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Towards the establishment of water-energy-food communities – empowering communities to make their own decisions

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Executive statement

This policy brief is directed towards government officials and policymakers, advocating for establishing Water-Energy-Food (WEF) nexus communities in South Africa. The objective is to empower local communities by facilitating integrated and sustainable decision-making around WEF resources. By endorsing a community-driven approach, we propose frameworks enabling these communities to effectively manage and allocate these resources, strengthening their resilience to environmental and economic challenges.

Establishing WEF communities presents a unique opportunity for the government at all spheres, NGOs and communities to promote sustainability, alleviate poverty, and mitigate resource-related conflicts at the grassroots level. Moreover, such an initiative will advance social justice by ensuring that local voices are heard and that communities have a stake in the governance of their WEF resources.

Key messages and recommendations

South Africa currently lacks a dedicated regulatory framework, institution or instrument that facilitates integrated decision-making across water, energy and food sectors. This gap hinders effective governance and exacerbates the resource-related challenges faced by vulnerable communities.

- Recommendation 1: Learning from European Union Directives and utilising existing South African multi-actor governance instruments as a foundation for developing a Legal and Policy Framework for WEF Communities, we recommend the establishment of WEF communities in South Africa.
- Recommendation 2: Utilise existing legal instruments in South Africa to establish a legal foundation for WEF communities, leveraging those instruments already familiar to the government and the community. This will facilitate the development of a comprehensive Legal and Policy Framework tailored for WEF Communities.
- Recommendation 3: Promote Capacity Building and Inclusive Participation
- Recommendation 4: Foster Collaborative Partnerships across governance levels
- Recommendation 5: Incorporate WEF Communities into South Africa's broader national policies

Introduction

South Africa is grappling with severe challenges stemming from the scarcity and unequal distribution of water, energy, and food resources, with the most severe impacts affecting local, rural, and traditional communities. Fragmented governance further complicates these challenges, with multiple actors—including national, provincial, municipal, and traditional leadership. The lack of coordination and a cohesive governance framework to address the interconnected nature of water, energy, and food resources has exacerbated these issues.

The urgency of addressing unequal access and South Africa's fragmented governance is highlighted by the Constitution (1996), which emphasises social justice and mandates collaboration across all levels of government to ensure equitable resource distribution. Yet, the current governance structures fall short of integrating these key sectors into a unified framework. This lack of coordination not only impedes sustainable development but

disproportionately affects vulnerable communities, undermining efforts toward equitable growth and resilience.

Drawing inspiration from the European Union's Renewable Energy Directive (2018) and Electricity Market Directive (2019), which introduced the concept of "energy communities," this policy brief proposes the establishment of Water-Energy-Food (WEF) communities—a concept not yet recognised in South African law. Unlike energy communities, which focus on a single resource, WEF communities would adopt a holistic approach to managing water, energy, and food resources at the local level. This integrated governance model would empower communities to make informed decisions, promoting sustainability, resilience, and social justice.



This brief proposes specific policy recommendations for establishing WEF communities using existing legal instruments as a point of departure, informed by lessons from the EU directives, and adapted to South Africa's unique context.

"WEF communities will empower individuals and households to make informed decisions while exercising their rights to water, energy, and food"

- Prof Willemien du Plessis

About the project

In response to the rising demand for energy, water, and food, the Water-Energy-Food (WEF) nexus has recently emerged as a popular approach highlighting the interconnections between these essential vital resources. The WEF nexus aims to promote sustainable development by integrating water security management, energy production, and food systems. WEF communities, operating at the local level, could facilitate improved governance and decision-making in the water, energy, and food sectors, thereby advancing social justice and sustainability in local communities.

Our research project, titled "Water-Energy-Food Communities in South Africa: Multi-Actor Nexus Governance for Social Justice?", introduces the concept of WEF communities, a new idea in South Africa's legal landscape. We draw inspiration from the European Union's (EU's) Renewable Energy Directive (2018) and Electricity Market Directive (2019), which introduced the concept of 'energy communities'. Although focused solely on energy, the EU model is built on a community-driven approach involving local businesses and authorities to support financing and provide operational assistance. In the EU, energy communities have successfully generated social, economic, and environmental benefits by encouraging collective renewable energy production. Building on this concept, our

research project aims to adapt and expand these community-driven models for South Africa by incorporating not only energy but also water use and food production. We explore how WEF communities can empower citizens to manage water, energy, and food resources collaboratively.

Our research included a comparative analysis of legal frameworks in both the EU and South Africa, as well as household-level assessments of WEF interlinkages and decision-making processes in two communities in the Eastern Cape and Northern Cape. Data was collected through literature reviews, focus group discussions, interviews, surveys, and field workshops. Stakeholder engagement is a key aspect of the project, with active participation from local communities.

