

# TU eMpower Africa e.V.

Analyze. Realize. Sustain.

DGVN Gemeinnützige Projekt-Rallye  
Michelle Zombory  
04.03.2021

# Our Identity

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We are students, researchers,  
alumni and friends of  
Technical University of Munich  
that translate research into  
reality





# Our Drive



Development requires  
affordable and reliable  
energy access

# Our Mission



We foster  
sustainable development  
for African communities  
through renewable resources



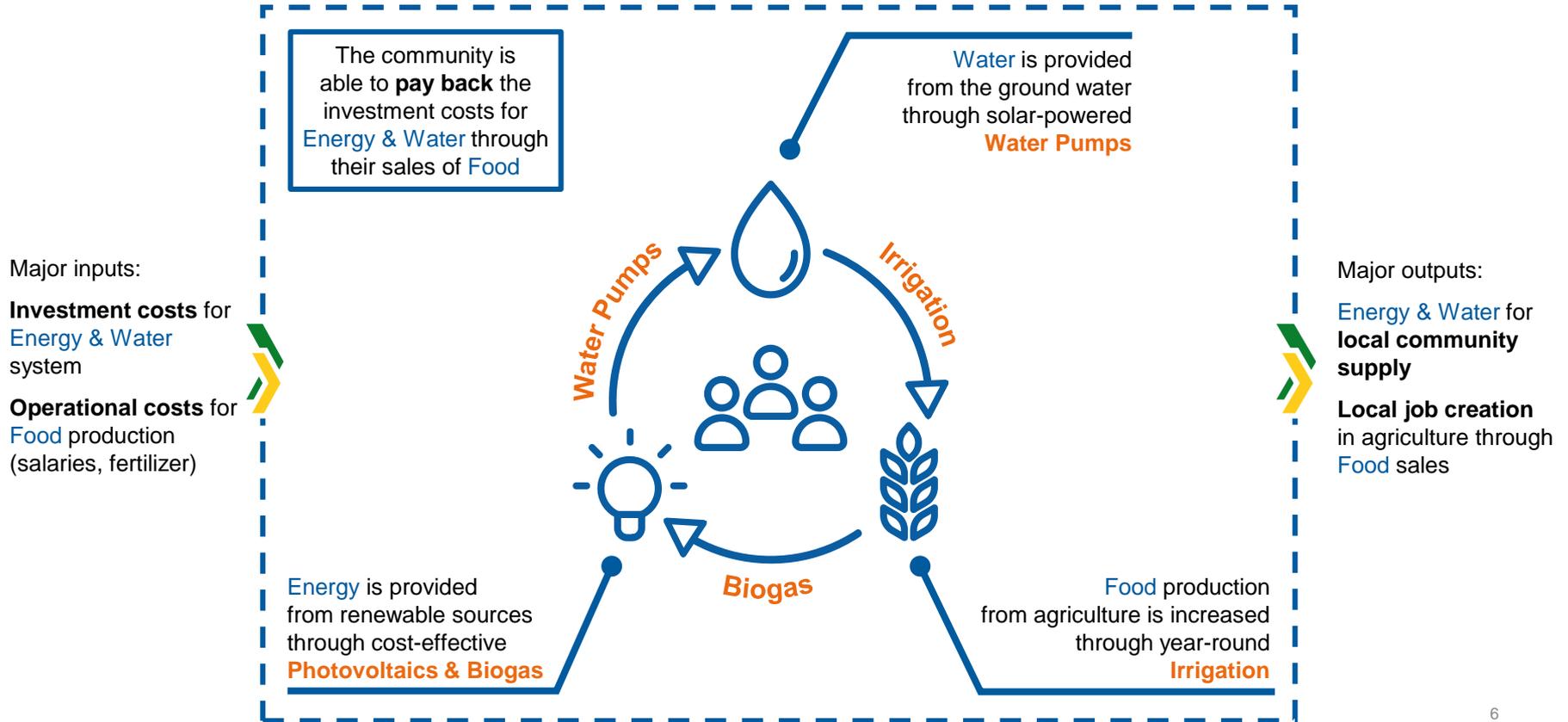


# Our Idea



Decentralized  
Energy-Water-Food  
Systems

# Our Idea



# Our Goals

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Business



Education



Investment



Network



Energy



Water

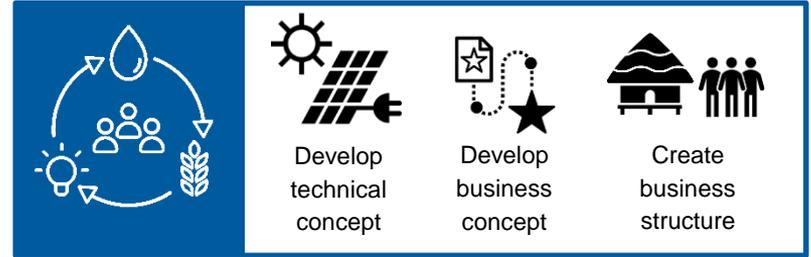
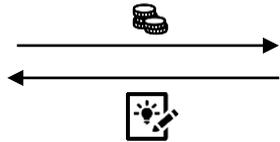


