Kingdom of the Netherlands

Smart Water for Agriculture Program (SWA)

2016 to 2019

SNV

META META

KIT | The Royal Tropical Institute

Aqua for All

WAGENINGEN UNIVERSITY & RESEARCH

PRACTICA FOUNDATION

Smart Water for Agriculture: At a glance

Development Investor

Kingdom of The Netherlands

Investment Period:
April 2016 – Dec 2019

Investment Value:
Euro ~6 million

Consortium Partners

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Background:

Irrigated Agriculture Market Landscape in Kenya

FAO Reports

33% of land in Kenya is used for agriculture and is largely under rainfed agriculture

2.7 million people in Kenya are experiencing food insecurity due to increasingly frequent droughts

Kenya has 353,000 ha. of potential irrigable land with irrigated area having reached only 165,900 ha.

53% of total irrigation potential in Kenya remains untapped

SWA Research

Systemic and Market Barriers hinder irrigation growth in Kenya

90% of the SWA farmers are using some form of irrigation and have the potential for uptake of new solutions (of the 544 farmers interviewed)

76% of all SWA farmers have access to finance, but only 12% have received credit

The sector offers significant market opportunities for companies if well managed

Our commitment

Identify and promote Smart Water Solutions (SWS)

20,000 SME farmers (50% women) adopt Smart Water Solutions to improve their income and livelihood

20% increase in **water productivity**

At least **10 Dutch-Kenya** private sector business linkages tailored to the needs of SME farmers facilitated

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Our key client: The entrepreneurial farmer

Irrigates cash crops (0.25 to 12.5 acres)

Has significant and predictable cash flow

Is market engaged

Is not 'just' a target farmers, but is at the forefront of exchange and learning

Our Approach

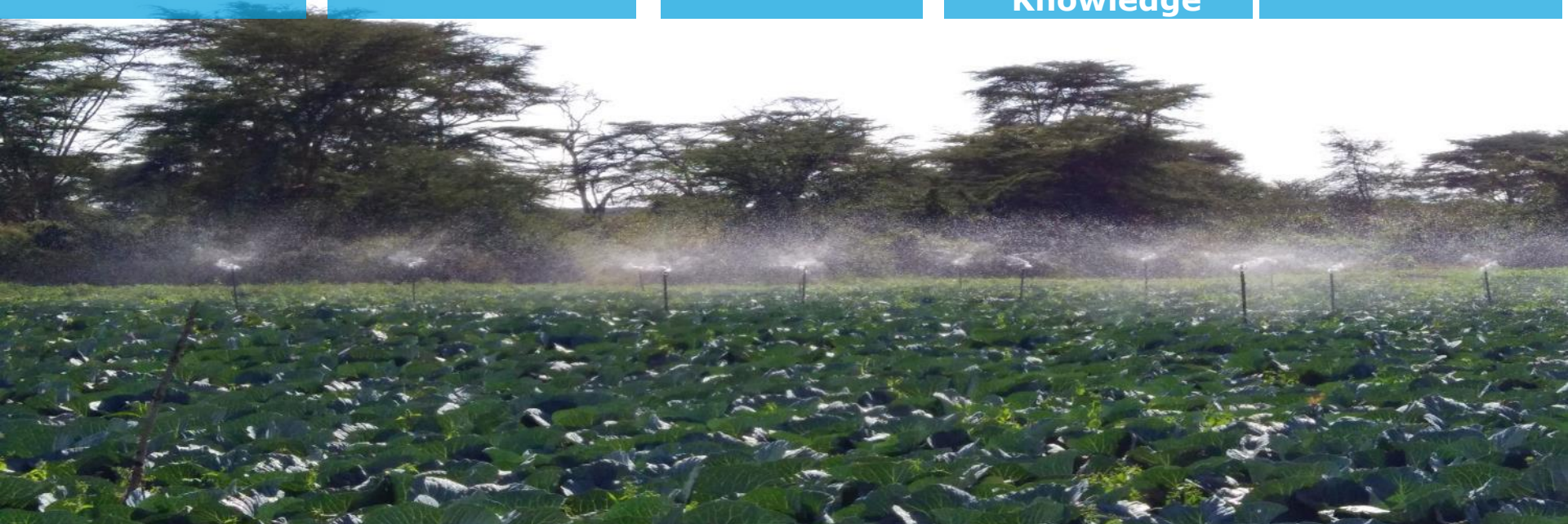
Establishing Irrigation Acceleration Platforms

