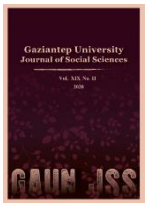

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Araştırma Makalesi ● Research Article

Environmental Justice as an Alternative to Resilience: India as an Example[1]

Dayanıklılık Kavramına Alternatif olarak Çevresel Adalet: Hindistan Örneği

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ÖZ

Dayanıklılık kavramı, iklim göçünü de içeren kalkınma tartışmalarının çeşitli alanlarında- çok da eleştirilmeden- giderek daha sık kullanılmaktadır. Fakat kavram, genellikle göz ardı edilen birçok sorunu içermektedir: İçeriği değişken, belirsiz ve şeffaf olmayan bir kavramdır. İklim değişikliğine uyum riskini ve sorumluluğunu devletten bireylerin omuzlarına yükler. Ayrıca mevcut adaletsizlikleri arttırır. Böylece kavram, statükonun devamına yol açar ve sosyo-ekonomik ve çevresel sorunların yapısal nedenlerini görmezlikten gelir. Bu makale, dayanıklılık kavramının çevresel sorunları çözmek için sınırlı bir kavram olduğunu ve bu sorunların dayanıklılık kavramından daha kapsayıcı ve adil bir sosyo-ekolojik mercek olan çevresel adalet kavramı ile ele alınıp çözülmesi gerektiğini savlamaktadır. Makalede Hindistan'daki iklim göçü örneği irdelenerek neden dayanıklılık kavramı yerine çevresel adalet kavramının kullanılmasının gerektiği tartışılmaktadır.

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ABSTRACT

The notion of resilience is being increasingly used, without much criticism, in various areas of the development debate, involving climate migration. Nevertheless, the concept incorporates several weaknesses which are often ignored: it is a vague and non-transparent concept with shifting meanings, transfers the risk and responsibility of adaptation from the state onto the shoulders of individuals, and duplicates existing injustices. Thus, it promotes the continuation of the status quo and overlooks the structural causes of socio-economic and environmental problems. This paper argues that resilience is a limited framework to deal with environmental harms and that environmental degradation should be dealt with in a framework of environmental justice because it provides a more comprehensive and just socio-ecological lens for the critical assessment and solution of environmental problems. The paper studies the phenomenon of climate migration in India and investigates why an environmental justice framework should be employed for analyzing and proposing solutions to environmental damage instead of resilience.

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Introduction

Resilience is being increasingly used in various areas of the development debate. Similarly, climate migration is examined through a resilience notion, appeasing the alarmist tone of the earlier environmental security angle (Boas and Rothe, 2016). Although as a flexible, learning-based and subtle concept (Bourbeau, 2018; Chandler, 2019), resilience offers certain benefits for environmental protection, it contains significant loopholes, e.g. being a vague and non-transparent concept with various meanings, putting the risk and responsibility of adaptation onto the shoulders of individuals, and duplicating the existing injustices (Gaillard, 2010; Joseph, 2013; Gillard, 2016).

Nevertheless, most researchers critical about resilience have suggested to either enhance the meaning of the concept or re-interpret it critically. This paper proposes that instead of the resilience concept, an environmental justice framework should be adopted as an analytical tool to examine environmental problems and offer solutions. Hence, the purpose is to analyze, why, in comparison to the resilience, an environmental justice framework is more comprehensive and just for understanding and preventing various kinds of environmental damages.

The paper focuses on climate-induced migration with a particular reference to India as the case study. Although multiple factors drive population movements, the Intergovernmental Panel on Climate Change (IPCC), an intergovernmental United Nations (UN) body, has been pushing to include climate migration as one of the main consequences of environmental change (IPCC, 2014). A new Oxfam analysis shows that there was a five-fold rise in the number of extreme weather events that resulted in human displacement over the last decade (Oxfam, 2019). India is chosen as a case study due to its particular vulnerability to natural hazards. Experiencing 431 natural disasters between 1980-2010, it is among the countries most severely affected by drought (Jülich, 2011; Government of India, 2018). People in developing countries, are more likely to be displaced by extreme weather events than people in high income countries. This happens even though the world's poorest communities like those in India bear little responsibility for climate change (Oxfam, 2019).

As per research techniques, the paper employs a case-study approach, uses content analysis and borrows from qualitative counter-factual analysis. As Gerring also points out, a case study approach is "an intensive study of a single unit for the purpose of understanding a larger class of (similar) units" (2004), where a unit equates to a spatially bounded phenomenon, such as country, person, and political party. This paper analyzes climate-induced migration in India as a case study. Secondly, content analysis, the technique of analyzing the presence of certain words, symbols, themes or concepts in a given qualitative text, is used with the aim of analyzing official documents on climate change from India to see if and how many times the resilience concept is used (Neuendorf, 2017). Furthermore, international organizations' reports are analyzed to study their recommendations about resilience. Finally, useful insights are derived from qualitative counter-factual analysis, which is a method for comparing two outcomes where one group has benefited from a treatment while another does not. In other words, it is the method of establishing a scenario for "what if an X was (not) to happen". In social sciences, they can be used along with case studies (Levy, 2009; Tetlock and Belkin, 1996). While analyzing the question of what if an environmental justice paradigm was to be used instead of the resilience concept, the article employs a qualitative counter factual analysis (Fearon, 1991).

