SOCIAL SCIENCE IN PERSPECTIVE

Vol. 16
October - December 2024 No. 4

SOCIAL SCIENCE IN PERSPECTIVE

Vol. 16 **October - December 2024** **No. 4**

CONTENTS

Articles

Introducing New Books

Multidimensional Poverty Index: Estimates of World Regions and India

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Multidimensional Poverty Index (MPI) of Alkire Foster methodology is the internationally acclaimed methodology to measure multidimensional poverty around the world as well as across nations. In India, the MPI is calculated with slightly modified methodology by enhancing the number of indicators to 12, whereas the global MPI covers 10 indicators. This paper attempts to examine multidimensional poverty across different regions of the world and India. It is found that a mere minority of the poor experiences hardship in a single dimension, whereas over one-third of them endure multiple forms of deprivation simultaneously. According to UNDP report, almost one fourth of the people are multidimensionally poor, and the world poverty encompasses in two regions viz., Sub-Saharan Africa (42%) and South Asia (41%). According to the report of NITI Aayog, there is a sharp decline in the national poverty due to significant efforts by various governments to enhance the standard of living for millions of individuals by taking a number of Initiatives in this regard.

Key words : Multidimensional Poverty Index, Incidence, Intensity, Dimension, Indicator, Standard of Living, Health, Education.

Introduction

"Poverty is a pronounced deprivation in well-being" (World Bank, 2000). Though significant changes have been taking place around the world over the centuries, the concept of poverty and its analysis is still an overwhelming subject. There are various perspectives and methods to define poverty. In a narrow sense, poverty is defined as having insufficient income or consumption. In a broader sense, however, poverty is defined as lacking essential capabilities which include inadequate income or education, poor health, a sense of helplessness, and lack of political freedom. Regardless of the methods used to define poverty, measuring it is necessary for four reasons: first, to ensure that the poor remain a priority; second, to identify and target appropriate interventions among the identified poor; third, to monitor and assess policy and project initiatives aimed at the poor; and fourth, to assess the efficacy of organizations dedicated to serving the poor (Jonathan Haughton Shahidur R. Khandker, 2009).

Although it was assumed that a person's income could fairly accurately reflect their ability to meet minimum standards in a number of areas, including housing, clothing, and nutrition, there has been increasing agreement in recent years that income poverty measures are insufficient (Sen, 1992). Thus, Poverty has probably always been understood as a multidimensional problem. The reason for this is that, in the first place, an imperfect market leads to the unfulfillment of some critical requirements; therefore, non-market commodities or institutions are necessary to meet those needs. Secondly, varying household capacities to transform income into functioning ie, though different house holds have similar amount of income, using that income in different ways will improve their quality of life. Third, experience shows that a wide range of factors, including health, nutrition, inadequate water and sanitation, social exclusion, low education, subpar living conditions, violence, shame, and disempowerment, are used by the poor to characterize their state of deprivation. Fourth, income is merely a means to ends. It is the ends which are valuable, not the means.

As a result of the aforementioned constraints being acknowledged, methods for measuring poverty in multiple dimensions were developed, and governments were pressurised to create official measures of poverty that would supplement income-based indicators. The new availability of household survey data, which is for the application of multidimensional measurements, has encouraged this tendency. Although a number of approaches to measure multidimensional poverty have been put forth, the Alkire and Foster approach has been the most widely applied in empirical research, as evidenced by the Multidimensional Poverty Index. In the multidimensional context, the identification of the poor is more complex. The Alkire and Foster methodology (AF methodology) combines a method for identifying the poor based on counting the number of (weighted) deprivations, and a method for aggregation (Sabina Alkire and Maria Emma Santos, 2013).

Methodology

The present paper makes use of various publications and reports of World Bank, Oxford Poverty and Human Development Initiative (OPHI), NITI Aayog and Planning Commission to analyze and interpret the data. The paper focuses on the estimates of multi-dimensional poverty across different regions and countries of the world and different States of India by World Bank, UNDP and NITI Aayog.The global MPI, adapted to the Sustainable Development Goals (SDGs), is an internationally comparable measure of acute poverty for over 100 countries situated in developing regions. It complements global monetary poverty measures by capturing the simultaneous deprivations that each person experiences in ten indicators related to education, health and living standards. The global MPI is composed of three dimensions viz., health, education, and living standards and 10 indicators. Equal weightage is given to each dimension and each indicator within a dimension. A person is identified as multidimensionally poor if they are deprived in at least one third of the weighted indicators. The global MPI uses the AF method to measure multidimensional poverty. The AF method sums up the deprivations each person experiences in a weighted deprivation score, identifies who is poor, and aggregates this information into a headline and associated information platform. It has come to be widely used because of its simplicity yet specificity. Incidence is the percentage of people who are poor (or headcount ratio, H). Intensity is the average share of indicators in which poor people are deprived (A). MPI is the multidimensional poverty index, which is the product of incidence and intensity (MPI = H × A).(UNDP, 2018).

World Bank Estimates of Multi-dimensional Poverty Across Different Regions and Countries of the World

While the World Bank's poverty estimates are traditionally based on data on income or consumption, other crucial dimensions of well-being, such having access to high-quality healthcare or living in a safe environment, are not adequately represented by conventional monetary measures. The World Bank created a multidimensional poverty measuring system in order to directly quantify these non-financial aspects and compile the results into an index. By presenting both monetary and nonmonetary deprivations together, MPI helps in examining the share of the disadvantaged population that is overlooked by a purely financial definition of poverty.

Two exercises have been conducted by the World Bank to assess global poverty. The first uses comparable data from 119 economies for the year 2013 (about 45 percent of the world's population) to produce a worldwide picture. The way that global poverty is seen changes when indicators of education and access to basic infrastructure services are combined with income or consumption. The percentage of the poor rises by 50%, from 12% living below the global poverty line to 18% experiencing at least one of the three dimensions of well-being deprivation. Out of the total sample, a mere minority of the poor experience deprivation in a single dimension: over 33% of the poor have simultaneous suffering in all three dimensions. According to the data, one person in eight (11.8%) of the 119-economy sample in or around 2013 lives in a household is experiencing financial poverty, while nearly one in five (18.3%) living in a household has multidimensional deprivations (Table 01). The multidimensional measure counts as poor any individual whose cumulative deprivation exceeds the key threshold of 1/3, leading to a more expansive understanding of poverty. According

to data pertaining to the global region, shortfalls in one dimension coexist with deprivations in other dimensions in Sub-Saharan Africa. Given the comparatively high prevalence of sanitation and education deficiencies in South Asia, it is possible that the region's poverty rates would more than double when those non-monetary dimensions are taken into account (see Table 02).The second exercise, which is conducted for a smaller group of nations (six), examines the addition of two further non-monetary dimensions: household security (the possibility of encountering a natural disaster or crime) and health. The profile of the poor changed when these are taken into account along with the first three dimensions (seeTable 03). When nonmonetary dimensions are taken out, the percentage of the poor that live in female-headed families is higher in the majority of these countries. In many of these nations, the poor are also significantly more prevalent in urban areas (World Bank, 2018).

Table 01 : People Living in Monetary or Multidimensional Poverty, 119 Economies, circa 2013

Region	Monetary		Multidimensional		Number of economies	Population coverage (%)
	Headcount ratio	Share of the poor (%)	Headcount ratio (H)	Share of the poor (%)		
East Asia and Pacific	5.3	8.1	7.5	7.3	13	28.9
Europe and Central Asia	0.3	0.4	1.1	0.8	17	90.0
Latin America and the Caribbean	3.9	5.7	6.1	5.8	17	91.5
Middle East & North Africa	3.2	2.2	5.9	2.6	9	72.1
South Asia	11.9	12.3	26.6	17.7	5	23.0
Sub-Saharan Africa	44.9	70.9	64.3	65.4	29	60.7
Rest of the world	0.5	0.5	0.5	0.3	29	39.6
Total	11.8	100.0	18.3	100.0	119	45.0

Source: World Bank (2018), 'Poverty and Shared Prosperity: Piecing Together Poverty Puzzle', World Bank Publication, Washington DC, pg.97.

Table 02 : Individuals in Households Deprived in Each Indicator, 119 Economies, circa 2013 (in Percentage)

Region	Monetary	Educational Attainment	Educational Enrolment	Electricity	Sanitation	Drinking Water
East Asia and Pacific	5.3	7.5	3.2	4.5	14.0	11.3
Europe & Central Asia	0.3	0.9	5.6	0.5	6.8	2.6
Latin America and the Caribbean	3.9	12.2	2.7	3.3	15.6	6.4
Middle East and North Africa	3.2	11.1	7.9	3.8	14.6	4.2
South Asia	11.9	31.6	22.6	23.8	39.5	7.0
Sub-Saharan Africa	44.9	46.2	20.8	64.8	61.9	33.9
Rest of the world	0.5	1.2	0.0	0.0	0.6	0.0
Total	11.8	17.0	9.0	15.9	23.8	10.9

Source: World Bank (2018), 'Poverty and Shared Prosperity: Piecing Together Poverty Puzzle', World Bank Publication, Washington DC, pg.99

Table 03 : Share of Individuals Deprived, by Indicator, Selected Countries (in Percentage)

Dimension	Indicator	Ecuador	Indonesia	Iraq	Mexico	Tanzania	Uganda
Monetary poverty	Daily consumption < $1.9	2.0	3.5	2.5	9.2	43.6	35.8
Education	Any school-aged child is not enrolled in school	2.2	3.6	26.0	10.4	32.2	15.4
	No adult has completed primary education	4.8	5.3	12.6	5.3	13.9	26.1
Access to basic infra-structure	No access to basic-standard drinking water	11.3	19.0	13.4	3.7	54.6	54.0
	No access to basic-standard sanitation	14.1	26.6	13.5	19.4	74.5	77.0
	No access to electricity	1.2	0.8	0.7	4.3	79.7	87.2
Health	No facility delivery	6.8	16.6	11.7	4.6	36.7	30.8
	No DPT3 vaccination	3.6	33.6	—	11.9	—	8.4
	Any child is stunted	25.7	41.8	40.5	15.0	43.4	40.7
	Any female is malnourished	3.5	10.5	6.0	5.3	13.6	—
Security	Experienced or in threat of crime	33.0	6.9	21.1	16.4	1.8	5.1
	Affected by natural disaster	2.9	0.9	3.0	0.1	5.6	32.3

Source: World Bank (2018), 'Poverty and Shared Prosperity: Piecing Together Poverty Puzzle', World Bank Publication, Washington DC, pg.104

UNDP Estimates of Multi-dimensional Poverty across Different Regions of the World.

The global MPI estimates that 1.3 billion people - or 23% of the 5.7 billion people who live in these countries - live in acute multidimensional poverty in the 105 countries it covers. This means that these people are deprived in at least one-third of the overlapping deprivations in indicators of health, education, and living standards. Approximately equal proportions of multidimensionally poor individuals reside in Sub-Saharan Africa (42%) and South Asia (41%), with regional variances observed at the country level, according to data across major geographical regions. Of all the regions in the world, Sub-Saharan Africa has the highest rate of multidimensional poverty and the largest population of poor individuals. The worldwide MPI datasets show that 559 million of the 969 million individuals living in 40 Sub-Saharan African nations are MPI poor. With 58% of the population living in multidimensional poverty and an average intensity of 55%, the region's MPI score is 0.317 overall, meaning that 31.7 percent of the poor are deprived in all indicators (seeTable 04). South Sudan and Niger have the highest rates of multidimensional poverty in the region, with over 90% of the population experiencing at least 50% of weighted deprivations. Additionally, with a headcount ratio of less than 6%, South Africa is the least poor nation in Sub-Saharan Africa (OPHI, 2018, pg.44).

Table 04 : MPI Poverty by World Region

Developing Regions (UN Statistics Division)	MPI	Headcount ratio (H)	Intensity (A)	Number of poor people (millions)	Poor People in Percentage	World Population in million
Arab States	0.098	19.2%	50.8%	65.7	4.93	346
East Asia and the Pacific	0.025	5.9%	43.1%	117.7	8.84	2000
Eastern Europe & Central Asia	0.009	2.4%	38.3%	3.5	0.26	149
Latin America & the Caribbean	0.033	7.7%	43.2%	39.7	2.98	516
South Asia	0.143	31.3%	45.8%	545.9	40.98	1700
Sub-Saharan Africa	0.317	57.7%	54.9%	559.4	42.00	969
Global MPI (developing regions)	0.115	23.2%	49.5%	1.33 billion	99.99	5680

*Source: Oxford Poverty and Human Development Initiative (OPHI), Global Multidimensional Poverty Index 2018, University of Oxford, pg.*13

The global MPI for the South Asian region, which is the second poorest in the world, includes seven nations and more than 1700 million people, of whom 546 million live in poverty. Eleven percent of the population in this region is severely poor, meaning they lack access to at least half of the weighted indicators, and nineteen percent are vulnerable to poverty, meaning they lack access to between twenty and thirty-three percent of the weighted indicators (OPHI, 2018, pp. 45). Afghanistan has the highest percentage of poor people among the South Asian countries at 56%, while the Maldives has the lowest percentage at 1.9 percent (Table 05).

Table 05 : Global Multidimensional Poverty Index for South Asia

Country	MPI (MPI = HxA)	Head count Ratio(H)	Intensity (A)	Number of Poor People (in million)	Vulnerable to Poverty	In Severe Poverty	Missing Indicators
Maldives	0.007	1.9	36.6	0.008	5.3	0.1	0
India	0.121	27.5	43.9	364.20	19.1	8.6	0
Nepal	0.154	35.3	43.6	10.21	24.3	12.0	0
Bhutan	0.175	37.3	46.8	0.29	17.7	14.7	0
Bangladesh	0.194	41.1	47.3	66.92	21.5	16.2	0
Pakistan	0.228	43.9	52.0	84.77	14.5	24.7	0
Afghanistan	0.273	56.1	48.7	19.442	18.0	25.1	Nutrition

Source: Oxford Poverty and Human Development Initiative (OPHI), Global Multidimensional Poverty Index 2018, University of Oxford, pg.48

The poverty among the other three world regions reveals that though the rate of poverty is low, the intensity is higher, ie., the average weighted deprivations among the poor is 43.1 percent, 38.3 percent and 43.2 percent respectively for East Asia and Pacific, Eastern Europe and Central Asia and Latin America and the Caribbean. (see Table 04). The change of global scenario also occurred in India. The number of multidimensionally poor individuals in India decreased from 635 million in 2005-‘06 to 364 million in 2015-‘16. This represents a dramatic departure from the trend observed from 1999-2006, during which time multi-dimensional poverty decreased at the slowest rate. The data reveals that it was due to the fast poverty reduction among children, the poorest states, Scheduled Tribes, and Muslims (UNDP, 2018).

NITI Aayog’s Estimates of Multidimensional Poverty Index in India

The national Multidimensional poverty Index by NITI Aayog is based on AF methodology. Based on a dual-cutoff counting method, the AF methodology serves as a general framework for measuring multidimensional poverty and classifies people as either poor or not. The person who is “deprived” in each component indicator is identified by using the first order cut-off inside that indicator. A deprivation score is then calculated for each individual based on the information gathered from all indicators combined. Next, the second order cut-off is used to determine whether people are multidimensionally poor. The national MPI model keeps the three equally weighted variables of standard of living, health, and education, just like the global MPI model does. However, when it comes to indicators, the worldwide MPI contains ten indicators, while India’s MPI has twelve indicators (including bank account and prenatal care) (NITI Aayog, 2021).

Table 06 : India Headcount Ratio, Intensity and MPI: An Overview

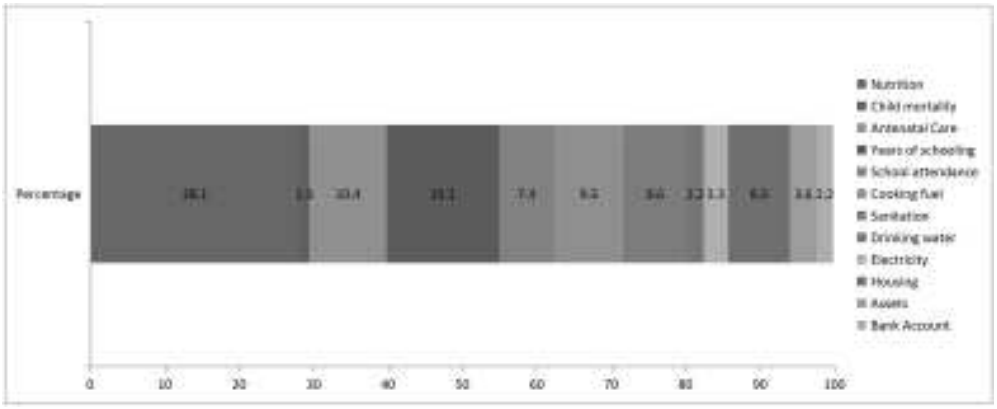
Region	Headcount Ratio (H)	Intensity (A)	MPI (HxA)
India	25.01%	47.13%	0.118
Rural	32.75%	47.38%	0.155
Urban	8.81%	45.25%	0.04

Source: NITI Aayog (2021), ‘National Multidimensional Poverty Index: Baseline Report’, Government of India, New Delhi, pg.32.

As per the data in 2015-‘16, the national poverty stood at 25.01 percent, whereas the rural and urban poverty status is 32.75 percent and 8.81 percent respectively. It means that the national poverty is stuck at rural India. Though only one fourth of the people are living in poverty, the average deprivation is very high for the poor people irrespective of rural-urban, ie., they are deprived of almost half of the indicators (seeTable 06). The major contributor (indicator) of national poverty is found to be lack of sufficient nutrition (28.1%), whereas, the least contributors are drinking water and bank account (2.2% each) (seeFigure 01).

Among the States, Bihar is the poorest State, ie., more than half of the people are in poverty, whereas, Kerala is the least poor State (0.71%). In the case of Union Territories, Dadra & Nagar Haveli has the highest poverty, ie., a just more than one fourth of the people are under the clutches of poverty, and Puducherry is the least poverty stricken State (1.72%) (NITI Aayog, 2021). The data on Multidimensional Poverty in India for the years 2005-‘06, 2015-‘16, and 2019-‘21 reveals that in 2005-‘06, over half of India’s population (55%) experienced multidimensional poverty, with an intensity of poverty reaching up to 55%. The headcount ratio has fallen from 55.34% in 2005-‘06 to 24.85% in 2015-‘16 and to 14.96% in 2019-‘21. Further, there is a steep decline in the headcount ratio during the last nine years. It shows a decline from 29.19 percent in 2013-‘14 to 11.28 percent in 2023-‘24 and 24.82 crore individuals are estimated to have escaped multidimensional poverty during this period. As a whole, during these periods the headcount ratio has fallen from one of two individuals to one in ten individuals in all its dimensions.

Figure 01 : Indicator-wise Contribution to the MPI in India: Percentage contribution of each indicator to the MPI score



Source: NITI Aayog (2021), ‘National Multidimensional Poverty Index: Baseline Report’, Government of India, New Delhi, pg.32.

The Indian government has undertaken several initiatives to enhance the quality of life for millions of people, including the PM Awas Yojana, Swachh Bharat Mission (SBM), Saubhagya, Pradhan Mantri Jan Dhan Yojana (PMJDY), Pradhan Mantri Surakshit Matritva Abhiyan, Public Distribution System, Saksham Anganwadi, and Pradhan Mantri Poshan Shakti Nirman.(NITI Aayog).

Conclusion

The implementation of Multidimensional Poverty Index to measure poverty along with income / consumption poverty measures widen the coverage of poverty and paved the way to tackle the limitations of income / consumption poverty measures. The World Bank reports that the proportion of the poor increased by 50%, from 12% living below the international poverty line to 18% experiencing at least one of the three dimensions of well-being deprivation. According to UNDP estimates of multi-dimensional poverty across different regions of the world, the world poverty encompasses in two regions viz., Sub-Saharan Africa (42%) and South Asia (41%).The quality of life for those living in poverty has significantly improved in India over the past 20 years, according to NITI Aayog, with rates of poverty having dropped from over 50% to 11.28%. The rate of decline in multidimensional poverty has accelerated during the period 2013-‘14 to 2022-‘23 due to a large number of initiatives/ schemes of the Government targeted at improving specific deprivation aspects.

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Understanding Gandhi

D. Jeevan Kumar

Gandhi was not an intellectual in the academic sense of the term. He was not a scholar or a philosopher. He was not a theoretician. His thinking had the quality of a creative genius. He was pre-eminently a man of action. He has written a great deal but his writings are designed as a guide to action and not for the acquisition of knowledge. They are generally concerned with the solution of real problems, arising out of the many-sided and complex situations of his time. Interest in Gandhi's thought and action seem to be on the increase, and his message to the world appears uniquely relevant. He remains however, in many ways, an enigma.

