Institute for Ecology and Action Anthropology (INFOE), Universidad Simón Bolívar, Karamoja Development Forum in cooperation with Humboldt-Universität zu Berlin, Centre for Rural Development (SLE)

Discovering the Cultures of Resilience

Promoting the contributions of traditional livelihoods to climate change mitigation and adaptation and global sustainable development

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Silvopastoral systems in Uganda sustainably managed by pastoralists."Mobility is pastoralism, pastoralism is mobility" (Borana proverb).

The majority of the 500,000-strong Borana tribe live in North Kenya. Pastoralist communities have proven an enormous capacity of change and adaptation, but in the public debate pastoralist customs are often regarded as one of the key drivers of environmental degradation. Erroneous conceptions need to be challenged: Pastoralist mobile customs do not necessarily threaten but support the peaceful coexistence of tribes or communities. The pastoral adaptive strategy lies within mobility itself and thereby demonstrates a culture of resilience. © KDF

The objective of this briefing paper is to highlight the values, potential and needs as well as concerns and threats to the livelihoods of indigenous peoples[1] and local communities and their contributions to addressing the impacts of climate change and to reaching the **Sustainable Development Goals** (SDGs), in particular **SDG targets 2.4, 13.1** and **15.2**. The deliberations and exchange of experiences during a workshop on 'Cultures of Resilience' held in October 2017 at Humboldt-Universität zu Berlin, Centre for Rural Development (SLE), Germany, are reflected below. The paper does not claim to capture all of the complex realities of indigenous peoples and local communities practicing, developing and struggling to maintain their traditional livelihoods in the face of climate change and environmental degradation. Rather it focuses on what research and development partners should pay attention to while discovering cultures of resilience.

Keywords: Indigenous Peoples, Land Use, Climate Change, Action Research

[1] The term "indigenous peoples and local communities" is used to describe and include indigenous and tribal peoples, local and traditional communities and ethnic groups or minorities maintaining and practicing traditional lifestyles, cultural practices different from those of the other segments of the national population, their own languages, social organization and political institutions, in accordance with ILO Convention No. 169.

SDG-Targets:

2.4 By 2030, ensure sustainable food production systems and implement resilient agricultural practices that increase productivity and production, that help maintain ecosystems, that strengthen capacity for adaptation to climate change, extreme weather, drought, flooding and other disasters, and that progressively improve land and soil quality

13.1 Strengthen resilience and adaptive capacity to climate related hazards and natural disasters in all countries.

15.2 By 2020, promote the implementation of sustainable management of all types of forests, halt deforestation, restore degraded forests and substantially increase afforestation and reforestation globally

From victims to agents of resilience

Indigenous peoples and local communities are important partners in mitigating and adapting to climate change. Through their knowledge, practices, adaptive strategies, and innovations to protect fragile ecosystems they contribute to the sustainable management of natural resources, and to the conservation of biodiversity, forests and climate. Many live as shifting cultivators in forests and mountain areas, as pastoralists in savannahs and deserts, as fishermen and hunters in the Arctic or in coastal areas. They belong to those most affected by the impacts of climate variability and change, and also suffer from ill-conceived solutions to climate change, even though their resource-conserving lifestyles hardly contributed to global warming. However, they may not simply be treated as vulnerable groups but as agents of cultures of resilience. Their resilience is rooted in their cultural heritage and values, their traditional knowledge and practices on risk diversification and conflict mediation, their governance regimes and their sustainable, community-reviewed production systems.

In the village of Bayyo, Bontoc, Mountain Province, Philippines, sweet potato crops are planted in circular raised beds and other forms. The reasons behind are to maximize irrigation through soil capillary action, prevent rat infestation and have uniform sizes of tubers. The two major principles of the indigenous peoples of Luzon/Cordilleras are: 1. share what you have, and 2. only take what you really need.