The article first discusses the weaknesses of resilience concept by reviewing the relevant literature. Then, it analyses the environmental justice paradigm and considers why it is a more appropriate framework for studying and preventing environmental harms compared to resilience. In the last section, the paper examines the use of resilience and studies the

hypothetical adoption of an environmental justice framework for the climate migration issue in India. Since research on both environmental migration and Indian studies is very limited in political science and international relations literature in Turkey, by conducting an in-depth analysis on these topics, the paper hopes to make a significant contribution. In addition, resilience concept is getting established without enough criticisms in many policy corners. Nevertheless, finding policy solutions on the concept of resilience in the context of environmental harms within capitalism is like patching. One only deals with short-term consequences without seeing the root causes of the problems or seeing the entire socio-political framework. Hence, by casting a critical eye on the concept, discussing its weaknesses, illustrating its usage in a Southern context, and offering an alternative framework which environmental degradation should be instead handled, the paper invites not only the academics but also the policy-making world to reconsider the concept critically.

Weaknesses of Resilience

Shifting meanings

Resilience emerged as a concept to analyze different capacities to respond to uncertainty and sudden change (Pike, 2009). It was first used in the climate and disaster literature in the 1970s (Gaillard, 2010). While by the 1990s it has become a widely used concept, there are still ongoing debates around its meaning (Joseph, 2013). Its shifting definition can even be seen in the Climate Change Synthesis reports published by the IPCC. While resilience was initially defined as the "amount of change a system can undergo without changing state" in 2001 (IPCC, 2001), in 2014, it was defined as the ability of social, economic, and environmental systems to adapt and transform to "cope with a hazardous event or trend or disturbance" (IPCC, 2014).

C. S. Holling, defined this fuzzy term by classifying it under two categories: resilience as engineering resilience, meaning the capacity of a system to return to its previous state after an external shock; and ecological resilience, where the system adapts itself to continue to perform its basic functions after an exogenous shock (Holling, 1973). Building on Holling's definition, other scholars (Bourbeau, 2013; Corry, 2014; Methmann and Oels, 2015) added another component: socio-ecological resilience. It is sometimes not enough for systems to adapt themselves, but they need to go through alterations and acquire new functions to cope with the external disturbance. There are also scholars who suggest for a more radical treatment of socio-ecological resilience by incorporating an analysis of power relations and inequalities that cause the vulnerabilities in the first place (Homborg, 2013). Thus, there are numerous conceptualizations of resilience ranging from more conservative to radical ones, conservative ones suggesting a return to an earlier condition while radical ones being more focused on creative problem solving (Humbert and Joseph, 2019).

While shifting meanings of resilience is mostly seen as a weakness in the literature, it is also contended that the fuzzy and abstract nature of resilience is a reason of its growing popularity. Boas and Rothe highlight that its diverse meanings win it support from diverse actors such as traditional security players and climate change community (Boas and Rothe, 2016). Likewise, Walsh-Dilley and Wolford hold that lack of clarity around the concept presents a unique opportunity for rethinking what really matters for development and ensure that it does not become a technical concept (Dilley and Wolford, 2015). Although there is a certain accuracy behind these arguments, multiple logics makes the concept a vague, and non-transparent one. First, it may mean different things to different people. Second, the multiplicity in discourses can lead to diverse practices, meaning that when the meaning of the resilience differs, the policies follow also vary from each other. Third, trying to find a common ground generally result in the reduction of meanings.

Reduction of responsibilities

The relevance of resilience to neoliberalism as a concept also varies due to its multiple meanings. Some scholars argue that resilience is purposefully used to promote the neoliberal agenda. It is misplacing the responsibility for adaptation and transformation onto the vulnerable individuals and communities without reflecting much on the responsibility of accountable actors (Gillard, 2016). It signals the reduction of the responsibility of the nation state for social protection by underlining uncertainty of risks and normalizing failures (Sengupta and Jha, 2021). On the contrary, there are others who view resilience as a response to the failure of neoliberal policy programs. They argue that some policies developed highly regulatory and interventionist characteristics and they are in sharp contrast with the core principles of neoliberalism (Chandler, 2014; Boas and Rothe, 2016). For instance, carbon markets rely on significant government intervention, since the measurement and commodification of CO2 for emission trading primarily demand governmental action (Boas and Rothe, 2016). The growing popularity of resilience is, accordingly, linked to the way it offers a flexible and learning-based alternative to heavily technical and bureaucratic climate-governance mechanisms (Chandler,2014; Boas and Rothe, 2016). Likewise, Bourbeau suggests that viewing resilience only as a by-product of neoliberalism is limiting since "resilience strategies have had a positive impact in many international contexts" (Bourbeau, 2018).

