits.

India's requirements for domestic working of a patent are highlighted in Section 83. In fact, the practice of abuse of patent rights through trolls is discussed u/s 83(b). India is also of the view that the reasonable requirements of the public are to be taken into consideration and are deemed unsatisfied (Section 84(1)(a)) if the patented invention is not being worked in the territory of India or is not being worked to the fullest extent that is reasonably practicable (Section 84(7)(d)). The controller also has the power u/s 146 to give a written notice to the patentee or licensee requiring them to furnish necessary information regarding the extent to which the patented invention has been commercially worked in India. In case of non-compliance of this requirement, the act provides for the imposition of a fine upto INR 10 lakhs on the holder (Section 122(b)). In order to check the working of patents, the act requires a patent holder to file an annual statement regarding the working thereof. Patent holders who fail to file such a statement may be liable for a fine and /or imprisonment.

#### **e) No patent protection to software**

The implementation of the Patent Amendment Act,2005 excludes a huge area for trolling by not providing patent protection to software (including embedded software) which is a common subject matter prone to trolling activity.

#### **f) Section 115 of Patents Act**

This Section allows appointment of scientific advisors with deep technological knowledge for speedy trials. It also helps the Courts to identify dubious patents and to revoke them.

#### **g) Section 3(d) of Patents Act**

Section 3(d) makes it very difficult for patent trolls to get dubious patents there by resorting to evergreening.<sup>13</sup>

Added to these the facts that Indian Courts are not generally patent friendly (and hence do not grant injunctions easily) and that after succeeding in a case the damages granted are often insufficient and the

picture is complete to the extent that the business model of patent trolling is difficult to sustain in the Indian legal landscape. A lacuna in the Indian legal system often pointed out by critics needs special mention here - namely the absence of an open post grant review. If such a review is judiciously implemented at the time of renewal of a patent or at any time that a patent is sold, it can go a long way in improving the system so as to make sure that the public is not hoarded for exploitation by patent trolls. Moreover to control the chaos caused by trolling, the quality of patent examination should be enhanced to avoid unnecessary patent authorisations. Steps such as implementing patent concentration strategy and perfecting the patent trading market can also go a long way. Another recommended measure is the introduction of the provision for joint/class litigation in the Patents Act similar to Section 245 of the Companies Act 2013 so that the entities targeted by trolls can collectively file a suit there by reducing the per head cost. Government can also think of creating a public fund where by parties who can substantially prove that they are victims of trolling can be given funds to file a suit at the proper forum. Sources of income in that fund may by no means be limited to Government grants, but can also include penalty imposed on trolls. Needless to say, patent trolls can also be curbed by not entering in to agreements for licensing or purchasing patents with unverified parties.

### **Patent Trolls and Defensive Patenting**

The rise of patent trolls has lead to a practice called defensive patenting wherein companies amass portfolios of patents to protect themselves against law suits. A classic example is the announcement of Google in the year 2011 to buy the cell phone company Motorola Mobility. As a key factor in the acquisition, Google specifically cited its wish to use Motorola's thousands of patents to protect its own mobile operating system Android from possible legal action.

### **Conclusion**

Patent trolls target companies of various types including manufactures, distributors or retailers in certain industries. But it is a small company devoid of deep pockets that are primarily targeted. For instance one California company by name Pangea Intellectual Properties claimed that its patents were infringed by websites that possess financial information that customers enter online. In fact patent trolls very often pick up low quality patents and take advantage of asymmetries in the economics of litigation to make quick cash. An oft quoted case is that of Bitmovin which has mean on the receiving end of several of these dubious suits which are a very real threat to innovators and other start-ups. Sometimes they remain stagnant and wait for some other company to develop the same technology before proceeding to sue them for infringement.

It must be mentioned here that NPEs reject the term patent troll and claim that they are actually protecting the system by ensuring that patent holders receive the monitory rewards that are due to them. They defend themselves on the grounds that they actually promote invention by adding liquidity, absorbing some of the risk otherwise borne by inventors and getting more royalties for small inventors.<sup>14</sup> But the reality is otherwise. For instance, American economists are of the opinion that investors lost approximately \$500 billion to patent trolls from 1990 to 2010 based on the decrease in value of company's stock after they have been sued by NPEs. Microsoft says that it typically faces about 60 pending PAE infringement claims costing it tens of millions of dollars every year to defend. Google, Blackberry, Earthlink and Red Hat detail that there litigation defends costs have gone up by 400% as patents trolls are filing four times as many law suits in 2018 as compared to 2005. Through these abusive practices they costs uncertainty for businesses, add redundant costs, scare investors and even force businesses to shut down. It needs to be mention here that the concept of troll is by no means confined to patents, but extends to copyrights as well. Such a company's business model would typically consists of filing suits against bloggers, artists, freelance journalists and other small-fry individual users for alleged unauthorised reproduction of works. A classic example is Right haven LLC, a copyright holding company founded in 2010. Its modus operandi consists of entering in to agreements with various publishers (often localised periodicals) and subsequently filing suits for copyright infringement against website owners for unauthorised reproduction of the periodical's photographs and other contents. Righthaven then proceeds to demand \$ 75000 from each alleged infringer in lieu of court action.

This coupled with Righthaven's propensity to swiftly settle cases and high expenses in defending such actions leads to a highly profitable business model – with Righthaven footing no more than the cost of the paper on which the initial demand was made.

But the reality is that such business models are not only inherently exploit it and abusive of the legal process but also question the very theoretical justifications that are usually put forth to support the treatment of IP as traditional tangible property. These entities function in a manner seemingly independent of the three dominant strains of property theory- the Labour, Utilitarian and Personality justifications. Righthaven being a non-innovative entity does not labour to create the good that is sort to be protected (viz) the creative works. Moreover its conduct violates Locke's Proviso in that there is net harm being caused to innovation in general and to society - through curtailments to free speech and expression caused by the threat of litigation. In fact, a copyright aggregator like Righthaven infringes on the fair use doctrine and leads to a chilling effect. The result is a negative impact on social welfare and completing the circle.

It is heartening to note that the US courts have recently started to recognise that these entities have no legal basis for continued functioning. This lack of basis extends to jurisprudential and historical realms also. In *Righthaven Vs Democratic Underground* case, for instance (US District of Nevada Court) it was found that Righthaven has no standing to sue for copyright infringement. A similar ruling of a federal judge in Colorado has put an end to all 57 proceedings that Righthaven has initiated in that State. In fact, Righthaven is now virtually defunct. The company is now insolvent having failed to pay legal costs owed to the defendants in *RighthavenVs Thomas Die Blase* and *RighthavenVs Wayne Hoehn*. Its domain name was auctioned by the receiver to satisfy the company's debtors. The company has been criticised for bullying internet users in to unnecessary settlements and has been fined for making material misrepresentations to federal courts. Needless to say, it can be characterised as a capitalism- induced manifestation of corporate greed. And that explains the twin reasons why trolls should not be accorded protection by law - first being the violation of the social contract and the second being skewing public-private interest balance unjustly. The need of the hour is to weed out the concept of trolls by redefining IP rights and obligations. This calls for reformation in both the legislative and judicial branches.

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12. This section reads as follows:-The examination and investigations required under section 12 and this section shall not be deemed in any way to warrant the validity of any patent, and no liability shall be

incurred by the Central Government or any officer thereof by reason of, or in connection with, any such examination or investigation or any report or other proceedings consequent thereon.

13. **Section 3(d)** says that the mere discovery of a new form of a known substance which does not result in the enhancement of the known efficacy of that substance or the mere discovery of any new property or new use for a known substance or of the mere use of a known process, machine or apparatus unless such known process results in a new product or employs at least one new reactant, is not patentable.
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## **A Sustainable Global Peace Structure**

**R.K. Suresh Kumar**

Professor B.Vivekanandan's (2022) book *The Welfare State System and Common Security - A Global Vision for a Common Future* published by Palgrave Macmillan / Springer Nature, Switzerland AG, is presented to the reader as a game changer in shaping the future world. The author has succeeded in weaving together the delicate threads of a superior political theory.

Antonic Guterres, UN Secretary – General in his Foreword to *Securing Our Common Future : An Agenda for Disarmament* wrote:

We are living in dangerous times. Protracted conflicts are causing unspeakable human suffering. Armed groups are proliferating, equipped with a vast array of weapons. Global military spending and competition in arms are increasing, and the tensions of cold war have returned to a world that has grown more complex. In today's multipolar environment, the mechanisms for contact and dialogue that once helped to diffuse tensions between two super-powers have eroded and lost their relevance. This new reality demands that disarmament and non-proliferation are put at the centre of the work of the United Nations.

*Securing Our Common Future : An Agenda for Disarmament* underlines the political and security issues that render disarmament difficult to achieve, but emphasises that disarmament must not wait until improved conditions. Rather, the 'Report' notes that disarmament is even more important in times of tension and conflict and highlights the importance of disarmament as a tool to help prevent armed conflict, improve human rights, enhance security, build confidence and peace, and enable the achievement of the Sustainable Development Goals.

These words in a way is the backdrop of this book which is a timely intervention reemphasizing a change in the perspectives of Nation States to dump the practices which harm global security and denies a shared and sustainable common future for humanity.

It is for us to choose whether we want an agitated society or a peaceful one. Certainly, the author through this book successfully leads us to a society run on the principles of Social Democracy. It is a fairly brief text, divided into seven chapters. Social Democracy did not come to the author like a revelation. He did not befriend it, rather it was the theory and successful practice of Social Democracy that befriended him. The theory of Social Democracy is not something new. As a person who has imbibed its fineness intellectually, he is convinced that for a prosperous human society to emerge Social Democracy should emerge triumphant.

