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SPECIAL ISSUE ON MIGRATION

EDITORS' FOREWORD

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Migration and Growth: Lure of
Urbanisation in India
Deepanjali Saraf and Milindo Chakrabarti

The Great Gulf Heist
Rejimon Kuttappan

Protection of people displaced from India's
Sinking Islands: A Human Rights Perspective
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Lived Experiences of Kashmiri Pandit
Women: Forced Displacement and the Life
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EDITORIAL

Dear Readers,

Most regional and global issues are rooted in local realities, and so are their solutions and responses. At present, more than 100 million people are displaced and forced to flee their homes, accounting for 1 in every 78 people globally. As wars, conflicts, health emergencies, and climate and economic crises accelerate, migrants (including displaced people) face enormous challenges related to safety, access to basic needs, and integration. Furthermore, the pandemic and the failure of effective local and international responses to protect migrant rights have exposed the injustice faced by the displaced communities during this health crisis. We want to call attention to the fact that when migrants are in a crisis, all levels of society are affected. As such, understanding the problems and solutions in international and local groups through discussions, deliberations, and evidence are crucial and essential. There is a need for rigorous research to fill in the evidence gaps between policymaking and the ground reality of intersecting issues of migration.

We are glad that the Jindal Journal of Public Policy, through this Special Issue on Migration, aims to contribute to the migration literature that could influence policymaking. This Issue comprises articles from various aspects of migration and public policy reflecting India's migration issues. We also bring to you a few insightful public policy-focused articles as part of this issue.

India continues to host people seeking safety due to the growing political, economic and climate crises in neighbouring countries and regions while tackling continuous challenges in responding to internal migration issues. The COVID-19 pandemic-induced problem was limited not only to health but also led to an unanticipated crisis of reverse mass labour movement from cities where the devastation continues to reflect today. In this regard,

Deepanjli Saraf and Milindo Chakrabarti, through their paper, **Migration and Growth: Lure of Urbanisation in India**, study the role of the Indian informal sector in the process of urbanisation and examine whether models of migration curated by economists are applicable in explaining their part in reducing the dualism that hinders development.

While India is the largest migrant-sending country and the largest remittance-receiving country in the world, the Indian migrants in the Gulf are at the risk of wage theft. We bring you a commentary by Rejimon Kuttappan, in **The Great Gulf Heist**. The article narrates the realities of the victims of wage theft, with stories of Indian migrants who were employed for building Qatar's FIFA World Cup Stadium. The article also highlights India's role in addressing the wage theft that exploits Indian Gulf migrants.

Chhaya Bhardwaj highlights the urgency to respond to India's climate change-induced displaced persons situation. The article, **Protection of people displaced from India's sinking islands: A human rights perspective**, analyses the human rights involved in climate-change-induced displacements and the importance of protection, rehabilitation, and relocation that need to be addressed through a human rights approach.

No aspect of life remains unaffected by displacement. In this Issue, we share with you an interesting and vital analysis of the **Lived Experiences of Kashmiri Pandit Women** where Ashani Dhar, highlights how displacement impacts various facets of life, including health, education, living conditions (camps), security, access to livelihood and the disruption in the creation of social capital.

In her article, **Visibilising the Underbelly of Global capitalism: Transnational Movements of Labour as Commodity**, Rita Manchanda reviews three books that are considered significant contributions to the

growing interdisciplinary field of migration studies. The books *Uncertain Journeys: Labour Migration from South Asia*, edited by A.S. Panneerselvan (2018); *Undocumented: Stories of Indian Migrants in the Arab Gulf* by Rejimon Kuttapan (2021) and *Gender, Identity and Migration in India*, edited by Nasreen Chowdhory and Paula Banerjee (2022), bring scholarly perspectives and policy analyses from the global south.

Life-threatening circumstances arise not only from man-made strife such as terrorism or wars, they also emerge from changes in the environment and climate, sudden or prolonged. Rajnish Wadehra, Sasank Aramsetty and Armin Rosencranz draw attention to climate refugees through the paper **Cognizing Climate Refugees and Proposing Measures for Their Relief**. The paper highlights the vital need for recognition of people displaced by environmental crises and the inhumanity of ignoring them in the conventional refugee systems.

Furthermore, in the paper, **Urban Energy Systems in India: Insights from Complex Systems Thinking**, Naresh Singh and Poorva Israni present an understanding of urban energy systems through the lens of complexity theory that contributes to identifying each element and their interactions within the system and beyond. Besides, the paper **Impact of Ideology on Public Policy and Governance: India at 75** by Kartik Kishore and Satya Narayan Misra takes the readers through an analysis of the impact of changed economic ideology on structural transformation, and high GDP growth coupled with a dissonance between the growth and development of Independent India and the Free-market economy-dismantling of the LPQ (License, Permit, Quota) Raj. Further, the paper also shows how parties in power with different political ideologies have shown remarkable congruence in economic ideology by pursuing the free market philosophy and makes solid recommendations for institutional independence, capacity build-up, and proper free market regulation.

We appreciate the overwhelming submission we received for this special Issue. The response indicates the need for more space and platforms to share scientific studies done in migration studies. We look forward to creating opportunities to disseminate vital research through our journal in the coming issues.

Volume 7 Issue I of the Jindal Journal of Public Policy has been possible due to the generous support of many in the process. Our special gratitude goes to the expert review board, Prof. Jessica A. Field, Prof. Sumeet Mhaskar, Prof. Abhiroop Chowdhury, Prof. Raffaella Puggioni, Prof. Sugandha Nagpal, Prof. Tarini Mehta, Prof. Kumar Manish and Divya Bhatnagar for taking immense efforts to review the papers carefully and for providing essential comments and suggestions to authors. We are grateful to Prof. Sudarshan, Dean of the Jindal School of Government and Public Policy, for his constant support and for providing opportunities for advancing the journal.

Special thanks to the talented Shweta Venkatesh for providing us with her copyediting expertise and for her continued collaboration with the journal. We appreciate the consistent support offered by Mani Mala, Manager & Academic Co-Ordinator of the Jindal School of Government and Public Policy. The efforts taken by Joydeep Mukherjee and Anil Kumar in designing the Issue are commendable. Our international board of advisors' mentorship has been an asset in maintaining and advancing quality outcomes through the journal.

As you may be aware, we have shifted the submission portal and access to the journal to a new online platform. We especially thank M. Madhan, Director of Global Library and his team for maintaining the site and providing technical and expert support for the journal. The journal can be accessed on the [new webpage](#), and we invite you to connect with the journal through our social media handles, [Twitter](#) and [LinkedIn](#).

We look forward to connecting with you through our next Issue on Problems, Policies and Politics. Till then, stay well!

Happy Reading!

Meenuka, Indranil, Manini, and Aseem

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1. MIGRATION AND GROWTH: LURE OF URBANISATION IN INDIA

Deepanjli Saraf and Milindo Chakrabarti

ABSTRACT

This paper examines the role of the Indian informal sector in the process of urbanisation and checks whether models of migration curated by economists are applicable in explaining their role in reducing the dualism that hinders development. The study has been limited to the Indian urban sector (non-agriculture) and the analysis is based on several data sources. Calculated wage differences in the workforce show a persistent urban-rural wage gap over a span of time; the wage gap between regular/ salaried employees and casual labour present at any point of time captures the informalisation of the urban economy. Labour segregation based on skill set and the bifurcation of migrants based on duration of stay are two factors missed by models of migration. The results reveal a substantial contribution by the informal sector in the urbanisation process, in which low-income unskilled rural migrants execute a noteworthy role. In addition, these results share the failure of models of migration to explain the continuation of the informal economy in India.

Keywords: urbanisation, rural-urban migration, informal labour market, wage-gap, migration models, urban dualism

INTRODUCTION

COVID-19 had brought the world to a standstill, with industries and markets being shut everywhere. India simultaneously underwent an unanticipated crisis of mass reverse movement of labour from cities. Due to the lack of data, estimates about the expected number of migrants vary. '... Railways claimed about 3.5 million workers were able to avail travel on

special trains, The central government, in its report to the Supreme Court of India, averred that 9.1 million migrants have been transported, ...' (Srivastava, 2020), 'the Chief Labour Commissioner's office has counted over 26 lakh migrant workers stranded across the country' (Jebaraj, 2020). As per Srivastava (2020) and a survey by NABARD, circular migrants formed the largest share (72 percent) of the reverse migrants and 26 percent of this consisted of seasonal migrants. (Kaur and Shubham, 2021). The situation demonstrates the poor socio-economic construct of the Indian urban economy while drawing attention towards the victimisation of low-income migrant workers by Indian public policies.

Urbanisation and formalisation of the economy are metaphors for development (Mukherjee, Paul, and Pathan, 2009; Shaw, 1999; Kundu and Sarangi, 2007; Shonchoy and Junankar 2014) yet the current growth appears to be taking place at a considerable opportunity cost of formalisation. Approximately 89 percent of India's workforce is engaged in the informal sector (Economic Survey 2021-22) which contributes 50 percent to the nation's GDP (Nandakumar, 2022). This high contribution to the nation's economy directs attention towards the Indian labour market structure, quality of employment, and reassessment of development policies (Mukherjee et al. 2009; Shonchoy and Junankar, 2014; Colmer, 2015.). A recent State Bank of India report records that the share of the informal sector shrank to 15-20% percent of GDP in 2020-21 due to the shock of COVID-19 and efforts at demonetization and digitalization (Ghosh, 2021). However, the contribution of migrant labourers to economies in developing nations cannot be over-emphasized. However, neither the significance of concepts underlying the models of migration nor the adaptability of the models in the changing urbanisation process is questioned. Hence, the motive of the paper is to find answers to following questions:

1. *How does the urban informal sector influence the urbanisation process?*
2. *Are existing models of migration relevant in explaining the existence of the informal sector in urban India?*

The paper examines the popular notion of urbanisation and revisits the concepts of migration models within the current urbanisation framework. The models analyse potential increase in the quality of life of labourers migrating to urban regions compared to their rural counterparts. These migration models are investigated with the help of an index fashioned to check their relevance and estimate wage differentials among various job categories, in order to present the pervasiveness of casualisation in economy.

The paper makes an important contribution to the literature on urbanisation and migration as it provides knowledge on the real nature of migration in India and application of theories of models of migration in the current urbanisation scenario in developing countries with the idea of wage gap indexes. The second section of the paper expands on urbanisation in India by sharing statistics on urban sector growth, and on the contribution of all components over the last five decades as well as by examining the employment scenario in urban areas. Section three provides statistics on migration in India and elaborates on concepts of models of migration. Section four provides a detailed discussion on the wage-differential index and tests it against the ideas of models of migration.

URBANISATION IN INDIA

Ancient cities are believed to have developed for the purpose of trade (Cartwright, 2019; Kaplan et al., 2004) and their establishment around large river bodies consequently led to far-reaching water networks shaped for the transportation of goods (Cartwright, 2019; de Vries, 1990; Whipps, 2008) whereas modern cities that emerged after Industrialisation in the eighteenth century, are a result of the urbanisation process (Ioannides and Rossi-Hansberg, 2005; Kaplan et al., 2004; de Vries, 1990; Bhagat, 2012).

Cities eventually turned into the centers of population and production and became the main contributors of national GDPs (Etzo, 2011; Ioannides and Rossi-Hansberg, 2005).

Urbanisation elements comprise natural growth of population¹, migration, change in boundaries and the creation of new urban centres (Bhagat 2014; Bhagat and Mohanty 2009; Census of India 2011; Colmer, 2015; Ioannides and Rossi-Hansberg, 2005; Kaplan et al. 2004; United Nations 2001). Presently, the global urban population stands at 56 percent (UN DESA 2001) and is expected to grow to 68 percent by 2050, of which Asia and Africa are expected to be the largest contributors (UN DESA, 2018). In 2020, 56.2 percent² of the world population was urban.

Post-independence, the urbanisation process in India transpired via its four largest metropolitan cities: Mumbai, Kolkata, Chennai and Delhi (Shaw, 1999; Kundu and Sarangi, 2007; Bhagat, 2014). The Economic Reforms that started in 1991 further expanded investment opportunities and relaxed trade policies, leading to the introduction of new employment areas along with an expansion of existing ones (Bates, 2000; Bhagat, 2014; Shaw, 1999). Better job opportunities, availability of a variety of goods, local amenities and public goods in urban areas attracted a large mass to urban centres (Bhagat and Mohanty, 2009; Ioannides and Rossi-Hansberg, 2005; de Vries, 1990).

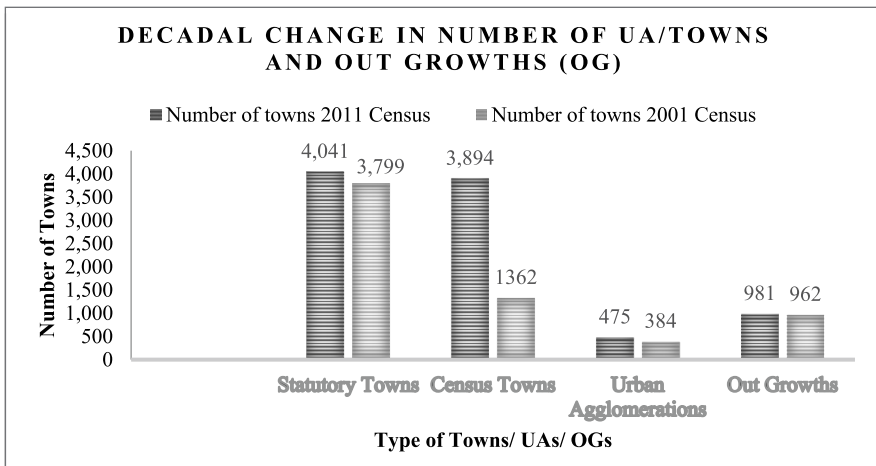
Due to the absence of a standard universal definition, urban areas are defined differently by national statistics of different nations (Bhagat, 2014; Ioannides and Rossi-Hansberg, 2005; “Migration Data”, 2020). The census

1 Natural Increase Rate of Population = Crude Birth Rate - Crude Death Rate

2 <https://www.weforum.org/agenda/2020/11/global-continent-urban-population-urbanisation-percent/#:~:text=Overall%2C%20more%20people%20in%20the,the%20world%20population%20was%20urban.>

authority of India defines an urban area as an area which satisfies: i) a minimum population of 5,000, ii) at least 75 percent of the males in the main working population are engaged in non-agricultural pursuits, and iii) a density of population of at least 400 persons per sq. km. Statutory towns, census towns, out growths (OG) and urban agglomerations (UA) make up urban areas. An increase in the same hints at an expansion of urban territories. Census data (figure below) reveals an increase in number of towns, agglomerations and out growth areas over a decade, a change dominated by the expansion of census towns.

Graph 1



Source: Census India (2011)

Owing to large economies of scale, big cities are ideal to become pivots of manufacturing and are preferred areas for establishing production units (Colmer, 2015; Bhagat, 2014; Shaw, 1999). However, the unavailability of inexpensive land and the non-compliance with laws of the city have pushed the industry set-ups to the peripheries (Shaw, 1999; Srivastava 2020; Bhagat 2014). The proliferation of slums and informal residencies around the industries have led to the construction of outgrowths (Bhagat, 2014).

The degree of urbanisation is jointly computed by the rise in urban growth (change in population size) and the fall in rural growth. Decennial statistics since 1971, paint a favourable portrait of urbanisation testified through records (table 1) of rising urban growth rate with a parallel descend in rural growth.

Table 1: Decadal Change in Urban and Rural Growth

Year	Urban Growth Rate (%)	Rural Growth Rate (%)
1971	19.91	80.09
1981	23.34	76.583
1991	25.7	74.222
2001	27.81	72.082
2011	31.16	68.724
2019*	34.47	65.528
2020*	34.926	65.074

*Source: compiled by author using figures from Census Data (2001, 2011); *The World Bank Data*

Steady rise in urban growth is documented by tracking the components of urbanisation. Over the decades, the statistics note a major input from natural population growth in urbanisation. However, the contribution of net rural-to-urban migration to the process has been steady. Post 1991, the rate of reclassification of area and jurisdictional changes exhibits a significant contribution to urbanisation as compared to previous years, and the natural population growth rate shows undulating figures.

Table 2: Status of Components of Urbanisation (in percentage)

Components of Urbanisation	1971-81	1981-91	1991-01	2001-11
Natural Growth Rate	49.9	62.3	57.6	43.8
Net reclassification from rural to urban and jurisdictional changes	31.4	19	21.5	35.6
Net Migration	18.6	18.7	20.8	20.6

Source: Bhagat (2012)

It has been interestingly identified from the data as well as pointed out by certain studies (Bhagat and Mohanty, 2009; Bhagat, 2014; Colmer, 2015) that the rise in population has been modulated by an increase in the number of towns and cities. Colmer (2015) observes that 'between 1901 and 2011 there has been a 75% increase in the average town size and a 70% increase in the average mega city size.'

Indian cities are the main drivers of the nation's economy by contributing 63 percent to the GDP (Census 2011). Business Standard (2011) projects that cities will contribute 70 percent to India's GDP by 2030. The service sector is the largest sector in India, it accounted for 54.77 percent of India's Gross Value Addition (GVA) in 2019-20, while the manufacturing sector contributed 27.48 percent and the agriculture and allied sector's share was 17.76 percent (MoSPI, 2020). The service and industry sectors open up various employment options in both formal and informal set-ups.

National Sample Survey (NSS) data on employment and unemployment 2011-12 and data from Periodic Labour Force Survey (PLFS) round 2017-18 share that between 2011-12 and 2017-18 there has been an increase of 5 percent in regular wage jobs, though this is attributed to a 4 percent decrease in the overall workforce share. Despite this rise, regular employment is largely skewed towards elementary occupation (The Economic Times, 2019). Further, a reduction of 9 percent in informal sector employment between 2004-05 and 2017-18 was observed due to the shift in female workers to domestic units as help (The Economic Times, 2020). Despite the falling numbers of employees in the unorganised or informal sector, it still remained the dominant sector in providing employment. PLFS 2018-19 showed that among the working population about 128 million are part of the labour force in urban areas of which 116 million are employed. Out of the total employed, 23 percent are formal workers and 77 percent are informal workers.

Further, the nature of employment in the formal sector is not as regulated as expected. It was observed that since 2005, the number of hired workers

(both casual and regular) without job contracts increased much faster as compared to those with contracts. Hence, the growth in the workforce was dominated by contractual or casual employees, and it grew more rapidly in the organised sector not only due to casualisation of the workforce but also due to employment without contracts (Punia 2020; Srivastava 2016). The abrupt closing of industrial work during the COVID-19 lockdowns resulted in an exodus of migrant workers (a testament to the large informal market at play in the urban economy) who, lacking security of employment, shelter, and food, rushed back to their hometowns.

MIGRATION MODELS AND LURE FOR URBAN AREAS

Migration is described as a plan of action adopted by rural populations to improve household livelihoods and benefit from better services in urban areas (Bates, 2000; Bhagat, 2014; UN ESCAP, 2013; Kundu and Sarangi, 2007). Cities are greatly benefited from the steady supply of labour coming in from rural areas (Bates, 2000; Bhagat, 2011). Within India, as per the 2011 census, 37 percent of the country's total population accounted for internal migrants³.

Migration as based on the direction of movement, can be categorised into four groups—rural-to-rural, rural-to-urban, urban-to-rural and urban-to-urban migration (Bhagat, 2011, 2014; Census of India, 2011; Kundu and Sarangi, 2007). The significance of rural-to-urban migration in the urbanisation process cannot be under-emphasized, however, the statistics in table 3 draw attention towards the high contribution of urban-to-urban migration, which is expected to occur in lieu of acceleration in contract-based jobs. Curiously, a parallel ascend is observed in urban-to-rural migration over the census years.

3 defined as migrants who move within the boundaries of their own country; this includes both intrastate and interstate migrants.

Table 3: Migration Trend in India based on Place of Last Residence (POLR) (Duration of Residence 0-9 years)

Form of Migration	Total (in percentage)		
	1991	2001	2011
Rural-to-Rural	58.1	54.7	45.6
Rural-to-Urban	20.1	21.1	20.5
Urban-to-Urban	14.2	14.7	25
Urban-to-Rural	7.5	6.4	8.9

Source: compiled by authors using figures from Census Data⁴ (1991, 2001, 2011)

Migration can also be classified as permanent and temporary/ seasonal migration on basis of the durations of stay of migrants away from their places of origin. Temporary migrants move outside their places of origin for a short duration (some months in a year) for change in economic activity and return when said economic activity is concluded (Keshri and Bhagat, 2012; Srivastava, 2020; Bhagat, 2014).

Circular migration has become an additional source of income for rural households that are unable to support themselves through agriculture (Keshri and Bhagat, 2012; Bhagat, 2014). The movement is associated with seasonal activities and forms a large section of informal employment in both rural and urban areas (Mukherjee et al., 2009; Srivastava, 2020; Kundu and Sarangi, 2007). Therefore, its importance has been realised by researchers and policy makers. Difficulty in identification and survey of seasonal migrants from the permanent migrants in surveys and census obstructs the study of phenomenon (Keshri and Bhagat, 2012; Srivastava, 2020; Bhagat, 2014).

However, the 64th round of the NSS (2007-08) exclusively provides data on migration to study temporary and permanent migration in India. With the help of the analysis done by Bhagat and Keshri (2012), it is understood that rural residents prefer temporary migration and urban residents permanent migration. Further, Keshri and Bhagat (2012) and Kundu and Sarangi (2007) observed that education status is negatively related to temporary

migration and that socioeconomic backward groups such as Scheduled Caste and Scheduled Tribes, are more likely to migrate temporarily than higher caste groups in rural areas.

As reviewed, migration forms a notable component in the urbanisation process and its significance has been advocated explicitly by developmental economists (Harris and Todaro, 1970; Lewis, 1954) through the migration models curated by them. Assembled for underdeveloped and developing countries, rural-to-urban migration models focus on reallocation of surplus labour employed in indigenous sectors to capitalistic sectors on account of gaps in the growth process, income, and productivity between the two. The models are built on assumption of the presence of a dualistic economy: agricultural or indigenous (in rural areas) and capitalistic or modern (in urban areas), with the former being predominant.

Lewis' theory of migration (1954) underlines the objective to make underdeveloped or developing countries developed through the accumulation of capital by expanding the capitalist sector. In order to do so, Lewis finds it imperative to shift large disguised labour from the rural to the urban sector, since marginal productivity of an additional labour on limited agricultural land is zero or negative. When employed in modern industry, productivity of the labour will be positive without affecting marginal productivity in the agriculture sector. Lewis elaborates that the supply of unlimited labour from rural areas is incentivised by the higher wages offered in the modern sector, which should be fixed and must be 30-50 percent above that offered in the subsistence economy. Expansion of the modern sector through reallocation is expected to set in a multiplier effect which shall not only generate surplus for the employer but also capture all the surplus labour of the agriculture sector, leading to expansion in industrialisation and progress towards sustainable growth. This process, as per Lewis, is believed to continue until all agricultural surplus labour is absorbed by the capitalistic sector along with rural wages becoming equal to urban wages.

Following the idea of Lewis' reallocation model, economists Harris–Todaro's theory (1970) differs from it in one point as it considers the main driver or the main motivating force of the move to be the difference in the expected wages of rural and urban areas than the real wages offered in either sector. Harris–Todaro further assert that taking into consideration the presence of unemployment in the urban sector and not in rural areas, migrants calculate their chances of finding employment in urban areas before the move. The model argues that despite migration being a very careful unanimous decision of families (Etzo, 2011; De Haan, 2002), it is still a 'game of lottery' as termed by sociologist Gurglar, where in spite of the knowledge of low chances of finding jobs in urban areas, migrants are ready to take the risk of moving due to the expectation of high wages (Harris and Todaro, 1970). Therefore, migrants first analyse the chances of finding a job of their choice in their field and the expected urban wage (by calculating expected urban wage times the probability of getting a job) and third, they compare the expected urban wage (W_u^e) with the real wage they are earning in agriculture (W_r). The model propounds migration to continue as long as W_u^e is greater than W_r ; migration will cease only when the continuous rural-to-urban movement has either forced down the urban wage or forced up urban unemployment so much that $W_u^e = W_r$ and reverse migration is anticipated to set in if W_r exceeds W_u^e .

URBAN MIGRATION

In an effort to answer the research questions posed, the paper derives a measure of informalisation of labourers in urban India, using the extent of wage differentials between urban and rural workers. Data on wages are available separately for male and female workers. Further, they are also available separately for those who earn salaried incomes and those who earn wages on a daily basis. Wage differences have been calculated using NSS and PLFS data. Following the spirit of Lewis (1954), we argue that the migration

of labourers from rural regions to urban regions would increase the gap between rural and urban wages as people will shift from a subsistence level wage system to a formal one with higher productivity and a consequent higher level of wages for themigrants. The process would also facilitate an increase in the gap of wages received by salaried employees and by casual labourers. We estimate the wage differential index using the following constructs:

(a) overtime between urban and rural employees-

$$\frac{\text{Urban (maleorfemale)}-\text{Rural(maleorfemale)}}{\text{Rural (maleorfemale)}} \%$$

(b) at any time between casual labourers and regular/ salaried employees-

$$\frac{\text{Regularorsalariedemployees' wages}-\text{Casuallabourwages}}{\text{Casuallabourwages}} \%$$

The flourishing service sector and the rapidly-expanding manufacturing sector jointly introduced heterogeneity in the urban labour force. Based on proficiency, labour force is segregated into four groups⁵—highly skilled, skilled, semi-skilled and unskilled; the former two configurate under regular wage/ salaried employees and the latter two under casual labour, of which migrants too form a part (Lucas, 2004; Srivastava, 2016). Empirical studies validate externalities associated with human capital (Dumont and Liebig, 2014; Glaeser and Maré, 2001; The Economic Times, 2016; Michaelsen and Haisken-DeNew, 2015). As a result, education and earning show a positive correlation in a manner that a highly-skilled individual is expected to earn more (Srivastava, 2016; Kundu and Sarangi, 2007).

5 For details on definition of classification of workers visit - https://labour.gov.in/sites/default/files/MW%20Final%20%281%29_0.pdf

Table 4: Daily wages (INR) received by casual labourers and regular wage/salaried employees of between the ages of 15-59 years during 2004-05, 2009-10 and 2011-12

Category of workers	Category of person					
	Male		Female		Person	
	Rural	Urban	Rural	Urban	Rural	Urban
2011-12						
Regular wage/ salaried employees	322.8	469.87	201.56	366.15	298.96	449.65
Casual labour in works other than public works	149.32	182.04	103.28	110.62	138.62	170.1
2009-10						
Regular wage/ salaried employees	249.15	377.16	155.87	308.79	231.59	364.95
Casual labour in works other than public works	101.53	131.92	68.94	76.73	93.06	121.83
2004-05						
Regular wage/ salaried employees	144.93	203.28	85.53	153.19	133.81	193.73
Casual labour in works other than public works	55.03	75.1	34.94	43.88	48.89	68.68

Source: NSS data – 61st, 66th, 68th rounds

Table 5: Average earnings (INR) received by regular wage/salaried employees in current weekly status and casual labourers on per day basis in 2017-18, 2018-19 and 2019-20

Category of workers	Category of person					
	Male		Female		Person	
	Rural	Urban	Rural	Urban	Rural	Urban
2019-20						
Regular wage/ salaried employees	467.93	669.94	338.08	532.30	438.09	635.86
Casual labour in works other than public works	306.5	385	198	252	278.50	366
2018-19						
Regular wage/ salaried employees	451.63	639.96	290.81	494.76	417.83	606.35
Casual labour in works other than public works	287	354.25	186.25	223.75	266.25	335.25
2017-18						
Regular wage/ salaried employees	451.09	599.63	297.96	485.32	421.41	573.74
Casual labour in works other than public works	267.5	323.75	173	192	246.5	303.5

Source: PLFS 2018-19, 2017-18 (four quarters)

Tables 4 and 5 are computed using data retrieved from NSS data (2004-05, 2009-10 and 2011-12) and PLFS (2017-18, 2018-19 and 2019-20) respectively to present wages offered to different categories of workers in different areas. Wage gap in rural and urban areas under different job categories are calculated using data from tables 4 and 5 and presented in tables 6, 7, 8 and 9 separately.

Table 6: Urban-Rural wage gap (in percentage) among regular wage/ salaried employees and casual labourers during 2004-05, 2009-10 and 2011-12

Category of workers	Category of person		
	Male	Female	Person
2011-12			
Regular wage/ salaried employees	45.56	81.66	50.40
Casual labour in works other than public works	21.91	7.11	22.71
2009-10			
Regular wage/ salaried employees	51.38	98.11	57.58
Casual labour in works other than public works	29.93	11.30	30.92
2004-05			
Regular wage/ salaried employees	40.26	79.11	44.78
Casual labour in works other than public works	36.47	25.59	40.48

Source: compiled by authors

Graph 2

Source: compiled by authors

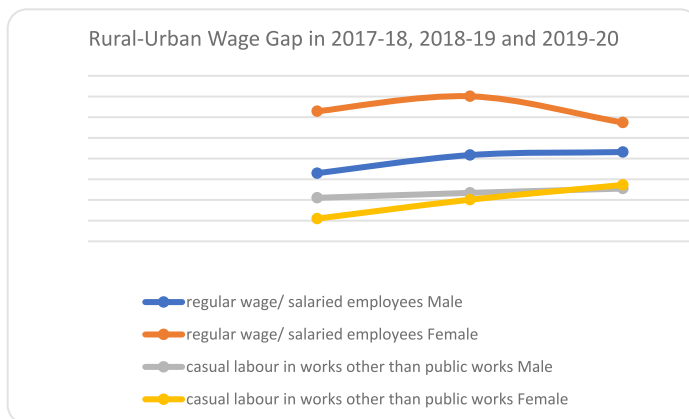
The urban-rural wage gap during the period 2004-05 to 2009-10 is estimated to have increased by 11 percentage points (from 40.26 percent to 51.38 percent) among regular wage/ salaried employees males and has decreased by 19 percentage points (from 79.11 percent to 98.11 percent) among female employees of the same category. During the period 2009-10 and 2011-12, the gap has decreased by approximately 6 percentage points (from 51.38 percent to 45.56 percent) among regular wage/ salaried employees males and has decreased by 16 percentage points (from 98.11 percent to 81.66 percent) among female regular wage/ salaried employees.

