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An “opening the market”
early adopters led extension model



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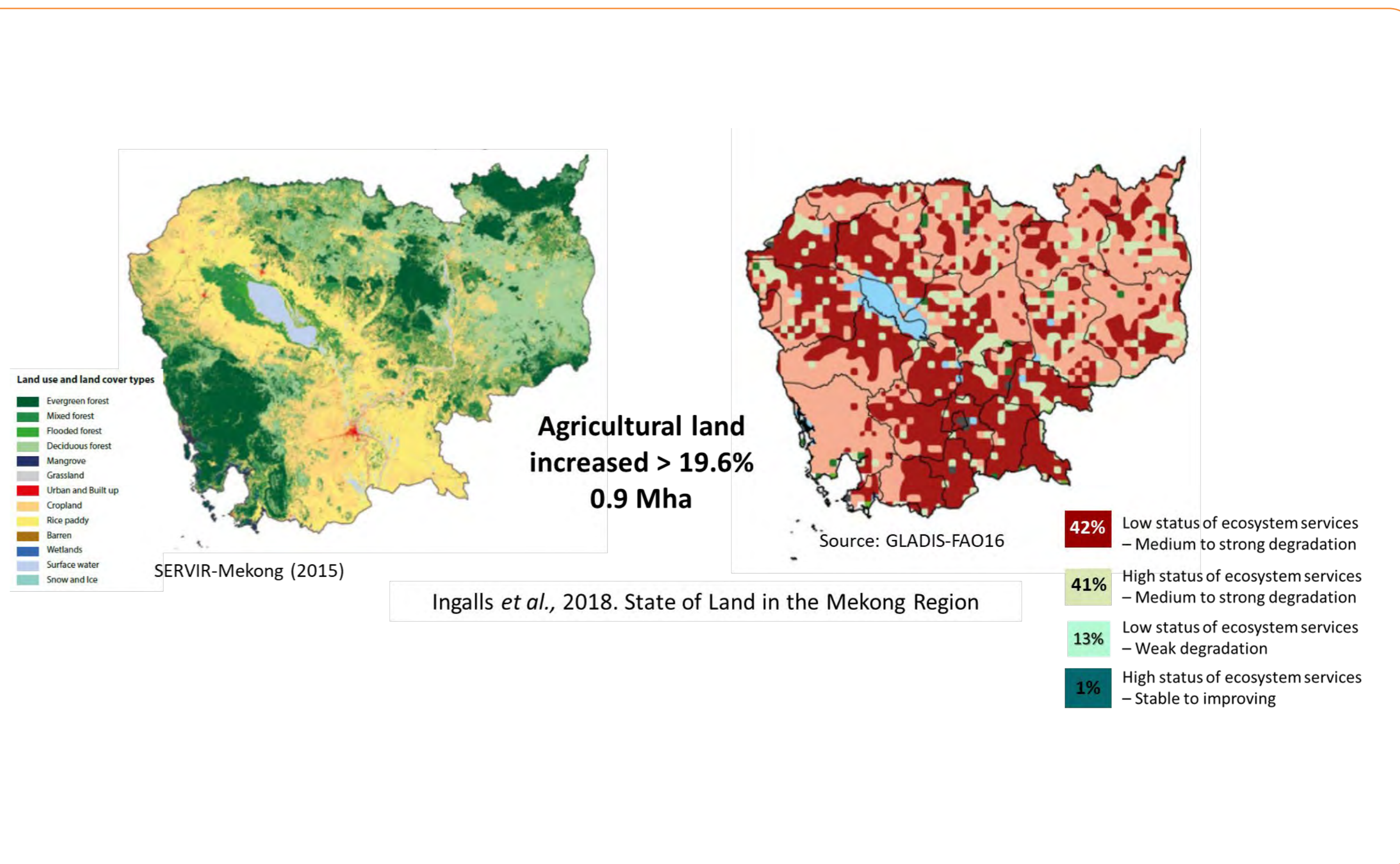
05. Result to Date



Challenges in Agriculture

There is a need for the Cambodian agriculture sector to reinvent itself by shifting from increased production through land expansion and excessive use of inputs towards sustainable intensification.