Although resilience's relevance to neoliberalism is disputed, those critical about the concept accept that it places much of the risk of the vulnerabilities and the responsibility for the adaptation and transformation on the shoulders of individuals and communities (MacKinnon and Derickson, 2013). This is also because resilience is an increasingly managerial-type concept, and it segregates individual, regional, and national levels. Nevertheless, what may appear as a local issue may have roots in global inequalities. When individuals and communities seek to use their already existing resources to cope with a shock, systemic constraints exogenous to individuals and communities, such as unequal distribution of wealth, market forces, and political governance will curtail their ability to respond to turbulence (Gaillard, 2010). Increasing embeddedness of most communities into the global capitalism makes individual and community resilience against various types of shock less imaginable. Small communities cannot reorganize themselves and become risk-averted within the current global economic system (Joseph, 2013; Chandler, 2019). Given the length of production chains, the organization of trade and communication networks, and the complexity of financial and insurance systems, for an individual or small community to become self-resilient is almost impossible. It is particularly the case for the poor and the marginalized communities. Since they face restricted access to means of livelihood, global capitalism particularly increases their vulnerability to climate emergencies (Faber and Schlegel, 2017). Moreover, fostering community resilience masks inequality and hierarchy within a community. For resolving environmental vulnerabilities, the root causes of these insecurities, often related to communal injustice, are required to be addressed. However, resilience promotes self-management and individual risk taking. It is a not a concept fit for treating the defenselessness of the poor and the marginalized communities. It predominantly advances the interests of the urban elites, contains mostly restricted scope such as "infrastructure-first" approach or "smart investments", and reinforces a value-neutral and apolitical process (Camponeschi, 2021). It reduces complex historical processes and injustices into a managerial-type of vulnerability and places the responsibility for adaptation onto the shoulders of the individuals.

Injustice multiplier

Thirdly, resilience overlooks the issues that can be the root causes of the risk-inducing factors and reproduce the insecurities, hence, it only offers limited change (Biermann, 2015; Ferguson, 2019). In other words, resilience does not delve much into the factors generating the socio-environmental problems. It upholds the established system and feeds into conservative

predispositions. Consequently, resilience in effect duplicates some injustices for both the environment and the local inhabitants. In other words, resilience works as an injustice multiplier by accumulating further inequalities and injustices. Although in general, a positive relationship between resilience and environmental justice is assumed, tensions and contradictions between them exist (Allen, 2017). For instance, Krishnan shows how resilience measures such embarkment construction against flood protection in Assam, northeast India can setback environmental justice because of the poor design, limited community consultations, insufficient maintenance, and river erosion (Krishnan, 2017). Likewise, Lambert and Allen further build on this argument by analyzing periphery of Lima, Peru. In Lima, debates on resilience to climate change, earthquake, and vegetation cover are substantiated using conservation maps. Nevertheless, some of these maps represent *lomas*, an endemic system growing on slopes which is inhabited by dwellers, as unpopulated, reducing the nature to an amenity feature. In other words, unjust urbanization occurring due to the economic structure is ignored with the aim of nurturing green hope however at the same time by exacerbating environmental injustices (Lambert and Allen, 2017).

To sum up, resilience concept comprises major loopholes. Hence, it falls short of offering a road map to achieve a real transition so as not to face further marginalization and injustices. Next, we introduce the environmental justice paradigm and discuss why environmental harms should be analyzed and handled in a framework of environmental justice rather than resilience.

Environmental Justice Paradigm

The concept was first born in the U.S. as a discourse to combat racial inequalities over the location of toxic waste sites in the late 1970s (Pellow, 2002). It called upon the unequal distribution of social and environmental advantages and degradation among different social groups, such as class and ethnicity. It shows how groups with less responsibility for creating such burdens suffer more from them (Sikor and Newell, 2014). The paradigm also studies the decision-making process in environmental schemes (Pellow, 2009). It provides a way of understanding how the process through which environmentally-harmful projects are decided upon are embedded in a framework of unequal power relations, leading the way for unequal distribution of environmental harm (Martinez-Alier, 2016).

Environmental justice is both an activist discourse (Agyeman and Evans, 2004) and a vision-setting framework for analyzing our ecological standing (Pellow, 2004, 2009). As a framework, it examines how the environmental hazards are created and unequally distributed as well as the role of the people and various groups in this process (Pellow, 2009). It assesses how the ownership of technology, expertise, and intellectual property rights, which are required for a transition to a world of clean energy and a safe environment, are distributed unequally, further solidifying existing injustices (Shue, 2014). It also evaluates all these questions in different dimensions, including inequalities within and between countries, between generations, as well between different species (Page, 2006).

People experience environmental insecurities depending on the current and historical patterns of resource allocation and implications of human-environment interaction (Detraz and Betsill, 2009). An example would be a gold mine using cyanide close to villages whose populations are dependent on agriculture. This can be considered as an environmental injustice since it benefits the shareholders of the gold mining company, while harming the villagers and nature. Moreover, a potential migration of villagers into the slums further generates environmental injustices, deepening the spatial divisions economically in cities, and, in the case of a sudden and large displacement, prospectively putting extra pressure on the supplies of water and electricity in the slums, creating extra insecurities. This example of a gold mine

project can be substituted by natural disasters, since they impact the rich and the poor unevenly and any large development project, particularly if they have been granted permission without procedural justice (Saad, 2017).

