Where will people go? Considerations for Receiving Communities

Climate Change, Planned Relocation and Development Assistance

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In the developing world, underlying vulnerabilities, aspirations and capabilities fundamentally shape the potential for migration to develop as an adaptation to climate impacts (Ribot et al. 2020). In many cases, those same vulnerabilities and impacts from multiple successive shocks may limit the capability to migrate, resulting in trapped populations (Black et al. 2011). Some are now arguing that the real future humanitarian crisis may not necessarily emerge from climate change-induced migration, but from restricting migration to the point that those most vulnerable are stuck in regions of declining inhabitability (Shah 2020, Ayeb-Karlsson et al. 2018). We analyzed 74 reports of development agencies, multilateral banks, non-profit development organizations and other development institutions providing or evaluating development assistance published between 2009 and 2019. From the perspective of development actors' policies and programs we identify three elementary approaches to addressing vulnerable rural populations: (i) In situ adaptation; (ii) facilitated migration; and (iii) planned relocation and resettlement. In this paper, we focus on the second and third responses. Well planned relocation can be both a form of disaster risk reduction and a form of climate change adaptation. Planned relocation can be undertaken preemptively (e.g. before a disaster strikes, or as a measure to avoid the longer term impacts of climate change) or remedially (e.g. following a disaster). Since urban areas are potentially a destination, facilitating migration to well planned urban sites may be part of the suite of solutions. We discuss how governments and aid agencies are currently implementing these two approaches. We critically assess the benefits and risks entailed in planned relocation, and address the potential promise of preparing urban destination areas – ranging from small towns to major cities – to be better able to receive migrants. References Ayeb-Karlsson, S., Smith, C. D., & Kniveton, D. (2018). A discursive review of the textual use of 'trapped' in environmental migration studies: The conceptual birth and troubled teenage years of trapped populations.

Creating Home: Multilevel Governance Structures for Emerging Climate Migration

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Whether in response to sudden disasters or "slow-onset" conditions like sea-level rise, intolerable heat, or water scarcity, people are likely to move. Domestic migrations have already occurred and are expected to increase. Moreover, as parts of the globe become uninhabitable, whether small-island states or newly flooded or drought-stricken regions, all nations will face increased pressure to accept people seeking more sustainable environments. Where will people go? They might move within their community, from the riverside to the hills. They might move within their states, from the coast to an inland area. Or they might move to new states and regions. While considerable attention has focused on the difficult climate adaptation challenges faced by the communities facing direct impacts, less attention has focused on "receiving" communities: the neighborhoods, cities, and states likely to absorb new migrants. The experience will be most challenging for marginalized and low-income individuals and communities. Low-income migrants will face greater challenges than wealthy migrants in finding

adequate housing and other resources. And low-wealth and marginalized communities are more at risk of gentrification and more intense shortages of affordable housing if their communities experience in-migration. Focusing on housing, this paper argues that a national strategy to address the needs of migrants and receiving communities is necessary. That strategy should incorporate roles for multiple levels of government. Against a backdrop of key federalism values, including effectiveness, democratic accountability, and the protection of civil rights, the article will identify appropriate roles for federal, state, and local governments.

Mapping Social and Natural Hazards: A Survey of Potential for Managed Retreat in the United States

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The purpose of this study was to investigate how factoring the impact of natural disasters beyond flooding would affect managed retreat policy eligibility in the United States. For the study design, a correlation analysis method compared weighted measures of flooding and other natural disasters (e.g. wildfires, tornadoes, heatwaves, etc.) to CBSA Populated areas, prevalence of cropland, and relative poverty on a county level. The study found that the vast majority of CBSAs eligible for managed retreat programs under a policy inclusive of non-flooding events would have already been covered by flood-only managed retreat policies. However, a majority of those counties that are not covered by a flood-only managed retreat policy have high rates of poverty and are either heavily populated and/or agriculturally active. The correlation is particularly strong between counties that are subject to multiple natural hazards and those that have both high rates of relative poverty and cropland prevalence. These findings also reveal that, while current flood-based policies in the United States serve many areas that do need access to managed retreat funding and implementation, other vulnerable areas are overlooked by this approach. These areas are often deeply impoverished and are therefore particularly vulnerable to natural disaster. If and when those disasters do occur, these areas are often less financially prepared to recover or retreat from the disaster's advance and, due to the limitations of the current policies discussed above, are less able to take the precautionary measures necessary to mitigate their risk.