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Traditional land use and natural resource management systems are dynamic and continuously developed by indigenous and local communities according to changing socio-environmental factors such as demography and mobility patterns, climatic seasonality and fluctuations, vegetation dynamic, crop productivity, invasion of exotic species, pests, and diseases. This ancient body of adaptive knowledge has ensured indigenous livelihoods and resilience on our planet for millennia.

Challenging the dominant discourse

Despite their cultures of resilience, they are not sufficiently represented in the international discourse. Contrary to the convincing evidence about the role of indigenous knowledge in sustainable land management and conservation of biodiversity, their holistic view of the environment is still marginalised in climate change research, development and policy-making circles. Instead, a dominant state and institutional discourse based on technical and 'scientific' expertise and hierarchical governance prevails.

Diverse indigenous groups are often considered responsible for harmful environmental practices due to misunderstandings based on different cultural perspectives. As recognised by the United Nations Framework Convention on Climate Change (UNFCCC) Conference of Parties, the lack of financial and political support to protect and understand indigenous peoples' knowledge and practices represents one of the major obstacles for their integration into climate change adaptation planning policies and practices.

The absence of effective legal protection of land tenure and access rights in several parts of the world represents a fundamental threat to indigenous peoples' resilience. Indigenous guardians of their ancestral lands are frequently threatened by policies that favour a change of their traditional land use practices, such as urbanization policies, mining activities or state incentives for the cultivation of cash crops, e.g. soybeans or palm oil.

In addition to the loss of territory, demographic changes and accelerated acculturation processes put the resilience of traditional food production systems at risk. Climate variability and change directly impact indigenous agricultural practices, making it impossible to predict the correct time for cutting, controlled burnings, sowing, harvesting, and crop rotation, which have usually followed consistent patterns of rainy and dry seasons. Similarly, the increased occurrence and intensity of fires associated with the severity of drought, increased forest vulnerability and the resultant soil weathering process amplify climate change effects in a feedback process.

What research is needed to make Indigenous peoples' contributions visible?

This leads us to ask about the necessity of breaking with the dominant trend that disqualifies indigenous knowledge as invalid and counterproductive. There are still large knowledge gaps on the potentials and strengths of indigenous peoples' land use systems that can be addressed through targeted research. Gaps include, e.g., their contri-

butions to national economic outputs and growth, food security, peace and stability within and across country borders, as well as environmental stability.

Considerable research evidence is needed to close these knowledge gaps, both in order to learn from traditional knowledge and practices and to confirm its contribution to climate change adaptation and mitigation and to reaching the SDGs.

Research providing solid evidence directly supports effective advocacy for indigenous peoples and local communities. Not only the potentials must be shown, but also the limitations of traditional systems, as they cannot withstand mounting land use pressures, demographic changes, migration, and climate change impacts forever.

Fires are a threat to forests, and therefore fires should be prevented and controlled. For the Pemón (Venezuela), and many Indigenous peoples living in South America land use is based on cooperative work called Mayú. Indigenous fire management is controlling forest fires and an essential feature of shifting cultivation, a climate-resilient agricultural practice in the tropical forests. The wood-ash introduces nutrients from forest biomass and increases the pH of very acidic, weathered and poor tropical soils.
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How to research with Indigenous peoples?

It is important not only to focus on what to research, but also how to conduct research with indigenous peoples and local communities. The research methodology often does not consider a real participation of the community. This is rooted in the still prevalent conception of research with an academic researcher being the central actor, who explores a pre-determined field with a specific objective chosen beforehand by themselves for a limited period of time. Indigenous peoples and local communities are involved only for knowledge extraction, while results are generated, presented and further used "back home" in front of an equally academic audience.