Environmental Justice Instead of Resilience

Scholars are increasingly aiming to remedy limitations of the resilience concept by expanding its conceptualizations. One most substantial of effort among them is the idea of incorporating the critical theory into the resilience thinking to better understand the political process of change resulting from resilience and bring about positive and radical transformations (Nelson, 2014; Biermann, 2015). Nevertheless, incorporating a critical turn to resilience thinking is not easy. The concept is already commonly used by several policymakers to manage and govern socio-ecological systems and amending the usage of this concept in their perceptions is reasonably demanding. Moreover, the resilience is already a vague concept with even "socio-ecological resilience" having more than one interpretation (Homborg, 2013). Adoption of a such a widely used but differently interpreted concept in a critical and transformative way, yet with another interpretation may cause supplementary difficulties. However, embracing environmental justice as a completely new analytical framework, rather than the resilience concept (both its common and critical forms), averts various insecurities more effectively.

In an environmental justice framework, the system itself, together with the communities, social relations, and the ecosystem it includes, can be considered as the referent object, and can be transformed. Hence, this paradigm offers a more dynamic and transformative framework, which offers solutions not only for "bouncing back after a crisis" like the resilience concept, but also for handling the causes of systemic crisis.

Paradoxically, the reasons for the insecurities that the notion of resilience wants to prevent, are inherent within the current system, which the concept of resilience intends to preserve. Since it is the existing social framework that creates the insecurities, to generate a secure environment, unequal power relations embedded in the existing social framework, which are the root causes of the problems, need to be addressed. An emphasis on resilience "not only elides the structural causes of vulnerability", but also prevents alternatives which are sought to create an environment of justice (Gillard, 2016). This is partially because resilience stresses the need for the individual and local communities to become self-reliant and responsible. It encourages the idea of responsible citizenship, reducing the role of the state and other social institutions for social and economic well-being. In fact, this is a privatized form of social rule where competition, individual responsibility and the logic of the market is promoted through ideas such as "public-private partnerships, networked governance, and an individualised conception of civil society on mobilizing active citizens" (Joseph, 2013). As such, one of the main risk-averting strategies promoted by resilience is financialization, through weather derivatives, insurance, and catastrophe bonds to hedge against environmental disasters (Ferguson, 2019). Nevertheless, financialization privatizes responsibility in the form of a debt rather than reducing the risk. Hence, first it reduces the responsibility and then it reproduces and deepens the same insecurities. An environmental justice framework, instead, recognizes injustice both at the individual and communal level, offers solutions for each of them by revealing the root causes of the problems embedded in various inequalities.

Particularly for a problem like climate migration, an environmental justice lens produces more comprehensive framework. The causes of migration are composed of intertwined factors including structural inequalities, economic insecurities, and social hierarchies. Therefore, exclusionary managerial techno-fixes do not offer healthy and just answers. Environmental justice framework, suggesting the examination of the causes of injustice at multiple layers

(individual, communal, racial, national, and class), provides far-reaching solutions (Turhan and Armiero, 2019).

In the following part, we will discuss our case study. First, we briefly discuss the climate-migration nexus where the concept of resilience has been frequently employed and which this paper also takes as a case study in the context of India. Subsequently, we examine why an environmental justice framework is more suitable for tackling climate migration in India than resilience.

The Climate-Migration Nexus

When the scholarly debates on the linkages between environmental change and human migration first emerged during the 1980s, it was accompanied by an alarmist discourse which portrayed climate change as a factor causing instability and violence that would in return trigger displacement of large masses of people (Wiegel et al., 2019: 2).

In the late 2000s, a new line of research came to the fora which started criticizing claims of "massive, abrupt and unavoidable flows of climate refugees" (Bettini, 2013: 63) on a factual basis and also moved away from the alarmist discourse that projected populations affected by climate change as defenceless victims who are forced to move across international boundaries by the negative implications of environmental change (Hartmann, 2010; Bettini, 2013; Piguet, et al., 2018; Wiegel et al., 2019). The new discourse around climate change-migration nexus, started framing migration as an adaptation strategy used proactively by individuals affected by changes happening in the natural, socio-political, and/or economic environment (Black et al., 2011; McLeman and Smit, 2006). While being less alarmist and more emancipatory than the securitised approach of the 1990s towards environmental migration, the framing of migration predominantly as a tool to be used by individuals in order to reduce their vulnerability and develop a form of resilience, has also been criticised for putting the responsibility to adapt mainly on the shoulders of individuals and communities. Equating failure to adapt with individual failure runs the risk of neglecting matters emanating from environmental injustices and different levels of vulnerability across global, regional, and local scales (Wiegel et al., 2019; Bettini, 2017; Klepp and Herbeck, 2016).

