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In "Geografia economico-politica" sono pubblicate opere di alto livello scientifico, anche in lingua straniera per facilitarne la diffusione internazionale. I direttori approvano le opere e le sottopongono a referaggio con il sistema del "doppio cieco" (*double blind peer review process*) nel rispetto dell'anonimato sia dell'autore, sia dei due revisori che scelgono: l'uno da un elenco deliberato dal comitato di direzione, l'altro dallo stesso comitato in funzione di revisore interno. I revisori rivestono o devono aver rivestito la qualifica di professore universitario di prima fascia nelle università italiane o una qualifica equivalente nelle università straniere. Ciascun revisore formulerà una delle seguenti valutazioni: a) pubblicabile senza modifiche; b) pubblicabile previo apporto di modifiche; c) da rivedere in maniera sostanziale; d) da rigettare; tenendo conto della: a) significatività del tema nell'ambito disciplinare prescelto e originalità dell'opera; b) rilevanza scientifica nel panorama nazionale e internazionale; c) attenzione adeguata alla dottrina e all'apparato critico; d) adeguato aggiornamento normativo e giurisprudenziale; e) rigore metodologico; f) proprietà di linguaggio e fluidità del testo; g) uniformità dei criteri redazionali.

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GABRIELE CASANO

TURKANA: A TERRITORY ON THE MOVE

**NAVIGATING UNCERTAINTIES AND IMBALANCES
IN KENYA'S NORTHWESTERN FRONTIER**

Foreward by

DANIEL OCHIENG' OLAGO





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ABBREVIATIONS

ACAPS	Assessment Capacities Project
ACLED	Armed Conflict Location & Event Data Project
APAD	Agency for Cross Border Pastoralist Development
ASALs	Arid and Semi-Arid Lands
AU	African Union
CBCR	Cross Border Community Resilience
CEWARN	Conflict Early Warning and Response Mechanism (IGAD)
CMCN	Climate-Migration-Conflict Nexus
EU	European Union
EWS	Early Warning System
FAO	Food and Agriculture Organization of the United Nations
FSIN	Food Security Information Network
GBV	Gender-Based Violence
GCC	Global Climate Change
GRFC	Global Response Food Crisis
ICPAC	IGAD Climate Prediction and Applications Centre
ICPALD	IGAD Centre for Pastoral Areas and Livestock Development
ICRC	International Committee of the Red Cross
IDDRSI	IGAD Drought Disaster Resilience and Sustainability Initiative
IGAD	Intergovernmental Authority on Development
IPCC	Intergovernmental Panel on Climate Change

12 *Abbreviations*

JICA	Japan International Cooperation Agency
KDRDIP	Kenya Development Response to Displacement Impacts Project
KNBS	Kenya National Bureau of Statistics
NDMA	National Drought Management Authority (Kenya)
NGOs	Non-Governmental Organisations
OCHA	Office for the Coordination of Humanitarian Affairs
IOs	International Organisations
REF	Research and Evidence Facility
SALW	Small Arms and Light Weapons
SAPCONE	Sustainable Approaches for Community Empowerment
TERA	Turkana Environmental Resource Association
UCDP	Uppsala Conflict Data Program
UNDP	United Nations Development Programme
UNDRR	United Nations Office for Disaster Risk Reduction
UNEP	United Nations Environment Programme
UNHCR	United Nations High Commissioner for Refugees
UNICEF	United Nations Children's Fund
USAID	United States Agency for International Development
WFP	World Food Programme

FOREWARD

On the 3rd of March 2023, I received an email from Professor Mauro Spotorno of the University of Genoa, an eminent Professor of Economic and Political Geography at the Department of Political and International Sciences. He also doubled up as the Director of the university's Observatory on Religious and Migratory Phenomena. His request was to have the University of Nairobi's Institute for Climate Change and Adaptation, of which I am Director, to host his PhD student, Dr. Gabriele Casano, who was undertaking his research on the issue of community resilience by analysing the complex links between climate change, migration and social conflict in the Horn of Africa. How did Professor Spotorno find me? It was from a contact in Italy, namely, Professor Alessandro Pezzoli of the Polytechnic of Turin, who had previously collaborated with Professor Shem Wandiga, the immediate former Director of the ICCA, in the context of hosting and supporting a master student's research in Kenya in the year 2020. Professor Spotorno stated that "after several searches to organise a visiting and potentially fieldwork period in Kenya – for Gabriele – we decided to turn to your institute as an ideal institution for this purpose... it appears to be an excellent point of reference to systemise academic research and field operations, thanks to the many high-level research and support initiatives launched in the areas of our common interest". I was happy to receive and accept the request, and looked forward to us

starting a longer-term and mutually beneficial collaboration between our institutions on topics of common interest. Thus began my first indirect encounter with Gabriele, by email in April 2023. After going through a string of administrative procedures for hosting and research permissions, Gabriele finally landed in Nairobi on 13th September 2023, and we met physically for the first time. Over the next couple of days and weeks we spent time discussing the various aspects of his proposed research, exchanging ideas and learning experiences, seminar presentation to our institute, and planning for the fieldwork that took place in October and December 2023, together with Prof. Spotorno and my Turkana Coordinator for the REACH Kenya Programme, Mr. Dennis Ong'ech.

