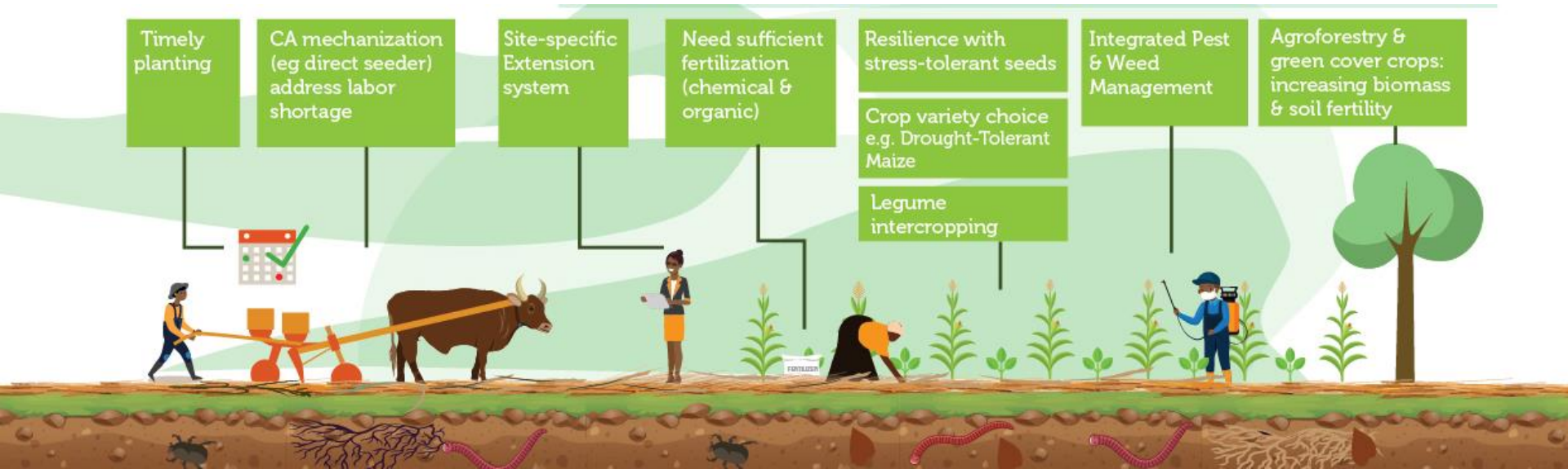




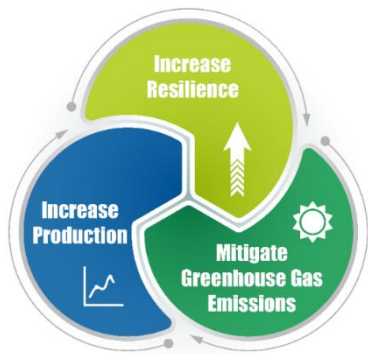
TRANSFORMING CROP & LIVESTOCK PRODUCTION SYSTEMS FOR CLIMATE RESILIENCE IN SOUTHERN AFRICA

A Business Case for Scaling Climate-Smart Agriculture



Why should this project be funded?

- Climate change impacts in southern Africa and soil fertility decline threaten to reduce productivity by 15-50% - **affecting millions of people**



- Climate-smart agriculture helps to **adapt** current farming systems to climate change, **increases productivity** and profitability and **mitigates** emissions
- Based on the foundation of 15 years of research evidence and development experience

Business as usual will not work



Increase in Temperatures by **2.1–2.7 °C**
UNFCCC projections for Africa (ref Girvetz et al, 2018)

2 droughts every 5 years

Reduction in maize yield by **10 to 30%** by 2030

and... **80%** by 2050
Ref: UNEP/GRIDARENAL 2016



Our evidence shows.....!

CSA is good for the planet & the farmer



Increase in soil moisture



Increase in soil biodiversity



50%-80%
Decrease in soil erosion



136% Yield increase
Maize-sunhemp rotation compared to maize monocropping



Up to **+260%** increase in incomes in dry environments



But adoption is still low

Adoption of complete CA systems



2.5%

Zimbabwe



5.5%

Malawi



8.3%

Zambia

Adapted from Kassam et al, 2018, Global spread of conservation agriculture

To scale CSA practices like conservation agriculture (CA), some farming constraints have to be addressed



What CSA scale up strategy?



- Weigh in trade-offs: needs farm-specific extension strategy



- Ladder approach



- Start small plot & expand



- Innovation platform to increase capacity and connect farmers to reliable markets

Aims of this initiative

- **Expanded uptake** of sustainable climate-smart agriculture and pastoral production systems in southern Africa
- **Increased resilience** to climate change and **carbon stocks** while reducing soil fertility breakdown;
- **Higher yields and incomes** for healthier populations, ecosystems and economies



Work packages

1. **Out-scaling** climate-smart agriculture interventions with public and private sector partners;
2. **Knowledge dissemination** and **capacity building**; and
3. Creating an **enabling environment** for scaling.





What Impact can be expected?

- At least 300,000 farm households practicing CSA on additional 300,000 hectares and increase resilience **by year 5**
- 80,000 ha of rangeland under improved grazing management **by year 5**
- 1,500,000 farm family members reached through CSA interventions **by year 5**

What Impact can be expected?

- Increase in productivity (20-50%) of major food and nutritional crops **by year 5**
- Increased carbon storage (+20%) - reduced erosion (+50%) – new methodology & baselines on animal related emissions **by year 5**
- Increase in amount of heat and drought tolerant seed varieties sold/marketed and CSA practices promoted by private sector





What Impact can be expected?

- Knowledge products for improved information sharing and uptake
- At least 100,000 farmers and extension officers trained **by year 5**
- SADC buy-in and full support for an enabling environment

Target countries



All SADC countries will benefit from the impact!

Phased approach

Phase 1: by year 3

Phase 2: by year 5

- **Scaling - First Tear:** Botswana, Zambia, Zimbabwe, Malawi, Mozambique and Lesotho
- **Scaling - Spillover countries:** Namibia, Tanzania, Eswathini and South Africa



Partnerships



- All relevant **Government Departments in SADC**
- **Political lead partner: SADC**
- **Consortium partners:** CCARDESA, CI, CIMMYT, FANRPAN, GIZ, PPF, RSDA
- **Civil society / private sector partners:** Seed companies, machinery manufacturer, livestock enterprises, NGOs
- Further **complimentary partners**, including CGIAR centres, NGOs and other last-mile provider

We are requesting:

- Project funding of **40M Euro for 5 years**

We promise:

- To raise ambition in the fight against climate change
- Transformational change of current agriculture systems for increased climate resilience

[Find more information here:](http://www.ccardesa.org/events/stepping-engagement-climate-smart-agriculture-investments-cop25)

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