A third, new line of research has emerged from the 2010s onwards that highlights the existence of a certain "multiplicity of mobility" in connection with climate change (Wiegel et al., 2019; Boas et al., 2022; Baldwin et al., 2019; Boas et al., 2019; Parsons, 2019; Suliman et al., 2019; Cundill et al., 2021). Accordingly, there are "multiplicities of climate mobilities" (Boas et al., 2022), meaning human mobility under climate change can take many forms since it is context dependent and shaped "by existing relations of power and inequality" (ibid.). Within this line of research "mobility justice" (Sheller, 2018) emerges as a relevant notion to grasp climate mobilities as it sheds light on "how power and inequality inform the governance and control of movement, shaping the patterns of unequal mobility and immobility in the circulation of people, resources and information" (ibid.: 14).

India in between Resilience and Environmental Justice

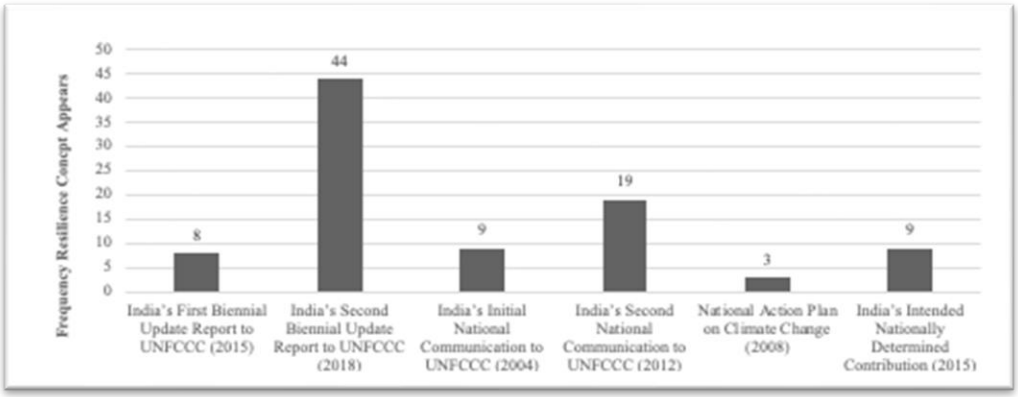
Use of resilience in climate change documents in India

The Indian subcontinent is one of the geographies which suffers from the heaviest climate change impacts. It also experiences extremely high levels of water stress (Pandey, 2019), along with water quality, pollution, and inequality of access. Consequently, there is intensified displacement within the country, including the States like West Bengal, Odissa, Gujarat, Rajasthan, and Maharashtra. Furthermore, India also receives international migration due to similar problems in neighbouring countries, e.g., Bangladesh. However, the extent to which the impacts of climate change in India drive internal and international migration remains

contested. Most recent studies suggest that 8% of all rural-urban moves between 2005-2012 in India were attributable to weather (Sedova and Kalkuhl, 2020). While the Central State has been to a large extent reluctant to accept environmental factors as the main driving force behind international migration, such as those from Bangladesh (Stojanoy, 2017), it is suggested that climatic factors highly influence population distribution in India. The area between Bangalore and Chennai, the southern Indian highlands and northwest India are in-migration hotspots while the northern part of the Gangetic Plain and the corridor between New Delhi and Lahore are out-migration areas (Word Bank, 2018). Still, it is largely accepted that it is the combination of socio-economic factors, such as income, education, agricultural performance, access to irrigation, and climate impacts that determine multidimensional migration decisions in India (Viswanathan and Kumar, 2015; Dallmann and Millock, 2017).

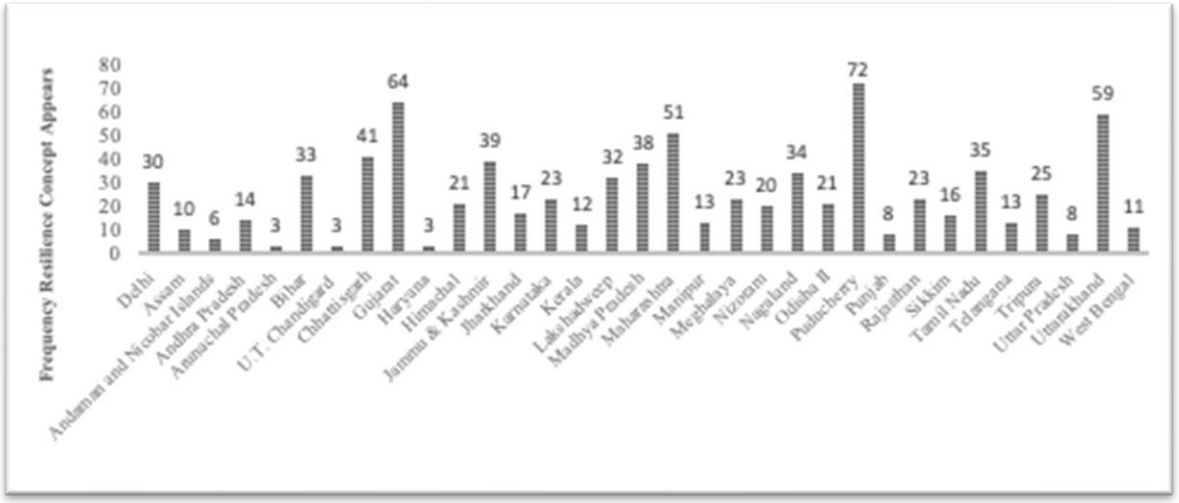
Significantly, the Indian state has rejected adopting climate security discourse, interpreting it as a Western negotiation strategy. It was treated as seeking to push India and China to concede to binding climate mitigation targets and condemned for redirecting the historical responsibility for climate change from industrialized countries to emerging economies (Boas, 2014). Hence, India criticized the handling of the climate change issue by the UN Security Council (UNSC) arguing that climate issues could not be served by structurally unrepresentative organizations such as the UNSC but required an inclusive forum. The Indian representative told the UNSC that the Council did not "have the wherewithal to address the situation" (UNSC, 2011). Moreover, according to India, climate-related issues such as food insecurity or existential threats to island states can only be handled through a holistic approach to development centred on human security and livelihoods. Nonetheless, this hesitant approach to the concept of climate security did not prevent India from using the resilience concept in the UNSC debates (UNSC, 2011). In fact, the concept of resilience is commonly used in the official climate change documents produced by both Indian Central and State Governments. A hand-coded content analysis of the concept of resilience was conducted through searching and counting the words "resilience" and "resilient" in the official climate change documents from India. The documents examined include India's First and Second Biennial Update Report to United Nations Framework Convention on Climate Change (UNFCCC), India's Initial and Second National Communication to UNFCCC, India's Intended Nationally Determined Contributions, National Action Plan on Climate Change as well as State Governments' and Union Territories' actions plans on climate change.