Keywords: Revolutionary, Messiah, Avtar, Satyagraha, Enigma

Of all the great figures of the 20th century, Gandhi has perhaps best stood the test of time. In the aftermath of a century of unprecedented mass violence, many see in him the prophet of the only possible future for mankind, a future without hatred, greed and lust for power. Interest in Gandhi's thought and action seem to be on the increase, and his message to the world appears uniquely relevant. He remains however, in many ways, an enigma.

One of the greatest paradoxes in relation to Gandhi is the contrast between the diversity of perceptions of him in his lifetime, and the very limited range of iconic representations retained of him by posterity.

In his lifetime, Gandhi had been perceived successively and simultaneously as a Bolshevik, a fanatic, a trouble-maker, a hypocrite, an eccentric, a reactionary, a revolutionary, a saint, a renouncer, a messiah, and an *avatar*. He was likened both to Lenin and to Jesus Christ! After his death, two views of him have become dominant. In India, he is celebrated as the '*Father of the Nation'*; outside India, he is remembered as an apostle of non-violence. Such impoverishment in the range of representations is partly due to the selective way in which collective memory works, but it is largely due to our inability to have devised a suitable methodology to understand the man and his ideas.

Looking back from the vantage point of the 21st century, it seems nothing short of a miracle how in the first decade of the 20th century, Gandhi launched his crusades against racialism, colonialism, runaway industrialism, religious fundamentalism and violence. He heroically opposed the treatment of his fellow-countrymen in South Africa by courting for himself the humiliation of the humblest Indian so that he might, in his own person, face the punishment meted out for disobedience.

When he called for non-cooperation with the British in India, he himself disobeyed the law and insisted that he must be among the first to go to prison. When he denounced the adoption by India of Western industrialism, he installed a spinning wheel in his own house and laboured at it daily with his own hands. When he set out to combat inter-communal violence, he faced death by starvation, in an act of penance, for the error and sin of the members of his community.

Gandhi taught us the doctrine of *satyagraha*, *not* as a passive submission to evil but as an active and positive instrument for the peaceful solution of all kinds of differences - personal, national or international. He showed us that the human spirit is more powerful than the mightiest of weapons. He applied moral values to political action and pointed out that ends and means can never be separated, for the means ultimately

govern the end. If the means are evil, then the end itself becomes distorted and at least partly evil. Any society based on injustice must necessarily harbour the seeds of conflict and decay within it, so long as it does not get rid of that evil.

In Gandhi, there was a confluence of different influences which guided him to mould a mighty instrument of *satyagraha* and gave direction to his mission: A Gujarati hymn from India, a New Testament from Palestine, a book from Russia, a pamphlet from America, a book and the Suffragette influence from Britain, and many more. All these influences came together to lead Gandhi, as if by a hand of destiny, into the battlefield of the 20th century to wage one of the noblest battles that have been fought by a single human being for the liberation of an entire nation. They combined to make Gandhi the greatest non-violent revolutionary of the age.

Gandhi was *not* an intellectual in the academic sense of the term. He was *not* a scholar or a philosopher. He was *not* a theoretician. His thinking had the quality of a creative genius. He was pre-eminently *a man of action*. He has written a great deal but his writings are designed as a guide to action and *not* for the acquisition of knowledge. They are generally concerned with the solution of real problems, arising out of the many-sided and complex situations of his time.

The discussion of theory in Gandhi's methodology is always brief and sketchy. As soon as he had an idea or a plan, he tried to put it into practice and induced others to do likewise. In the latter case, he had naturally to explain his ideas and plans. But the explanations were brief and suited to the person, place and occasion. The guidance given was practical. The instructions and the explanations were generally conveyed through correspondence, newspaper articles or brought out in discussions and speeches.

Gandhi has written a few books. But even these are concerned with particular problems. They are *not* written with the object of explaining his system of thought rationally and logically argued in all its implications. The writings are generally free from references to other thinkers and authors. For popularising his ideas and converting the people to his way of thinking and action, Gandhi, as a practical reformer, relied more on example than on precept or preaching.

Whatever their external form of presentation and expression, Gandhi's ideas are new and revolutionary. They arise out of the creative mind of an individual to whose reforming zeal the social situation and the difficulties of those times are a challenge. For him, historical precedents and examples are no barrier to fresh thinking and discovery.

Gandhi did not acquire his ideas and knowledge merely from books. He did not pass his time in libraries and museums poring over musty volumes. Much of his knowledge was the result of direct contact with life and the practical experience it offered. He therefore placed his ideas before the public, *not* in the language of the learned but in that of the average intelligent man and woman. He was a man of the masses and spoke to them in their own simple language, which they under-stood. He addressed them *not* about what he had read and studied in books but what he had seen, sensed, experienced and thought about. He described his own observations and his reactions to them. This is the method that has characterised great religious reformers and prophets.

Gandhi offers no convenient theories, logically and mathematically worked out. There are, as we have said, many gaps in reasoning and apparent contradictions. Gandhi thought so rapidly that he jumped over many connecting links in the chain of reasoning. These links the practical worker or the theoretical student has to provide from his own intelligence, observation and experience.

Gandhi discussed economic and political problems from a higher moral and humanistic point of view. If, therefore, a young person wants to study Gandhi's economics and politics, s/he will have to be content with very meagre systematic literature on these subjects. S/he will have to wade through a mass of material which must be arranged and systematised for oneself. It is the first major difficulty in under-standing Gandhi's thought and schemes of reform. His ideas need to be systematised, co-ordinated and correlated. The trends

in his thinking on the many subjects he discussed are scattered through-out his writings. They have to be arranged.

Gandhi views life as an organic whole. His concrete schemes are, therefore, intimately and organically connected with one another. Unity is achieved through some definite guiding and regulating ideas, values and principles. As stated earlier, Gandhi remains, in many ways, an enigma.

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Adaptive and Coping Strategies of Fishing Households in Southern Coasts of Kerala: Emphasis on Exploring Gender Dynamics

Dickson David

This study examines the adaptive and coping strategies employed by fishing households in southern coasts of Kerala, India, to mitigate the impacts of livelihood vulnerabilities and stresses. It aims to contribute to the limited existing literature on coping and survival strategies of fisher communities, particularly focusing on gender dynamics. The study employs a mixed-methods approach, combining qualitative data from semi-structured interviews, focus group discussions, and observational notes with quantitative data from a comprehensive questionnaire. It contributes to our understanding of the complex relationships between livelihood vulnerability, resilience, and coping strategies in the context of small-scale fisheries. It recommends that the policymakers and development practitioners prioritize community-based initiatives that address the specific needs and challenges faced by fishing households in southern coasts of Kerala.

Keywords: Fishing households, Adaptive Capacity, Coping Strategies, Gender Dynamics, Livelihood Vulnerability, Resilience, Small-scale Fisheries, Kerala

Introduction

Small scale fishers, who make up the majority of the global fishing community, play a crucial role in feeding millions of people world wide. They are the backbone of the fishing industry, providing fresh sea food to local markets and supporting local economies. However, the livelihood issues of small scale fishers are manifold. They are exposed to the vulnerabilities caused by ocean grabbing and land grabbing (Bennetta et al. 2015). Overfishing by the dominant actors significantly reduces the fish supply, adversely impacting the livelihoods of smaller participants the most. Excessive fishing is seen as their main livelihood issue (Yuerlita and Perret 2010). Fishermen community's resource dependence and open access nature of fisheries leads to resource degradation, poverty and marginalisation (Allison and Ellis 2001).

Fishing community is considered as 'outliers' (Kurien 1995) in Kerala, India since they are left out of the sphere of public action for capability building. Their capability in terms of endowments and entitlements (Speranza et al. 2014) is very low. The very reason for this state is low and inconsistent income (Kurien *Ibid* and David 2020). This is because of dwindling fish stock. Many studies such as Kurien and Achari 1990, Mohanty 2013 and David *(Ibid)* pointed out the fact of decline in fish production over years in Kerala, India. Viewing from the livelihood perspective, their poor and unreliable income from natural capital such as sea and land, affects their capability in building other assets such as financial, physical and human capital.

Fishing is possible by integrating physical capital such as crafts and gears, human capital such as physical labour, skills and knowledge and natural capital such as sea and shore. Fishing in the open sea itself is risky, especially during rough weather conditions. Other risky factors are output, price and income volatilities. Income depends on price and output. Price is determined mainly by the demand and supply conditions in the primary market. Demand remains more or less the same for a certain time period. Hence it is the supply status that mainly determines the price for the output sold. Since output is highly uncertain, supply, price and income are also uncertain. On the other hand, owing to reduction in the fish catch, income

earned by the fishermen is low and inconsistent. Lower, inconsistent and uncertain income can be considered as regular stress with regard to fishing livelihood. This regular stress makes their livelihood vulnerable and hence fishing is an unsustainable livelihood.

As in the case of other natural resource dependents, fishing households also cope with stress and shocks through resilience and survival strategies. Most of the studies, such as Beck, (1989), Corbett (1989), Evans (1989), Heyer (1989), Nabarro et al. (1989), Pryer (1989), Swift, (1989), Taal (1989), Waal (1989), Rahmato (1991), and Kuipers and Jong (2023) are concerned with coping and survival strategies of non-fishing communities. Only a few empirical literature is available regarding strategies of the fisher community such as Amadu et al. (2021), Deb and Haque (2016), Freduah et al. (2018), D'agata et al (2020) and Wintergalen (2022). This article therefore strives to contribute towards filling this gap. The article is organised into four sections. The first outlines the methodology employed in analysis. The second focuses on conceptualisation of various components of livelihood relevant to this study. The third outlines the study area and the context of the study, and the fourth portrays and analyses responses of the fishing community in terms of adaptive and coping strategies against stresses and shocks.

1. Methodology

This study is exploratory in nature. For conducting the study, primary and secondary data are utilised. The study has been conducted in two sample fishing villages - Adimalathura (N=96) from Thiruvananthapuram district and Eravipuram (N=77) from Kollam district. Data were collected through semi-structured interviews, focus group discussions, and observational notes for exploring gender-specific, household level and community level coping and adaptive strategies.

Starting from the literature on evolution and development of livelihood concepts, a thorough survey on literature was conducted. Literature consists of journal articles, books, theses and occasional papers. The main aim was to find out how households in different communities individually and socially respond to various stresses and shocks that make their life vulnerable. From this, a broader perspective on livelihood issues and survival strategies - adaptive and coping - could be developed. At the same time, strategies of two different villages could be compared and this helped to unravel the reasons beneath them. All the literature was downloaded from databases such as *Google Scholar* and *ScienceDirect* using key terminologies such as 'stresses and shocks', 'livelihood vulnerability', 'livelihood resilience', 'adaptive capacity', 'livelihood strategies', 'survival strategies', 'resilient strategies', 'adaptive strategies' and 'coping strategies'. Also the website of Institute of Development Studies, Sussex was extensively used to download articles regarding various livelihood strategies from different spatial contexts.

A comprehensive questionnaire was utilized to examine the diverse dimensions of adaptive and coping strategies, to investigate the strategies employed at these levels. Furthermore, the questionnaire included questions designed to recognize the community-level survival strategies, providing a holistic understanding of the respondents' adaptive and coping mechanisms.

2. Livelihood Concepts with Special Emphasis on Fishery

As it is said earlier, concepts relevant to the study are only taken into consideration.

Vulnerability

Chambers and Conway (1991) clearly defines what vulnerability is by discussing various aspects regarding it. The term 'vulnerable' is simply used as a synonym for 'poor', whereas, vulnerability is not the same as poverty. This contrast is made undoubtful by distinguishing different dimensions of deprivation. Vulnerability refers to exposure to contingencies and stress, and difficulty in coping with them. Vulnerability has thus two sides: an external side of risks, shocks, and stress to which an individual or household is subject; and an internal side which is defencelessness, meaning a lack of means to cope without damaging loss.

From a livelihood point of view, a livelihood context is the vulnerability context. Within such contexts, people have different resources (livelihood assets) at their disposal, which they use to achieve their goals (Speranza et al., *Ibid*). Vulnerability relates to the holding of assets; 'the more assets people have, the less vulnerable they are, and the greater the erosion of people's assets, the greater their insecurity' (Moser 1998). The same point was raised by Swift (*Ibid*) who argues that the low asset status in rural communities would be a good indicator of vulnerability.

Resource degradation, poverty and marginalisation make the lives and livelihood of the fisher community vulnerable (Allison and Ellis *Ibid*). Fishers are apparently equally exposed to climatic shocks, higher sensitivity and lower adaptive capacity combine to generate elevated levels of vulnerability (Islam et al. 2013). Fisheries have declined as a result of multiple stressors, such as globalisation of fisheries industries, declaration of Exclusive Economic Zones (EEZs) by many countries, invasion of coastal waters by more advanced fleets, lack of appropriate trade policies, poor fisheries governance, and overfishing (Atta Mills et al., 2004). These stressors are the vulnerability factors in the livelihood of the fisher community.

Stresses and shocks

Simply stated, stresses and shocks are those factors that make life of the people vulnerable. Stresses are defined as pressures (outside) which are typically continuous and cumulative and therefore to some extent predictable such as seasonal shortages, rising populations or declining resources (Krantz 2001), declining rainfall, HIV, AIDS, general economic hardships (Nyamwanza, 2012). Regularly occurring stresses are of two types: diurnal and seasonal. Examples of diurnal include midday and afternoon heat, mosquitoes in the evening and at night, cold and difficulty in seeing at night (Chambers and Conway *Ibid*). Seasonal stresses are more relevant than diurnal as far as sustainability of livelihoods is concerned. Shocks are defined as impacts which are typically sudden, unpredictable and traumatic such as fires, floods, political violence, epidemics and droughts (Krantz *Ibid*). Accident or sudden death of an individual, sudden illness, loss of valuables due to theft, fire or other disaster, firing an employee from a firm without any prior notice, etc. are some examples for shocks that affect individuals and households. Whereas, wars, epidemics, drought, flood, landslides, terrorist attack, violence, etc. are some examples of shocks that affect a community as a whole.

The livelihoods and survival of human individuals, households, groups and communities are vulnerable to stresses and shocks (Chambers and Conway *Ibid*), the effects of these gradually build up and affect the whole household (Evan *Ibid*). Rural livelihoods are exposed to growing climatic shocks and stresses (Natarajan et al. 2022). The main stress the coastal fishing communities face is depletion of fishery resources. Also, risk factors concerning climate, markets or sudden disaster are also making their livelihood vulnerable (Allison and Ellis *Ibid*). A livelihood is sustainable which can cope with and recover from stress and shocks (Chambers and Conway *Ibid*; Scoones, 1998). A livelihood is socially sustainable if it has the internal capacity to withstand stresses and shocks (Chambers and Conway, *Ibid*).

Adaptive and coping strategies

Bennett et al. (2014) defined adaptation as proactive planning of individual or collective actions based on knowledge of past or anticipated future. For instance, a decline in fish stocks due to overfishing, fishers adapt by developing harvesting techniques for other species. When a livelihood is at stake or when an existing livelihood is stressed and being unable to provide the expected outcomes, finding alternatives and switching to them, are adaptive strategies. In short, adaptation refers to action oriented responses. On the other hand, coping is defined as passively accepting consequences of a stressor (Bennett et al. *Ibid*). For example, when there is a decline in fish stocks caused by overfishing, fishers coped by waiting for a fishery recovery rather than adjusting their livelihoods. Coping is self adjustment to the limitations posed by a stressor. Hence, coping refers to passively accepting stress or stressors.

Corbett (*Ibid*) summarised the coping strategies of farmers in sub-Saharan Africa into three broad

stages: (i) insurance mechanisms, e.g. changes in cropping pattern and planting practices, reduced consumption, inter-household transfers, etc.; (ii) disposal of productive assets (divestment), e.g. sale of large livestock, agricultural tools, mortgaging of land or obtaining credit; and (iii) destitution, e.g. distress migration and starvation.

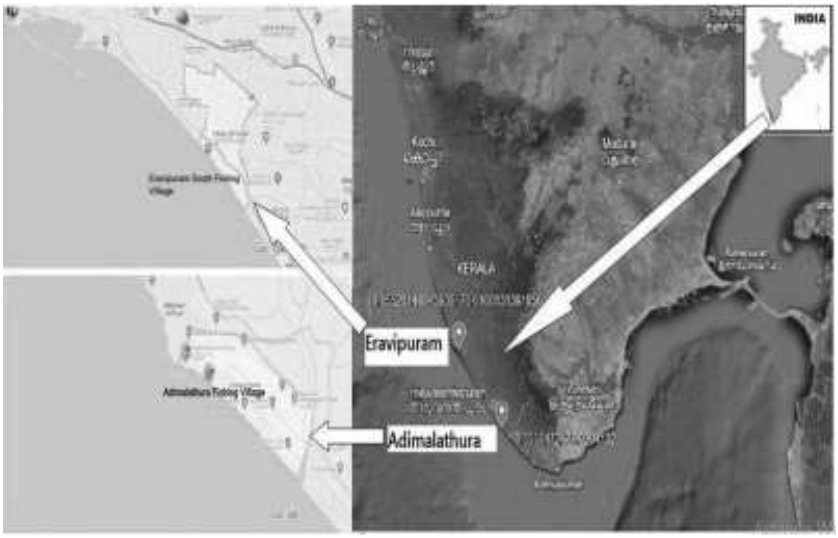
Allison and Ellis (*Ibid*) reveals a range of adaptive strategies and responses at individual, household and community level such as targeting different species according to availability, geographical mobility, livelihood diversification, intra-household responses such as allocation of family labour in time of need, or acceptance of income variation and modification of consumption patterns.

3. Study Area and the Context

The area selected for the study consists of Eravipuram South fishing village and Adimalathura fishing village in Kollam and Thiruvananthapuram districts respectively, the two southernmost districts of Kerala State, India. These two adjacent districts have a combined coastline of 115 km, which constitute 19 percent of the total coastline, which is the southern coast of Kerala. The two fishing villages are depicted in Figure 1.

Figure 1

Map of India and Kerala State with study area and their locations



Source: Adapted from Google Maps (2024)

Adimalathura lies between 8.360975°N and 77.017568°E. The village is located between Pulluvila in the south and Chowara in the north. The north-south distance of Adimalathura is 2.36 km. Eravipuram South lies between 8.85976°N and 76.62331°E. The village is located on the outskirts of Kollam city. The north-south distance of Eravipuram South is 3 km. The southern coast of Kerala is characterized by a tropical climate, with high temperatures and humidity throughout the year.

According to CMFRI (2016), Adimalathura was inhabited by 1679 fishermen families, and had a total population of 4817 in 2016. Out of the total families, 90 percent belonged to Below Poverty Line (BPL) category. Eravipuram South had 620 families, and a total population of 2094 in 2016. Out of the total families, 57 percent belonged to BPL category.

4. Responses of Fishing Community

The fishing community's responses to economic uncertainty can be broadly categorized into adaptive and coping strategies, which are critical for survival. These strategies can be classified at three levels: communitarian, household, and individual. The individual level can be further subdivided into male-specific

and female-specific responses. This section will first examine the adaptive strategies employed by the fishing community, followed by an analysis of coping strategies. By examining both adaptive and coping strategies at multiple levels, this study aims to provide a comprehensive understanding of the survival mechanisms employed by the fishing community in Kerala.

4.1 Adaptive strategies

The adaptive strategies employed by the fishing community are characterized by their proactive and long-term approach, demonstrating a commitment to ensuring the viability of the industry. These strategies, which are often driven by the community itself, are designed to promote sustainability and resilience in the face of changing environmental and economic conditions. By prioritizing long-term thinking and collective action, these initiatives foster a sense of community ownership and shared responsibility for the health of the fishery. As these strategies prove effective, they tend to be replicated by other members of the community, ultimately giving rise to a communitarian approach that prioritizes collective well-being over individual interests. This diffusion of innovative practices has the potential to create a tipping point, where the entire community is empowered to adopt sustainable fishing practices that benefit not only individual households but also the broader ecosystem.

4.1.1 Adaptive strategies at community level

Community wide occupation-specific adaptive strategies were observed in both Adimalathura and Eravipuram South villages, where small-scale fishers, including catamaran and OBM fishermen, face various livelihood stresses. The community struggles with dwindling fish stock, soaring fuel prices, and lower market share from final market price, making fishing an unviable activity. Additionally, catamaran fishermen are neglected by fish vendors, who primarily buy fish from harbours, leaving them unable to exchange their catch. Sea erosion and the resulting closure of fishing gaps also pose a significant threat to their livelihoods. Another issue is that, during fishing season, all the able bodied fishermen are fully employed and hence fishing units find it unable to exploit potential resource stock due to shortage of labour. Labour requirement per fishing unit cannot be exactly calculated well in advance since fishing itself is an activity intertwined with uncertainty. Furthermore, off-season and monsoon-related trawling bans also pose additional stresses on fishery-based livelihoods.