- Small holder farmers are particularly **vulnerable** to **climate change** given their high **dependence** on rainfall and minimal crop diversification.
- Cambodian agricultural lands are under threat of **degradation** and soil fertility depletion due to deforestation.
- **42%** of land in Cambodia is under strong degradation.
- The **annual cost of land degradation** in Cambodia is estimated at **USD 677 million**.



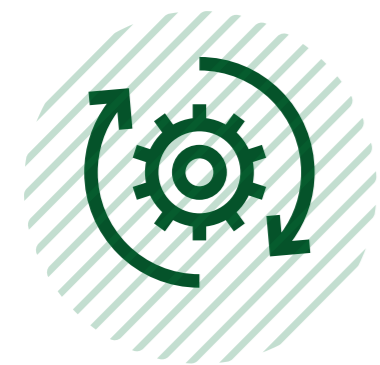
Need for Sustainable Intensification Solution

Sustainable Intensification looks at optimizing resource utilization and management whereby farmers produce greater yields by using fewer inputs and without increasing land area. Among the key components of sustainable intensification, CA is one of them



EFFICIENCY

better use of on-farm and imported resources



SUBSTITUTION

focuses on the replacement of technologies and practices



REDESIGN

(transformative) to harness ecological processes and connect scales (field to markets).



CONSERVATION AGRICULTURE

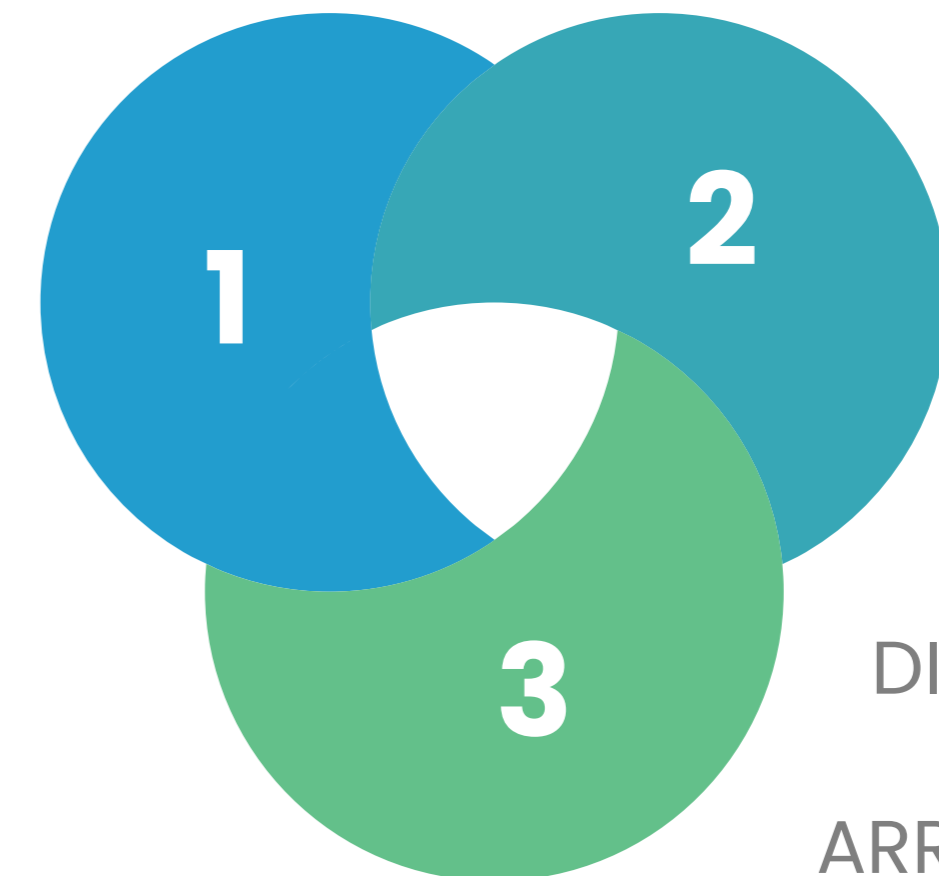
LEADS TO:

- Healthy soil
- Increased resilience of the production systems



THREE PILLARS OF CONSERVATION AGRICULTURE

MIMIMUM OR NO SOIL TILLAGE

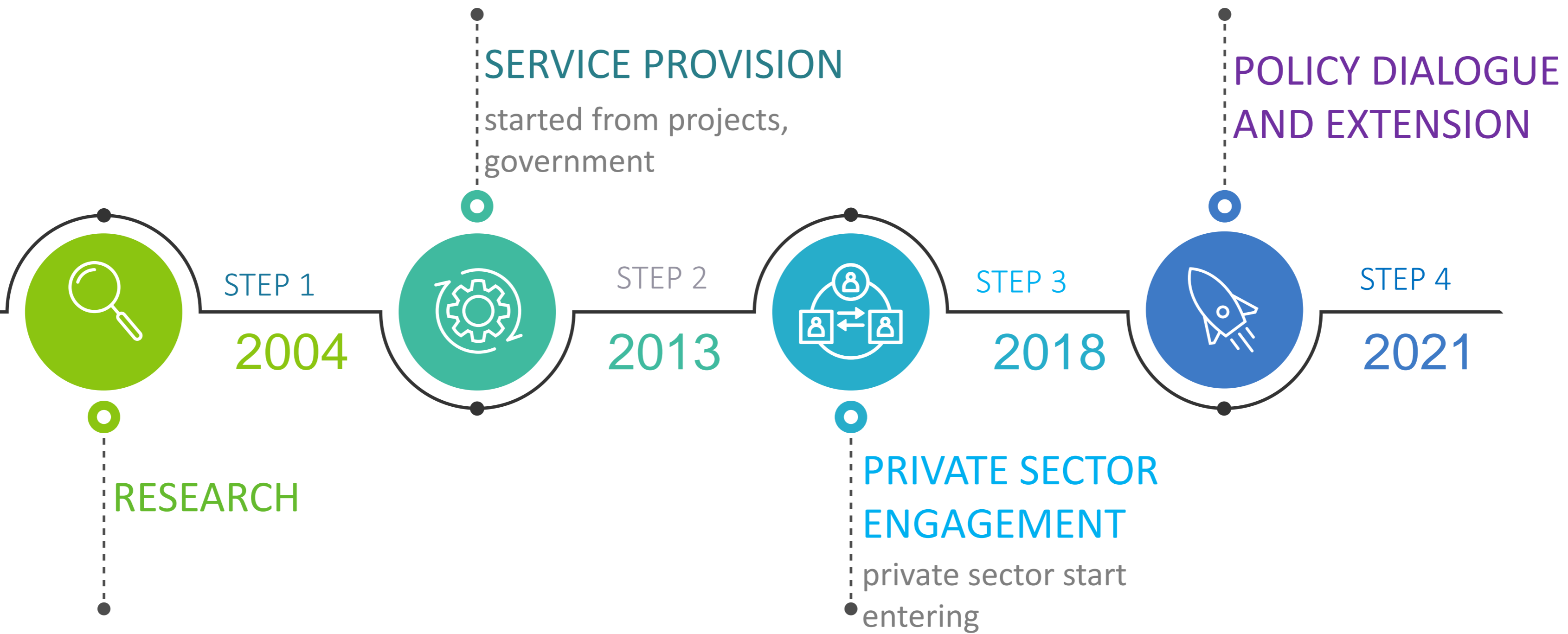


PERMANENT SOIL COVER

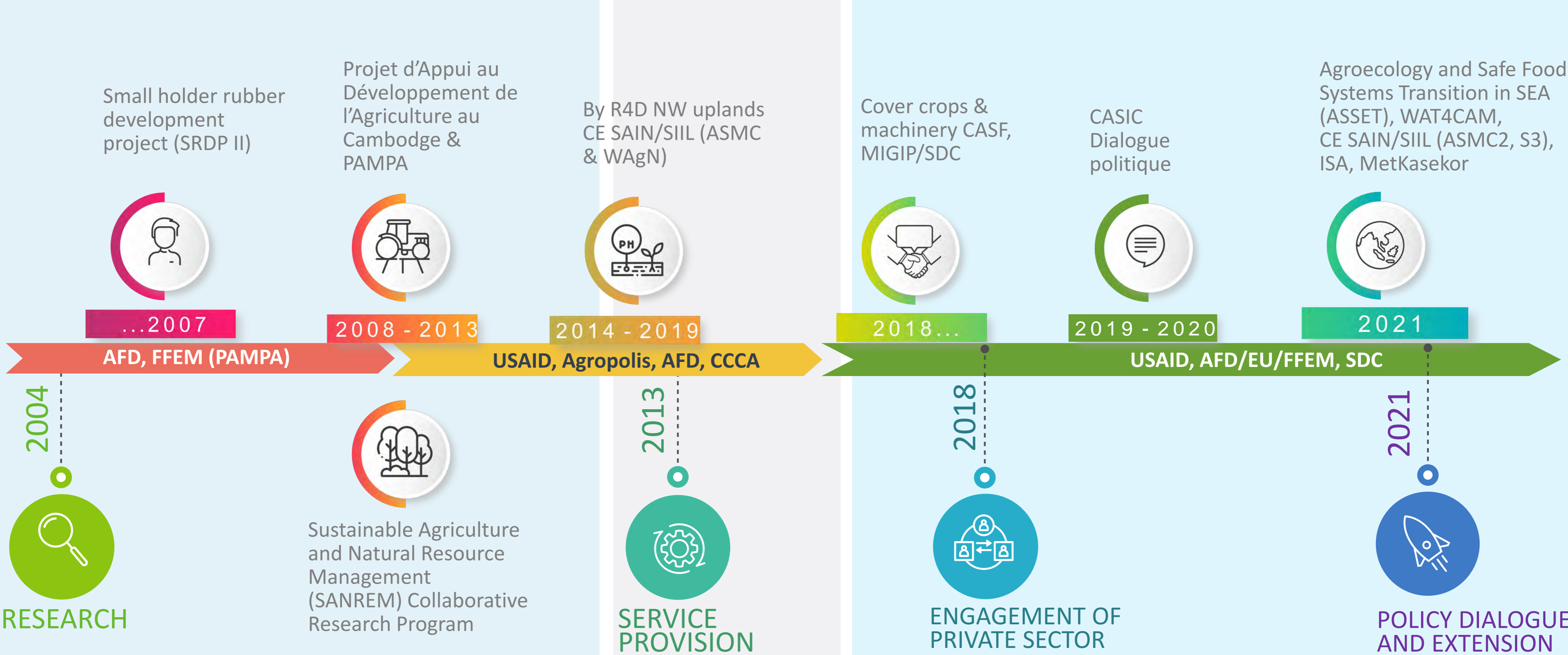
SPECIES DIVERSITY & SPATIAL ARRANGEMENT

Historical Transition from Research to Development

With the interest being picked up by the private sector, it is now important to show them the new markets so that the private sector can promote the sustainable intensification techniques and technologies



Different Initiatives Towards the Transition



MetKasekor Supports Sustainable Intensification



MetKasekor is an innovative extension model. MetKasekor focuses on opening the market for private sector investments. The model is a government resource for the future with the intention to improve the public agricultural extension service system in Cambodia.

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Unique Features



PUBLIC SECTOR

Involved in “opening the market” for the private sector

PRIVATE SECTOR

Accompany the public sector during the sensitization of the farmers and provide the services on a commercial basis

