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Predicting Displacement: A Theoretical Critique of Data-Driven Forecasting of Forced Migration, Humanitarian Anticipation and the Politics of Early Warning

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ABSTRACT

Humanitarian agencies, governments and research consortia are investing in data-driven systems that forecast displacement from conflict, climate and economic signals. Their stated purposes are to position aid in advance and to plan reception. A less openly stated purpose is to prepare borders. The promise of anticipation is widely endorsed, yet the conditions under which displacement forecasting helps the people it predicts have received little theoretical attention. This conceptual, non-empirical paper offers a critique of displacement forecasting as both a scientific and a political practice. It integrates peer-reviewed scholarship published between 2023 and 2026 on migration and displacement forecasting, early warning and anticipatory action, the climate–conflict–displacement nexus, humanitarian data ethics and border externalisation, and every source was checked against its Crossref record and screened for retractions and editorial notices. From this synthesis the paper builds a predictable–actionable–beneficial framework, which distinguishes three claims that forecasting systems make: that displacement can be predicted, that prediction can be acted on, and that the action benefits the displaced. The analysis shows that each claim holds only under specific conditions. Forecasts tend to be most accurate where data are dense and contexts stable, which is often where they are least needed. A forecast that tells a humanitarian agency where to pre-position food can equally tell a border agency where to deploy patrols. Forecasting also renders displaced people as flows to be anticipated, although their own decisions to stay, flee or comply with armed actors shape the movements being predicted, and may be altered by the forecast itself. Five propositions follow, on accuracy under data sparsity and conflict, the institutional conditions of actionability, dual use, reflexivity and the governance of beneficence. The Lake Chad Basin and the central Sahel serve as the anchoring context. The paper concludes with an ethical framework for forecasting people who have not consented to being predicted, built on purpose limitation, a prohibition on use for containment, accountability to affected populations and independent oversight.

Keywords: forced migration; displacement; forecasting; early warning; anticipatory action

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1. INTRODUCTION

Imagine a model that predicts, with reasonable confidence, that thousands of people will leave villages near the Nigeria–Niger border in the coming months as drought deepens and armed groups move into new areas. The forecast could lead a humanitarian agency to pre-position food and water, to release funds before the crisis peaks, and to prepare camps with dignity rather than in haste. It could equally lead a government, or a foreign partner, to strengthen checkpoints along the routes towards Agadez and the Mediterranean. The model itself does not decide which of these happens. That decision is made by the institutions that commission, own and act on the forecast.

Displacement forecasting has grown quickly. Researchers now combine conflict event data, social media, macroeconomic indicators and mobile phone records to predict forced and irregular migration (Barker & Bijak, 2025; Bosco et al., 2024; Wycoff et al., 2025). Some test new methods altogether, such as prediction markets (Morgenstern & Strijbis, 2024) and natural language processing for conflict early warning (Walterskirchen, 2026). Humanitarian agencies have embraced anticipatory action, including forecast-based financing that releases funds when a forecast crosses a threshold (Rahman et al., 2024). The climate–conflict–displacement nexus has become a central research and policy concern, not least in the Sahel and the Lake Chad Basin (Eboreime et al., 2025; See et al., 2026a).

Yet the enthusiasm for anticipation has outpaced reflection on its conditions. Reviews of climate migration forecasting conclude that current models cannot yet provide reliable predictions (Schewel et al., 2024). Mobile phone data offer new signals for anticipatory analysis but raise problems of user privacy and data ethics (Aydoğdu et al., 2025). Humanitarian data governance relies heavily on self-regulation, which risks "ethics washing" (Lidén, 2026). Meanwhile, migration forecasting in Europe is explicitly framed as support for border and asylum policy (Bosco et al., 2024), and European border technology increasingly operates on African soil (Iwuoha, 2025; Uzomah, 2024).

This paper takes these tensions seriously. Its objectives are to break displacement forecasting down into the distinct claims it makes; to specify, through testable propositions, the conditions under which each claim holds; and to propose an ethical framework for forecasting people who have not consented to prediction. The guiding question is simple: when we predict displacement, who benefits, and under what conditions?