Food

# Our Approach

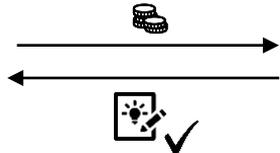
Step 1:  
Project preparation

Donor



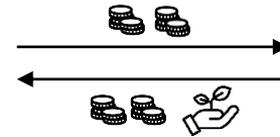
Step 2:  
Supported operation

Donor

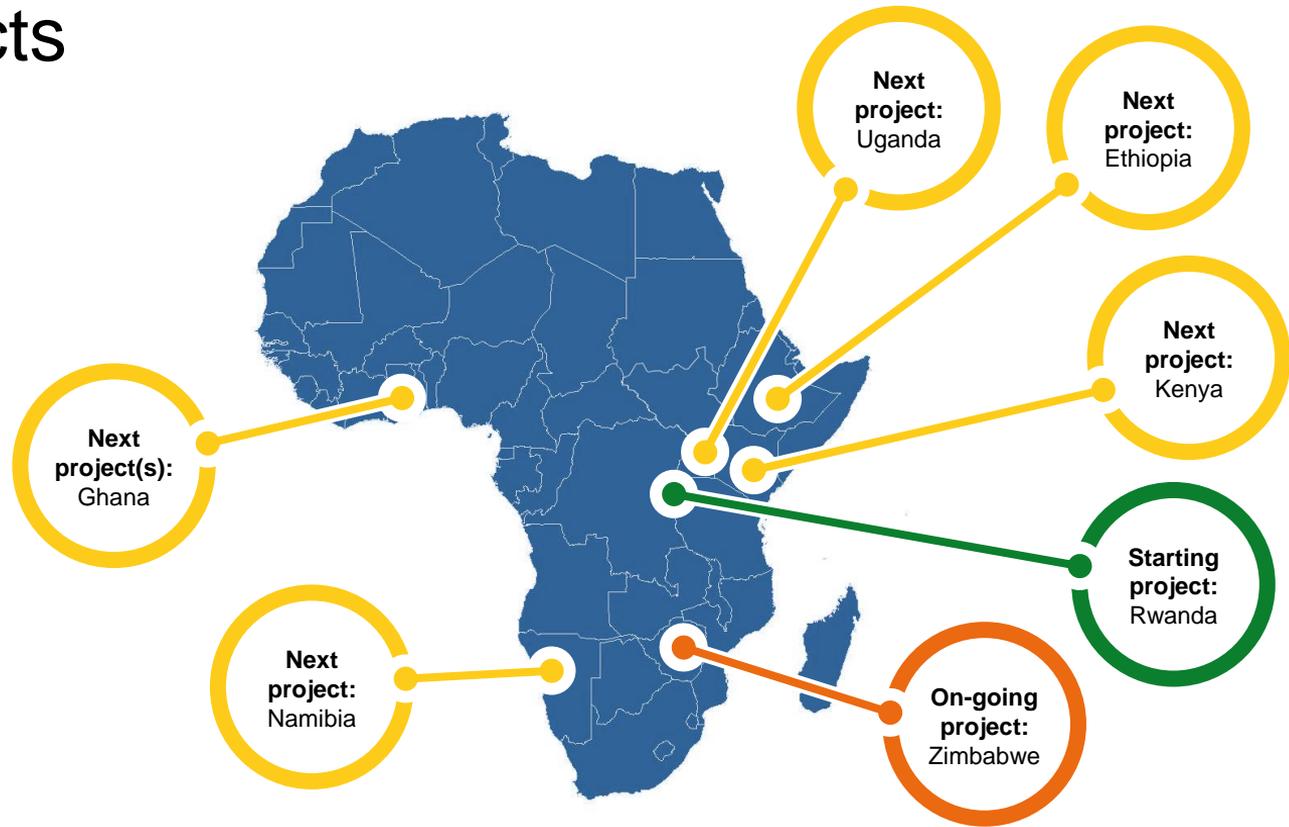


Step 3:  
Independent operation

Investor



# Our Projects



 Project on-going since **2016** with:



learning from the roots\*

 Project starting in early **2020** with:



 Project starting in late **2020** with:



Deutscher Akademischer Austauschdienst (DAAD)  
German Academic Exchange Service

# Our Partners



Bavarian Association for the Promotion  
of Solar Energy



And many more...



# Pilot project – Status quo



St. Rupert Mayer  
Zimbabwe

# St. Rupert Mayer – the community

- Hospital, nursery, primary school, high school (partially boarding school), church