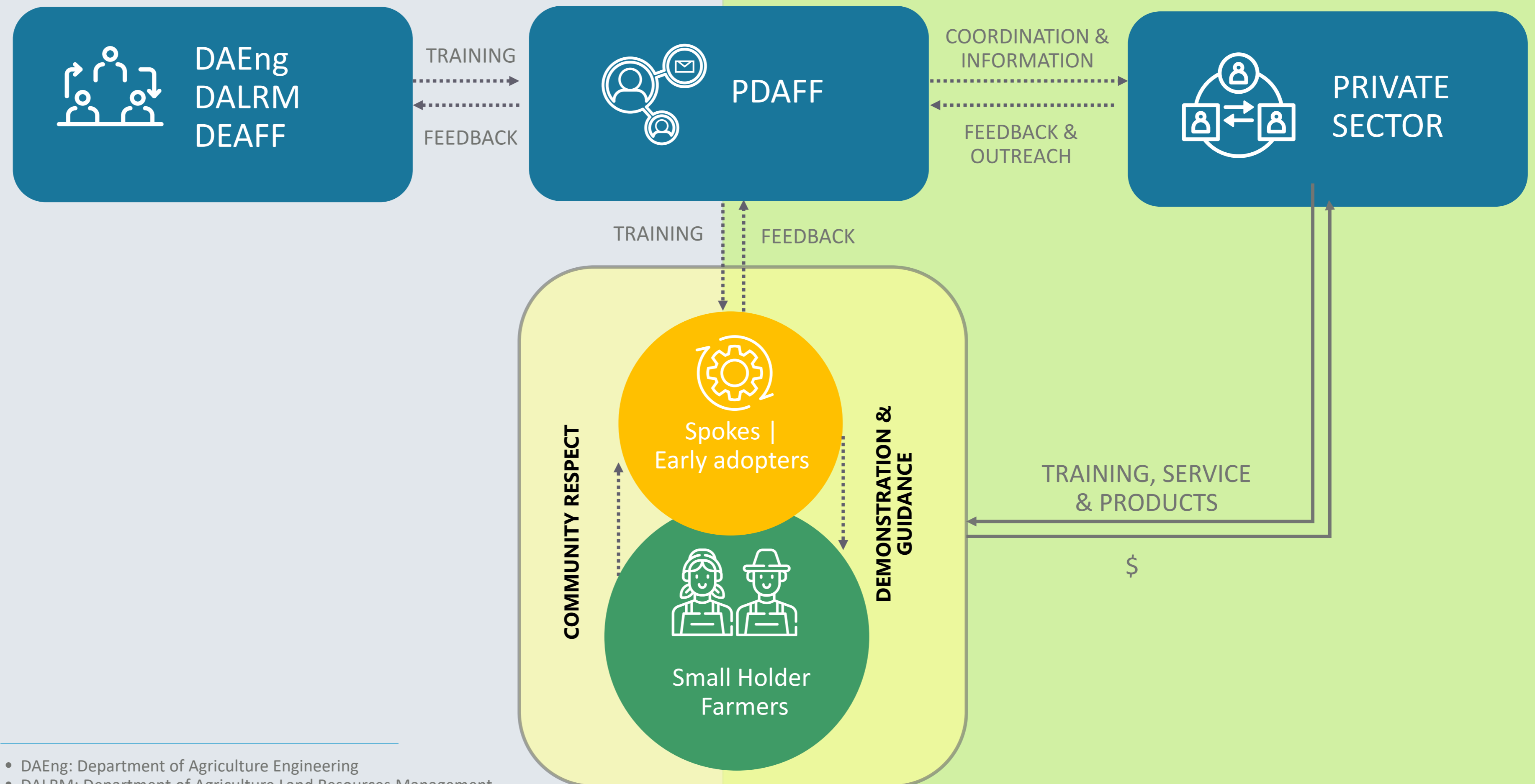
EARLY ADOPTERS

Agree to take the SI services and use their land to showcase the results to other farmers