2. LITERATURE REVIEW

2.1 CONCEPTUAL REVIEW

Displacement and forced migration. Displacement refers to movement compelled by conflict, violence, disaster or the threat of these, whether within a country, as with internally displaced persons, or across borders. Research increasingly emphasises that displacement rarely has a single cause. See et al. (2026a) review the climate–disaster–conflict nexus and argue that displacement outcomes emerge from overlapping and nuanced dynamics rather than from individual triggers. Lasater et al. (2025) reach a similar conclusion in a scoping review, describing the relationships among climate change, conflict, displacement and health in humanitarian settings as complex, non-linear and multicausal.

Forecasting and early warning. Forecasting is the estimation of future displacement, whether its timing, volume, origin or destination. Early warning systems combine forecasts with communication and decision procedures. Anticipatory action refers to interventions taken before a predicted shock peaks, often triggered by forecasts (Rahman et al., 2024). Dash (2024) distinguishes impact-based forecasting, which predicts what a hazard will do to people, from forecasting of the hazard alone.

Humanitarian data. Humanitarian data comprise information collected about crisis-affected people and places, including registration records, needs

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assessments, biometrics and remotely sensed data. Fast (2023) shows that donors' demands drive data collection in humanitarian health delivery, creating a mismatch between the principle of data minimisation and the practice of using everything collected.

Predictable, actionable and beneficial. This paper uses three terms. A displacement is *predictable* when a forecast can estimate its timing, size or direction with useful accuracy. A forecast is *actionable* when an institution has the mandate, resources and procedures to act on it in time. Action is *beneficial* when it improves the safety, dignity or choices of those predicted to move, rather than only the convenience of those who must respond.

2.2 THEORETICAL REVIEW

Three theoretical traditions inform the framework.

The first is the science of migration forecasting. Its central lesson is humility. Migration is a complex system shaped by individual decisions, networks, policies and shocks, and forecasts deteriorate quickly with the time horizon and with structural breaks (Barker & Bijak, 2025; Morgenstern & Strijbis, 2024). Schewel et al. (2024) review thirty climate migration forecasting models, covering gravity, radiation, agent-based, systems dynamics and statistical extrapolation approaches, and conclude that they are not yet able to provide reliable predictions. This tradition explains the limits of predictability.

The second tradition is humanitarian ethics and the critical study of humanitarian data and innovation. Bruder and Baar (2024) find that the humanitarian innovation literature suffers from conceptual ambiguity. Twigt (2024) shows how refugee protection settings become testing grounds for technologies, and Harb (2025) documents the invisible labour needed to keep humanitarian data systems working. Lidén (2026) argues that adopting the sector's data responsibility guidance is no guarantee of ethical conduct, because interpretation is contested and capacity limited. This tradition explains why actionable forecasts are not automatically beneficial.

The third tradition is critical border and externalisation studies. It treats migration governance beyond the territory of destination states as a political project. Cobarrubias et al. (2023) theorise externalisation, Jegen (2023) shows how externally funded programmes in Niger "migratise" ordinary regional mobility, and Landherr (2024) theorises the transit migration state. Frowd (2025) traces how the International Organization for Migration spreads data-driven border management. This tradition explains why the same forecast can serve containment as easily as care.

2.3 EMPIRICAL REVIEW

Forecasting performance. Wycoff et al. (2025) combine Ukrainian-language social media with conflict event data to predict refugee flows from Ukraine to five neighbouring countries, validating the predictions against UNHCR border-crossing data. Barker and Bijak (2025) forecast migration in European countries using mixed-frequency macroeconomic data. Bosco et al. (2024) present a machine-learning architecture to forecast irregular border crossings and asylum requests for policy support in Europe. Morgenstern and Strijbis (2024) test prediction markets as an alternative. Walterskirchen (2026) compares natural language processing methods for conflict prediction and finds that the best choice depends on the availability of text sources and other predictors. Macis et al. (2024) propose anomaly detection models for early warning of socio-political unrest. Aydoğdu et al. (2025) review the capacity of mobile phone data to support anticipatory analysis of displacement and assess the privacy and ethical challenges involved, and Argyriou and Leese (2026) show that practitioners themselves concede that migrant data is rarely accurate.

Anticipatory action and early warning practice. Rahman et al. (2024) examine whether forecast-based financing reduced rural Bangladeshi women's vulnerability to flooding, highlighting that household-level assessments overlook gendered effects. Dash (2024) identifies a gap between impact-based forecasting and people-centred early warning in India. Linares Quero et al. (2023) argue that famine early warning systems are not conflict-sensitive, failing to capture the use of hunger as a weapon of war. See et al. (2026b) interview humanitarian practitioners in the Philippines about "complex displacement", noting that responses remain fragmented and examining how displacement

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is classified. Borgomeo and Jägerskog (2025) note that research has focused on predicting the causal links between climate, conflict and displacement, with less attention to informing actual interventions, and propose a decision framework.