Improving Access to Smart Water Solutions (SWS)

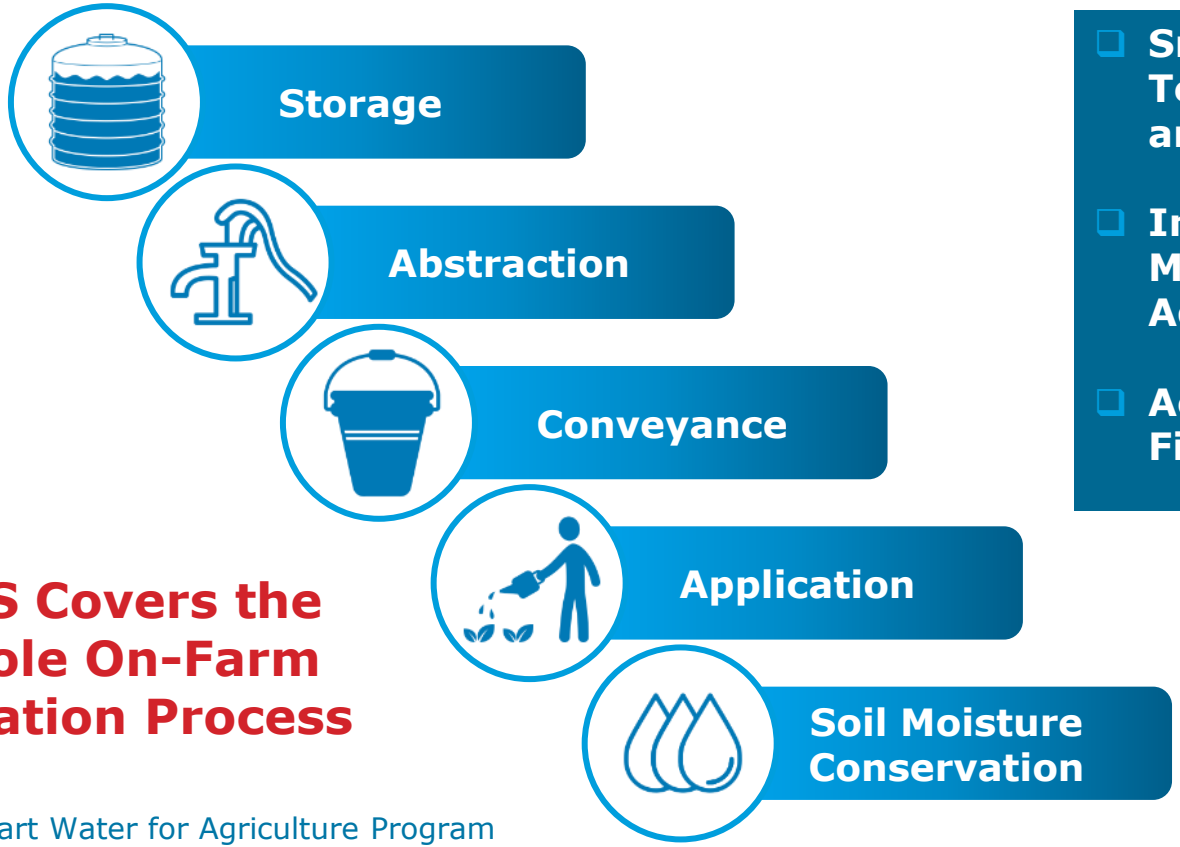
Increasing Access to Finance for SME Farmers

Creating Demand for SWS through Increased Access to Knowledge

Strengthening Business and Market Linkages in SWS Sector



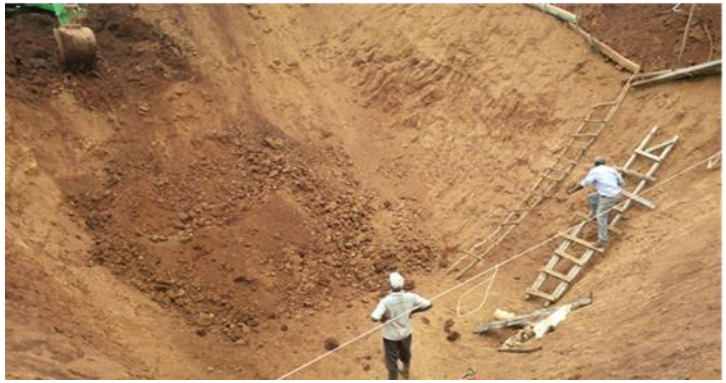
Overview of Smart Water Solutions Package