"Real" participatory research determines its aims, methodologies and actors on-site, together with the local community. Adjustments to social and cultural norms (i.e. local language, customs, gender or age, suitable timing, etc.) cannot be emphasized enough: Every deviation from "local ways" alters the information obtained. The design should be as "raw" and original as possible. The involvement of the local community should therefore start as early as possible, in order to define objectives and methods accordingly. Active participation entails that community members are part of the scientific team and are also credited as such by being co-authors, quoting their voices, and using elements of citizen science. The academic researcher acts as a facilitator instead of the central actor, undertaking tasks for which he or she possesses the necessary skills. Those include the "translation" of local results into academic and policy language to be used in the international arena: Providing solid and concise arguments for political advocacy, formulating precise recommendations for action, and choosing the most effective means for a wide distribution of the results, among both academics and political actors.

Recommendations for Action

Sharing and integrating indigenous knowledge requires an increased intercultural interface between the research and public policy communities. A number of existing platforms for continuous learning agreements could be taken advantage of. Some of these include the International Indigenous Forum on Biodiversity (IIFB) and the International Indigenous Peoples' Forum on Climate Change (IIPFCC). In relation to this, it is important for the UNFCCC to operationalize the Local Communities and Indigenous Peoples' Platform (LCIP) to advance and promote indigenous knowledge and indigenous peoples' rights.

The contributions of indigenous communities, particularly the role of their land use practices in adapting to climate change and reaching global food resilience and security, and their contributions to national economies, peace and security are under-researched. The potential of indigenous fire management and shifting cultivation in climate change mitigation, specifically the potential of indigenous land use practices to safeguarding natural carbon sinks are research gaps to be filled. More information on critical aspects of indigenous knowledge and their contribution to nations would inspire actors in developing policies related to conserving indigenous knowledge and protecting indigenous lands.

Security of land tenure and access to natural resources are of the highest importance to indigenous peoples - as they are central to their economic, social and political structures. The primary starting point for any research should be the land issue, as knowledge is so closely interconnected with land use. To avoid misunderstandings, research needs to acknowledge that traditional knowledge is site and context specific and cannot be simply translated from one place or region to another. While this value is fairly documented and recognised by the international community through instruments like the United Nations Declaration on the Rights of Indigenous Peoples, consensus amongst national governments and commitment to preserving the rights of pastoralists and shifting cultivators among others to land still needs to be realized.

In the research endeavour with indigenous peoples and local communities, research ethics should protect their rights. Obtaining free, prior and informed consent (FPIC) must be underscored. While many communities do share knowledge willingly, they are not fully aware of the implications of such knowledge being published. Researchers must make sure they fully inform communities on how, where and with whom the results is being shared.

Efforts around the globe are necessary to formulate legitimate participatory management policies developed by intercultural perspectives (indigenous, academic and institutional), to enhance climate resilience strategies, and to promote socially just and culturally sensitive practices. This can be reached by action-oriented research where academia and community actors jointly develop practical solutions.

The benefits of research should be shared equally. The example of Canada demonstrates that collaboration of publications by academia, elders and indigenous leaders allows for shared recognition. A Canadian framework for research engagement between universities and Aboriginal communities outlines principles and protocols, and provides a step in the right direction as they promote, and require the use of instructors and assistants from indigenous communities to be involved in research on indigenous peoples.

Four principles guide research and development with Indigenous peoples and local communities:

⇒ Reframing Indigenous peoples' issues and filling knowledge gaps on values, principles, and practices (**Evidence**)

⇒ Action-oriented research to advocate for the cultures of resilience in the international debate on climate change and SDGs (**Advocacy**)

⇒ The research process allows for inclusive community-review of methodologies and results. (**Participation and interculturality**)

⇒ Ancestral, traditional and modern knowledge are exchanged. This creates a solid base with which target-, system-, and transformative knowledge can be produced to find innovative solutions (**Innovation and knowledge**)

All in all, there should be closer interaction between indigenous communities and academia in building long-term relationships and consciousness. We propose a research and development paradigm where quality and validity is not only sustained by peer-reviewing processes for publications, but also steered by community peer-reviewed processes including the production of transformative knowledge and solutions.

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Links:

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https://aippnet.org/leave-no-one-behind-sdgs-and-indigenous-peoples/

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