The Lake Chad Basin and the Sahel. The Lake Chad Basin spans Nigeria, Niger, Cameroon and Chad. Chikuruwo (2023) examines the gendered vulnerabilities created by climate change in the Basin, and Idika-Kalu (2025) analyses women's experiences of terrorism in north-east Nigeria. Eboreime et al. (2025) describe climate pressures in the Sahel as threat multipliers for violent conflict and internal displacement. Bamidele (2026) studies the lived experiences of displaced people in the Bakassi and Dalori camps in north-east Nigeria, where displacement has recurred since 2009. Buba (2026) shows that civilian compliance with armed actors is a self-protection strategy in the Boko Haram insurgency, which helps explain why some contested communities are displaced while others remain in place. Uzomah and Záhořík (2026) document negotiated frontiers and differentiated geographies of displacement along the Nigeria–Niger border. Uzomah (2024) and Iwuoha (2025) show how European border technology and biometric programmes operate across West Africa.

Comparative evidence. Gelvez and Bauer (2025) analyse 23 years of climate disasters, armed conflict and displacement in Colombia at municipal level and find that violence emerged as the primary driver of displacement, with distinct spatial clusters and temporal shifts. Hermans and Kizilkaya (2025) argue that mobility responses to climate stress depend on how people perceive risk, not only on the hazards themselves.

2.4 GAPS IN THE LITERATURE

Three gaps stand out. First, technical studies evaluate forecast accuracy but rarely ask whether accurate forecasts change outcomes for displaced people. Second, ethical and critical studies question humanitarian data practices but rarely engage with the specific epistemic claims of forecasting. Third, the African contexts where displacement is most severe and data most sparse, such as the Lake Chad Basin, are the least represented in forecasting research. The paper responds by connecting the technical, institutional and ethical dimensions in one framework, anchored in that context.

3. MATERIALS AND METHODS

Research design. This is a theoretical, non-empirical article. It uses integrative conceptual synthesis to build a framework and derive propositions that later empirical work can test. No human participants were involved and no primary data were collected, so population, sampling and instrument validation in the empirical sense do not apply.

Source identification. Literature was identified through structured searches of the Crossref metadata service, with abstracts consulted through Crossref and the OpenAlex scholarly index, using terms such as "forecasting forced displacement", "migration forecasting", "early warning", "anticipatory action", "forecast-based financing", "climate conflict displacement", "humanitarian data ethics", "Lake Chad Basin", "Sahel", "Boko Haram" and "internally displaced persons Nigeria". Searches were run in October 2026.

Inclusion and exclusion criteria. Sources were included if they were peer-reviewed journal articles published between 2023 and 2026 and addressed displacement or migration forecasting, early warning and anticipatory action, the climate–conflict–displacement nexus, humanitarian data governance, border externalisation, or displacement in the Lake Chad Basin and the Sahel. Preprints, working papers, conference papers, book reviews, grey literature, items without a resolvable digital object identifier (DOI) or consultable abstract, and outlets whose peer-review practices could not be confirmed were excluded.

Verification. Each candidate was checked against its Crossref record for DOI, authors, title, journal, volume, issue and pagination, and was screened for retractions, corrections and expressions of concern through Crossref update metadata. Publication year follows the issue year where one exists. Thirty-six articles met all criteria and are cited.

Analytic procedure. Sources were coded for the claim they bear on (predictability, actionability or beneficence), the data and methods involved, the institutions that commission or use forecasts, and the populations affected. The coded material was

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compared across contexts to identify recurring mechanisms, which were then stated as propositions. Evidence from the Lake Chad Basin and the Sahel was used to test the fit of each proposition.

Bases of judgement and trustworthiness. Conceptual work is judged by clarity, parsimony, explanatory reach and falsifiability. Each proposition is stated so that it could prove wrong, and the discussion identifies evidence that would weaken it.

AI usage disclosure. Generative AI tools were used to assist with literature retrieval, metadata checking and language editing. The arguments, interpretations and conclusions were developed and reviewed by the author(s), who take full responsibility for the content. No AI tool is listed as an author, and no source was cited without verification against its publisher record.

