UNCTAD TA PROJECT IN AGRICULTURE AND ENERGY

Update on progress

09 May 2023
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Deputy Director:
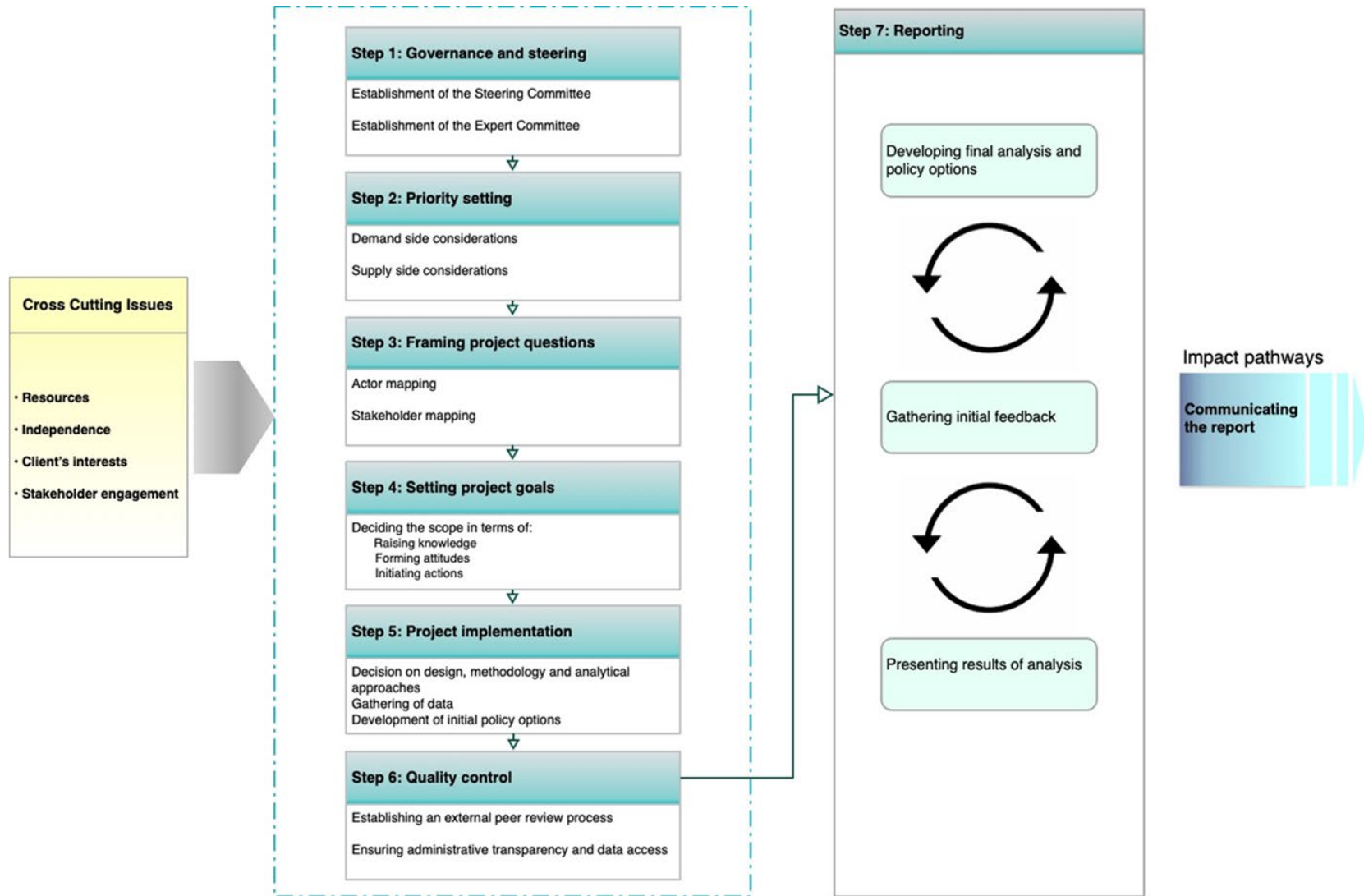Multilateral Cooperation

NDP 2030

Objective and Outcomes of the TA Project

- Objective : To strengthen capacities to conduct TA in agriculture and renewable energy and design and implement policies that support learning, diffusion, and adoption.