In 2016, Prof.B.Vivekanandan in his classic work examining the global visions of three outstanding statesmen of Europe viz; Olof Palme, Bruno Kreisky and Willy Brandt argued that the Social Democratic ideology remains the only solution to build a new 'One World' – of equality and justice. In the book he also dealt with the relevance of the idea of Social Democracy for the Developing World. The author, himself an acknowledged theorist on Social Democracy surmised then that the idea of Social Democracy will make perfect sense in future.

As Prof.J.P.Roos in his foreword rightly observed: "as the world is becoming more globalised; it is imperative that peoples welfare and global security are also placed in a more positive frame which ensures

equal sharing of the total welfare in the world". He continues that according to the author "Welfare State System is a peace structure at the national level which engenders peace, cooperation, harmony and solidarity in society. Common Security is another complementary peace structure at the global level, which also engenders peace, cooperation, harmony and solidarity.... A union of the Welfare State System and the common security system would guarantee peace and prosperity in the world, since they tend to humanise the mechanism of national security and social justice in the world".

The strength of Professor Vivekanandan's argument emanates from the positive aspects of the Welfare State system which emboldens him to state that it will achieve the results hoped for. According to the author, the short coming in the Palme Commission Report on Common Security (1982) was that "it spoke more about organising common security as a universal external policy approach, without suggesting a universal domestic system for all countries, which would complement and keep countries on that path only." The book like the earlier one on the global visions of three European Social democrats is a classic, refreshingly retold by bringing forth a Universal Welfare State System to complement and sustain a Common Security System in the world. The author is sure that the vision contained in the book is not fanciful, but realistic.

A great opportunity to change the course of history through peaceful means is available to mankind today. Formulation of public policies can play a leading role in finding solutions to complex issues faced by the world nationally and internationally. The book is a product of Prof. Vivekanandan's extensive knowledge of Scandinavian / Nordic countries since 1985 and the strenuous research that he has undertaken on the theory and practice of Social Democracy.

The book has seven chapters viz; The Perspective, Swedish Welfare State Model, Welfare State System in Finland, Welfare State System in Canada, Common Security, Scandinavian / Nordic Welfare States: An Approximate International Peace and Security Model and lastly, The Way Ahead.

In the beginning of the 1<sup>st</sup> chapter The Perspective, the goal and mission of the book is straightaway stated. "A peaceful contented 'One World' is the goal and Welfare State System and Common Security are the means". He traces the origin of the concept of one world, which we can find in ancient Indian Philosophical thought. This was much before Swedish Social Democratic leader Per Albin Hansson came up with this concept in Sweden, in the early 1930's and before Wendell Willkie conceptualised his idea of 'one world' in 1943. The numerous ongoing developments in different parts of the world gave fillip to the concept of 'one world' and gave it a concrete shape. After pointing out the superiority of the Welfare State compared with all other socio-economic and political systems, the author traces the dynamic relationship between the state and the citizen - a constructive relationship, which has epitomised in the form of 'cradle-to-the-grave' Welfare State System, established in Sweden and other Scandinavian countries. Compulsory re-distributive taxation, compulsory schooling, income transfer in the form of family support, free social assistance to the elderly and invalid persons, child allowance, unemployment benefits, various pensions etc are the characteristics of the existing Welfare State Systems. The state centric welfare state system functions as a provider and regulator of welfare benefits to the people. The author is confident that the welfare system will humanise societies, by providing people with psychological security by promoting social integration in a big way. People responsibly pay tax and avail consciously its benefits as well, thus becoming the benefactors and at the same time beneficiaries too. He does not fail to mention that the records show that universal benefits, like free health care, family allowances, free education, free social services and so on enjoy wide popular support. The global welfare state vision is concerned with transfer of resources on a global scale, for local dispersals in a just way across the continents. This points to the need of an international organisation, like the ILO, to discuss global welfare state building strategy. The merits of such a vision; to the author, lies in full employment policy, a system of distributive justice, and a higher form of social system. Moreover it reminds us of the dwindling spending by the Governments on public welfare in the period of liberalization - privatization - globalization programmes.

The author seems fascinated when he writes that “if the welfare state system becomes a domestic social set-up, and the Common Security System as enunciated by the Swedish Prime Minister Olof Palme, becomes the foreign and security policy of nations, the bountiful surplus resources it would release to raise people’s living conditions around the world, are beyond description, it would enable people’s across the world to equitably share the earth’s bounty.” Here I would like to point out the importance of the Gandhian concept of “conscious living”. Ensuring every person a share in the cake alone will not initiate mankind into leading a conscious life. It lies more in the realm of human experiences. The question here is, - is the vision of Social democracy capable of initiating this wisdom among individuals, groups movements and governments? This alone can ignite human minds all over the world to lead a worthy life. Ideologies must not be concentrated in dead shrines; it should also elevate individuals to the status of noble souls. Then only the stalled motor of the Welfare State System will emerge as the best form of social system that the statesmen and humanists have ever articulated and established.

The author vividly gives a description of the spread of the Welfare State System in Scandinavia, France, Germany, Britain, the US, Canada and two countries in Asia viz; India and the People’s Republic of China. He is absolutely right when he writes that today the Welfare State System is a widespread phenomenon, as almost all countries have same salient features of it. The author agrees that the test of this would be whether through targeted policies governments could alleviate hardships of poor people in society. Here I would say that the author should have taken into consideration the actual facts and figures as the mirror to reflect on the Indian scenario since 1990’s.

The book also discusses the adversities that the Welfare States faced in the 1980’s and 1990’s. Here he accurately observes that the Welfare States survived the economic crises with marginal changes. They did not make adjustments on basic principles or policies but only on its various distributive and allocation details. Prof.B.Vivekanandan sounds realistic when he observes that the negativity in the globalisation project is its attempt to negate freedom and autonomy of nation states as fundamental units of planning and organising welfare states, to raise resources for it and to formulate policies to stabilise it. Of course, it creates new forms of marginalization and social exclusion. It is true that the tyranny of the market cannot survive for long. On the other hand we also see examples of the collective efforts by the deprived communities regaining their self sustance and retrieving their lost space by regaining the control of labour process.

The II<sup>nd</sup> chapter details how the Swedish Welfare State model was successfully built up. The author considers the Welfare State in Sweden as the most advanced one, as it has emerged as a prosperous and contented society. It could overcome the crises of the 1990’s. The author is aware of the limitations of the present Welfare State System conceived and established as national entity. He wishes for a co-ordination of the global Welfare State Systems.

In the Welfare State Systems of Sweden, Denmark and Norway the dominance is that of the social democratic programme. In Finland, the credit is shared by the Social Democratic Party, The Centre Party, the Communist Party and the Trade Unions. The welfare state in Finland (Ch: III) underlines the centrality of a strong, benevolent state to vigorously pursue the ideals of social democracy. The author examines the challenges thrown by the economic crises of the 1990’s and the responses to overcome them. He feels that the 1990’s crises was bureaucracy driven and was avoidable. Bankruptcy of the banks, the budget deficit, rise in unemployment, job security, crises in welfare programmes like health care, social expenditure and mounting public debt and new burdens on the labour and salary earners had to be satisfactorily addressed. Opinions differ on the question, whether the measures taken to tide over the economic crises have brought about any fundamental change in the welfare system in Finland. Many believe that the basic structure of the welfare state remained intact. The welfare state could help the people to cushion off the adverse effects of the economic recession but to the author it is normal that in crises situations, people favourably respond to exigencies and accept temporary curtailments and hardships which is a responsible response. However, it is the usual practice of those in power to restore the former status once the crisis is over. But this did not happen

and the changes made during the recession have been made permanent. The author consider this as a fundamental change in the principle of the Finnish Welfare State System. His advice to the Finnish statesmen is to strive for bringing back Finland as the happiest country in the world which it was in 2019.

Canada's experience in the construction of an advanced Welfare State System has been given special attention in chapter IV. The efforts of Canada to address the emerging challenges are valuable lessons to other countries. The author places the advanced Welfare State System there, under the category of a liberal welfare state, with certain features of dualism attached to it. Under the federal scheme the provinces were made responsible for social assistance, education, health care and social services. The readers are introduced to the historical evolution of the Welfare State System in Canada. It unfolds through a discussion of the Marsh Report (1975), the Heagerty Report (1943), the Royal Commission Report (1940) and the Welfare State Reforms in 1960's. The resultant benefits enjoyed by the people are also discussed in detail. In the 1980's doubts were raised on the role of the state as a provider under the influence of Thatcherism and Raeganism. The fallout was modification in the eligibility criteria for social security benefits, including unemployment benefits. In short social services were sought to be privatised or contracted out. The conservative- led government since 1985 started adopting the US model Welfare System which the author sarcastically dumps as an "assault on equality". The recession by the end of 1981 made things difficult for the government. The 1980's and 1990's witnessed drastic changes in the structure and policies of the Canadian state. The Canada-United State's Free Trade Agreement (FTA) of 1989 was the culmination of the expansion of the regulatory powers of the state and surrender to international funding agencies. In spite of these changes, the health care and education system in Canada still remains basically fully public funded.

A new domestic challenge faced by the Welfare State Systems including Canada is the demographic change. Canada will have two-and-a-half times more old people by 2030 than the country has now constituting one-fourth of the total population. The growth of single parent families has also enhanced social expenditure in Canada. In this chapter the author comes up with facts and figures to remove certain misconceptions propounded by the enemies of the Welfare State System. The studies point out that millions of Canadians have turned to welfare only after exhausting all other sources of income. On the future of the Welfare State System in Canada, the author is certain that no intervention can make the Canadian people to discard the system.

In the chapter on Common Security (Ch : V) the position of the author is that a peaceful and secure environment is imperative for universal public welfare. The international community has not so far come up with such a system in place for the welfare of all peoples in the world, except in one region viz; Northern Europe. After elaborately discussing the inadequacy of super structures, the nation state and balance of power, the deterrence doctrine and the search for alternative by the European Socialist and Social Democratic Parties; the genesis and the core of the Common Security Doctrine is meticulously discussed. The Palme Commission Report (1982) forms an important part of this chapter. The end result of the success of Common Security and the Welfare State System will be the laying of a firm foundation for an enduring, peaceful, prosperous and contented society, everywhere in the world. Economically Common Security will augment the resources of the nations through reduced defense expenditure which can be used for public welfare programmes. Promoting equality and equal justice globally will lead to a superior way of life sans borders.