Limitations. The synthesis is restricted to English-language journal articles from a four-year window, so francophone scholarship on the Sahel is under-represented. Much forecasting research concerns Europe and other data-rich contexts, so some mechanisms are inferred from evidence outside Africa.

4. RESULTS AND DISCUSSION

4.1 RESULTS: THE PREDICTABLE–ACTIONABLE–BENEFICIAL FRAMEWORK

Displacement forecasting rests on three claims, each depending on the one before. A forecast must first be accurate enough to be useful. An institution must then be able to act on it in time. Finally, the action must benefit those predicted to move. Table 1 sets out the framework.

Table. 1. The predictable–actionable–beneficial framework of displacement forecasting

Claim	Question it answers	Conditions under which it holds	How it fails	Lake Chad Basin and Sahel
Predictable	Can the timing, size or direction of displacement be estimated with useful accuracy?	Dense, timely and representative data; stable relationships between drivers and movement	Sparse or biased data; structural breaks; short-distance and repeated movement missed	Conflict disrupts data; weak connectivity; negotiated, repeated movement
Actionable	Can an institution act on the forecast before displacement occurs?	Pre-agreed triggers, finance and responsibilities; lead time exceeds response time; access	Forecasts become reports; fragmented coordination; access denied	Insecurity and access constraints; a crisis spanning four states
Beneficial	Does the action improve the safety, dignity or choices of those predicted to move?	Purpose limitation; protection mandate; accountability to affected people; independent oversight	Use for interdiction or deterrence; data harms; experimentation on people with least voice	Strong external interest in preventing onward movement towards North Africa and Europe

Note. Compiled by the author(s) from the synthesis in Sections 2 and 4.1.

Predictable: forecasts are most accurate where they are least needed. Forecasting performance depends on dense, timely and representative data. The best-performing systems in the literature draw on rich administrative records, macroeconomic series, social media in widely used languages, and validated border-crossing counts (Barker & Bijak, 2025; Bosco et al., 2024; Wycoff et al., 2025). Such data exist mostly in stable, high-capacity states and in crises that attract dense monitoring. In the Lake Chad Basin, by contrast, conflict disrupts data collection, mobile networks are patchy, many people do not use the platforms that generate digital traces, and movement is often short-distance, repeated and negotiated with armed actors (Buba, 2026; Uzomah & Záhořík, 2026). Mobile phone data, whose use in displacement settings raises privacy and ethical challenges (Aydoğdu et al., 2025), can only capture people who own and use phones, and text-based methods depend on the text sources available (Walterskirchen, 2026). Climate migration forecasting remains unreliable even in better-studied contexts (Schewel et al., 2024). The result is an inversion. Predictive accuracy is highest where crises are least severe and lowest where they are most acute.

Actionable: forecasts change nothing without institutional pathways. Anticipatory action works when forecasts are tied in advance to triggers, funds

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and responsibilities. Forecast-based financing is the clearest example (Rahman et al., 2024). Where such arrangements are absent, forecasts become reports. See et al. (2026b) note that humanitarian responses to overlapping climate and conflict displacement remain fragmented, and examine how such displacement is classified in practice. Linares Quero et al. (2023) show that famine early warning neglects the conflict dynamics that drive hunger. Borgomeo and Jägerskog (2025) observe that research has focused on predicting causal links rather than on informing interventions. In the Lake Chad Basin, actionability is further limited by access constraints, insecurity and the coordination problems of a crisis that spans four states.

Beneficial: the same forecast serves care and containment. A forecast is information about where people will go. Its use depends on who holds it. For a humanitarian agency, it supports pre-positioning and reception. For a border authority, it supports interdiction. Bosco et al. (2024) present forecasting of irregular border crossings and asylum requests explicitly as policy support for Europe. Externalisation research shows that European migration priorities have been built into programmes in Niger and other transit states (Jegen, 2023; Landherr, 2024), and that European border technologies and biometric systems operate at West African borders (Iwuoha, 2025; Uzomah, 2024). Even humanitarian use can harm when data practices are poorly governed (Fast, 2023; Lidén, 2026), and humanitarian registration can create lasting harms for misclassified people, as with Kenyan citizens recorded as refugees (Weitzberg, 2025).