Table 1: Frequency Resilience Concept Appears in the Official Indian Climate Change Documents



Created by the authors, 2021

Table 2: Frequency Resilience Concept Appears in the Indian State Governments' and Union Territories' Climate Change Action Plans[2]



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The results reveal that the concept was embraced in all documents (Table I and Table II). Moreover, there is an increase in the frequency of its use from 2004 to 2018. The concept was used in various contexts, as such it carried different meanings such as engineering resilience, socio-ecological resilience, and ecological resilience. For instance, according to India's second Biennial Update Report to UNFCCC, as an example of socio-ecological resilience, India is "striking to build resilience capacity through Employment Guarantee Act and Food Security Act" (Government of India, 2018). The reports also use the term to indicate engineering resilience for infrastructural strength and to point out ecological resilience, while mentioning climate vulnerability of mangroves (Government of Gujarat, 2014).

An important feature to note is that a critical approach, like the one developed about the notion of climate security, has been non-existent for the concept of resilience. Likewise, in international climate change negotiations, no country has adopted a critical approach towards the concept of resilience yet. The first reason might be that the resilience concept is frequently used somewhat interchangeably with adaptation. In international negotiations, developing countries have been struggling to obtain compensation for climate adaptation from those historically responsible for climate change. Therefore, the term "adaptation"– and because of its proximity to adaptation, "resilience" as well – signifies a struggle for justice and incorporates a positive meaning. The second reason might be that developing countries are already incorporated into the global market economy. Consequently, they are also not critical of the neoliberal principles like self-reliance, privatization of responsibility, and the reduction of the role of the state, and the resilience concept seems like a right choice to them.

Environmental justice instead of resilience in India

Our content analysis has illustrated that the concept of resilience is being increasingly used in official climate change documents in India. Although our aim is not to argue for a direct impact, the recommendations of international institutions in favour of resilience-based policies,

[2] The table does not include the relevant analysis for the State of Goa as well as the Union Territories of Ladakh and Dadra and Nagar Haveli and Daman and Diu.

are not left unheard in India. While elaborating on the reasons for why environmental justice framework would be a more relevant and helpful tool for policy-makers and academics in their efforts to analyse and address environmental problems than resilience concept, this paper focuses on two recommendations commonly made by international institutions to developing countries by specifically focusing on India as an example. Deploying a qualitative counter-factual analysis, we discuss how an environmental justice framework would offer more elaborate, critical, and comprehensive socioecological answers than the concept of resilience.

For strengthening the resilience against climate change, one common recommendation of international institutions is to strengthen competitive markets, spread financialization, encourage private sector-led growth (World Bank, 2001) and improve overall productivity (World Resources Institute, 2008). For resilience against climate change, international institutions explicitly suggest adoption of a certain type of economic development: competitive, financialized and market-based economics. An example of this in India is World Bank's support to India's market-based crop insurance (World Bank, 2013). The crop insurance program called Pradhan Mantri Fasal Bima Yojana (PMFBY) was introduced in 2016 with the aim of increasing resilience against climate change. In this state-funded but privately-operationalized program, insurance premiums, which are highly subsidized by the state, are collected from the farmers by the companies and then used to make pay-outs to farmers. Although the World Bank celebrates the success of this scheme, encouraging business competition, financialization, and greater productivity privatizes the risk and makes the agricultural producer more dependent on global commodity prices. The program is vastly criticized for causing a transfer of public wealth to private companies by allowing private players to enter into the crop market, engaging local farmers in global circuits of finance, delimiting the concept of "risk", excluding marginalized farmers, leaving aside some crops, and maintaining the status-quo of input intensive, debt-financed capitalist agriculture (Matthan, 2022). As a result, in 2019, the scheme was turned into a voluntary scheme and large amounts of farmers opted out (Agarwal, 2020).