- ~ 800 inhabitants



- Closest city: Chinhoyi (80 km, ~ 2,5 h)
- ~ 200 km from Harare (~ 4 h car, ~ 8 h bus)

# Status quo – Technical System

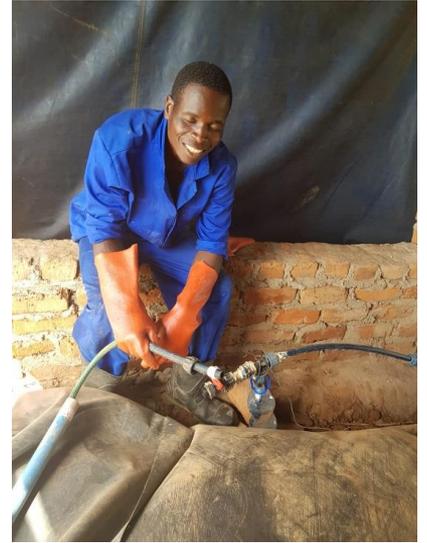
Solar Home System



Solar Pump System



Biogas plant



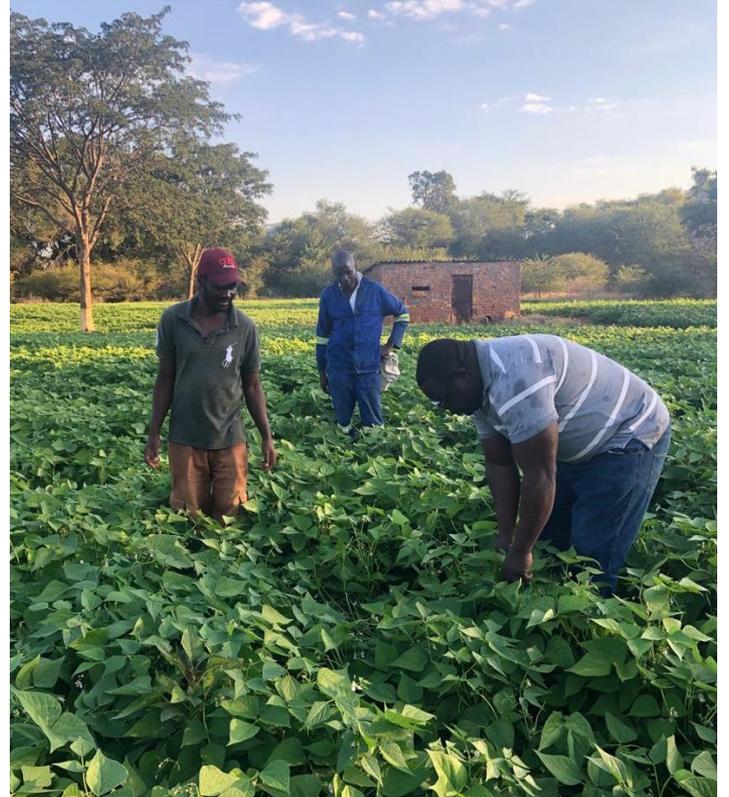
# Installation of the second solar water pump

- Funding by Solarenergieförderverein Bayern e.V.
- Installation by local company Midlands Solar in September 2020
- Pumps water for irrigation and fills the tanks for drinking water



# Agribusiness at a glance

- Commercial farming business
- 2,5 hectares with expansion potential
- Local team: 6 full-time employees
- Irrigation with solar powered water pumps
- On the right track towards independent operation!



