

Our theory of change describes the underlying rationale of the TES NbS project, and will support planning, implementation, and assessment.

Definitions

Nature-based Solutions (NbS) involve the protection, restoration and management of natural and semi-natural ecosystems, the sustainable management of working lands and aquatic systems, and the creation of novel ecosystems in and around cities or across the wider landscape (Seddon et al 2021). NbS aim to address societal challenges including climate change, food and water security, natural disasters, human health, and/or social and economic development (Cohen et al 2016, 2019) while increasing biodiversity and human well-being relative to the pre-NbS state (Seddon et al 2021).

Water Towers in Southern Africa are elevated areas (mountains, plateaus and other high-lying areas) which have relatively high runoff critical for water supply to local communities and economies as well as transboundary and national river systems (e.g., the Orange, Okavango, Zambezi, Limpopo and Cunene Rivers) (Viviroli et al 2007, 2020; Nel et al 2017).

Key Actors are participants involved in the TES NbS project and include policy coordinators, directors, high-level project/programme managers, researchers, and other decision makers (from NGOs, government departments, consulting firms and academic institutions) involved in the field of NbS or related interventions which are of relevance to Water Towers in Southern Africa.

Equitable NbS are fair, respectful, gender responsive, socially inclusive and provide wellbeing for relevant local communities (at the site or near to the site of planning or implementation) based on their specific context (i.e., more for those who need more) (Leach et al 2018).

Sustainable NbS lead to the long-term maintenance of desirable and meaningful life support systems which are biophysically, culturally and socially determined (Leach et al 2018).

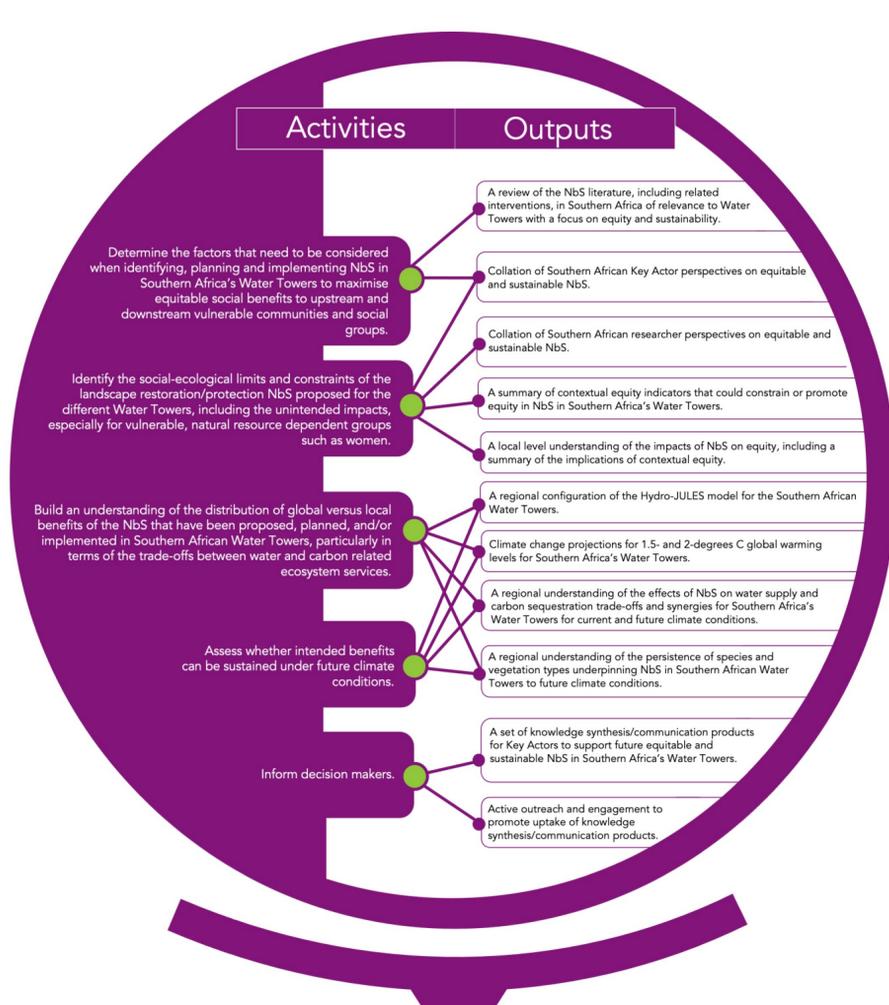
Context

- Urgent responses are needed to address societal challenges including climate change.
- NbS are one of the strategies being widely promoted in Southern Africa, but the literature on NbS including related interventions has not been synthesized for the region.
- NbS have been proposed and implemented across Southern Africa, including in important Water Tower regions.
- There is inadequate knowledge of how NbS affect local people, the trade-offs between carbon and water supply services and whether there are biophysical and socio-economic limits and constraints to their implementation.
- There is limited understanding of how equitable NbS are in terms of who wins and who loses considering gender, different social groups and across different scales including national, sub-national, and local to global.

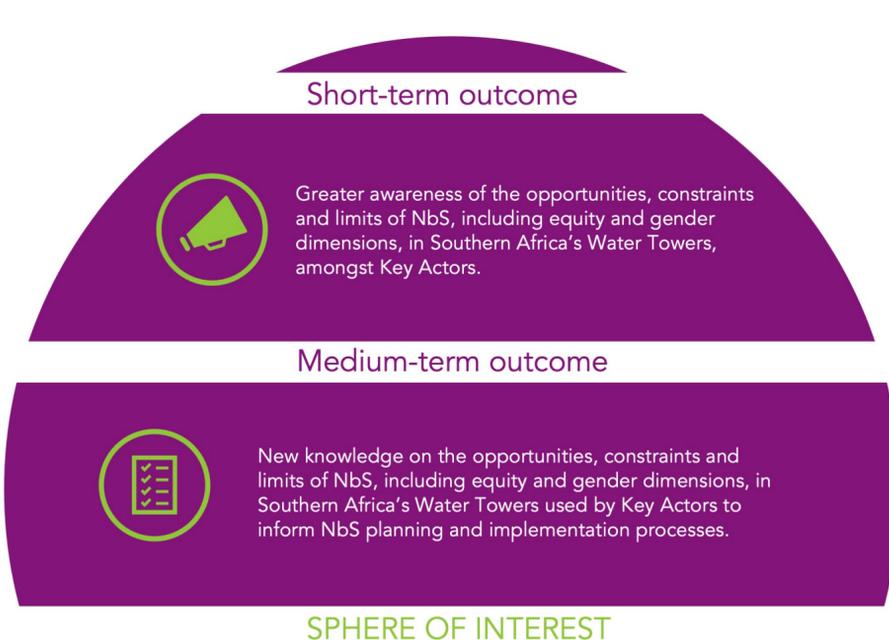
Assumptions

- Southern African countries are looking to implement equitable and sustainable NbS.
- Knowledge and literature exist from Southern Africa to inform equitable and sustainable NbS, but this has not been adequately incorporated into existing global syntheses.
- Experiences and synthesis from the Global North while useful for learning do not provide the gender responsive and socially inclusive context required to inform NbS in Southern Africa.
- Decisions based on improved and locally relevant or derived knowledge, evidence and awareness lead to more equitable and sustainable NbS.
- Enhanced knowledge and awareness positively influence capability to influence or implement equitable and sustainable NbS.
- Key Actors have the capacity and willingness to use the information in decision making efforts.

SPHERE OF CONTROL



SPHERE OF INFLUENCE



SPHERE OF INTEREST



IMPACT



TES NbS project team



Funded by



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