Tanzania Geothermal Development Company Limited

Geothermal Innovations in Tanzania

Geo-Hatchery Project

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Outline

Tanzania Geothermal Development Company Limited

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1 Overview

Tanzania Geothermal Development Company Limited

Core Functions

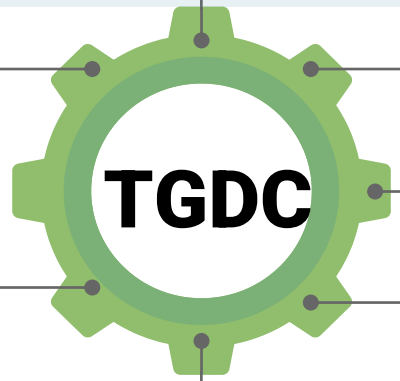
Explore, Develop, and Utilize geothermal for Power and Direct Uses.

Establishment

- Incorporated **2013**.
- Operational **2014**.

Mandate

Spearhead Geothermal Development in the Country.



Fund Sources

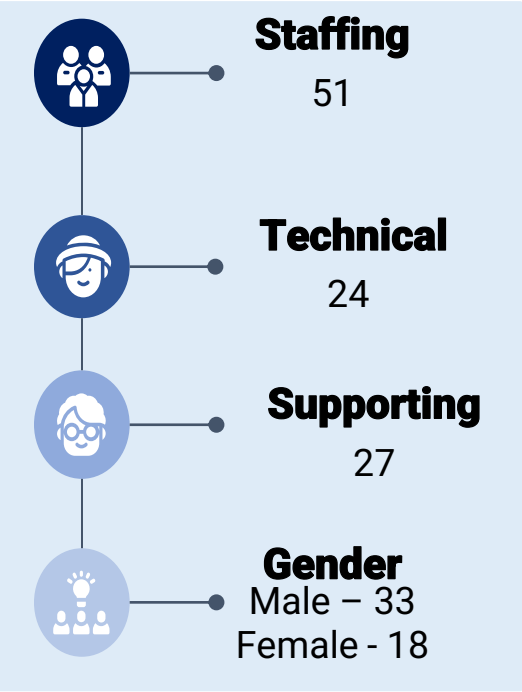
GoT, TANESCO, TGDC, GRMF, UNEP, ICEIDA, DFID, AfDB, BGR, etc.

Relationship

Subsidiary of TANESCO.

Ownership

100% owned by TANESCO.



❶ Overview

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Country Geothermal Potential

Geothermal potential:

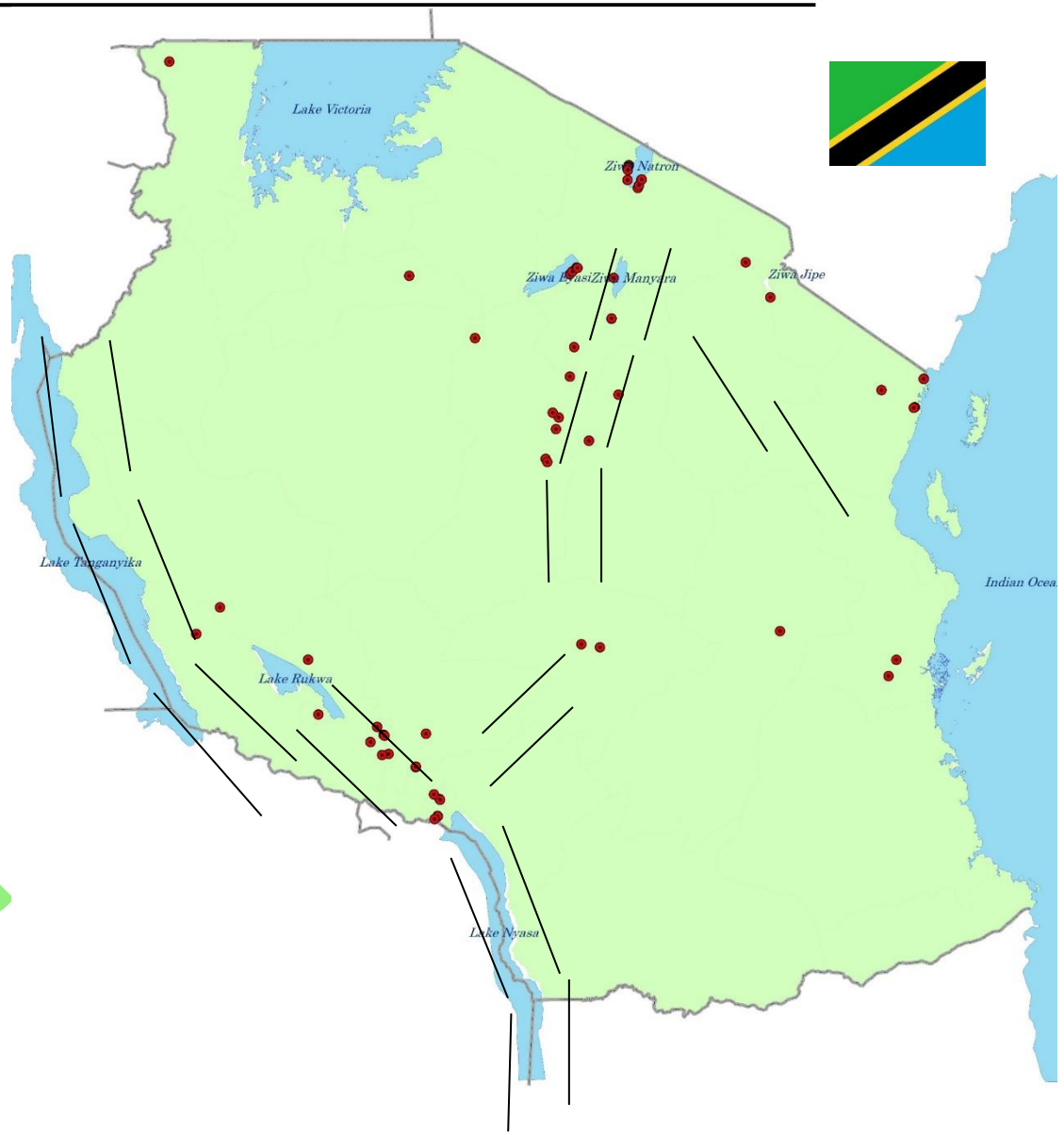
5,000 MWe;

Over 50 potential sites

- Different geological settings

Low – Medium (30 - 150°C): sedimentary, fault controlled;

High(≥150°C): volcanic systems.



