FORECASTING CLIMATE (IN)SECURITY IN FRAGILE STATES

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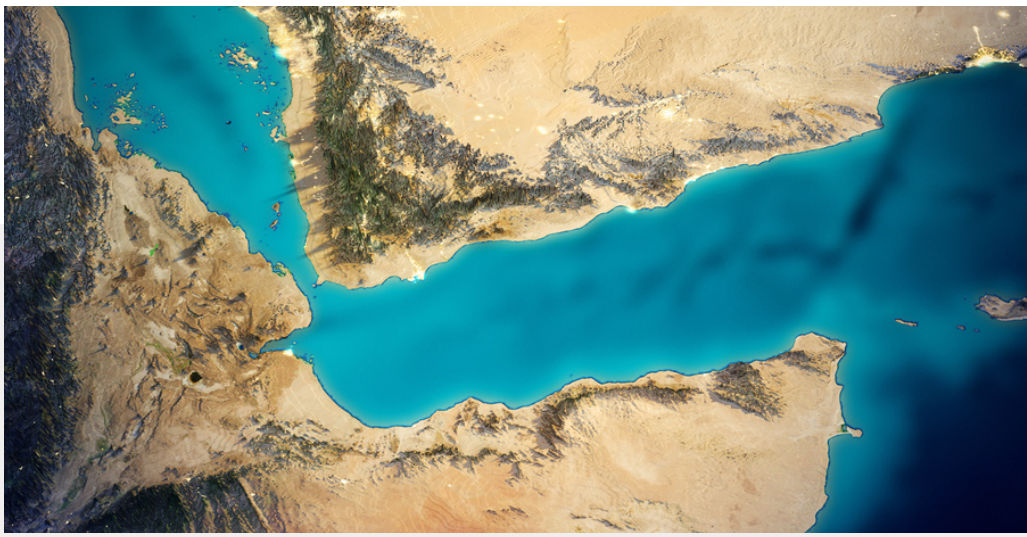
Negative cascading impacts from climate-related insecurities are often felt more acutely in fragile and conflict affected states (FCAS). FCAS often lack the coping capacities to mitigate and adapt to the human security and peace implications that occur when rising mean temperatures, environmental change and onset disasters interact with local social, political and economic dynamics. The negative outcomes of these interactions have, in part, given rise to the rapid growth in the field of conflict modelling. Strata is one such model. It is a United Nations Environment Program (UNEP) platform that identifies and tracks environmental and socio-political climate stresses. The platform uses a convergence of evidence approach that overlays data from the climate, environment, predictive trends, peace, security and socioeconomic vulnerabilities to produce hotspot maps. In turn, these maps are used to highlight where climate, environmental and security stresses overlap and coincide with vulnerable populations.

The accuracy of Strata, and other such models, relies on data, and lots of it. More data means that the platform has a higher chance of accurately predicting "hotspots". In FCAS, this could greatly assist in the allocation of 'triple nexus' humanitarian, development and peace resourcing. As the wave of climate security research grows, it is becoming increasingly clear just how valuable grassroots, local-level, data relating to social, political and economic dynamics is to predicting instability and conflict. When blended with macro-scientific trends, local-



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level qualitative and quantitative data has the capacity to help identify specific communities at risk from climate-related security pathways. Given this context, the resilience of fragile states could be enhanced on two fronts: centralised data collection and analysis, and a revised approach to local-level data collection that mainstreamclimate-related considerations.

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Enhancing Centralised Data Analysis

Across FCAS, there is an absence of a single organisation or institution that is actively "hunting" for data. Given that national and local governments within these states tend to lack the capacity to manage the magnitude of data required for conflict modelling, one could look to the UN for leadership in this field. The work that the UN has already done on climate security modelling shows that it has the capacity and appetite to manage big data. Through its inherently deep reach into fragile states, the UN could leverage its community-level networks and harness qualitative and quantitative data to amplify the accuracy of conflict modelling. The ability to enhance the forecasting of climate-related instability at the state-level and below would provide a welcome boost to the triple-nexus actors working at the community level.

Revising Local-Level Data Collection

As well as being integral to gathering big data, improving local-level data collection across the triple nexus community would, in itself, be valuable for forecasting potential climate security threats. Research shows that climate threats are not "owned" by one sector but tend to be inherently cross-disciplinary. Climate security pathways converge in non-linear fashions that dissect multiple sectors and manifest in hard and soft threats to communities, landscapes and infrastructure. The prolonged presence of Somalia's drought exemplifies the multifaceted nature of climate insecurity through its negative impact on natural resource access, inter-clan conflict, armed group recruiting, migration, the economy, elite capture and governance. An impact on one of these sectors often results in negative cascading repercussions across one or more of the other variables.

Actors across the triple nexus should appreciate how significant their access to remote and conflicted-affected communities is to understanding climate insecurity. Just as FCAS could be referred to as on the frontline of climate change, these actors, by default of where they work, are frontline climate security actors. By working amongst the communities

most at risk, they have access to a mass of social, political and economic data that is inaccessible to other actors. A climate-related security pathway such as livelihood deterioration, for example, could be greatly enhanced by continual data collection relating to rural food production, land use and soil moisture content. This is exactly the kind of data that the triple nexus community, and their associated networks, have access to. Furthermore, the access of actors in rural areas could be enhanced by new technologies such as drones to comprehensively map land use as a cost-efficient alternative to buying satellite imagery.

In relation to livelihood deterioration, metrics associated with the collection of firewood is another example of simple data collection that could provide valuable understanding of climate-impacted insecurities. To reference Somalia again, this data could be used to provide an assessment of al-Shabaab influence as the group are known to hold the monopoly on firewood collection for charcoal production. In other countries, this data could be used to predict tipping points for when women are at increased risk of violence as they travel further distances to collect firewood. In both cases, the unifying factor is that improved data collection could help to identify entry points for humanitarian actors and development workers, as well as the peace and security sectors to mitigate climate risks before they become negatively reinforcing.

Regardless of the sector, the ability to accurately forecast the need for resources in FCAS is going to become increasingly linked to the mainstreaming of localised climate-related data. Highlighting the importance of this data and its links to climate security's associated pathways could provide the triple nexus community with a motive to work in an increasingly integrated and open manner. Amongst the complexity of climate security pathways, one aspect is clear: climate threats are not siloed.