Renewable Energy Communities and a Citizen Energy Communities are founded on the principles of -

- Open and voluntary participation
- Non-discrimination for both participants and consumers,
- Effective control by their members, including individuals, local authorities or small enterprises, and
- A primary focus on delivering environmental, economic or social benefits to their members or to the local areas in which they operate, rather than solely generating financial profit.



























Existing instruments for establishing WEF communities

Due to the lack of legislation to establish WEF communities, there are a number of existing institutions and instruments that government departments, municipalities, communities, non-governmental organisations and individuals could utilise to establish their own version of WEF communities in accordance with their own needs. They include, for example,

- Public-private partnerships.
- Agreements that traditional councils may conclude with municipalities and developers.
- Communal property associations.
- Cooperatives.
- Multi-actor governance instruments in terms of water legislation, such as catchment management agencies, water use associations, catchment management forums and partnerships.
- Environmental management cooperation agreements.
- Community forestry agreements.
- Stokvels.

All these instruments have their shortcomings and to overcome them, it is imperative to adjust and enhance the legal framework to foster integrated management, whereby communities can make their own decisions in relation to water, energy and food.

Prerequisites for establishing a WEF community

From the comparison of all the instruments mentioned above, we determined that a WEF community should, amongst others,

- be voluntary,
- clearly defined and
- should allow for members to exit, should they wish to.
- The legislation should establish the principles governing the WEF community, and
- should set procedures for establishing such communities based on non-discriminatory and democratic principles.
- The pursuance of social justice issues and equal access to energy, water and food production or special benefits for community members should be emphasised, while
- differentiation among participants should be carefully discussed to ensure fairness and non-discrimination.
- The establishment document should set out a clear mandate, as well as procedures for decision-making and dispute resolution.

Study results, conclusions and recommendations

Current South African multi-actor governance instruments do not explicitly incorporate an integrated Water-Energy-Food (WEF) governance approach, but existing instruments can provide a foundational framework for establishing WEF communities. By leveraging existing governance mechanisms, such as public-private partnerships, agreements between traditional councils and developers, communal property associations, and cooperatives, South Africa can establish WEF communities that empower local stakeholders. Such communities not only promise better governance but also foster inclusivity and resilience, addressing pressing issues of resource scarcity and social injustice.

Recommendation 1: Establish Water-Energy-Food (WEF) Communities in South Africa

We recommend the establishment of Water-Energy-Food (WEF) communities to integrate decision-making on water, energy, and food resource management at the local level. Drawing from successful examples in the European Union, particularly energy communities established under the EU Renewable Energy Directive (2018), WEF communities could empower South African citizens to take ownership of WEF resource management.

Recommendation 2: Develop a Legal and Policy Framework for WEF Communities

We propose that policymakers make use of existing legal instruments in South Africa to establish an interim legal foundation, leveraging those instruments already familiar to the government and the community.

- Public private partnerships.
- Agreements that traditional councils may conclude with municipalities and developers.
- Communal property associations.
- Cooperatives.
- Multi-actor governance instruments in terms of water legislation, such as catchment management agencies, water use associations, catchment management forums and partnerships.
- Environmental management cooperation agreements.
- Community forestry agreements.
- Stokvels.

The interim framework should provide guidelines for integrating water, energy, and food management into local governance structures, ensuring that local actors have the authority and capacity to manage resources sustainably.

Recommendation 3: Promote Capacity Building and Inclusive Participation

To ensure the success of WEF communities, we recommend investing in capacity building at the local level, focusing on marginalised groups such as women, youth, and the poor. This will enable these communities to make informed decisions and actively participate in resource governance.

Recommendation 4: Foster Collaborative Partnerships across governance levels

A multi-stakeholder approach will enhance resource allocation, provide financial and operational support, and ensure that WEF communities are effectively integrated into broader governance frameworks.

Recommendation 5: Incorporate WEF Communities into South Africa's broader national policies

We recommend integrating WEF communities into South Africa's broader national policies on climate change, resource management, and poverty reduction. These communities offer a localised solution to national challenges, such as climate resilience and resource scarcity, and can contribute to national goals by promoting sustainability at the grassroots level.

Limitations (optional)

The establishment of WEF-communities will have to be negotiated and if a legal framework is considered, it is proposed that it be developed with a bottom-up approach. The establishment of such a WEF community has not been done in practice, although evidence of such communities (with no legal basis) exists in the Eastern and Northern Cape. The introduction of such a concept will differ from one community to another and from urban areas to rural areas.

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