However, among in male casual labour, the wage gap has decreased by 6 percentage points (from 36.47 percent to 29.93 percent) during the period 2004-05 to 2009-10 and by 8 percentage points (from 29.93 percent to 21.91 percent) during period 2009-10 to 2011-12. The fall in the wage gap observes a relatively high dip among female casual labour, with a decrease of 14.29 percentage points (from 25.59 percent to 11.30 percent) during the period 2004-05 to 2009-10, and a further decrease of 4 percentage points (from 11.30 percent to 7.11 percent) during the period 2009-19 to 2011-12.

Table 7: Urban-Rural wage gap (in percentage) among regular wage/salaried employees and casual labourers during 2017-18 and 2018-19

Category of workers	Category of person		
	Male	Female	Person
2019-20			
Regular wage/ salaried employees	43.17	57.45	45.14
Casual labour in works other than public works	25.51	27.27	31.42
2018-19			
Regular wage/ salaried employees	41.70	70.13	45.12
Casual labour in works other than public works	23.43	20.13	25.92
2017-18			
Regular wage/ salaried employees	32.93	62.88	36.16
Casual labour in works other than public works	21.03	10.98	23.12

Source: compiled by authors



Calculation of differentials show that during 2017-18, among regular salaried males the urban-rural wage gap stood at 32.93 percent, which is 12.63 percentage points less than that estimated for the person category during 2011-12. This gap expanded by 8.77 percentage points in the year

2018-19 to 41.70 percent and it further widened by 1.47 percentage points during 2019-20. However, in the same category among female employees, a stark wage gap of 62.88 percent prevailed in 2017-18, which is 18.78 percentage points less than that estimated for the category during 2011-12 and this gap rose to 70.13 percent by 7.25 percentage points in 2018-19, but shrunk again in 2019-20 by 12.68 percentage points.

During the period 2017-18 and 2018-19 among male casual workers, the urban-rural wage gap increased by 3 percentage points (from 21.03 percent to 23.43 percent), and among female casual labour, the gap increased by approximately 9 percent (from 10.98 percent to 20.13 percent).

Table 8: Wage gap (in percentage) between regular wage/salaried employees and casual labourers during 2004-05, 2009-10 and 2011-12

Category of workers	Category of person					
	Male		Female		Person	
	Rural	Urban	Rural	Urban	Rural	Urban
2011-12						
Regular wage/ salaried employees	116.18	158.11	95.16	231.00	115.67	164.34
Casual labour in works other than public works						
2009-10						
Regular wage/ salaried employees	145.40	185.90	126.10	302.44	148.86	199.56
Casual labour in works other than public works						
2004-05						
Regular wage/ salaried employees	163.37	170.68	144.79	249.11	173.70	182.08
Casual labour in works other than public works						

Source: compiled by authors

Results in table 8 show gap in wages between regular wage employees and casual labourers in all categories of person. Among rural males, in the period between 2004-05 and 2009-10 the gap fell by 17.97 percent and it further fell by 29.22 percentage points in the period between 2009-10 and

2011-12. Among urban males, in the period between 2004-05 and 2009-10 the gap expanded by 15.22 percentage points, whereas it fell by 27.79 percentage points in the period between 2009-10 and 2011-12. Among rural females, in the period between 2004-05 and 2009-10 the gap fell by 18.69 percent and it further fell by 30.94 percentage points in the period between 2009-10 and 2011-12. Among urban females, in the period between 2004-05 and 2009-10 the gap expanded by 53.33 percentage points and it fell by 71.44 percentage points in the period between 2009-10 and 2011-12.

Overall, for all rural persons in the period between 2004-05 and 2009-10 the gap fell by 24.84 percent and it further fell by 33.19 percentage points in the period between 2009-10 and 2011-12. Among all urban persons, in the period between 2004-05 and 2009-10 the gap expanded by 17.48 percentage points and fell by 35.22 percentage points in the period between 2009-10 and 2011-12.

Table 9: Wage gap (in percentage) between regular wage/salaried employees and casual labourers during 2017-18 and 2018-19

Category of workers	Category of person					
	Male		Female		Person	
	Rural	Urban	Rural	Urban	Rural	Urban
2019-20						
Regular wage/ salaried employees						
Casual labour in works other than public works	52.67	74.01	70.75	111.23	57.30	73.73
2018-19						
Regular wage/ salaried employees						
Casual labour in works other than public works	57.36	80.65	56.14	121.12	56.93	80.87
2017-18						
Regular wage/ salaried employees						
Casual labour in works other than public works	68.63	85.21	72.23	152.77	70.96	89.04

Source: compiled by authors

Statistics in table 9 show that among rural males, in the period between 2011-12 and 2017-18, the gap between earnings by regular wage/ salaried employees and casual workers fell by 47.55 percent, it further fell by 11.27 percentage points and 4.69 percentage points in the period between 2017-18 and 2018-19 and 2018-19 and 2019-20, respectively. Among urban males, the gap decreased by 72.9 percentage points in the period between 2011-12 and 2017-18, further by 4.56 percentage points in the period between 2017-18 and 2018-19 and by 6.64 percentage points in the period between 2018-19 and 2019-20. Among rural females, in the period between 2011-12 and 2017-18 the gap fell by 22.93 percent and by 16.09 percentage points in the period between 2017-18 and 2018-19. A further decrease was observed in the period between 2018-19 and 2019-20 by 14.61 percentage points. Among urban females, in the period between 2011-12 and 2017-18 the gap fell by 78.23 percent and in the period 2017-18 and 2018-19 by 31.65 percentage points. A further contraction was observed in the period between 2018-19 and 2019-20 by 9.89 percentage points.

Overall, for all rural persons, in the period between 2011-12 and 2017-18 the gap fell by 44.71 percentage points, and it further fell by 14.03 percentage points in the period between 2017-18 and 2018-19. However, a negligible contraction of 0.37 percentage points was noticed in the period between 2018-19 and 2019-20. Among all urban persons, in the period between 2011-12 and 2017-18 the gap fell by 75.3 percentage points. It further fell by 8.17 percentage points in the period between 2017-18 and 2018-19 and by 7.14 percentage points in the period between 2018-19 and 2019-20.

Data analysis from both indexes presented in tables 6-9 assist in investigating both the application and reliability of rural-to-urban models of migration. Results of the first index present a decrease in the urban-rural wage gap in discussed job categories in the last 10-11 years, presenting a migration not induced by wages. Further, the wage gap prevailing in the survey years, particularly among casual labour (of which migrants are a large part), is below 30 percent for both males and females. In contrast, Lewis

emphasised that the wage gap must be between 30-50 percent. The findings fail to obtain explanation from models of migration.

Interestingly, a contraction in wage gaps draws attention towards a simultaneous development in rural sector which was not anticipated by Lewis in his model since he considered the capitalist sector to be the sole catalyst of growth for developing nations. Additionally, it is surprising to note that development economists did not consider the introduction of a third sector, the service sector, in developing nations and associated dualism in urban labour market consequent to developed human capital.

NSSO and PLFS surveys bring up a strong presence of informal employment in both organised and unorganised sectors. The decreasing wage gap between regular wage employees and casual labour with respect to casual employees from tables 8 and 9 indicates that the gap remains and its nature depends on the skills endorsed by organised sector. The decreasing gap with respect to casual labour wages additionally shares an underlying implication of increasing informalization, especially in the urban economy, protecting constant supply of cheap labour in modern economy. Besides, expansion in contract-based jobs has catalysed abundant temporary or seasonal migrants. Clearly, migration models failed to ponder upon factors other than wages to stimulate movement and hence lack any mention of any answers to the situation of casualisation.

Migration models further mention that the movement is expected to stop when wages in rural and urban areas become equal and all surplus labour is absorbed by modern sector. However, the reduction in the wage gap calculated under both indexes does not imply a positive state of economy as the Census, PLFS and NSSO statistics on employment status show the existence of a large unemployed workforce and increased reverse migration, along with a significant share of rural-to-urban migrants.

Lastly, migration models failed to consider various other factors when developing their structures for developing nations, as witnessed from the

effects of COVID-19 on the migrants. Absence of social as well as economic security together with political exclusion drove a large mass of migrants to their native places.

CONCLUSION

Cities are not only drivers of the economy but have also become a positive force for addressing sustainable economic growth, development and prosperity. However, in light of the evidence provided, urban informal sector, in both organised and unorganised markets, seems to have taken over the economic sector. Unorganised sector activities only provide opportunities to unskilled workers to secure their basic needs for survival. Besides, the labour market runs on the whims of employers from the manufacturing and tertiary sectors, favouring large no-contract employment at low wage rates. Further, traditional models of migration failed at various parameters to explain the scenario of the urban economy and hence, stand irrelevant in explaining the urbanisation process. Additionally, these models failed to provide reasons for a large proportion of rural migrants becoming absorbed in the informal sector and for the increasing casualisation in organised sector. Had these labourers been part of formal employment with job contracts, they would have been still employed.

Despite the potential of urbanisation to lead a new age of well-being, resource efficiency and economic growth, cities have also become homes to high concentrations of poverty and inequality. The influx of population due to unplanned migration has led to an increase in the magnitude of slum areas and scarcity of availability of land besides laying stress on the supply of basic amenities. Urban poverty and housing are two major challenges for policy makers, while the processes of migration and urban growth are influenced by the unorganised urban sector—a connection whose further examination can provide a way forward.

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2. THE GREAT GULF HEIST

Rejimon Kuttappan

ABSTRACT

The following is a commentary by Rejimon Kuttappan, author of Undocumented: Stories of Indian Migrants in the Arab Gulf- Penguin 2021, on the wages of migrant workers in the Gulf countries, specifically in Qatar.

Wage theft can be defined as non-payment for overtime; denying workers their last pay cheque after they leave a job; not paying for all of the hours worked; not paying minimum wages; not paying a worker at all, and not adhering to the terms of the contract.

Wage theft was occurring pre-COVID-19. However, it became more visible during the height of the COVID-19 pandemic.

35-year-old Paulson Johnson migrated to Qatar in 2011 from Kerala after he failed to find a job in his state. As he had no land for farming, survival for him and his parents then was a daily challenge. It was then that a friend found Johnson a job as an excavator operator with the Bin Omran Trading Contracting (BOTC) in Qatar.

In 2015, he was shifted to the team that was building the Al Bayat stadium in Al Khor where nine Fédération Internationale de Football Association (FIFA) World Cup 2022 matches, including the inaugural match, were held.

"Our job was to fill the barren land with mud, leaving a hole in the middle. That hole is now the green pitch. And the area we filled with mud is where 60,000 seats are fixed," Johnson said, and his monthly salary was 486 USD then.

As Johnson belonged to the staff category, he was not eligible for overtime wages. Despite non-payment, Johnson had to work for 11 hours, with only a 15-minute break to have lunch.

"Most days, I will issue passes for the trucks while eating lunch. There was no lunch break for us. Every day, 11 hours or plus. And that too, without pay for those extra hours," Johnson said adding that by 2018, their work was over.

"In 2019 end, we went to see the stadium. We were stunned and felt proud then. But, when we were forced to leave empty-handed, we didn't feel proud...", Johnson said.

In 2019, his monthly salary was 1,701 USD.

"However, since 2016, the monthly salary disbursement was not regular. The company will send letters stating that the pending salary will be debited on the date mentioned in the letter. Sometimes it will happen and sometimes not. And as we belong to the staff category, we won't go on strike. But workers would strike. They will close the camp gates and sit in the camps. When workers go on strike, the workers' salaries will be paid and they would be repatriated," Johnson added.

Finally, on March 28, 2022, the company HR issued a letter to all notifying them of that day being their last working day.

"That day, we went to the office in the evening. The HR department said we were terminated and should leave the country soon. They told us our pending salary (one month) and the 11 years of end-of-service benefits will be settled in a month," recounted Johnson.

Johnson has to get around 9,000 USD.

"They promised that it will be deposited in our Qatar bank accounts in a month. Now, it is December. Six months have passed.... nothing has happened," Johnson added.

Johnson and his 18 friends, most of them in mid-level posts, are yet to receive 126,000 USD.

These cases are not isolated ones.

On August 14, a few workers from Al Bandary, a construction company, protested in front of the company office in the Al Sadd district in Doha to demand payment from their employer.

There were around 60 workers. They were detained and moved to prisons.

"Since the beginning of 2020, salaries have been irregular. Altogether, I have not got six months' salary. I must get nine years of end-of-service too. In all, it would be around 20,000 USD," Mohammed Junaid, an Indian worker who was arrested and repatriated, told me.

Junaid had complained about the non-payment of wages to the Qatar Ministry of Manpower in June 2021.

As there was no update from the company, he joined the protestors only to be arrested, jailed for 15 days, and repatriated.

Junaid was held at a different detention centre for five days and repatriated after a total of 20 days of imprisonment.

"When I was repatriated, the unpaid salary and end-of-service benefits were only partially paid. However, there was a miscalculation. The overtime pay wasn't calculated. But there was no option to question it. We had to leave," he added.

Johnson and his friends, and Junaid and his colleagues are all victims of wage theft.

WAGE THEFT

Wage theft can be defined as non-payment for overtime; denying workers their last pay cheque after they leave a job; not paying for all of the hours worked; not paying minimum wages; not paying a worker at all, and not adhering to the terms of the contract (MFA, 2020).

Wage theft is an important issue because it is a human rights violation, and it has an impact on a country's economy, especially one which has substantial remittance inflows such as India.

Workers in countries such as the United States and Australia are protected from wage theft, but in West Asian countries—where some 23 million migrant workers, including 10 million from India, are working—wage theft is not viewed as a grave violation of labour rights.

And unfortunately, even migrant-sending countries like India have failed to recognize wage theft as a crime.

Wage theft was present in Qatar in pre-COVID times as well. The pandemic further exposed underlying gaps in labour migration (particularly among temporary and contractual migrant workers) and the flawed foundations upon which such migration programs have been established.

In 2014, *The Guardian* reported that hundreds of migrant construction workers from Bangladesh and Nepal had gone without wages for more than a year.

Those workers were tasked with building, of all things, the luxury offices for the FIFA tournament's organizers in Al Bidda Tower—nicknamed 'the Tower of Football'.

That same year, international trade unions complained to the ILO that Qatar was not complying with international labour standards.

They alleged that the 'kafala' or sponsorship system which ties employees to a certain employer enables exploitation and forced labour and that the authorities were not adequately detecting violations of labour rights.

The complaint eventually led to a slate of labour reforms hammered out in intense negotiations between Qatar and the ILO (Ian Black, Owen Gibson, Robert Booth, 2014).

This included the creation of labour tribunals, an unpaid wages support fund, and regulatory mechanisms to verify that the wages promised were paid.

In March 2021, Qatar adopted a minimum wage that applies to all workers, of all nationalities, in all sectors—a first for the Gulf (Ian Black, Owen Gibson, Robert Booth, 2014).

Despite these reforms, quotes from workers as written above prove that different forms of wage theft persist in Qatar.

Wage theft is not only confined to Qatar but is present in all Gulf Cooperation Council (GCC) countries of Oman, Kuwait, Saudi Arabia, Bahrain, and the UAE.

Recognizing wage theft as a serious rights violation, the Migrant Forum in Asia (MFA), a regional network of migrant rights organizations, launched a campaign titled 'Justice for Wage Theft' in association with a large coalition of civil society organizations and trade unions on June 1, 2020.

The MFA has been fighting to deliver justice for wage theft victims since June 2020.

A recent MFA report (2022) reveals about 3,106 cases of workers' wage theft from five countries and found that the workers lost about 25.2 million USD in wages alone.

This would be about one worker losing an average wage of 7,217 USD for 14 months.

This proves that wage theft is present in other countries. Additionally, the Business and Human Rights Resource Centre (BHRRC) has been recording cases of labour abuse of migrant workers in the GCC countries since 2016.

Their record indicates that wage theft is the most commonly-reported abuse—cited in 80 percent of the cases documented. During the worst of the pandemic in 2020, the BHRRC documented almost 400 percent more cases of abuse compared to the same period in 2019—of which 77 percent is related to non-payment of wages due to employers citing economic downturn (MFA, 2020).

Interestingly, in 2021, the MFA and its partners were successful in reclaiming the stolen wages of hundreds of migrant workers from the multinational company Leighton Contracting Qatar (LCQ).

As India is the largest migrant-sending country and the largest remittance-receiving country in the world, it is the obligation and duty of the Indian government to ensure that the wages of Indian migrant workers abroad are

not withheld. In order to ensure the protection of workers' rights as well as that of the country's interests in the international sphere, robust mechanisms and regulations must be implemented by countries in good faith.

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3. PROTECTION OF PEOPLE DISPLACED FROM INDIA'S SINKING ISLANDS: A HUMAN RIGHTS PERSPECTIVE

Chhaya Bhardwaj

ABSTRACT

In this article, the authors comment on the interlinkages between human rights and the protection of people on sinking islands in India. Currently, at least two islands in India – Sagar and Ghoramara are on the brink of disappearance due to rising sea levels and coastal erosion in the region. The complete sinking or disappearance of these islands will displace the current residents of these islands. Currently, there is a lack of a relocation or rehabilitation policy to protect people affected by sea-level rise or climate change. The rising sea levels and a lack of policy negatively impact the human rights of the residents of these islands. Against these facts, the authors in this article explore the human rights guaranteed under part III of the Constitution of India that may be applied to protect people displaced from Sagar and Ghoramara. One of the ways to protect these residents is by relocating or resettling them in mainland India in a place that is not prone to hazards. The right to life and equality guaranteed by the Constitution have been previously applied to protect people displaced by other disasters like earthquakes and tsunamis. Given their historical application and success, these two fundamental (human) rights can be applied to protect people from sinking islands without a central policy or law to protect the residents of Sagar and Ghoramara.

Key words: sinking islands, human rights, climate refugees, displacement, climate change policy, India

INTRODUCTION

The Indian and Bangladesh Delta is one of the most climate-vulnerable regions in the world (Cazcarro et. al., 2018). The islands here have either sunk due to rising sea-levels (Kapoor, 2018), or are slowly but continuously sinking and are on the verge of disappearing. Lohachara is one of the islands that has already been erased from the global map (Gosh et. al., 2014). A recorded number of 374 inhabitants of Lohachara island were forced to move to other places (Gosh et. al., 2014). It is predicted that sister islands namely “Sagar” (Bera et. al., 2021) and “Ghoramara” are next in line to disappear due to sea-level rise (Rudra, 2014). While the disappearing islands raise many questions related to legal and policy frameworks, one specific question is linked with people whose homes disappear as a consequence of the island disappearing. While sea-level rise has been a continuous phenomenon in the Bengal Delta region since the early 1980s, there have not been any significant policies governing relocation and rehabilitation of people in the region (Bhardwaj and Renganath, 2022).

In the absence of a sea-level rise related relocation or rehabilitation policy in India, there are several human rights which are negatively affected due to poor implementation of human rights norms by the state. The author enlists and comments on various human rights that are at threat due to the absence of a policy framework for climate-change-induced displaced persons in India.

HUMAN RIGHTS OF THE CLIMATE-INDUCED MIGRANTS IN INDIA

Indian citizens have the right to a healthy environment not only for the current generation but also for the future generation, covered within the ambit of the principle of inter-generational equity (Fermento Resorts, 2009). The right to a healthy environment is a fundamental human right part of the right to life covered under Article 21 of the Constitution of India

(M.C. Mehta, 2004). To protect the human right to healthy environment of its citizens, the government has a Constitutional duty to protect the rights of its citizens (Centre for Public Interest Litigation, 2012).

Under international frameworks, the international organizations state that the states have an 'affirmative' duty to protect people from the adverse effects of climate change. For climate-change-induced displaced persons from Lohachara, Sagar and Ghoramara, the United Nations High Commissioner for Refugees has issued a Guidance document to protect the internally displaced persons (IDPs) in the context of disasters (UNHCR, 2021). These guidelines are based on the universally-recognized human rights with a vision that human rights can guide the protection plans for such IDPs (UNHCR, 2021). The guidelines also acknowledge the responsibility of states to protect people from violations of human rights and disasters (UNHCR, 2021). The guidelines acknowledge that people who are forced to move due to climate change or disasters have human rights such as their right to practice culture and traditions, their right to participate, their right to livelihood, their right to adequate housing, and their right to basic services, all of which are adversely affected (UNHCR, 2021). Therefore, adopting a human-rights based approach for the protection of these displaced persons may be a good holistic approach from a judicial point of view. The implementation of these human rights approaches is not very effective and remains a general challenge in India, especially in the context of climate change related issues (Jolly and Menon, 2019).

RIGHT TO LIFE OF CLIMATE-CHANGE IDPS

Article 21 of the Indian Constitution guarantees right to life to all citizens in India (Pathak, 2019). It includes the right to life and personal liberty free from arbitrary deprivation of the ambit and scope of this right (Pathak, 2019). Within the overarching right to life, there are several other rights encompassed within it. For example, right to food (Court on its own

motion, 2020), right to water (Subhash Kumar, 1991), right to adequate housing (Sudama Singh, 2010), and right to a healthy environment (Charan Lal Sahu, 1989) amongst others. These fundamental rights have not been derived or implemented in India in the context of climate change and rarely in the context of IDPs. The people of Sagar, Ghoramara and Lohachara are IDPs who are fleeing their country of origin due to a slow onset of disasters, i.e. sea-level rise (Bhardwaj and Renganath, 2022). India has previously known conflict-induced IDPs—Kashmiri Pandits—and development-induced IDPs as well, the most well-known being the Narmada Dam IDPs (Bhardwaj and Renganath, 2022). There are judicial decisions that have discussed their human rights and protection frameworks (Rattan Lal Raina, 2014). The Narmada Bachao Andolan Case (Narmada Bachao Aandolan, 2000) discusses the fundamental rights of the displaced person, specifically in the context of Article 21. While doing so, the court recognized the need to read international treaties and covenants concerning human rights to interpret the fundamental (human) rights guaranteed by the Constitution. In Narmada Bachao Aandolan (2000), the court stated:

'tribal populations shall not be removed from their lands without their free consent from their habitual territories except in accordance with national laws and regulations for reasons relating to national security or in the interest of national economic development. It was further stated that the said Convention provided that in such cases where removal of this population is necessary as an exceptional measure, they shall be provided with lands of quality at least equal to that of lands previously occupied by them, suitable to provide for their present needs and future development.'

If this rule is to be applied in the context of those fleeing climate change and sea-level rise, two challenges arise. Firstly, there are no laws or regulations currently existing in India that can govern displacement due to climate change or sea-level rise. Secondly, the rule that the quality of land should be equal to the lands previously occupied by them is misleading in the context

of people fleeing or affected by sea-level rise. If at all, there has to be a relocation framework for such people, they should be relocated to areas that are not affected by sea-level rise. This would imply better quality of lands and not equal quality of lands.

In Rattan Lal Raina (2014), case Article 21 was discussed as the bedrock of constitutional guarantees, consisting of the right to live with dignity. The landlessness, joblessness, homelessness, marginalization, food insecurity, loss of purchasing power and social disintegration that follows displacement, renders people to live life in deprivation of dignity (Jaiswal, 2019).

Right to life comes with several branches of fundamental rights, one of which is the right to water. In the international case of *Ioanne Tietiota*, the science that sea-level rise can cause salination of soil and sources of drinking water, thereby interfering with an individual's right to life was discussed extensively (Bhardwaj, 2021). In India, the application of right to life under Article 21 has been expanded to include, right to relief and rehabilitation of people affected due to disasters (Bipinchandra, 2002). There is however, no specific case law discussing the application of article 21 on people forced to migrate due to disasters or climate change; in the *Kashmiri Sikh Community v. State of J & K 2019*, the High Court of Jammu and Kashmir applied the Prime Minister's Package for Return and Rehabilitation announced in the year 2008 and the Rules of 2009 which applied to Kashmiri migrants. For the purpose of these rules, IDPs meant a person registered with the Relief and Rehabilitation Commissioner Migrant. It means, for IDPs, relief and rehabilitation are core to their protection and specifically of the protection of Article 21, and this interpretation can apply for people displaced due to conflicts and disasters both. The Indian court has also applied 'Guiding Principles on Internal Displacements' in the context of India. In the Case of *J. L. Koul & Ors. v. State of J& K 2009* and *Union of India & Ors. v. Vijay Mam 2011*, the Supreme Court has agreed with the guideline that all IDPs have a right to an adequate standard of living.

The scholars report that residents of Lohachara island were moved to northern islands, which are at the brink of disaster in the form of inundation today. Neither the legislature nor the judiciary have taken up the cause actively to develop human-rights based frameworks to protect the residents of Lohachara. Parasuraman (1999), reported that in India, generally the displaced persons do not have adequate access to water, food security, education etc., all of which form part of the 'right to life' under Article 21 (Shakeel, 2017). These claims are supported by Mahendra Lama, who cites similar findings for people displaced within India (Mahendra, 2000). The problem of right to clean and drinking water and access to it, is an ongoing challenge for people displaced due to climate change and sea-level rise. While currently, there is a lack of specific studies concerning access to water by those affected or displaced by sea-level rise, any specific study can help bolster the scientific evidences concerning climate-change IDPs and right to water in India.

RIGHT TO EQUALITY OF THE CLIMATE-CHANGE IDPS

The cases of conflict-induced IDPs in India thrive on the right to equality guaranteed by Article 14 of the Indian Constitution. In Rattan Lal's Case of 2014, the court discussed Article 14 in relation to the conflict-induced IDP. Under international law, migrants are generally deprived of the right to equality by most governments, however, this deprivation is based on nationality (Crépeau, and Samaddar, 2011) and is distinct from the discrimination against migrants like IDPs. Within India, there are evidences of discrimination against the Northeast migrants working in Delhi (McDuie-Ra, 2012) and more generally internal migrants from Uttar Pradesh and Bihar also have known to face discrimination (Abbas, 2016). Due to this discrimination, their right to life, right to livelihood and adequate compensation is restricted (McDuie-Ra, 2012). This also hinders economic developments for these internal migrants, leaving them in a vicious cycle of poverty, vulnerability and discrimination (McDuie-Ra, 2012).

Article 39 of the Indian Constitution proclaims that 'the state should direct its policy toward securing, among other things, a right to adequate means of livelihood for men and women equally, and equal pay for equal work for both men and women'(Mehta, 2005). However, in the light of the discrimination that persists against the internal migrants in India, it becomes difficult to implement the right to equality and right to equal pay in India. Those fleeing sea-level rise, particularly from the islands in Bengal, may also face discrimination in mainland India because of the differences in race, language, ethnicity and so on. A 2021 study by Columbia University, highlighted the political biases prevalent in India against internal migrants (Gaikwad and Nellis, 2021). This means that there exists institutionalized discrimination by the state against internal migrants who may not be local in a particular geographical context. For instance, India's Untouchables still face discrimination at several frontiers that can keep people from these groups in a vicious cycle of poverty (Aiyar, 2007). The ambit of the judiciary is limited, and experts have recommended training of judiciary to end discrimination and sensitization of issues to ensure that members of the judiciary are not prejudiced (Sarkin and Koenig, 2009). The layers of inequality in India are complex and include gender-based discrimination, caste-based discrimination, religion-based discrimination, tribe-based discrimination, race-based discrimination, and nationality-based discrimination to name a few; a reminder that the multiplicity of identities in India can lead to multiple complexities in India (Ruwanpura, 2008).

CONCLUSION

This short commentary aims to highlight the human rights involved in the context of climate-change-induced displaced persons. While these rights may be many, most of them can be derived from the Right to Life. Regardless, the protection, rehabilitation and relocation of these displaced persons must be implemented keeping in mind the fundamental human rights that are always at risk for these climate-change-induced IDPs. According to international organisations, a human-rights approach is the most holistic approach to protect IDPs fleeing climate change and sea-level

rise. This approach can lead to stronger standards related to the protection of people who are adversely affected by climate change and their human rights. The author, through this article, does not intend to recommend any policy or legal changes through legislative or judicial action but to present an analysis of the existing framework, developed primarily by the judiciary under Article 21 'right to life' interpretations. There is no denying that almost all human rights can be interlinked with the adverse effects of climate change, however in India, the legislative or jurisprudential aspect linking major human rights with climate change has not been effectively achieved yet. Additionally, people displaced because of climate change or rising sea-levels may find themselves at the crossroads of several human rights violations, however, much has to be achieved regarding strengthening their protection mechanisms as well.

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4. LIVED EXPERIENCES OF KASHMIRI PANDIT WOMEN: FORCED DISPLACEMENT AND THE LIFE BEYOND

Ashani Dhar

ABSTRACT

Migration, whether forced or voluntary, has been an intrinsic part of the broader processes of social change across the world. However, there is a marked difference in the way different forms of migration are conceptualised and the resultant implication that it has. For instance, the difference between refugees and Internally Displaced Persons (IDP) and the expected role of the state in dealing with them. Officially termed 'migrants', the Kashmiri Pandit community – originally belonging to the now Union Territory of Jammu and Kashmir, India, is a quintessential example of a community that was forcibly displaced and forced into a life of exile in their own country over three decades ago. The exilic conditions that characterised their lives have left an indelible print on their minds and have shaped their life discourses polemically, in the forms of ruptured social fabric, disoriented identity, barriers to education, healthcare and restricted labour market opportunities. Although displacement affected the entire community at large, the impact of displacement was experienced differentially. This difference stemmed from gender, the social capital they possessed, educational qualifications that they had, their place of residence (rural or urban) and the quality of social networks they had access to. The most explicit difference can be seen between those who were set up in tents that were sunk in filth and were a breeding ground for disease and ill-health versus those who were displaced but never had to live in 'migrant camps'. But even within these two groups, there are apparent differences in the lives of men and women. The challenges of everyday life are felt more acutely by women who have had to navigate the murky waters of patriarchy in addition to physical displacement.