Important adaptive strategies identified at the community level are: employing season specific gears, employing carrier vessels during bumper catch, circulatory migration, employing *thangal* system of fishing, shifting fishing operations to nearby harbours, carrying fish to nearby harbours for ensuring fair price, and intra-sectoral mobility.

From the fishermen's perspective, the key to addressing low, inconsistent, and uncertain income is to increase their fishing efforts throughout the year by investing in season-specific gears. The fishermen in both Adimalathura and Eravipuram villages employ different gears for different species. They employ Outboard Motor (OBM) vessels for fishing in distant waters and catamarans for fishing in shore waters. Adimalathura village has around 200 OBM vessels and around 100 catamarans, while Eravipuram village has around 75 catamarans and around 10 OBM vessels. The fishermen in both the villages employ *Thattumadi*, a gear aiming all types of pelagic species from June to September in a calendar year. Apart from *Thattumadi*, the fishermen in Eravipuram, employ *rolu vala*, intended to capture false trevally; *noolu vala* for sardine and *rani vala* for shrimp. From October to May, the fishermen in Adimalathura employ *ozhukuvala* (drift net) targeting specific species such as tuna, Indian mackerel, ribbon fish, etc. At the same time, fishermen in Eravipuram village employ *noo vala/thelinja vala*, aimed to capture Indian mackerel; and *echam vala* for tuna and Indian mackerel. During these months, they apply electric lights and attract fish. In Adimalathura, seven or eight vessels join as a unit during the times of good catch and they venture together with three or four *ponthu*, a small vessel made up of thermocol to keep a small container carrying small batteries for charging lights. The unit also employs a catamaran as a carrier vessel. Catamaran men's responsibility is to

take fish to land for sale while the mother vessels continuously engage in fishing. Employing carrier vessels can ensure selling fish within the market time in fish landing centers at shore and thereby avoiding fall in price for the catch. Irrespective of the seasons, fishermen in Adimalathura employ hook and line fishing throughout the year, whereas, fishermen in Eravipuram do not apply hook and line. Among the fishermen in Adimalathura, some are circulatory migrants. They move to distant harbours within and outside Kerala. They migrate from one place to another based on the availability of fish and the relative prices of species at landing centres. They engage in fishing by staying at sea till they get ample quantity of fish and hence their vessels are known as *Thangal Vallam*[1]. In contrast, Eravipuram's fishermen do not engage in circulatory migration. When monsoon weather prevents them from fishing from their village, fishermen in Adimalathura depend on the neighbouring Vizhinjam harbour. From there, they conduct fishing operations subject to the village level fishing rules framed by the harbour management committee of Vizhinjam church. From this, it can be understood the fact that the fishermen of Adimalathura submit themselves to the rules of another village without either hesitation or questioning them in order to maintain a livelihood. In Eravipuram, owing to shore erosion, fishermen depend on neighbouring Port Kollam harbour or Vaddy harbour throughout the year. There they don't have any stringent rules as in the case of Vizhinjam harbour. Catamaran fishermen in both the villages very often used to transport fish to nearby harbours for ensuring fair price when they are unable to fetch a fair price for their catch. Mechanised fishermen in both the villages face loss of fishing days owing to trawling ban. In Adimalathura, the circulatory migrant fishermen come back to the village during off season since staying in distant places and engaging in fishing from there is not viable for them. These men employ in crafts which are being operated from their native village, Adimalathura or from nearby Vizhinjam harbour. Fishermen engaged in trawlers also join the village fishermen in OBMs during trawl ban period. Seasonal shift from mechanised sector to motorised sector can be viewed as intra-sectoral mobility and an adaptive strategy of fishermen.

4.1.2 Male specific strategies

In Adimalathura, a notable observation is the presence of Self-Help Groups (SHGs) of males, which is a departure from the traditional notion that SHGs are exclusive to women. These men's SHGs have a specific objective, which is to access micro loans and repayment on a monthly installment basis. This initiative allows men to pool their resources together, leveraging collective bargaining power to negotiate better loan terms with financial institutions. By doing so, they can access capital that might not be readily available to them individually, enabling them to invest in various income-generating activities, such as fishing gear, boats, or small-scale entrepreneurship. Additionally, the regular meetings and discussions within the SHGs provide an opportunity for men to share their experiences, challenges, and successes, which can lead to increased confidence and empowerment. However, SHGs of males are not popular among male adults in the village. Males having membership in SHGs constitute only six percent in the village. In Eravipuram, there are no such groups of males.

4.1.3 Female specific strategies

The uncertain and meager income of fishermen has severe consequences on their families, particularly the women who are forced to seek alternative employment to make ends meet. With their husbands' earnings from fishing insufficient to cover household expenses, women are compelled to sell their labour power as domestic servants or workers in tourist resorts.

In Adimalathura, 73 percent of households have at least one woman employed, out of those employed, 51 percent working in resorts, where they earn a monthly salary ranging from Rs. 7,500 to Rs. 12,000, based on the nature of employment. Other major occupational areas of women are fishmongering (8 percent) and domestic servants (6 percent). In Eravipuram, 64 percent of the households have female workforce participation. Out of the total female workforce, 96 percent are employed as domestic workers, earning an average monthly income of Rs. 7180. Despite not fully compensating for their physical labour, these jobs

provide a regular monthly salary, allowing women to mitigate the stress caused by their husbands' unpredictable and low-income fishing livelihoods.

In both villages, nearly all employed women are members of Self Help Groups (SHGs), which enables them to raise family assets or reduce liabilities. As SHG members, they gain access to loans at competitive interest rates, repayable in monthly installments from their income earned as domestic and resort workers. This complementary relationship between female employment and SHG membership plays a significant role in the economic lives of fisherfolk households.

Commercial banks are often hesitant to lend personal loans to fisher households due to the perceived risk associated with lending to coastal households, particularly those involved in fishing, which is vulnerable to unpredictable fishing yields and environmental factors like climate change. However, commercial banks are more willing to lend to SHGs since there is a collective responsibility among the women members to repay the loan. This approach not only provides women with access to credit but also fosters a sense of community and cooperation among them. By working together and supporting each other, women in fisher households can build resilience and improve their economic stability at least on a small scale.

4.2 Coping strategies

Alongside the stresses of uncertain income and financial insecurity, households in Kerala's fishing communities are also exposed to various shocks that can have devastating consequences. Accidents at sea, often triggered by rough weather or collisions with other vessels, can result in the loss or damage of physical assets, such as boats and equipment, as well as the incapacitation or tragic loss of life of fishermen. The sudden and unpredictable nature of these events can be particularly challenging for households that rely heavily on the income of a single breadwinner. When a fisherman is injured or killed, the household is left vulnerable and struggling to cope with the financial implications. This study has identified a few coping strategies among fishermen who have experienced such shocks.

4.2.1 Coping strategies at community level

In the event of a fisherman suffering an accident at sea, rendering him unable to participate in fishing activities, the response of the fishing unit in which he works is remarkable. The affected fisherman receives a share of the net proceeds alongside his colleagues. This team approach serves as a vital coping mechanism to mitigate the financial burden of his temporary disability even though the share of money is small. By distributing an equal share of the earnings, the fishing unit demonstrates a commitment to social welfare and solidarity. This collective approach not only provides emotional support but also enables him to maintain a sense of dignity. Furthermore, this community wide strategy fosters a sense of belonging and social cohesion among the fishing community members, highlighting the importance of collective responsibility and shared risk in times of adversity. By adopting this coping strategy, the fishing community exemplifies in reinforcing its own values and social fabric, ultimately contributing to a more resilient and harmonious community.

4.2.2 Male specific coping strategies

From Eravipuram, it is discovered that due to limited financial resources, those who smoke cigarettes opt for high-priced cigarettes on occasion and substitute with cheaper alternatives, such as beedi, for the majority of the time. This type of substitution in consumption is a common coping mechanism employed by individuals with low income to make ends meet. This finding illustrates the vulnerability of this demographic to the pressures of poverty. This coping strategy is particularly noteworthy because it highlights the complex relationship between poverty and substance use. The act of smoking, which is often associated with relaxation and pleasure, takes on a new significance for individuals with limited financial means. The desire to indulge in high-priced cigarettes on occasion may be seen as a way to momentarily forget about financial worries or celebrate special occasions, despite the long-term health risks and financial burdens associated with this behaviour. The reliance on cheaper alternatives like beedi is a testament to the resourcefulness and adaptability

of individuals in low-income households, who are forced to make difficult choices about how to allocate their limited resources. In Adimalathura, majority of the fishermen do not smoke, instead they chew 'betel quid', a mixture of betel leaves, arecanut, and slaked lime. Tobacco leaf also may be added to this.

Another interesting finding in both the villages is about the creative ways fishermen adapt to financial constraints and find ways to maintain social connections and enjoy leisure activities despite limited resources. The fishermen who are paid low-income and who used to consume alcohol, have limited financial resources to spend on liquor consumption. They can't afford to consume liquor individually or in larger quantities, pointing to the fact that it remains a luxury item for them. Sharing the expense of a bottle of liquor and splitting it is a strategy to reduce the financial burden of liquor consumption, making it more affordable for them. Mostly they share the expense and consume the liquor together by sitting in a circle. This suggests that social bonding and camaraderie are important aspects of their relationships, and they find ways to maintain these connections even with limited financial resources.

4.2.3 Female specific coping strategies

The economic struggles faced by fishermen households are often exacerbated by the lack of financial assets, leaving them with limited options for managing their financial burdens. In such situations, households employ a range of coping strategies to make ends meet. However, it is often the women in these households who bear the brunt of these economic pressures, and their responsibilities become increasingly onerous. Women in these households have developed unique coping strategies that prioritize family obligations over personal desires or needs. This prioritization is a reflection of their deep-seated commitment to their families and their roles as caregivers.

For fishermen households, meeting huge expenses such as marriage or house construction can be a significant challenge. To bridge this financial gap, they often turn to borrowing money from individuals who are capable of lending, such as relatives, friends, or neighbours. In addition to borrowing, they may also sell off or mortgage their limited stock of gold jewels in cooperative banks or private finance companies to raise the necessary funds. Jewels can be seen as a safety net or a source of emergency funds for these households, which is why they are often viewed as a valuable asset that can be tapped into during times of financial need. The role of women in decision-making is crucial in these situations, as jewels often belong to them and they may also be earning a stable income through employment as domestic workers or resort staff. This financial independence allows them to take on a more active role in household financial decisions, including the decision to sell or mortgage their jewels. Furthermore, self-help groups (SHGs) play a vital role in empowering women in these households, enabling them to take control of their finances and make informed decisions about borrowing and repayment.

In addition to the various financial coping mechanisms discussed earlier, another significant way that fishermen households in the surveyed villages cope with economic pressures is through the institution of *Polivu*. This cultural institution is deeply ingrained in the community and serves as a safety net for fishermen families by providing small-scale financial assistance for meeting expensive functions such as marriage or other religious ceremonies. This system of mutual assistance is particularly prevalent in certain coastal regions of Kerala, including Malappuram, where it is known as *Kurikalyanam*, and Kozhikode, where it is referred to as *Panapayatu* (David, 2020). The *Polivu* system is based on three key principles: mutual trust, cooperation, and reciprocity. It relies on the collective efforts of the community to pool together resources and provide financial support to those in need. When a family faces a significant expense, such as a wedding or house construction, those community members who are invited would contribute small amounts to the family. The name of the contributor and the amount would be recorded in a *Polivu* book. The amount would be returned later by the receiver with an additional amount of money to those who contributed earlier when the latter meets expenses with regard to marriage or house construction. This cyclical nature of giving and receiving creates a sense of social capital within the community, fostering strong bonds and a sense of belonging among its members.

The *Polivu* system has several benefits for fishermen households. Firstly, it provides access to financial resources that may not be readily available through formal channels, such as banks or government programmes. Secondly, it helps to reduce the economic burden associated with important life events, such as marriage or illness. This can help to alleviate stress and anxiety related to financial insecurity and allow families to focus on other aspects of their lives. In addition to its practical benefits, the system also reflects the strong social fabric of the fishermen community. It is a testament to the values of mutual aid and cooperation that are deeply ingrained in this cultural context. By providing financial support to one another, fishermen households demonstrate their commitment to their community and their willingness to work together to overcome challenges. The *Polivu* system is an important example of how social capital can be leveraged to build resilience and improve economic stability in rural coastal communities.

Meeting essential consumption needs on credit from nearby shops is a critical coping strategy for low-income fisher households in Kerala. This practice is deeply ingrained in their economic lives, as it allows them to manage the uncertainties of their daily income. Fishermen often face irregular income, with some days bringing in a good catch and others being barren. To mitigate this uncertainty, they rely on credit from local shops to purchase essential goods and services, such as food and other household provisions. This credit-based system is a crucial lifeline for fisher households, enabling them to meet their basic needs despite the fluctuations in their income. They prioritize paying back the loan in the next few days, when they expect to receive a decent catch and can settle their liabilities. This pattern of borrowing and repayment creates a cycle of dependency on the shopkeepers, who are often willing to extend credit due to their long-standing relationships with the fishermen.

The credit culture is deeply embedded in the social fabric of the fishing community, with shopkeepers and fishermen having a mutual understanding of each other's needs and constraints. This trust-based system allows fishermen to borrow small amounts of money, typically ranging from a few hundred to a few thousand rupees, to cover daily expenses. In return, they promise to repay the loan on the next day or within a few days, depending on their fishing schedule. This coping strategy has significant implications for the financial stability of fisher households. By relying on credit to meet essential consumption needs, they are able to maintain a basic level of consumption despite the uncertainties of their income. However, this also means that they are trapped in a cycle of debt, with repayments consuming a significant portion of their income. Furthermore, this reliance on credit can lead to financial stress and anxiety, particularly during periods of poor fishing seasons or when they are unable to secure credit from shopkeepers.

The most vulnerable among the fisher households are those led by widowed females having no other male working members or females with bedridden male counterparts. In Eravipuram, they constitute 5 percent and in Adimalathura, they constitute 2 percent. Although they are negligible in numbers, mentioning their vulnerability warrants special attention.

These households often face a heightened level of financial vulnerability, with limited resources and no clear means of income. Their income from being a domestic maid servant is not sufficient. When they are unable to access credit or other forms of financial assistance, they are forced to make extreme sacrifices to cope with their circumstances. In many cases, they are left with no choice but to reduce their consumption of essential items, such as food, to make ends meet. The consequences of this reduction in consumption can be severe. Women in these households may go without meals or eat only a limited and inadequate diet, leading to malnutrition and related health problems. This not only affects their physical well-being but also has a profound impact on their mental and emotional health. The stress and anxiety associated with food insecurity can lead to feelings of hopelessness and despair, further exacerbating their already challenging circumstances.

Another noteworthy strategy of women is that they tend to focus on emotional coping mechanisms such as engaging in religious practices. Women in both villages belong to Roman Catholic in Christianity. Generally, fishermen who belong to all religions are more generous in pleasing the supernatural power since

they work in an environment of extreme weather with occupational uncertainty and risks (David, 2020). Religious practices can provide emotional support and comfort, helping women to manage stress and anxiety caused by their daily struggles. Participating in religious activities can give women a sense of belonging and connection to their community, which can be particularly important for those who may feel isolated or marginalized. Religious beliefs and teachings can offer guidance and direction, helping women to cope with challenging situations and find meaning and purpose. Participating in rituals and traditions can provide a sense of structure and routine, which can be comforting and reassuring. Religious practices can help women build resilience by teaching them coping skills such as sufferance, leading life within the means and self-care.

Conclusion

The fishing community in Kerala has developed various adaptive and coping strategies to respond to economic uncertainty, which are critical for their survival. These strategies can be categorized into communitarian, household, and individual levels, with both male-specific and female-specific responses. The community's adaptive strategies, such as employing season-specific gears, circulatory migration, and intra-sectoral mobility, demonstrate a commitment to ensuring the viability of the industry. The coping strategies, including distributing earnings among fishing unit members in case of accidents and sharing liquor expenses, illustrate the community's ability to come together and support one another in times of adversity. The study highlights the importance of collective responsibility and social cohesion among the fishing community members, which is reflected in their values and social fabric. Furthermore, the study shows that women in fisher households have also found ways to adapt to the uncertainties of their husbands' income by seeking alternative employment and joining self-help groups, which provides them with access to credit and a sense of community. Overall, the fishing community's responses to economic uncertainty demonstrate their resilience and ability to adapt to challenging circumstances. It is recommended that the policymakers and development practitioners need to prioritize community-based initiatives that address the specific needs and challenges faced by fishing households in southern coasts of Kerala.

Notes

1. In local parlance 'Thangal' means 'stay' and 'Vallom' means the fishing craft.

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Policy Orientation in Social Sciences

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Often we come across questions about the relevance of social sciences in public life, questioning its authenticity, uniqueness in theory or objectives, and applications in making policies in different spatial and social levels. Even social scientists are shy of saying about the applicability of their findings or researches, by setting their views, often as 'On the one hand... and on the other hand...' Most common criticisms about social sciences are about their lack of rigour and reliability of findings, low power of societal predictions and lack of universal applicability.

Keywords : Morals and Legislation, Predictive Power, Scientific Innovations, Demographic Dividends, Digital World, Maladaptive Behaviour.

Bertrand Russell thought that boundaries of social science applications are up to 'morals and legislation'. So also were the thoughts by the Indian philosopher Kautilya about 2500 years ago. But, Russell also thought of political power as a policy instrument equally important as energy power. He thought that it can be used for designing welfare programmes in different societies. To quote him: "...power, rather than wealth, should be the basic concept in social theory, and that social justice should consist in equalization of power to the greatest practicable degree."[1] Contrary to this, Max Weber thought that social sciences should be value-free, and however profound they may be, they could not directly impact societal decisions[2]. On the other hand another sociologist of the last century, Emile Durkheim thought that social sciences can be more objective just as much as natural sciences, provided precise empirical methods are deployed to get individual and societal views. In the 19th century many economists (e.g., W. Bentham, W.S Jevons, K. Menger, Leon Walras, W. Pareto, J S Mill and many others) thought that the development of utilitarianism as a theory can become an important tool for decision making on individual behaviours in their day to day life, and in designing policies on control and command of markets. Much later it was found out that however rigorous the theory can be, it lacks its universal applicability because of several strict assumptions (such as no inter-personal comparison, perfect information system, or rationality of human behaviour), non-cardinality of measures on utilities, and so on.

Leaving many such classical and historical views aside for the moment, it is important to note that contemporary social sciences deal essentially with humans and not with material objects. It consists of several branches such as sociology, economics, anthropology or political science, all of which encompass enquiries on human life and behaviour in their every day life. All of them are aiming at the same social phenomenon, but from different angles. Therefore, there is going to be some problem in arriving at a unified scientific view. Above all, unlike natural sciences, there are not many opportunities to conduct actual experiments with people[3]. More over many of the observations on human behaviour are qualitative. With the result, many postulates in social sciences become value loaded, or context specific. These make the outcomes less and less universal in applications or lack universal policy orientations. No wonder many of the social science oriented theoretical foundations and findings are not policy oriented. In a fast changing world, the predictive power of the policy recommendations get much diluted. They stay more as case studies and lack in universal applications.

Therefore, under the present state of this science, it is not surprising that their findings have remained more as cautions, utopian, or ideal, moral or ethical or advisory at the societal and family levels, much less

at the state policy levels. With this backdrop, questions about the relevance of social sciences in today's policy making domain is raised in this paper.

Origin of Social Sciences

There is always a fundamental question about the origin and evolution of social sciences, independent of natural sciences. Since sciences (and also technology) emerged from the existence of five basic elements that nature has created in the universe, one can only guess about the evolution of social sciences just then and there. But not easy to prove. Recall that in *Manduka Upanishad*, Chapter II Section 1, stanza 3[4], it is scripted: "*Life and mind and the senses are born from HIM; and the sky, the wind, the light, water and earth, upholding all that is."* Creation of those five basic material elements only followed the life system with 'mind and senses' to manage those elements. This evolutionary process also made homo sapiens superior to other life systems (Harari, 2017).

Among all the life systems, it is the homo sapiens[5] that absorbed and took advantage of the mind and sense aspects to the maximum extent, to use the five basic elements for the welfare of human and lifekind. Thus, human and animal living beings (and in a limited way plant life as well) started thinking about the way to put the fundamental material elements for the best use for their life system[6]. Thus emerged sciences as much as technology over millions of years, starting from 'making fire from rubbing wood or stones, to sending satellites to the moon now'.