The book focuses on the climate-migration-conflict nexus in the arid to semi-arid region of the Horn of Africa, characterised by low and highly variable rainfall, severe droughts and flash floods. The symbiosis between humans and nature, cause and effect, is a constant thread that weaves together the notions of vulnerability, adaptation, and community resilience in all their different and context-specific territorial peculiarities and configurations in space and time in a polycrisis era. In this exciting and thought-provoking book, Gabriele explores three complex concepts – community, resilience, and territoriality – embedded in yet another complex framework, the climate change-conflict-migration nexus – within the Horn of Africa region more broadly, and amongst Kenya's dominantly pastoral Turkana community in particular, all these embedded, of course, in the geographical notions of space and time. It considers how local territorialisation processes evolve through diachronic and synchronic lenses, and how global climate change, resilience and territorialisation processes interact to define communities and community resilience even as the territories evolve. I find that Gabriele brings much clarity to the three concepts that I have already mentioned above, the various facets by which different authors and researchers view them, how the ambiguities can be minimised, and how these can contextually be brought to bear to understanding how communities evolve over time in such spaces, given the challenges, opportunities, capacities and resources that they have on hand. I particularly like the novel way in which he has laid out the factors that contribute to

community resilience, namely, the collective pillar that comprises the multi-faceted dimensions of collective action, and the propulsive pillar that encapsulates the resources and capacities of a community to actively respond to potentially destabilising internal and external factors.

The Turkana community occupies an area in northwestern Kenya that is at the confluence of three international borders – Uganda, South Sudan, and Ethiopia – which truncate traditional community territories. This, coupled with other factors such as the remoteness, multi-ethnic setting defined by diversity of social structures/traditions, nomadic culture and access to pasture and water, high climate variability, fragile ecosystems, inadequate infrastructure for education, water and health-care, limited socio-economic investments, among others, set the scene for potential conflict situations, especially over shared but limited resources, that are exacerbated by intensified rainfall unpredictability, droughts and flashfloods due to climate change. The resilience strategies that have been developed, such as the adoption of alternative livelihoods like crop-farming, are necessarily context-specific, but are also limited by local capacities to adapt. Recurring territorial patterns were observed, linked to nomadic tradition, housing practices, subsistence strategies, and ongoing transformative processes such as land degradation, the growing threat of the invasive shrub *Prosopis juliflora* which is displacing native vegetation, and proto-urbanisation. Intra-community commonalities and differences, including along gendered lines, were noted from analysis of the field data concerning the factors emphasised under the collective and propulsive pillars underpinning community resilience.

Some of the nuggets that I pick from this engaging book are that: the coping/adaptation strategies are presently sufficient to not result in complete collapse and transformation of existing community structures, even though territorial structures may be weakened; future trajectories of community structure will become more uncertain, thus entangling the emerging forms of resilience in this uncertainty; externalities will become increasingly important under future climate change in the context of the climate-migration-conflict nexus, so that local intervention strategies will have to capture learnings from the changing broader geographical realities, and lastly; redefinition of

“the collective” is imperative under changing circumstances, in small and incremental but sure steps, rather than by untested leaps and bounds. I encourage you to read this book and draw your own nuggets from it. No doubt, it will initiate lively debates and discussions that, going forward, will enrich our understanding and guide beneficial actions and interventions in the climate change-migration-conflict nexus in context and at scale.

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19th May 2025

INTRODUCTION

«The human intellect is a completely new phenomenon on our planet, more characteristic and richer in influence than any other that organic evolution had previously matured [...] no other organism has exerted, as man has, such a lasting and far-reaching influence on so many other beings as to transform the living physiognomy of the Earth in the most profound way.»

Friederich Ratzel, 1921; paragraph 3⁽¹⁾

The idea of *community resilience* has recently joined the concept of resilience to describe the ability of communities to deal with external stresses and disturbances of a social, environmental, and political nature. However, the definition of this concept is not universal, which creates challenges for its scholarly, practical, and comprehension applications. Beginning with an awareness of the intricacy of global climate change from a geographic standpoint, this volume aims to draw attention to some of the most troubling elements that challenge the already precarious equilibrium that communities and territories depend on. The term *climate-migration-conflict nexus* (CMCN) refers to a system of interaction dynamics where human action, in its various spatial, economic, and political configurations, and the surrounding environmental conditions are the main players. The spatial and social implications of this intricate relationship raise several questions, foremost among them how to most effectively address the challenges it presents.