And yet, available literature on the subject is androcentric and homogenising in nature. The paper attempts to shed light on the manner and the source for the differential impact of displacement as seen through the impact of displacement on health, education and employment, which are more pronounced for women than men.

Keywords: Kashmiri Pandits, forced displacement, lived experiences, social capital, women.

INTRODUCTION

Migration, whether forced or voluntary, has been an intrinsic part of the broader processes of social change across the world. It has been theoretically defined in a myriad of ways, most commonly based on the simplistic assumptions of push-pull models with a singular aim of income (utility) maximisation. The more refined frameworks, such as that by Amartya Sen, perceive it to be the capability (freedom) to choose where to live, to move, when and why to move as against a passive 'cause-and-effect' response to various push-pull factors⁶.

Therefore, simplistically speaking, anybody who moves from one place to another, regardless of their motivation, would be undertaking the process of migration. However, there is a stark difference in the way the whole movement is initiated, understood and the resultant implications that it carries given the broader contexts in which it was undertaken. For instance, while both refugees and internally-displaced persons (IDPs) undertake the process of migration i.e. they move from one place to another, they are two distinct terms. Although, the causes for displacement could be similar for both categories of people, including but not limited to political unrest, religious persecution, armed conflict, internal disturbance, and so on, the

6 Haas, H. (2021). A theory of migration: the aspirations-capabilities framework. *Comparative Migration Studies*. Vol 9(8)Springer.

implications can be drastically different. The basic difference between both categories is that in order to be classified as a refugee, a person has to necessarily cross an internationally recognised border, whereas IDPs stay within the territorial boundaries of the country that they are citizens of. However, it is not just a matter of nomenclature. These terms are extremely loaded and as such become the primary identities by which such individuals are recognised. For instance, for those categorised as refugees, there is a definite plea for humanitarian help and assistance from countries they may not have anything in common with. For those who are categorised as IDPs, there is a sense of responsibility that their own government has to necessarily shoulder in order to rehabilitate and resettle them thus forth.

The Kashmiri Pandit community, originally belonging to the now Union Territory⁷ of Jammu and Kashmir, India, is one such community. Forced into a life of exile in their own country over three decades ago, the displacement of the Kashmiri Pandits from Kashmir in 1989-90 is a devastating tale of people being run out of their own homes for the safety of their lives while the state absolved itself of the responsibility to protect their lives and livelihood.⁸

There are multiple narratives of what led to their exodus, all carrying a strong political undertone. From the perspective of the Kashmiri Pandits garnered through personal interviews as well as memoirs in vernacular magazines such as *AIKS*, it is clear that the reason they were forced to leave was the blatant threat to their life and security. Kashmir was considered to be a relatively peaceful valley where the Kashmiri Hindu and Kashmiri Muslim communities lived in harmony with each other. The conditions of 1988-89, targeted killings of Kashmiri Pandits and a general sense of fear forced them to leave. On the other hand, the government stands by the fact

7 Jammu and Kashmir Reorganisation Act 2019, re-constituted the former state into the union territories of Jammu & Kashmir and Ladakh w.e.f 31st October 2019.

8 Shekhawat, S. (2009). Conflict Induced Displacement: The Pandits of Kashmir. *Conflict Trends*, Issue 4, ACCORD.

that by the 1990s the pro-azadi movement had gained considerable ground and that in the early 1990s, there were slogans reverberating from mosques ordering people who did not support the Kashmir movement to leave the valley. While the government has maintained that the Pandits wanted to leave voluntarily and their movement was facilitated by government vehicles that may have created the image of the government facilitating their move, the Pandits have a different story to tell wherein they received no help from the government at all. Those who travelled in the dead of night recall making their own arrangements to travel outside Kashmir. Most of them recall their neighbours and friends helping them with making arrangements to leave the Valley.

The most popular narrative is that it was the turmoil caused by the alleged rigging of the legislative assembly elections of J&K of 1987 that sparked tensions in the state. The political developments in Kashmir in the years preceding the exodus laid the groundwork for mass displacement of the Kashmiri Pandit community in late 1989 and early 1990. It all culminated in a trail of blasts and targeted killings in which the Central Telegraph office and the Srinagar Club had been chosen as the first targets of the militants in 1988. The year 1989 started with a wave of targeted killings of Kashmiri Pandits. For instance, the retired judge who had sentenced Maqbool Bhat to death for the murder of Neel Kanth Ganjoo, was shot dead outside the J&K High Court⁹. There were many such Kashmiri Pandits who had been shot dead.¹⁰ Women and young girls were 'allegedly raped' gripping the community with fear for their womenfolk. One of the most horrifying incidences is of the rape and murder of Girja Kumari Tikoo who was sawn in half by a carpenter's saw. The post-mortem report of Sarla Bhat, a nurse, confirmed that she was gang-raped before her body was riddled with bullets.¹¹ Although

9 The incident has been widely reported in Indian press and also finds a mention in the book by Prakash, V. (n.d.). *Terrorism in India*. India: Kalpaz Publication. Pg. 516

10 Koul, M.L, (1999). *Kashmir – Wail of a Valley*. Part 1. University of Michigan.

11 Koul, M.L, (1999). *Kashmir – Wail of a Valley*. Part 2. University of Michigan.

the details of very few such incidences are available in public domain, personal interviews with the displaced Kashmiri Pandits reveal many such other incidences that were never openly discussed.

A full-page statement had been delivered in the offices of vernacular dailies that explicitly stated for Kashmiri Pandits to immediately leave Kashmir¹². By this time, those who had not fled earlier had panicked enough to leave in the dead of night by any means possible. As reminisced by many Kashmiri Pandits, there was no help provided to them by the government in the form of security or transportation out of Kashmir. The state government was jolted into action only when thousands of Kashmiri Pandit families reached Jammu. The state government registered these families and referred to them as 'migrants' post which they were temporarily set up in relief camps around Jammu.

“As a fall-out of the fundamentalist and terrorist activities, sizeable number of families belonging to the minority communities have been forced to leave their homes in Kashmir Valley and settle temporarily in Jammu, Delhi and other parts of the country. Government is providing all essential relief to the uprooted families. It is hoped that the Jammu and Kashmir migrants will go back to their homes in the Valley in the near future”¹³

They were set up temporarily in tents that were sunk in filth with no arrangements for water supply and heaps of garbage that were not cleared and which turned into potential health hazards.¹⁴

12 On January 4th, 1990, *Aftab*, a local Urdu newspaper, published a press release allegedly issued by Hizb-ul-Mujahideen asking all Hindus to pack up and leave. This was also followed by *Al Safa*, another local paper and *Srinagar Times* on 16th January 1990.

13 Annual Report of the Ministry of Home Affairs (1990-91)

14 Koul, M.L. (1999). *Kashmir – Wail of a Valley*. Part 2, Chapter 12. University of Michigan.

A meagre amount of relief and some dry ration that had been initiated as doles. The relief amount has been increased from time to time, and current is capped at 13,000 INR per family at the rate of Rs. 3250 per person. It had started off at the rate of 250 INR per person (for a maximum of 4 members of a family)¹⁵. However, the assistance received from the government over the years has not satisfied the Kashmiri Pandit community.

While there are various grievances about how the ration as well as relief money was inadequate, the gravest injustice meted out to them was referring to them as 'migrants', a term that continues to be used for them. Their main reservation with the term 'migrant' is how that term conveys a sense of agency (however insignificant) that a migrant is typically assumed to have. But the displaced Kashmiri Pandits did not leave Kashmir because they wanted to, they left because that was the only viable alternative for them.¹⁶ Even if that meant leaving their lives behind and being forced into a life of confusion, uncertainty, and complete disorientation. And yet, the entire question surrounding the exodus and the Kashmiri Pandits has become a political debacle reserved for international forums, trivializing how their lives were completely turned around in a matter of days.

There is also lack of any succinct data on the displaced Kashmiri Pandits to study whether their mortality and morbidity indicators worsened considerably and rapidly post displacement and resettlement. An independent study conducted by the Times of India¹⁷ showed that among 350 families having 1200 inmates, only 5 births took place since resettlement in the camps while 200 people had died. Some of the reasons for this could be premature menopause in women, delayed reproduction or infertility, malnutrition, sunstrokes, weakness and stress. Another study conducted by

15 <https://pib.gov.in/PressReleasePage.aspx?PRID=1705569>

16 Bhan, N and Bindra, S. (2019). Effects of Migration on the Health of Kashmiri Pandits. *Indian Journal of Public Health Research and Development*. Vol 10, No. 12. Pp. 89-93.

17 Times of India, 5th July 1995 Times of India.

Panun Kashmir in 1995, based on a sample survey of families present in the migrant camps between 1990-1995 showed that in 300 families having 1365 inmates, only 16 births had taken place¹⁸. The study shows how differences in the living conditions were prevalent not only between camp and non-camp displaced populations but also between people living in different camps. However, studies such as these, have not been attempted in the last ten years even on a small-scale, thus the lack of concrete data about the conditions of the displaced Kashmiri Pandits.

The exilic conditions that characterised their lives not only left an indelible print on their minds but shaped their life discourses polemically, in the forms of ruptured social fabric, disoriented identity, barriers to education, healthcare and restricted labour market opportunities. Yet, the exilic narratives deep-rooted in the feeling of helplessness have eclipsed the heroism showcased in rebuilding and re-establishing their home and identity, thus reducing Kashmiri Pandits to exemplary victims and anonymous bodies alone.

WOMEN AND DISPLACEMENT

For women, the conflict and violence of 1989-90 impacted both their survival as well as their dignity. There were derogatory slogans underlined with sexual threats directed at the Pandit women such as 'let the Pandit men leave Kashmir, but let them leave their women behind' and 'Assi Gachhi Kasheer Batau Rous Batnew Sann (We want Kashmir along with women folk of the Kashmiri Pandits but not their males)'.¹⁹ The question of sexual victimisation of Kashmiri Pandit women has been addressed in some texts,

18 Kashmir Documentation – Pandits in Exile (2010). Panun Kashmir Movement, Jammu India Pg. 64.

<https://citeseerx.ist.psu.edu/document?repid=rep1&type=pdf&doi=fbc50eb3c4e5682bfa3b84b5cff97d3fb740d4a0>

19 Kashmir Documentation – Pandits in Exile (2010). Panun Kashmir, Jammu, India.

but broadly speaking, the ordeal of women who either were sexually abused or were threatened with it, has largely been absent from scholarship.

The process of displacement itself, the subsequent resettlement and the task of 'place-making' posed additional challenges for Kashmiri Pandit women who were the lesser educated, and the financially-dependent sex as compared to men. While there exist narratives of the harrowing experiences of displacement in some vernacular magazines (such as AIKS, Shehjar, Naad etc), there has been a consistent lack of scholarship on the embodied experiences of women either on account of androcentric narratives or due to the lack of a sufficiently sympathetic and interested audience. As a result, women and their experiences have been marginalised within the community as well as in the broader narrative around this 'territory of desire'²⁰. Therefore, it is important to problematize and explain this critical social phenomenon of conflict-induced displacement from the perspective of women in order to develop a feminist method of inquiry (Harding, 1987) to fully comprehend the differential impact of displacement for women as against for men. Harding emphasises the importance of formulating gender as a theoretical category in research²¹. A feminist theory is therefore critical to reconstitute the meaning of the experiences of women as they have lived them. It helps in consciousness raising as it enables readers to view the context critically in a new light.

Feminist theorisations of displacement offer a lens to analyse displacement from a political perspective, allowing the reframing of displacement as a multiscalar, micropolitical and differentiated process for women as against men. Such an approach accounts for the previous literature that has typically overlooked practices, bodies, as well as the degrees to which displacement occurs.

20 Kabir, A. J. (2009). *Territory of Desire: Representing the Valley of Kashmir* (NED-New edition). University of Minnesota Press. <http://www.jstor.org/stable/10.5749/j.ctttj7p>

21 Harding, Sandra. (1987). *Feminism and Methodology: Social Science Issue*, *Bloomington IN: Indiana University Press*. 1-14; 76-94

Therefore, as per Malesi (1987), the feminist method would include description, contextualisation, multiple approaches to gather data, subjectivity and consideration of gender itself as a variable. Therefore, the primary advantage of using a feminist perspective in studies on conflict-induced displacement, would be that the impact of the displacement on women in particular can be viewed from a gendered perspective, thereby showcasing how displacement had a differential impact on women and men as well as between different groups of women based on varying factors.

The archival pieces of news for instance “*Kashmiri Pandits – Aliens at Home*’ dated December 9th, 1990²² or “*Kashmiri Pandits Narrate Woes*”²³ dated February 19th, 1990, published in *The Times of India* shed light on how Kashmiri Pandits had been run out of the Valley and did not feel accepted in Jammu, thereby making them nothing better than guests in their own country. Leading newspapers show snippets of interviews with Kashmiri Pandit men reserving for themselves the overarching responsibility to speak for the community. Their responses however have a strong political undertone and often take the shape of a blame-game. What is interesting is that not even a single interviewee is a woman. The only time that women are considered to be an active part of the community is on the 19th of January every year since 1990 when a silent demonstration is taken out to remind the government of the fateful time that the community had been left to its own perils.

Pictures showing women participating in silent protests in recent times are often circulated with much pomp and show, and yet, there is almost no written record of the different ways in which women showed resistance and

22 Hussain, A. (1990, Dec 09). Kashmiri pandits aliens at home. *The Times of India (1861-2010)* Retrieved from <https://www.proquest.com/historical-newspapers/kashmiri-pandits-aliens-at-home/docview/613618633/se-2>

23 Kashmiri pandits narrate woes. (1994, Feb 19). *The Times of India (1861-2010)* Retrieved from <https://www.proquest.com/historical-newspapers/kashmiri-pandits-narrate-woes/docview/516377297/se-2>

resilience immediately post displacement, especially in relief camps. Their role in the task of rebuilding their homes while ensuring emotional availability for their children, the sick and the elderly of the family as well as the community is often ignored, as is their effort in supplementing family income by taking on double-burden of work in the form of paid employment outside home and unpaid work at home.

The lack of literature on the specific experiences of Kashmiri Pandit women makes it very difficult to bring out the atrocities perpetrated against them or the ways in which they dealt with the changed circumstances. Interviews²⁴ with a select few women presently living in Jagati township²⁵ in Jammu revealed how the main challenges they faced ranged from lack of privacy, recurrent urinary tract infections, skin related diseases and other non-communicable diseases.

In-depth interviews with women from Jagati also reveal how displacement has had a differential impact on women as against men. For example, the roles and responsibilities of men mostly continued to be the same after displacement—to be the primary breadwinner and provide for the family in material terms. Failing which, alcoholism and substance abuse was an accepted reaction to the challenging times. For women, the unpaid work increased as did the emotional labour. They were reeling from the trauma of their changed circumstances while providing the same level of care and comfort to the children, elderly and the sick. Jagati is replete with examples of women being the actual breadwinners and shouldering the entire responsibility of the household expenses while being subjected to domestic violence at the same time and yet their ordeal is rarely ever captured in academic writing or otherwise.

24 Primary data collected in 2022 by the author by way of in-depth personal interviews of women presently living in Jagati township.

25 Jagati township has been established around 23 kms away from the city of Jammu on NH44. It was set up to be a satellite town that was to accommodate all the displaced Kashmiri Pandits living in the 9 relief camps spread around Jammu after the displaced Kashmiri Pandits who fled from Kashmir came to Jammu.

THE CHALLENGE OF 'PLACE-MAKING'

The theorisation of place is done by understanding it as a meaningful segment and not just in a cartographic sense. It does not have a fixed pattern or established human meaning but is defined by the specific meaning that an individual attaches to it. As against a 'space', a 'place' is humanised space, one that is a centre of established values and meanings (Tuan, 1977: 54). Likewise, a 'place' gathers things in its midst both animate and inanimate entities that bring together experiences and histories, languages and thoughts. Therefore, the power that a place possesses, is because of the power of gathering that it has; gathering of people, thoughts, experiences and histories (Casey, 1996: 24). For Kashmiri Pandits, therefore, 'place' was where they lived their everyday lives and sustained their livelihoods, making memories, networking and following their rituals and cultural practices. It was a safe zone where they felt protected. It was an instrumental tool that tied their reality and identity together. Since most women were not into paid employment while they were in Kashmir, and rendered unpaid care work at home, their 'home' was a very important aspect of their lives.

Post-displacement, not only did the Kashmiri Pandits lose their homes, they lost an important part of their identity. Women felt this loss more dearly because their sense of 'place' was heavily dependent upon the confines of their home. As a result, displacement led to a disoriented sense of identity for them, where they no longer had a 'place' that they could call home.

Despite the fact that displacement affected everyone, the impact was not felt by every individual in the same manner. One of the most important factors that differentiated the experience of one person from another can be traced and understood in the differing social capitals that they had access to and the degree to which they could avail this access.

IMPORTANCE OF SOCIAL CAPITAL

Social capital is an important conceptual apparatus that can be employed to explain how social networks, cultural capital as well as the socioeconomic

positions of people in Kashmir became crucial factors in deciding where they resettled post displacement and the consequent impact this had on the generations to come.

Various social, economic, and political mechanisms all work together in varying capacities to give rise to the **socioeconomic position** of an individual, whereby populations get stratified by their gender, income, education, occupation, class, caste, religion and other factors. The socioeconomic position shapes the specific determinants of health status that are reflective of people's places within the social hierarchies of the society. Based on their respective social statuses, individuals experience differences in the exposure as well as the vulnerability to health-endangering conditions. Even illness can feed back into altering the social position of an individual by way of impacting their employment opportunities and thereby reducing income.

At the *individual level*, social capital refers to the individual networks and levels of personal involvement in a society in which case it becomes a component of human capital alongside the skills and knowledge (education) which would favour productivity, careers as well as social inclusion. In this case, individual social capital then becomes a counterbalance for other forms of capital, such as lack of education. Therefore, a less-educated person would have to rely more on social support and networks to meet everyday challenges. It is also possible that social capital may act as a complementary force to higher education. For instance, better-educated people possess more robust networks and social participation. This is reflected in the way that individuals living in urban areas in Kashmir who were better educated were able to secure jobs much earlier than their rural counterparts because of the better social networks.

COMMUNITY SOCIAL CAPITAL

Social capital is essentially viewed as a community characteristic. It is a network of individuals who are linked together by social ties and

interactions. Therefore, community social capital is not just the additive product of individual social capitals but of the community as a whole. The remainder of this paper is interested in exploring the relationship between social capital and health, which becomes all the more important because conceptually they can have reciprocal effects on each other. This is reflected in the way of many Kashmiri Pandits who were not very well educated themselves but were able to improve their material conditions quicker because of the better-placed network that they could draw resources from.

The importance of social capital can be gauged in a direct form when a careful analysis is done about how and why some Kashmiri Pandits were forced to stay in tents in inhumane conditions²⁶ for instance, at the Mishriwala camp situated at the outskirts of the city of Jammu, there was not even a single toilet for the 1200 families living in makeshift tents, while there are other members of the community who have never had to experience any such situations. In-depth interviewing with people who presently live in Jagati township and those who are either living in Jammu or in Delhi, would reveal how displacement was experienced differentially. It typically took the following form.²⁷ Those people who were residing in the city of Srinagar and who were the professional salaried classes and, educated people, were able to mobilise their networks and make arrangements either to live in Jammu on rent, or with relatives/acquaintances at the time they reached Jammu after fleeing from Kashmir. People from rural areas, non-salaried and had a lower level of education, were the ones who were forced to live in tented accommodations that had been erected by clearing jungles in and around. Those who were better placed in terms of their socio-economic positions, had the luxury to

26 Hussain, A. (1990, Dec 09). Kashmiri Pandits— aliens at home. *The Times of India (1861-2010)* Retrieved from <https://www.proquest.com/historical-newspapers/kashmiri-pandits-aliens-at-home/docview/613618633/se-2>

27 Sourced from personal interviews conducted by the author with persons living in Jagati township in Jammu.

weigh the pros and cons of staying back in Kashmir when the situation started deteriorating in 1988-89. These people packed their bags and left Kashmir in a slightly more planned fashion. Those who were running businesses or were directly working in the fields in rural Kashmir had no such option and were forced to live in Kashmir for as long as they could. Given that their biggest asset was land, an immovable factor of production, they faced huge losses. The sudden nature of forced displacement did not allow them the luxury of time to sell their land and liquidate their assets. As a result, the political turmoil left them penniless and in a more pitiable state.

IMPACT OF DISPLACEMENT

In order to assess the affectivities of the kind of forced displacement that the Kashmiri Pandit community faced, it is pertinent to consider displacement itself to be a context rather than a process wherein the historic-structural complexities as manifested at the micro level have a multifaceted impact on the lives of individuals. Rather than only seeking a physical trajectory of where the Kashmiri Pandits thus resettled, a focused effort on how they lived through the immediate period after the exodus and the challenges they faced in rebuilding their lives needs to be studied in greater detail. There are various facets of their lives that should be given due attention, health, education and employment being some of the more important aspects.

As Ankur Dutta (2016) writes,

'What complicates the scene is the fact that more than two decades have passed since their displacement. Many Kashmiri Pandits have rebuilt their lives with varying degrees of success. Yet the sense of loss with displacement persists across generations. There is an inability to make a secure place and home in spite of settlement in physical sense. The multiple issues associated with the forced displacement of Pandit community such as homelessness, dislocation, the camp life as a refugee, the haunting traumatic memory of physical and mental violence, the

*cultural and ritualistic social memory of the past etc. have an indispensable gender dimension which has to be addressed since the female experience of these aspects of exile differs significantly from that of men. Unlike Kashmiri Pandit men, the women have faced more disadvantages due to their basically lower social and human capital status which makes them more vulnerable in such historical contexts of victimisation. Either they were direct victims of mental and physical abuse or were living in constant fear of different forms of threats and violence as part of growing social and communal tension in the Kashmir valley*²⁸

There was no aspect of life that remained unaffected by displacement, but the most significant impact was felt on the health of the people, their ability to attain or continue their education and their livelihoods and thus, have been dealt with in more detail.

IMPACT ON HEALTH

The health of any individual is a product of their social, economic, ecological, geographical, political, environmental factors. Post-displacement circumstances had a direct and an indirect impact on the health of the displaced persons, along with short-term as well as long-term impact on health. Choices about health and healthcare are determined by forces that go much beyond health, such as gender, conflict, livelihood opportunities, social relations and so on. Therefore, any strategy to improve the health of displaced persons would be incomplete without adequate attention paid to these other factors as well.

28 Datta, A. (2016). Dealing with dislocation: Migration, place and home among displaced Kashmiri Pandits in Jammu and Kashmir. *Contributions to Indian Sociology*. Vol. 50(1). Pp. 52-79. SAGE Publications.

Displaced populations may not have poor health per se but the process itself can have negative impacts on their health due to exposure to diseases, lifestyle changes, cultural barriers, stigma, lack of healthy practices, barriers to healthcare and many other factors. For those who are exposed to poverty, inequality and threat to physical integrity, health becomes an even bigger cause of concern²⁹.

Healthcare solutions for a displaced population can take one of two forms, either short-term or long-term interventions. Band-Aid solutions would only address immediate concerns, but for the Kashmiri Pandits who were displaced from their own homes, efforts needed to be more consistent. If the primary accounts of those who lived in tents in Jammu are to be believed, for an entire year (1990-1991), no efforts were undertaken by the government to provide any kind of healthcare services, not even primary healthcare services or any emergency services. As a result, the interviewees believed that about 1000 people were lost to dehydration and snake bites alone although official data on the same is unavailable.

Quantification of healthcare needs of any displaced group is a requisite to ensure that the already-scarce resources do not get appropriated by the better-off natives, leaving relatively little for the displaced. It is rather unfortunate that the government missed an opportunity to provide targeted healthcare services to the displaced people, which could have been done in a preliminary manner because of the advantages of their encampment. The government could have reached out to a higher number of displaced people because they were spatially concentrated in a few camps. Yet, this was not done.

As far as health indicators are concerned, it becomes difficult to ascertain them for displaced Kashmiri Pandits for two reasons. One, their health

29 Carol, A. (2018). Statelessness, exodus and health: Forced internal displacement and health services. *Refugee Populations and Health*, CSP Reports in Public Health.

conditions become mere numbers in the overall calculation of the health indicators of the state of Jammu & Kashmir. Even for district-wise data, there is no one statistic for the Kashmiri Pandits living in the relief camps as they are spread in and around Jammu. Two, the health indicators by religion subsume them under the broader category of Hindu and therefore their conditions become a part of a larger picture, smoothing over details specifically about them. For instance, there is district-wise data available on key health indicators in the NFHS 5 where a total of 20 districts including Jammu, Leh, Kupwara, and Ladakh have detailed data on various indicators like the use of contraceptives, the rate of anaemia in women, the percentage of married women in different age groups and so on. But there is no separate data collected on the health conditions of those displaced Kashmiri Pandits who presently live in Jagati township³⁰. For example, the NFHS 4 and 5 data upon comparison show that the overall percentage of women aged 15-49 years who are anaemic has reduced from 65.9 percent to 48.9 percent, however, this is reflective of the overall situation in the entire territory of Jammu and Kashmir and in no way reflects whether displaced Kashmiri Pandit women are faring better in terms of the percentage of women who are anaemic³¹. Likewise, assessment of the situation of Infant Mortality Rate (IMR) can be done at the aggregate level of the UT (16.3) only with no way of analysing the situation for the displaced Kashmiri Pandit women and if the IMR has decreased for the displaced Kashmiri Pandits owing to improved maternal health and nutritional status or level of institutional births.

In the case of Kashmir, it is believed that post-exodus, the very first year was an acute phase where almost everyone who was displaced suffered from one or more health problems. Depression among the adults was considered a

30 Health Dossier 2021: Reflections on Key Health Indicators – Jammu & Kashmir and Ladakh. And NFHS 5, GOI.

31 NFHS 4 (2015-2015) and NFHS 5 (2019-2021), Government of India.

given. Heart diseases and skin-related diseases become very common. Reportedly³² about 2000 people died from heat stroke in the first year alone. Post that, as people began to come to terms with the change in their circumstances, and coping mechanisms started to come into play, stress-related problems began to take over. Diabetes, allergies, hypertension became more prevalent. Lack of security, clean water, food, shelter, basic sanitation became their most pressing challenges. It is also argued³³ that present-day concerns are related to heart diseases, cancers, hypertension along with psychological disorders like depression, PTSD and phobias. As time passed, and help from the state was received, these problems become non-life threatening and this is possibly the reason why the urgency to address these began to be relegated to the background.

The aspect of the health of the displaced that gets highlighted the most is their mental health. Any traumatic experience will impact each aspect of health—physical, mental, psychological—in varying capacities. Depending on the demographic profile, the overall status of health, socio-economic conditions, and cultural beliefs, the response to health outcomes differ. With specific reference to the Kashmiri Pandits who lived in the various relief camps in Jammu, studies have been conducted on the health of the pandits primarily ranging from ascertaining the prevalence of dementia among the displaced Kashmiri Pandits³⁴ and the psychiatric morbidity in adult Kashmiri Pandits living in a 'migrant camp' at Jammu³⁵. Most of the studies that have been conducted make use of standardised psychometric tests and are quantitative in nature. While the tests themselves provide information on the different kinds of mental health problems that are most

32 Bhan, N; Bindra, S. (2019). Effects of Migration on the Health of Kashmiri Pandits. *Indian Journal of Public Health Research and Development*. Vol. 10, No. 12. Pp. 89-93

33 Sourced from personal interviews conducted with the Pandits living in Jagati township presently.

34 Raina S, Razdan S, Pandita KK, Raina S. (2008). Prevalence of Dementia among Kashmiri migrants. *Annals of Indian Academy of Neurology*. Volume 11, Issue 2. Pp. 106-108.

35 Banal, R. et al. (2010). Psychiatric Morbidity in adult Kashmiri migrants living in a migrant camp at Jammu. *Indian Journal of Psychiatry*. 52(2) pp.154-158.

commonly associated with the displaced populations, these studies fail to establish the probable causal relationships of how the prevalence of dementia could be related to literacy levels or why men have a higher prevalence of dementia in the given sample size.

Psychometric tests offer a ready insight into some mental, emotional, behavioural issues, but as they rely solely on self-reporting measures, they have obvious methodological limitations. This is because the test scores are analysed using a set standard of parameters and a diagnosis is made, however, such quantitative analyses are beset with a respondent bias and they may not adequately capture the nuances of social life and its processes. This can be overcome by using qualitative techniques such as in-depth interviews, focused-group discussions and cross-referencing. These measures have not been adopted to study the displaced Kashmiri Pandits, therefore providing only limited information about their status of health as well as their overall well-being.

Coping strategies have been defined as 'the response to diminish physical, emotional, psychological burden linked to stressful life events and daily hassles'³⁶. It is an adaptational activity including constantly-changing behavioural and emotional efforts. There are two approaches that have been identified approach (problem-focused to resolve the stress) and avoidance strategies (emotion to avoid thinking about it). The study conducted in Muthi Camp in Jammu uses Trauma Symptom Checklist-40, Perceived Stress Scale, and Coping Response Inventory. The study³⁷ concluded that the null hypothesis was accepted for significant differences were found in terms of the anxiety, depression, sleep disturbances and sexual trauma index but no significant difference was found in terms of the disassociation

36 Charak, R.; Bhat, A. (2011). Gender Differences in trauma symptoms, perceived stress and coping strategies in Kashmiri migrants. *Indian Journal of Health and Well-Being*. Vol. 2(1). Pp 24-26.

