

Entrepreneurial Conservation Agriculture Services Provision to Medium and Smallholder Farmers in Kenya

dubbed “*Huduma Kwa Mkulima 25*”



Executive Summary of the Project Proposal

October 2014

Introduction

The proposed *Huduma kwa Mkulima 25* project seeks to scale up the adoption of conservation agriculture (CA) by one million farm households in Kenya by 2025. The project drivers are built on the fundamentals of mechanisation of smallholder farming; adoption of climate-smart agriculture by clusters of farmers; and engagement of the for-profit agribusiness innovations of the private sector to enhance access of services along the value chain. Consequently, the project will in its two five-year phases, contribute to eliminate hunger, half poverty, induce resilience to climate change, attract and create decent rural employment particularly for youths and women.

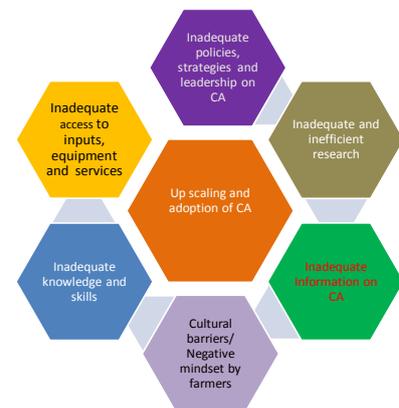
This project has been prepared as part of a pan African initiative led by African Conservation Tillage Network (ACT) with the support of partners¹ to realize the CAADP goal of 6% annual growth rate of agriculture with a view to realizing food security on the African continent. CA is based on three principles: minimum disturbance to the soil (no-till or minimum tillage); permanent soil cover; and crop rotations/associations. CA is now practiced on over 150 million hectares worldwide and is expanding at the rate of 7 million hectares annually. Unfortunately, there are about 1 million hectares in Africa and less than 40,000 in Kenya held up primarily by poor access to services and negative mind-sets.

This document presents an overview of the project to potential investors; underscores the necessary and adequate services required by farmers, and other service providers along the value chain; and expounds the opportunities for corporate social responsibility and for-profit private sector investors.

Where is the hold-up to adoption of CA?

The main constraints to upscaling and adoption of CA are:

- Inadequate policies and strategies for implementation CA
- Inadequate and inefficient CA research
- Inadequate information and knowledge on CA
- General lack of awareness and understanding of the potential of CA in generating employment, agribusiness, food security and environmental conservation
- Traditional barriers and/or negative mind-set with farmers stuck in traditional ways of farming.
- Inadequate access to CA support inputs, equipment and services



To address the above challenges, the project proposes the development of an infrastructure of services and human resource which will facilitate the emergence of entrepreneurs to provide sustainable CA services to farmers and other actors along the relevant value chains. This should in turn lead to making CA an agribusiness as it relates to farmer practices and as users of CA, as well as to service providers as suppliers of services. The conceptual approach is to move away

¹ National Governments, Norwegian Agency for Development Corporation (NORAD), European Union (EU), Common Market for Eastern and Southern Africa (COMESA) and AU-NEPAD

from provision of subsidized inputs to farmers in favour of developing commercial linkages with service providers.

The infrastructure of services and human resources include support for research and development, development of standard curricula for the training of farmers and key actors along the value chain, establishing strategic linkages with key support services that include financial, insurance and manufacturing institutions, and the engagement of young people through schools to inculcate CA thinking and practices for posterity.

OBJECTIVES OF PROJECT

No	Objective
1	To increase public awareness and understanding of CA and its potential as an agribusiness
2	To increase knowledge and skills of CA among farmers, service providers extension agents, researchers and training institutions
3	To increase access to inputs and services, including post-harvest by key CA actors along the value chain
4	To mainstream CA in training institution and service provision levels
5	To provide approved packages of recommended CA practices and services for various farming systems along the value chain
6	To provide farmers and service providers with R&D driven CA technologies
7	To ensure effective Project Management and Coordination

THE INTERVENTION STRATEGY

- ◆ **Farmers as entrepreneurial mechanised CA services providers²** to Farmers. Skilled entrepreneurs, majority being female and male youths, will serve neighbours on planting in mulched/unploughed fields, herbicides spraying, cover crop seeds and seeding, crop harvesting, threshing, processing and transportation.
- ◆ Innovative business models enticing **private sector services' provision to smallholder, medium scale farmers and service providers**. Providing farmers with information, knowledge and skills has not generally been adequate to ensure adoption of technologies. The business oriented capacity building model proposed here recognizes the importance of linking farmers to service providers and markets on a sustainable basis.
- ◆ Concentrated action zones and **services clusters** in 25 Counties selected on basis of receptiveness and potential to scale up CA and neighbouring county clustering.
- ◆ **Research and development on CA cropping systems and diversification enterprises** targeted for different Counties and farmer typologies with backward linkages to CA.