The concretisation of the welfare state idea through societal reconstruction is noticeable in Scandinavian / Nordic Welfare States like Sweden, Denmark, Norway, Finland and Iceland. This forms the content of the VI<sup>th</sup> chapter. The author has deep appreciation for these states which he considers as worthy of emulation by socially conscious people across the world. These welfare state could offer a civilised alternative to both capitalist and communist state systems. An enlightened reformist approach, an evolutionary process of social transformation effected in a peaceful manner and a civilised manner of distributing wealth forms the hallmark of the system. The success of the Welfare State System had even influenced the late Soviet leader, Mikhail

Gorbachev to come up with Perestroika and Glasnost in the erstwhile USSR. The author also feels happy and proud that the Scandinavian countries have lived up to Mahatma Gandhi's expectations of focussing on the poorest and the weakest.

The last chapter (VII) shows the deep commitment of the author to the cause of Social Democratic Theory and the Social Welfare State System. The excellence of the Welfare State System is beyond doubt as it involves caring for others and sharing with all. In short the healing and building power of social democracy is convincingly argued in this book. Those wishing for the emergence of a new and just global order ought to be indebted to Prof.B.Vivekanandan for holding high the torch of a "grand vision" for ensuring a better tomorrow.

# **Role of National Health Mission in Reproductive and Child Health Care among Tribal Population: A Case Study of Kani Tribes**

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*This paper is an attempt to understand the role played by the National Health Mission in reproductive and child healthcare among tribal population, especially with respect to the Kani tribes of Thiruvananthapuram district. The paper analyses the awareness, access, utilization and satisfaction about the various reproductive, maternal and child health care schemes available under NHM among the Kani population of Vithura grama panchayath. The study also explores the levels of socio-economic status and health care seeking behaviour pattern of the STs. The main issue faced by the tribals is the lack of health service which adversely affects their health. In spite of large numbers of government policies and schemes aimed at tribal welfare, they still face the problems of availability and accessibility of government health care facilities. The study is based on the primary data collected from tribal settlement in Vithura panchayath of Thiruvananthapuram district and arrives at conclusion through statistical analysis.*

## **1.1 Introduction**

The Constitution of India says that : the “the President may with respect to any State or Union territory, and where it is a State, after consultation with the Governor thereof, by public notification, specify the tribes or tribal communities or parts of or groups within tribes or tribal communities which shall for the purposes of this Constitution be deemed to be Scheduled Tribes in relation to that State or Union territory, as the case may be.” The tribal population usually is a group residing in a definite area in clusters, share a common culture, dialect and are unified through social organisation but is ethnically different from other groups. The most common characteristic feature of tribals are the extreme social and economic backwardness faced by them. India comprises of 705 scheduled tribes which constitutes 8.6 % of the total population of the country (Census, 2011).

The state of Kerala is home to a significant share of tribal population. The scheduled tribe population in Kerala constitutes 1.45% (census 2011) of the total population. There are 36 different scheduled tribes in Kerala. Kerala’s tribal population reside mostly in the hilly forests of the Western Ghats and is thereby cut off from mainstream society. Most of the tribes practice agriculture or are collectors of forest resources. The term outlier (scheduled tribes) was introduced in the 1990’s in the discussion of the Kerala model. The rate of deprivation among the tribal population is called as the “Outlier phenomenon” and it remains a great cause of concern for the state. The tribes in general have been left out of the domain of public action and the capacity building process.

The Kerala state ranks first in Human Development Index among the different states of India on account of its exemplary socio-economic indicators on par with some of the developed economies of the world. Kerala has made remarkable achievements in the areas of Literacy rate of 93.91 per cent, the Life expectancy of 74, Sex Ratio (female 1084 male 1000) and Infant Mortality of 12 death for 1000 live birth (Census India, 2011). The progress made by the state has attracted the attention of development economists worldwide. Despite being a forerunner of development, the state could not extend the benefits of progress to some sections of society. The increasing disparities in socioeconomic and demographic indicators between tribals and the rest

of the population of Kerala present a stark contrast. The tribal population remain peripheral, marginalized, excluded and exploited. Kerala had the highest gap between the tribal populations and general population as far as health status was concerned. The health indices show the vulnerable position of tribes in Kerala. Various measures have been adopted to improve health status of the Scheduled Tribes.

Health is an indispensable pre-requisite for human development, hence health care constitutes an important area where wide spread welfare measures have been initiated by the state. Health is a fundamental human right emphasized in the Alma-Ata Declaration of 1978. In accordance with the principles of the Alma-Ata conference on health which focused on equitable and cost effective primary health care health became an important rational concern in most countries, especially the developing countries. Government of India launched the National Rural Health Mission (NRHM) in 2005 as a flagship health scheme, in 2013. NRHM was subsumed under a broader programme called National Health Mission (NHM) to provide equitable, affordable and quality healthcare services through strengthening of health systems, institutions and capabilities. It was envisaged that the NHM would facilitate universal access to quality healthcare services.

A vital sector in health domain is the reproductive and child health since women and children are the most vulnerable. The Reproductive and Child Health (RCH) programme under NHM provide for healthcare to women and children with a view to reducing maternal and infant mortality and total fertility rates as well as social and geographical disparities in access to and utilisation of quality reproductive and child health services. Reproductive, Maternal, Newborn, Child Plus Adolescent Health (RMNCH+A) was introduced in 2013 under the umbrella of the National Health Mission (NHM) to resolve the causes of maternal mortality and infant mortality and alleviate factors impeding access and utilisation of healthcare services. RMNCH+A forms one of the most important components of the National Health Mission.

The tribal people suffer from severe health deprivations in comparison to their counterparts due to other pressing socio-economic conditions faced by them, with women and children being the most vulnerable. The starkest marker of tribal deprivation is indicated by the startlingly high Infant Mortality Rate, Maternal Mortality Rate, Neo-Natal Mortality Rate and Under-5 Mortality Rate of tribals. Most of the tribal women are victims of undernourishment and anaemia, they face greater health risks as a result of early marriage, frequent pregnancies, unsafe deliveries, and sexually transmitted diseases. The reproductive and child health of tribals are often not given proper care. This seriously impedes the development of tribal women. This brings forth the importance of reproductive empowerment among tribals. Health care is major problem in far-flung isolated tribal areas. Lack of food security, sanitation, adequate hospital facility and high poverty levels aggravate the poor health status of tribals. The problem of malnutrition and lack of adequate health care facilities are multi-dimensional and intergenerational in nature. There are wide variations among members of different tribal groups in health status and their willingness to access and utilize health services, depending on their culture, level of adaptation, interaction with general population etc.

This study is an attempt to subject the health care services available under NHM for tribal people to systematic analysis. The study also attempts to fathom the levels of awareness, access, utilisation and satisfaction of schemes under NHM among the STs and to probe into the adequacy, critical gaps, issues and challenges involved in the delivery system of the health care to Kani tribe.

## **1.2 Review of Literature**

This section tries to review the different studies regarding health status of tribal population.

Salil Basu (2000) conducted a study related to health development and tribal development. He found that the provisions of potable drinking water should be very high on the list of priorities for delivery of health measures to the tribes. He suggested that we must also improve the education and literacy status of the tribes if there has to be durable improvement in the status of their health. The Government must step up investments in education for the tribes and make health education an important part of it. He concluded that tribal medicine and medical traditions are valuable and hence are to be preserved.

Anand Kumar, (2003) have concluded in his study that the primitive tribals of Odisha and their health scenario presents a kaleidoscopic mosaic of various communicable and non-communicable diseases profile keeping in pace with their socio-economic development. Among these there are communities who still depend primarily on hunting and food gathering as primary source of livelihood. The wide spread poverty, illiteracy, malnutrition, absence of safe drinking water and sanitary conditions, poor maternal and child health services, ineffective coverage of national health and nutritional services, etc, have been found, as possible contributing factors of dismal health condition prevailing amongst the primitive tribal communities of the country. Many of the infectious and parasitic diseases can be prevented with timely intervention, health awareness and IEC activities. Some of the intervention programmes can be included in the national programme also. The non-communicable diseases like diabetes and hypertension are conspicuously absent indicating that the primitive tribal communities are still far away from the modern civilization and developments. In spite of the tremendous advancement in the field of preventive and curative medicine, the health care delivery services among primitive tribal people are still poor and need to be strengthened in order to achieve the goal of health for all in the country.

Mehta (2000) reported that over two thirds of births in the world are delivered by local or traditional midwives or birth attendants in tribal areas. Traditional birth assistance is the only source of assistance available to tribals. This had led to increase in infant mortality and maternal mortality among tribal population.

Balgir (2005) conducted a study on the health status of the tribal population and found out that we should expect a socio economic gradient in health even within this marginalized population. The patterns of indigenous health derivation and heterogeneity are investigated in this study. The public health relevance of avoiding tobacco and alcohol use in India has been well documented in recent years.

A study on tribals in different parts of the country by the Ministry of Tribal Affairs (2007) suggests that there is no adequate reach of health care services in tribal areas. "The infant mortality, under-5 child mortality and percentage of children under-weight in respect of Tribes are higher than that of the overall population as well as of other disadvantaged socio economic groups."

Rose Nambiakkim (2008) made a comprehensive study on the reproductive health awareness among the tribal women in Churanchandpur district of Manipur. She examined the relationship between the socio-cultural factors and reproductive health among the tribal women. She also analyzed the education and health services rendered by the Missionaries. She observed that education is the best way to health awareness among tribal women. Now in Churanchandpur modern medical facilities are available and easily accessible to the people. She observed that if the young mothers are made aware of health, personal hygiene, nutrition and utilization of health services there will be considerable improvement in health status of Tribal population.