While the sciences grew out of inquisitiveness of mind, chiselled with senses to drive them for the welfare of human and animal kinds, numerous questions, conflicts and choices arose over time. What kind of institutions needed to manage the material and scientific innovations and developments for the better of their societies? Where is the place and role for humans in the process of scientific and technological developments? Is man the only beneficiary of those ? Is he a silent receiver? Where to place man who emerged first as a selfish individual (expressed also as anthropocentric) but living in a societal framework (as an 'impartial spectator', as expressed by Adam Smith in 1759[7]). How do we use those universal resources for the better of current and future generations? How do we value the relative merits, benefits or relevance of the materials created out of them? Many such questions kept coming in human minds over millions of years immediately following the scientific evolutions and plausible applications. As an illustration, while discovery of steam engines led to applications in transport and production activities, it led to questions on human healthcare and atmospheric pollution and quality of life and so on. Such developments gave rise to the evolution of thoughts in social sciences, questioning the pace of scientific developments and relevance to human societies in the short and long run. Coming close to the last five to six centuries, Westphalia Treaty in 1648 among 145 countries is an example of the outcome of resolving conflicts and social concerns of a large number of societies, faiths, ethnic groups, regional and social groups, ultimately resolving to form 'nation states'; so that each country can formulate the best of social and political sovereign reforms in the interests of people within, without conflicts or wars.

Coming close to current millennium, concerns about gender equality, child rights or social security for the seniors, meaning of family, religious and spatial rights, freedom of expression and living, value or prices (or exchange values) of goods and services being produced, and many such social science oriented entities exemplify a large basket of thoughts that grew and policies emerged and operationalized politically, towards welfare of the societies.

In brief, social sciences emerged as evolutionary thoughts on human behaviour to enable them (and also animals) to move and reap the social benefits and welfare, with equity and peaceful co-existence. For sure, development of the multi-disciplinary thoughts under social sciences also led to thoughts specifically on economic, social, political, anthropological, geographical, historical, psychological and legal systems. Historically they were all unified as a bundle of social sciences; over the years and centuries several of these individual branches emerged to make ways for specific deep thoughts, practices and policies.

Where is the Scope for Policies?

The next question is 'if there is any space for policies towards human welfare emerging from thoughts in social sciences?'. One can go back to thinkers like Kautilya (c. 370 - c. 283 BCE), Confucius (about 2500 years back), Plato (428 or 424 BCE to 348 BCE) and many others, and search answers for this question. Kautilya[8], for sure focussed basically on issues of moderating social behaviour with a focus on morality and public administration. He first defined the contours of state craftsmanship and good governance from which he drew social and economic principles and moral ethics for the king, society, citizen, family, army, and administration in general. He knitted most of the present day thoughts on economic, sociological, political and theological sciences within the framework of good governance of a state or kingdom. So also many other ancient writers referred above[9].

Coming close to present centuries, it was Adam Smith in *The Wealth of Nations*[10], famously argued in 1776 that economic behaviour is basically motivated by self-interest. Much of that axiom led him to dwell upon growth of human wealth and welfare; based on such an individual behavioural theory he proposed policy instruments such as division of labour, specialization, use of market, trade, money, development of wages and prices, and so on[11].

But 17 years before this writing, in 1759 he wrote his first book, *The Theory of Moral Sentiments.* He had then proposed a theory of human behaviour that looks at man's social behaviour-with 'man as a social entity'. He talks about the struggle between, what Smith termed the 'passions' and the 'impartial spectator.' Passions include choices, desires, wants, and affections; it drives at human economic behaviour essentially being selfish. Whereas man as an 'impartial spectator' makes him to be a societal entity, which demands on him to live in harmony with other individuals and nature. Reading these two books makes it clear that Adam Smith was developing social sciences of human behaviour, with humans as individuals, and society with common goals to reap societal benefits to accumulate wealth and raise welfare.

To elaborate bit further, in the very first chapter of Wealth of Nations, Adam Smith talked about 'specialization and division of labour' as two major policy instruments in industrial manage-ment and trade among the nations. That is a clear indication of social science as viewed by him addressed to policy and management at the state and individual levels. Remember that Industrial revolution of 19th century in many countries that followed, then took rides on such notions, with engineering and scientific innovations, developments and applications.

But industrial development backed up by such social science thoughts also divided the world of humans in many ways: as distinct sets of class societies (e.g., upper, middle and lower), divided between owners of capital and proletariats, leading to problems of discontinuity in labour force participation (e.g., as organized and unorganized labour), created incoherence between needs and innovations (e.g., nuclear power for useful energy Vs weapons of mass destruction), emergence of incompetence of labour to adjust to emerging industrial and management needs and problems (e.g., cleavage and clashes between skilled and unskilled workers), and unable to balance growth with resource sustainability leading to degradation and depletion of natural resources (e.g., soil erosion, depletion of forests, air pollution) and many such conflicts, challenges and so on.

Can one trace any root causes for many such issues? To begin with, one can go back to deployment of 'mind and senses', mentioned in Manduka Upanishad. Many of such questions about the humans and their societies arose, partly due to the 'relatively high degree of growth of science and technology ahead of humans' ability to understand and absorb them'. That in turn made more and more demands on social science researches towards policy making on the management of scientific and technological developments. This was recognized by many scientists themselves. For instance, Albert Einstein, wrote as back as in 1934 on this subject of conflict between growth of social and natural sciences and their policy applications. Just to quote from one of his addresses at the end of the world crisis in 1930's:

"If there is anything that can give a layman in the sphere of economics the courage to express an opinion on the nature of the alarming economic difficulties of the present day, it is the hopeless confusion of opinion among the experts…. As I see it, this crisis differs in character from past crises in that it is based on an entirely new set of conditions, arising out of the rapid progress in the methods of production. Only a fraction of the available human labour in the world is now needed for the production of the total amount of consumption goods necessary for life…." (published in Mein Weltbild, Amsterdam, 1934).

Karl Marx, was ahead of his time in 19th century, when he raised the issue of conflicts between the owners of capital and proletariats. His theory based on dialectical materialism called for a space or synthesis of political policy, parallel with the growth of sciences and technologies[12]. Referring to the material developments, it is also necessary to recognize, as a social policy, the need for bringing a balance between three types of wealths, namely man-made capital resources, natural resources and human capital as distinct ingredients. Various international treaties in recent years, including the latest Paris Accord among the 196 UN member countries in 2015 (followed by COP 28 Agreements 2023) is a case to cite on mitigating climate change impacts globally (Ref. Unfcc/int/files or www.ipcc.ch/reports).

Challenges in the Present Day

In this direction of balancing social and natural science and technological developments for the welfare of human (and also animal and plant) societies, much deep thinking is necessary. Late Vikram Sarabhai (1974), almost five decades back had identified the need for blending a management approach to bring science and technology to the people. Thereby he found a prominent place for social sciences in material development and management.

Among the many suggestions that he made to policy makers, in his own words, briefly stating some of the most relevant ones are:

- To apply ourselves to people 'before we can apply ourselves to the problems';
- For relating science to the real problems of society and for the application of results, a cooperative research association involving industry and people as partners has many advantages over laboratories.
- Fast increasing urbanization and growing poverty need to be addressed in our development programmes. Both of these overshadow over true delivery of 'sciences to peoples' welfare.
- Recycling waste, increasing soil fertility and promoting genetic engineering, reducing pollution, increasing transparency on technical knowledge to the consumers, improving communication etc., are some the major solutions to be taken up on priority basis. Many of these suggestions are today being addressed under climate change abatement policies.
- Solutions which provide increasing interdependence between social and political organizations, cooperation, as well as recognition of ecological principles should be taken first.
- Multi-disciplinary effort and recognition of multi-valence of individuals and institutions.
- Regard for cultural heritage of the nation to be kept in mind.

Clearly there is a need to expand the scope of social sciences to a wider network of liberal sciences, and take the application and implications of scientific developments for human welfare, hand in hand, and not behind. The Indian Council of Social Science Research, established in 1958, also has been emphasizing from time to time bridging the knowledge gaps between social relevance of scientific development and societal aspiration and expectations.[13]

What are the Major Social Issues Demanding Policies?

Social systems are very complex. It involves, people, with a variety of inhomogeneous characterizations and descriptions. Mathematically speaking, the human relations and their economic and social behaviours

are non-linear, neither simply defined as convex concave[14]. Therefore, there is a constant struggle in addressing social issues at 'individual' versus 'societal' basis. However, on a practical basis some of the major and commonly talked social ills are briefly listed here, more as selected thoughts, and not any exhaustive list of social science based issues requiring policy interventions:

1. Gender bias: Historically and ethnically much of the gender bias is created by humans themselves. It was only as late in history as 1928 that women in Britain had gained right to vote in elections. Though US was declared a democratic republic country as back as in 1776 it was only in 1920 that women in USA gained full rights to vote (with 19th Amendment to the Constitution). Much of the draconian mining laws, seafarers rules in many countries including India did not permit rights to women to actively participate in such workforce. According to the most recent Indian Employment Survey, 2024[15], during 2022 only 32.8% of the eligible female work force were actually participating in some employment or other; whereas it was as high as 77.2 for men-folks (as per the report from Institute for Human Development, 2024). In many societies within a family structure, one can notice biases towards women when it comes to sharing property rights, foods and even clothes[16]. There are also persisting girl child biases when it comes to education, nutrition and marriages. Gender equity oriented school education and demonstration on good transparent social behaviour etc., are the new calls to take on.

2. Regional and spatial disparity: Growth of regional biases arises partly due to uneven ease and access to resources for development and partly due to lack of political willingness to develop regions on a balanced basis. However, considering human settlements as given, the rights of people from backward regions cannot be ignored for their rights on human and economic development. Many states in India have set up specific Committees and Commissions to abate this issue. The most recent one is from Karnataka having come out with a report which was used to distribute development allocations specifically to backward regions from 2009[17]. Recently NITI Aayog published a Three Year Action Agenda, to recommend policy changes and programmes for action from 2017-18 to 2019-20. Treating regional disparity as a critical development issue it refers to difference in economic development and uneven economic achievement in different geographical regions; recommended in the development plans an Aspirationally Balancing approach.

3. Inter-generational biases: Use and Development of natural resources such as forests, water, minerals, biodiversity etc., require considerations to preserve them with equal rights over generations. After all, the resources are properties of all generations, of the present and the future. Unless due regard is given to this intergeneration balance view, the present generations can exploit them to the maximum benefits for themselves, leaving much less or in depleted state for the future generations. As per the Global Footwork Network (reported at World Economic Forum in 2018) the world is presently consuming the available annual resources within about 8 months, leaving the remaining four months with major insufficiencies to the survivors. Such biases do not merit any social acceptance in the long run[18]. Ecologists and Economists have been suggesting several policies to address this issue. Working with conservation biologists, drawing annual programmes (and even long run) plans on forest and grass felling are to be strictly implemented. Rights of indigenous people on their inherited biodiversity need to be strictly adhered to.

4. Addressing persistent poverty: Poverty has remained one of the major social evils (Kautilya treated it as a threat to social stability); much of its growth is attributed to biases in the use of resources and imbalanced regional development, or even biases on access to resources based on ethnic and stratified social classes. While data and methodologies can differ and subjected to discussion, Subramanian (2019) using the data on the distribution of consumption expenditure across classes and basing on the 2014 Rangarajan Committee's estimates of poverty lines, reports a rise in the poverty head count ratio to 35% from 31%. Likewise, according to Bhalla et al. (2022), the poverty ratio is as high as 29.9 to 38.9% depending upon differences in methods (varying base poverty line, Recall method of the survey and so on). Therefore, this debate on continuation of poverty has remained a very major issue in political, sociological and economic circles. The recent indicators such as Multi-Dimensional Poverty Index by NITI Aayog reveals a very dismal picture, with more than 35%

of people in India suffering from malnutrition, though the head-court ratio seems to have come down. According to NFHS Survey of 2019-21, about 19.3% of children are identified as Zero-food children. All said and done, many more social science studies are needed to come to the grips on poverty measures and policy recommendations.

5. Inequality in income and wealth: a major social evil: Numerous studies from India show that while the overall growth process in India is much better than in many other developed and developing countries, there is an increasing concern about equally fast increasing wealth and income disparities. A long run study from 1962 to 2022 by Bharti et al. (2024), reveals that in India the average wealth to income ratio have increased from 3.8 in 1998 to 5.8 times by 2022. This disproportionate rise in wealth will only suggest of fewer and fewer people in India receiving true income benefits. Talking about income inequality, between 1951 to 2022 while the bottom 50 percent peoples' share of national income remained fairly the same around 15-20%, that of top 10 percent peoples' income shares rose from about 35% in 1951 to 57% in 2022. On the other hand, noticeably, the share of middle 40% peoples' shares have declined from 43% to 27% during the same period. According to the most recent report: Henley Private Wealth Migration Report (2024), India has about 326400 millionaires (with the numbers having swelled by 85% between 2013 to 2023). All these statistics are only suggestive of serious hypotheses on increasing income and wealth inequality in developing countries like India. Social science policies on redistribution of wealth and incomes have not taken good roots in India, despite having declared the nation as a secular democracy. Assuring equality of opportunities, tuning educational policies as per job requirements, various social and economic reforms on income, land and asset holdings are the needs of the hour. One can only list few of them demanding serious policy interventions such as land reforms, progressive tax systems, subsidies and assistance and employment guarantees to poor, needy and vulnerable sections of the population, legal support to the poor on their property rights, visible transparency rules, information rights and many others.

6. Appropriate technology: Long back it was J C Kumarappa (1945) who talked about the need for appropriate technology for the youths of India. Almost 5 decades back scientists like Vikram Sarabhai (1974) stressed the need to take science and technology to the people, and not the other way. Yet many of the current trends in technology and development are leaned to cater only to a select few élite scientists and high profile corporate magnets. Social studies on these mismatches are needed for arriving at proper policy directives.

7. Lack of scientific and technical skills to meet basic needs of the society: Starting from the report of the Kothari Commission in 1964, coming close to current period with New Education Policy of 2022 have stressed on Skill development as part of the Indian Educational Policies. After launching the 'Make in India' policy in 2014 as a major goal towards self-reliance, it was equally felt that the levels of skills among the upcoming youths is far below their possible attainments. Therefore, immediately as a policy, National Skill Development Agency in 2013 and a separate Ministry and mission were launched in 2015. All these programmes are addressed to absorb and internalize the 'Demographic dividends' that India has now. However, it was pointed out by several studies (People strong, 2015) that in India the desired skill levels are quite low as compared to several comparable countries (such as Peru or Vietnam) and differ significantly between different jobs and tasks in agriculture, manufacturing and services. Accordingly, the youths will have to be identified for their attainable skill levels and necessary educational tools will have to be developed. This calls for a major social science policy intervention (apart from technical supports), including reforms in education system, away from vernacular to vocational and professional education.

8. Imbalanced emphasis on development meant for elite consumption: Consumption is very basic to welfare. Information and data on consumption rates in India are being compiled ever since 1950, thanks to the major role played by late Professor P C Mahalanobis, the doyen of Statistics in India and the Indian Statistical Institute. Since then as many as 69 Rounds of the All India surveys were conducted in India on measuring consumption rate and patterns (earlier in every Rounds, later on once in five years since the 27th Round in 1972-73). Invariably, the high degree of consumption inequalities between the rich and the poor

have been pointed out in every Round Reports. As per the latest 69th Round information covering consumption data for the years 2022-23, at the all India level the lowest 5% people in urban India were found to have an average monthly per capita consumption of Rs. 2087; whereas the same for the top 5% people on average consumed Rs. 20,846, amounting to ten times. Information about the rural people is slightly better with Rs. 1441 for the lowest 5% people and Rs.10581 for the top 5% people around 7 times higher (GoI, Factsheet on HCES:2022-23, M/o S&PI, 2024). Serious policy interventions are required as warned by several social scientists like Deaton and Dreze (2002) and Tendulkar (2009)[19]. Schemes such as Mid-day meals, nutritional supplements such as milk and eggs to women and poor persons, food in the form of coupons to workers at controlled rates etc., are to be given serious thoughts.

9. Lack of emphasis in technology development on health and quality of life: While development with science and technology is important, relatively much less emphasis is laid on the quality of life of people who work with them. The digital world has given rise to several mental and physical hazards such as increasing incidences of spondylitis, social isolation, depression, anxiety, hate and jealousy, and increased maladaptive behaviours. According to an international conference on impacts of digitization on humanity, several major adverse impacts were identified on humans and societies (Glimple and Fabian, 2019). Food habits associated with modern technologies (e.g., fast and packed foods, irregularity in eating habits and lack of food nutrition), lack of health protections against hazards and so on are all well known. Social policies to check these trends are needed.

10. Ignoring indigenous knowledge and technology: has led to a large section of population involved in the mainstream of technology and development, totally isolated from rest of the society. Apart from traditional artisanship, even the traditional knowledge on many aspects of quality of life are vanishing. Yoga apart, there are several indigenous knowledge tools and techniques that have to be embedded with modern technologies. Much of the mental stress of working with or using modern technologies (digital, AI or space or fast transport systems etc.) are to be balanced with time and space related traditional livelihood methods (say, resting on a river bank or forest slope, running along rivers or farm land banks or sea beaches, meditation and practising *pranayama* and yoga, allocating time for a family life and so on) have to come back in a big way.

11. Increasing neglect of employment, declining rate of empowerment and human dignity has become a major concern. With a huge back log of demographic dividend in India, it is necessary to launch massive employment oriented work situations. Between policies of capital and technology intensive work cultures, it is also necessary to promote moral and ethical service sectors to support methods and avenues to make the developmental activities deliver human and animal welfare safely and honourably. Tourism, recreation, distribution of knowledge embedded with traditional knowledge for human welfare through appropriate education and health care and cultural systems etc., are to be intensified. In many of these social transformations, exposure to psychology, ethics, and philosophy are to be introduced as basic tenets of education as part of behavioural sciences.

To Conclude

On the occasion of 70th birth day of Mahatma Gandhi, in 1939, Albert Einstein said the following.*"….a politician whose success rests not upon craft nor the mastery of technical devices, but simply on the convincing power of his personality……Generations to come, it may be, will scarce believe that such a one as this ever in flesh and blood walked on this earth" (written at Sabarmati Ashram, Ahmedabad)*[20].

There is a strong message in what Albert Einstein had said. Humanity needs guidelines for its own existence and sustainability to balance and use the development of sciences and technology concurrently with human needs and aspirations based on social science principles. There is a need on the part of governments and non-governmental institutions to balance between short run and long run developmental policies, equally embedded with societal (and not just social) education and reforms for the societies to absorb and go along

with them, with the same speed as scientific developments. If social reforms are given a back seat over the developmental reforms, however well aimed, the world will continue to face social conflicts, insecurity, social unrest, disharmony, revolts and calamities; all of which are signs of unsustainable world; even threatening democratic forms of nation building, which was said to be the very first socio-political reform in 1648 in Europe.

Can this essay end without any leftovers? Certainly not. There are numerous limitations in social science methodologies. Most of it come from the fact that one does not know exactly how much is our understanding of the society. Understanding of the society from the grass root level to the universal level is a matter of perception and purpose of pursuits. Accordingly, social policies emerge, some at the grass root level (e.g., behaviour within a family or caste or classes, or customs at the village level etc.); more at the district, state or national levels (e.g., designing subsidies or welfare packages to different vulnerable groups, or guaranteeing employment or minimum pension etc.); yet at the international level, say creating or designing multi-lateral cooperation or protocols in dealing with issues such as climate change or anti-war agreements and so on. All these are matters of understanding the value of such social concerns. However much understood, one is not sure if social scientists know it all.

Secondly, there exists significant differences in the professional virtues of social scientists because of which we fail to mesh neatly with the task of policy analysis, and this leads to disappointment and mutual suspicion and differences between social scientists 'within' as a group and policy makers as another group. Finally, it may also be pointed out that good communication with policy makers is very much lacking in its basic premises. Social scientists still have some problems in this regard, be it coming to a common ground on societal issues such as balancing between equity and efficiency (Arrow, 1972; Okun, 1975), or choice between environment and development (Brundtland Commisison Report, 1987), or choices between market and non-market operations (Condirelli, 2013) including creating participatory institutions (Mathew Adler and Helga Nowotny (2023).

Notes

1. See Russell, Bertrand (reprinted in 2004, paperback edition) *Autobiography*, Routledge Publication, London, P.432. His objections to scientific techniques are clearly stated in his book: *A History of Western Philosophy* (1945, paperback, Clarion Book, New York). To quote him, *"The philosophies that have been inspired by scientific techniques are power philosophies, and tend to regard everything non-human as raw material. Ends are no longer considered; only the skillfulness of the process are valued. This also is a form of madness."* (p.494)
2. However, in his famous book: *The Protestant Ethics and the Spirit of Capitalism,* Weber argued about the emergence of capitalism from the growing tendency on Protestantism; which perhaps laid the foundation for countries to develop policies based on capitalistic modes of production.
3. Only the most recent thoughts on Experimental Economics (e.g., Controlled Randomised Experiments) is a progress in the direction of soliciting societal and individual preferences and values on their wants, ability to attain, and maintain a welfare oriented life. See Chakravarty et al. (2011).
4. Taken from Hume, Robert Ernest (Ed.) (1979): *The Thirteen Principal Upanishads: Translated from Sanskrit*, Oxford University Press, London. The true meaning of this stanza is about Him being the universe, with all the five elements mentioned as parts of his body, studded with mind and sense, all as one single entity.
5. For an enlightened reading on the evolution of human kind from animal kind, one may read: Harari (2017)
6. A most illuminating book on this subject of plants also having mind and sense, is: Colin Tudge (2005)
7. Smith (1759) distinguishes between 'passion' and 'impartial spectator' as the two distinct behavioural strugglesfor men.
8. Among the many translations of original Sanskrit version, one can read Ranganathan, L N (1987):

Koutilya: The Artha Shastra, edited, rearranged, translated and introduced by the author, Pengun Books, Calcatta.