- Smart Water Technologies, Products and Services
- Innovative Water Management and Agronomic Practices
- Access to Market, Finance and Knowledge

SWS Covers the Whole On-Farm Irrigation Process

Our progress – examples: improved storage



Community pan - Laikipia

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Our progress examples: improved water delivery

Bucket and flood to improved drip

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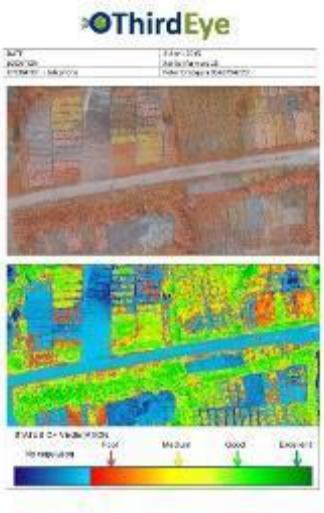
Our progress: innovation



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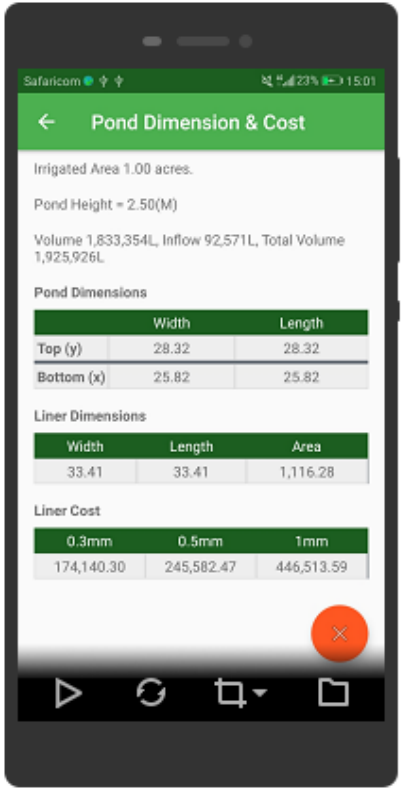
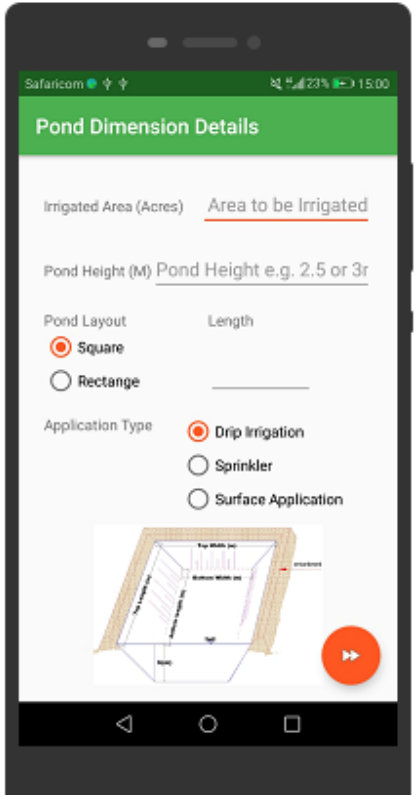
KTN PRIME
NEXT FRONTIER

Our progress: innovation – developed and pond design support App





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Our progress: example business cases

Future Water: Drones to determine on-farm production resource requirements

Energy efficient pumping solutions

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Conclusions – Climate Adaptation

- The involvement of lead farmers as key actors in technology dissemination was successful. They can be multipliers in adaptation of technologies
- Focus on a wide range of technologies, to ensure potential adopters have a wide range to choose from.
- Important to make sure the technologies selected are introduced for the right context, to avoid disappointment with users. For example, solar pumps have potential, but cannot replace petrol pumps in all sitiuations.

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Conclusions Youth Employment and Involvement

- NGOs can make a contribution to irrigation development by increasing the quality and accessibility of information and disseminating it in an easy-to-understand format; this does not often get priority
- Market based approach, on its own, was not sufficient. There is need to include an element of horizontal learning (farmer to farmer).
- Establishment of SMART Centres in this project was at a too late stage. The assumption was they would mainly play a role in scaling.

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Asante Sana

Thank You!!

Dank Je Wel

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