1 Overview

Tanzania Geothermal Development Company Limited

Strategy

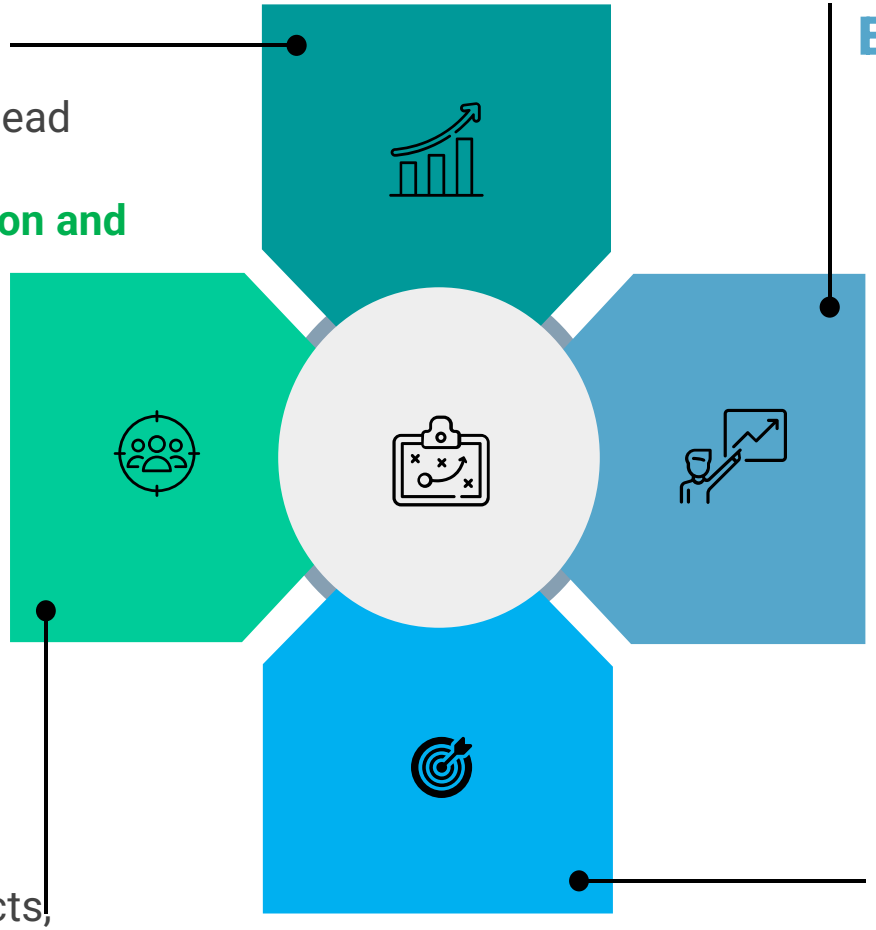
1 Overview

Tanzania Geothermal Development Company Limited

Wining Tactics

Early revenue generation

- Early generation through Wellhead installation,
- **Implement direct heat utilization and Innovations projects,**
- Consultancy services.



Enhance project Profitability

- Development model - combined electricity and direct use.

Private sector involvement

- Legal and regulatory framework,
- De-risking geothermal projects;

Operation Efficiency

- Business processes automation,
- Data collection technology.

❷ Geo-Hatchery Project

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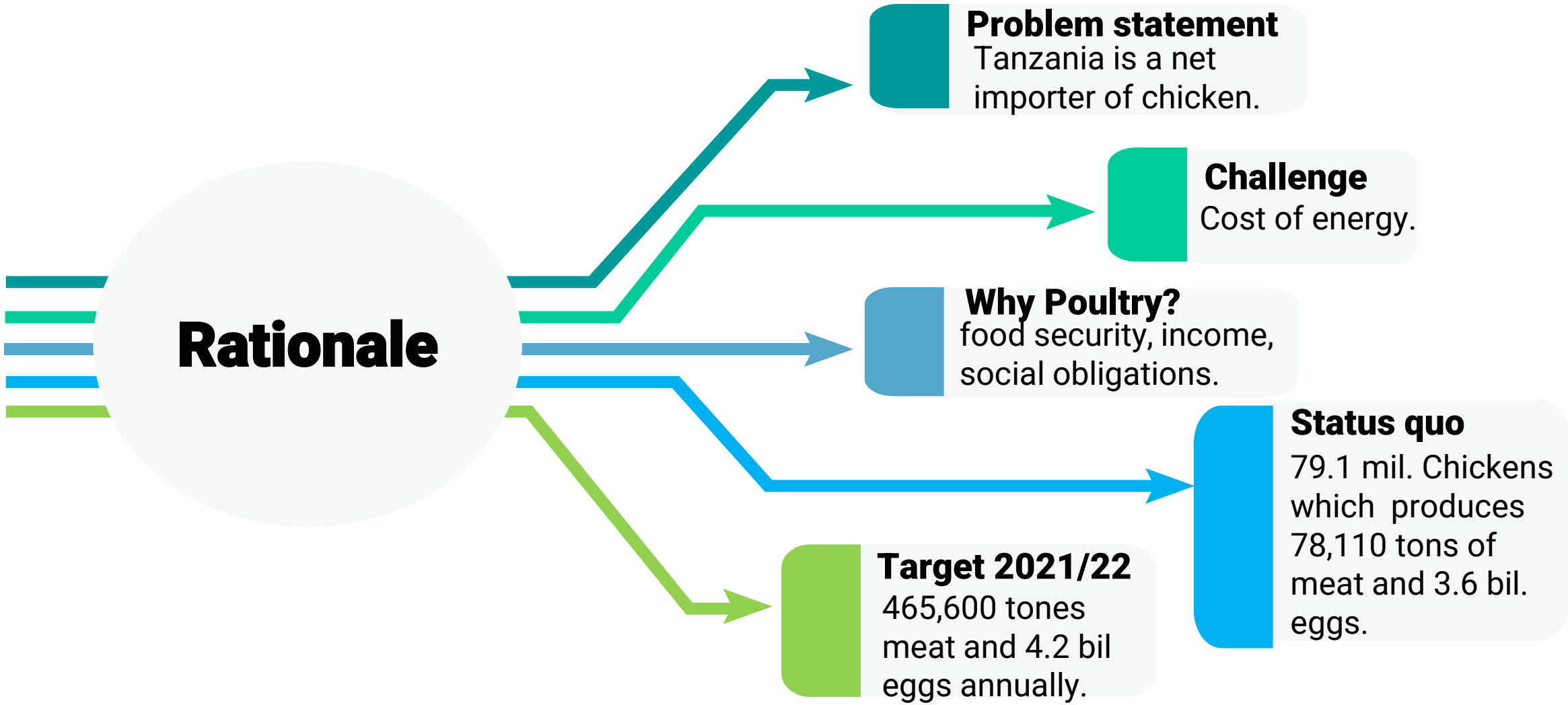