9. For instance Plato (around 375 BC) referred to 'where and how exactly the citizen (defined as philosophers and intellectuals) and slaves should live in a society of town. See *Bloom, Allan (1991) [1968]. The Republic of Plato. Translated, with notes and an interpretive essay.* New York: Basic Books.
10. See Smith, Adam. 1776. This book is considered to be a treatise on development, while Smith (1759) is on ethics of human living.
11. Smith (1776) also proposed the reason on political wisdom of human behavior about 'maintaining sovereignty with the division of the society as civilians who pay taxes and army who protect the sovereignty and do not pay taxes', see Smith, Adam (1776), Book V, Chapter 1, Part 1 on 'On Expense of Defence'.
12. In 1917 former Soviet Union went for a social revolution, overthrowing feudal king Tsar Nicolas II, establishing a socialistic republic as USSR. This can be considered a classic example of social science led policy.
13. Indian Council of Social Science Research, Report of the Fourth Review of Committee of ICSSR: *Restructuring the Indian Council of Social Science Research*, New Delhi, March 2007.
14. In Dasgupta (2003), he provides some details: "Ecologists use the more general term "non-linear" to highlight what economists call "nonconvex". The term "linear" (and its negative, "non-linear") is widely understood. The same is probably not true for the term "non-convex". For more details see page 4, Footnote No 10.
15. International Labour Organization and Institute for Human Development (2024): India Employment Report, 2024: Youth employment, education and skills, ILO, Geneva.
16. Agarwal, Bina (2016): *Gender Challenges* (3-vol. box set), Oxford University Press, New Delhi.
17. See as an instance of policy oriented social science report, D M Nanjundappa Committee on Redressal of Regional Disparity in Karnataka, (2002), which came out with recommendations to make special investments in three categories of talukas, as 'most, backward, backward, and well developed'.
18. Martin Wietzman in several or his writings argued for intergenerational equity in the use of environmental resources. See: 'Why the far-distant future should be discounted at its lowest possible rate', *Journal of Environmental Economics and Management*, Vol.36, No. 3, p. 201-208.
19. Prof. S. Tendulkar was the Chairman of the Expert Committee, of GoI (2009).
20. Taken from the book: Albert Einstein: *Ideas and Opinions*, Rupa & Co, New Delhi, 1979, p. 77-78

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Introducing New Book

Dissecting the Regime of 'Deep Lies'

Meera Nanda, *A Field Guide to Post-Truth India*, Three Essays Collective, Gurugram, 2024, 194 pages, Rs. 600/-

Saurav Kumar Rai

Recently William Dalrymple, an India-based Scottish litterateur, sparked a debate while speaking at 'Idea Exchange' column of *Indian Express*, by saying that 'Failure of Indian academics to reach out to general audiences has allowed the growth of WhatsApp history'. It led to huge furore from professional historians condemning the statement made by Dalrymple often citing individual examples. However, one point which is overlookedsorely in this entire debate is that the growth of so-called 'WhatsApp history' is actually linked with broader structural transformations India has been undergoing in recent years. The onus of it cannot be put simply on 'individuals' for their failure to connect with the public, when the reasons are deeply structural. It is these structural transformations which are at the centre of discussion in the recent book by Meera Nanda.

This book is basically the collection of essays written by the author on different occasions with the binding theme of analysis of impact of recent political developments in India on epistemological thought. The essays that make up the book fall into two categories. The first category (chapters 1, 5, and the Appendix) explores the philosophical manoeuvres through which 'Deep Lies' are created. By 'Deep Lies' Nanda connotes the 'lies' which are not amenable to fact-checking as they supposedly derive their sanctity from much deeper ethnosciences which are supposedly beyond the grasp of 'modern' empirical mind. The second category (chapters 2, 3, and 4) examines how 'Deep Lies' are put to work in domains of health, history writing, and school textbooks.

Nanda points towards the emergence of post-truth culture in India in recent years in which myths substitute for history, pseudoscience parades as science, mysticism lays claim as a legitimate scientific method and baldfaced lies drown out objective facts (p. 6). Nanda views it as a phenomenon deeply linked with the twilight of secular India and a natural corollary of a post-secular society where majoritarian belief prevails. In other words, these changes are more structural than merely emanating out of individual failures. Here Nanda basically refers to the structural changes introduced by the Hindutva regime over past one decade.The assault on secularism is accompanied by an assault on 'science' and the 'scientific worldview' thereby leading to post-truth condition.

Delineating about 'post-truth' condition, Nanda argues that it is a condition when objective, verifiable facts lose their relevance in public discourse (p.13). It is a situation in which objective facts are less influential in shaping public opinion than appeals to emotion and personal belief. In other words, in post-truth world, while the truth still remains truth and a lie is still a lie, it fails to shape broader public opinion. Underlying the 'Big' and the 'Deep' lies, argues Nanda, is a shared political impulse, namely, to bend our sense of reality to fit political agendas and religious dogmas of the post-secular political society (p.12).

An essential trait of post-truth society is that in the guise of decolonizing the mind and indigenizing education, it promotes mythical pseudo-scientific ideas contained in spiritual texts as 'real' knowledge. Here Nanda examines the role played by National Education Policy, 2020 in this pursuit under the rubric of 'Indian Knowledge System'.

Similarly, in the post-truth era, traditional scientific beliefs overcome the necessity of empirical

verification. Nanda has explained this phenomenon particularly in Chapter 2 in the context of AYUSH's campaign to 'integrate' ayurvedic herbal formulations with modern medical treatments for Covid-19 despite the absence of adequate scientific evidence for the efficacy and safety of these herbals (p. 47). While it is true that the crises unleashed by Covid pandemic provided an opportunity to traditional healing systems to reclaim their lost space vis-à-vis biomedicine, the enthusiasm with which the state backed 'faith healing' was worrying. Nanda sees it as a betrayal of people's trust both by the state as well as medicinal system (p. 55).

Further, in Chapter 3, Nanda investigates the 2022 calendar produced by IIT-Kharagpur that juxtaposes myths to interpret the archaeological remains of the Indus Valley Civilization as a Vedic Aryan civilization. In a similar vein, in Chapter 4, Nanda explores distortion of theory of evolution caused by elimination of Darwin's theory from high-school textbooks to fit into the traditional Hindu view of spiritual evolution through karma and reincarnation. According to Nanda, 'the potential harm of NCERT's decision has to be assessed against the background of an already existing surfeit of unexamined irrational beliefs parading as compatible with science' (p. 104). The cancellation of Darwin, argues Nanda, is only the beginning of what is to come.

In the end, in Chapter 5, Nanda critically examines Patanjali's yoga sutras; whereas in Appendix she reproduces a published essay that explores Vedicization of modern ideas which is central to India's reactionary modernity.

This book is a must read for many reasons. It unpacks theoretically as well as illustratively the regime of post-truth that has descended around us. It helps us in understanding as to why scholarly discourse has failed to make any substantial impact on public in general. This post-truth condition cannot be reverted by individual 'heroics' and requires intensified collective efforts with capacity to alter the structure as a whole.

Recent Trends in Kerala's Migration: Fall in Emigration to the GCC Countries and Rise in Student Migration

Jerry Alwin

Kerala's migration has been witnessing two major changes viz. a fall in emigration to GCC countries and a rise in student migration. Due to the spread of the COVID-19 pandemic and related disruptions, there occurred an unprecedented return of Keralite emigrants from GCC countries. Due to their return most of the emigrant workers became unemployed, remained without jobs and income, and faced high uncertainty about their livelihood. The return has resulted in a total loss of remittances and shattered the finances of a sizeable number of returnee households. The rapid rise in student migration both emigration and student out migration is another development. In the case of total emigrant students, nearly 80 percent went abroad for higher studies. The major destinations are the United Kingdom, Canada, and countries in the European Union. The student out migrants are estimated at 1.33 lakhs, mostly migrating to Karnataka, Tamil Nadu, Maharashtra, and New Delhi.

Keywords: Emigration, Return Emigration, Student Emigration, Student Out-migration

Kerala's migration both emigration (migration to foreign countries) and out migration (migration to other states and Union Territories in India) has been witnessing rapid changes in recent years.The spread of COVID-19, the global pandemic, has created an unprecedented impact on global migration. To contain the spread of COVID-19, most countries in the world implemented lockdowns, shutting down borders, halting international flights, other international travel controls, imposing curfews, etc. These measures have resulted in unprecedented return of Keralite emigrants from Gulf Cooperation Council (GCC) countries which account for about 80.5 percent of Kerala's total emigrants. Another major change that has been happening in migration is the steady increase in student migration to foreign countries and other states and Union Territories in India. In this context, the article examines the recent trends in Kerala's emigration to GCC countries and student's emigration to foreign countries and other parts of India. Data from the two recent studies viz. the COVID-19 pandemic and exodus of Keralite emigrant workers from GCC countries (B. A. Prakash, 2022) and the Kerala migration survey 2023 (Rajan S. I, 2024) are used for the article.

Exodus of Keralite Emigrants from GCC Countries

Due to the spread of the COVID-19 pandemic and related disruptions, a large number of Indian emigrants returned from GCC countries since March 2020. The returnees used different ways to return to India such as normal flights from GCC countries, special flights, chartered flights organised by emigrants or their organisations, and circular routes to reach India due to COVID-19 travel restrictions imposed in some countries. The government of India also organised an evacuation mission viz. Vande Bharat Mission to bring back the stranded Indian emigrants from foreign countries. According to an estimate by the government of India, 55.93 lakh Indians returned from foreign countries up to 30th April 2021 through the mission.

According to an estimate of Non-Resident Keralites Affairs (NORKA), 14.7 lakh Keralites returned to Kerala due to COVID-19 disruption till June 22, 2021 (Table 1). Of them, 59 percent returned from UAE, 11.7 percent from Saudi Arabia, 9.7 percent from Qatar and 9.1 percent from Oman. It is reported that loss of jobs and expiry of visa are cited as the major reasons for the return. Of the total returnees 71 percent returned due to loss of jobs and 20 percent due to visa expiry and related problems. A district-wise distribution

of returnees shows that of the total returnees, 63.6 percent were returned from six districts viz. Malappuram (17.9 percent), Kozhikode (11.7 percent), Kannur (11.1 percent), Thrissur (8.1 percent), Thiruvananthapuram (7.9 percent) and Kollam (6.9 percent). This return can be considered as an unprecedented one in the history of return emigration of Keralite emigrants from Gulf countries.

Table 1: Number of Non ResidentKeralites (NRKs) returned due to COVID-19 crisis, till June 22, 2021

No	Country	Number of return emigrants	Share (%)
1	United Arab Emirates	8,72,303	59.3
2	Saudi Arabia	1,72,016	11.7
3	Qatar	1,42,458	9.7
4	Bahrain	43,194	2.9
5	Kuwait	51,170	3.5
6	Oman	1,34,087	9.1
7	Other Countries	56,209	3.8
Total		**14,71,437**	**100.0**

Source: Non- Resident Keralite Affairs Department (NORKA)

To study the causes of return, activity status of returnees before and after return and impact of return on emigrant households and the local labour market, a study was conducted on a sample of 404 return emigrants belonging to five districts viz. Kannur, Kozhikode, Malappuram, Pathanamthitta and Thriruvananthapuram **(**B A Prakash, 2022). The study arrived at the following conclusions. Due to the COVID-19 pandemic and related disruptions, the Keralite emigrant workers employed in GCC countries, who used to send sizeable amounts as remittances to their households regularly were forced to return to Kerala due to the loss of jobs and other pandemic-induced disruptions. It was found that those who returned on leave to Kerala were unable to return and the returning emigrant households experienced total loss of remittances and acute economic distress. An important finding of the study is that the majority of sample returnees (54.2 percent) returned on leave but were stranded in Kerala. Due to return, most of the emigrant workers became unemployed, remained without income and faced high uncertainty to find employment. The survey findings on the activity status of returnees after return, show that of the total returnees, 70.8 percent were unemployed and 28.7 percent were employed and 0.5 percent were not in the labour force.

The sample returnees informed that their households had a somewhat sound financial situation before their return due to receipt of remittances regularly. However, the return has resulted in a total loss of the remittances and shattered the finances of all sample returnee households. More than one-fifth of the returnee households belonged to poor households or below the poverty line (BPL) households. The return emigration has pushed a good number of households to the BPL category. The local labour market experienced an excess supply of labour force, an increase in the unemployment rate and created a gloomy prospect for remigration of returned emigrant workers and fresh migrants. The returned emigrant workers feel that the labour market situation and prospects of getting regular and remunerative jobs are bleak in Kerala.

Results of Kerala Migration Survey (KMS) 2023

KMS 2023 is a statewide survey on migration covering 20,000 sample households in 14 districts and 77 Taluks in Kerala (Rajan, S.I., 2024). It is one of the largest surveys conducted on the subject of migration in Kerala. The major findings of the survey are the following (1) KMS 2023 has estimated the number of emigrants from Kerala as 2.2 million in 2023. (2) Of the total Keralite emigrants the share of UAE is 38.6 percent, Saudi Arabia 16.9 percent, Oman 6.4 percent, Qatar 9.1 percent, Kuwait 5.8 percent, and Bahrain

3.7 percent. The total share of GCC countries is estimated at 80.5 percent. (3) UAE has emerged as the destination of the largest number of Keralite emigrants in 2023. (4) There has been a decline in the share of Keralite emigrants in GCC countries from 89.2 percent in 2018 to 80.5 percent in 2023. (5) There has been a shift in the destination of Keralite emigrants from GCC to non-GCC countries. The share of non-GCC countries increased from 10.8 percent in 2018 to 19.5 percent in 2023.

(6) The COVID-19 pandemic in 2020 and 2021 has led to large-scale return of migrants, job losses, compulsory repatriations, expired visas, increasing fear of deportations, economic disruptions, and wage theft. (7) The number of emigrants who have returned home is estimated to be 1.8 million in 2023. (8) The northern region of Kerala remains a focal point for migration, encompassing the majority of emigrants. Malappuram district is the origin of nearly 377,647 emigrants in 2023. (9) The survey estimates a total of 0.5 million out-migrants from Kerala. The states viz, Karnataka, Tamil Nadu, and Maharashtra remain in the top position with respect to out-migration, return-out-migration, and student migration. (10) A major development is the rapid increase in student migration, with the number doubling in the past five years. Students constitute 11.3 percent of the total emigrants from Kerala. (11) A cause for the decline in the stock of Keralite emigrants in GCC countries is attributed to the preference of student emigrants to non-GCC countries.

Rise in Student Migration

The KMS 2023 data on Keralite emigrants indicate that there has been a rapid rise in student migration in recent years. The two categories of student migration are emigration to foreign countries (emigrants) and migration to other states and union territories of India (outmigrants). The KMS 2023 has estimated the number of emigrant students as 2.50 lakhs. In the case of emigrant students above 16 years, over 80 percent have gone abroad for higher studies completing their graduation in Kerala. Among the destinations, the United Kingdom (UK) ranked first, followed by Canada and European Union countries. One out of four students from Kerala went to the UK for their higher studies, while one out of five students from Kerala opted for Canada. A male-female breakup of emigrant students shows that 54.4 percent are males and 45.6 percent are females.

A district-wise distribution of emigrant students shows that the largest share goes to Ernakulam, i.e., 18.1 percent (Table 2). Thrissur district ranks second position and Kottayam district third position. The other districts having a sizeable number of emigrant students are Kannur, Kollam, Kozhikode, Malappuram, and Alappuzha. The rapid rise in the emigration of students can be attributed to several factors. The deterioration in the quality of higher education in colleges, universities, and others is a major factor. The lack of modern facilities, outdated courses, poor quality of teachers, lack of qualified teachers to teach emerging subjects, steady deterioration of PhD research, unhealthy practices of student unions, unhealthy overall environment prevailing in college campuses, etc. are such factors. The high rate of unemployment among educated youth with higher educational qualifications is another reason. The lack of availability of suitable regular and remunerative jobs is another factor. The labour market situation prevailing in Kerala for educated youth is bleak. In this bleak situation, it is only natural that the youth with talents and aspirations wish to migrate to foreign countries to better their future life. A major reason is the hope to get better jobs and settle in foreign countries. The Banks in Kerala are following a liberal policy of giving loans to students for emigration.

Table 2: Emigrant students from Kerala by district 2023

District	Emigrant Students (number)	Percent
Thiruvananthapuram	4887	2.0
Kollam	21607	8.9
Pathanamthitta	10466	4.3
Alappuzha	14217	5.8
Kottayam	35382	14.5
Idukki	6946	2.9
Ernakulam	43990	18.1
Thrissur	35873	14.7
Palakkad	13692	5.6
Malappuram	15310	6.3
Kozhikode	15980	6.6
Wayanad	3750	1.5
Kannur	23512	9.7
Kasaragod	4391	1.8
Total	**250002**	**100.0**

Source: Rajan, S.I. (2024)

Student Out Migrants

The KMS 2023 has estimated the total student out migrants as 132354 in 2023 (Table 3). Of the student out migrants, 50.8 percent migrated to Karnataka and 20.9 percent migrated to Tamil Nadu. Thus nearly 72 percent of the total students migrated from Kerala went to Karnataka and Tamil Nadu. The other states having sizeable Keralite student migrants are Maharashtra, New Delhi, and Andhra Pradesh. On the other hand, the share of Keralite student migrants in other states and union territories in India is small. A break up of student out migrants into male and female shows that the majority of them are females (57.8 percent). The share of males is estimated as 42.2 percent. The KMS 2023 does not provide other details about the student out migration.

Table 3: Student out migrants by destination state, 2023

State/UT	Student Out Migrants (Number)	Percentage
Karnataka	67195	50.8
Tamil Nadu	27696	20.9
Maharashtra	7429	5.6
New Delhi	6983	5.3
Andhra Pradesh	5767	4.4
Gujarat	3392	2.6
Goa	1822	1.4
Uttar Pradesh	1919	1.4
Punjab	1540	1.2
Madhya Pradesh	1288	1.0
Chhattisgarh	1009	0.8
Rajasthan	1002	0.8
Other states & UTs*	5314	4.0
Total	**132354**	**100.0**

*UT: union territory *****Andaman Nicobar, Himachal Pradesh, Uttarakhand, West Bengal, Arunachal Pradesh, Jharkhand, Pondicherry.*
Source: Rajan, S.I. (2024)

Conclusion

The above analysis can be concluded with the following observations. Though the study on return migration has the limitation of a small sample size (404), it gives a realistic picture of the return of Keralite emigrants from GCC countries and the status of returnees. Due to return to Kerala most of the emigrant workers became unemployed, remained without jobs and income, and faced high uncertainty about their livelihood. The return has resulted in a total loss of remittances and shattered the finances of many returnee households. The KMS 2023, one of the largest migration surveys conducted in Kerala also supports that Kerala witnessed a large-scale return of migrants due to COVID-19. The survey also found that there has been a decline in Keralite emigrants from GCC countries and a shift in migration to non-GCC countries. A significant finding of KMS 2023 is the rapid increase in student emigration from Kerala. These studies highlight the recent changes in the trend and pattern of emigration from Kerala.

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Legal Questions Raised by Fashion : Can the Indian Law fill the Void?

Raju Narayana Swamy

Fasion law incorporates the legal questions inherent to the design, manufacture, distribution, marketing and promotion of all types of fashion products. Fashion designers who have not registered their designs are unable to seek damages and injunction to prevent unauthorized copying of their designs. In an era of fast-paced fashion sector development, where design houses release new collections of fashion goods on a regular basis-usually every season-fashion designers require automatic and instant protection for their designs that is not dependent on registration. It is here that the Indian law falters. The Indian law denies designers the opportunity to test their unique interventions in the market, observe how they are received and then decide whether or not the design is worthy of registration.

Key words : Trickle-down Effect, Piracy Paradox, Patrimonial Right, The Jury of Design, Suigeneris Protection

Introduction

Fashion has been defined as "everything that is the current trend in a person's appearance and attire, particularly in clothing, footwear and accessories". It is more than just clothes, jewellery and shoes, but is a form of expression. To quote Ralph Lauren himself "fashion is not necessarily about labels. It's not about brands. It's about something else that comes from within you".

Intellectual Property (IP) and fashion are inextricably linked. In fact, copyright and related rights, trademarks, patents, utility models, registered and unregistered designs, domain names, geographical indications, trade secrets, know-how etc. can all be used to protect fashion designs. In the Indian context, special mention should be made of the Copyright Act 1957, Industrial Designs Act 2000 and Trademark Act 1999. To be more specific, sketch design and color combination can be protected under the Copyright Act whereas article design can be protected under the Designs Act.