- Outcome 1: Improved capacity to conduct TA in energy and agricultural sectors

- Outcome 2: Improved capacity of policy makers to design and implement technological capabilities in upgrading strategies and policies in the selected sectors

- Not forgetting that, this is a pilot project, that will assist other developing countries with information to be able to conduct TA

- South Africa/DSI is conducting TA in both Agriculture and Energy

Some conceptual clarifications

- **Technology Assessment (TA)** *is a* scientific, interactive and communicative process which aims to contribute to the formation of public and political opinion on societal aspects of science and technology." It is a form of policy research that examines short- and long-term consequences (for example, societal, economic, ethical, legal) of the application of technology". **Impacts of TA are expected to be threefold: raising knowledge and forming opinion among policy makers and initializing actions by them.**

- **Technology forecasting** can be seen as attempting to predict the future characteristics of useful technological machines, procedures or techniques. **Its aim is mainly to inform decision makers at the level of companies and other organizations,** thus, not concentrating on the broader societal effects of technological advancements and innovation.

- **Technology Foresight** combines creative thinking, expert views and alternative scenarios to make a contribution to strategic planning. It looks into the longer-term future of science technology and innovation (STI) in order to make better-informed policy decisions. **Thus, Foresight is a long-term strategic, not an assessment tool.**

- **Technology Needs Assessment (TNA)** originates in the process UNFCCC in 2001. TNAs are a set of country-driven activities that **identify the climate change mitigation and adaptation technology priorities of partner countries, and work towards producing a pipeline of investment projects**.

- **Responsible research and innovation (RRI)** is an approach that anticipates and assesses potential implications and societal expectations with regard to research and innovation, **with the aim to foster the design of inclusive and sustainable research and innovation.**

Cross Cutting Issues

· **Resources**
· **Independence**
· **Client's interests**
· **Stakeholder engagement**

Step 1: Governance and steering

Establishment of the Steering Committee

Establishment of the Expert Committee

Step 2: Priority setting

Demand side considerations

Supply side considerations

Step 3: Framing project questions

Actor mapping

Stakeholder mapping

Step 4: Setting project goals

Deciding the scope in terms of:
    Raising knowledge
    Forming attitudes
    Initiating actions

Step 5: Project implementation

Decision on design, methodology and analytical approaches
Gathering of data
Development of initial policy options

Step 6: Quality control

Establishing an external peer review process

Ensuring administrative transparency and data access

Step 7: Reporting

Developing final analysis and policy options

Gathering initial feedback

Presenting results of analysis

Impact pathways

Communicating the report

Step 1-Steering Committee and Expert Group Status

- Two structures- SC and EG

    - SC to manage, guidance, oversight, set priorities

    - EG to implement the TA i.e provide information in area of speciality

- Identified the SC and EG representatives nominated by institutions (both energy and agriculture sector)

- SC appointed by the DG the DSI

- Structure and representation

    - SC chaired by the DSI and also DSI provide secretariat support.

    - Chair of the SC appoints the EG

    - Two TA experts/consultants to work with SC and EG to collate, consolidate and draft the report.

STRUCTURE AND REPRESENTATION

DSI: CHAIR OF STEERING COMMITTEE AND SECRETARIAT SUPPORT TO PROJECT	
STEERING COMMITEE	**EXPERT GROUP**
Agricultural Research Council	Agricultural Research Council
Department of Agriculture, Land Reform and Rural Development	Department of Agriculture, Land Reform and Rural Development
Department of Science and Innovation (Agric , Energy and International sections)	Department of Science and Innovation (Agric and Energy sections)
South African National Energy Development institute	South African National Energy Development Institute
Technology innovation Agency (Agric and Energy)	Green Cape
Academy of Science of South Africa (Gender desk)	(Academia) Universities of Pretoria and Cape town
	UNIDO (SADC office) and others
Independent TA Experts/Consultants	Independent TA Experts/Consultants

- Two separate meetings, starting with Agriculture group on 17 Nov 2022 in person

    - Participatory process

    - reference to many policy documents in SA and at regional level

    - Policy documents informs the decision on technologies

- Identified Agricultural Technologies

    -Tools for Traceability (Animal traceability in particular)

    -Omics for Food

Agriculture Expert Group meeting 17 Nov 2022, CSIR, Knowledge Commons

Step 2- Priority setting

- Energy group meeting on 7 March 2023 remotely

    - reference to many policy documents in SA and at regional level i.e White paper of STI, Energy policies, DSI decadal plan

- Identified Energy technologies

    -**Green hydrogen,**

    -Floating PV Solar panels,

    -Agro-Votaics,

    -AI in Energy ,

    -Energy storage

General observations

- It is emerging that the TA process should be informed by the Technology Foresight studies that outline the priority technologies in our respective countries

- Technologies that are suitable for TA process – new and emerging

- There is a need for more resources (financial) for this project

- More involvement and support of UNCTAD/Consultants (to clarify issues)

- Combination of online and in-person meetings works

- There is a need for quicker feedback from UNCTAD

- Need for more regional meetings to share experiences among the beneficiary countries

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ANY QUESTIONS ?