37 Ibid.

and sexual problems. It concluded that men and women did not differ significantly in terms of perceived stress but women showed more coping strategies than men. It makes reference to another study³⁸ by Arnetz et al. in 2010, to suggest that demographic factors such as age, gender, and race lead to lesser variance in stress as compared to lifestyle factors like social support, sleep, self-care etc. Therefore, buffering factors such as social support, socioeconomic status and self-care might affect the perceptions of stress.

While the study uses psychometric tests to make analysis, it uses the term sex and gender interchangeably as is done in many medical and health journals unintentionally. However, as a social scientist, it is important to make the qualification between sex and gender absolutely clear. To suggest that coping strategies are found to a higher degree in females than in males would imply there is an underlying biological composition or physiology of the individual sexes that explains it. However, if gender is used as a metric, it would entail all the processes of socialisation that teach a woman to bear the stresses of life and to endure them.

Another aspect that has not received adequate attention of scholars is the long-term impact of displacement on the Kashmiri Pandits, especially those who continue to live in resettlement areas. Any community that has been forcibly displaced due to conflict and violence, would report Post-Traumatic Stress Disorder (PTSD) and Generalised Anxiety Disorder (GAD) and other emotional responses and problems. However, displacement tends to cause long-term impact on health which may not be of a psychological nature alone.

38 Maghout, J.S., Janisse, J., Schwartz, K., & Arnetz, B.B. (2010). Demographic and Lifestyle Factors Associated with Perceived Stress in the Primary Care Setting: A Metro Net Study. *Family Practice – Oxford Academic*, 28 (9), Abstract at PMID: 21068192.

For those who were displaced, displacement was accompanied by severe economic constraints forcing people to alter their food habits, their healthcare-seeking habits and any other essential expenses. More often than not, it was women whose health took a backseat in the case of an economic adversity. As some camp dwellers recalled, for the first year after the encampment, no healthcare services made available to those living in the camps. As a result, thousands of lives were lost to easily preventable diseases and conditions. Dehydration and snake bites became very common causes of death (Bhan & Bindra, 2019).

The Kashmiri Pandits' ongoing health and social needs stem from the dislocation they face and the loss of support, economic position, education, and health care. The impacts of these conditions have been felt inter-generationally. The most commonly-cited example³⁹ is that of low income-low nutrition: underweight, malnourished children with lower educational and labour market prospects.

IMPACT ON EDUCATION

While no systematic study has been conducted to ascertain the impact of displacement on access to education by the displaced Kashmiri Pandits, personal accounts of the displaced reveal difficulties in sustaining the expenses of education to be their biggest hurdle. This is despite the relief in the form of reservation of seats for the Kashmiri migrants at lower cut-offs in different colleges. Of late, prominent universities (such as Delhi University) in the country have altered admission procedures for the 'Kashmiri migrants'. For instance, in the case of University of Delhi, those wards of Kashmiri Pandit 'migrants' who wished to apply for seats reserved for Kashmiri migrants were required to register themselves with the

39 Siddiqui F, Salam RA, Lassi ZS, Das JK.(2020).The Intertwined Relationship Between Malnutrition and Poverty. *Front Public Health* doi: 10.3389/fpubh.2020.00453.

University specifying their percentage along with their course and college preference. Subsequently seats would be allotted to the student who had scored the highest percentage for a given college and course. Presently, every college under University of Delhi, releases a separate cut-off for the Kashmiri migrants reflecting the increased competition amongst them, wherein the wards of those who are non-camp but displaced Pandits have a better chance of securing those seats. Likewise, some Universities require an aspiring student to submit residence proof of certain areas belonging to specific quartiles in Kashmir to be eligible to apply for a seat reserved for the Kashmiri 'migrants'. This leaves many displaced Kashmiri Pandits at a disadvantage since they no longer have any documented proof of their homes back in Kashmir. Nevertheless, the basic requirement to apply for a seat continues to be a 'migrant certificate'⁴⁰. The wards of Kashmiri 'migrants' have to upload a registration certificate as a 'Kashmiri migrant' issued by Divisional Commissioner/Relief Commissioner⁴¹ who is the competent authority to do so.

However, wards of non-displaced Kashmiri Pandits could also receive a migrant certificate if they are able to submit some kind of documentation of their parents or grandparents as proof of having lived in Kashmir. The process becomes quicker for those students who apply for a certificate simply for educational purposes and surrender any claim over relief money. As a result, competition for a handful of seats that should have ideally been filled by wards of displaced Kashmiri Pandits, has increased tremendously. This is important because the experience of the exodus and its implications

40 Relief and Rehabilitation Organisation was created vide Government Order No. 52/CR/REV/ER dated 23.03.1990. It had a stated mandate to provide ration, shelter and cash assistance to 'migrated' families from Kashmir Valley for sustaining life, wherein one of the services to be delivered to the 'registered migrants' by the Department of Relief and Rehabilitation was the "*Issuance of migration certificates for educational purposes*".
<https://www.jkmigrantrelief.nic.in/orders/CitizenCharter.pdf>

41 [https://www.dr.du.ac.in/reservation-of-kashmiri-migrants.php#:~:text=1\)%20Various%20undergraduate%20programs%20of,the%20wards%20of%20Kashmiri%20Migrants.](https://www.dr.du.ac.in/reservation-of-kashmiri-migrants.php#:~:text=1)%20Various%20undergraduate%20programs%20of,the%20wards%20of%20Kashmiri%20Migrants.)

were not the same for everyone. Those who continue to live in Jagati township grow-up with severe economic restraints and as such would benefit greatly from the seats reserved for the Kashmiri Pandit 'migrants' in government institutions of higher education since they are offered at subsidised costs. However, if a quick assessment was to be done of the admission requirements in leading universities, it would be clear that of late, there is a separate cut-off for the Kashmiri Pandit migrants thereby increasing competition amongst the community greatly. The level of education that one can achieve is equally a product of the aptitude of the student as well as how conducive an environment is provided to the child. As there is a wide difference in the way that wards and children of Kashmiri Pandits parents who were resettled immediately in makeshift tents and have only been shifted to Jagati township in 2011, and those who never had to live in those camps, there is no doubt that the Jagati inhabitants are placed at a disadvantage, stemming from the lack of additional resources and tutoring. As a result, they are either forced to take admissions in private institutes that typically necessitates education loans for years at a stretch or are forced to give up their dream of education altogether.

Although there is no official document that suggests that the seats are reserved for kids from migrant camps, there is an expectation that these seats should be given to them as against those kids who have grown up in much better circumstances. This is because the reservation for them was made on account of the difficulties they faced post displacement and the disruption in their education. 32 years after the exodus, it is often the second or third generation children who are seeking the advantage of the reservation, but the economic impact of displacement is intergenerational and as such doesn't take away from the importance that it can have in helping children significantly improve the conditions of their families.

However, this recent trend has not undermined the importance that the community places on education as the panacea for their woes. One of the reasons for the unwavering faith in education could also be the manner in

which educated pandits were able to bounce back on their feet much quicker than the rest of the relatively uneducated community. Hence, there is a great deal of significance and relevance attributed to education because of which, parents undertake loans to finance the education of their children, burdening them further, often pushing them deeper into indebtedness.

Within this, the level of priority accorded to young girls and their education needs to be further explored. Examining whether the desire to educate Kashmiri Pandit children equally regardless of their sex against the backdrop of the all-India trend of sacrificing a daughter's education in favour of the son would prove to be extremely insightful.

IMPACT ON EMPLOYMENT

The sudden displacement of the Pandits left them with no sense of stability in life and rendered them devoid of possessions. They were left with little to no income, no job and no certainty about the coming future. The period immediately post the exodus was particularly terrible for them as a large proportion of the population was facing poverty-like conditions for the first time. Displaced urban dwellers were typically the educated, salaried professional class while those in the rural areas were land-owners and businessmen. The exodus had levelled the playing field for everyone in many respects.

Post-resettlement, the community found livelihood in odd jobs and small businesses. The professional class were on the lookout for better-paying jobs but an influx of educated professional people never bodes well for the native population. The recently-displaced were suddenly competing for jobs with the natives of Jammu and as the simple laws of demand and supply dictate, surplus labour reduced the bargaining power of the natives and even more so for the displaced Pandits, who were more vulnerable.

The women however, saw the exodus to be a blessing in disguise providing them with an opportunity to seek paid employment outside their homes⁴². A highly patriarchal community, the Kashmiri Pandit mores barred women from entering the labour market altogether irrespective of their level of education. A very small proportion of women were working in a paid, professional capacity mostly as teachers or as clerical staff in government offices in Kashmir in the pre-displacement period.

Economic compulsions borne out of displacement forced the women of the pandit community to seek employment outside the household. Those who had shifted to Delhi and Noida especially felt that they could explore the labour market and find a job that suited their qualification. Employment was important not only to support their families but also because it would lead to financial independence for them.

However, terms such as 'financial independence' or 'financial emancipation' have to be read with extreme caution and care with respect to women. A patriarchal structure not only puts limitations on what women can and cannot do, but also imposes rules and regulations on every imaginable aspect of their lives. For working women, this often manifests as control over the money that they earn. Therefore, true financial emancipation would mean that women have the agency to decide how the money that *they* earn is going to be spent. Seldom is the choice theirs. Most women, especially of the older generation, would hand over their entire salary to their husbands or fathers or fathers-in-law and have zero say in deciding how that money is to be spent.

42 Sawhney, C; Mehrotra, N. (2013). Displacement from Kashmir: Gendered Responses. *Sociological Bulletin*. Pp. 83-99.

The response of the government in order to help the unemployed youth of the Kashmiri Pandit community has been the much-discussed PM package. The Government devised policies for the Return and Rehabilitation of Kashmiri Migrants under the PM Package in 2008 and 2015 with various components such as enhancement in the relief amount which presently is capped at 13000 INR per family at 3250 INR per person (therefore for a maximum of 4 people). A significant component was the 6000 posts that were announced as a way of providing direct government employment in various departments in places like Bandipore, Anantnag, and Kulgam.

However, the problems of the PM package are far and wide. One, the jobs generated are typically in Kashmir, which forces many people to not avail these job opportunities as concerns of safety and security have not been adequately addressed. The other reasons that have come to light in recent times is the staggered increase in the wages of those working under the PM package, denial of leaves or transfers on compassionate grounds. The recent targeted killings of Hindus⁴³ have sparked a fresh wave of fear amongst the pandits about whether they would like to continue working in Kashmir or not. The death of Rahul Bhat, a Kashmiri Pandit working as a clerk under the PM Special Employment Package for migrants in 2011-12, has further triggered immense fear in the community. He was shot dead in his office on 12th May, 2022⁴⁴. Likewise, the targeted killing of the Hindu teacher Rajini Bala from Samba district, Jammu posted in Kulgam on 31st May, 2022 was another incident sparking fear and insecurity amongst the community about taking up the jobs offered under the PM package.

There are constant requests and applications⁴⁵ submitted to the concerned authorities requesting transfers out of Kashmir, especially by women.

43 <https://www.hindustantimes.com/india-news/terrorist-who-killed-rahul-bhat-tv-artist-amreen-among-3-gunned-down-in-jk-101660146686792.html>

44 <https://www.ndtv.com/india-news/kashmiri-pandit-employees-demanding-transfer-from-kashmir-detained-in-jammu-3784253>

45 <https://www.outlookindia.com/national/kashmiri-pandits-hit-streets-again-after-teacher-s-targeted-killing-in-j-k-s-kulgam-news-199512>

Protests were staged in Jammu by men and women alike after Rajini Bala was shot dead, wherein explicit demands were made to transfer the Kashmiri Pandits to government departments in Jammu with priority given to women who were forced to take up jobs in remote areas in Kashmir to support their families.⁴⁶

CONCLUSION

As the younger generation toils to make their lives qualitatively different from that of their parents and grandparents, specifically for those who were resettled in camps, it becomes important to understand that the challenges for every generation are different and any one-size-fits-all solution would not be able to make a difference to their lives. Solutions and remedies will have to be tailor-made keeping in mind the requirements of every generation. For example, with respect to the elderly who continue to live in the camps, integration of health and social care is extremely important. This integration is even more important given that the younger generation is moving out of resettlement areas to metropolitan cities in search of jobs. As a result, the resettlement camps are slowly transitioning into 'old-age' homes where the older generations cannot rely on the younger generations to cater to their needs. Likewise, the younger generation requires the assistance of the state, especially in pursuit of education and employment opportunities to make sure that they get a fair chance at improving their life in qualitative as well as material terms.

46 <https://www.outlookindia.com/national/kashmiri-pandits-hit-streets-again-after-teacher-s-targeted-killing-in-j-k-s-kulgam-news-199512>

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5. VISIBILISING THE UNDERBELLY OF GLOBAL CAPITALISM: TRANSNATIONAL MOVEMENTS OF LABOUR AS COMMODITY

Rita Manchanda

Uncertain Journeys: Labour Migration from South Asia edited by A.S. Panneerselvan, Speaking Tiger Publishers 2018; *Undocumented: Stories of Indian Migrants in the Arab Gulf* by Rejimon Kuttapan Penguin Books 2021 and *Gender, Identity and Migration in India* edited by Nasreen Chowdhory and Paula Banerjee, Palgrave Macmillan, 2022

'Migrants are like candles. They burn themselves out, and provide light to others'

AKM Moshin, *Bangalar Katha*

At the annual *Pravasi Bharatiya Divas*, the contribution of overseas Indians and the diaspora is celebrated but amidst the high achievers, presidents, and billionaires, ignored and invisible is the contribution of the low and semi-skilled workers, especially female domestic workers at the lowest rung of the labour hierarchy of those who migrate to the Gulf and S. E Asian migration corridor. They expose themselves to working and living in a world of precarity, in the desperate hope of lifting their families out of poverty. The Gulf countries account for half of India's 18 million emigrants whose official remittances make up nearly a fifth of the total 87 billion USD overall remittance flows into India. Braving indebtedness, exploitative recruitment agencies, the uncertainties of fraud about jobs, wage theft, bonded labour and dire living conditions, health neglect, hunger, sexual harassment and even torture, migrant workers from South Asia risk their all to escape the hopelessness of unemployment at home in order to sustain their families living there.

Chilling and poignant are the stories of victimhood and vulnerability of migrants captured in the long form writings of journalists compiled by A.S. Panneerselvam in *Uncertain Journeys: Labour Migration from South Asia*. Journalist Rejimon Kuttapan's *Undocumented* is a story within a story of the journalist-migrant's tale of rescue encounters of other migrants in Oman. Their Eldorado dreams of escaping poverty have pushed many into deeper dispossession. One such is Appuni from Kerala, whose plight is hauntingly captured in the images of him driving his 800 Maruti car, his home and his coffin. During his 23 years of struggle in Oman, Appunni became a victim of a cycle of indebtedness that is writ into the *kafala* system of contractual guest workers—in bondage to their work sponsor. Appunni slipped from being a documented to an 'undocumented' overstaying migrant, just beyond the clutches of the police, taking up any odd job—even rag-picking—so as to send money home while simultaneously being desperate to return there himself. But once home, with no big house or goods to show for his toil, Appunni was an embarrassment to his family.

Nasreen Chowdhory and Paula Banerjee's edited volume *Gender Identity and Migration in India* at first glance appears to be an odd ensemble of journalistic and academic writings. However, it is arguably appropriate for a journal located in a School of Public Policy whose pedagogic space is also home to a Media and Communications Programme. It is curious that while journalism plays so significant a role in the formulation of public policy, and is the object of public policy, media and communications policy tends to reside almost exclusively in media and communications programs and rarely in public policy programs (Napoli, 2020). This review article is an attempt to engage with the possibilities that the intersection of journalistic and academic perspectives can bring to the policy space around migration governance and politics. As Chowdhory and Banerjee claim of their volume, it is to bridge the gaps between knowledge production in academia and the lived experiences of peoples and communities who constitute the subject and object of forced migration.

What these three texts have in common is a shared vision of the importance of foregrounding the liv-ed/-ing experiences of workers, irrepressibly on the move, the human face behind the macro statistics of labour and remittances; their struggles and resilience in navigating the ill-fitting disciplinary protocols of migration governance and policy regulation. Governance categories of legality and illegality seem irrelevant as Nepali journalist Janak Sapkota realises when he confronts the structure of permissive polities in the Nepal-Gulf migration corridor that facilitates human trafficking under the guise of foreign employment (Kalir and Sur, 2014). More bureaucratisation often leads to greater vulnerability, as underage women or women with minor children who are desperate for work are enabled in their attempt to circumvent the policy 'bans'; the cost however is a high one and not always of a monetary nature.

Similarly, the bonded labour conditions under the *kafala* system of contractual workers force migrants to escape abusive conditions and become undocumented illegals, or to grasp at the allure of free work visas. In a precarious labour market where the commodity on sale is labour, this can entrap migrants into deeper indebtedness. In migration corridors across the globe, categories of legality and illegality are not only unhelpful but worse; they strip the worker of his dignity. In this context, the author Rejimon Kuttapan in *Undocumented* cites the 'Platform for International Cooperation on Undocumented Migrants' which prefers to use the term 'irregular' migrants, and rejects legal definitions such as illegal which carry the implication of being undeserving of rights (2021,33).

These writings challenge the syndrome of 'seeing like a state' and argue for re-defining migration governance from perspectives that uphold the dignity and humanity of the vulnerable worker. Deepening the critique on inherited international legal and policy perspectives on migration, the academic activist Giorgio Grappi, in his writing in Chowdhory and Banerjee's collection, draws attention to a 2014 figure of 6000 Indians jailed abroad of

which more than half were in the Gulf countries. The reasons cited were mostly related to violations of visa rules—overstay, illegal entry, non-possession of valid documents, and violation of employment contract.

While narratives of victimhood bear witness to the plight of a vulnerable and powerless group, the analyses (both academic and journalistic) in these collections suggest that these precarious working and living conditions do not relate to exceptions or perversions of the system but 'are part of a complex reorganisation of the economy and production at a global scale in the last decades' as Giorgio Grappi in the edited collection *Gender Identity and Migration in India* states (2022,113).

Calling for 'understanding the institutional, political and social conditions that produce precarised conditions', Grappi shifts the focus of the migration discourse away from the 'mere description of a disadvantaged group' requiring humanitarian assistance [100]. Instead, he emphasises that 'migrations must thus be politically analysed and conceptualised vis-a-vis the global transformation of production, power and economy which includes a profound redefinition of state form, its capacity, its role and functions' [114]. It is argued that the vulnerability and powerlessness of migrants are embedded in the victimhood discourse of the international protection regime and need to be politically framed as a product of social relations shaped by institutional racism, labour market segmentation, and border regimes.

Journalists are no less acute in their more rooted analytical observations of the relation of global capitalism to the precarity of the migrant's experience. Witnessing the abject lives of hungry and relentlessly indebted and dispossessed Bangladeshi migrants in Singapore, Porimol Palma in *Uncertain Journeys* tentatively asks 'can human beings be reduced to a commodity within the global free flow of capital and business models?' [Panneerselvan 2018, 53–4].

The spatial and ideological location of the editors and the authors involved is the global south, and this is reflected in the centrality of the logic of inequality which informs these publications. The tension between the global north and global south in epistemic, legal and policy perspectives on migration governance is highlighted in editors Chowdhury and Banerjee's emphasis in *Gender Identity and Migration* on the unhelpful distinction between forced migration and voluntary migration. 'Forced migrants are always vulnerable people irrespective of whether their particular vulnerability comes from poverty or the political situation within society, but that it always results in severe persecution.' Does escaping persecution from life insecurity pose a different risk level, say than that of fleeing livelihood insecurity? [342]. Grappi provocatively takes further the discourse of economic migrants' 'unfreedom' as manifest in their conditions of work both in situations where employers invariably keep the passports of their workers, and in the incarceration of migrants in jails. The majority of the Indians crowding the jails in these countries are there for reasons of the violation of labour and visa regulations [113]. Inherent in the *Kafala* system of being obliged or rather 'bonded' to work for the Gulf employer who secures their legal work visa is the notion of the migrant as a guest contract worker. Those who jump their bondage on account of the abuse and exploitation they experience become undocumented, visa overstayers, and deportable.

While all three publications present the overwhelming material reality of migration, they also highlight that migration has become an integral or naturalised part of the lives of women and girls. Chowdhury and Banerjee invoke a feminist methodology and gender as an important category of analysis for migration studies. Gender draws attention not only to the different reasons why women and men migrate and their differentiated experiences but also to the 'feminisation' of migration, that is the 'emasculatation' of migrants especially forced migration, their embedding in a victimhood discourse and the naturalisation of their powerlessness and

disenfranchisement (Kapur, 2013). The case studies purport to represent the 'subject position of women migrants' and their agency as demonstrated in the 'choice' to migrate. They would have been more persuasive if the edited volume had provided a robust conceptual framing of the theme of gendering or infantilisation of the migration discourse (Johnson, 2011) (Manchanda, 2023). Also, the editors state they welcome authors' insistence on 'expanding the understanding of gender, social reproduction and belonging'. However, this reader frankly wondered about the logic of coherence of a book on migration when reading this eclectic grouping of chapters, including 'Women in India's CPI (Maoist) ranks', 'Gender, Gun and Guerrillas: Peoples War of Nepal' and 'The Reproducers and Facilitators of India's Gestational Surrogacy Market'.

In visibilising the multiple aspects of women on the move for labour, of note is Sailaja Menon's chapter 'If only I were a Male' in *Gender Identity and Migration*. It introduces the feminisation of domestic work and the continued undervaluation of unpaid and paid domestic work, and indeed even its recognition as work. Increasingly though, feminist labour studies scholars are analysing women's reproductive work not only as producing labour units but also as people and social relations. Menon locates the expanding economy of care within the context of the transnational globalised economy that now enters our homes not only with consumer products but also with the emerging economy of care. That economy is driven by urban middle class women stepping out to work and creating the demand conditions for girls and women from marginalised communities in the rural areas to migrate to the cities for work. Menon states that according to the National Domestic Workers Union, women, and children make up 90 percent of the 20 million domestic workers enumerated.

Menon co-joins these women on the move for work with women's migration for marriage. Over 20 million women move every year to their husband's homes. A large proportion of these poorly-educated young women from the rural areas swell the unorganised labour force. Menon

stops short of engaging with the issue of the invisibilisation of women's internal labour migration often getting camouflaged as marriage migration (Mazumdar, 2013), although she recognises that girls and women from tribal communities migrate for work not only on account of land alienation but also on account of aspiring to lives different from those that they lead. Too often, policy studies tend to conflate such labour migrations as human trafficking for slave domestic labour and sexual exploitation and seek to block women's access. Menon's essay dovetails with more comprehensive studies such as that of Neha Wadhawan (Wadhawan, 2022) which confronts the invisibilisation of women's labour migration, and advances the overwhelming reason of marriage migration, which obscures the secondary reason of post-marriage labour.

It is to the writings of journalists that we turn to bear witness to women's subject experiences of external labour migration. There is Rejimon Kuttapan's delicate representation of Jumaila's story that allows us a glimpse into the situation of Arabs (falsely presenting themselves as Sheikhs) contracting interim marriages and the impossibility of acquiring citizenship in the Gulf. This time the 'Sheikh', in reality a small farmer, took young Jumaila from Kerala back with him to his family of wives and children in Oman. Jumaila bore him two sons but unable to bear abuse, hunger and ill treatment that was meted out to both her and her sons, she escaped when her husband wanted to prostitute her. An absconding Jumaila lost her family visa. She luckily got a work visa as a domestic worker and was able to stay close to her sons. However, once the sponsors left, she became illegal and deportable. Eventually she was summoned by the Oman Ministry of Interior for a hearing pending likely deportation. Fortunately, the Omani officials granted the plea of her elder son, an Omani citizen, to become her Arab work-visa sponsor! (111-112).

Kuttapan and Panneerselvan's edited collections recount horror tales of victimhood and abuse of vulnerable women migrants. The women are exploited by greedy recruitment agencies that extort upwards of a lakh,

deepening their indebtedness. South Asian countries have imposed multiple 'protective' gender bans to restrict women below 30 years, or proscribe women with young children from migrating and also impose bureaucratized monitoring of children left behind by migrating women. Such restrictions mean that a journey to Saudi Arabia which takes a few hours can take up to 336 days, a protracted period when woman migrants in transit are at the mercy of human smugglers. Not only have these gender bans been found to be ineffective but they have also intensified women's vulnerability. Moreover, it makes women objects or targets of governance rather than agents for their own empowerment.

Reading agency in the lives of these persecuted migrant women domestic workers appears to be at odds with the dominant discourse of victimization narrated in the exemplary horror stories of migrants; the young Sri Lankan, Rizana, who was executed in Saudi Arabia on charges of infanticide and Ariyawathie, who was tortured by her employer in Saudi Arabia with hot nails and sharp objects being stuck into her body. Can agency be gleaned in the desperate choice to migrate, and in their resilience in contriving possibilities of escape or indeed, to want to re-migrate despite it all going wrong? It is important to tease out the meaning that women themselves attach to their experiences of virtual bondage—of continuous overwork, sleep deprivation (two hours of sleep in a night), hunger, health negligence and sexual predation. Thulasi Muttalingam was struck by some of the women speaking of their experiences as being empowering. 'I loved the freedom in Saudi Arabia to evaluate and understand myself as a person. Over here we face a barrage of criticism from family friends on how to behave,' says one of her interviewees, Stella [150-151]. It was not that Stella enjoyed any freedom to go out, it was constant work with barely six hours of sleep and even her weekly outing for shopping was under supervision. However, Stella enjoyed for the first time the 'freedom to process my own thoughts' she said. She worked as hard at home but in Saudi Arabia, the domestic work she did was valued. Ironically, she felt like a person with rights; and an exploration of the same would present interesting narratives.

Finally, a tailpiece about the regional or South Asian canvas in these works. The Panos collection of writings on the South Asian migrant experiences maps similarities in the narrative of persecution as well as indicates the need for a regional policy response to deal with the systemic problems of the precarious conditions of labour under global capitalism. Limited was the state's form and capacity (and the political will) to protect migrating citizens' rights. Suggestive was the need to develop a regional response to obviate competitive beggaring of wages amongst each other. Kuttapan brings alive the human story of fraternal solidarities across our states' difficult borders. Majeed, hurt and bleeding in the foot, survived his desert crossing in Oman to return to Kerala because two Pakistani Pathans carried him to the border. Jahanara from Bangladesh was lost having fled her abusive employer but at the migrant hive of Deira in UAE, she found Ratna from Mumbai, who offered her fish fry and the warmth and love of a family.

These three publications are important contributions to the growing interdisciplinary field of migration studies, bringing in scholarly perspectives and policy analyses from the global south. These writings, in visibilising and analysing the interconnection between gender, migration and labour, should pave the way for more informed research and policy making that is responsive to the complexity of not only why, but how women migrate. These writings caution against unhelpful gender bans that deny women agency. They remind us of the importance of taking into account the impact of migration on women's employment in the policy discussions among the stakeholders.

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6. COGNIZING CLIMATE REFUGEES AND PROPOSING MEASURES FOR THEIR RELIEF

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ABSTRACT

There are several instances around the world where people have been forced to migrate due to numerous issues, inclusive of the political circumstances, terrorism, famines. One of the key issue which happens to be missing out from this bracket is the migration induced by the climate. If all the aforementioned earlier can cause force migrations, then it is possible that climate change can also induce forced migration. This paper will discuss the problems faced by the climate refugees in the current world, as this paper will showcase the manner in which the climate refugees have often been neglected from the focal point. It is observed that the Global North had often neglected to take the climate refugees as a part of their refugee system and its laws, this had left a massive void for these refugees, who had come seeking refuge under extraneous circumstances, which they had been facing and led to their migration from their homes domestically/internationally. Climate Refugees and their problems have often been deemed to be under an ambiguous conception, due to misunderstandings by several researchers. Therefore, the paper will shed light on the ambiguous concepts elaborate on the International Treaties and their take on the climate refugees. The paper highlights the vital need for recognition of people displaced by environmental crises and the inhumanity of ignoring them in the conventional refugee systems.

Key words: climate refugees, forcibly displaced, refugees, migration, policies

Cognizing Climate Refugees and Proposing Measures For Their Relief

INTRODUCTION

The term 'Climate Refugee' refers to individuals affected by grave environmental circumstances, which lead them to be displaced from their habitats, in pursuit of shelter at a new space, safe from dire climate impact.ⁱ Such displacement is also referred to as 'Environmental Migration'. These terms have come into use in recent years, but these effects have been recorded in ancient history. Climate change along with natural disasters has played a crucial role in shaping the 'Atlas of Migration' which records the manner in which inhabitants were distributed among land masses on Earth.ⁱⁱ Survivors of the great biblical flood aboard Noah's Ark were climate refugees.ⁱⁱⁱ So were the 1.15million people displaced by the Indian Ocean Tsunami which killed over 225,000 in 2004^{iv}; and the survivors, if any, of the sinking of Krishna's Dwarka off the coast of Gujarat^v.

Not all climate events are sudden. Some could be gradual, possibly stretched over long durations, such as the drying up of rivers and lakes, rising sea levels, or creeping desertification. Also, not all displacements are caused by nature. These could be man-made, such as the discharge of harmful chemicals by factories or mines; forest fires caused either by erring dwellers or lit intentionally by farmers and real estate developers to clear the land; radiation emanating from meltdowns in nuclear power plants, etc.

Thus, while a 'refugee' is one who seeks 'refuge' in a new community, a new place, or area, those forced to do so by sudden or gradual changes in climate or the environment are climate refugees^{vi}.

