

Blog “Sustainable Land Management in Sub-Saharan Africa: Improving livelihoods through local research”



INTRODUCTION



Our blog is intended for project staff as well as interested stakeholders from science, policy and practice, to share experiences and mutually learn. It is an opportunity to showcase the multi-faceted nature in which we improve livelihoods and support sustainable land management through local research.

This current blog, prepared by Dr. Peter Asare-Nuamah shares insights from a panel discussion held at the 25th Anniversary International Conference of the Center for Development Research (ZEF) University of Bonn, to shed light on implementation-oriented research.

STRENGTHENING IMPLEMENTATION-ORIENTED RESEARCH

Implementation-oriented research is increasingly applied to address complex challenges—challenges with multifaceted and dynamic causes and impacts across diverse stakeholders, societies and boundaries. For emerging scientists, especially early career researchers, learning from past experiences in designing and carrying out implementation-oriented research, is imperative. More so, understanding the challenges associated with implementation-oriented research and how to address them can contribute towards promoting implementation-oriented research.

The INTERFACES project funded by the German Federal Ministry of Education and Research (BMBF) organised a panel discussion at 25th Anniversary International Conference of the Center for Development Research (ZEF) University of Bonn, to shed light on exactly this. Moderated by [Dr. Peter Asare-Nuamah](#), the panel discussion sought to highlight lessons learned and insights gained in designing effective implementation-oriented research. The panellists for the discussion included [Prof. Dr. Lisa Schipper](#) (University of Bonn), [Prof Samuel Nii Ardey Codjoe](#) (University of Ghana), [Dr. Namukolo Covic](#) (CGIAR – Director, East and Southern Africa), and [PD Dr. Alisher Mirzabaev](#) (International Rice Research Institute).



WIDE APPLICATION TO ADDRESS COMPLEX PROBLEMS

Implementation-oriented research involves working with diverse stakeholders to co-create solutions to a societal problem. The panellists highlighted the applicability of implementation-oriented research in addressing complex challenges in diverse contexts and research fields. Some of the areas in which the panellists applied implementation approaches include the development of food-based dietary guidelines, strengthening adaptation to climate change, and integrated water resources management. It emerged that an implementation-oriented research conducted with municipalities in Western India led to the development of heatwave related policies and reduced deaths associated with heatwaves. The lessons from

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the research resulted in the implementation of similar policies by other municipalities.

The shift from traditional research which focuses on the ‘what and why’ to the ‘how’ under implementation-oriented approach makes implementation research more appealing in addressing complex challenges. This allow for the inclusion of diverse actors or stakeholders in the development of innovations and solutions for specific contexts and problems. For instance, engaging with farmers or policymakers offers the unique opportunity to gain in-depth insights of their contextual challenges – allowing scientists to learn from them, while at the same time enabling local actors in the development of solutions through the technical insights of scientists. Thus, implementation-oriented research is a win-win approach in addressing developmental challenges by scientists and local actors. It is applicable across a wide temporal and spatial scale ranging from local, national, regional to international levels.

KEY CONSIDERATIONS IN DESIGNING EFFECTIVE IMPLEMENTATION-ORIENTED RESEARCH

One critical factor influencing the effective development of implementation-oriented research is understanding the needs and preferences of stakeholders. As stated in 1919 by the Physicist Nikola Tesla ‘*science is but a perversion of itself unless it has as its ultimate goal the betterment of humanity.*’ Gaining a better understanding of what stakeholders need and working towards that as opposed to what scientists assume is essential for stakeholders can lead to the betterment for stakeholders. For researchers, implementation-oriented approach allows stakeholders to be placed at the centre of the solution development process – enabling them to bring their perspectives and realities to the processes. Essentially, policymakers reflect on what is possible to implement when it comes to scientific reports. It is therefore, crucial that scientists understand perfectly what the needs of stakeholders are and at what particular point in time, given the insatiable needs of human society and the associated limited resources. As such, understanding what stakeholders perceive as essential leads to tailoring existing resources towards meeting them.

The diversity of stakeholders is an essential consideration in designing an implementation-oriented research. As societal challenges are multifaceted, stakeholders have different experiences, norms, values and views in relation to a particular challenge. This diversity shapes how solutions are to be developed, particularly from equity and justice perspectives. It is therefore, crucial that implementation-oriented researchers make critical efforts to understand the problem from the diverse perspectives of different stakeholders. The benefits of engaging diverse stakeholders include gaining a holistic understanding of the problem, and designing fit-for-purpose and fit-for-context solutions.