Venkat Rao (2001) showed that understaffing of primary health care centres is the main cause for the tribal to be deprived of the health care benefits. Most of the tribal population is desperately poor, backward, generally uneducated and lead a very hard and miserable life.

Vandana Panwar (1998) on the viability of a tribal health programme in Gujarat, cited understaffing of primary healthcare centres, exploitation of migrant labourers, and inadequate supplies of medicines as primary causes of underdevelopment and poor health outcomes. The widespread poverty, illiteracy, malnutrition, absence of safe drinking water and sanitary living conditions, poor maternal and child health services and ineffective coverage of national health and nutritional services have been identified in several studies as possible contributing factors to dismal health conditions prevailing among the tribal population in India. In this article, the author focuses on certain factors like infant mortality rate, life expectancy, genetic disorders, sexually transmitted diseases, nutritional status, forest ecology, child health and health care practices which are generally responsible for determining the health status and health behaviour of tribal communities (Dimensions of Tribal Health 2000).

In a nutritional and demographic study (Prema et al. 1992) of Kannikar tribal women of Trivandrum district, Kerala, normal and physiological conditions like pregnancy and lactation were studied. Important sources of protein like pulses, milk and milk products and other animal foods were lacking in their diets. Average calorie consumption was found to be below the recommended level for normal, pregnant as well as lactating women. Detailed clinical examination of the Kanikar tribal women showed that anaemia (90 percent), vitamin A deficiency (30 percent) and niacin deficiency (10 percent) were prevalent among them. The morbidity status of the tribal women revealed the prevalence of pyrexia, respiratory complaints, gastro-intestinal diseases and rheumatic diseases. Among the adult women gynaecological complaints and deficiency diseases were common (Basu, 1993).

According to Verma et al (1999), tribal areas are inaccessible. High immunization rates among tribal children may be achieved through targeting illiterate mothers in inaccessible areas. These first-contact primary interventions, in turn, may also lessen the increasing rates of youth mortality seen among tribals.

Most of the tribal population is deprived of the benefits of modern health care system. A study done on health care among Kunabi Tribe of Karnataka revealed that traditional healers are present in certain villages and over 45 species of plants are still used in the area to treat a wide range of ailments such as fever, cough, skin diseases, rheumatism, snake-bite, jaundice and dysentery (Hebbar et al. 2002).

An epidemiological survey of tribal villages in southern Bihar revealed that there is no health care facility in tribal areas and noted that a lack of health awareness in the area remained the primary obstacle towards improved community health (Friedman et al. 2002).

Rao, (2010) states that a number of welfare schemes were introduced by the Government of Andhra Pradesh for the socio-economic upliftment of these marginalized people with emphasis on rehabilitation, settled cultivation, distribution of animals, improving educational standards, providing better health, and drinking water facilities. Houses and house sites were received by majority of respondents.

### **1.3 Research Gap**

Although several scholars have studied the tribal society within the state, not many studies have been conducted to understand the role of National Health Mission on the reproductive and child health of tribes in Kerala at micro level. The major studies on the tribes included ethnographic surveys, socio-cultural analysis, socio-linguistic aspects of tribal life and anthropological studies. Though, maternal and child health care sometimes formed a part of some studies, it did not become the focal aspect. There is dearth of studies regarding the accessibility and utilisation of maternal and child health care under NHM by tribal population of Kerala. Micro level study considering the facets of provisioning, accessibility, awareness, utilization and satisfaction of Reproductive, Maternal, Newborn, Child, Adolescent Health (RMNCH+A) care services have not been dealt before.

This study, therefore, will be unique in the field of research on accessibility and utilisation of maternal and child health care services. Thus, it is extremely important to conduct methodical study which can help in realising the levels of progress made by the Scheduled Tribes as a result of the Government welfare schemes which, in turn, can aid the Government in improving the quality of the already existing schemes and in launching new and innovative strategy for the advancement of Scheduled Tribes especially in the field of tribal health.

### **1.4 Statement of the Problem**

Health is a predominant factor for the economic development of our country. The tribal groups constitute an important part of our economy. There is a growing socio-economic inequality between tribal population and general population. Basic inequality in health care between tribals and non-tribals has increased over the years. Tribal development can be made possible only by ensuring adequate health facility.

Tribals constitute around 20% of the population of Vithura Grama Panchayath of Thiruvananthapuram district. Despite the concerted efforts of the government the effect of the welfare policies on tribal welfare and development has been marginal. Most of the tribes continue to remain under a state of deprivation. Hence it is essential to analyse the present status of health among the tribals, various health intervention schemes under NHM available for reproductive and child health care of tribal population, its implementation, outreach and effectiveness.

The main issue faced by the tribals is the lack of health service which adversely affects their health. In spite of large numbers of government policies and schemes aimed at tribal welfare, they still face the problems of adequacy and accessibility of government health care facilities. Lack of education and limited awareness of different health facilities and government schemes available for them may have also led to poor health among them especially children and pregnant women. This study intends to investigate the reasons for the same. The paper analyses the awareness, access, utilization and satisfaction about the various reproductive, maternal and child healthcare schemes available under NHM among the Kani population of Vithura grama panchayath. The study also explores the levels of socio-economic status and healthcare seeking behavioural pattern of the STs. The main issue faced by the tribals is lack of health service which adversely affects their health.

### **1.5 Objectives**

- 1) To analyze the socio-economic profile of the Kani tribal population of Vithura grama panchayath, Thiruvananthapuram district.
- 2) To evaluate the availability, adequacy and utilization of reproductive, maternal and child health care services under NHM in the tribal areas and assess the level of awareness among tribals about the available health schemes.
- 3) To examine the level of satisfaction among tribals regarding the schemes.

### **1.6 Methodology**

The present study is descriptive in nature and seeks to identify and analyse the reproductive, maternal and child health care services received by the tribal women. The study population consists of tribal women of Kani tribe who are in the reproductive age. Based on the density of tribal population, Vithura panchayath of Thiruvananthapuram district was purposively selected for collecting the primary data for the study. The sample consists of 100 tribal women in the reproductive age. The data were collected from the tribal women by in depth interview using an interview schedule. The data collected in this respect from hundred tribal women were analysed using descriptive statistical methods. The study is based on both primary and secondary data. The main source of data is primary sample survey of households in the tribal settlements. Survey was made on the basis of purposive random sampling method. It was supplemented with secondary data from panchayath. After the field work, the data collected were scrutinized and were processed in tabular forms. Both quantitative and qualitative methods were employed to analyse the collected data. Suitable statistical tools were used for analysis.

### **1.7 Limitations of the Study**

The subject and area of study posed a number of challenges in the smooth conduct of the study. The most important limitation faced during the study was reluctance on the part of people to provide information. The study was limited to the area of a single grama panchayath and was conducted within a span of limited time. Hence, there was both space and time constraint.

### **1.8 Tribal Health Care in India and Kerala**

The tribals are an ancient segment of population in India. India has the largest concentration of tribals next only to Africa in the world. By and large their living depends on agriculture and forest hunting. So they

earn just enough for their subsistence. Although there is special provision guaranteed by the constitution, health care facilities for the tribals need much improvement. The central government identifies communities as scheduled tribes based on a community's "primitive traits, distinctive culture, shyness with the public at large, geographical isolation and social and economic backwardness" (India Ministry of Tribal Affairs 2004). "While "scheduled tribes" is an administrative term adopted by the Government of India, the term "Adivasis" (meaning "original inhabitants" in Sanskrit) is often used to describe the different communities that belong to scheduled tribes. The Adivasis are considered to be the earliest settlers in, and the original inhabitants of, the Indian peninsula, with their presence dating back to before the Aryan colonization".

The total ST population returned in Census 2011 in Kerala is 4,84,839, out of which 4, 33,092 (89%) are in rural areas. There are 35 different scheduled tribes in Kerala. Highest concentration of ST population is found in Wayanad district (18.53%) followed by Idukki, Palakkad, Kasaragod, Thiruvananthapuram and Kannur. Around 75% of tribal population is concentrated in these 6 districts.

The Scheduled Tribes in Kerala are overwhelmingly rural and geographically scattered. Out of the 35 Scheduled Tribes, five are primitive tribes, namely Koragas, Kattunaikan, Cholanaikkan, Kadar and Kurumbas. The Koragas in Kasaragode, the Kurumbas of Attapady, the Kadar of Parambikulam, Sholayar and the Cholanaikans of Wayanad & Nilambur are under threat of extinction.

One of the most important challenges faced by the tribal economy in Kerala is poor health status and inadequate health care services which deteriorates the quality of life and standard of living of the tribal people. Kerala topped the India Human Development Index in 2011 because of its high literacy rate and exemplary health services. However, the death of more than 60 infants due to malnutrition in Attapady proves to be a blot on Kerala's exceptional health care system. This presents widespread disparity in health status between tribal and non-tribal population in Kerala.

Tribals suffer from a deficiency of calcium, vitamin-A, vitamin-C in their diets. Malnutrition and under nutrition are common among primitive tribal group especially pregnant women and children. It directly influences the reproductive performance and their infant's survival growth and development. Due to inadequate hospital facility they have developed their own medicine system based on herbs and other items collected from nature and processed locally. Tribal population has distinctive health problems which are mainly governed by multidimensional factors such as habitat, difficult terrain, isolation, superstitions, poverty, illiteracy, deforestation, life-style, food habits etc.

The government of Kerala has taken various measures for timely medical attention to tribal population. The government has set up many primary health centers, mid- wife centers, ayurveda dispensaries and allopathic hospitals. Mobile-medical units have been set up which conduct monthly medical camps in remote tribal settlements. The government has introduced 3 major health projects for tribals in Kerala. They are namely, Mananthavady Health Project, Attapady Health Project and Idukky Health Project. Numerous other schemes such as Comprehensive Tribal Health Care, Tribal Relief Fund, Assistance for Sickle-cell Anaemia Patients, Janani-Janma Raksha, Financial Assistance to Traditional Tribal Healers, Food Support Programme, National Health Mission etc. have also been launched by the state and central governments to help the tribal people.