# Agribusiness pictures



Farm workers planting sugarbeets



Cabbage



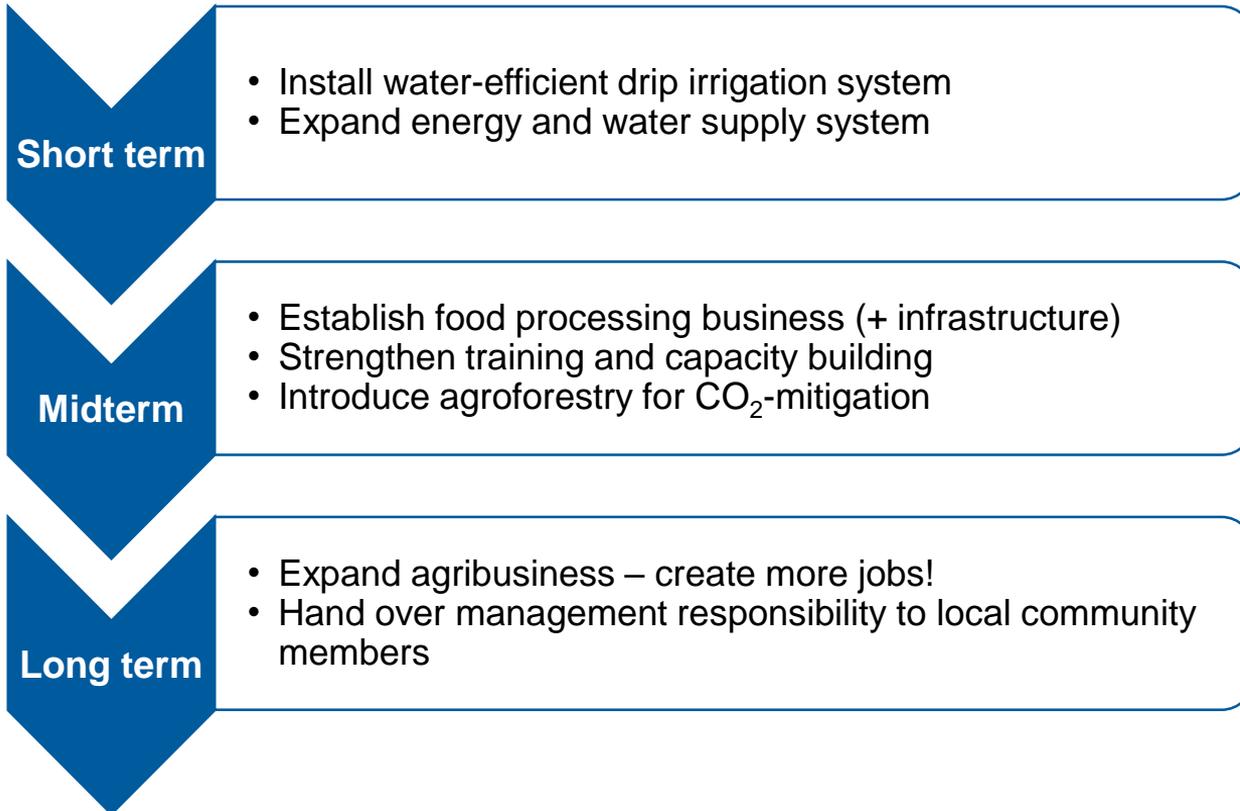
Onions

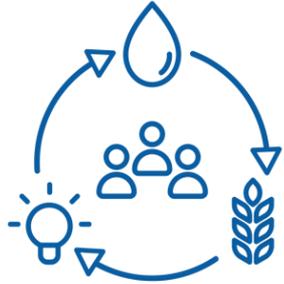


Overhead irrigation

# Next steps

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