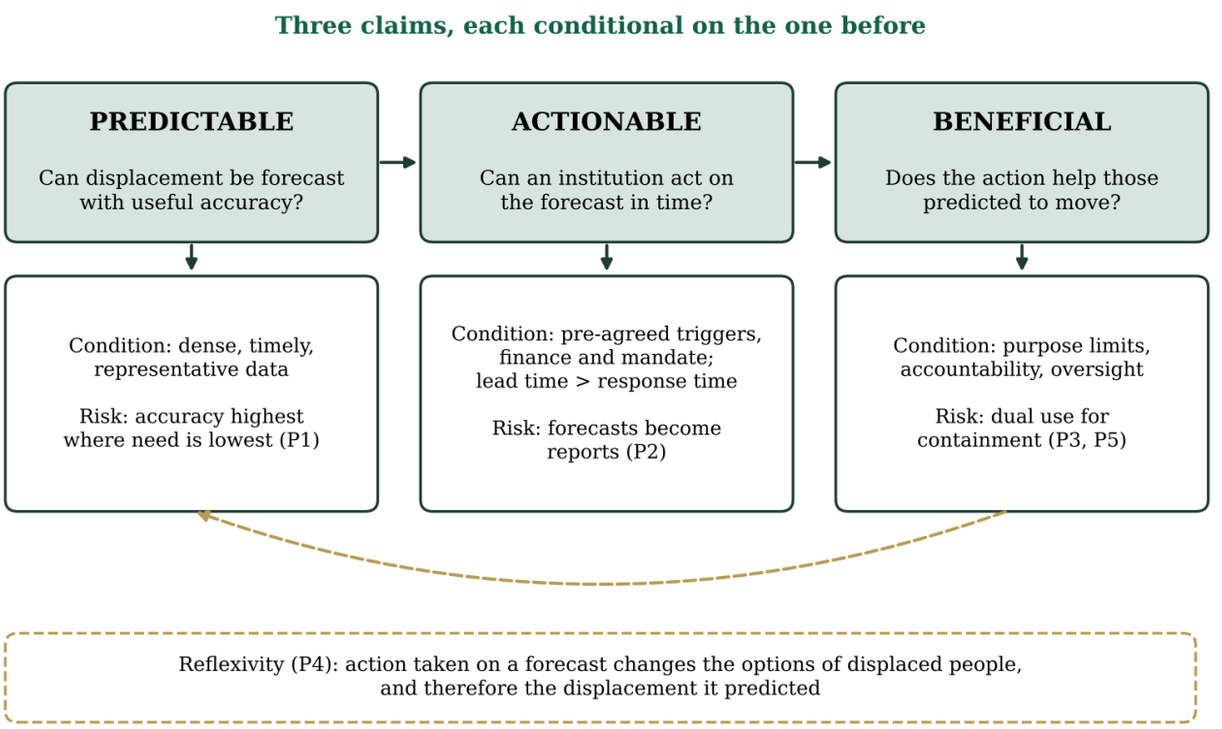


Figure. 1. The predictable–actionable–beneficial framework and the reflexive effect of forecast-triggered action. Source: developed by the author(s).

Five propositions follow from this analysis.

Proposition 1: Forecast accuracy is inversely related to humanitarian need, because data density tracks stability rather than vulnerability. Where conflict is intense, governance weak and populations poor and rural, data are sparse, biased towards the connected, and disrupted precisely when the crisis peaks. The proposition predicts that forecast errors in the Lake Chad Basin and the central Sahel will be systematically larger than in European or other data-rich settings, and larger for rural, female and less connected populations, whose movements are least visible to digital sensors and whose vulnerabilities are distinct (Chikuruwo, 2023).

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Gendered gaps also appear in the evaluation of anticipatory action itself (Rahman et al., 2024). The proposition would be weakened by evidence that forecasting models perform as well in data-sparse conflict settings as in data-rich ones.

Proposition 2: Forecasts improve humanitarian outcomes only when they are linked in advance to triggers, finance and mandates, and when lead time exceeds response time. A forecast is actionable only if someone has agreed beforehand to act on it, has the resources to do so, and can act before the displacement occurs. Forecast-based financing institutionalises this link (Rahman et al., 2024), while impact-based forecasting connects hazards to likely effects on people (Dash, 2024). In conflict-driven displacement, lead times are short and access is contested, which narrows the window for action (Linares Quero et al., 2023). The proposition would be weakened by evidence that forecasts improve outcomes even without pre-agreed triggers or financing.