To try to understand how to deal with these intricacies, it was deemed useful to adopt a particular point of view that sees resilience both as a

(1) FRIEDERICH RATZEL (1921). *Anthropogeografie*. Cited in: ADALBERTO VALLEGA A. (1990). *Esistenza, società, ecosistema. Pensiero Geografico e questione ambientale*. Mursia, Milano, p. 13. Translation from Italian by the author.

precise epistemological approach functional to this purpose, and as a valid concept from which to interpret reality and endowed with a prescriptive function, but also as a real tool available to geography capable of contributing concretely to the activation of specific practices for the reduction of social and territorial vulnerability. The purpose of this volume is to clarify the meaning of *community resilience*, so that its application can support geographical analysis and take into account the variety of factors that a territorial approach to this concept requires. It will be understood how *community resilience* can be harnessed in a context characterized by dynamics attributable to the *climate-migration-conflict* nexus to investigate, understand, and address the evolution of local *territorialisation* processes, both from a diachronic and synchronic perspective, giving space to the needs highlighted by the most vulnerable groups and protecting the peculiarities of the social and territorial contexts considered. This will be achieved by conducting a territorial analysis of the Turkana region that was chosen as a “case study” for several reasons that will be discussed later (Chapter III), and where empirical research was conducted from October to December 2023.

The first chapter of the volume hosts an overview of the debate on the relationships between the implications of the *climate-migration-conflict* nexus, resilience and *territorialisation* processes; this section also proposes a precise interpretation and conceptualisation of the concept of *community resilience* that makes explicit its fundamental relationship with *territorialisation* processes. The second chapter of the volume is dedicated to understanding how geographers may choose to investigate *community resilience*, from field investigation methods to relevant themes to address and consider during data collection and analysis activities. The third chapter provides an overview of the regional context studied and concentrates particularly, but not exclusively, on the configurations that the implications of the *climate-migration-conflict* nexus determine; the focus moves from the Karamoja Cluster Region to the local scale of the Turkana research field and draws on the information collected during the field research activities. The fourth chapter discusses the aspects and concepts introduced in Chapter I according to the findings presented in Chapter III, and it hosts final reflections on the main identified territorial processes, as well as insight about how to

enhance *community resilience* in Turkana. Conclusions are devoted to a general overview of the main findings and final remarks on the issues addressed.

Why deal with climate-migration-conflict nexus and resilience

The challenges posed by global climate change (GCC) call for continuous reflection not only on the consequences but also on what strategies can be put in place to limit negative impacts and contribute to positive evolutionary processes for the territories and communities affected. As presented in almost all the reports drawn up by the IPCC, the complexity inherent in the GCC is such that it calls into question many of the environmental balances that have ensured that modern societies have prospered and enjoyed certain stability in terms of climatic conditions. Within this framework of non-linear relationships, certain phenomena appear to be on the agenda, not only among the interests of the scientific community but also in everyday debate: migration and conflict. There are unquestionably pertinent connections between the GCC, human mobility, and conflicts in their various manifestations, despite a propensity to oversimplify the relationships between the phenomena. How to interpret these relationships using a geographical approach – indeed, what we might refer to as a territorial approach – is an especially intriguing topic to discuss.

Academia often uses the interpretative lens of geopolitics⁽²⁾ to understand these relationships, often limiting itself to observing and defining correlations based on elements that are not always scientifically selected and without investigating a broader range of aspects relevant to understanding the deeper mechanisms involved in human action. This work seeks to move beyond a linear approach to the problem by examining the relationship between the three components through an analysis that

(2) By geopolitics, in this context, we mean the discipline that investigates «*how international relations relate to the spatial layout of oceans, continents, natural resources, natural resources, military organisation, political systems and perceived territorial threats and opportunities*» (GREGORY *et al.* 2009; p. 301), it is a view of geopolitics originated and developed from the positions of authors such as Halford Mackinder, Karl Haushofer and Nicholas Spykman, and which has been analysed in detail by Foster (2006).

prioritises local actors and scale while also taking a more comprehensive view of the regional context. By adopting a synchronic and diachronic perspective, this territorial approach interprets the dynamics of human action in a particular geographical context rather than attempting to explain the factors that led to the emergence of CMCN. Thus, this territorial approach also aims to provide room for a prescriptive analysis that can assist local actors in defining territorial trajectories that are both distinct from and consistent with those that are already established. In order to move forward in this direction, it was determined to tackle the problem by focusing on the idea of resilience.

This concept hides several pitfalls, but these have not prevented it from successfully establishing itself in the everyday lexicon despite its purely technical origin. As we shall see in the following pages, behind the apparent vagueness of the notion and its generalised use in multiple spheres, even very distant from one another, it hides a solid logic and a potential analytical key capable of directing geographical research towards processes of understanding territorial complexity. More precisely, it is because of this ductility that resilience can be imbued with particular meanings that can reinforce its logic and provide scientific validation for its application. In our instance, it was determined to learn more about the idea of *community resilience*, which we could characterise as “social”. The rationale behind this decision is the realization that human behaviour is always a part of a network of environmental dynamics, and that these dynamics are influenced by each other. This constant dialogue presupposes knowledge, as in-depth as possible, not only of the environmental context under examination, but also of the social context considered. The possibility of more thoroughly examining the intricacy of human behaviour in a particular geographic setting actually emerges from the investigation of the fundamental elements of the social component that *community resilience* assumes. This process of understanding what is meant by *community resilience* is at the basis of the definition of the object of the empirical research, it is the preliminary reflection capable of directing the data collection in the field and it is, at the same time, the yardstick through which we intend to corroborate the hypotheses regarding the selection of the founding elements of the proposed conceptualisation of *community resilience* itself. To put