Understanding the context through diverse stakeholders is anchored in the research approach and praxis adopted. Essentially, implementation-oriented research requires inter- and transdisciplinary approaches and system thinking..

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Transdisciplinary approaches promote collaboration, particularly between Global North and Global South scientists, which is key to tackling complex challenges, especially in the global South. Such collaboration leads to exchange of ideas, pooling resources, and technical expertise and competences. For knowledge exchange, multiple perspectives from multiple scientists in relation to a particular problem unveils the complexity of societal problems while equally allowing for deeper reflections and discussion on what works best. In effect, reflections and discussions contribute to addressing disagreement through consensus and in some cases, compromise. Similarly, trust building between and among stakeholders and scientists—as well as donors—is highly imperative in designing and implementing effective implementation-oriented research. Trust building takes time, which necessitates the need for implementation-oriented researchers to offer adequate time for effective engagement between scientists and stakeholders. This is crucial not only for building trust, but also for co-creation and co-development of appropriate solutions by policymakers, practitioners and scientists. Similarly, it helps to adapt to changing situations in the stakeholders’ context. Again, prolonged engagement is helpful in assessing impacts, which is often challenging in short-term projects.

CHALLENGES CONFRONTING IMPLEMENTATION-ORIENTED RESEARCH

Several challenges arise in the development and implementation of implementation-oriented research. Some of them include:

1. It is time and resource consuming: the time and resource consuming nature of implementation-oriented research makes it quite challenging to effectively address complex challenges. This is because stakeholders’ preferences are dynamic and the resources available to address the problems at a particular time are always not available. It is crucial for scientists to be flexible to adapt to changing contexts of stakeholders. This will require the effective use of the available but limited resources to address a particular problem of stakeholders.
2. Pressure from donors: there is an expectation of time bound release of results and publication of impacts from their donation. However, most

often, the changing context of stakeholders leads to a delay in meeting donors’ demand, thereby putting pressure on researchers. It is important for donors to understand that making a real impact in society takes time. Hence, creating an enabling environment for researchers to work flexibly with adequate adjustment is essential. For researchers, it is advisable to provide honest update and open communication with donors to enable them to understand the realities on the ground.

3. Another challenge is in regards to the effective assessment of the actual impacts and outcomes from implementation-oriented research. The assessment of impact and outcomes are mostly related to those observed and reported during and immediately after the end of the project. However, real impacts take time and long-term impacts are rarely assessed, as donors do not often make funds available for such assessment years after the end of the project.
4. A state of dilemma for researchers in the Global South: given that implementation-oriented research is resource-intensive, researchers—particularly early career researchers in the Global South—find themselves in a dilemma whether to chase funding for implementation research (often not forthcoming) or to focus on their publications (essential for their career progression and promotion). Hence, the mantra to ‘publish or perish’ discourage many researchers from implementation-oriented research. It is crucial for Global South researchers and institutions to establish mutual collaborations with those in the Global North to enable them access to funding for implementation-oriented research, which is often implemented in the Global South.

CONCLUSION

Implementation-oriented research is crucial in driving government and institutional policies and addressing complex societal challenges. It is imperative for the scientific community to advocate for the importance of implementation research in achieving sustainable development. This involves increasing knowledge and awareness among scientists and practitioners on how to effectively design and carry out implementation-oriented research, and develop appropriate capacities. Scientists

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must understand their contexts, know their actors, be well-informed of diversity and embrace knowledge and practices from diverse scientific disciplines in designing and carrying out implementation-oriented research. Past experiences and lessons learned can therefore, serve as a starting point for strengthening capacities for implementation-oriented research. . Similarly, mentorship and collaboration with early career researchers would be essential to promote and strengthen implementation-oriented research in vulnerable and at risk communities of the world. Given the time consuming and resource demanding nature of implementation-oriented research, the scientific community must rally for increased funding for implementation research, especially among scholars in the Global South, where complex challenges and vulnerability are pronounced.

PHOTOS

Courtesy of Dr. Peter Asare-Nuamah

FOR FURTHER INFORMATION

Funded by the German Federal Ministry of Education and Research (BMBF), within the strategy of its platform [Research for Sustainability](#) (Forschung für Nachhaltigkeit, FONA), the **INTERFACES** project works with four regional projects – **COINS**, **DecLaRe**, **InfoRange** and **Minodu** – to strengthen the integration, coherence and reach in the area of sustainable land management.

MEDIA

Follow us for updates on the research programme on our [website](#) and follow us on [LinkedIn](#) and on [D-Groups](#).

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