❸ Objectives

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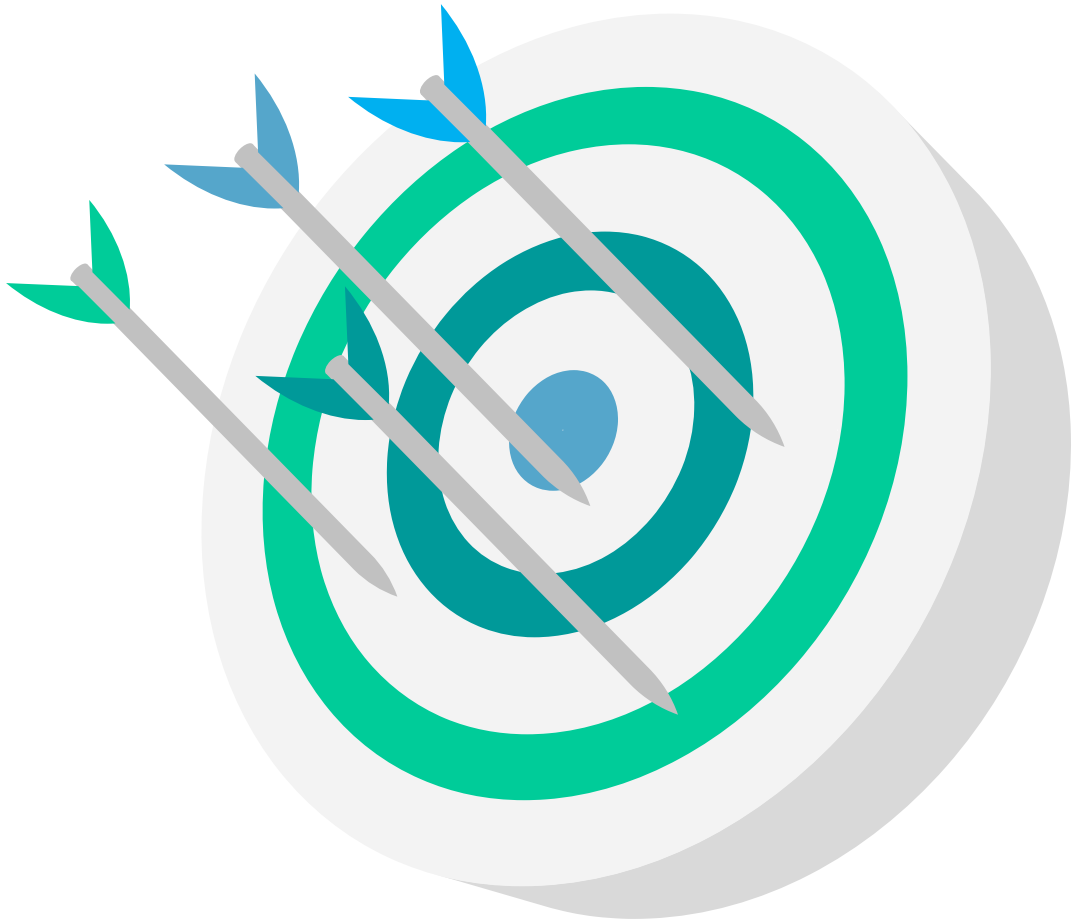
To increase food security and source of protein.