The Ministry of Tribal Affairs is the nodal ministry for the overall policy, planning and coordination of programmes for the development of Scheduled Tribes. The programmes and schemes of the ministry are intended to support and supplement, through financial assistance, the efforts of other central ministries, the state governments and voluntary organizations, and to fill critical gaps taking into account the present situation of the tribals. Though the primary responsibility for the promotion of interests of Scheduled Tribes rests with all the Central Ministries, the Ministry of Tribal Affairs complements their efforts by way of various developmental interventions in critical sectors through specially tailored schemes.

## 1.9 Analysis of Data

The study population consists of tribal women of Kani tribe who are in the reproductive age(15-55). Based on the density of tribal population, Vithura panchayath of Thiruvananthapuram district was purposively selected for collecting the primary data for the study. The sample consists of 100 tribal women in the reproductive age. The data were collected from the tribal women by in depth interview using an interview schedule. The data collected in this respect from hundred tribal women were analysed using descriptive statistical methods. The study is based on both primary and secondary data. The main source of data is primary sample survey of households in the tribal settlements. Survey was made on the basis of purposive random sampling method. It was supplemented with secondary data from panchayath. After the field work, the data collected were scrutinized and were processed in tabular forms. Both quantitative and qualitative methods were employed to analyse the collected data. This section provides the result of analysis of data obtained through interview method during the field survey. The analysis of the variables helps to highlight : (i) The socio- economic characteristics of the sample unit (ii) work details (iii) health issues and (iv) expenses incurred.

### 1.9.1 Socio-Economic Characteristics

Socio-economic characteristics were analyzed by considering:

(i) Age (ii) Marital Status (iii) Education (iv) Occupation (v) Number of family members (vi) Monthly Income (vii) Income category.

**Table 1.9.1 : Distribution of respondents according to Socio-demographic variables**

Variable	Frequency (n=75)	Percentage
<b>i) Age</b>		
15-25	12	16
26-35	28	37
36-45	26	35
45-55	09	12
<b>ii) Marital Status</b>		
Unmarried	0	0
Married	62	83
Divorced	08	11
Widow	05	6
<b>iii) Education</b>		
Illiterate	0	
Primary	05	6
High School	28	37
Intermediate	31	41
Graduation	11	16
<b>iv) Occupation</b>		
Student	05	6
Unemployed	06	8
Housewife	11	16

Wage Labourer	04	5
Agricultural		
Labourer	04	5
MGNREGS	45	60
<b>v) Number of family members</b>		
1-3	23	31
4-7	52	69
8-10	0	0
<b>vi) Monthly Income</b>		
Less than 5000	56	75
5000-10,000	16	21
More than 10,000	03	04
<b>vii) Income Category</b>		
APL	03	04
BPL	72	96

Source: primary survey 2022.

The above table shows that there are 16% of the respondents belong to the age group of 15-25, 37% of the respondents belong to the age group 25-35. 35% of the respondents belong to the age group 36-45 and 12% of the respondents belong to the age group 45-55.

Majority of the respondents (83%) are married. 11% are divorced and 6% are widowed.

The table shows that 6% have primary education, 37% of the sample population has completed high school, 41% have completed intermediate/ higher secondary and 16% have completed graduation.

As per the table 6% of the sample population are students, 8% are unemployed, 16% are housewives and 5% each are agricultural labourers and wage labourers.

It is seen that 31% of the households surveyed have family members between 1-3 while 69% of the families surveyed have 4-7 members.

Income wise 75% of the households have less Rs 5000 as monthly income, 21% of the households have monthly income between 5000 and 10000 and 4% households have more than 10000 as monthly income.

It is also seen that 4% of the households are above poverty line and 96% of the households are below poverty line.

### **1.9.2 Availability and Accessibility of Reproductive and Child Health Care Schemes Under NHM**

The following table shows the response of the sample population regarding the availability and accessibility of various schemes under NHM

### 1.9.3

**Table 1.9.2 : Availability and Accessibility of Reproductive and Child Health Care Schemes Under NHM**

Schemes	Availability			Accessibility		
	Yes	No	Don't Know	Yes	No	Don't Know
Janani Suraksha Yojana	86%	11%	3%	82%	12%	6%
Janani Shishu Suraksha Karyakram	79%	9%	12%	76%	11%	13%
Accredited Social Health Activist (ASHA)	96%	2%	2%	95%	3%	2%
Ante Natal Care Services	73%	11%	16%	76%	10%	14%
Delivery Services	92%	5%	3%	90%	6%	4%
Post Natal Care Services	70%	14%	16%	68%	12%	20%
New born Care	75%	16%	9%	72%	18%	10%
Immunization Services	93%	5%	2%	87%	9%	4%
Child health care	72%	12%	16%	70%	15%	15%
Family Planning Services	76%	18%	6%	79%	11%	10%
Adolescent Health Services	57%	23%	20%	55%	32%	23%

Source: primary survey 2022.

Table 1.9.2 illustrates the availability and accessibility of various types of services for the tribal mothers under NHM. From the data it is clear that 86% of the respondents replied in affirmative to the availability of Janani suraksha Yojana while 11% replied in negative and 3% didn't know about the availability. Table tells that 82% of the respondents thought Janani Suraksha Yojana was accessible but 12% of the respondents could not access Janani Suraksha Yojana. Similarly 79% of the respondents replied in affirmative to the availability of Janani Shishu Suraksha Karyakram while 9% replied in negative and 3% didn't know about the availability. According to the table 76% of the respondents thought Janani Shishu Suraksha Karyakram was accessible but 11% of the respondents could not access Janani Shishu Suraksha Karyakram. Accredited Social Health Activist (ASHA) was the most accessible scheme. On the other hand, Adolescent Health Services were inaccessible.

### 1.9.4 Awareness about the Reproductive and Child Health Care Schemes Under NHM

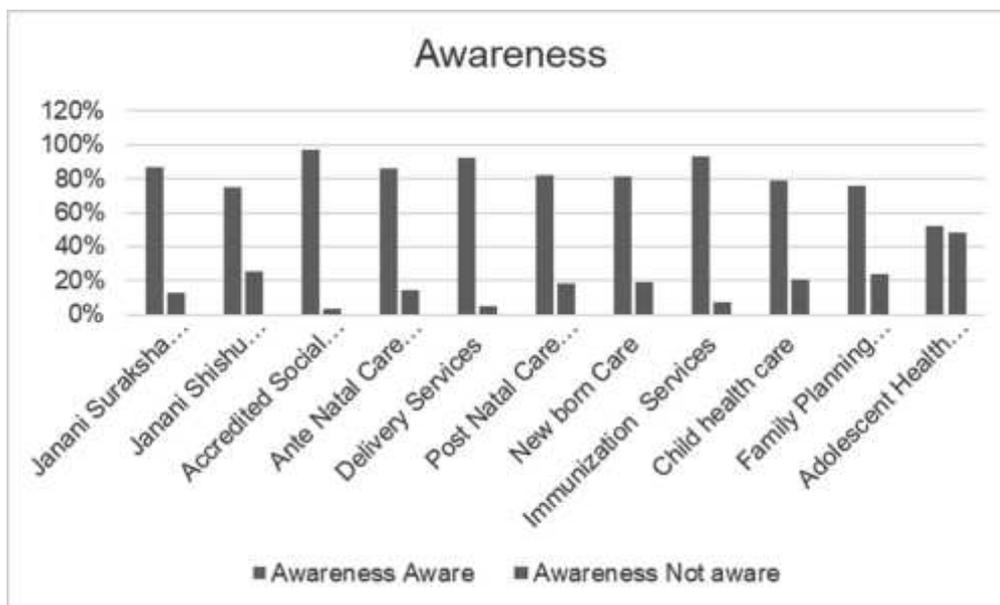
The following table shows the awareness of the sample population regarding the various schemes under NHM

**Table 1.9.3 : Awareness about the Reproductive and Child Health Care Schemes Under NHM**

Schemes	Awareness	
	Aware	Not aware
Janani Suraksha Yojana	87%	13%
Janani Shishu Suraksha Karyakram	75%	25%
Accredited Social Health Activist (ASHA)	97%	3%
Ante Natal Care Services	86%	14%
Delivery Services	92%	8%
Post Natal Care Services	82%	18%

New born Care	81%	19%
Immunization Services	93%	7%
Child health care	79%	21%
Family Planning Services	76%	24%
Adolescent Health Services	52%	48%

Source: primary survey 2022.



Source: primary survey 2022.

### 1.9.5 Utilisation of the Reproductive and Child Health Care Schemes Under NHM

The following table shows the percentage of beneficiaries utilizing the various schemes under NHM

**Table 1.9.4 : Utilisation of the Reproductive and Child Health Care Schemes Under NHM**

Schemes	Percentage of Beneficiaries utilizing the scheme.
Janani Suraksha Yojana	84%
Janani Shishu Suraksha Karyakram	71%
Accredited Social Health Activist (ASHA)	97%
Ante Natal Care Services	83%
Delivery Services	92%
Post Natal Care Services	78%
New born Care	84%
Immunization Services	94%
Child health care	77%
Family Planning Services	80%
Adolescent Health Services	51%

Source: primary survey 2022.