Legal Provisions

No discussion on fashion and IP can be complete without a reference to Section 2(d) of the Designs Act and Section 15 of the Copyright Act. The former defines designs to mean "only the features of shape, configuration, pattern, ornament or composition of lines or colours applied to any article whether in two dimensional or three dimensional or in both forms, by any industrial process or means, whether manual, mechanical or chemical, separate or combined which in the finished article appeals to and is judged by the eye". It is noteworthy in this context that the Designs Act does not incorporate a specific definition of "fashion design". The Act does not protect the entire garment, rather it only protects individual aspects like shape, pattern, colour etc of the garment. The need of the hour is a term that should facilitate the overall appearance of a particular piece of apparel rather than the current definition which protects each aspect of a garment individually. As regards the latter, it stipulates that

(1) Copyright shall not subsist in any design which is registered under the Designs Act. Thus designs that are capable of being registered under the Designs Act, 2000 and are registered according to the Act's provisions are exclusively protected under the Designs Act. It needs to be mentioned here that for a design

to be protected under the Designs Act, it should satisfy the conditions as laid down in Section 4 of the said Act.

(2) Copyright in any design, which is capable of being registered under the Designs Act but which has not been so registered, shall cease as soon as any article to which the design has been applied has been reproduced more than fifty times by an industrial process by the owner of the copyright or with his license, by any other person. It also needs to be mentioned here that designs that are not eligible for registration under the Designs Act, 2000 because they are original artistic works are protected under the Copyright Act, 1957.

Special mention must be made in this regard of the case Ritika Private Limited Vs Biba Apparels Private Limited in which a boutique apparel designer firm that was the first to copyright a design which was commercially in use by the defendant sought an injunction. The Court ruled in favour of the defendant pointing out that the copyright was given under the Copyright Act of 1957 which states that if a design is reproduced more than fifty times, the designer loses his copyright on the work. To be more specific, the Court looked into the legislative perspective and made a clear inference that the protection afforded to a work that is commercial in nature is less than that granted to a work of pure art and that they are not to be compared.

The Microfibres Case

A land mark case in the annals of fashion and IP is the Microfibres case wherein the Delhi High Court endeavoured to formulate the Indian legal stance on copyright protection for fashion designs. In this case Microfibres, an American corporation involved in the business of selling and exporting upholstery materials sued the defendant contending that the Berne and Universal Copyright Conventions provided copyright protection to its artistic works in India and that the defendant's textiles bear works that were identical or colorable imitations of the originals. In fact, the claim of the plaintiff was that their work constituted original artistic work within the meaning of Section 2(c) of the Copyright Act, 1957 which would entitle them to enjoy copyright protection. The defendants argued that the plaintiff's artistic works were actually designs and fell within the scope of the Designs act 2000. To fortify their arguments, they pointed out that the plaintiff had registered some of the upholstery designs in UK under the local Designs Act and that the Indian Design Office had confirmed in writing that the subject works are registrable.

The Court accepted the argument that the only category in which fabric designs could potentially fit under Sec 2(c) of artistic creation is 'painting'. The Court made a distinction between paintings in the meaning of M.F Hussain's works and fabric patterns holding that only the former may be classified as a "painting" under the concept of artistic work. The comparison to M.F. Hussain's painting in the present case would be otiose. In a design, the characteristics are merely ornamental and are applied to another object, as opposed to an artistic painting which has its own existence. The goal with which such arrangements were undertaken in the present case (viz) to employ them in a commercial setting must not be overlooked. Establishing a sixty year monopoly (as envisaged in Copy right Act) on industrial and commercial designs will render the law of designs obsolete and hamper competition, nay industrial innovation.

Given that a particular design had been manufactured more than fifty times in Microfibres, the Division Bench dismissed the appeals as frivolous and upheld the Single Judge's decision that any copyright in the designs was abandoned upon such commercial production of the articles to which the design had been applied.

Rajesh Masrani Vs. Tahiliani Design, AIR 2009 Delhi 44

This is a case which has a significant impact on the fashion industry. In this case the defendant asserted that the plaintiff cannot claim protection to their designs as the designs were not registered as per the Copyright Act, 1957. The Court noted that it is well established law that registration of the work is not mandatory. The registration u/S 44 of the Act is not a prerequisite to pursuing remedies such as seeking an injunction to prevent

infringement as well as damages. It is merely there to provide prima facie verification of the details of the right as mentioned in Section 48. The Court also observed that the plaintiff's work is an original artistic work entitled to protection under Section 2(c) of the Copyright Act and that as it cannot be registered under the Designs Act, the provisions of section 15(2) of the Copyright Act do not apply. The Court held that the plaintiff's work is at least inventive and unique, if not novel and that the respondent had copied the work, which should not be allowed. It was categorically held that registration is not necessary for claiming protection to designs under the Copyright Act.

Trademark Protection for Fashion Design

In India, the Designs Act 2000 under Section 2(d) while defining "design" expressly excludes the trademark. To put it a bit differently, a fashion design which is a trademark cannot be protected under the Designs Act. But the judgment rendered by the Delhi High Court in Micolube India Ltd Vs Rakesh Kumar trading as Saurabh Industries & Ors has expanded the ambit of trademark protection for design. The full bench by 2:1 majority held that the plaintiff would be entitled to institute an action of passing off in respect of a design used by him as a trademark provided the action contains the necessary ingredients to maintain such a proceeding. The Court observed that: "post registration under Section 11 of the Designs Act there can be no limitation on its use as a trademark by the registrant of the design. The reason being : the use of a registered design as a trademark is not provided as a ground for its cancellation under Section 19 of the Designs Act."

Thus a fashion design registered under the Designs Act not only gets protection under the Act but can also be protected by instituting an action for passing off provided that design was being used as a trademark post-registration.

Fashion Design & Piracy

Fashion design is the application of design and aesthetics beauty to the items of fashion. Modern fashion design is divided into three basic categories: (i) haute couture, (ii) ready-to-wear (Pret-a-Porter) and (iii) mass market. A couture garment is made to order for an individual customer from high quality, expensive fabric, seen with extreme attention to detail and finish, using time consuming techniques. Ready- to-wear collections on the other hand are not made for individual customers, but are made in small quantities to guarantee exclusivity. Both haute couture and ready to wear collections are presented in international catwalks. The Mass Market on the contrary caters for a wide range of customers using cheaper fabrics and simpler production techniques.

Piracy is the act of duplicating without permission. Unauthorized replication of original fashion designs is known as fashion design piracy. It can be divided into two broad categories-knock-offs and counterfeit. Knock-offs do not have the original company's logo or mark on the product. To put it a bit differently, they are exact replicas of another designer's style, but without IP infringement. This is in sharp contrast to counterfeiting which involves making replicas with the same brand name as original commodities. To be true to facts, there are two forms of counterfeiting in fashion industry: deceptive and non-deceptive. Deceptive counterfeiting occurs when a consumer is uninformed that he or she is purchasing a false or fraudulent object. Non deceptive counterfeiting occurs when a customer buys a duplicate of the actual brand intentionally and with complete awareness. In our image-based buying society where shoppers seek the optimum mix of trend and affordability, we have the perfect environment for counterfeiting. No wonder why counterfeiters are mostly targeting major fashion houses-Gucci, Prada and Adidas, to name few.

The Piracy Paradox

The "Piracy Paradox" was coined by Kal Raustiala and Christopher Sprigman to describe the idea that copying leads to new creations. Their contention is that imitation not only coexists with creativity but also encourages it. They point out the 'angelic' qualities of piracy and substantiate that piracy in fashion design may prove more a boon than a bane.Elucidating it further they write:-

"The absence of IPR protection for creative designs and the regime of free design appropriation speeds diffusion and induces more rapid obsolescence of fashion designs… The fashion cycle is driven faster....by widespread design copying because copying erodes the positional qualities of fashion goods. Designers in turn respond to this obsolescence with new designs. In short, piracy paradoxically benefits designers by inducing more rapid turnover and additional sales".

However the paradox is a weak argument for the endless duplication that occurs in the fashion apparel sector all over the globe. In fact the paradox has been challenged especially by Hemphill and Suk (2009) who highlight that there are various forms of copying in the fashion industry - ranging from actual imitation to borrowing, remixing and reinterpreting. Copying someone else's work is unethical and theft is morally wrong in every aspect of law. To put it a bit differently, the paradox runs counter to the notion of uniqueness, which is the driving force behind the fashion industry. Another fundamental flow in the paradox is that it is predicated on the 'trickle-down effect' which assumes that fashion designs are copied from the top. This is erroneous as local enterprises which employ indigenous designers are the hardest hit by counterfeits. Due to shortage of finances, these employees are unable to generate new designs in accordance with the Piracy Paradox. Thus the Paradox overlooks the fact that plagiarism is a two-way street.

Claiming Protection for Fashion Designs under the Indian Law: Issues and Challenges

Claiming protection for fashion designs under the Indian law is not an easy process. First, to claim protection under the Copyright Act, the work should qualify as an original artistic work (which is dealt with u/s 2(c)). As regards the Designs Act, it should fall under the category dealt u/s 2(d) of the Act. Apart from it, a design to get registration and consequently to get protection under the Designs Act must satisfy the following conditions as well:

1. It must be new or original
2. It must not have been disclosed to the public anywhere in India or in any other country by publication in tangible form or by use or in any other way prior to the date of filing for registration.
3. It must be significantly distinguishable from known designs or combination of known designs
4. It must not comprise or contain scandalous or obscene matter.

Under the Act, the proprietor (as explained in Section 2(j)) of a registered design gets copyright in the design which means the exclusive right to apply the design to any article in any class in which the design is registered. Thus the Act affords protection not in a particular article but against a class of articles as enumerated in Schedule III of the Designs Rules, 2001. Goods manufactured by the fashion designers may fall under the following classes:-

1. Class 2: Articles of clothing and haberdashery
2. Class 3: Trade goods, cases, parasols and personal belongings, not elsewhere specified
3. Class 5: Textile piece-goods, artificial and natural sheet material.
4. Class 10: Clocks and watches and other measuring instruments, checking and signaling instruments
5. Class 11: Articles of adornment.

The overlapping between Designs Act and Copyright Act however has an adverse effect with regard to the protection of fashion designs.

It is also worth mentioning here that in the absence of registration the design law provides no protection and that the registration process is not only expensive but also time consuming. In India, the entire design registration procedure (from filling an application to receiving a certificate of registration) takes roughly 10 to 12 months. This is troublesome because a garment's anticipated life in a designer store is limited to one

season or 3-4 months. In this situation, a designer is left with only one option-to apply for design registration well ahead of the anticipated date of market debut of his works. This leads to a new challenge (viz) maintaining the secrecy behind design elements. Moreover, once the registered design reaches the consumer market, the designer may discover that the design is unappreciated, rendering the entire design registration worthless. It also needs to be mentioned here that though the Designs Act provides for recovery of damages vis-a-vis infringement of registered designs, the amount of money that can be collected is minimal (ie) not exceeding Rs.50000/-. The grandeur associated with couture designs worth lakhs of rupees is mocked by this damage barrier.

Fashion designers who have not registered their designs are unable to seek damages and injunction to prevent unauthorized copying of their designs. Needless to say, in an era of fast-paced fashion sector development, where design houses release new collections of fashion goods on a regular basis-usually every season-fashion designers require automatic and instant protection for their designs that is not dependent on registration. It is here that the Indian law falters. Thus the Indian law denies designers the opportunity to test their unique interventions in the market, observe how they are received and then decide whether or not the design is worthy of registration.

The International Scenario

In comparison to the Designs Act of India, the EU's 2002 Regulation (Council Regulation (EC) No 6/ 2002 of 12 December 2001 on Community Designs), the UK's CDPA (Copyright, Designs and Patents Act) and the US's ID3PA and IDPA (Innovative Design Protection and Piracy Prevention Act of 2011 and the Innovative Design Protection Act of 2012) establish an effective regime for the protection of the fashion design industry by providing protection against unregistered design copying. In fact, unregistered design is the real innovation of European Design Right. The most vivid example regarding unregistered design protection is Karen Millen Vs Dunnes Stores

(a) The EU context

In the EU, industrial design rights are provided at both the Community level by virtue of the Community design and at the national level under individual national laws. A community design is a unitary industrial designs right that has equal effect across the EU and regulated by the 2002 Regulation. The 2002 Regulation includes provisions relating to "registered community design protection" and "unregistered design protection". Although unregistered community design protection is shorter (three years) and limited in comparison to the term of the registered community design protection (twenty five years) it is more suitable to those industries which are producing large numbers of possibly short-lived designs over short periods of time, particularly fashion industry.

(b) The UK scenario

Fashion designers in the UK are protected from the evil of piracy as they may institute a suit for infringement of their design right and may get relief by way of damages, injunctions, accounts or otherwise under the CDPA without having to go through the pain of registration of design. It is worth mentioning here that an unregistered design right is limited in nature. It does not allow monopoly rights but the owner is protected from copying of his/her design.

(c) France and Italy

France has long considered fashion design to be a protectable form of expression. It first granted protection to fashion design as an applied art under the Copyright Act of 1793 before extending protection in the Copyright Act of 1909 to patterns and other nonfunctional aspects. It explicitly specifies fashion designs in listing protected works under Copyright Law. French copyright law grants moral and patrimonial rights to authors. The former affirm the designer's rights of integrity and attribution, extend to his or her heirs and do not expire. In fact, under Section L 121-9 of the French Intellectual Property Code, the designer has four

main categories of moral rights: the droit de paternite, the droit au respect de l integrite de l ceuvre, the droit de divulgation, the droit de repentir ou de retrait. The latter grant the holder the exclusive rights of reproduction, distribution and financial returns from the sale of the design.

Under French Law, fashion designs receive protection upon creation as opposed to the laws of the European Community where rights attach at publication or registration.

Mention must be made here of the suit filed by Yves Saint Laurent against Ralph Lauren for infringement based upon moral and patrimonial rights, stemming from a haute couture dinner - jacket dress featured on a 1992 runway. The Court found that the Ralph Lauren ready-to-wear version was so strikingly similar that an ordinary customer would not be able to tell the difference. The striking similarly infringed upon the moral and patrimonial rights of Yves Saint Laurent as the right of attribution and rights of reproduction, distribution and financial returns were violated.

Like France, Italian fashion has a rich history and reputation for luxury. Copyright protection in Italy comes automatically with creation of the work. Under Italian copyright law, “works of industrial design displaying creative character and per se artistic value” are protected. Ancillary to its statutory protections, Italy has established the Jury of Design, an independent body that determines whether a design is worthy of protection. It is comprised of ten experts, jurists, designers, marketing experts and entrepreneurs. Though not binding, decisions of the Jury of Design are largely respected by both the parties.

(d) The US situation

The US legislations are audacious attempts to protect fashion designs exclusively and facilitate increased design innovation and dissuading of knock offs.

Impact of Technology on the Fashion-IP Synergy

In New York, Intel partnered with numerous designers including Erin Fetherston, Prabal Guning and Band of Outsiders to live broadcast their shows in virtual reality. Similarly the London-based fast fashion retailer Topshop provided shoppers with headsets enabling them to see its catwalk show in real-time through a 3D virtual world. Meanwhile designer Rebecca Minkoff turned to augmented reality via a partnership with shopping app Zeekit which allowed viewers to upload a picture of themselves to see what they would look like in their favourite items following the show, However one of the most interesting innovations came in mixed reality space. This time it was on creating a experience layed over the real world through holograms. This was used on a runway by the legendary Alexander Mc Queen when a hologram version of Kate Moss modeled a dramatic organza gown. Holograms have recently appeared in the fashion shows of Diesel, Guess and Ralph Lauren creating optical illusions and taking the fashion-technology relationship to the next level.

But the synergy does not stop there. In a fashion show in Milan, luxury designers Dolce and Gabbana did not trot out handbags on the arms of humans. Instead drones did the heavy lifting, emerging from backstage.

All these raise innumerable questions on the fashion-IP law front. For instance, can holograms and drones be considered performers? Who is the author of the collective work created by artificial intelligence? These questions are to be viewed in the backdrop of the fact that traditionally the requirement of originality has been linked to the physical person of the author. To put it a bit differently, machines and AI seem to be excluded from the notion of authorship. However this does not mean that algorithmic artworks cannot afford copyright protection as long as human choices are involved. These questions assume all the more importance as rapid technological progress has exacerbated the inadequacy of IPRs against plagiarism. Introducing a separate sui generis protection for Al-generated works is perhaps the need of the hour.

Conclusion

Ralph Lauren once said, “I do not design clothes. I design dreams”. Fashion law incorporates the legal questions inherent to the design, manufacture, distribution, marketing and promotion of all types of

fashion products. Whether the subject is haute couture or ordinary clothing, this branch of law encompasses a wide variety of legal issues that accompany a fashion item throughout its lifecycle. Contract law, company law, tax law, international trade and customs law are of fundamental importance in defining the new area of law. But the most important of them all is IP law. For instance one cannot ignore the discussions related to the manipulation of photographed images made possible by programmes such as Photoshop. Expressions through digital technology raise questions regarding transparency, veracity of commercial communications and consumer's freedom of choice as new technologies could facilitate the sale of counterfeit goods. Needless to say, fashion is going through a metamorphosis. Even catwalks which have traditionally represented private sales channels for select wealthy customers have taken on a new function-entertaining the crowd rather than sale of chic clothing. As the industry reinvents itself post the pandemic, the new frontiers thereof revamp, revitalize and rejuvenate the debate on the appropriateness of rights and remedies provided by IP law in this ever emerging field.

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Productivity and Growth in Indian Manufacturing: An Empirical Analysis

Subhash P.P.

Productivity emerges as the primary driver accelerating the developmental progress of India. However, various obstacles hinder the nation from swiftly elevating the living standards of its large population to a suitably high level. A rapid and substantial increase in productivity would enable India's manufacturing units, which produce goods and services, to secure a stronger position in international export markets. Enhancement in productivity would facilitate the country's integration into global value chains and bolster its ability to withstand intense competition from imports that threaten domestic enterprises. Moreover, increased productivity is essential for enhancing the competitiveness of small and medium-sized enterprises, particularly within the manufacturing sector. This would also promote value addition across various economic activities, resulting in higher profits, which in turn would incentivize further investments and lead to higher worker compensation. Collectively, these factors would contribute to the expansion of the economy and the increased prosperity of the Indian population.

Keywords : KLEMS Approach, Total Factor Productivity, Translog Index, Kendrick Index, Multicollinearity, Trade Liberalization.

Introduction

The study and evaluation of productivity and economic growth at both national and international levels constitute a central focus for academic research and the formulation of public policy. In the realm of economic policy, revitalizing growth often emerges as the primary objective. Consequently, productivity assumes a pivotal role in scholarly research endeavors aimed at elucidating the disparities in economic development rates and living standards amongst nations with comparable conditions. Productivity is the principal driver of development and accelerated expansion processes.

Productivity gains facilitate a nation's deeper integration into global value chains and serve as a buffer against imports, which can displace domestic manufacturers due to intense competition. Moreover, productivity is instrumental in enhancing the competitiveness of small and medium-sized enterprises, particularly within the manufacturing sector. It also contributes to increased value addition across various economic activities, thereby ensuring higher profits. These profit increases subsequently stimulate further investments and improved employee compensation. The overarching goal is to foster a dynamic economic environment where heightened productivity is crucial for enhancing competitiveness, mitigating import-related challenges, and encouraging increased investments and superior compensation structures.

India's economic growth trajectory underwent significant transformation during the 1980s, with the annual growth rate increasing from 3.5 percent between 1950-1951 and 1979-1980 to approximately 5.5 percent in the 1980s (Ahluwalia, 1991). This notable increase has been attributed to a gradual process of industrial and trade liberalization, potentially combined with fiscal expansion. Following the Balance of Payments (BOP) crisis of 1990-1991, India embarked on comprehensive and extensive liberalization of both its internal and external policies. Despite these substantial reforms, the growth rate experienced only a marginal increase,

maintaining a range between 5.5 and 5.8 percent throughout the 1990s, as documented by (Virmani, 2006). This phenomenon posed a perplexing challenge for analysts, prompting them to question whether the relatively modest reforms of the 1980s were sufficient to elevate the growth rate by two percentage points, while the more extensive reforms of the 1990s seemingly yielded negligible effects on the growth trajectory.

This confusion is further exemplified in the manufacturing sector. A broad consensus from numerous studies indicates that productivity growth decelerated in the post-reform 1990s compared to the growth rates of the 1980s. This outcome has puzzled economists and policy analysts, who had anticipated that the reform process would catalyze an increase in productivity. Numerous academic studies have endeavored to elucidate the reasons behind this unexpected result of the reform process.A nuanced understanding of India's achievements in productivity advancements, the relationship between productivity improvements and economic growth, and the underlying factors influencing productivity trends is of paramount importance from both academic and policy-oriented perspectives. Productivity metrics serve as essential tools for evaluating a country's economic performance.