To boost local social economic activities via geothermal energy.

Promote direct heat uses and use of modern and alternative energy in the country.

Create an employment and boost small industry subsector.



4 Timelines

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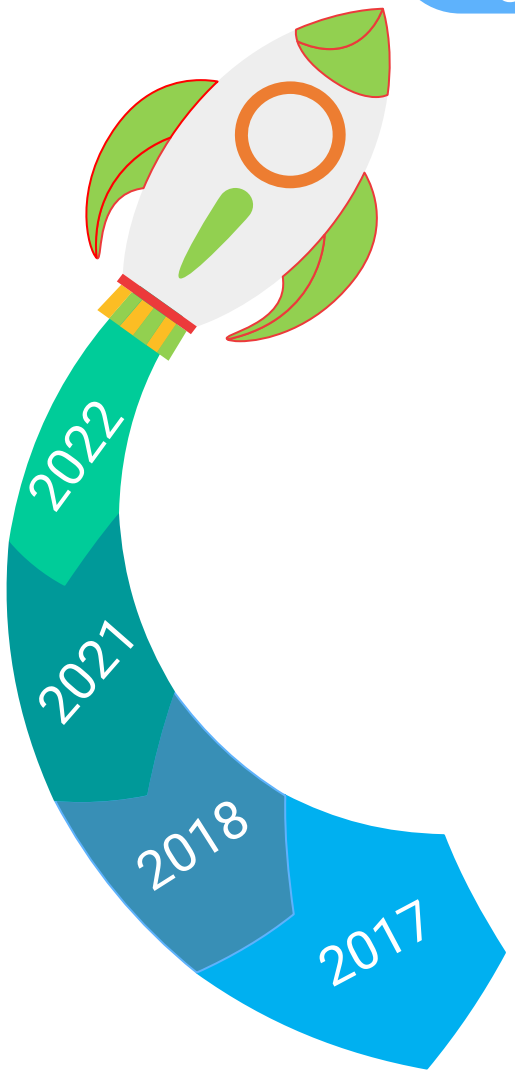
Our Target
> 300,000 chicks annually



Pilot Geo-Hatchery Plant

Design completed; capacity 21,600 eggs per incubation; preparation ongoing; construction starts July, 2022.

Develop, Pilot and Test Geo-Incubator

First prototype with a capacity 240 eggs per incubation. More than five tests conducted, success rate of over 90%.

Direct Use Pre-feasibility Study

Multi direct uses projects such as agriculture, aquaculture, and recreational (tourism).

Detailed Exploration

A medium temperature, fault-controlled system, suitable for direct heat uses project and binary power plant.

❺ Remarks

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a) Our target is over **300,000 chicks** annually by 2023**;**

b) 1 shallow well (300 - 500m depth) is required.

c) Estimated budget for scale up Geo-Hatchery plant is **USD 300,000.**

d) Songwe is a demonstration site for the direct heat uses projects.

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