In fact, farmer indebtedness has serious socio-economic consequences in India such as an average rate of suicide every 30 minutes (Dia Da Costa, 2013). Under persistent indebtedness, smallholder farmers are more likely to resort to decisions that are not in their best interest and lose their ability of opposition. In poor households of Southern India, debt repayment has resulted in migration or become a tool of coercion, leading to practices like sale of landholding or forced marriage of daughters (Mosse, 2002). Furthermore, market price-dependency poses the risk of increased environmental damages, soil degradation, water-use problems and deforestation (Narayanan, 2015). It is found that in India 10 percent increase in formal credits increases fertilizer consumption by 1.7 percent, pesticide application by 5.1 percent and tractor purchases by 10.8 percent (Ramprasad, 2019). This risks an increased pesticide application leading to soil degradation and water-related problems. India already faces several problems with water provisioning. In addition to being highly inequitably distributed, the median per capita water availability in India is less than half of what is available in the U.S.

Another common recommendation of international institutions for resilience is allowing migration flows in a controlled manner. Migration is seen as an adaptation strategy since migrants send remittances back home and diversify income sources (Jha et al., 2018). Hence, if realized in a controlled manner, migration is viewed as a strategy for livelihood diversification and poverty reduction (World Bank, 2018). Nevertheless, those who migrate from rural to urban areas mostly find work in ghettos and work as cheap wage labourers. Similarly, in India, climate migrants who migrated from rural to urban places were strongly dependent on agriculture and belonged to the lower end of the skill distribution (Sedova and Kalkuhl, 2020). Hence, they can only find work in the mushrooming factories providing cheap consumer goods to the world market or in large agricultural plantations, mining, or logging operations. This type of migration

remains advantageous for transnational capital while already vulnerable migrants face multiple injustices: they face natural hazards in the rural areas; they displace; they confront severe difficulties on the migration road; finally, they find work as cheap labourers and live in city slums in unhealthy conditions. In fact, these multiple injustices faced by climate migrants are acknowledged by the Ministry of Urban Development of India. The Ministry recognizes climate migrants as "dual victims of existing natural hazards and emerging climate change-displaced from their original places" and acknowledges the risks they confront in their new residences (Ministry of Urban Development, 2010). Still, however, the Indian government continues to rely on the notion of resilience for dealing with environmental degradation.

Instead of implementing PMFBY and allowing migration flows as an adaptation strategy if an environmental justice framework was to be adopted in India, we would have a better understanding of questions such as "who casues the environmental degradation that lead to PMFBY and the use of migration as an adaptation strategy?", "who migrate due to environmental deprivation in question?", "where do they migrate to?", "who benefits from and who is harmed by this migration?", "how do people, who stay, and who migrate, deal with environmental problems?". These questions are intertwined with resource allocation, inequality as well as participatory and recognitional power. Therefore, environmental justice offers a more comprehensive and just framework for understanding the processes before a migration decision is taken as well as the different coping mechanisms communities adopt both during and following the migration.

Firstly, an environmental justice framework requires analyzing who bears most of the responsibility for an environmental degradation in question. Concerning climate change, historically, industrialized Western countries released most emissions per capita. A large majority of poor Indians live in rural areas and are prone to climate change risks. If an environmental justice framework is employed, any solution to climate migration would take the historical responsbilities of the Western countries vis-à-vis the disappropriate burdens on the poor and the marginized people in India into account. Likewise, India officially calls for the application of common but differentiated reponsibilities, and respective capacities and equity principle for dealing with the climate problem (UNSC, 2011). Hence, application of an environmental justice framework would suit India's climate negotiation position best.

Secondly, according to environmental justice perspective, instead of providing asistance per disaster, a long-term planing perspective is necessary. For this, firstly, who migrate, where they migrate to and why they migrate need to be acknowledged. There might be inequalities among the migrants that need to be considered. For instance, most of the Bangladeshi immigrants coming into India are middle class people while the Bangladeshis who have lower income generally migrate internally (Stojanoy, 2017). However, within India, people who migrate due to climate change are mostly low-skilled and tend to be heavily dependent on agriculture (Sedova and Kalkuhl, 2017). Moreover, climate affects different income groups and migrant receiving places differently. For instance, drought affects lower income farmers more seriously in India than other social groups in the country (Udmale, 2014). When low skilled migrants move to urban areas, they often find residence in slums (Harvey, 2009). Therefore, it is likely that they will face other types of climate impacts, such as floods, after migration. Yet, since they provide cheap labour, market actors benefit from the migration process. Without studying these details, it is not possible to provide long-term socio-economic resilience to these vulnerable communities. For that reason, a critical analysis of the causes, winners, and losers of migration as well as the inequalities emanating from this process and the results of it need to be conducted.