The data shows that the most utilised scheme is Accredited Social Health Activist (ASHA) and the least utilised scheme is Adolescent Health Services

### 1.9.5 Expenditure on Health During Last Delivery

Table: 1.9.5 Represent the Expenditure on Health of the Respondent

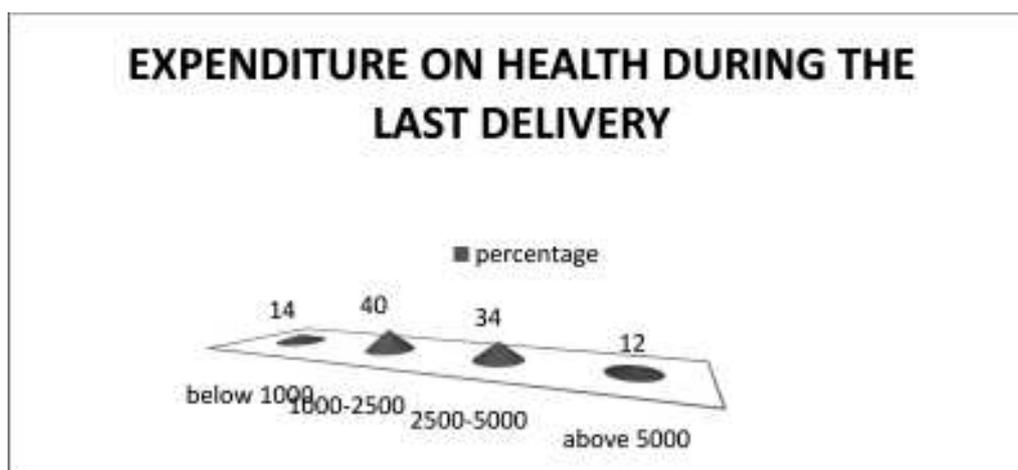
**Table : 1.9.5 : Expenditure on health during last delivery**

Expenditure on health during last delivery	Percentage
Below 1000	14
1000- 2500	40
2500- 5000	34
Above 5000	12
Total	100

Source: primary survey 2022

The above table shows that 14% have expenditure on health below Rs. 1000. Then 40% of the respondents have expenditure on health between Rs 1000-2500, 34% of respondent spent an amount between Rs 2500-5000 on health, while 12% have an expenditure above 5000.

**Figure: Expenditure on Health during the last delivery**



Source: primary survey 2022

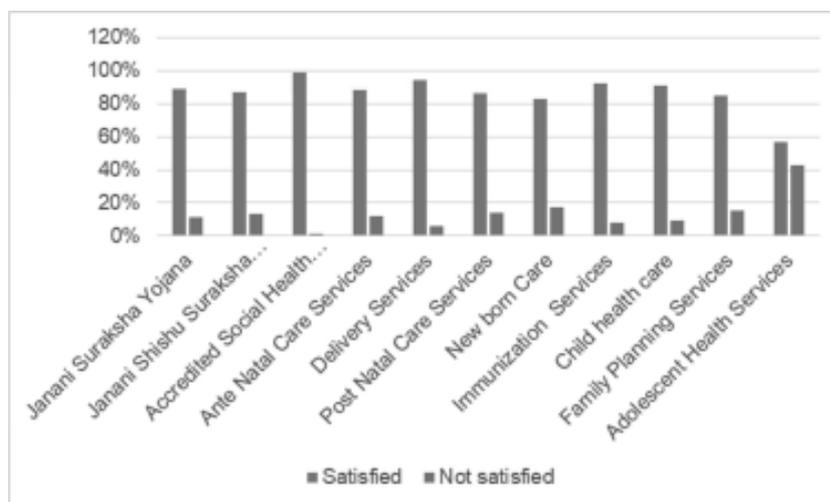
### 1.9.6 Satisfaction Regarding Schemes Under NHM

**Table 1.9.6 : Satisfaction Regarding Schemes Under NHM**

Schemes	Satisfaction	
	Satisfied	Not satisfied
Janani Suraksha Yojana	89%	11%
Janani Shishu Suraksha Karyakram	87%	13%
Accredited Social Health Activist (ASHA)	99%	1%
Ante Natal Care Services	88%	12%
Delivery Services	94%	6%
Post Natal Care Services	86%	14%

New born Care	83%	17%
Immunization Services	92%	8%
Child health care	91%	9%
Family Planning Services	85%	15%
Adolescent Health Services	57%	43%

Source: primary survey 2022



## 1.10 Findings, Suggestions and Conclusions

This section summarizes the major highlights of the study.

### Major Findings

A significant percentage of the respondents belong to the age group 26-35, and 36-45. It is seen that 83 % of the respondents are married, 11% of the respondents are divorced and 6% are widows. Regarding education of the respondents, 16% of them had completed graduation. Majority of respondents have intermediate level education (41%) or high school level education (37%). The monthly family income of 75% was less than 5000 while 21% belongs to income group of Rs 5000-10000, Only 4% belongs to income group between Rs 10000-20000. With respect to occupation, most of the respondents are engaged in MGNREGS. The availability and accessibility varied across different schemes. The most accessible scheme was ASHA and least accessible scheme was adolescent health care. Awareness about the schemes varied from scheme to scheme. The most utilised scheme was services provided by ASHA and the least utilised scheme was adolescent health care. Regarding their expenditure on health majority spent Rs.1000-2500. Only 12% of respondent spent above Rs 5000. Majority of respondents meet their medical expenditure through the use of insurance card.

### Suggestions and Policy Implication

On the basis of the study following measures are suggested for improving the health status of tribal population.

In order to meet the shortage of manpower in the critical areas of health care centres, district authorities in health care departments should be adequately authorized so that time is not lost in replacement of manpower and the work is effectively managed. Eligible candidates from nearby areas can be considered for employment to facilitate uninterrupted service. Continuous training of paramedical staff to increase the productivity must be considered. The training must include special interpersonal relations and awareness of tribal problems that can foster a sense of belongingness. Compensation for the mobility of health staff must be considered.

This will take care of cost effectiveness and efficient implementation of schemes. A committee must be formulated under the aegis of the district medical officer (DMO) at district level to design, implement, monitor and evaluate the progress of tribal health programmes. This would facilitate faster response to the need in health care centres. This committee also should be empowered to check and maintain an inventory of laboratory chemicals, medicines and hospital disposables apart from manpower resources. Motivated healthcare professionals have to be posted in the tribal belt. It is difficult to expect health care staff to serve continuously in tribal areas due to their personal reasons and the nature of geographical locations and climatic conditions. Therefore, job rotation of employees may be considered to motivate and develop commitment among the staff. Special wages and incentives package need to be evolved with a focus on proper promotion, housing, skill based training for the health care professionals and paramedical to enhance their competency and involvement in the job. Working in rural area be made compulsory for fresh medical graduates and students. Government agencies, NGO's and private nursing school should unite and work jointly to deliver health care services in the tribal settlements. Present rule of serving in rural hospital for medical students has to be further strengthened. Government agencies can collaborate with nursing training colleges for cost effective nursing services. Providing treatment to cure diseases (therapeutic) is far more expensive than preventing (prophylaxis) them. Therefore a robust system must be in place for planning, organizing, developing and utilization of the resources to achieve the objective of health care for tribals. Tribal family should be educated on importance of immunization to maintain good health; especially tribal mothers must be educated. The government should give appropriate development policies for tribal health care.

## **Conclusion**

The present study is an attempt to find out the role of NHM in reproductive and child health care service of tribal population. The study showed that tribals had awareness about the government policies for tribal health care. They require better treatment, travelling facility, medicines etc. A number of factors are responsible for the tribals not being able to get the benefits of modern health care. The main reason is due to the geographical isolation and inaccessibility. Health care centres are far away from tribal areas and poor transportation makes it even more difficult for tribals to make use of the available medical facilities. In the tribal context, environment plays an important role in the framework and evaluation of health care systems. Therefore, policies and programmes should be evolved keeping in mind the ground realities. Poor socioeconomic condition forces the tribal children to give up their education. No doubt, existing health care system is people centric but it is the fact that the benefits have not reached the tribals.

It was observed during the study that most of the tribal families live in thatched huts with floors made up of mixture of cow- dung and mud. Sanitation and drainage systems are poor. Malnutrition and gastrointestinal disorders are common among tribal populations. Many tribal homes have animals (goat, rabbits) and birds at home, living side by side with them. If tribals are not enlightened on the importance of clean environment at home, it may result in communicable diseases of childhood turning into chronic diseases. Protein deficiencies, which have been detected in gross amount, may aggravate disease conditions.

Absence of qualified medical practitioners has resulted in mushrooming of clinics run by unqualified (quacks) medical practitioners in and around tribal areas. Use of infected syringes and needles by them may transmit infections. It was also revealed during the study that, very few of tribals were able to read and write. Therefore, they could not appreciate the benefits of modern medical facilities.

Two questions are central to understand the effects of health care service delivery system in tribal areas, one being their knowledge of the modern health care system indicating needs, interests, and preferences and the second is the accessibility to the health care centre. Research reveals that media influences the knowledge, opinions, attitudes, and behaviours of target audience. Media can disseminate ideas, images, themes,

and stories. Therefore, media can play a potential role by being a part of all health related promotional programmes in tribal areas. The media both the audio and the visual can play a major role in disseminating health awareness.

The plans and policy options of health care delivery system should be ambitious, at the same time, be guided by the realities. It is imperative to carry out locally relevant initiatives for better service delivery. There is a wide scope for studying the problems inherent to the tribal society. Developing a system that can ensure a close monitoring and evaluation of the implementation of delivery system to augment positive response from the tribals is the need of the hour. Though a number of national and international agencies have conducted studies to evolve schemes for upliftment of tribal population, there is a mismatch between the problems and solutions. If an effective machinery to supervise and execute the health care services of the tribals is developed with social and legal accountability tribal health can be improved. In order to achieve national integrity in this regard a time bound and comprehensive health programme needs to be developed for tribal upliftment.

