



TERMS OF REFERENCE FOR A DIRECTED PROJECT

KEY STRATEGIC AREA 4	: Water Utilisation in Agriculture
THRUST 3	: Water Utilisation for Poverty Reduction and Wealth Creation in Agriculture
PROGRAMME 1	: Sustainable water-based agricultural activities in rural communities

TITLE: Application of research findings to support the empowerment of Agri-parks farmers to increase irrigated food production and market access

Rationale

The South African Government initiated the rollout of Agri-parks across the country, aiming to revitalise agriculture, catalyse rural industrialisation and support emerging farmers (Department of Rural Development and Land Reform, 2016). An Agri-park is a networked innovation system of agro-production, processing, logistics, marketing, training and extension services, located in a District Municipality. It enables a market-driven combination and integration of various agricultural activities and rural transformation services. The Agri-park model includes the following three units:

1. The Agri-hub (AH) that would essentially provide financial and technical support to all farmers within a 20 km radius;
2. Each Agri-hub would encompass several Farmer Production Support Units (FPSU) that will provide support on a local level; and
3. The Rural Urban Marketing Centre (RUMC) will assist farmers with marketing of produce and the relevant administration.

In a recent WRC study conducted to assess the impact and management of water quantity and quality for South African Agri-parks. It was evident that the existing Agri-parks in Gauteng still resembled the traditional government-supported production units operated by only a few farmers who mostly farm with limited support structures. In general, most agri-park farmers have good agricultural skills, but generally low levels of off-farm skills. Non-farming skills are critical for participation in the value chain, and these are lacking.

Overall aim:

The overall aim of the project is to implement innovative water conservation strategies and agricultural technologies to support Agri-park farmers and the development of the three units of the Agri-park model. As it stands, the agricultural value-chain is a buyers-market and farmers are passive price recipients. This needs to change to ensure that farmers gain greater influence on the market. A new approach that ensures the formation of local market institutions is needed to facilitate effective participation in the market.

Specific aims

- To use a social learning approach to ensure technology transfer and adoption of water conservation strategies and agricultural innovations to support Agri-park farmers.
- To enhance farmers' knowledge of sustainable irrigated agricultural techniques and practices, and marketing knowhow.
- To strengthen Rural Urban Marketing Centres to assist farmers with appropriate processing of produce.
- Provide mentorship to farmers to enable participation in the value-chain. This includes understanding the business and marketing aspect of the agricultural commodities as well as planning to synchronise production with market requirements.

Deliverables:

The use of social learning and cocreation of knowledge allows for lasting adoption of new technologies. This increases the productive water use for food crop production which in turn, contributes towards addressing the wider contextual and sustainable development problem of household food insecurity in South Africa. Additionally, wastewater reuse technologies and low-cost water conservation strategies show potential in mitigating the effects of climate change for increased crop water productivity. The deliverables should address all the stated objectives and also include; the use of rain water harvesting technologies, introduction of green technology, on-site climate-smart technologies, the development of farmer centric market opportunities.

As it is most unlikely that a single organization will have all the expertise required, it is strongly recommended that a consortium of experts and organizations with full appreciation of the agri-park model, production and market challenges, food security challenges and climate-smart agricultural innovations is formed in order to provide the highly specialised knowledge required.

Impact Area:

Empowerment of Communities and other related Knowledge tree impact areas

The estimated budget over a 36 -month long study period is available from KSA 4

Time Frame	: 3 years
Budget for 1st year	: R 1 000 000.00
Retention payable on approval of final deliverable	: R 800 000.00
Total Funds Available	: R 4 000 000.00

Budget breakdown:

AVAILABLE BUDGET OVER THE PROJECT PERIOD OF FIVE YEARS: **R 4 000 000.00**

2021/2022:	R 1 000 000.00
2022/2023:	R 1 500 000.00
2023/2024:	R 1 500 000.00
Total	R 4 000 000.00