Proposition 3: The use of a forecast follows the interests of the institution that commissions and holds it. Displacement forecasts are dual-use by nature. Where forecasting is funded or owned by destination states, or embedded in externalisation programmes, the proposition predicts that its outputs will be used more for border preparation and deterrence than for humanitarian protection. Where it is owned by humanitarian organisations bound by protection mandates and by agreements that restrict onward sharing, humanitarian use will dominate. The externalisation literature supports this expectation (Cobarrubias et al., 2023; Frowd, 2025; Jegen, 2023). The proposition would be weakened by evidence that forecasts produced for border agencies are routinely used to improve protection for those predicted to move.

Proposition 4: Forecasts are reflexive. By triggering visible action, they alter the displacement decisions they predict. Displaced people are not flows. They decide whether, when and where to move, based on their perception of risk and their options (Hermans & Kizilkaya, 2025). In the Boko Haram insurgency, civilians weigh flight against strategies of compliance that may keep them in place (Buba, 2026). In camps, displaced people navigate long periods of waiting and constrained choice (Bamidele, 2026). When a forecast leads to visible action, such as aid pre-positioned at a site, checkpoints strengthened on a route or a border closed, it changes the options people face, and therefore their decisions. A forecast that leads to border closure may push movement onto more dangerous routes; a forecast that leads to aid near home may reduce the need to move. Forecasting models that treat displacement as an external process to be observed cannot capture this feedback. The proposition would be weakened by evidence that forecast-triggered action leaves displacement patterns unchanged.

Proposition 5: Forecasting people who cannot consent requires governance that substitutes for consent. The people whose movements are predicted almost never consent to being forecast, and they rarely know it is happening. Individual consent is impractical when the subject of prediction is a population. Some substitute for it is therefore needed. The literature shows that ethical self-regulation is insufficient (Lidén, 2026), that donor demands drive excessive data collection (Fast, 2023), and that humanitarian settings can become sites of technological experimentation (Twigt, 2024). The proposition predicts that forecasting systems will be more beneficial, and more trusted, where they are bound by purpose limitation, independent oversight, community engagement and accountability to affected populations. It would be weakened by evidence that forecasting systems without such safeguards produce equally beneficial outcomes.

Table 2 translates these propositions into an ethical framework for displacement forecasting.

Table. 2. An ethical framework for forecasting people who have not consented to prediction

Principle	What it requires	Application to the Lake Chad Basin and Sahel
Purpose limitation	Forecasts are produced for stated humanitarian purposes and may not be repurposed	Written prohibition on use for interdiction, push-backs or deterrence; limits on sharing with border agencies
Actionability first	No forecasting without a pre-agreed plan, trigger and budget for anticipatory action	Forecasts linked to anticipatory financing and response plans agreed with national and regional authorities

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Principle	What it requires	Application to the Lake Chad Basin and Sahel
Accountability to affected people	Communities are informed, consulted and able to raise concerns about forecasting and its uses	Community-based early warning drawing on the knowledge of women, displaced people and host communities
Transparency and audit	Methods, performance and errors are published and independently reviewed	Reporting of errors by area and population group, including those least visible to the data
Data minimisation and protection	Only the data needed are collected, protected and retained for a limited time	Investment in local data-protection capacity; no transfer of raw data to third states
Evaluation of use, not only accuracy	Assessment of what was done with forecasts and how affected people fared	Joint evaluation by humanitarian agencies, governments and community representatives

Note. Developed by the author(s) from the propositions in Section 4.1.

4.2 DISCUSSION

The framework's central contribution is to separate the three claims that displacement forecasting usually makes together. Much of the current debate treats accuracy as the main problem, implying that better data and better models will make forecasting beneficial. The analysis shows that this is not enough. Accuracy is necessary but not sufficient. Even a perfectly accurate forecast does nothing without institutional pathways, and with the wrong pathways it can harm the people it predicts. This reading is consistent with critiques of the gap between forecasting and intervention (Borgomeo & Jägerskog, 2025; Dash, 2024), and it adds the political dimension that technical studies tend to omit.

The accuracy–need inversion has particular force in the Lake Chad Basin and the Sahel. These regions combine overlapping climate and conflict pressures (Eboreime et al., 2025; See et al., 2026a), repeated short-distance displacement and negotiated border crossings (Uzomah & Záhořík, 2026), and intense external interest in preventing onward movement (Jegen, 2023; Landherr, 2024). Here, forecasting faces both its greatest technical difficulties and its greatest risk of being diverted towards containment. The framework therefore suggests that investment in forecasting for the region should be matched by investment in local data systems, community-based early warning and governance safeguards, rather than imported as a technical solution.