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# Performance Evaluation of MSME Entrepreneurs in Thiruvananthapuram District

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*The importance of MSMEs has grown dramatically as a result of their ability to respond to the demands of an ever-changing world. Many MSME entrepreneurs are doing their diversified activities. Micro, Small and Medium Enterprises in Thiruvananthapuram have constantly reported higher growth rates compared to other sub-sectors in the industrial sector. The next generation development in Thiruvananthapuram district is possible only through the growth of MSME sectors. So, in order to measure the performance of MSME entrepreneurs in the region, a research study is inevitable. Present study is basically directed towards applying the concept of entrepreneurship performance in evaluating Performance Indicators of MSME entrepreneurs in Thiruvananthapuram district. The study aims at evolving performance variables which could be used for capturing the dynamics and enable effective monitoring and evaluation for strategic management, policy implementation and corrective measures.*

## Introduction

Entrepreneurship is one of the key functional components in the economic development of a nation. It is considered an economic practice since the operational process requires creation and operation of an enterprise with a view to generate profit or wealth in an ecosystem for the same. The requirement for a broad-based entrepreneurial class arises from the need to speed up the process of stimulating the factors of production, diffusion of economic activities and development of backward regions. Entrepreneurship is relevant in all economic systems. It is crucial for the use of available material resources, generation of employment opportunities, growth of capital for further investment and for the improvement of economic well-being. In recent years, the global landscape of entrepreneurship has undergone a paradigm change and start-ups have played a critical role in the development of the social and economic climate of the nation. Policymakers, business leaders, economists and the Government have come together to encourage entrepreneurship development. Entrepreneurship development has been emerging as a policy imperative.

After independence, India took the middle road to economic growth. The functions of public and private sectors have been clearly identified by industrial policy statements. Some sectors have been reserved for the public sector and some other sectors have been allocated to the private sector. Government of India has taken the initiative to build the infrastructure required for rapid industrial development. Different steps taken by the Government have encouraged numerous entrepreneurs to come forward and give a boost to the overall development of the country. Thus, the significance of Micro, Small and Medium Enterprise (MSMEs) has been growing in recent years, specifically in the state of Kerala for its noteworthy contribution in gratifying various socio-economic objectives such as a higher growth of employment, promotion of exports and fostering entrepreneurship. The last four decades of economic growth in Thiruvananthapuram has shown that the Micro Small and Medium Enterprises have dominated in terms of both employment and output. There are many challenges in the industrial development of Thiruvananthapuram, such as labour union issues, land acquisition issues, high land prices, high raw material costs, labour problems and the high population density that made land acquisition almost impossible. Although the industrial sector has great potential to improve the opportunities for gainful employment, the development of large-scale industries in Thiruvananthapuram is

not possible due to various constraints noted above. In this context, MSMEs have the capacity to overcome many of the industrial constraints that Thiruvananthapuram is facing, and at the same time, it also has the capacity to improve the employment prospects of people through skills acquisition in urban and rural areas. Measurement of entrepreneurial performance is important in identifying current and future successful ventures and in broadening our understanding of the entrepreneurial process. There is emerging consensus that entrepreneurial activity is taking place and should therefore be examined at various levels such as individual, organizational and national level. Moreover, a multi-level approach provides an opportunity to explore the performance of entrepreneurship at different levels of analysis.

## Review of Literature

**Glaeser (2009)** analysed the sociological factors that contributed to the development of entrepreneurs owning small scale businesses. His study listed out certain aspects that a prospective entrepreneur should consider such as the environmental context in which he will be operating his business, a grit to adapt the business accordingly, an unblemished family background and much more. The author links entrepreneurial success more to cutting-edge innovation and creativity and hence does not find formal education as an inevitable reason for entrepreneur's success. Moreover, providing infrastructural services on its own also does not encourage entrepreneurship. These tenets are particularly encouraging for the growth of small-scale enterprises and also for the blossoming of new entrepreneurs.

**Panda.H (2017)** evaluated certain parameters for estimating entrepreneurial performance in Kerala. They analysed achievement values along with entrepreneurial success and deemed it as the most effective predictor variable for predicting entrepreneurial performance. Several psychological, social and cultural variables are recognized by their research that highly influenced entrepreneurial performance. They identified that individualism promoted important positive associations, whereas collectivism and the locus of power created negative correlation.

## Methodology

Present study evaluates the intrinsic determinants of MSME entrepreneurs in the Thiruvananthapuram district. The Performance of Entrepreneurs has been assessed on the basis of the Performance evaluation variables. Performance is evaluated for all the service and manufacturing sectors in the form of partnership and sole-proprietorship model of business at panchayat and corporation level MSMEs at Thiruvananthapuram. Performance Evaluation variables of MSME entrepreneurs in Thiruvananthapuram district for the present study are Men, Marketing, Money, Management, Materials, Methods of Production & Machinery. Here to make the comparison, MANOVA test was done. Thus, the dependent variables are Men, Marketing, Money, Management, Materials, Methods of Production & Machinery (7M's) and the categorical variables are Form of organisation namely partnership and sole proprietorship and Type of organisation namely service sector and manufacturing sector. Secondary data from District Industries Centre, Thiruvananthapuram was used to examine the growth of MSME's. Out of a finite population (N) 38,566 entrepreneurs in Thiruvananthapuram district, level of significance ( $\alpha$ ) of 5%, for error at 5.3%, the sample size determined was **356**, with the support of the following formulae.

$$n = \frac{N}{1 + N \times e^2} \quad \text{where } N = 38,566, e = 5.3\%, n = 356 \text{ [TAROYAMANE (1976)]}$$

## Objectives of the Study

- To evaluate the Performance of Micro, Small and Medium Enterprises entrepreneurs in Thiruvananthapuram district.
- To analyse the Growth of MSME's in Thiruvananthapuram district.

## Analysis & Interpretation

In order to measure the Performance of entrepreneurs, certain questions were designed according to Likert scale. In order to arrive at concrete meaning from the opinion of the entrepreneurs at Thiruvananthapuram district, the mean score was further divided into three categories. A mean value lower than 3 shall be treated as low, a mean value in between 3 and 3.5 will have the moderate effect and a mean value greater than 3.5 will be considered as the high influence. The results of the statistical analysis performed for testing hypothesis are presented and interpreted. The data collected was analysed for the whole sample.

**Table-1 : Performance Indicators- Descriptive Statistics**

Variables	Form of Organization	Type of Organisation	Mean	Std. Deviation	N	Influence
Men	Partnership	Service Sector	2.958	0.2941	12	Low
		Manufacturing sector	3.071	0.3769	75	Moderate
		Total	3.056	0.3671	87	Moderate
	Sole proprietorship	Service Sector	3.050	0.3916	166	Moderate
		Manufacturing sector	3.055	0.3542	103	Moderate
		Total	3.052	0.3771	269	Moderate
	Total	Service Sector	3.044	0.3858	178	Moderate
		Manufacturing sector	3.062	0.3630	178	Moderate
		Total	3.053	0.3742	356	Moderate
Marketing	Partnership	Service Sector	3.046	0.6186	12	Moderate
		Manufacturing sector	3.089	0.5504	75	Moderate
		Total	3.083	0.5566	87	Moderate
	Sole proprietorship	Service Sector	3.044	0.6295	166	Moderate
		Manufacturing sector	3.082	0.5855	103	Moderate
		Total	3.059	0.6122	269	Moderate
	Total	Service Sector	3.044	0.6270	178	Moderate
		Manufacturing sector	3.085	0.5694	178	Moderate
		Total	3.065	0.5984	356	Moderate
Money	Partnership	Service Sector	2.869	0.7930	12	Low
		Manufacturing sector	3.086	0.8946	75	Moderate
		Total	3.056	0.8802	87	Moderate
	Sole proprietorship	Service Sector	3.060	0.9552	166	Moderate
		Manufacturing sector	3.089	0.9095	103	Moderate
		Total	3.071	0.9363	269	Moderate
	Total	Service Sector	3.047	0.9444	178	Moderate
		Manufacturing sector	3.087	0.9007	178	Moderate
		Total	3.067	0.9217	356	Moderate

Management	Partnership	Service Sector	3.075	0.8331	12	Moderate
		Manufacturing sector	3.346	0.9700	75	Moderate
		Total	3.308	0.9525	87	Moderate
	Sole proprietorship	Service Sector	3.272	0.9935	166	Moderate
		Manufacturing sector	3.341	0.9500	103	Moderate
		Total	3.299	0.9758	269	Moderate
	Total	Service Sector	3.259	0.9827	178	Moderate
		Manufacturing sector	3.343	0.9557	178	Moderate
		Total	3.301	0.9688	356	Moderate
Materials	Partnership	Service Sector	2.948	0.5306	12	Low
		Manufacturing sector	3.315	0.7588	75	Moderate
		Total	3.264	0.7400	87	Moderate
	Sole proprietorship	Service Sector	3.288	0.7987	166	Moderate
		Manufacturing sector	3.296	0.7875	103	Moderate
		Total	3.291	0.7929	269	Moderate
	Total	Service Sector	3.265	0.7870	178	Moderate
		Manufacturing sector	3.304	0.7734	178	Moderate
		Total	3.285	0.7794	356	Moderate
Methods of production	Partnership	Service Sector	2.917	0.9962	12	Low
		Manufacturing sector	3.397	1.0663	75	Moderate
		Total	3.330	1.0644	87	Moderate
	Sole proprietorship	Service Sector	3.199	1.1209	166	Moderate
		Manufacturing sector	3.318	1.1214	103	Moderate
		Total	3.244	1.1205	269	Moderate
	Total	Service Sector	3.180	1.1126	178	Moderate
		Manufacturing sector	3.351	1.0962	178	Moderate
		Total	3.265	1.1062	356	Moderate
Machinery	Partnership	Service Sector	3.066	0.7186	12	Moderate
		Manufacturing sector	3.522	0.7951	75	Moderate
		Total	3.459	0.7969	87	Moderate
	Sole proprietorship	Service Sector	3.350	0.9391	166	Moderate
		Manufacturing sector	3.418	0.8666	103	Moderate
		Total	3.376	0.9110	269	Moderate
	Total	Service Sector	3.331	0.9270	178	Moderate
		Manufacturing sector	3.462	0.8365	178	Moderate
		Total	3.396	0.8841	356	Moderate