SOURCES OF ENERGY HAVE DRIVEN MIGRATION

It is well known that large migrations across seas and continents from 45,000 years ago to about 13,000 years ago occurred due to rise in sea levels post the ice age^{vii}. Human and animal energy gave way to coal and the 18th

and 19th centuries brought about a major turnaround across the world due to industrialisation, which surfaced as the most prominent driver for the movement of people from farms to industries. At the close of the 19th century, prominent 'migration routes' showcasing the importance of economic factors or hunger for jobs by people migrating to more prosperous towns have been identified by E.G. Ravenstein^{viii}.

Coal fueled the industrial revolution as the major source of energy and Britain, which was the largest producer, used its dominance in this energy source to the fullest. The rise of industrialisation of European colonial powers was fueled by the energy provided by coal, their progressive growth was powered by steam engines which ran steamships and railroads. Even though its effects on the environment are well documented, coal continues to be used today to generate about 50 percent of the world's electric power. In the case of large polluters such as China and India, this is higher; while China burns about 4.2 billion tonnes of coal, India stands second with 1.2 billion tonnes^{ix}.

Oil and gas grew in the 21st century as major energy fuels, largely for transportation and heating, but also for power generation, and the world adopted these with gay abandon, impervious to their ills^x. When enough gas could not be found on land, drilling rigs under river basins and oceans were set up, gas tankers began carrying compressed natural gas across the world, and port terminals came up to import gas and transmit it through gas pipelines in importing countries.

Even though there were alarming signs of smoke, fog, and pall all along the way, only the positive economic benefits of steam, coal, oil and gas revolutions were ever taken into account by leaders in decision-making positions. The sources of energy fuelling each stage of progress had obvious direct effects in causing people to migrate for jobs, and to vacate lands and spaces acquired or taken by governments and corporations to run their industries and power projects. They also had certain indirect effects on

the health of humans, both of current and future generations, that would compel people to shift from one place to another.

Nuclear disasters gained notoriety after Fukushima and several countries abandoned their plans of modernising their ageing nuclear power plants. However, the acknowledgement that nuclear energy is cheap and is the cleanest dependable baseload power appears to have overtaken the most environmentally-conscious nations today and as a result, both Japan and Germany have reversed their plans and are getting on depending on coal and reviving and modernising their nuclear power plants^{xi}.

In retrospect, it is revealing that the impact of our choice of energy sources on the planet's ecosystems has long been ignored in favour of development and national security, and this is the phase when the world has the chance to transform its old retinue. Latecomers to development are being noticed for their volume of emissions, but there are large parts of the world in Africa which are yet to emerge and transit through these stages of development in their energy sources. Every step of the evolution of energy has been fraught with climate consequences, much damage has already been done, and it continues to be done every passing day.

Climate change is not just a theoretical calculation or a thing of the past. It is very real at present and it could come to haunt us in the future if it is not remedied. In today's world, rapid environmental change is widely believed to be driving floods, heatwaves, global warming and the rising of sea levels in several parts of the world^{xii}.

Scientists at the United Nations' Intergovernmental Panel on Climate Change (IPCC) have reported that we are on a disastrous path of warming within the range of 2.3 degrees to 4 degrees Celsius by 2100CE. IPCC's 6th Report of the Third Working Group states "Total net anthropogenic Greenhouse Gas (GHG) emissions have continued to rise during the period 2010–2019, as have cumulative net CO₂ emissions since 1850. Average annual GHG emissions during 2010–2019 were higher than in any previous

decade, but the rate of growth between 2010 and 2019 was lower than that between 2000 and 2009'^{xiii}.

Commitments made by 195 signatories of the Paris agreement, if adhered to, would shave off just a few tenths of a degree and a large gap would still remain to reach the safe goal of 1.5 to 2 degrees^{xiv}. Essentially, the world has become conscious but we are making slow progress. Rising global temperatures result in the melting of ice and glaciers, not just at the polar icecaps but on mountain ranges across the world, and this results in rising sea levels. Climate change can be defined as 'the long-term change in the planet's average weather patterns along with changes in the frequency and severity of these patterns.'^{xv}

When people affected by these changes seek refuge in other areas, they often face stiff resistance. Their livelihoods are destroyed, often their neighbourhoods or whole cities are under threat. The lack of any arrangement for shelter remains a predominant point at issue which affects the lives of climate refugees. For those who do not suffer themselves, the suffering of other people sometimes appears to be of little concern, even though there are effects that harm all. Much work needs to be done to raise the consciousness of our shared global environment and protect people in danger.

Severe heatwaves which affected parts of South Asia, Africa, Europe and California during the summer of 2022 have harmed the production of food, leading to alarming rates of hunger. Quoting from the first joint report of the UN Office for Coordination of Humanitarian Affairs, the Red Cross, and the Red Crescent published in October 2022: 'Heatwaves already kill thousands of people every year, and they will become deadlier with every further increment of climate change. We hope this report serves not only as a wake-up call but also as a road map. Heatwaves demand a humanitarian response that is locally grounded, that acts quickly on the basis of data and analysis, and that works in partnerships with local governments, civil society and development actors to protect the most vulnerable people.'^{xvi}.

'Extreme heat will also increasingly undermine agriculture and livestock systems, degrade natural resources, damage infrastructure and contribute to migration. The International Labour Organization projects that economic losses related to heat stress will rise from 280 billion USD in 1995 to 2.4 trillion USD in 2030, with lower-income countries seeing the biggest losses.'^{xvii}

The severity of these impacts often goes unnoticed in the rest of the world except for the effect of rising food prices^{xviii}. There are long-term effects such as shifts in crop patterns which drive farmers to quit farming and migrate elsewhere and looming global food scarcity; the impact of climate change on the the global south is particularly severe. The people most affected are those who scarcely contribute to climate change and the leading question is—what should be done to take care of them?

At the 27th Conference of Parties (COP 27) of the United Nations Framework Convention for Climate Change (UNFCCC) at Sharm El Shaikh which was attended by 45,000 participants, this issue was raised and pressed by several European nations. After much debate, a resolution was passed for rich countries to provide aid to poorer nations hit by climate disasters through a dedicated fund. A sum of 270 million USD has been committed which would be operationalized under the five year action plan titled 'Action for Climate Empowerment' during UNFCCC's COP 28 next year^{xix}. The UN Executive Secretary for Climate Change, Simon Steel, admitted that the issue was being deliberated upon for decades: 'We have determined a way forward on a decades-long conversation on funding for loss and damage—deliberating over how we address the impacts on communities whose lives and livelihoods have been ruined by the very worst impacts of climate change.'^{xx} The UN Secretary General also announced a 3.1 billion USD plan to develop early warning systems.

These groundbreaking decisions are a good start, they do tackle sudden and severe climate disasters, but they do not tackle the displacement of people in case of severe gradual damage to their habitats. While people affected by

disasters would be assisted by this fund to relocate, this relocation would remain within national borders.

International migration has long been a contentious issue, particularly after the recent flood of refugees fleeing from the war in Syria to Europe. Several EU member nations refused entry for refugees, even though this contravened against EU law^{xxi}. The plight of small island nations that could completely sink under rising ocean levels is completely ignored. This problem is being faced by several Pacific islands today and in the future, could be faced by entire low-lying nations. The impact of climate-induced migration, even if the lands are not sinking, but are damaged and uncultivable, is acute and severe in the global south, where the state is unable to provide adequate relief for the displaced persons.

International covenants and treaties on refugees do not cognize climate or environmental refugees. The concern post the World Wars was about human rights, hence displacements due to war and political abuse have been acknowledged, but displacement due to climate change stays uncognized. The root of our problem lies perhaps not in defining climate refugees, but in the reluctance of member nations to burden themselves with the plight of others who are suffering. Since the world does not accept the existence of climate refugees, there are no international safeguards for them to be a part of the refugee system and they are left to fend for themselves. The UN Secretary General Antonio Guterres, who is a former High Commissioner for the UN High Commission for Refugees, acknowledges their plight thus:

'As forcibly displaced not covered by the refugee protection regime, they find themselves in a legal void.'^{xxii}

The UN has acknowledged this plight obliquely through the UN Chronicle since 2009, but perhaps other pressing matters prevented this body from taking charge of the matter and from doing anything substantial on the ground to build a consensus to alleviate it: 'The UN Chronicle is not an official record. It is privileged to host senior United Nations officials as well as

distinguished contributors from outside the United Nations system whose views are not necessarily those of the United Nations. Similarly, the boundaries and names shown, and the designations used, in maps or articles do not necessarily imply endorsement or acceptance by the United Nations.^{xxiii}

With the fierce severity of environmental disasters already being felt, it is time to confront the problem and generate a duty of care towards those lives and livelihoods affected by climate change.

TYPES OF CLIMATE REFUGEES

To find solutions for the problems faced by the climate refugees, at the outset, we must look at the types of climate refugees present around the world. There exist two types of climate refugees who can be categorised as follows:^{xxiv}

Internal Climate Refugees: The World Bank has delineated 'Internal Climate Refugees' as the people who have had to move or flee within the boundaries of their country due to forceful climate-driven migration. This internal movement is estimated to account for a massive chunk of the total number of people who happen to be forced to relocate due to the impact of climatic change.

External Climate Refugees : External climate refugees or 'International Climate Refugees' can be defined as the people who have had to move or flee beyond the borders of their countries due to the devastating consequences of adverse climatic change. The number of international climate refugees is not doubt relatively lower in number since not many countries still recognize that climate-driven circumstances can cause the people to cross borders to seek refuge. International refugees can also be understood as individuals who happen to flee their country owing to perceived reasons of safety and refuse to go back due to perceived real or impending disasters. A perfect example for this category is Ioane Teitiota, the Kiribati Citizen, who sought refuge in New Zealand on the basis of

climate change in his homeland. His island is sinking and the effects of ocean level rise are shockingly evident. He was, however, denied the refugee status in New Zealand^{xxv}.

'CLIMATE REFUGEES': A LONG-NEGLECTED TOPIC

Until early in the twenty-first century, the notion of environmentally-forced displacements was deemed to be something that would be faced in the future, and therefore did not attract immediate concern. Research on this aspect of displacement was largely absent from the study of migrations on account of the dominance of what we can deem to be an 'Economic Paradigm'^{xxvi}. Until recently, the majority of the mass migrations on the one hand emanated from the push for economic betterment which led to migration from the global south to the global north, and on the other, was attributed to the 'Political Paradigm' which included displacements due to people fleeing from totalitarian regimes, coups, wars or terrorist threats^{xxvii}.

The 1951 UN Convention on refugees and its Protocol of 1967, which were signed by 145 state parties, defined the principle of non-refoulement, which restricts the ability of host states to repatriate political refugees, and require states to cooperate and ensure that the rights of refugees are respected and protected^{xxviii}. It is understandable that the post-war period focused the UN's attention towards political refugees, but these paradigms have for long overlooked the connection between the environment and migration, and research on people displaced by the environment has been scarce.

We can distinguish five specific aspects which can act as push factors for migrations:

- Natural Disasters and Catastrophes
- Industrial Accidents
- Developmental Projects that change and involve damaging impacts on the environment
- Progressive Degradation of the environment and climate change

- Environmental Consequences of wars, terrorism or other political conflicts

It is these factors that are found time and again, to be the drivers for individuals to take refuge abroad. The countries of the global north consistently neglect these concepts as part of their refugee systems and laws.

One of the many factors which might have impeded the research of connections between the environment and migration is that the world perhaps did not accept the conception of environmental refugees in the absence of causal empirical proof. The evidently ambiguous conception of the unstable relationship between the empirical character of the subject and the disorganized nature of the work involved in collecting the data, has led the way for many other problems to surface from a unidirectional connection between migrations and environmental changes to the façade of the well-established outcomes from the UNHCR's 2008 Population Cascades study^{xxix}.

Following the Population Cascades study, a number of researchers have corroborated that when detrimental impacts are caused on the masses due to ghastly environmental degradations, they are often followed up by factors such as socio-economic problems, which in turn result in political situations of the region coming under serious threat. These threats can vary from case to case and region to region, but their numbers can show the surge or ebb in the flow of migration. There can also be instances of scientific error by which assumptions are made which are often oversimplified as a part of the process of analysis. Sometimes, this results in greater more attention being paid to the political situation of the region rather than to the deteriorating environmental circumstances. The political reasons for migration as fallouts of the wars in Syria and Ukraine for instance, overshadow the passive shifts in the environment, for instance, successive failures of crop harvests, or the breakdown of electrical and gas pipelines for heating, the closure of schools for children, which could actually be the driving force in influencing large-scale migration.

Consequently, the controversial usage of the term environmental refugee in international fora is often subjected to criticism. Norman Myers' study claims that 'there are nearly 150 million refugees around the world'^{xxx}. These refugees are often accused of flooding host nations, usually rich first-world countries in the global north. This flooding results in the harsh policies adopted by the aforementioned rich countries such as the closing of their borders or the increased hostility of citizens of host countries towards the refugees. The United States' stance of building a wall on its southern border with Mexico could be a perfect example of building hostility towards refugees, despite the fact that the US calls itself the 'melting pot' of humanity, irrespective of people's backgrounds and circumstances.

Another researcher, Sherlyn MacGregor, states : 'the term "environmental refugee" conflates the idea of disaster victim and refugee, its use brings with it the danger that the key features of refugee protection could be undermined and the lowest common denominator adopted.'^{xxxi} Macgregor further explains that a political problem exists in defining the sociological changes that occur with climate change and that these are best understood through a feminist lens, since it is undeniable that the effects of climate change would be gendered^{xxxii}.

The environment and its detrimental impacts, in most instances, occur in the natural ecological geosphere, distinctly separated from politics. Therefore, the term 'environmental refugee' should be further encouraged to allow for ethical treatment of incoming refugees by host countries in a manner similar to economic or political immigrants. Destination or host nations, often burdened by their own national problems, look to diminish their responsibility to assist and protect other people, and they refrain from acknowledging environmental refugees to be on the same page as other forms of refugees^{xxxiii}. In fact, three European nations—Poland, Hungary, and the Czech Republic—contravened European Union law and refused Syrian refugees in 2016 and, as the world has seen, they were reprimanded but not penalised for doing so^{xxxiv}.

The UN High Commissioner for Refugees is no doubt aware of this undefined category as the issue has been raised several times at several major fora, but refrains from taking quick concrete action, perhaps in order to not ruffle the feathers of donor nations. This would obviously nudge host nations towards prudent care under the accepted norms of human rights. If environmental motivations were to be treated as a subset of political motivations, such refugees would fall under the international definition of refugees and have the right to be granted protective charge by their host nations. However, for all practical purposes, climate refugees, have thus far been excluded from any relief under the human rights pacts.

Consequently, several terminological variants, have been used by researchers to cite the individuals who happen to be fleeing environmental hazards and other grave disturbances. Though the term 'environmental refugees' has frequently been used, such migrants have also been referred to as 'environmental migrants' or 'ecological migrants' or 'ecomigrants' and several other variants in French, Italian, German and Spanish. Some of these terms can be assigned to be used to specifically define individuals who have been displaced by developmental projects and industrial accidents. Perfect examples for industrial accident-induced domestic migrants are those affected by the Three Mile Island in USA, the Bhopal Gas Tragedy in India, and the Chernobyl Disaster in erstwhile USSR. The immediate impact of an industrial accident also often leaves in its wake a degradation of the habitat and a loss of local jobs. Therefore, the crucial factor of degradation of the environment cannot be taken away from the aspect of determining the plight of an individual, who seeks the status of refugee in a foreign land, whatever be the cause.

INTERNATIONAL TREATIES ON ENVIRONMENT IGNORE REFUGEES

The Stockholm Declaration of 1972 at the United Nations Conference on the Human Environment, was the first to bring the attention of world leaders to the growing harm that was being caused to the planet. The first

principle adopted at this convention stated that humans have a right to use and enjoy nature, but this right comes with the duty to protect it.^{xxxv} The second principle stated that natural resources are limited, we must use natural resources carefully, and that preservation of resources for future generations is essential and depends on effective planning and management. Principle 22 put the responsibility very clearly on member states thus: “States shall co-operate to develop further the international law regarding liability and compensation for the victims of pollution and other environmental damage caused by activities within the jurisdiction or control of such States to areas beyond their jurisdiction”^{xxxvi}.

This was a notable first step, but the underlying assumptions were that humans were somehow endowed with the right to use anything in nature, and could be relied upon to manage, plan, and preserve these 'resources'. Though this utilitarian underpinning was evident, this was perhaps the way the world functioned in that period, benefitting from exploiting everything provided by nature was presumed to be our right. The United Nations Environment Program was created in 1972 to facilitate the required shifts. A 'World Conservation Strategy' was formulated to integrate economic and environmental management. The dichotomy between the aims of economic development and environment management was indeed well articulated and this impetus drove several member nations to create laws to regulate and protect the contamination in their water and air^{xxxvii}.

This was followed by the Brundtland Commission's report titled 'Our Common Future'^{xxxviii}. This went much beyond management and planning and highlighted in the concept of sustainability, or using resources such that we leave enough for our future generations to use. The report stated: 'Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs.'^{xxxix} Utilitarian again, no doubt, but with a mature warning that caused a stir in the global intellectual circles of member nations to conserve and protect their environment. Environment protection laws

were enacted and regulating bodies created in the parliaments and assemblies of the leading nations of the world to curtail the excessive use of non-replenishable resources and to protect their air and water.

The Montreal Protocol on 'Substances that Deplete the Ozone Layer' was adopted by 193 signatory nations in 1987 to specifically tackle the growing ozone hole in the earth's atmosphere by phasing out Hydrochlorofluorocarbons (HCFCs). HCFCs were successfully removed from use across the world and were replaced by hydrofluorocarbons (HFCs) which did the job and the ozone hole began closing well, on the path to be fully repaired. However, it took the world a couple of decades to uncover the fact that HFCs themselves are very potent greenhouse gases. Although they survive in the atmosphere for less than thirty years or so, their effects on the earth's atmosphere could be thousands of times greater per unit of mass than that of carbon dioxide. These are now being phased out under agreements arrived at in Kigali in 2016, which came into effect in 2019^{xi}. This push will bring forth new chemicals to replace HFCs and to bring forth in the world an era of new climate-friendly refrigerants.

It seems to appear in retrospect, though, that the business interests that would profit from changing over to HFCs might have been instrumental in driving out HCFCs. HFCs were not declared as an interim step, it was only later that their effects were properly assessed^{xii}. Climate scientists need to learn to be alert to manipulation, if any, and must think ahead of the commercial curve of the profit interests of businesses when such radical shifts are engineered.

In 1989, the UN General Assembly passed resolution 44/288 which created the United Nations Conference on Environment and Development. The clash between development and the environment, which harmed the planet was evident and acknowledged, and the world collectively set out to address this clash under the guidance of world leaders at the United Nations.

The UNConference on Environment and Development, informally known as the Earth Summit, at Rio de Janeiro in 1992 was a high-level global summit which saw huge participation of civil society, and also a host of protesters to grab headlines which were splashed across the world. Being a plene-potentiary conference, the diplomatic representatives carried the authority of their governments to commit to schemes at the summit.

Agenda 21 was adopted by a resolution at this summit as a charted path for the 21st century which stressed on action to save the earth^{xliii}. Para 1.3 of Agenda 21 states 'Agenda 21 addresses the pressing problems of today and also aims at preparing the world for the challenges of the next century. It reflects a global consensus and political commitment at the highest level on development and environment cooperation. Its successful implementation is first and foremost the responsibility of Governments. National strategies, plans, policies and processes are crucial in achieving this. International cooperation should support and supplement such national efforts. In this context, the United Nations system has a key role to play.'^{xliiii}

While much was stated in the Agenda 21 about alleviating poverty, providing funds to developing nations, liberalising markets and trade restrictions, and achieving sustainable development, there was only a passing mention of the effects of climate change on rising coastlines. It was stated in Para 5.3: 'There is a need to develop strategies to mitigate both the adverse impact on the environment of human activities and the adverse impact of environmental change on human populations. The world's population is expected to exceed 8 billion by the year 2020. Sixty per cent of the world's population already live in coastal areas, while 65 per cent of cities with populations above 2.5 million are located along the world coasts; several of them are already at or below the present sea level.'^{xliiv} However, no steps were outlined for action to mitigate the harms caused to people dwelling in coastal areas who would be affected by these shifts.

The connection between poverty alleviation and sustainable development was to be balanced by strategic investments and open markets, as that was the flavour of the times with the USSR having broken up into CIS states. The success of free markets in prevalent economic and political opinion was considered to be the universal mantra for achieving sustainable development^{xlv}.

At this summit, 173 nations of the world also signed the Rio Declaration with 27 universal principles, and a treaty to create the United Nations Convention on Climate Change (UNFCCC), which has done commendable work since then^{xlvi}. The Convention on Biological Diversity was also created at this summit, and a declaration was adopted to spell out the principles of forest management. The impending plight of people displaced by climate degradation was ignored. There was no mention of environment refugees or of steps to be taken to alleviate their impending plight.

The UNFCCC went to work and in 1997 succeeded in creating the Kyoto Protocol. This was signed by 160 member states and it defined the 'Clean development mechanism' and the concept of 'Common but differentiated responsibilities'^{xlvii}. The mechanism allowed countries to develop projects aimed at emission reductions in other countries and get credits which could be traded to give form to the principle that the polluter must pay for causing the pollution.

The US however backed out of the Kyoto protocol, as it was not ratified by the US legislators, and this was followed in December 2011 by Canada's withdrawal from the protocol, effective Dec 2012. This was the deadline for the extended first period of commitment and Canada had committed to reducing its greenhouse gases by 6 percent by this time, which obviously had not been achieved. Annexure 1 signatories, 38 developed nations, had committed to specific reductions in their greenhouse gas emissions^{xlviii}. Targets had been committed to by signatories with percentages of reduction in each of the six major greenhouse gases emissions adding up to gross 5.2 percent reductions over 1990 levels^{xlix}. It was obvious that the US

and Canada did not want to achieve the committed reductions and there was resentment that non Annexure1 developing nations have not been given any target under the principle of common but differentiated liabilities.

This caused the emissions-trading norms agreed to at Kyoto to be stillborn at least until the second commitment period, when the remaining signatories readopted a scheme for emission reductions at Doha which came into force in 2020 to reduce emissions by 18 percent over 1990 levels by 2030ⁱ. The trading mechanism for emissions is revived and is back in place though still in its nascent stages. The Adaptation Fund created at Kyoto to facilitate the Clean Development Mechanism was later used to serve the CMA mechanism under the Paris agreementⁱⁱ.

UNFCCC continued the hard work of building awareness and achieving consensus on sustainability through the Stockholm Convention on Persistent Organic Pollutants of 2002, the Johannesburg Declaration for Sustainable Development in 2002, the UN Collaborative Program on Reducing Emissions from Deforestation and Forest Degradation in Developing Countries (UN-REDD) of 2008, the United Nations Conference on Sustainable Development (Rio +20) Summit, amongst others.ⁱⁱⁱ These, along with regular updates on the state of the world's environment with well-articulated scientific research conducted by the IPCC, paved the way for an environment agreement to curtail emissions—which the Kyoto protocol had failed to achieve.

UNFCCC convened meetings of the Committee of Parties (COP) every year and came close to achieving its mission at COP 15 at Copenhagen in 2009 which was undermined by developing nations led by India and China with support of the G77. These developing nations, grouped as non-Annexure1 parties, refused to be blamed for their high emissions taking the stand that their per capita emissions were indeed miniscule. Annexure1 parties committed to provide 100 billion USD towards the costs of mitigating carbon emissions and the Green Climate Fund was established to

manage and disburse these funds. The developing nations did not commit to an agreement as the costs of mitigation were estimated to be more than 2 trillion USD. All that they agreed to do was to look at their carbon sinks, look at their sources and quanta of greenhouse gas emissions and to follow the work done by IPCCⁱⁱⁱ.

This process of negotiation continued at successive meetings of the COP until they finally converged at the 21st COP meeting at Paris in 2015. However, the harsh targets for reducing emissions which had been proposed earlier were replaced by a watered-down version which allowed signatory nations to propose their intended nationally-determined contributions without any guiding parameters. The agreement was signed by 195 nations with open-ended, self-decided targets, to be ratified by their parliaments, and a month after 55 signatory nations came back with their instruments of ratification, acceptance or approval, the agreement came into force from November 2016.

President Obama had campaigned relentlessly for building the consensus required for Paris, to the extent of a making a joint announcement with the Chinese President a couple of months before COP21. But there was a change of guard and the *enfant terrible*, the United States, acted up again and served notice to the UNFCCC, withdrawing from the Paris agreement under executive orders of President Trump in 2017, which would be effective from 2020^{iv}. President Biden withdrew that notice by reversing this decision in 2021, and the US is back on board, though perhaps still way behind in its monetary contributions to the coordinating agency UN^{iv}.

These flip-flops reduced the impact these accords could have had, and squeezed the funds that were committed at Paris to be distributed to emerging nations to meet the challenges of shifts in the carbon intensities of their economies. It has been evident that the shift towards renewable energy would benefit the global north as companies in developed nations would hold the patents for newer technologies. It had been agreed at Paris

that developed nations would provide through the Green Climate Fund, an annual contribution of 100 billion US Dollars to contribute to the developing nations towards their shifts to renewable energies and towards meeting their nationally determined contributions from 2020 onwards. Funds, however, have been delayed due to the pandemic and a slack in contributions; it remains to be seen how much actually flows through to poor nations.

In an effort to achieve consensus, the UN seems to have diluted the due process of goal-making itself. The nationally self-determined contributions in carbon reduction, which have been offered by signatories, do not add up to the goal of limiting global warming to between 1.5 and 2 degrees Celsius. Starved of funding this switch to renewables, the poorer nations have been left holding their bowls for alms, and while China and India have made notably large strides in setting up very capacities for solar power, several other members of the G77 have been left far behind for lack of funds. To a large extent, the world's rich nations have also lost their market for solar panels and other peripheral equipment to generate and to store renewable energy, to China, which developed huge capacities for producing the solar equipment required for this switch and has offered it at expensive prices without the need to pay royalties to the west^{lvi}.

In all this, the plight of humans who would actually suffer the brunt of climate change seems to have been lost. Funds for technologies are being provided whereas those harmed by climate impact need funds for survival, for their lost livelihoods, for food and shelter for their families.

The UN had another embarrassment during this period. The Millennium Development Goals, very ably crafted at the Millennium Summit of 2000 in hope of significant achievement in reduction of poverty, had also failed. A face-saving device in the form of the Sustainable Development Goals was adopted by member states in 2015 under its Sustainable Agenda for 2030^{lviii}. These, too, are open ended, with no specific targets for any nation to meet,

though with well-developed reporting and review procedures with effective feedback loops.

It is no surprise that the plight of climate refugees has been landing on deaf ears. The plights of coastal regions and small island states and rising sea levels had been mentioned in Agenda 21 but nothing in all these years was done to arrive at a consensus to take care of the people living there. Adequate attention has not been paid by the UN bodies to creating an effective remedy that brings forth a direct effect on the ground. Their efforts are still in the process of reaching out to a large number of destination countries to accept environmental refugees, and it is obvious from the limbo in which this matter hangs that member states value their own national interests higher than the plight of others.

An example of this impending plight is evident in the case of Ioane Teitiota versus The Chief Executive of Ministry of Business, Innovation and Employment at the Supreme Court of New Zealand^{lix}. This case is of significance in the field of climate-induced migration. It was filed by the plaintiff Ioane Teitiota for refugee status and was rejected by New Zealand in 2015. Since then, Ioane Teitiota has filed several petitions in the United Nations based on the threats to his and his family's lives because of rapidly altering climate conditions in his home island nation of Kiribati. However, the UN Human Rights Committee has so far refused to grant him relief, the main reason being that the applicant's right to life was threatened not by war or political strife, but due to environmental change. The UN Committee ruled that there should be adequate circumstances to proceed in the aforementioned case, and that the prospect of his sinking island nation due to climate change was not one of them. Kiribati could adopt adaptation/mitigation actions which would possibly eliminate this dire prospect. A favourable decision, if granted, might result in violating international norms in the destination nation-states, both at national and international levels^{lx}.

This case showcases the inability of international fora to intervene and protect individuals whose lives are under threat due to fast-rising sea levels and inaccessibility to natural resources. All Teitiota's efforts were in vain as he was deported back to his native country of Kiribati. This is not the first case to come into prominence. In 2014, a judge in New Zealand had granted rights to two Tuvalu residents immigrate to New Zealand on humanitarian grounds. Despite this precedent, Teitiota's case is indeed the first where an individual has been fighting a losing battle for his rights of being an 'environmental refugee' on the international stage.

It needs to be mentioned here that New Zealand did make an earnest attempt in 2017-18 to bring in special humanitarian provisions for granting refugee visas to Tuvalu and Kiribati climate refugees. It was evident that both these neighbourhood island nations were sinking, but the proposal did not go through, and the matter was laid to rest^{lxi}. Australia too had promised aid of 300 million AUD over four years to assist the Pacific Islanders. Its failure was ascribed by analysts to the island nations of Kiribati and Tuvalu themselves, however the real reasons should not be cursorily assessed and would require a thorough study of the proceedings in the NZ Parliament.

The world seems to be arriving at a sorry consensus that climate refugees should be contained within their own countries, if possible with aid, rather than being encouraged to move across borders, as a government spokesman quoted by Reuters stated 'The best response, where feasible, is effective adaptation and internal relocation, rather than cross-border resettlement as a first response'^{lxii}.

In the Philippines, more than 382,000 persons were displaced in 2022 due to natural disasters and conflicts in Mindanao. According to the UN Office for Coordination of Humanitarian Affairs, of these, 265,000 are reported to have returned to their homes but 117,000 are still reported to be displaced^{lxiii}.

Closer home, India's neighbour Bangladesh has a portion of the Sunderbans in the Ganges delta sinking and has already given shelter to over

a million ostracised Rohingya refugees from Myanmar's Zakhine province. India has also hosted about 18,000 Rohingyas as per official figures. Borders are often porous in the global south and migration is easy.