Thirdly, recognitional and procedural aspects of an environmental policy require the participation of the climate migrants and those that are currently excluded in the policy-making

process. In India, around 270 million people live under the poverty line. Around 200 million people living in rural places already use short-term migration as a livelihood strategy (IIED, 2021). A meaningful and just participation would require their needs to be met and their voices to be heard. In other words, a just solution to climate migration provided by environmental justice would include the voices of the excluded while most recommendations by international organizations still rely on exclusionary managerial techno-fixes (World Bank, 2021). Only by then, as opposed to market-based policies such as PMFBY, agro-ecological farming practices and more egalitarian life styles can spread.

The environmental justice framework requires socio-ecological equality in both spatial and temporal terms. In other words, distribution of environmental benefits and harms among people should be equally distributed both spatially, between different groups, societies, nations, and between various generations. Moreover, recognitional and procedural aspects of environmental justice framework state that any environmental policy should be designed in an inclusive way and through meaningful participation where dissident voices are not only heard but considered seriously. For instance, policies that would typically be dismissed in today's society as undermining economic progress and social order, such as introducing a complete ban on cutting trees, prohibiting opening of new gold mines, requiring only the use of recycled gold, borderless movement of people could be considered as viable policy alternatives, if environmental justice framework is adopted. In addition, justice in terms of policy outcomes should be aimed; e.g., in case of an environmental disaster like a flooding, disabled, young and elderly people should be protected more. Nevertheless, environmental justice framework is not basis where a few techno-fix oriented policies would produce a magic correction. In fact, even if all environmental regulations and laws are implemented correctly, in a country like India, if a radical improvement for the fair treatment of all people is side-lined, then environmental justice cannot be provided. This is because socio-political, economic and cultural forces would continue producing the same environmental inequalities. So, in fact, environmental justice is a framework where social inequalities between people due to race, class, ethnicities disappear. Here comes the most challenging problem perhaps: These social inequalities are not produced due to market failures but rather they are produced by "normal, routine functioning of capitalist economies" (Pellow, 2009).

Currently, we live in a global community of crisis where environmental injustices are rather normalized; the language of crisis is used only when the environmental harms start affecting the environmentally privileged. Under these circumstances, radical and more transformative thinking and policies are required to hinder production of environmental harms. Resilience-based policy making, however, offers limited solutions, re-produces the same market-base social structure and multiplies injustices. For socio-economically disadvantaged, there is no such thing as being resilient in global capitalism.

Conclusion

The concept of resilience is being increasingly used without much criticism. Nevertheless, this vague concept contains significant weaknesses. It is a vague and non-transparent concept, puts the risk and responsibility of adaptation onto the shoulders of individuals, and doubles the existing injustices. Hence, it supports the status quo, discounts the root causes of vulnerabilities, and falls short of offering a road map to a real empowerment. Therefore, the proposition is to adopt an environmental justice framework instead of the resilience for analysing and preventing environmental harms.

An environmental justice framework is comprehensive and just compared to the resilience for analysing environmental problems and offering solutions. Unlike the resilience, environmental justice is transformative. It uncovers the structural causes of problems, arising

out of various inequalities. It also discusses the distribution of benefits and harms arising out of proposed policies. Yet, policies based on resilience without environmental justice (like PMFBY) might lead to resilience of some people at the expense of non-resilience of some others.

Moreover, the notion of resilience incorporates the logic of risk and defence through a rather short-term lens. An environmental justice framework, however, necessitates a long-term vision with planning; it reveals who historically caused most of the harm in the past and who will benefit and how much from the proposed policies. This is particularly crucial for climate-related issues. In addition, environmental justice is participatory. It promotes inclusion of the climate-migrants in the decision-making and planning processes and empowers people not only from a material perspective -by preventing their future vulnerabilities and encouraging redistribution - but also from a procedural one – by giving them a voice about the policies concerning their own life.

This paper examined the Indian case while investigating why environmental justice offers a more comprehensive and just framework than that of resilience. Our content analysis of official climate change documents of Indian Central and State Governments illustrates the widespread use of the concept of resilience by Indian policymakers. We also notice an increase in the frequency of use of the concept from 2004 to 2018. However, India experiences high rates of climate induced migration, particularly involving disadvantaged groups, and these rates are expected to increase further as climate change worsens. Policy recommendations based-on an understanding of resilience (e.g. PMFBY and migration as adaptation) have not offered transformative answers so far. Certainly, an on-site field study in India about the consequences of implementing policies based-on resilience would strengthen our analysis. This is highly recommended for future studies because due to its particular geography exposed to climate change, its sheer size, extent of poverty and inequality, India stands among those countries that should get prepared for climate migration most urgently.

While conducting further research about various aspects of environmental justice remains essential, the key suggestion this article poses is that instead of expanding and reframing resilience concept to make it a better fit for development debates – *and in a sense increase resilience's resilience to critics* – concepts such as super profits, underdevelopment, neo-colonialism, unequal trade (Samaddar, 2015) and accumulation by dispossession should be elaborated upon for more impactful development research.

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