Analytical Framework

The development and growth processes in India have been extensively examined in the literature, encompassing both the period preceding the economic reforms of the 1990s and subsequent developments. Early studies on India's industrialization, including the seminal works of Bhagwati and Desai (1970) and Bhagwati and Srinivasan (1975), have significantly contributed to this body of knowledge. Over time, notable publications on India's economy have emerged, such as Ahluwalia and Little (eds) (1998), Srinivasan and Tendulkar (2003), Panagariya (2004, 2008), Tendulkar, Mitra, Narayanan, and Das (eds) (2006), Hope, Kochar, Noll, and Srinivasan (eds) (2013), and Dev and Babu (2015). Recent contributions include edited volumes by Kapila (ed.) (2017) and Goyal (ed.) (2019). More recent volumes addressing specific themes or areas of India's development include Bhide, Balasubramaniam, and Krishna (eds.) (2021), which focuses on services, and Aggarwal, Das, and Banga (2020), which covers growth, industry, trade, and employment.

Productivity measures are distinguished according to their application in assessing performance, that is, according to whether they use partial or complete factors of production for assessment. Measures of partial productivity look at the output in relation to one or more inputs, like labour, capital, or energy. The most widely used of these metrics is labour productivity, which is the output divided by the number of employees or hours worked. Labour productivity and GDP per capita are closely related when GDP (Gross Domestic Product) is utilised as the output metric and the number of workers are used as the input measure. This link emphasises how labour productivity is a key factor in determining the level of life in a nation.

This discourse introduces the KLEMS-based productivity measurement approach for the Indian economy. The KLEMS approach meticulously considers the contributions of labour, capital, energy, materials, and services as inputs in the context of output growth. The research projects under the India KLEMS programme aim to establish finely disaggregated, high-quality data for a comprehensive analysis of productivity and growth at the industry level. This aligns with the primary objectives of the World KLEMS programme, which seeks to create comparable datasets for detailed productivity studies that are both country-specific and cross-country. This study significantly enhances the existing body of knowledge on economic growth by focusing on productivity as a pivotal driver of growth.

Review of Literature: Theory and Empirics

Numerous Indian studies have examined productivity, encompassing both the aggregate economy and broad sectors. These studies predominantly focus on organized manufacturing, with comparatively less attention given to agriculture and the service sectors. A seminal work by Bosworth et al. (2007) provides estimations elucidating the sources of economic growth during the sub-periods of 1960-1980 and 1980-2004. Earlier investigations into the determinants of growth include studies by Dholakia (2002), Sivasubramonian (2004), and Virmani (2004).

Regarding the manufacturing sector, prior analyses have indicated a sluggish pace of Total Factor Productivity (TFP) growth in Indian manufacturing from 1951 to 1979. Pioneering contributions by Reddy and Rao (1962), Banerji (1975), Goldar (1986), and Ahluwalia (1985) highlighted this trend. Notably, literature from the 1990s began exploring biases inherent in productivity estimates for the manufacturing sector. These biases were attributed to the use of the value-added function and the method of single deflation of value-added.

The double-deflation method for value-added, employed by Balakrishnan and Pushpangadan (1994), challenged the findings of Ahluwalia (1991), which utilized the single-deflated value-added approach. Ahluwalia's study posited an acceleration in Total Factor Productivity (TFP) growth in manufacturing during the 1980s. Subsequent investigations predominantly reached a consensus that the purported enhancement in TFP growth in Indian manufacturing post-reform was not evident and, in fact, exhibited a slower pace compared to the TFP performance observed in the 1980s. A limited number of earlier studies addressing the unorganized manufacturing sector, including works by Prakash (2004), Unni et al. (2001), and Kathuria et al. (2010), predominantly reported a downward trajectory in TFP growth.

Objectives.

1. To analyse the growth of Output and Factor income shares in Indian manufacturing sector.
2. To analyse Productivity Growth and Out Put Growth in Aggregate Economy

Methodology and Data Source

To track the impact of changes on productivity and output growth over time, this study examines data from a wide range of industrial sectors from 1980-1981 to 2016-2017. The study period is divided into three sub-periods to better understand the overall patterns in variables during and after the reforms: (a) Period I (1981-82 to 1991-92), (b) Period II (1993-94 to 2006-07), and (c) Period III (2007-08 to 2016-17), as well as the entire period from 1980-81 to 2016-17.

Methodology of TFPG

Two primary approaches are frequently employed to evaluate the growth of Total Factor Productivity (TFP) in Indian manufacturing: "growth accounting" and "econometric estimation." The growth accounting method computes TFP growth by deducting the weighted input growth from the output growth. The resulting difference can be interpreted as the exogenous shift of a frontier production function, accounting for the effects of technological advancement, production scale, learning by doing, and technical efficiency (Srivastava, 1996). Although Tinbergen (1942) and Solow (1957) laid the foundation for this method, Jorgenson (1987) demonstrated that TFP growth might be calculated as the growth rate of output less the growth rate of total input under specific conditions.

The growth accounting approach assumes that producers act as price takers in both output and input markets, equating output prices with marginal costs of production, and compensating factors according to their respective marginal products. Additionally, it presupposes constant returns to scale in technology. When these assumptions are difficult to uphold, direct econometric estimation of the production function is often pursued, despite its inherent limitations. Challenges such as multicollinearity, autocorrelation, and the need for a large sample size can hinder the accurate estimation of production function parameters (Trivedi et al., 2000). To circumvent these challenges, this study employs the growth accounting approach to estimate productivity growth.

Within the growth accounting technique, various approaches exist for estimating productivity growth. This study adopts the Translog index, in contrast to the Kendrick Index or Solow Index. The Translog index permits variability in the elasticity of substitution between factors of production and does not assume Hicks-neutral technological progress. Recent studies on productivity measurement in Indian industries have frequently

employed the discrete approximation of the Translog Production Function, as manifested in the Translog Index, particularly in cases involving five inputs.

$$\Delta \text{InTFPt} = \Delta \text{InYt} - \left[\frac{(SK_t + SK_{t-1})}{2} \times \Delta \text{InKt}\right] - \left[\frac{(SL_t + SL_{t-1})}{2} \times \Delta \text{InLt}\right] - \left[\frac{(SE_t + SE_{t-1})}{2} \times \Delta \text{InEt}\right] - \left[\frac{(SM_t + SM_{t-1})}{2} \times \Delta \text{InMt}\right] - \left[\frac{(SS_t + SS_{t-1})}{2} \times \Delta \text{InSt}\right]$$

In the above equation, Y = output, K = capital, L = labor, E = energy, M = materials, and S = services. SK, SL, SE, SM and SS are income shares of capital, labor, energy, materials, and services, respectively. All the income shares sum up to unity.

Empirical Findings

The study employs a two-digit level categorization of KLEMS manufacturing industries, with exclusionary criteria applied to certain non-manufacturing sectors from the analysis. Sectors excluded encompass: (i) Agriculture, hunting & related service activities, (ii) Other mining and quarrying, (iii) Recycling, and (iv) Other industries. Within the manufacturing sector, the investigation specifically targets industries with an average share exceeding 2% in aggregate manufacturing output throughout the study period. Accordingly, the analysis focuses on 12 industries, collectively constituting 89.1% of the output shares. These selected industries are: (1) Food products & beverages (15.7%), (2) Chemicals & chemical products (14.6%), (3) Basic metals (13.1%), (4) Textiles products (10.2%), (5) Coke, petroleum products & nuclear fuel (9.6%), (6) Machinery & equipment n.e.c (4.6%), (7) Motor vehicles, trailers & semi-trailers (4.5%), (8) Electrical Machinery and Apparatus nec (3.7%), (9) Non-mettalic Mineral products (3.7%), (10) Rubber and Plastic products (3.2%), (11) Other Transport equipments (2.7%), and (12) Fabricated metal products (2.7%).

Table:1. Trends in Shares of factors in aggregate Out Put (%)

Periods	Capital	labour	Energy	Materials	Services
1980-81 TO 1992-93	13 (1.8)	8.3 (-2.9)	6.8 (-0.4)	63.9 (-0.5)	8 (-3.6)
1993-94 TO 2006-07	15.3 (-0.3)	5.5 (-3.4)	6.2 (-1.9)	62.3 (-0.1)	10.7 (-3.1)
2007-08 TO 2016-17	14.9 (-2.7)	4.4 (-5.2)	5.6 (-6.1)	63.3 (-0.8)	11.7 (-3.0)
1980-81TO 2016 -17	14.5 (-0.9)	6.5 (-3.2)	6.4 (-0.9)	62.9 (-0.1)	9.7 (-2.1)

Figures in parenthesis indicates average annual growth rate (%).

Throughout the study period, significant changes in the composition of inputs in the manufacturing process have been observed, as detailed in Table 1. In the aggregate manufacturing sector, material inputs have constituted the largest proportion of total input costs, accounting for 62.9 percent. This is followed by capital at 14.5 percent, services at 9.7 percent, energy at 6.4 percent, and labor at 6.5 percent. Notably, the shares of capital and services have exhibited an increasing trend over time, while labour and energy have experienced a decline in their respective shares. The proportion of material inputs has remained relatively stable throughout the period. Specifically, the share of capital has increased at an annual rate of 0.9 percent, though with considerable fluctuations in growth rates across different sub-periods. In contrast, the share of services has demonstrated a consistent upward trajectory, rising from 8.0 percent in Period I to 10.7 percent in Period II, reflecting an average annual growth rate of 3.1 percent. The significant and variable share of services warrants their inclusion as a distinct input in this study.

The labour share has experienced the most significant annual decline, registering a substantial decrease at a rate of 3.2 percent. This pronounced reduction in the labor share is concerning, given the manufacturing sector's potential for creating substantial employment opportunities. Addressing employment-related issues should be a priority at the policy level to counteract this trend. Several studies, including those by Virmani and Hashim (2009), suggest that businesses are increasingly adopting capital-intensive technologies, a shift attributed to the rigidity of labour laws. Concurrently, reflecting a shift towards energy-efficient technologies,

the share of energy inputs has declined at an annual rate of -0.9 percent. Notably, a significant portion of this reduction occurred in the final sub-period of Period II, indicating a marked transition towards more energy-efficient practices in the manufacturing sector.

Table:2. Average factor shares in Manufacturing sectors (1981- 82 to 2016- 17)

Sectors	Capital	Labour	Energy	Materials	Services
Food products & beverages	9.1 (0.2)	4.0 (-1.6)	3.1 (0.0)	75.1 (-0.5)	8.6 (4.7)
Textile products	11.4 (0.7)	9.9 (-3.7)	8.4 (0.9)	60.2 (-0.1)	10.1 (2.6)
Coke, petroleum products & nuclear fuel	11.8 (3.4)	1.3 (-1.8)	1.7 (-0.4)	82.6 (-0.4)	2.6 (2.1)
Chemicals & chemicals products	19.4 (0.9)	5.6 (-2.2)	9.1 (-1.8)	55.7 (0.0)	10.2 (1.5)
Rubber & plastic products	15.2 (-0.6)	5.5 (-1.6)	5.0 (1.0)	65.3 (-0.1)	9.0 (2.0)
Non-metallic mineral products	21.7 (1.1)	7.9 (-2.3)	23.5 (0.1)	37.4 (-0.6)	9.6 (1.3)
Basic metals	15.1 (1.9)	6.1 (-3.3)	12.1 (-0.6)	57.7 (0.0)	v (-0.1)
Fabricated metal products	13.0 (0.2)	8.2 (-1.7)	4.1 (1.6)	61.1 (-0.4)	13.1 (2.1)
Machinery & Equipment (n.e.c)	15.8 (-0.5)	9.8 (-2.2)	3.0 (-2.0)	57.5 (0.0)	13.9 (6.1)
Electrical machinery & Apparatu	16.3 (0.1)	8.4 (-2.8)	2.4 (0.6)	63.4 (-0.1)	9.5 (4.9)
Motor vehicles & Trailers	15.8 (-1.0)	8.2 (-4.1)	2.7 (-1.7)	63.1 (-0.2)	10.2 (2.9)
Other transport equipment	12.2 (2.4)	12.8 (-6.2)	3.2 (-2.3)	62.3 (-0.6)	9.5 (1.2)

Figures in parenthesis indicates average annual growth rate (%).

A significant degree of variability is observed in the distribution of input factor shares across various manufacturing sectors (Table 2). Materials account for the highest proportion of total input costs in the sectors of Coke, Petroleum Products, and Nuclear Fuel (82.6%) as well as Food Products and Beverages (75.1%). Conversely, materials constitute the smallest share in the Non-Metallic Mineral Products sector (37.4%). Most sectors exhibit minor fluctuations in the material share over the years. The most capital-intensive sectors, based on input share, are Non-Metallic Mineral Products (21.7%) and Chemicals and Chemical Products (19.4%), whereas Food Products and Beverages represent the least capital-intensive sector (9.1%).

Labour finds its highest application in the sectors of Other Transport Equipment (12.8%), Textile Products (9.9%), and Machinery and Equipment Not Elsewhere Classified (9.8%), while it has the lowest application in the sectors of Coke, Petroleum Products, and Nuclear Fuel (1.3%) and Food Products and Beverages (4%). Notably, the share of labour demonstrates a declining trend across all manufacturing sectors over the study period. The Non-Metallic Mineral Products sector is the most energy-intensive (23.5%), whereas the sectors of Coke, Petroleum Products, and Nuclear Fuel (1.7%) and Electrical Machinery and Apparatus Not Elsewhere Classified (2.4%) use the least energy. Among the sectors with the highest utilization of services

are 'Others' (14.7%), Machinery and Equipment (13.9%), and Fabricated Metal Products (13.1%). The Coke, Petroleum Products, and Nuclear Fuel sector (2.6%) utilizes the minimum services among all manufacturing sectors. In all but one case, the share of services has increased over the study period.

Table 3: Growth in Output and Inputs: Aggregate Manufacturing (%)

Periods	Output	Capital	labour	Energy	Materials	Services
1980-81 TO 1992-93	7.8	9.1	0.7	8	8.1	2.7
1993-94 TO 2006-07	8.5	7	2.1	3.6	8.3	10.1
2007-08 TO 2016-17	11.9	6.3	5.4	8	13.4	11.4
1980-81 TO 2016 -17	8.1	7.7	1.6	5.1	8.2	7.5

The study period exhibited varying growth rates in both the output and input components of aggregate manufacturing, as illustrated in Table 3. During Period I, the output grew at an annual rate of 7.8 percent, which increased to 8.5 percent in Period II. Notably, the output growth rate in Period II demonstrated considerable variability across its sub-periods, with rates ranging from 7.4 percent in the first sub-period to 2.7 percent in the second sub-period, and a significant 11.9 percent in the third sub-period. The decline in output growth during the second sub-period can be primarily attributed to a slowdown in both domestic and global demand. In contrast, robust economic growth in both domestic and global contexts during the third sub-period contributed to a substantial increase in manufacturing output growth.

The growth of inputs generally mirrored the trajectory of output growth. Material inputs exhibited the highest annual growth rate at 8.2 percent over the study period, followed by capital at 7.7 percent, services at 7.5 percent, and energy at 5.1 percent. In contrast, labour input displayed a significantly lower growth rate of 1.6 percent per annum. Notably, substantial disparities were observed in the growth rates of most inputs between Period I and Period II. While the growth rates of capital and energy declined in Period II, the growth rates of labour and services increased substantially during this later period.

Trends and Growth of TFP and LP

Output growth from larger application of inputs is not as relevant to the issue of reform effectiveness as growth from improvement in productivity of inputs. Productivity growth is also relevant for sustaining growth over the medium-long run, given its link cost competitiveness of industries.

We start by looking at partial factor productivity before moving on to total factor productivity (TFP). Labour Productivity (Partial factor productivity) is calculated by dividing the total output by the quantity of an input. The main problem in using this measure of productivity is that it ignores the fact that productivity of an input also depends upon the level of other inputs used. For example, a higher dose of capital application may increase the productivity of labor even when other inputs including labor remain constant.

The TFP growth can be calculated in number of ways. However, the two most common approaches used in case of Indian manufacturing are 'growth accounting' and 'econometric estimation'. Growth accounting measure estimates the TFP growth by subtracting the weighted input growth from the output growth. The difference so obtained includes the effects of technological progress, scale of production, learning by doing, technical efficiency etc. The productivity growth can be understood to represent the exogenous shift of a frontier production function [Srivastava (1996)]. Though the genesis of this approach can be traced back to the works of Tinbergen (1942) and Solow (1957), it was Jorgenson (1987) who showed that under certain conditions, the growth rate of TFP could be estimated as the growth rate of output minus the growth rate of total input.

Labour Productivity Growth of Factor Inputs

Numerous scholarly inquiries have explored into the intricacies of labour productivity and its nexus

with economic growth, spanning both developed and developing nations. These investigations have underscored the pivotal role of labor productivity in shaping the trajectory of a nation's economic development, highlighting positive associations between innovation and labour productivity elucidated through panel data analyses.

Table 4: Growth in LabourProductivity of Factor Inputs: Aggregate manufacturing (%)

Period	Capital (Y/K)	Labour (Y/L)	Energy (Y/E)	Materials (Y/M)	Services (Y/S)
1980-81 TO 1992-93	-1.1	7.3	-0.2	-0.8	4.9
1993-94 TO 2006-07	2	7.3	5.5	0.3	-3
2007-08 TO 2016-17	6.2	6.7	6.9	-1.3	2.5
1980-81 TO 2016 -17	0.1	6.6	3.3	0.1	-1.7

The results on labour productivity reveal varied patterns across subperiods as well as sectors, as depicted in Table 4. The maximum annual growth in productivity during the study period occurred in labor (6.6%) and energy (3.3%). While the productivity of capital (0.1%) and materials (0.1%) increased only marginally, there was a significant decline in the productivity of services (-1.7%). Except for labor, all inputs exhibited considerable differences in productivity between Period I and Period II. The productivity of capital, energy, and materials saw substantial increases in Period II compared to Period I, whereas services recorded a substantial decline during the same period. Much of the improvement in capital productivity occurred in the third sub-period, driven by improvements in capacity utilization. The productivity of capital was negative in the first sub-period before registering some improvement in the second sub-period.

Energy productivity showed consistent improvement throughout Period II. Although the productivity of materials improved marginally in Period II, it declined significantly in the last two sub-periods. Given that materials constitute a dominant portion of total costs, the negative growth in material productivity during these sub-periods is concerning, as it adversely impacts the overall productivity and cost competitiveness of the manufacturing industries. Services, after experiencing a significant contraction in productivity during the first sub-period, showed notable improvement in the last two sub-periods of Period II. Labor productivity growth remained stable at around 6.1% per annum during the first two sub-periods, consistent with the levels of the 1980s, before accelerating to 7.5% per annum in the third sub-period. In contrast, energy productivity growth accelerated from negative rates in the 1980s to over 5% during the first two sub-periods, before moderating in the third sub-period.

TFP Growth in Indian Manufacturing

Economists often prioritize Total Factor Productivity (TFP) metrics. TFP remains unaffected by the intensity of observable factor inputs, unlike single-component productivity measures, which are influenced by the intensity of omitted inputs. TFP captures the portion of output that cannot be explained solely by the quantity of inputs utilized in production. Consequently, TFP levels reflect the efficiency and intensity with which inputs are utilized in the production process.

Table 5: TFP Growth in Indian Manufacturing (%)

Sectors	1980-81 TO 1992-93	1993-94 TO 2006-07	2007-08 TO 2016-17	1980-81 TO 2016 -17
Food products & beverage	1.98	0.05	0.95	0.72
Textile products	1.17	1.12	1.78	1.13
Coke, Petroleum & Nuclear fuels	-4.7	-0.91	2.39	-2.22
Chemicals & chemicals product	1.72	0.01	1.71	0.6
Rubber & plastic products	0.52	0.31	0.07	0.38
Non- Metallic Mineral products	0.03	0.93	1.18	0.62
Basic Metals	0.34	0.73	-0.74	0.59
Machinery & Equipment (n.e.c)	0.35	1.23	0.75	0.93
Electrical machinery & apparatus	1.9	2.27	2.84	2.14
Motor vehicles & Trailers	0.57	1.33	4.02	1.07
Other Transport Equipment	2.05	2.07	2.75	2.06
Fabricated Metal Products	-1.26	1.48	1.2	0.53
All Manufactures	0.61	0.58	1.41	0.59

At the close of the 1980s, the textiles sector emerged as a prominent contributor to manufactured exports, with a significant portion of these exports comprising consumer products made from cotton textiles. However, other segments of the textiles industry, particularly those involving man-made fibers and synthetic materials, remained heavily protected and exhibited inefficiencies. Similar conditions prevailed in the production of woolen, silk, and other textiles, as well as to a certain extent in the cotton yarn and intermediary products. Despite these challenges, the textiles sector as a whole demonstrated Total Factor Productivity Growth (TFPG) rates of 1.2%, 0.49%, 1.2%, and 1.8% across different sub-periods. Notably, productivity did not experience a decline, primarily due to the global competitiveness of the export-oriented segment of this sub-sector.