The circumstances of their emigration appear to be political, but Bangladesh has housed several thousands on an island that is sinking. India has put those that could be identified and rounded up in camps, as a precursor to pushing them back^{lxiv}. The Geneva Convention regulates political emigres, and, in this instance, it might suits both India and Bangladesh to club the Rohingyas into this category. The fact of the matter remains, however, that no country, whether in the global north or south, wants to host refugees not defined under UN Conventions.

UN CONVENTIONS ON REFUGEES

The Geneva Convention on Refugees is considered to be the gold standard by which International Law for Refugees operates^{lxv}. Our reason for referencing the Geneva Convention or the 1951 Refugee Convention is to articulate its importance and the manner in which it governs and protects individuals who happen to seek refuge in another country. Refugees are entitled to, *inter alia*, the right not to be punished for entering the host country illegally, the right to fresh identity documents, the right of protection from *refoulement* or repatriation, the right to travel within the territory, the right to freedom of religion, the right to public relief and access to courts, the right to housing and education and the right to work.

However, since the concept of climate refugees was absent when its legal framework was made, signatory member states, particularly those that would need to host climate refugees, do not consider climate refugees to be a part of the refugee convention. Refugees are defined and cared for, but climate refugees are not specifically covered.

Therefore, during deliberations, the signatory states of the 1951 Refugee Convention find themselves in a dilemma in debates on the topic of climate

refugees. To their credit, the signatories of the Geneva Convention had proposed the formation of a 'Task Force on Displacement'. Instead of making it a part of this convention, however, this task force was established under the Paris Agreement. It states that the task force would create parameters for climate refugees using different and integrated approaches to diminish or address any kind of displacements caused due to the detrimental impacts of the climate change^{lxvi}.

It is important to mention Article 33 of the 1951 Refugee Convention, which curbs the destination countries from forcing refugees back to their native countries where they might face life-threatening circumstances^{lxvii}. This is of utmost importance and signatories explicitly take measures directed at intercepting and averting possible deportation of persons who might face life-endangering situations, along with situations that might arise which could harm the individual's freedom.

The UN Global Compact on Refugees was approved by the UN general Assembly in 2018^{lxviii}. It had set up guiding principles for human rights. It had laid out the responsibilities of businesses at its 2011 summit founded on the three pillars of:

1. The state's duty and responsibility to protect human rights
2. The responsibility of businesses to respect, identify, prevent, mitigate and account for the anticipated impacts of their business activities on human rights; and,
3. Access to remedies for all

However, in the form of guiding principles, these served to dilute the responsibilities of states by being voluntary. The same principles could have resulted in states making their own strong laws to implement these, had there been a treaty to this effect. It was hoped that a treaty would result in the 2022 summit, but this too was watered down as its ambitions were contained very specifically in only these four goals, all leading to pushing the problem back to suffering nations as an internal rather than an international issue:

- Ease pressures on host countries.
- Enhance refugee self-reliance.
- Expand access to third country solutions; and
- Support conditions in countries of origin for return in safety and dignity.

These expressly and narrowly defined ambitions served the purpose of the global north, the targeted host nations, very well. This terribly narrow mindset needs to be expanded in order to bring forth a fraternal ambience on the question of climate refugees.

The UN High Commissioner for Human Rights has acknowledged in 2021 that environmental effects have displaced more than 21 million people annually since 2010, and that this was twice the number of people displaced by wars, violence and conflicts^{lxi}. The Global Report on Internal Displacement had estimated in 2018 that more than 61 percent of displacements were due to natural disasters; and even though in 2021 conflicts and violence intensified, out of 38 million internal displacements, 23.7 million or 62 percent were due to natural disasters.^{lxii} A study of 2017 in *Science* magazine had stated “Weather-induced conflicts in developing countries spill over to developed countries through asylum applications...When temperatures in the source country deviated from a moderate optimum of around 20 Degrees C that is best for agriculture, asylum applications increased.”^{lxiii}

The World Bank in its report of 2018 claimed that 143 million people would be displaced internally by 2050^{lxiiii}. The focus was deliberately shifted to internal displacements with these high figures, blotting out or at least overshadowing for the time being in the international global discourse, the need for international displacements. The initiative taken at Sharm Al Shaikh in 2022 therefore mirrors this concern and focuses merely on internal displacements. The global north pays for what the UN does, and this appears to be the bottleneck. This convergence of views seems to be

aligned with the wealthy north to stem the international flow of climate refugees, perhaps by refusing to even acknowledge their existence.

The result is that international displacements are curbed, so long as they are not covered by UN treaties and are overshadowed in international fora. The sheer size of the problem is expected to become more severe as small island nations sink and large tracts of land in other regions become infertile and uncultivable. The time to act is now, before we have a more serious problem on our hands.

SUMMARISING THE WORK DONE BY UNFCCC, AND PROPOSING SOME SOLUTIONS FOR CLIMATE REFUGEES

The international community seems to be a long way from coming to a consensus on specific definitions to classify the types of migrants or refugees and the protection status that they should be granted. Several proposals have been presented at international and intellectual fora to safeguard the vulnerable and these have been acknowledged since the 1990s. These proposals include, inter alia, award of the status of refugees to climate-displaced persons under the 1951 Refugee convention; a legal framework to ensure such refugees are accommodated by destination countries; using the guiding principles for internal and external displacement and temporary mechanisms for protection and care; and proposing a new protocol for climate refugees. In an article Chiara Scissa has suggested some pathways to bring relief to refugees^{lxxiii}. The authors concur and these are included and elaborated in some of our suggestions and acknowledged in the text and relevant footnotes. None so far have found favour with the rich nations, many of whom are popular destinations for migrants.

Until 2015, despite several proposals, there was no sign of a ground-breaking policy. The Agenda for the Protection of Cross-Border Displaced Persons in the Context of Disasters and Climate Change (Protection Agenda) was incorporated into the Paris Agreement and this now functions

under the guidelines of the Executive Committee of the Warsaw International Mechanism for Loss and Damage (ExCom) that had been established under the UNFCCC at Doha at COP 18 in 2012 and finalised at Warsaw in 2013 at COP19^{lxxiv}.

The functions of the Loss and Damage Mechanism are comprehensively spelt out: viz. “Enhancing knowledge and understanding of comprehensive risk management approaches to address loss and damage associated with the adverse effects of climate change, including slow onset impacts; strengthening dialogue coordination and cohesion and synergies among stakeholders; enhancing action and support including finance, technology and capacity building to assess loss and damage associated with the adverse effects of climate change, collection, sharing, management and use of relevant data and information, including gender-disaggregated data.”^{lxxv}

The first five year plan of the executive committee has been approved and is now in progress. The Executive Committee has five working groups of experts working on plans with the following themes:

- The Expert Group on Slow Onset Events
- The Expert Group on Non-Economic Losses
- The Technical Expert Group on Comprehensive Risk Management
- The Task Force on Displacement
- The Expert Group on Action and Support

The decisions to form these groups are welcome but they have been on the back burner for too long. Five-year plans are not required to study the effects on people vulnerable to climate change.

At the Conference of Parties, serving as the meeting of the Parties to the Paris Agreement, under the Warsaw International Mechanism for Loss and Damage, the Santiago Network has been established to avert, minimize, and address the loss and damage associated with the adverse effects of climate

change, and to 'catalyse the technical assistance of relevant organisations, bodies, networks and experts for the implementation of relevant approaches at the local, national and regional level in developing countries that are particularly vulnerable to the adverse effects of climate change'^{lxvii}. The Santiago Network's Secretariat has been created, and this should start working soon, hopefully in 2023. It was decided that this would have the following functions:

- (a) Contributing to the effective implementation of the functions of the Warsaw International Mechanism, in line with the provisions in paragraph 7 of decision 2/CP.19 and Article 8 of the Paris Agreement, by catalysing the technical assistance of organizations, bodies, networks and experts;
- (b) Catalysing demand-driven technical assistance, including of relevant organizations, bodies, networks and experts, for the implementation of relevant approaches to averting, minimizing and addressing loss and damage in developing countries that are particularly vulnerable to the adverse effects of climate change by assisting in:
 - (i) Identifying, prioritizing and communicating technical assistance needs and priorities.
 - (ii) Identifying types of relevant technical assistance.
 - (iii) Actively connecting those seeking technical assistance with best suited organizations, bodies, networks and experts.
 - (iv) Accessing technical assistance available, including from such organizations, bodies, networks and experts.
- (c) Facilitating the consideration of a wide range of topics relevant to averting, minimizing and addressing loss and damage approaches, including but not limited to current and future impacts, priorities, and actions related to averting, minimizing and addressing loss and damage pursuant to decisions 3/CP.18 and 2/CP.19, the areas referred to in Article 8, paragraph

4, of the Paris Agreement and the strategic workstreams of the five-year rolling workplan of the Executive Committee of the Warsaw International Mechanism;”^{lxvii}

These are welcome steps, and it seems that some thinking has started, though no practical action on the ground has emerged as yet. It is hoped that these structures do not swing towards protecting the would-be protectors, as in the case of the UN Global Compact. These new structures could, however, be expected to generate a wealth of research and knowledge on all aspects of the harms people face due to climate change.

The key however lies in getting the nations of the world to arrive at a consensus and make good these harms.

OUR SUGGESTIONS

The fund under Action for Climate & Environment Plan adopted at COP 27 at Sharm al Shaikh is expected to be finalised a year later at the next meeting of the committee of parties, COP 28. The Santiago Network and Secretariat should hopefully be fully operational by then. The mechanics of its operation and other fine details should, hopefully, be available when these are decided. It would be debilitating, however, if assistance or aid is provided only after the catastrophes have occurred, after some sort of detailed post facto investigation to assess who suffered and how much.

1. Gradual deterioration needs to be assessed and residents need to be supported by extending the responsibilities of local states with international aid under this action plan. Gradual deterioration could be classified into, say, four levels of seriousness and mitigation efforts could be commenced at certain stages as detailed below to counter or curtail the creeping damage before it causes grievous harm to local residents.
2. Persons who are likely to suffer from gradual deterioration in their habitats should be provided relief in the form of guidance to abate the

impending harm in advance. This should be a preventive measure which would deter them from fleeing and lessen the possibility of harm that they might be positioned to suffer in future. Impending deterioration of the environment can be assessed before it causes grievous harm to residents of local areas.

3. Once the gradual deterioration starts and is in progress, relief needs to be provided for those who suffer gradual climate-induced harm to their environments and livelihoods, while they are in early stages of gradual deterioration. Residents of local areas should be supported by their states so that over time they are empowered to cope with the change. Such support could be in the form of providing aid for abatement of the soil, water or air degradation as the case may be. Farmers and cattle breeders who depend on the climate may be provided alternate guidance regarding which crops to sow which could survive in their changing climate.
4. Forest dwellers need to be provided alternate means of livelihoods to be able to cope with the gradual deterioration in their habitat. In case such creeping harm can be attributed directly to neighbourhood mines, factories or other businesses, these units should be sued to provide adequate penalties to affected dwellers and to pay for the local government's efforts of abatement. Member states of the UNFCCC who are unable to meet abatement costs should be granted aid to adopt relief measures in consonance with the level of deterioration as per four stages suggested in the preceding paragraph.
5. In the event that gradual deterioration cannot be curtailed or mitigated and affected residents do need to relocate, they should be provided assistance for such relocation by member states in other areas if possible, with accommodation for their families, alternate vocations for their bread-earners and alternate education for their children. This should prevent them from becoming destitute and also, perhaps, from migrating to other countries.

6. In case their habitat provides no alternative space or accommodation, as in the case of small island nations which might soon be entirely under water, their country needs to take responsibility to negotiate with others and enter into bilateral agreements to provide them the required shelter abroad. It is normal for bilateral agreements to have some give-and-take, or *quid pro quo*, and it is for nation states to agree between themselves for such arrangements if possible and certain guidelines may be framed by the UNFCCC to arrive at fair compensation. One such method could be, for instance, for immigrants to pay higher taxes as citizens of their destination countries. There could be others, such as joint applications by both nations for aid from international organisations.
7. Those who cross international borders and are not covered under the Sharm el Shaikh initiative or future initiatives, need to be classified at destination countries as illegal. Legal emigrations would be those that are made under bilateral agreements,^{lxviii} and these would need to be registered under a new protocol at the UNFCCC as suggested in paragraph 4 above.
8. Illegal immigrations are also to be dealt with, as the growing climate deterioration might increase numbers beyond quotas or emigrants could land in nations not within the agreed bilateral quotas. Emigrants who land in destination countries in desperation without the support of their home states, can be treated as illegal but they should be covered under the 1951 Convention. There should be a provision for temporary protection and non-refoulement, legal aid for presenting their petitions seeking citizenship. Also recommended are temporary permissions for them to work and for their children to go to school; provision of temporary accommodation for their housing or temporary cash aid for them to survive. These provisions would be required to be created by multilateral agreements by amending the 1951 Convention.

9. The 1951 Refugee convention requires refugees to flee from their homelands in order to qualify for the status of a refugee. Several of those harmed by climate change might however be staying on, trying to find alternate solutions or vocations. Hence even if they were recognised as persons harmed by climate change who did not as yet flee their homelands, they would not qualify to be potential refugees. It is imperative that signatories to the 1951 Convention and members coopted in later years get together to amend the convention to include and cover climate refugees who flee from their homelands as being at par with other refugees, while potential refugees be defined and allocated to the UNFCCC to be taken care of, as suggested in the succeeding paragraphs.
10. In the event bilateral agreements are contravened, the International Court of Justice Nations may adjudicate, but the penalties on exit states and destination states should be quantified in prior guidelines under the UNFCCC and 1951 Convention. A consensus needs to be created about international migration. Quotas could be allotted to all nations of the world who do not enter into bilateral agreements. Bilaterals could be required to be registered with the UNFCCC so that gaps can be filled by imposing quotas. This may require a new protocol on Climate Refugees which could be adopted under the aegis of the UNFCCC.
11. In cognizance of International Human Rights Law and Customary Principles with guidelines, member states of the UN should be made aware of consequences for delay in complying with their international obligations. Environmental alterations in climate, whether natural and sudden, or gradual, all comprise events which severely affect the right to freedom of movement, along with life, health, property, sufficient food and water. The right to life with dignity specified in the declaration of human rights which has been repeated in several international conventions and treaties should be binding on signatory member states to the extent that if certain principles of priority are not adhered to, the

concerned member states should be penalised with compensatory damages. In essence, what we are proposing here is that certain human rights need to be treated as fundamental, such as the right to live a life with dignity, and in case these are not adhered to by member states, the International Court of Justice should be empowered to levy penalties. The right of all of humanity to live in dignity must be enforced and defaulters punished. Destination countries need to open up their borders and accommodate such immigrants subject to the guidelines proposed in preceding paragraphs. If the world does not accept them, it is a negation of their human right to live healthy and dignified lives. This fundamental human right needs to be made enforceable at the International Criminal Court, and states that do not adhere to it may be penalised. The quantum of penalty would need to be guided by predetermined guidelines agreed to by member states at the UNFCCC as well as the 1951 Convention.

12. Creating a temporary protection mechanism has been suggested by Chiara Scissa^{lxxix}. The specific aim of temporary protection mechanisms is to safeguard the vulnerable who happen to be dislocated by severe climatic events, pending an official decision on their admission. It is the moral duty of the international fora to protect these people and give them a temporary protection status such as the norms that members of the European Union have adopted in their domestic legislations. Asylum is a fundamental right and an international obligation for countries, as recognised in the 1951 Geneva Convention on the protection of refugees^{lxxx}. The EU adopted a Common European Asylum System in 1999 for refugees of war and political strife, which could assist in dealing with the environmental complications.^{lxxxi} This method is proposed in the absence of any other protection measures to safeguard the humanitarian interests of such refugees. It is ironic that while the refugee status is predominantly granted on humanitarian grounds, it still remains undefined in most national legislations,

including some member states of the European Union, and it completely ignores those who have been dislocated by environmental circumstances.

- The prime need today is to raise awareness about these issues so that the suggestions above may be implemented by member nations of the UNFCCC and the 1951 Convention. The UN performs the job of creating this awareness and nudging nations towards a consensus quite well by organising frequent conferences and spreading the word through non-governmental organizations, social media and civil society. It is important to bear in mind that this awareness exercise should be:
 - Inclusive, to incorporate the humanitarian dimension,
 - Gendered, with a gendered look at the burden on women and children,
 - Social and Economic, to look at the burden on the least well-off as it comes with huge ramifications on the safety and well-being of endangered populations, particularly women and children.
13. One of the criticisms that came up against some proposals is the loss of local jobs in destination countries by the influx of refugees, whether climate refugees or otherwise. A protection for local jobs may therefore be essential in order to arrive at a consensus. It is suggested that jobs of citizens in destination countries should be protected before jobs are offered to climate immigrants even after they become legally entitled to live in their host countries. However, livelihoods for arriving immigrants whether legal and covered under the UNFCCC protocol as suggested above, or illegal and covered under the 1951 convention, are obligatory for signatory member states at destination countries to provide and in case jobs are not available, such immigrants should be guests of the destination states.

CONCLUSION

It is evident that climate refugees are not receiving their rightful recognition and acknowledgement in the contemporary world. The importance of cognizing environmental refugees as a part of the conventional refugee system cannot be denied because life-threatening circumstances arise not only from man-made strife such as terrorism or wars, but they also emerge from changes in the environment and climate, sudden or prolonged. Merely debating the problem of climate-change migrants will not resolve the issue, getting nations together to negotiate the best deal might be the only solution. It is of utmost importance for global citizens to be cognizant of and to embrace the plight of our fellow humans suffering at the hands of nature. It needs to be understood that the world so far has witnessed just one Ioane Teitiota but the situation could undoubtedly worsen, and if left without any agreement on duty of care towards these refugees, the world could see millions of other Ioane Teitiotas soon.

ENDNOTES

- i Defining the term 'Climate Refugee' through contemporary means and lucid terms: School of Advanced Study, University of London. (2020, July 29). *Climate Crisis, Migration and Refugees: Bridging the Legal Protection Gap for a Sustainable Future*. Refugee Law Initiative Blog. Accessed Jan 06, 2023 from <https://rli.blogs.sas.ac.uk/2020/07/29/climate-crisis-migration-and-refugees-bridging-the-legal-protection-gap-for-a-sustainable-future/>
- ii Atlas of Migration published by Rosa Luxembourg Stiftung in 2019 offers an interesting analysis of research conducted on migration of labour and its impact on both countries of origin and the countries of destination. Accessed Jan 06, 2023 <https://www.rosalux.de/en/publication/id/40425/the-atlas-of-migration/#:~:text=The%20Atlas%20of%20Migration%20seeks%20to%20change%20perspectives,objective%20debate%20within%20left-wing%20European%20parties%20and%20movements.>
- iii Noah's Ark Old Testament Accessed Jan 06, 2023 <https://www.churchofjesuschrist.org/study/manual/old-testament-seminary-teacher-manual/introduction-to-the-book-of-genesis/lesson-17-genesis-6-13-9-29?lang=eng>
- iv Please see <https://www.britannica.com/event/Indian-Ocean-tsunami-of-2004> ; please also see from the UN Environment Program archives and notice that these do not mention the impact on migrations : <https://web.archive.org/web/20080820112413/http://www.oceansatlas.org/id/71687>, see also <https://web.archive.org/web/20050111221153/http://www.unep.org/Documents.Multilingual/Default.asp?DocumentID=414&ArticleID=4692&l=en>
- v Dwarka, Krishna's ancient sunken kingdom, is claimed to have been discovered in the waters of the coast of Kutch at Gujarat, Accessed Jan 06, 2023 <https://www.gujaratexpert.com/dwarka-history/> and <https://www.youtube.com/watch?v=msaaNZ5THrM>
- vi For the definition of a refugees, please see <https://dictionary.cambridge.org/dictionary/english/refugee> Accessed Jan 06, 2023.
- vii Showcasing the trend of migration or masses fleeing from their native places in search of better lives, evidence of which is present from the Ice Age to the contemporary world: Piguet, E. (2008, January). *New Issues in Refugee Research - Climate Change and Forced Migration*. UNHCR. Retrieved Jan 06, 2023, from <https://www.unhcr.org/uk/47a316182.pdf>
- viii Ravenstein, E. G. (1885). The Laws of Migration. United Kingdom: Royal Statistical Society. For more, please also see Ravenstein's estimates as quoted by Sir H Atkinson in the "The Otago Daily Times", Otago, New Zealand, Nov 13, 1890 at <https://paperspast.natlib.govt.nz/newspapers/ODT18901113.2.9> Accessed April 12th 2023. This also might be of interest: Piguet, E. (2008, January). 'Consequences of Industrialization on the environment and movement of the people in the period of 18th and 19th century', *New Issues in Refugee Research - Climate Change and Forced Migration*. UNHCR. Retrieved Jan 06, 2023, from <https://www.unhcr.org/uk/47a316182.pdf> Accessed April 12th 2023
- ix According to the International Energy Agency's 2022 report on Coal, the world will see an increased dependence on coal in 2022-23 due to the high gas prices in the wake of the crisis created by the war in Ukraine. See <https://www.ica.org/reports/coal-2022/executive-summary> . Quoting from this report: "Coal power generation will rise to a new record in 2022, surpassing its 2021 levels. This is driven by robust coal power growth in India and the European Union (EU) and by small increases in China – and it comes despite a decline in the United States."

- x International Energy Agency's 2021 report on Oil and Gas shows that 15 percent of global energy sector greenhouse gas emissions are caused by oil and gas. Please see <https://www.iea.org/reports/oil-and-natural-gas-supply> accessed Jan 06, 2023.
- xi On the policy reversal/volte face caused by the shortage of gas in Europe, please see this report from 2011 when Germany decided to shut down all its nuclear power plants by 2022: <https://www.bbc.com/news/world-europe-13592208> ; see the present position, please see this report from World Nuclear Association <https://world-nuclear.org/information-library/country-profiles/countries-g-n/germany.aspx> which states that in June 2020 the country started a new 1100MW coal fired power generation plant, Dattein4, which was expected to be the last. But the war in Ukraine tilted the priorities and this article compares the German policies for nuclear and coal power: Selje, Tom, 'Comparing the German exit of nuclear and coal: Assessing historical pathways and energy phase-out dimensions'in Energy Research and Social Science, Vol 92 December 2022 102883 <https://www.sciencedirect.com/journal/energy-research-and-social-science> Accessed April 17 20203 <https://www.sciencedirect.com/science/article/abs/pii/S2214629622003863>
- xii Anthropogenists believe this is caused by human actions, while there are deniers who refuse to believe that this is the case. For a balanced view on this debate, please see <https://en.unesco.org/courier/2018-2/anthropocene-vital-challenges-scientific-debate> accessed Jan 06, 2023
- xiii IPCC's Sixth Report accessed Jan 06, 2023 <https://www.ipcc.ch/report/ar6/wg3/>
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- xix UNFCCC United Nations Resolution on climate disasters <https://unfccc.int/news/cop27-reaches-breakthrough-agreement-on-new-loss-and-damage-fund-for-vulnerable-countries>
- xx UN Climate Press Release 20 November 2022 <https://unfccc.int/news/cop27-reaches-breakthrough-agreement-on-new-loss-and-damage-fund-for-vulnerable-countries> 'COP27 Reaches Breakthrough Agreement on New "Loss and Damage" Fund for Vulnerable Countries'
- xxi Poland Hungary and Czech Republic refuse entry to Syrian refugees in 2015/16. See <https://www.aljazeera.com/news/2020/4/2/by-refusing-refugees-poles-hungarians-and-czechs-broke-eu-law> There is no such law for climate refugees.

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- xxviii UNHCR 1951 Refugee Convention and 1967 Protocol [unhcr.org/1951-refugee-convention.html](https://www.unhcr.org/1951-refugee-convention.html)
- xxix The Depiction of the Environmental Refugee as a problematic concept: Piguet, E. (2008, January). *New Issues in Refugee Research - Climate Change and Forced Migration*. UNHCR. Retrieved Jan 06, 2023, from <https://www.unhcr.org/uk/47a316182.pdf>
- xxx Myers, Norman. The Sinking Ark. A New Look at the Problem of Disappearing Species (Pergamon Press, 1979). See also Myers, N. Ultimate Security: The Environmental Basis of Political Stability (WW Norton & Company, Inc., 1993) and Myers, N. Mittermeier, R., Mittermeier, C. *et al.* Biodiversity hotspots for conservation priorities. *Nature* **403**, 853–858 (2000). <https://doi.org/10.1038/35002501> please see <https://www.nature.com/articles/35002501> This study established that species with a small geographical spread are more prone to extinction, and they are found in areas where severe destruction of the habitat is caused by human development activity. Myers defined these areas as 'biodiversity hotspots'. He also suggested various methods to curtail the destruction of biodiversity. At the National Research Council during the 1980s, he had published a report on the rate of deterioration of tropical forests and a report on the correlation of the loss of tropical forests and climate change at the UN's Food and Agriculture Organisation.
- xxxi Macgregor, Sherlyn, 'A Stranger Silence Still: The Need for Feminist Social Research on Climate Change' [Volume 57, Issue 2, suppl](#)
Please see <https://journals.sagepub.com/doi/full/10.1111/j.1467-954X.2010.01889.x> She argues for a gendered approach to solving the climate crisis, as that would enable a 'more accurate diagnosis' and a 'more promising cure'. quotes Nelson who states that 'policies need to ensure that gender analysis is fully integrated to avoid exacerbating gender inequalities' (Nelson V., Meadows K., Cannon T., Morton J., Martin A., (2002), Uncertain predictions, invisible impacts, and the need to mainstream gender in climate change adaptations, *Gender and Development* 10 (2): p51–59) and feminist lobbyists who protested at Bali in 2007 with the slogan 'No climate justice without gender justice'.
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- xxxiv Please see <https://www.aljazeera.com/news/2020/4/2/by-refusing-refugees-poles-hungarians-and-czechs-broke-eu-law> ; see also <https://www.usnews.com/news/best-countries/articles/2022-03-08/the-russia-ukraine-conflict-highlights-polands-complicated-history-with-refugees>
- xxxv Principles of the Stockholm Declaration and the Action Plan for the Human Environment can be accessed here : <https://wedocs.unep.org/bitstream/handle/20.500.11822/29567/ELGP1StockD.pdf> Accessed April 12th 2023
- xxxvi Ibid
- xxxvii The US enacted its Clean Air Act in 1972 building on its existing Pollution Control Act of 1955 and mandated the US Environment Protection Agency to set up and establish National Acceptable Air Quality Standards and implement them in every state by 1975; the Clean Water Act was also enacted in 1972. The UK already had its Clean Air Act of 1953, which had been created in response to the London Smog of 1952. India enacted the Water (Prevention and Control of Pollution) Act in 1974, the Air (Prevention and Control of Pollution) Act in 1981, and the Environment (Protection) Act in 1986.
- xxxviii The Brundtland Commission, formally the World Commission on Environment and Development (WECD), informally known by this name as Ms Gro Harlem Brundtland, former President of Norway. was nominated as its Chairperson and Mansoor Khalid as Vice Chairman in 1983. Its report titled “Our Common Future” was released in 1987. In 1988 the commission was wound up and the Centre for Our Common Future was tasked with the follow-up.
- xxxix Ibid
- xl For more on the damaging effects of HFCs please see <https://www.ccacoalition.org/fr/slcp/hydrofluorocarbons-hfcs> and also see Anjali Jaiswal's analysis at NRDC published in 2017 at <https://www.nrdc.org/experts/anjali-jaiswal/climate-action-global-transition-away-hfcs-moving-forward> both accessed Jan 06, 2023
- xli This is not the first instance of businesses driving change; in previous decades, Azo-free dyes were made to switch over from Azo-based dyes, which were found to be carcinogens. The benefit of this switch was naturally bagged by leading dye-making corporate conglomerates which had benefited from profits of Azo dyes in previous decades and, with this switch, benefited from their patented technologies for making Azo-free dyes. The world would largely benefit if new technologies to save humankind from harmful effects of existing products were pushed by policy changes rather than the other way around. The point to emphasise is that the change should be driven by the consciousness of the harm caused by our current use of certain materials and businesses can still have their profits from patenting intellectual rights on the best possible technologies for the desired change. There needs to be further research to uncover this aspect of profit taking from such multilaterally agreed shifts bound by international treaties.
- xlii Para 1.1 of Agenda 21 states: 'Humanity stands at a defining moment in history. We are confronted with a perpetuation of disparities between and within nations, a worsening of poverty, hunger, ill health and illiteracy, and the continuing deterioration of the ecosystems on which we depend for our well-being.' For the complete text of Agenda 21, please see <https://sustainabledevelopment.un.org/content/documents/Agenda21.pdf>