² Four integrated aspects are proposed: (1) Conventional machinery contractors switching to CA equipment; (2) contractors who switch from using animal draft power to small tractors and CA equipment; (3) contractors using animal drawn CA equipment; and (4) agro-dealers turning to CA products.

METHODOLOGY

In each County some 130 entrepreneurs (average of 4 per Ward) will, through rigorous selection criteria, be recruited and trained to become Master CA service providers and trainers of farmers. These will each be provided with appropriate and preferred sets of CA equipment on loan. The loan is off-set as the 50 farmers target for each Master Service Provider demand and pay cash for CA services rendered; and as rebate when they recruit, link to services and qualify each of 4 targeted other service providers, termed Linked CA Service providers. Direct project engagement in each county lasts only 12 months.

Five new Counties will be reached each year; making 25 counties reached in 5 years. The total number of farmers served by the Masters would then be $130 \times 25 \times 50 = 162,500$. The 6 Linked Service Providers by each of the 3,250 Master Service Providers will bring 19,500 Linked Service Providers who will serve 50 farmers each, a total of 975,000 farmers over the 2 phases of the project. In phase II, the CA mechanisation scaling up is anchored on the Linked CA Service Providers - will bring in the additional farmers served.

In order to build the capacities of farmers, MALF staff, machinery and equipment service providers, and agro-chemical and seed providers, the following activities will be undertaken:

- ◆ Support to existing conventional farming machinery service providers to adopt CA.
- ◆ Support existing CA machinery service providers to adopt new technology and seek financial and insurance services to expand their businesses.
- ◆ Train agro-dealers to handle CA inputs (herbicides, cover crop seeds, implements, spares and repair services) and to become information hubs for farmers.
- ◆ Train potential and existing small- and medium-scale farmers and their organizations to be effective CA farmers. That will include all aspects of CA, farm planning, role of biofuel in crop rotation, understanding and seeking financial support, post-harvest processing and marketing, etc.
- ◆ Learning-exchange visits – between farmers; service providers; and agricultural staff.

PROPOSED PARTNERSHIPS

- Agricultural Sector Development Support Program (covers 4 ministries: MALF, Environment and Natural Resources, Water, Cooperatives).
- Comprehensive African Agriculture Development Program (CAADP) of AU/NEPAD
- Kenya Agriculture and Livestock Research Organisation (KARLO)
- Farmer Organisations
- Agricultural Universities and Colleges
- Machinery & equipment dealers with bases in Kenya
- Large-scale CA farmers (best practices)
- Private Sector (Banking, Insurance, Communication, Training, Manufacturers)
- Development partners and donors. To support the project by financing activities such as training; provision of credit guarantees to banks to encourage them to lend to farmers and service providers; CA research and development; etc.

What does it mean to have one million farmers in Kenya practicing CA by 2015?

- Easy doubling of cereal yields (1.5 to 3 tonnes per hectare); thus an increase of one million tonnes annually worth 22 billion Kshs.
- Significant improvement in mother and child nutrition. Inter-cropped and relayed legumes (lablab, beans, peas, soya beans) and oil seeds (sunflower, simsim, canola, etc.) are rich in proteins and essential nutrients.
- Surplus cereals, legumes and seed cake form the basic ingredients for expansion of women controlled small-stock (poultry, dairy goats, aquaculture, etc.) livestock feeds industry and other income generating enterprises.
- An open but organised market of crop production inputs and services for one million medium and smallholder farmers and service providers:
 - Decent rural employment for at least 10,000 farmers as CA mechanisation service providers (contractors); agro-dealers and processors
 - Weather related crop insurance premium of 5 billion Kshs annually (5,000 per ha)
 - Financing for production inputs (37,500 Kshs per hectare) i.e. 37.5 billion annually
- Climate smart farming. Not ploughing saves 8lts of diesel per hectare, i.e. a saving 4 million litres of diesels for 50% of the 1 million farmers using tractors and equivalent to 400 million Kshs annually. At 2.9 kg of greenhouse gas (GHG) emissions per litre of diesel, 11,600 tonnes of GHG are saved annually.
- One hundred eighty five (185) billion Kshs worth of Conservation Agriculture equipment market is an opportunity for locally adapted designs, manufacturing, importation and distribution.

What Opportunities for the Private Sector?

FINANCIAL INSTITUTIONS Provision of various financial services (assets financing, farm inputs) to organised producer groups of one million smallholder and medium scale farmers.

CROP BUYERS Catalyze contract farming, guaranteed markets and prices, value addition and preservation, handle increased produce volumes.

INSURANCE Provision of weather based crop insurance. It exponentially opens up a whole lot of opportunities - farming not-so-a-risky business; precision and science based farming.

EQUIPMENT MANUFACTURERS& DEALERS Creation of new markets for equipment; penetration into areas not reached before; and creation of after sales services throughout targeted Counties.

Have you, as a potential investor, identified your investment opportunities?