Comparative evidence supports this caution. Gelvez and Bauer (2025) find, for Colombia, temporal shifts in how climate disasters, violence and displacement interact, increasing concentration over time, and areas that persistently show low displacement despite exposure. Lasater et al. (2025) describe the relationships among climate change, conflict, displacement and health as complex, non-linear and multicausal. If such relationships shift even in settings with long data series, models trained elsewhere and applied to the Lake Chad Basin should be treated as hypotheses to be checked against local knowledge, not as authoritative predictions. Gendered patterns matter here too. Women in the Basin face distinct climate and conflict risks (Chikuruwo, 2023; Idika-Kalu, 2025), so forecasts that ignore gender will misjudge both who moves and who is trapped.

The analysis also engages critically with the humanitarian innovation agenda. Bruder and Baar (2024) note the conceptual ambiguity of humanitarian innovation, and Twigt (2024) shows how crisis settings permit experimentation that would face more scrutiny elsewhere. Displacement forecasting fits this pattern. It is often piloted where safeguards are weakest and affected people have least voice. The reflexivity proposition adds a methodological point. Forecasting systems are typically evaluated on whether predictions match outcomes, but if forecasts change behaviour, a "wrong" forecast may reflect successful prevention, and a "right" one may reflect a self-fulfilling response, for example where border closures redirect flows towards predicted routes. Evaluation must therefore assess what was done with forecasts, not only whether they were accurate.

Two counter-arguments deserve a response. The first holds that forecasting, whatever its flaws, is better than reacting late. The framework agrees, but only where actionability and beneficence are secured. Otherwise, the alternative to forecasting is not inaction but investment in preparedness that does not depend on prediction, such as flexible funding and local response capacity. The second holds that border preparation can itself be humane, for example by preparing reception rather than interdiction. This is true, and the ethical framework in Table 2 allows

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such uses while prohibiting use for containment and push-backs.

Future research could test the propositions by comparing forecast errors across data-rich and data-sparse settings, tracing how specific forecasts were used by the institutions that received them, and studying, with displaced communities, whether and how anticipatory action changed their decisions. Participatory early warning in the Lake Chad Basin, building on community knowledge of risk, would be a valuable test of Proposition 5.

5. CONCLUSION AND RECOMMENDATIONS

Displacement forecasting is neither inherently helpful nor inherently harmful. It makes three claims, that displacement is predictable, that prediction is actionable and that action is beneficial, and each holds only under specific conditions. Forecasts tend to be most accurate where they are least needed. They change outcomes only when tied in advance to triggers, finance and mandates. Their use follows the interests of those who hold them, and they can alter the very decisions they predict. In the Lake Chad Basin and the Sahel, where displacement is severe, data sparse and external interest in containment strong, these conditions are hardest to meet.

Several recommendations follow. Humanitarian agencies and donors should invest in forecasting only alongside pre-agreed anticipatory action protocols, including triggers, financing and clear responsibilities. Forecasting systems for displacement should be governed by explicit purpose limitation, with written prohibitions on use for interdiction, push-backs or deterrence, and with restrictions on sharing outputs with border agencies. Governments of the Lake Chad Basin, working through the Lake Chad Basin Commission and with civil society, should develop community-based early warning that draws on local knowledge, including the knowledge of women and displaced people, rather than relying only on remote data. Forecast performance and errors should be published and independently audited, with attention to which populations are least visible to the data. Donors should fund local data systems and data protection capacity in the region, not only global models. Finally, evaluation of forecasting should assess what was done with forecasts and how affected people fared, not only whether predictions came true.

6. CONTRIBUTION TO EXISTING KNOWLEDGE

The paper makes four contributions. Conceptually, it offers the predictable–actionable–beneficial framework, which separates the three claims that displacement forecasting usually merges and shows that each depends on different conditions. Theoretically, it advances five falsifiable propositions on the inversion of accuracy and need, the institutional conditions of actionability, dual use, reflexivity and governance, connecting forecasting science with humanitarian ethics and critical border studies. Normatively, it proposes an ethical framework for forecasting people who have not consented to prediction, built on purpose limitation, a prohibition on use for containment, accountability to affected populations and independent oversight. Contextually, it places the Lake Chad Basin and the central Sahel at the centre of a debate dominated by data-rich contexts, showing why these regions face both the greatest technical difficulty and the greatest political risk.

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