- xlili Ibid. Emphasis on globalisation and opening up of markets in the developing world is evident as the flavour of the times, see Para 2.5 of Agenda 21 which states 'An open, equitable, secure, non-discriminatory and predictable multilateral trading system that is consistent with the goals of sustainable development and leads to the optimal distribution of global production in accordance with comparative advantage is of benefit to all trading partners. Moreover, improved market access for developing countries' exports in conjunction with sound macroeconomic and environmental policies would have a positive environmental impact and therefore make an important contribution towards sustainable development.'
- xliv Ibid United Nations Sustainable Development. (1992, June 14). *Agenda 21* [Press release].
<https://sustainabledevelopment.un.org/content/documents/Agenda21.pdf> accessed Jan 06, 2023
- xlv Fukuyama, F. (1989). The End of History? *The National Interest*, 16, 3–18.
<http://www.jstor.org/stable/24027184>
<https://www.jstor.org/stable/24027184> see also Macintosh, D., *The End of History and the Last Man* by Francis Fukuyama in *Philosophy Now*
https://philosophynow.org/issues/106/The_End_of_History_and_the_Last_Man_by_Francis_Fukuyama
- xlvi For the birth of the UNFCCC and the commendable work this convention has done, please see <https://unfccc.int/process/the-convention/history-of-the-convention#Essential-background> accessed Jan 06, 2023
- xlviii The Clean development Mechanism created at Kyoto is detailed on this site <https://unfccc.int/process-and-meetings/the-kyoto-protocol/mechanisms-under-the-kyoto-protocol/the-clean-development-mechanism> accessed Jan 10 2023
- xlvi Targets for the first commitment period of the Kyoto Protocol were committed by Annex 1 countries to reduce emissions of six main greenhouse gases: Carbon dioxide (CO₂), Methane (CH₄), Nitrous oxide (N₂O), Hydrofluorocarbons (HFCs), Perfluorocarbons (PFCs), and Sulphur hexafluoride (SF₆). The exact percentages by which each gas would be reduced were listed in Annex B. For more, please see: <https://unfccc.int/process-and-meetings/the-kyoto-protocol/what-is-the-kyoto-protocol/kyoto-protocol-targets-for-the-first-commitment-period>
- xliv For more views on the failure of Kyoto Protocol please see <https://www.climateforesight.eu/articles/success-or-failure-the-kyoto-protocols-troubled-legacy/> and <https://www.nature.com/articles/491663a>
- l The Doha amendment was signed in 2012 but ratified later and has come into effect from 2020. Please see <https://sdg.iisd.org/news/doha-amendment-enters-into-force/> and <https://unfccc.int/process/the-kyoto-protocol/the-doha-amendment>
- li For more on the fate of the Adaptation Fund please see: <https://unfccc.int/Adaptation-Fund> and https://unfccc.int/sites/default/files/resource/cma2018_3_add2_new_advance.pdf#page=2
- lii AT Rio, +20 member states adopted the document 'The Future We Want' in which they decided to commence the process of creating Sustainable Development Goals to build on the earlier Millennium Development Goals.
- liii At COP 15 at Copenhagen, which was also the location for a concurrent COP 6 of the Kyoto Protocol, there was a breakdown. India led the G77 and took this stand to block an agreement which would have constrained developing economies, along with others, to define the measure of how much each would achieve, as had been done at Kyoto. For a Swedish view of India's position on climate change, please see <https://mediamanager.sci.org/documents/Publications/Climate-mitigation-adaptation/reducinggreenhousegasemissions-india.pdf> accessed Jan 06, 2023

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- lv The US State Department announcement of Feb 19th 2021 <https://www.state.gov/the-united-states-officially-rejoins-the-paris-agreement/> Accessed April 12th 2023
- lvi This author claims that German subsidies actually helped Chinese solar panels to flood the market in Europe at cheap prices: <https://qz.com/41166/how-germanys-energy-transformation-has-turned-into-a-crisis> ; Please see this contrary view from Forbes which states that subsidies from the Chinese government along with cheap labour and coal have made Chinese solar panel prices drop so substantially <https://www.forbes.com/sites/michaelsellenberger/2021/05/19/china-made-solar-cheap-through-coal-subsidies--forced-labor-not-efficiency/?sh=1253388d71ec> The fact undisputedly remains that developed nations cannot compete now at such low prices.
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7. URBAN ENERGY SYSTEMS IN INDIA: INSIGHTS FROM COMPLEX SYSTEMS THINKING

Naresh Singh and Poorva Israni

ABSTRACT

The fossil fuel-based energy systems require accelerated transitioning towards renewable energy provisions in order to reduce carbon emissions. Urban energy systems are commonly called socio-technological systems, that have interconnections with the political, environmental, and economic landscape of the urban areas. These inter-sectoral linkages, the constant evolution of stakeholder's priorities and relationships, and their conflicting objectives in the urban energy landscape make urban energy systems a complex system. Asserting the need to comprehend the challenges of transitioning towards sustainable energy systems, it appears desirable to view urban energy systems as complex systems. Based on recent literature on urban energy systems and complex systems thinking, the paper initially discusses the characteristics of urban energy systems. It aims to demonstrate the relationship of urban energy systems with social, technological, environmental, political, and economic aspects of urban areas. It further emphasizes the need and the approaches to recognise urban energy systems as complex systems due to the presence of factors, such as multiple stakeholders, the interconnectedness of the agents, changing dynamics, and adaptive processes in the systems. This paper takes the case study of the city setting of Bhopal, Madhya Pradesh, and considers its urban Solar City Master Plan to better understand the essence of complex energy systems. Against this background, the aim of the paper is to understand the application of complexity economics and systems thinking to the transition of urban energy systems from fossil fuels to renewables. In addition, the paper intends to explore how examining the urban energy systems through the lens of complexity economics and systems thinking can be valuable in formulating policy interventions towards sustainable urban energy transitions.

Key Words: energy systems, urban, system thinking, energy transition, energy policy, sustainable energy

INTRODUCTION

Fossil fuel-based energy systems require accelerated transitioning towards renewable energy provisions in order to reduce carbon emissions. The path to achieving a low carbon economy significantly entails the substitution of fossil fuel-based energy options with renewable energy alternatives. Decarbonisation of the energy sector is critical to reduce energy-related carbon dioxide emissions and to subsequently mitigate the effects of climate change. Globally, most of the energy usage has been in urban areas. In this context, it becomes crucial to understand urban energy systems as they are central to sustainable energy transitions.

In responding to the impacts of climate change, several countries in the world, including India, are looking for energy transition pathways. The energy transitions entail a substantial shift from fossil fuels to renewables. The data shows that approximately 75 percent of the final global energy is used in the urban areas, and these urban areas are responsible for approximately 70 percent of the global carbon dioxide (CO₂) emissions (Bai et al., 2012). Contemporarily, India is the third-largest energy user in the world, contributing to 7 percent of the global anthropogenic greenhouse gas (GHG) emissions in 2018 (Tong et al., 2021). Additionally, data from Oxford Economics shows that 17 amongst the top 20 fastest-developing cities in the world are situated in India, Surat being at the top of this list (Global Economic Research: 17 of 20 Fastest-Growing Cities in the World Will Be from India, n.d.). This urban evolution will include energy provisions for residential and commercial buildings, urban mobility, and other urban spaces, eventually adding to the global energy consumption. India is witnessing rapid urbanisation, leading to an increase in GHG emissions. India's per capita CO₂ emissions stand at 1.8 tonnes, which can be considered much lower than the world average of 4.2 tonnes. However, in 2017, India's CO₂ emissions increased by 4.6 percent. Since then, the

country's CO₂ emissions have accelerated steadily, with an average growth rate of 6 percent in the decade of 2007-2017 (Andrew, 2017). This can be attributed to India's increasing population and non-eco-friendly urban development. Urban expansion thus opens up possibilities of incorporating and expanding renewable energy infrastructure along with improving the efficiency of energy usage. In this background, it can be implied that a thorough understanding of the urban energy systems in India is central to sustainable energy transitions and climate change mitigation measures.

While systems thinking as a concept is becoming popular in the sustainability space, interventions have failed in being systemic. For example, in sustainable urban planning, there has been an excessive emphasis on systems engineering and infrastructure than on people. At a global scale, most sustainability transformations are not driven by systems-wide change (Voulvoulis et al., 2022). A potential reason for this can be that the majority of interventions do not target root causes but instead deal with symptoms. At present, a complex systems thinking approach has not been undertaken and integrated in any country towards policy development dealing with the current transition to renewable energies. The fact that current socio-technical systems and the shift to renewable energy sources involve complex system dynamics is rarely acknowledged. This has hindered the adoption of finding alternative solutions to effectively adapt to the unpredictable change in the availability of energy as well as significant shifts to renewable energy sources. The understanding of complex systems thinking can help in identifying the path-dependent capabilities of solving the root and leading causes.

The link between urban cities and climate change interventions has been undergoing transformations, as the movement towards sustainable development has shifted the view of looking at energy management in cities to effective sustainable energy interventions and innovations in the urban areas. Earlier, cities were looked at merely as centres for energy demands.

However, the need to protect the environment due to the negative impacts of climate change has gradually led to the requirement of looking at cities as centres for sustainable urban governance perspectives and novel renewable energy technologies. The energy systems comprise a range of stakeholders such as producers, suppliers, distribution companies, and end-users. In the process of advancing towards energy transitions, the diverse range of agents in the energy systems can frequently have conflicting objectives. The stakeholders interact through physical and social networks which are institutionally and politically governed. In this context, the development of urban governance perspectives may vary as there are various stakeholder paradigms towards energy transitions. To accommodate the different stakeholder paradigms within the urban energy system, the governance structures have to consider the complex nature of the energy systems. To comprehend the complex nature and the policy challenges relating to sustainable urban energy transitions, it is pivotal to manifest the intertwined nature of the stakeholders of the urban energy systems. Urban energy systems are commonly called socio-technological systems, that have interconnections with the political, environmental, and economic landscape of the urban areas. These inter-sectoral linkages, the constant evolution of stakeholder's priorities and relationships, and their conflicting objectives in the urban energy landscape make urban energy systems a complex system as a whole (Keirstead and Shah, 2013).

URBAN ENERGY SYSTEMS: A COMPLEX SYSTEMS THINKING APPROACH

Complexity theory provides a conceptual framework, a way of thinking, and a way of seeing the intricacies of the world. A complex system is characterised as a system that has heterogeneous elements that are interlinked, and constitute elements that adapt and transform over a period of time (Frank, 2017). Urban energy systems are largely composed of three elements—agents, objects, and the environment (Bale et al., 2015). The key agents in urban energy systems include households and business energy

users, energy generators and suppliers, distribution companies, governments, and environmental regulators. The agents in the system interact with each other through networks under the influence of institutions and regulatory bodies, and they tend to have properties of adaptation and transformation. The objects in the urban energy systems include technologies, infrastructures, and environmental ecosystems. The objects change over time according to economic, political, and environmental circumstances. The third element is the environment, which encompasses social, political, and cultural facets within which the urban energy systems operate. The elements in the urban energy systems share information and learn from each other and are dynamic in nature. Against this background, urban energy systems can be understood as complex systems that have diverse and interrelated agents or objects. In addition, they exhibit complex social and technological dynamics, and can consequently be understood overarchingly as social-technological and social-ecological systems.

Complexity theory proposes that complex systems involve properties such as self-organisation, emergence, path dependence, non-linearity, evolution path and adaptive behaviour. In order to better understand the properties of complex urban energy systems, it is desirable to characterise the complex systems in conjunction with their applications to the urban energy systems:

AGENTS - Agents in a complex system are individuals or groups that interact with each other and are involved in the process of decision-making. Based on the conditions of the environment and their ability to influence each other, the agents adapt, learn, and respond in a system. The urban energy systems include diverse kinds of agents such as end-users, governments, power generators, suppliers, and regulators. For instance, end-users, power generators, and suppliers are in direct contact with each other in the urban energy system, and activities or decisions of one agent in the system have the ability to impact the other agents within the system. The activities and decisions of the agents are highly induced by the components

of the environment such as regulations, government interventions, and technology.

NETWORKS - Networks provide pathways through which the heterogeneous agents in a system interact, and they have consequences for properties such as resilience mechanisms and the interrelatedness of agents (Bale et al., 2015). In urban energy systems, there can be physical and social networks, for example, there are network interactions among households or end-users, power generating companies, and distribution companies. The interactions aid in balancing the demand and supply in the urban energy system. In addition, the network interactions between agents and the technological environment in urban energy systems help in understanding user behaviour and preferences, which can be different for diverse agents. For instance, the preferences and interactions of large corporate bodies will differ significantly from the demands and preferences of emerging start-ups and organisations within the energy systems and for energy transitions.

FEEDBACK LOOPS - One of the key properties of complex systems is a feedback cycle. It is a cyclical structure of cause and effect. One initial change in the system is capable of inducing further secondary effects, eventually influencing the initial change. Feedback loops can be negative or positive. Positive feedback loops entail changes that increase the movement of the system away from its initial stage while negative feedback loops include those initial changes that aid in keeping the system in its original state. From the perspective of urban energy systems, increased investments in the clean energy sector can feed directly back into creating increased jobs and uplifting the local economy. Focus on a national green energy system has the capability to increase benefits for an economy, which further tends to create a cycle of economic and environmental gains. Moreover, another example of a positive feedback loop is the interactions between energy users, power generators and government institutions which influence the land use planning and management for clean energy infrastructure.

DYNAMICS - Complex systems are not always in equilibrium, and they are influenced by temporal or permanent changing aspects. In regard to urban energy systems, structural changes such as population dynamics, technological changes, and lifestyle changes take place. These changes can decidedly influence the dynamics of the energy systems. From a perspective of a policymaker, dynamics in urban energy systems are valuable to consider because they help in understanding the elements of a system and their embeddedness within the operational area. Taking into consideration urban environment planning, an emphasis on the dynamics of the system and their intra-interactions can be fruitful for effective program designing and implementation of sustainable energy transitions.

CONTEXTUAL - The elements and agents in urban energy systems are deeply embedded in the local context of the city. The urban infrastructure of a city will depend on various factors such as local economic activities, infrastructural forms, ecological systems, consumers, and their preferences and cultural backgrounds. Therefore, urban energy systems and energy transitions should be configured depending on the local context of a city. For instance, in India, the path towards sustainable energy transition should account for the societal systems, which are different in urban and rural areas. The significance of social systems should be acknowledged by observing the social preferences, types of livelihoods, and user consciousness to effectively contribute towards sustainable energy transitions.

SELF-ORGANISATION - A self-organising system can adapt autonomously in the system without any agent having complete control over the system (Basu et al., 2019). Urban energy systems can be self-organising, as there is no one agent that has overall control in the planning of the energy systems. There are multiple agents that make decisions at multiple levels, such as households, and governments at local and central levels, and the decisions of one agent can have implications for the complete system. In addition, the systems can be shaped by multiple policies and regulations of diverse agents. In the context of India, the formation of

citizen groups and environmental advocacy groups as representatives of particular agents in the background of lack of political representation are examples of self-organisation. In terms of energy transition governance, self-organisation has the possibility to encourage faster adoption of clean energy in India.

PATH DEPENDENCY - A system evolves in particular directions based on its past interactions and networks. As the evolution of any system happens, dominant interactions and network patterns develop over a period of time, which eventually become norms and parts of the system (Basu et al., 2019). In urban energy systems, urban infrastructure such as grid systems and the spatial patterns of a city lead to path-dependence tendencies. These path-dependence tendencies are largely a reflection of historical and contextual factors, which may vary from one location setting to another. Furthermore, the path dependency of systems is a reflection of the adaptive and transformative nature of the urban energy systems.

EMERGENCE - The macro nature of a system emerges from the practices and interactions of microelements present within. The agents are not rational and are capable of having bounded rationality. In this background, the nature of the system cannot be predicted on the basis of past information because of the non-linearity aspect of the agents. Agents are subject to new types of interactions and can change their ways of conduct or operation. The existence of multiple non-linearities can exhibit aggregate trends and patterns but cannot predict the whole system and its subcomponents (Labanca, 2017). For instance, future energy demands cannot be predicted on the basis of past energy demands, because the emerging multiple non-linear factors in the system could be impossible to predict due to the interactions of the agents.

CO-EVOLUTION - In a complex world, systems co-exist with other systems. For instance, the urban energy systems are made up of subsystems

along with being interdependent on elements such as water, transport, and food production, to name a few. The subsystems in the urban energy systems are technologies, government institutions and their regulations, energy users and their practices, and other ecosystems that collectively evolve. A change in one subsystem can impact other subsystems or the system as a whole. In urban energy systems, environmentally conscious consumer behaviour can stimulate the need for new technologies or vice versa. The property of co-evolution is an important facet in public policymaking as stimulation in one component of the system can help increase the interactions between the other agents.

LEARNING AND ADAPTATION - The interconnectedness and constant interaction of the various stakeholders aid the agents to learn and adapt in the system, along with being able to retain the historic structures. Due to changes in the environment of the system, complex systems can adapt to take the advantage of the system variations. For example, smart meters give information relating to energy efficiency, and consumers can learn and adapt as per the information provided in the system. Likewise, the information can be in the form of technological and political changes.

URBAN ENERGY SYSTEMS: RELEVANCE OF COMPLEXITY FOR POLICYMAKERS

The diverse nature of urban areas across the world signifies the need for considering complexity theory in urban sustainability governance and energy transitions. With the increasing focus of governments, policymakers, and development professionals on sustainable development, the focus is now shifting from linear approaches to multi-dimensional aspects of governance and advancement. A linear approach in policy designing is bound to produce externalities and unintended outcomes. To understand the multi-dimensional approaches needed towards effective urban sustainability governance, it is crucial to comprehend the complexity of the whole urban energy system and its subsystems. The identification

and analysis of the complexities of urban energy systems are relevant for the policymakers, as they help perceive the existence of the non-linear interactions of agents, along with the uncertainty of the system. Grasping the uncertainties and non-linearities is central to effective public policy designing and implementation.

CASE STUDY: BHOPAL'S SOLAR CITY MASTER PLAN

1. Bhopal City at a Glance

Bhopal is the capital city of the state of Madhya Pradesh, which is located in the central part of India. It is situated on a hilly terrain within the Malwa Plateau, lying between the geographical coordinates of 23⁰16' North latitude and 77⁰22' East longitude. The city is well connected through rail, road, and air, and is a major hub of educational, political, administrative, and industrial activities. In this context, Bhopal is one of the cities in the state that drives the economic progress of the region, and hence, it is viewed as an attractive destination for investments. The city is spread across 285.9 square kilometres, and it has a population of approximately 24 lakhs (District Energy in Cities Initiative, 2017). The major economic activities in Bhopal are manufacturing and engineering predominantly electrical goods and transportation equipment; tourism; and the administrative sector.

2. Bhopal's Solar City Master Plan

Bhopal has a humidsub-tropic climate with a hot summer season, mild and dry winters, and a humid monsoon season. The city has numerous lakes which add to its picturesque and pleasant weather. However, of late, global warming has been impacting the city of Bhopal, its famous lakes, and its huge green cover. According to the data from United Nations Environment Programme (UNEP), Bhopal's temperature has been increasing by 0.075 degrees celsius per year, which can be considered as a large increase as per climate change trends (Sirothia, 2016). Against this background, Bhopal aims to utilize its land parcels towards making itself a sustainable urban

habitat. Bhopal is one of the cities to be selected by the Ministry for New and Renewable Energy to be advanced under the Development of Solar Cities Programme. Currently, Bhopal has an on-grid solar system that is connected to the city's main power grid. The installed inverters integrate the current from the solar photovoltaic modules with the current from the grid to provide electricity to commercial and residential properties. The solar systems in Bhopal can also offload the excess current, if any. Making headway, Madhya Pradesh plans large-scale solar energy projects to promote decentralised and off-grid solar applications.

Under the larger ambit of the Solar Cities Programme, Bhopal's Solar City Master Plan was developed in 2011, which aimed to reduce the energy consumption of the city by 17 percent by the year 2018, through the adoption of renewable energy infrastructure (District Energy in Cities Initiative, 2017). However, the state has not been able to meet its targets, as it has shown a consistent lack of decisive action. The plan has been disappointing in terms of physical advancement, and this can be attributed to delayed disbursement of funds from the government, unsatisfactory project planning and monitoring, delayed procurement planning, insufficient institutional capacity, lack of stakeholder consultation, and lack of technical and social awareness amongst the households and individuals for renewable energy and energy efficiency. Along with this, the planning of the Municipal Corporation of Bhopal towards making the city a solar city has paved the way for encroachment possibilities around the catchment areas of the lake ("Residents Point at Loopholes in City Master Plan Draft," 2020). This has led to conflicts between the citizens and the government administration as solar infrastructure near the lake areas can damage the water ecosystems of Bhopal. These loopholes have highlighted the complexity of the urban energy systems. In the context of Bhopal and its Solar City Master Plan, complexity theory can contribute significantly in three areas to understand the components of the urban energy systems and their interactions.

- **System Awareness of the Urban Energy System** - The diverse set of elements and their interactions in complex urban energy systems can be challenging to perceive. Therefore, it becomes important for all the stakeholders to develop an awareness of the system, including the system dynamics, path dependencies, feedback loops, interlinkages of the agents, and the capability to adapt and transform. In the case of Bhopal's Solar City Master Plan, various agents such as planning authorities, real estate developers, architects and civil engineers, electricity distribution companies, state energy agencies, environmental planning and pollution control, installation contractors, and end-users should conceptually map the urban energy system to better understand the various subsystems of the urban energy system. In due course, this can be conducive for energy transition infrastructure planning, urban policymaking, and strategy devising.
- **Interlinkages and Embeddedness of the Urban Energy Systems** - Cities are highly dynamic where urban energy systems and urban infrastructures are embedded parts of the larger system. This is in contrast to the conventional way of viewing cities as static, and as systems with fewer interactions. In this context, the urban energy system of Bhopal should consider the heterogeneity of the subsystems existing in a large system such as the water systems, forest areas, and local areas. This supports policymaking and urban governance by looking at the subsystems within the system and their multiple non-linearities.
- **Context of the System** - During urban sustainability planning and governance, it is crucial to consider the contextual foundation of urban areas, and its further implications on energy systems. The contextual foundation largely includes the type of terrain and present land use planning, types of population, the evolution of the city's energy system, awareness of the residents, and other nearby ecosystems. This will facilitate interlinkages between urban areas and their energy systems, and their ability to shape and be shaped by each other.

3. Policy Recommendations

Urban areas and their energy systems have immense potential for sustainable transitions and climate change mitigation (Soni, 2015). In the interest of realising this potential, a resilient design for energy system infrastructure that can assess the non-linearities of the system is required. The following policy recommendations and key aspects can be adopted by policymakers in the city of Bhopal and overarchingly in other urban settings to stimulate sustainable energy transition practices:

- Policymakers should avoid the possibility of failures in sustainable energy transitions by taking a preventive maintenance approach. Catastrophic failures are not generated by the malfunctioning of broken units; they are created due to the relationships and interconnectedness between the sub-parts of the complex system (Dekker, 2011). In urban energy systems and their sustainable transitions, with the introduction of new technologies or a new policy in one urban energy subsystem, policymakers should assess and analyse their unexpected consequences on other subsystems to mitigate potential risks. The understanding of the connections in the system can aid in preventing errors by detecting the potential causes of failure and adverse events (Kumar, 2020). Moreover, this approach can be favourable to building resilient sustainable urban energy systems by identifying the impacts of diverse variables on the system and subsequently devising contingency plans. This approach of anticipatory management practices will build the skills of policymakers and leaders to foresee and adapt to emerging or actual adverse situations.
- For progressive transitions to renewables, along with the accelerated sustainable energy infrastructure, the emphasis should be placed on integration of social practices and technical innovation to capacitate the dynamic interactions between the renewable energy sources and energy end-users (Labanca, 2017). This can be done by taking into

consideration the current practices of energy consumers and focusing on their demand management for renewables. The policymakers should make a connection between the energy infrastructure and the behaviour of the people concerning sustainable energy transitions. There is a need to develop a new paradigm in social practices towards sustainable transitions by establishing configurations of technology, community practices, and climate education. Furthermore, it is important to recognize the significance of funding for indigenous technological advancement to upscale the renewable energy sector.

- Robust energy system planning requires taking into consideration various aspects such as energy access, affordability, secured energy supply, environmental impacts, and investment needs. For effective sustainable energy sector development, capacity building of the working staff and personnel is important. This can be done by a combination of online software training, workshops that provide hands-on experience, and courses that focus on strengthening technical capabilities.
- To enhance the capabilities of the leaders in sustainable urban energy systems, an outlook of complexity-informed leadership can be adopted (Styhre, 2002). The sustainable transition changes in the urban energy systems can be scrutinized by the leaders within a complexity theory framework. This will assist the leaders to question the linearities and direction of changes in the urban energy systems. Complexity-informed leadership will help people at the policymaking level and those in senior positions within the system to understand the organisational changes, which are dynamic due to succeeding activities and the interconnection among the activities.
- Sense-making tools are helpful in dealing with complex situations. In this context, strategic thinking using sense-making tools and techniques such as the Stacey Matrix and Cynefin Framework can be used. These sense-making tools can aid decision-makers by providing them with a

sense of place from which they can view their perspectives (Farrar, 2020). These tools can enable policymakers and leaders to equip themselves with the appropriate lens to view the contemporary and prospective approaches concerning sustainable urban energy transitions.

- The stakeholders in the urban energy systems should be thoroughly made aware of the urban energy systems as social-ecological and social-technical complex systems. A better understanding of the technical, ecological, and social interactions in the transition process can markedly improve the communications and reciprocal interactions among the consumer practices, technical systems, and non-human agents, and in due course, this can accelerate sustainable energy transitions.

CONCLUSION

Renewable energy is becoming an increasingly necessary source of power globally. Yet, there remains some technical challenges in the electricity network. For example, solar energy is clean and carbon free but is weather dependent and requires expensive energy storage systems. Hence, it becomes important to diversify the energy mix such that the energy grids can function without any disruptions. In this regard, viewing the energy sector within a systemic thinking framework can support the project planners, managers, and policymakers and concentrate the focus on energy security as well.

An understanding of urban energy systems through the lens of complexity theory contributes to identifying each element and their interactions within the system and beyond. It can be posited that there is great potential for policymakers and the government administration to gain insights into the different agents, interactions, dynamics, and potential outcomes of policy interventions in the urban energy systems. The complex systemic perspective encourages recognition of the dynamic and evolving

interactions inside and outside the system and gives a considerably needed retreat from the contemporary linear approach towards sustainable energy transition interventions.

The challenge that remains with complex systems thinking is its large-scale adoption by the policymakers due to the intricate communication of its concepts and lack of substantial results of its applications. However, at present, complex systems thinking provides a significant starting point to think in a certain way about sustainability and other potential domains with significant development gaps. Hence, this field of study can have influential impacts on designing interventions towards sustainable urban energy systems. Although complex systems thinking is in its initial stage, it is capable of providing important contributions towards solving the global sustainability crises.

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8. IMPACT OF IDEOLOGY ON PUBLIC POLICY AND GOVERNANCE: INDIA AT 75

Kartik Kishore and Satya Narayan Misra

ABSTRACT

India's public policy has been strongly conditioned by political ideology. While dirigisme was the preferred ideology when India became independent, the early 90s witnessed a sharp U-turn toward a free-market economy and the dismantling of LPQ (License, Permit, Quota) raj. This paper tries to analyze the impact of changed economic ideology on structural transformation and high GDP growth coupled with a dissonance between growth and development parameters such as MYS (mean years of schooling), malnutrition, IMR (Infant Mortality Rate), and MMR (Maternal Mortality Rate). The paper also brings out how parties in power with different political ideologies (Congress and BJP) have shown remarkable congruence in terms of economic ideology and pursuing the free market philosophy of the Washington consensus. It brings out how autonomy for bureaucracy is critical for quality governance (Fukuyama) and looks back into India's professional approach to perspective planning, policy design, and program evaluation under the erstwhile Planning commission. It also brings out the importance of RCT (Random Control Trials) before undertaking developing programs and not putting the cart before the horse. The paper makes a strong recommendation for institutional independence, capacity build-up, and proper regulation of the free market. Liberal democracy, without inclusive development and shared prosperity, and public policy without empathy for the most disadvantaged sections of the society, can lead to social disharmony and disruption.

Keywords: public policy, state capacity, bureaucratic autonomy, policy evaluation, IMR, MMR, LPQ, GDP

INTRODUCTION

Good governance is largely conditioned by sound public policy, where bureaucracy acts in tandem with the political executive to realize the expectation of the vox populi. While the political executive sets the tone for policy, 'it is left to the bureaucracy to carry out these policies and reach out to the intended beneficiaries, eschewing fear or favour. Max Weber argued that bureaucracy constitutes 'the most efficient and rational way in which human activity can be organized and that systematic process and organized hierarchies are necessary to maintain order, maximize efficiency and eliminate favoritism' (Serpa and Ferreira, 2019). Weber also observed how unfettered bureaucracy can be a threat to individual freedom, with the potential of trapping individuals in an iron cage of rule-based, rational control. Robert K. Merton, on the other hand, was anguished by the dysfunction resulting from bureaucratic structures. The negative consequences according to him are displacement of goal, trained incapacity, over conformity to rules. In the context of India, Francis Fukuyama observes that 'India is famous for high levels of corruption and clientelism, excessive rules and bureaucratic red tape'. He also believes that India clearly needs much greater state capacity across the board to govern professionally and properly. Against this backdrop, the paper attempts to analyze (a) the changing contours of ideology and its impact on growth and development (b) the importance of autonomy and capacity building, (c) the abdication of perspective planning and evaluation and (d) the way forward

CHANGING CONTOURS OF IDEOLOGY AND GOVERNANCE

Bureaucracy in India has gone through three main phases, (a) passive compliance with government policy, (b) conformance to the party in power during the emergency years (1973-77), and (c) regulation rather than control after economic liberalization in the 1990s. India's first Prime Minister (PM) Jawaharlal Nehru chose the path of socialism where '*Public Sector Units*

(PSUs) were considered temples of modern India'. The ideological preference was given technological scaffolding by Prof. P.C. Mahalanobis, who brought in the *Feldman-model* of state-controlled heavy industry as the driver of fast growth. The 1956 Industrial Policy Resolution and the Second Five-year Plan (1956-61) bore distinct testimony to this by monopolizing infrastructure sectors such as the railways, roadways, shipping and telecom, and strategic sectors such as Defense Production, Atomic Energy, and Space. In the *mixed economy* model that India chose, the private sector played a secondary role. The 'License, Permit, Quota' Raj gave the bureaucracy a field day to dispense favours and largess. The nationalization of banks in 1969 and of coal mines in 1973 were the final straws on the camel's back of nationalizing financial intermediation. Prof. Jagdish Bhagwati writes in his book *India's Tryst with Destiny* that the then PM Indira Gandhi's nationalization spree was responsible for the socialist banyan tree to strike firm roots (Bhagwati & Panagariya, 2014). Controlling a vital mineral resource like coal, apart from oil and gas exploration, made the government's monopoly sweeping. Prof. Raj Krishna believes that the Hindu rate of growth of 3.5 percent from 1950-1980, was largely due to the asphyxiating control of the bureaucracy, lack of accountability, and scant concern for the efficiency of commercial entities in a market-driven free market scenario (Krishna, 1988).