The Effects of Migration During the San Francisco Bay Area Housing Crisis on Regional Wildfire Hazard

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With the advent of climate change, changing weather conditions are causing nature-related disasters all over the world to become sharper in their intensity and frequency. The Mediterranean environment of Northern California is no exception to this rule. Northern California's short, wet, and mild winters with combined long, dry, and hot summers create conditions ripe for wildfires to occur. In California the annual burned area increased fivefold from 1972 to 2018 due to new climatic conditions, totaling over $20 billion USD in losses in 2018 alone. Much of this damage stems from the large number of buildings constructed in the wildland-urban interface, or the transition zone between forested areas and human development. Lately this has become a great concern for residents of the San Francisco Bay Area, which has seen not only a multitude of devastating fires within the past few years but also an intense housing crisis that is forcing much of the population to move towards the outer boundaries of the region and into that transition zone. Numerous commentators have discussed that if this is an ongoing shift in population location we may be forcing communities to live in remote, wildfire-prone regions, therefore exacerbating the area's vulnerability to these disasters. To analyze the population shift to wildfire prone

areas, a study was completed analyzing demographic shifts in the 9-county Association of Bay Area Governments defined San Francisco Bay Area region from 2012 (the beginning of housing price appreciation after the great recession) to 2018 in respect to geographical social vulnerability and physical hazard to wildfire. The 2012 and 2018 American Community Survey 5-year estimates were used for demographic data input. In addition to population numbers, a social vulnerability index was constructed from the census data using a social vulnerability index which took in 13 per capita variables (poverty, unemployment, income, no high school diploma, speaks English "less than well", lack of vehicle, mobile homes, multi-unit housing, crowding, group quarters, disable, single parent households, age 65+, and age 17-). We combined social vulnerability index with wildfire hazard potential data obtained from the U.S Department of Agriculture's Fire, Fuel, and Smoke Science Program. To tie all of these factors together, statistical regression was run to see if there was a correlation between the increase in population by different racial groups in census tracts that were more socially and physically vulnerable to wildfire. The methodology and outcomes of this study will be discussed along with providing some suggestions and advice for transferring the methodology to other geographic areas.

Why Smallholders Stop Engaging in Forest Activities - The Role of Migration in Livelihood Transitions in Southwest Ethiopia

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Every year, around 13 million ha of forests are lost worldwide, fueling carbon emission and contributing to biodiversity loss. Furthermore, forest decline and degradation poses a risk to those who depend on forest resources such as wood, medicine or food, which are often the rural poor in the tropics. In-migration of smallholders to forest frontiers is often considered one underlying cause for tropical deforestation and forest degradation, mainly because of the migrants needs for wood and agricultural land. Depending on institutional, social, political and economic framing conditions, migration can fuel transitions of the land and resource use in receiving system. So far, scholars usually focus on the resource use of migrants; however, the influence of migration on the livelihoods and resource use of the hosts is rarely studied.

This study aims to investigate the impact of migration on forest-related livelihood activities of local households. We chose the Bench Maji zone in Ethiopia remote southwest as a case study, which is a hotspot of in-migration and forest loss in Ethiopia. In this area, scholars have observed a transition from traditional forest-based to cereal-based livelihoods over the past two decades, attributing it to planned and unplanned in-migration of smallholder farmers from the northern and southern drought-prone and degraded Ethiopian highlands and the expansion of agricultural land. We employed a quantitative, multisite approach to understand how and why livelihoods, in particular forest-related livelihood activities, of local (forest-based livelihoods), northern and southern migrant (agriculture-based livelihoods) population groups changed since a major resettlement program was launched in 2003. We conducted a survey in farming households (n=224) covering livelihood activities of the three population groups in 2003 (retrospective) and in 2018. The data collection took place in 2019 in three different villages to account for place-specific differences in in-migration, population composition and levels of remoteness, forest availability and institutional settings for forest use. We utilized a random forest regression procedure to understand why households engage in forest activities. We further complemented our findings with insights from focus group discussions (n=3), interviews with local and

migrant key informants in the villages (n=9) and interviews with regional experts (n=3) to assess the role of migration in livelihood transitions in the study region.

We found that, the level of engagement in forest activities depends mainly on the original livelihood of a household. Thus, local households – who origin from forest-based systems – have the highest engagement in forest activities among all households both in 2003 and 2018. However, from 2003 to 2018 forest activities largely declined and became mainly a supplementing activity in most of the local households. Among local households, those who mainly collect non-timber forest products (NTFPs) have the highest engagement in forest activities.

We found that due to in-migration of smallholders from agricultural-based systems, but also due to an expansion of commercial agriculture for the production of cash crops, the cultivated area in our study region expanded at the expense of the forest, which hampered forest activities, especially the collection of NTFP. In addition, participatory forest management was introduced and access to the forest was restricted for all population groups to protect the remaining forests. Our findings show that the decline in forest area, but also restricted possibilities for participation in the newly established forest management groups, made it increasingly difficult for the local people to continue their forest-based livelihoods. Rather, local people gradually adopted the migrants' agricultural practices. Moreover, agricultural policies, which promoted land-intensive farming practices and the production of cash crops for national and international markets, further encouraged an uptake of agricultural activities. Our study furthermore shows that the local context, such as the number of migrants in the villages and aspects of remoteness, also play an important role in mediating the transition of livelihoods.