A comparable trend was observed in the chemicals and chemical products sector, with TFPG rates of 1.7%, -1.25%, -0.3%, and 1.7%. This sector is characterized by a diverse array of products and producers, including a significant number of small-scale enterprises. The diversity within this sector may have contributed to a slower diffusion of technological advancements, resulting in overall productivity growth only returning to the rates observed in the 1980s during the last sub-period.

India has traditionally held, and continues to hold, a competitive advantage in semi-skilled labor-intensive chemical production, rather than in capital-intensive and high-tech chemical manufacturing. These sectors experience varying degrees of impact and display differing rates of recovery. Total Factor Productivity Growth (TFPG) in the 'Other Transport Equipment' category declined from a relatively high annual rate of 2% during the 1980s to an average of approximately 1.7% per annum during the first and second sub-periods, before experiencing a significant rebound to 2.75% per annum in the final sub-period (Table 5). Similarly, TFPG in the Food Products and Beverages sector exhibits growth rates of 2.0%, -0.56%, -0.24%, and 0.95%, respectively. However, this sector has not yet returned to the growth rates observed in the 1980s. One contributing factor is the substantial difference between Indian consumer preferences and those in Western markets, which influences the performance and growth dynamics of this sector.

Productivity Growth and Out Put Growth in Aggregate Economy

An increase in productivity signifies that a given quantity of inputs yields a greater amount of output, or that resources are utilized more efficiently due to technological advancements, thereby reducing the necessary

inputs. It is understood that productivity growth is ultimately considered a crucial determinant of an economy's standard of living.

Table 6: Sources of output growth in aggregate manufacturing (%)

Period	Growth in Output	Sources of Output Growth					
		K	L	E	M	S	TFPG
1980-81 TO 1992-93	7.74	1.19 (15.3)	0.05 (0.6)	0.54 (6.9)	5.21 (67.4)	0.14 (1.8)	0.61 (7.9)
1993-94 TO 2006-07	8.23	1.08 (13.1)	0.10 (1.3)	0.22 (2.6)	5.18 (63.0)	1.07 (13.0)	0.58 (7.0)
2007-08 TO 2016-17	12.88	0.94 (7.3)	0.24 (1.9)	0.46 (3.6)	8.46 (65.7)	1.36 (10.6)	1.41 (11.0)
1980-81TO 2016 -17	8.06	1.12 (13.8)	0.08 (1.1)	0.33 (4.1)	5.19 (64.4)	0.75 (9.3)	0.59 (7.3)

Figures in parenthesis indicates average annual growth rate (%).

Total output in the manufacturing sector accelerated from an annual growth rate of 7.7% in the first period (1980s) to 8.2% in subsequent periods. Productivity played a significant role in this growth, with its contribution to output growth fluctuating from 10.7% in the first sub-period to -3.5% in the second sub-period, and then nearly 11% in the third sub-period. Other factors contributing to output growth-namely capital, labour, energy, materials, and services-also played crucial roles, collectively causing output growth to exhibit a J-curve pattern during the post-economic reform period.

Conclusion

Following the economic liberalization in the 1990s, India has attracted substantial interest from both foreign and domestic investors. Nevertheless, significant obstacles remain, particularly those impeding investment in formal sectors such as manufacturing, which is of paramount importance. Recent reports indicate a decline in India's investment to GDP ratio. To enhance investment and productivity, it is imperative to reform the labour market, improve both physical and human infrastructure, and create a more conducive investment climate. Despite being a leading exporter of IT workers and services, India possesses considerable untapped potential in various economic sectors, as highlighted by previous research conducted by the India KLEMS team. Productivity trends suggest that policies oriented towards external engagement, as opposed to inward-focused strategies, are more effective in boosting productivity.

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Civil War and Peacebuilding in South Asia: A Complex Landscape

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This article explores the intricate dynamics of civil war and peacebuilding in South Asia, a region marked by cultural diversity and historical conflicts. It examines the historical context of civil wars in countries like Sri Lanka, Nepal, India, and Bangladesh, focusing on underlying factors such as ethnic tensions, economic disparities, and political exclusion. The analysis highlights various peacebuilding initiatives, including international mediation and community-based approaches, emphasizing the critical role of civil society. Despite significant progress, challenges remain, including ongoing violence and political reluctance. The article advocates for sustainable peacebuilding strategies that prioritize inclusivity and regional cooperation, underscoring the need for continued dialogue and understanding among communities.

Key Words : Civil War, Peacebuilding, South Asia, Ethnic Conflict, Community Engagement

Introduction

South Asia is a region of immense cultural richness and diversity, comprising nations such as India, Pakistan, Bangladesh, Nepal, Bhutan, and Sri Lanka. However, this diversity is often overshadowed by conflict, leading to numerous civil wars and persistent violence. The legacy of colonialism, particularly the British Empire's divisive policies, has exacerbated existing ethnic and religious tensions. The Partition of India in 1947 serves as a seminal event that created two separate states - India and Pakistan - but also set the stage for ongoing conflicts. The aftermath of Partition was marked by communal violence and displacement, leaving deep scars that continue to affect inter-community relations today (Brass, 2003).

Historical Context of Civil Wars in South Asia

The civil conflicts in South Asia are complex and multifaceted, with each country experiencing unique challenges. In Sri Lanka, the protracted civil war between the Sri Lankan government and the Liberation Tigers of Tamil Eelam (LTTE) was fueled by ethnic nationalism and grievances from the Tamil population. The conflict, which lasted nearly three decades, ended in 2009 but left a legacy of mistrust and division (Sumanthiran, 2015). Similarly, Nepal's Maoist insurgency, which erupted in 1996, highlighted deep-seated socio-economic inequalities and political exclusion. The subsequent peace agreement in 2006 marked a significant turning point, leading to the establishment of a federal democratic republic (Khadka, 2013). However, the challenges of implementing inclusive governance and addressing historical grievances remain pressing issues. In India, the ongoing conflict in Kashmir and various ethnic tensions in states like Manipur and Assam underscore the complexities of managing diverse identities within a national framework (Zahid, 2020).

The enduring legacy of colonialism in South Asia has not only shaped ethnic identities but also entrenched a sense of division among communities. The arbitrary borders drawn during the colonial period often failed to account for the complex tapestry of ethnic, linguistic, and religious identities, resulting in minority groups feeling marginalized and threatened within newly formed states. In Bangladesh, for instance, the struggle for independence from Pakistan in 1971 was driven by linguistic and cultural discrimination faced by the Bengali population, which was perceived as a deliberate attempt by the ruling West Pakistani

government to suppress their identity (Rohde, 2013). This historical context of exclusion and marginalization continues to manifest in contemporary conflicts across the region, where communities grapple with a legacy of mistrust and grievances that fuel ongoing tensions. Moreover, the inability of post-colonial states to adequately address the socio-economic disparities exacerbated by colonial policies has further compounded the challenges, leading to cycles of violence and resistance that define much of South Asia's modern history (Chandra, 2019). Understanding these historical dimensions is crucial for any meaningful approach to conflict resolution and peacebuilding in the region.

Factors Contributing to Civil Wars

Several factors contribute to the persistence of civil wars in South Asia, including ethnic and religious tensions, economic inequalities, and political exclusion. The interplay of these factors often creates a volatile environment where marginalized communities resort to violence as a means of asserting their rights and identities (Ganguly, 2016). Economic disparities further exacerbate these tensions, as disadvantaged groups feel sidelined in a rapidly developing region. Political exclusion, where certain ethnic or religious groups lack representation and voice in decision-making processes, also serves as a catalyst for conflict. External influences, particularly from neighboring countries, can complicate internal dynamics, leading to further instability. Understanding these root causes is essential for developing effective peacebuilding strategies that address not only the symptoms of conflict but also its underlying drivers.

Another critical factor contributing to civil wars in South Asia is the role of political leadership and governance structures, which often exacerbate existing tensions. In many countries, leaders have historically relied on divisive identity politics to consolidate power, manipulating ethnic and religious divisions for electoral gain. This approach not only marginalizes minority groups but also stokes resentment and violence among communities. For instance, in India, the rise of majoritarian politics has led to increased communal tensions, with minority groups feeling increasingly vulnerable and excluded from the national narrative (Jaffrelot, 2019). Furthermore, weak governance and corruption hinder effective conflict resolution, as grievances go unaddressed and communities lose faith in state institutions. The lack of genuine political will to foster inclusive dialogue often results in the escalation of local disputes into broader conflicts, demonstrating that sustainable peace is not only a matter of addressing economic disparities but also requires robust political frameworks that promote accountability and representation (Varshney, 2020). Without these essential reforms, the cycle of violence is likely to persist, perpetuating instability in the region.

Peacebuilding Efforts in South Asia

Peacebuilding in South Asia has taken various forms, ranging from formal negotiations to grassroots initiatives. International mediation has played a crucial role in facilitating dialogue among conflicting parties, with organizations such as the United Nations and regional entities stepping in to provide support. For instance, the peace process in Sri Lanka involved international stakeholders who helped broker agreements and monitor ceasefires (International Crisis Group, 2012). However, the effectiveness of these interventions often hinges on the willingness of local actors to engage genuinely and commit to the peace process. Community-based initiatives focus on fostering dialogue and understanding at the grassroots level. Programmes that promote inter-community interaction and reconciliation can play a vital role in building trust and mitigating tensions, highlighting the importance of local agency in peacebuilding efforts.

In addition to formal negotiations and community-based initiatives, the role of regional organizations has become increasingly vital in peacebuilding efforts across South Asia. Organizations such as the South Asian Association for Regional Cooperation (SAARC) have the potential to facilitate dialogue and collaboration among member states, fostering a sense of shared responsibility in addressing common challenges. However, the effectiveness of SAARC has often been hampered by political rivalries, particularly between India and Pakistan, which can obstruct collaborative efforts aimed at conflict resolution. Initiatives like the SAARC Regional Integration Plan and various confidence-building measures have been proposed,

yet their implementation remains inconsistent due to geopolitical tensions (Chakrabarti, 2021). Moreover, the involvement of international non-governmental organizations (NGOs) has also proved beneficial in mobilizing grassroots support for peace initiatives, as they often bring much-needed resources and expertise to local communities. By bridging the gap between state actors and civil society, these organizations can enhance the effectiveness of peacebuilding efforts, ensuring that they are inclusive and representative of the diverse interests within South Asian societies. Moving forward, strengthening regional cooperation and fostering a collaborative approach to peacebuilding will be crucial in overcoming the obstacles that have historically hindered progress in the region.

Role of Civil Society

Civil society organizations have emerged as critical players in the peacebuilding landscape, advocating inclusive practices and holding governments accountable. These organizations often serve as intermediaries, facilitating discussions among various stakeholders and amplifying the voices of marginalized communities (Baker, 2014). Their efforts to promote social cohesion and understanding are vital for addressing the grievances that fuel conflict. However, civil society actors often face significant challenges, including repression from state authorities and limited resources. Despite these obstacles, their resilience and commitment to peacebuilding remain essential for fostering a culture of dialogue and cooperation in the region.

The effectiveness of civil society organizations (CSOs) in peacebuilding is further amplified by their ability to foster networks of solidarity and collaboration across communities. These organizations often serve as platforms for dialogue, bringing together diverse groups that might otherwise remain isolated due to ethnic or political divisions. For instance, interfaith initiatives in countries like India and Sri Lanka have successfully promoted understanding and reconciliation among communities by emphasizing shared values and common goals (Gopinath, 2018). Additionally, CSOs frequently engage in advocacy efforts to influence policy changes at local and national levels, pushing for greater inclusion of marginalized voices in political processes. Their work not only empowers communities to articulate their grievances but also encourages state actors to recognize and address the root causes of conflict. However, CSOs often face significant challenges, including limited funding, government restrictions, and the threat of violence. Therefore, it is crucial for international actors and local stakeholders to support these organizations, ensuring they have the resources and security necessary to operate effectively. By strengthening civil society, South Asian countries can build a more resilient framework for peace that is grounded in community engagement and cooperation.

Challenges to Peacebuilding

While there have been notable advancements in peacebuilding across South Asia, significant challenges persist. Ongoing violence and sporadic conflicts undermine progress, as old grievances resurface and new tensions emerge. The lack of political will among key stakeholders to implement peace agreements and address underlying issues poses a considerable barrier to sustainable peace (Thapa, 2019). Moreover, socio-economic factors, such as poverty and inequality, continue to fuel discontent, making it imperative for peacebuilding initiatives to incorporate developmental strategies. Regional dynamics, particularly the geopolitical rivalries between nations like India and Pakistan, complicate the peace process, as external influences can exacerbate internal conflicts. Understanding these challenges is crucial for crafting effective peacebuilding strategies that can adapt to the evolving landscape of South Asia.

Another significant challenge to peacebuilding in South Asia is the pervasive issue of historical grievances and collective memory, which often complicate reconciliation efforts. Many communities harbor deep-seated resentment due to past atrocities, perceived injustices, and unresolved conflicts, making it difficult to foster trust and cooperation. For example, in Sri Lanka, the memories of the civil war and the trauma associated with state-sponsored violence continue to shape Tamil sentiments toward the government, hindering efforts to build a unified national identity (De Silva, 2016). Similarly, in Kashmir, the prolonged conflict

has fostered a culture of mistrust, with many individuals on both sides of the divide viewing the other as an existential threat. Addressing these historical narratives requires sensitive and inclusive approaches that acknowledge the pain of all affected communities while promoting a shared vision for the future. Moreover, education plays a crucial role in shaping perceptions; curricula that emphasize reconciliation, diversity, and shared histories can help dismantle stereotypes and foster empathy among younger generations. Ultimately, overcoming these historical challenges is essential for creating a sustainable peace that not only addresses current conflicts but also heals the wounds of the past.

Case Studies

Sri Lanka

Analyzing the Sri Lankan civil war provides insights into the complexities of ethnic nationalism and the challenges of reconciliation. The conflict's end in 2009 marked a significant turning point; however, the post-war period has seen both progress and setbacks in addressing the needs of the Tamil population. While the government has made efforts towards reconstruction, issues of accountability for human rights violations and the integration of Tamil communities into the national narrative remain unresolved (Hernandez, 2016).

Despite the conclusion of the civil war in 2009, Sri Lanka continues to grapple with the aftermath, particularly in terms of reconciliation and justice for victims of the conflict. The government's reluctance to fully acknowledge and address wartime atrocities has fuelled discontent among the Tamil population, leading to protests and calls for accountability. Organizations like the Office of Missing Persons and various human rights groups have worked tirelessly to uncover the truth about the past, yet their efforts often face significant opposition from nationalist factions within the government (Rajasingham, 2020). The challenge lies in creating a political environment conducive to genuine dialogue that respects the rights and aspirations of all communities. Moreover, successful reconciliation requires not only addressing historical grievances but also integrating marginalized groups into the socio-political fabric of the nation. Initiatives that promote economic development and equal opportunity for all ethnic groups are essential for fostering long-term peace and stability in a nation still recovering from deep divisions.

Nepal

The transition from civil war to a federal democratic republic in Nepal offers valuable lessons in inclusivity and the importance of addressing historical grievances through political reform. The peace agreement of 2006, which ended the decade-long Maoist insurgency, emphasized the need for federalism and representation for marginalized communities. However, the challenge lies in translating these agreements into effective governance and ensuring that all voices are represented in the political process (Bhatta, 2018).

In Nepal, the post-conflict landscape remains fraught with challenges despite the successful signing of the Comprehensive Peace Accord in 2006. The transition to a federal democratic republic has been marked by political instability, with frequent changes in government and ongoing disputes over federal boundaries that have reignited ethnic tensions (Maharjan, 2017). Many marginalized groups, particularly in the Terai region, continue to voice concerns over inadequate political representation and access to resources. While the peace agreement emphasized inclusivity, the actual implementation of federalism has been uneven, leading to feelings of betrayal among those who expected meaningful reforms. Moreover, the rise of identity-based political movements presents both opportunities and challenges; they can amplify voices previously unheard but can also risk deepening divisions if not managed carefully. As Nepal navigates its complex political terrain, it will be crucial to ensure that all ethnic communities feel represented and that grievances are addressed to sustain the hard-won peace.

India

The ongoing conflict in Kashmir highlights the necessity of dialogue and engagement with local communities to find sustainable solutions. The situation in Kashmir is complicated by historical grievances,

national identity issues, and external geopolitical factors. Efforts for peace have included dialogues, confidence-building measures, and attempts to integrate Kashmiri voices into broader national discussions, yet the path forward remains fraught with challenges (Bhan, 2019).

Bangladesh

The Liberation War of 1971, which led to Bangladesh's independence, remains a landmark conflict in South Asia. It was marked by genocide, large-scale displacement, and atrocities that left enduring scars on the country's socio-political fabric. In its aftermath, Bangladesh faced significant challenges, including the reconstruction of a devastated nation and the pursuit of justice for wartime atrocities. The International Crimes Tribunal (ICT), established in 2010, sought to address these historical injustices by prosecuting individuals accused of crimes against humanity. While the ICT has been commended for attempting to provide justice, critics argue it has been marred by allegations of political bias and procedural shortcomings (Billah, 2021). These criticisms underscore the delicate balance between addressing past grievances and ensuring fair judicial processes.

In recent years, Bangladesh has faced new challenges to peace, including ethnic tensions and the refugee crisis stemming from the influx of Rohingyas from Myanmar. The 1997 Chittagong Hill Tracts Peace Accord was a milestone in addressing indigenous grievances, but its partial implementation highlights persistent governance issues.Land disputes, human rights abuses, militarization, Bengali immigration, and cultural hostility are some of the many underlying reasons of violence in the CHT. Adopting techniques of inclusion and accommodation rather than assimilation is crucial for preventing conflict in the hill region or to resolve ongoing conflicts. For the Accord's implementation process to progress towards peace, local and national unity is essential. In addition to other factors, fostering mutual respect and a positive outlook on one another will help peace initiatives advance (Wasima, 2021). Despite these challenges, Bangladesh has made strides in economic development and poverty reduction, which have contributed to stability. However, long-term peacebuilding requires addressing deep-seated issues of inequality, marginalization, and regional disparities while fostering inclusive governance to ensure that the gains of independence translate into sustainable peace for all communities.

Future Prospects for Peacebuilding

The future of peacebuilding in South Asia hinges on the development of sustainable strategies that prioritize inclusivity, economic development, and regional cooperation. Long-term peacebuilding efforts must focus on addressing the root causes of conflict, including economic disparities and political exclusion. By fostering an environment where marginalized voices are heard and valued, stakeholders can create a more equitable society. Engaging youth in peace initiatives is also crucial, as younger generations hold the potential to challenge existing narratives and promote a culture of peace. Their involvement can foster intergenerational dialogue, bridging divides and creating pathways for understanding and reconciliation.

Regional cooperation is essential for addressing shared challenges and fostering trust among nations. Collaborative efforts among South Asian countries can pave the way for mutual understanding and cooperation, ultimately contributing to stability in the region. Dialogues that include diverse voices and perspectives can help build a more cohesive and resilient society, one that acknowledges historical grievances while working towards a shared future. As South Asia navigates the complexities of civil war and peacebuilding, the need for continued dialogue, understanding, and collaborative action remains paramount. The path to sustainable peace is challenging but necessary for the region's stability and prosperity.

Conclusion

Civil wars and peacebuilding in South Asia present a complex landscape influenced by historical grievances, socio-economic disparities, and political dynamics. While significant progress has been made, challenges persist. Sustainable peacebuilding strategies that prioritize inclusivity, economic development, and regional cooperation are essential for fostering long-term stability in the region. Continued dialogue

and understanding among communities will play a crucial role in overcoming the legacy of conflict and building a peaceful future for South Asia.

Ultimately, the path to lasting peace in South Asia requires a multifaceted approach that prioritizes inclusivity, mutual understanding, and sustained dialogue. While historical grievances and ongoing conflicts present significant challenges, the resilience of civil society and grassroots movements offers a glimmer of hope for transformative change. Empowering marginalized communities and fostering inter-community cooperation can help bridge divides and promote reconciliation. Moreover, regional cooperation initiatives that facilitate collaboration among South Asian nations can contribute to a broader culture of peace, emphasizing shared interests and collective security. As the region moves forward, it is essential for all stakeholders - governments, civil society organizations, and international actors - to work in concert, ensuring that peacebuilding efforts are not only reactive but also proactive and deeply rooted in the lived experiences of the people. By addressing both the symptoms and underlying causes of conflict, South Asia can aspire for a future characterized by stability, equity, and harmonious coexistence among its diverse populations.

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