1. The big blow of emergency

The Emergency imposed in 1975 was a major blow to India's democratic credentials. The party in power expected the bureaucracy to be committed to the political philosophy of the party, to realize the goals of socialism. Bureaucracy was also in overdrive to realize mandates such as forcible mass sterilization as part of Sanjay Gandhi's five point programme⁴⁷, along with

⁴⁷ [Indias Experiment With Compulsory Sterilisation](#) | Peepul Tree | July 30, 2022

severe restrictions of civil liberties including crackdown on activities of trade unions and of civil society. It was also alleged that central intelligence agencies were used to harass opposition leaders. In the dark days of the Emergency, more than 100,000 people were imprisoned without trial. Access to the courts was denied to detainees, the government arguing that all fundamental rights had been suspended during the Emergency, and even the writ of habeas corpus was not available to detenus. Pre-censorship was imposed on all newspapers and journals. Ajit Mazoomdar, one of the top bureaucrats, recalling the memories of those dark days stated that 'one's most lasting memory of those days is of the fear that gripped the entire middle class, of arrest and detention, if any dissent was voiced in public. Politicians made no protests in or out of legislatures. Ordinary people would not talk freely, except among close friends. One understood what it had been like living under dictatorships in Europe'⁴⁸.

The civil servants, as the Justice Shah Commission (1977) noted, 'showed loyalty to the party in power in order to advance their career, forging of records, fabricating grounds of detention were endemic'. In other words, the bureaucracy was committed to the party in power rather than to the 'rule of law'. The government also superseded those judges who did not approve of Parliament's foray to be omnipotent and stultify their power of judicial review.

2. The tectonic shift towards liberalization

India took baby steps toward economic liberalization through its Industrial Policy (1978), when the Janata party came to power (Kohli, 2006). The real tectonic shift in governance, however, kick-started with economic liberalization in the 1990s. From a control regime, India embraced a regulatory mechanism and adapted market economics propagated by the

⁴⁸ [Emergency: A bureaucrat recalls the dark months \(Comment: Special to IANS\) | Business Standard News](#)

Washington Consensus in the fields of banking, taxation, foreign exchange rate, and Foreign Direct Investment (FDI) inflow. The Foreign Exchange Regulatory Act (FERA), 1973 became the Foreign Exchange Management Act (FEMA), and the Telecom Regulatory Authority of India (TRAI) regulated the telecom sector. Pension Fund Regulatory and Development Authority (PFRDA) and Insurance Regulatory and Development Authority of India (IRDA) regulated pension and insurance. Securities and Exchange Board of India (SEBI) regulated the stock market. Justice B.N. Srikrishna headed Financial Sector Reforms & Legislation (FSLRC), 2013 recommended the creation of a National Debt Management Agency (NDMA), Financial Redressal Agency, and Monetary Policy Committee (MPC). While the MPC has been put in place since 2016 to take a broad-based decision on how to fix the repo rate, the other two entities are yet to see the light of the day. The major turnaround in public policy was seen in the change in the role of the state from being a dominant player in economic activity to taking up the role of creating an enabling environment for the private sector to be a part of developmental activities⁴⁹. The gleaming airports, the sleek national highways, and the highly-efficient telecom sector are testimony to the change in governance. Bureaucracy is no longer involved in controls and quota enforcement but in promoting 'liberalization, privatization, and globalization'. Public-private partnerships have become the new buzzword for bolstering the infrastructure sector. The bureaucracy was now expected to be creating an enabling environment for the private sector to realize its 'animal spirits'(Kohli, 2006).

⁴⁹ [Reserve Bank of India - Speeches](#) | Reflections on Policy Choices in the Indian Financial System | 21 Oct, 2022

3. The structural transformation

The structural transformation of India after economic liberalization is best illustrated in the table below.

Table 1: India during Pre and Post Liberalization

Parameter	1977	2017
Agriculture as percent of GDP	38 percent	17 percent
The industry as percent of GDP	26 percent	26 percent
Services as percent of GDP	36 percent	57 percent
Export and import as percent of GDP	12 percent	41 percent
FDI and FII Inflow as percent of GDP	2 percent	6.8 percent
Public Sector Investment as percent GDP	9.8 percent	7.4 percent
Private Sector Investment	1.5 percent	11 percent

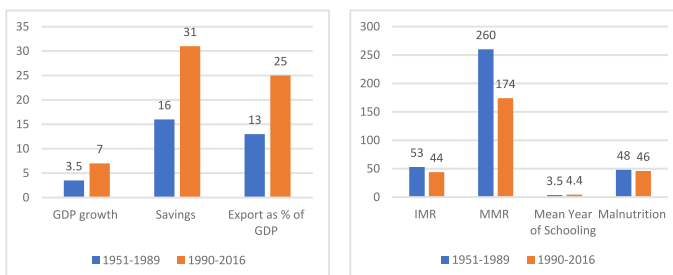
Source: *Macroeconomics: Then and Now by Nitin Desai- The Business Standard*

It is clear from the above how agriculture has waned in importance, the industry remained stagnant, and services have become the new mascot of high growth. India is now more open to globalization and the private sector has been the predominant face of India's economic growth story.

4. Growth development mismatch

However, these structural changes and the high economic growth mask India's human development story which indicates a poor record in terms of containing Infant Mortality Rate (IMR), Maternal Mortality Rate (MMR), and malnutrition and Mean Years of Schooling (MYS). Figure 1 shows how there is a huge disconnect between growth and development in India after economic liberalization.

Figure 1: Growth-development disconnect (pre and post liberalization)



Growth Development

Source: *Economic Survey (2017-18), Government of India*

India's record in terms of child and maternal mortality, schooling, and malnutrition is truly dismal. The *National Family Health Survey (NFHS) V (2019-21)*⁵⁰ brings out how 35 percent of children have remained stunted and the percentage of those suffering from anemia has increased from 53 percent in 2015-16 to 57 percent in 2021.

In particular, the governance of the social sector and optimal budget utilization have become areas of serious concern. As the following table will reveal, there have been substantial surrenders in programs like *Anganwadi*, *Matru Vandana*, *Beti Bachao Beti Padhao*, which are the major drivers for improving socio-economic inclusion.

Table 2: Gender Budget (in INR Cr.)

Program	2018 -19	2019-20 (BE)	2019-20 (RE)	2020-21 (BE)
Beti Bachao Beti Padhao	244.7	280	200	220
National Nutrition Mission	2662	3400	3400	3700
Anganwadi	16814	19834	17704	20532
Creche Scheme	29,7	50	50	75
Adolescent Girl	205	300	150	250
Matru Vandana	1054	2500	2300	2500

Source: India Budget 2020-21

It must also be noted that sectors like quality primary education, basic health care, and sanitation are merit goods (Musgrave, 1959), where the government must accord priority to allocation as the long-term benefits to the society generally far outweighs the benefits to the individuals (Stiglitz, 1986). Investment in merit goods, particularly at the early stages of child development has a spill-over effect and creates positive externalities for the society in the form of empowered democracy, more informed citizens, better exercise of rights, vibrant democracy etc. (Stiglitz, 1986). Sadly, in India, the allocation to these three sectors is less than 5 percent of the GDP

⁵⁰ [National Family Health Survey 2019-21](#)

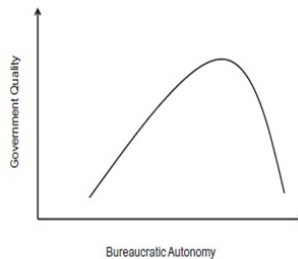
as against 10 percent spent by most developed economies and Emerging Market Economies like South Korea and China.

BUREAUCRATIC AUTONOMY

Francis Fukuyama defined governance as the capability of the government to make policy, enforce rules and deliver services (Fukuyama, 2013). He developed a broad framework to measure the quality of governance of any country. He laid stress on bureaucratic autonomy.

Autonomy maybe defined as the manner in which political principal issues mandate to the bureaucrats who act as their agents (Fukuyama, 2013)⁵¹. It is basically the degree of freedom that is given to officials to carry out their responsibility. According to Francis Fukuyama, there is a direct relationship between the degree of bureaucratic autonomy and quality of governance, which looks like an inverted U (Figure 2). This means that for optimal governance, it is important to equip bureaucrats with a certain degree of freedom. Binding them with stringent rules leads to what Samuel Huntington calls, 'subordination' (Fukuyama, 2013). On the other hand, unrestricted autonomy too can be disastrous as it may usurp the political dispensation and take over the nation as in case of Imperial Germany and Japan during World War I and World War II respectively where the military displaced the political authorities.

Figure 2: Bureaucratic autonomy and quality of government



Source: Fukuyama, F. (2013). What is governance? Governance, 26(3), 347-368.

51 Political principals refer to politicians who make bureaucrats act as their agents for implementation of any policies. The degree of freedom that the bureaucrats have to tinker with the policies to make them implementable, is referred as their 'autonomy'.

India's quality of governance continues to be crippled due to the subordination of its bureaucracy. Excessive subordination creates fear in the minds of officials because of which they do not innovate or take risks and develop a tendency to stick to the status quo. This cumulatively leads to poor performance. An instance of such a case can be seen in File Management of the lower level of bureaucracy. Under the current system, lower-level officials (mostly clerical staff) in the ministry are the first to put their comments on any file. However, because of the status-quo attitude, they more or less stick to the line taken by the ministry in the past. This approach also gives them a safety net in case there is any questioning of their comments from higher authorities (Panagariya, 2020). The officials at the higher levels too maintain the stand, even if the current time demands a reform for greater efficiency. This means that any reform will be initiated only by the cabinet or top-level bureaucrats. To promote innovative thinking at the lower and middle levels, the government should shift to a system where the first comments come from an officer belonging to the deputy secretary/director. This would also create a space for discussion amongst officials and promote out-of-the-box thinking over complex policy issues. Involving young energetic professionals at the lower levels can be another great idea; encouraging them to be enthusiastic to do the groundwork and prior research for the senior bureaucrats on any policy at hand. This requires that a research cell with expertise in economics and statistics be available to provide trend analyses and cost-benefit analyses. There is also a need to associate with good think-tanks to provide their professional and impedance advice and analyses.

India is a unique case where the current bureaucratic system itself acts as the greatest resistance in increasing bureaucratic capacity. The entire setup is skewed in favour of generalists over specialists⁵² (Panagariya, 2020). This is

52 This aspect was highlighted by Arvind Panagariya in his book "India Unlimited: Reclaiming the lost glory" in the chapter "Governance" under the section 'Reforms in Bureaucracy'.

because people receive their promotions on the basis of service tenure rather than performance. India's challenges at the time of independence were huge but still ordinary, like maintaining law and order and revenue collection. However, today, with far more complex challenges of sustainable development, the policy challenges are much more complex and require domain experts. This would increase the bureaucratic capacity, thus allowing greater autonomy and ultimately improving the quality of governance and service delivery.

ABDICATING POLICY DESIGN AND EVALUATION

A sound public policy must have a strong framework for policy evaluation. India was one of the first countries to create a Policy Evaluation Organization (PEO), which was founded in October 1952 and had the primary responsibility of analyzing community development programmes and other Intensive Area Development Schemes. The PEO's independent work proved to be quite successful in assessing government programmes and policies and advocating improvements through feedback. Using sophisticated economic modelling, Pitambar Pant, a civil official, established the Perspective Planning Division. Under the watchful eyes of Mahalanobis, Pant, and Nehru, robust public policy peaked with perspective planning, evaluation, and the Central Statistical Organization.

The PEO setup, though, began to deteriorate after 1969 as Indira Gandhi began to consolidate her control, despite becoming more robust throughout the first and third five-year plans. The Evaluation of Policy regained its lost momentum between the middle of the 1980s and the deregulation of the economy. The aspects of the examination before and after did, however, alter significantly in a very important way. The processes of designing policies and evaluating them are iterative and complementary. According to the guidelines established by the Development Assistance Committee (DAC) in Paris (1991), there are five evaluation criteria: relevance, effectiveness, efficiency, impact, and sustainability. Similar to

that, policy design is a lengthy process that includes eight major components and ongoing stakeholder consultation. Policy design identifies a potential 'need'. The policy won't be accepted and embraced if the beneficiaries have no need or requirement, and it will inevitably fail. For instance, the Punjab and Haryana regions fiercely opposed the Farm Bills which were passed through ordinance in the year 2020. This is due to the fact that the mandi system is firmly established, and no tampering is "necessary" there. Mandi, on the other hand, is sparse in Bihar, thus farmers there may be more willing to accept the need for the establishment of a market. After the prospective need has been identified, a requirements assessment is conducted, and then research is done to identify potential programmes to meet the need. An evidence-based design is chosen, the programme is created to suit the needs of the stakeholders, and then the Pilot is implemented, and the Policy is released. At every stage, the program's development must be closely watched and analysed in order to gather input for any necessary adjustments. A policy is created within such a broad framework to solve the lack of coordination and meet the needs of the group through continuous observation and periodic evaluation.

Figure 3: Steps for designing a program and its development



THE WAY FORWARD

As the forgoing would reveal, the ideological shift in India from socialism to a market economy has significantly impacted the growth variables of GDP, savings and the percentage of export (as shown in figure 1). This transformation from socialism to market economy unfurled by the economic liberalization in the year 1992 has also contributed significantly in decreasing the percentage of people below the poverty line by 26 percent (300 million). While the parties in power have different political ideologies, there is a remarkable coalescence in their continued commitment to free market philosophy and economic efficiency. However, these achievements do not mask our poor progress in terms of human development parameters like low IMR, MMR, mean years of schooling, and malnutrition. Unlike emerging market economies like China, growth and development have not become complementary wheels of India's development chariot. According to Weber, public policies are put into effect by civil servants who are expected to be meritorious, rational, and rule-based (Serpa and Ferreira, 2019). After independence, bureaucracy was governed by the control mandate of giving licenses, permits, and quotas. After economic liberalization, the bureaucracy was expected to provide an enabling environment for the private sector to flourish and harness the economy's aggressive potential. For this to happen, Francis Fukuyama rightly believes how bureaucratic autonomy is sine qua non of quality governance. In India, after 1956 the planning commission provided a unique template for planning, policy design and evaluation of major programs. However, with the dismantling of the planning commission, such a professional approach of setting targets, evaluating performances, making mid-course corrections and most importantly, democratic accountability, have become a challenge. Prof. Abhijeet Banerjee and Esther Duflo, the Nobel Laureates, strongly believe that by adopting a RCT model, the government would be in a better position to launch major development programs (Banerjee et. al., 2017). In India, however, many such programs are launched without a pilot survey of

their likely outcomes. Finally, for public policy and governance to succeed, institutions must be given independence, civil servants should be more professional through capacity build-up programs and there must be fair synergy between political expediency and sound professional opinion.

Bureaucracy must uphold rule of law in a professional and objective manner. Institutional independence must be respected by the party in power. For this to happen, the selection process of the major constitutional functionaries like the Judges, Controller and Auditor General (C&AG), Chief Election Commissioner (CEC) and RBI Governor should be done by a collegium rather than by the party in power (Sharma et al., 2018). Most importantly, the bureaucracy must be ring-fenced against arbitrary political masters, by ensuring the stability of tenure. On their part, the bureaucrats must rise to the challenge of nation-building, providing effective law and order, and most importantly equip themselves professionally and update their skills periodically to be on par with the best global standards of governance. The Economist in a recent editorial has pointed out that liberal democracy is at a crossroads, as the governing elite is subserving the interests of the elite and not the common man.⁵³ As India turns 76 as an independent country, its future as a global power will hinge on how it balances equity and empathy with economic efficiency and on how its bureaucracy upholds rule of law rather than sidling up to the party in power.

53 [Eric Li on the failure of liberal democracy and the rise of Chinas way | The Economist](#)

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Rejimon Kuttappan

Rejimon Kuttappan is an independent journalist and a migrant rights defender. He was Chief Reporter for the *Times of Oman* until he was deported back to India in 2017, for exposing human trafficking and modern slavery in the Arab Gulf through a front-page news story. Rejimon now writes for the Open Democracy, Rosa Luxembourg Publications, Thomson Reuters Foundation (TRF), Equal Times, Migrant Rights, Middle East Eye, *The Hindu*, *Times of India*, *The Caravan*, Wire, The Leaflet, and various other Indian news portals. He is also a researcher for the Migrant Forum in Asia and has worked as a consultant for the ILO, International Trade Union Confederation (ITUC) and Human Rights Watch. In 2019, he authored an anthology, *Rowing Between Rooftops: The Heroic Fishermen of Kerala Floods*, telling the stories of heroic fishermen who rescued thousands from the 2018 Kerala floods. And in 2021 fall, Penguin

published his book *Undocumented*. The book narrates the woes of undocumented Indian migrants in the Arab Gulf. Rejimon lives in Kerala and can be followed on @rejitweets.

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Prof. Chhaya Bhardwaj is an Associate Professor at the O P Jindal University, Jindal Global Law School, Rapporteur and Member of the Sabin Center for Climate Change Law- Columbia University, and a Member of the IUCN-WCEL. She worked as the Visiting Scholar and Lecturer at Dublin City University, United Nations Fellow in 2017 and 2019.

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Rita Manchanda

Rita Manchanda is a feminist scholar, author, human rights, peace and social justice advocate working in South Asia with particular attention to defending the rights of vulnerable and marginalised groups: women, religious and ethnic minorities and forcibly displaced persons. Several of her books, chapters and articles have made significant contributions and provided new insights in works such as “Women War and Peace in South Asia”, “Women and the Politics of Peace”, “New Directions in Women, Peace and Security”, “No Nonsense Guide to Minority Rights in South Asia”, *States in Conflict with their Minorities*”, “Contesting Infantilisation of Forced Migrant Women” and “Gender Conflict and Forced Migration in India: Human Rights” in *The Elgar Companion to Gender and Global Migration* (2023). Previously as Executive and Research Director of the 'South Asia Forum for Human Rights (SAFHR) , she coordinated a multi-country field based human rights audits of peace processes resulting in the “SAGE Series in Human Rights Audits of Peace Processes”. She has been Gender Advisor, Commonwealth Technical Fund (2004-5), consultant with

UN Women (2010-11,2012-13, 2014), Centre for Humanitarian Dialogues (2011, 2012), and SAFERWORLD (2015, 2016). She is an experienced guest lecturer on Global Studies and Peace, conflict and gender studies.

Naresh Singh

Dr. Naresh Singh is Professor and Executive Dean at the Jindal School of Government and Public Policy, where he is also Director of the Centre of Complexity Economics, Applied Spirituality and Public Policy. He is visiting professor, University of Ottawa, School of International Development and Global Studies.

He has served in several high-profile international positions such as · Executive Director of the Global Commission on Legal Empowerment of the poor hosted by UNDP and co-chaired by Madeleine Albright and Hernando de Soto · Director General in the Policy Branch of the Canadian International Development Agency · Principal Adviser on Poverty and Sustainable Livelihoods at UNDP New York

He has been an international consultant to organizations such as the United Nations Development Program (UNDP), the Food and Agriculture Organization (FAO), the Commonwealth Secretariat and the International Labour Organization (ILO). Professor Singh is recognized globally for his work on sustainable livelihoods. He has a transdisciplinary Ph.D. in Environmental Sciences, has been a visiting professor at several Universities in the US and Canada, including Boston, Harvard and McGill.

Poorva Israni

Poorva Israni is a Bachelor in Economics and a Master in Public Policy graduate. She is currently pursuing Master's in Environment and Sustainability at Western University. Poorva was working with the United Nations Development Program India towards the successful implementation of the Green Recovery Programme. She has experience in program designing and implementation of green energy and green mobility development projects.

Rajnish Wadehra:

Rajnish Wadehra is a Senior Fellow at Institute of Social Sciences and has been teaching elective courses on energy and environment law and policy on an honorary basis as a Visiting Faculty at Jindal Global Law School. He is a career executive and entrepreneur who came to academia mid-career. He has a Master's in Public Policy (JSGP, JGU), BA Economics (Hons.) from St Stephens College, University of Delhi, and a Certificate in General Management (IIM Calcutta). His areas of research include Global climate litigation ; Comparative energy and environment laws and policies around the world; India's dependence on coal and its impact on the environment and sustainability ; and India's ongoing transition away from centrally planned public sector led growth to a semi- regulated market economy. His enquiry focuses on aspects of justice, morals and ethics in business, law- and policy-making driving this transition.

Sasank Arremsetty:

Sasank Arremsetty is a student at Jindal School of International Affairs (JSIA) pursuing his Bachelor of Arts (Hons) in Global Affairs. He aspires to study law with interests in Environmental law and linking the concepts of International Relations to law and environment justice. He seeks, thereby, to study the intricacies and the much needed legal basis for the majority of the international happenings, that involve Global Politics, International Security Studies and Foreign Policies of various countries along with Global Environmental Policies.

Armin Rosencranz:

Armin Rosencranz retired as the founding Dean of Jindal Global School of Environment and Sustainability at O.P. Jindal Global University in 2022. In 1987, he founded the international environmental NGO, [Pacific Environment](#), which he led until 1996. As a political scientist and jurist he received five Fulbright grants – two to India, and one each to Australia,

Indonesia and the Philippines. Prof Rosencranz studied for his Bachelors degree at Princeton University and has had a long-standing association with Stanford University, where he studied for his Juris Doctor, Masters and Phd, and also served as the President of the Student Body, a Faculty Resident, and a Trustee. Apart from having written hundreds of articles and opinion pieces, he is well known as a co-author of the books 'Climate Change Science and Policy (Island Press, 2010) ; Climate Change Policy (Island Press, 2002) ; and 'Environment Law and Policy in India' (Oxford University Press, India).

Satya Narayan Misra

Prof. Satya Narayan Misra did his Post graduation in Applied Economics with first class from Utkal University, Bhubaneswar (1975). He joined the Indian Economic Service in the year 1976 followed by Indian Defense Accounts Service in 1979 and worked as Director (Finance) to DRDO (1995-1999). He was Financial Advisor to the Indian Air Force (2005-07), Joint Secretary (Aerospace) (2007-10) & Principal Controller of Defense Accounts (Navy) (2010-2012). Of the important milestones in his career he drafted the Defense Procurement Manual-2005 that ushered in high degree of transparency in defense acquisition.

He did his Ph.D. (Economics) in 2011 from Utkal University and has a path breaking book “Impact of Defense Offsets on Military Industry Capability and Self-Reliance - The Road Ahead” in 2012 to his credit. He has been trained at Defense Acquisition University, Washington, IRBM, California, Marshall Institute of Strategic Studies Munich; besides doing Management Development Programs at IIM Calcutta and IIM Bangalore.

Post retirement in 2012, he taught Constitutional Law, Service Law & Economics at the School of Law (2012-13), and became the Dean in School of Management of KIIT, Bhubaneswar (2016-2022).

Kartik Kishore:

Kartik Kishore is a final year student pursuing his Masters' in Public Policy from Jindal School of Government and Public Policy. He has a keen interest in political-economic issues and governance. He has several publications as op-eds in leading dailies on various policy issues. Some of them are - looming challenges of public policy in India, Gaps in Data Protection laws, Rent Seeking Tendencies in India's policy domain etc. His strength lies in macroeconomic analysis and programme evaluation. He has also presented research papers on 'Inflation Targeting, Monetary Policy: The Way Forward' in International Conference held in Jaipur. Based on his academic and all-round performance, he was awarded as the 'Best All-Rounder Student' on the eve of University Day by O.P. Jindal Global University.

He is currently working with Research and Information System for Developing Countries (RIS), New Delhi – a think tank associated with Ministry of External Affairs. As a policy researcher, he represented Centre for Maritime Economy and Connectivity (CMEC) at signing of Memorandum of Agreement to launch CMEC under the aegis of Ministry of Ports, Shipping and Waterways (MoPS&W), Government of India.

REVIEW BOARD BIO

Prof. Jessica A. Field is a Research Associate and guest lecturer at the Institute for Risk and Disaster Reduction, University College London (UCL). Prof. Field was an Adjunct Associate Professor at the Jindal School of International Affairs. Her research explores the politics and history of humanitarianism, primarily in India. She has completed research projects examining disaster governance in Ladakh, and refugee protection in Delhi, Hyderabad and Mewat. Dr Field is also a Lecturer in Global Challenges at Brunel University London, a Research Associate with the Institute for Risk and Disaster Reduction at University College London, and a Research Fellow with the Humanitarian and Conflict Response Institute at the University of Manchester. Her Ph.D. at the University of Manchester examined the professionalisation and neo-colonial character of humanitarian fundraising in the UK and India across the mid twentieth century.

Prof. Sumeet Mhaskar is a Professor and Labour Sociologist at the Jindal School of Government and Public Policy, O. P. Jindal Global University. He also holds Research Partner position at the Max Planck Institute for the Study of Religious and Ethnic Diversity (MPI-MMG) in Germany. Prof. Mhaskar has previously held positions at the Center for South Asia (Stanford University), Centre for Modern Indian Studies (University of Göttingen), International Centre for Development and Decent Work (Kassel University) and MPI-MMG. He is the recipient of the prestigious postdoctoral research award conferred by the Alexander von Humboldt Foundation in Germany. He has obtained his doctorate in Sociology from the University of Oxford, and M. A. and M.Phil. degrees in Political Science from Jawaharlal Nehru University in New Delhi. Prof. Mhaskar's research explores the multifaceted vulnerabilities workers' experience at the lower end of India's 'rising economy'. His research interest in deindustrialisation, joblessness, return migration, role of caste, religion and gender in shaping occupational choices, urban spatial restructuring, and labour and social movements.

Prof. Abhiroop Chowdhury is Professor and Associate Dean (Office of research) at Jindal Global School of Environment and Sustainability. He is also the faculty coordinator of student society- The Final Stand (TFS). He completed his graduation in Botany (Hons.) and M.Sc. in Environmental System Management with special paper on Wildlife conservation, from University of Calcutta. He had qualified national level GATE exam in two different subject tracks- Life Sciences, Ecology and Evolution. Abhiroop earned his, PhD degree from Indian Institute of Technology (Indian School of Mines) with MHRD fellowship, on the research question 'how development and climate change is impacting mangrove ecology at Indian Sundarbans?'. His post-doctoral research was on Kachchh mangrove ecology at Gujarat. Prof. Chowdhury's research focuses on blue carbon sequestration, Mangrove restoration, Climate-change Ecology, Pollution assessment and management, Environmental Social Work.

Dr. Raffaella Puggioni is an Associate Professor at the Jindal School of International Affairs, O.P. Jindal Global University. She is currently Associate Member at The Centre for the Study of Global Human Movement (University of Cambridge, UK), Global Studies Research Associate at the University of Sussex (UK), and Associate Fellow at the Higher Education Academy (UK).

Dr Puggioni has some fourteen-year teaching experience in International Studies/Political Science in both British and American systems of higher education, in countries as diverse as Italy, China, Azerbaijan and India. Her research expertise cuts across the field of International Relations Theory, Migration Studies, Citizenship Studies, Resistance and Border Studies. Although her research is globally oriented, most of her research has focussed on the Italian/European migration framework, with special attention to everyday practices of resistance. She is currently a member of the Editorial Board for the International Journal of Migration and Border Studies.

Dr. Sugandha Nagpal is an Associate Professor at the Jindal School of International Affairs, O.P. Jindal Global University. Dr. Nagpal has a Ph.D. in International Development from the University of East Anglia, Norwich (UK). Her research work focuses on issues of migration, gender, education, urbanization and development. Her PhD dissertation explores the gendered dynamics of middle class culture in a Dalit community in Punjab. In her previous work, she has investigated questions of land acquisition and development, maternal health and mobile technology and sex-selection in Indo-Canadian communities. More recently, she has forayed into more interdisciplinary and applied research on mobility and resilience in rural communities. One of her current projects focuses on internal migrants' aspirations for education and employment in Haryana. In the other project, she is working with mental health practitioners, educators and community partners across Kenya, UK and India to develop and implement a family-based approach to mental well-being.

Prof. Tarini Mehta is an Assistant Dean & Assistant Professor, Environmental Law, Jindal School of Environment & Sustainability. Environmental law, human rights and refugee law have been her areas of focus over the past decade as an advocate and legal scholar. She has published several articles and chapters in books on environmental governance and human rights. Her upcoming book on Environmental Governance in the Himalayan region, is a comparative study of five Himalayan nations. She received her Doctorate in International Environmental Law from Pace University, New York, USA.

Prof. Kumar Manish is the Assistant Dean & Assistant Professor, Environmental Science, Jindal School of Environment & Sustainability. A dedicated environmental scientist and conservationist, since 2007 he has been associated with mangrove conservation and alternative livelihood initiatives in the Indian Sundarbans. His primary areas of research are pollution mitigation, climate change and coastal area ecology, traditional

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Divya Bhatnagar is a Lecturer at the Jindal School of Government and Public Policy (JSGP) and focuses her research at the Centre for Complexity Economics, Applied Spirituality and Public Policy (CEASP). She has completed her Master of Public Policy at the University of Chicago and earned a certificate in International Development and another certificate in Global Conflict Studies. She has worked at UNICEF (UN headquarters, New York) in the Division of Data, Research, and Policy in the Education Section and the Child Poverty Section. She later worked in the Office of Innovation at UNICEF (UN headquarters, New York) researching education technology to reach children in low-resource and low-connectivity areas. Most recently, she worked at Giri Institute of Development Studies working on analyzing the Indian government's project of Samagra Shiksha Abhiyan and the UNDP program on community health.

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