Source: Compiled from the primary data

It is inferred from the Table 1 that the entrepreneurs of partnership service sector assigned a low mean score of  $2.958 \pm 0.29$  on the performance indicator variable-Men, whereas the entrepreneurs of manufacturing sector assigned a moderate score of  $3.071 \pm 0.37$ . The entrepreneurs of service sector who carries the business under sole proprietorship model assigned a moderate score of  $3.050 \pm 0.39$  on the variable-Men and the entrepreneurs of manufacturing sector have also assigned a moderate influence ( $3.055 \pm 0.35$ ). The entrepreneurs of partnership service sector assigned a moderate mean score of  $3.046 \pm 0.62$  on the performance indicator variable-Marketing and the entrepreneurs of manufacturing sector also assigned a moderate score of  $3.089 \pm 0.55$ . The entrepreneurs of service sector who carries the business under sole proprietorship model assigned a moderate score of  $3.044 \pm 0.62$  and the entrepreneurs of manufacturing sector have also assigned a moderate influence on marketing ( $3.082 \pm 0.58$ ). Entrepreneurs of partnership service sector assigned a low mean score of  $2.869 \pm 0.79$  on the performance indicator variable-Money and the entrepreneurs of manufacturing sector assigned a moderate score of  $3.086 \pm 0.89$ . The entrepreneurs of service sector who carries the business under sole proprietorship model assigned a moderate score of  $3.060 \pm 0.95$  and the entrepreneurs of manufacturing sector have also assigned a moderate influence on the variable-money ( $3.080 \pm 0.90$ ). Entrepreneurs of partnership service sector assigned a moderate mean score of  $3.075 \pm 0.83$  on the performance indicator variable-Management and the entrepreneurs of manufacturing sector also assigned a moderate score of  $3.346 \pm 0.97$ . The entrepreneurs of service sector who carries the business under sole proprietorship model assigned a moderate score of  $3.272 \pm 0.99$  and the entrepreneurs of manufacturing sector have also assigned a moderate influence on the variable-management ( $3.341 \pm 0.95$ ). The entrepreneurs of partnership service sector assigned a low mean score of  $2.94 \pm 0.53$  on the performance indicator variable-Materials and the entrepreneurs of manufacturing sector assigned a moderate score of  $3.31 \pm 0.75$ . The entrepreneurs of service sector who carries the business under sole proprietorship model assigned a moderate score of  $3.28 \pm 0.79$  on the variable-materials and the entrepreneurs of manufacturing sector have also assigned a moderate influence on the materials ( $3.29 \pm 0.78$ ). Entrepreneurs of partnership service sector assigned a low mean score of  $2.917 \pm 0.99$  on the performance indicator variable-Methods of production and the entrepreneurs of manufacturing sector assigned a moderate score of  $3.397 \pm 1.06$ . The entrepreneurs of service sector who carries the business under sole proprietorship model assigned a moderate score of  $3.199 \pm 1.12$  and the entrepreneurs of manufacturing sector have also assigned a moderate influence on the methods of production ( $3.318 \pm 1.12$ ). Entrepreneurs of partnership service sector assigned a moderate mean score of  $3.066 \pm 0.71$  on the performance indicator variable-Machinery and the entrepreneurs of manufacturing sector assigned a moderate score of  $3.522 \pm 0.79$ . The entrepreneurs of service sector who carries the business under sole proprietorship model assigned a moderate score of  $3.350 \pm 0.93$  and the entrepreneurs of manufacturing sector have also assigned a moderate influence on the machinery ( $3.418 \pm 0.86$ ).

**Table-2 : Performance Indicators-Multivariate analysis of variance test (MANOVA)**

Effect	Test	Value	F	Hypo-thesis df	Error df	P-value
Intercept	Pillai's Trace	0.981	2813.819	7.000	346.000	0.000
	<b>Wilks' Lambda</b>	<b>0.017</b>	<b>2813.819</b>	<b>7.000</b>	<b>346.000</b>	<b>0.000</b>
	Hotelling's Trace	56.926	2813.819	7.000	346.000	0.000
	Roy's Largest Root	56.926	2813.819	7.000	346.000	0.000
Form of organisation	Pillai's Trace	0.009	0.462	7.000	346.000	0.861
	<b>Wilks' Lambda</b>	<b>0.990</b>	<b>0.462</b>	<b>7.000</b>	<b>346.000</b>	<b>0.861</b>
	Hotelling's Trace	0.009	0.462	7.000	346.000	0.861
	Roy's Largest Root	0.009	0.462	7.000	346.000	0.861

Type of Organisation	Pillai's Trace	0.025	1.272	7.000	346.000	0.263
	<b>Wilks' Lambda</b>	<b>0.975</b>	<b>1.272</b>	<b>7.000</b>	<b>346.000</b>	<b>0.263</b>
	Hotelling's Trace	0.025	1.272	7.000	346.000	0.263
	Roy's Largest Root	0.025	1.272	7.000	346.000	0.263
Form of organisation	Pillai's Trace	0.022	1.182	7.000	346.000	0.312
	<b>Wilks' Lambda</b>	<b>0.977</b>	<b>1.182</b>	<b>7.000</b>	<b>346.000</b>	<b>0.312</b>
* Type of Organisation	Hotelling's Trace	0.023	1.182	7.000	346.000	0.312
	Roy's Largest Root	0.023	1.182	7.000	346.000	0.312

Source: Computed from the primary data

According to Wilks' Lambda test, the F- value is 0.462 and the P-value is 0.861 on the performance indicator based on form of organization. It can be concluded that there is no difference in the performance indicator of MSME sector in Thiruvananthapuram district. Similarly, according to the type of organization, Wilks' Lambda test shows the F-value as 1.272 and the P- value as 0.263 shows that there is no difference in the performance indicator of MSMEs in Thiruvananthapuram. According to the interaction effect of Form of organization with Type of organization, no statistical difference was noticed on the performance indicators as the P-value is 0.312 and the F-value is 1.182.

#### Growth of Micro Small and Medium Enterprises in Thiruvananthapuram District

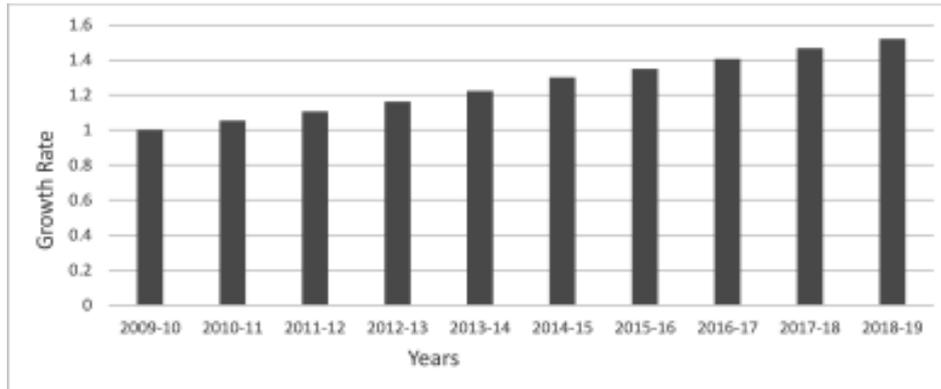
**Table 3 : Growth of MSMEs in Thiruvananthapuram District**

Year	No. of registered Units	Growth Rate
2009-10	26828	<b>1</b>
2010-11	28238	<b>1.053</b>
2011-12	29655	<b>1.105</b>
2012-13	31137	<b>1.161</b>
2013-14	32782	<b>1.222</b>
2014-15	34889	<b>1.300</b>
2015-16	36189	<b>1.349</b>
2016-17	37724	<b>1.406</b>
2017-18	39380	<b>1.468</b>
2018-19	40809	<b>1.521</b>
Average		<b>1.259</b>

Source: Computed from the Statistics of DIC, Thiruvananthapuram

Table 3 depicts the growth rate of the MSMEs in the Thiruvananthapuram district. The total number of units in 2009-10 was 26,828 and increased to 28,238 in 2010-11 with a growth rate of 1.053. In 2014-15, there were 34,889 MSME units registered with a growth rate of 1.3. The number of units registered further increased to 37,724 in 2016-17, with a growth rate of 1.406. In 2018-19, the total number of units registered in Thiruvananthapuram was 40,809 and the corresponding growth rate was 1.521. It was noted that an average growth rate of 1.259 was seen in the Thiruvananthapuram district with regard to the registration of Micro Small and Medium Enterprises.

**Figure 4.2 : Growth of MSMEs in Thiruvananthapuram District**



### **Findings of the Study**

- The study found that the average percentage increase in the number of units registered under the District Industries Center, Thiruvananthapuram during the year 2009-10 to 2018-19 was 1.259. This rapid growth in Micro Small and Medium Enterprises in the district has been the result of various incentives granted by Government of Kerala and Central Government.
- The analysis of the Performance Indicator Variables-Men, Money, Management, Materials, Methods of Production and Machinery showed no significant statistical difference as is evident from the opinion of entrepreneurs of manufacturing and service sector.

### **Conclusion**

The growing importance of entrepreneurship in the policy sector has increased the need for a sound basis for internationally comparable indicators of entrepreneurship and, indeed, a universally recognized measure of entrepreneurship that encourages and forms the basis for such measures. More action plans are needed, especially in the service sector MSME's, to make them financially strong and sustainable because there is a great scope for service sector MSMEs in Thiruvananthapuram. They have a great potential of expansion, growth and can help create many new employment opportunities. Services grew at an accelerated rate through increased government spending. Here it is expected that a flexibility in the operation of diversification of the business is to be given high priority. In terms of flood, drought, epidemics, the MSME sector should have the flexibility to tune its operations according to the need base.

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