GOVERNMENT EXTENSION

EMBED MetKasekor into the Government Extension System

Model

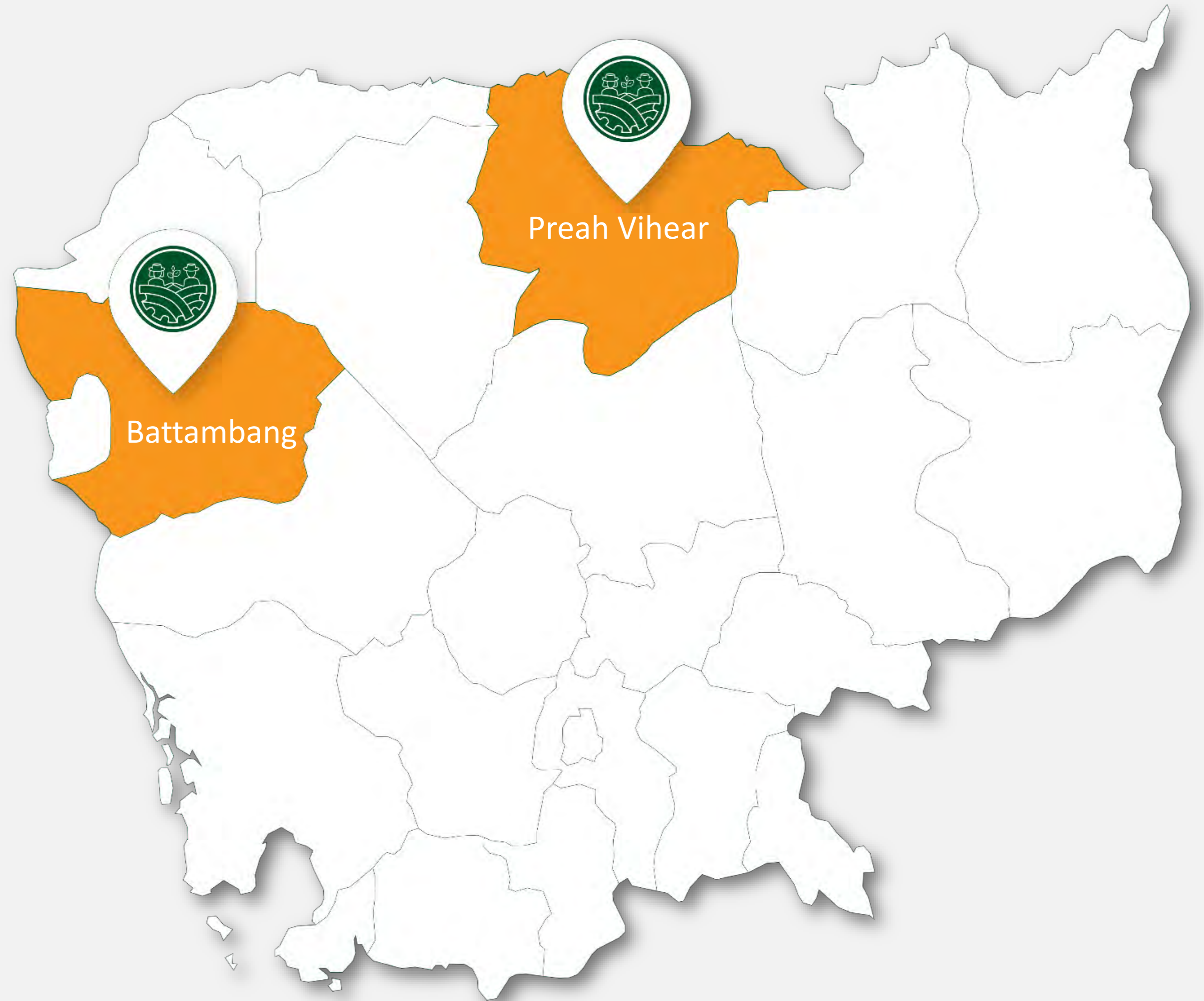


- DAEng: Department of Agriculture Engineering
- DALRM: Department of Agriculture Land Resources Management
- DEAFF: Department of Extension of Agriculture, Forestry and Fisheries
- PDAFF: Provincial Department Agriculture, Forestry, and Fisheries

Current Status

MetKasekor will be piloted in two provinces: Battambang and Preah Vihear (2021-24)

The pilot will be monitored by a Steering Committee within the Ministry of Agriculture, Forestry and Fisheries (MAFF)



Aspiration



MetKasekor fully integrated into the existing extension system of government, including provision of resources



MetKasekor model promoted by climate change and extension initiatives



Private sector demand to be part of MetKasekor and co-sharing resources with the Government



Metkasekor is studied by academic institutes and additional practices of sustainable intensification are integrated

MetKasekor Technologies



MAIZE, CASSAVA & RICE CROP CALENDAR

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec



MAIZE

Step 1
Prepare land
(for 1st year only)

Land leveler



Step 2
Plant cover crop

No-till planter & Sunnhemp



Step 3
Roll over cover crop &
plant main crop

Roller crimper & no-till planter



Step 4
Harvesting

Combine harvester



Step 5
Plant cover crop or
new main crop

No-till planter
(Sunnhemp or maize)



CASSAVA

Step 1
Prepare land
(for 1st year only)

Land leveler



Step 2
Plant cover crop

No-till planter



Step 3
Roll over cover crop &
plant main crop

Roller crimper & no-till planter



Step 4 & 5
Harvesting (Feb)
Plant cover crop or main crop

Cassava harvester & no-till planter



RICE

Step 1
Prepare land
(for 1st year only)

Land leveler



Step 2
Plant cover crop

No-till planter & cover crop



Step 3
Roll over cover crop &
plant main crop

Roller crimper & no-till planter



Step 4
Harvesting

Combine harvester

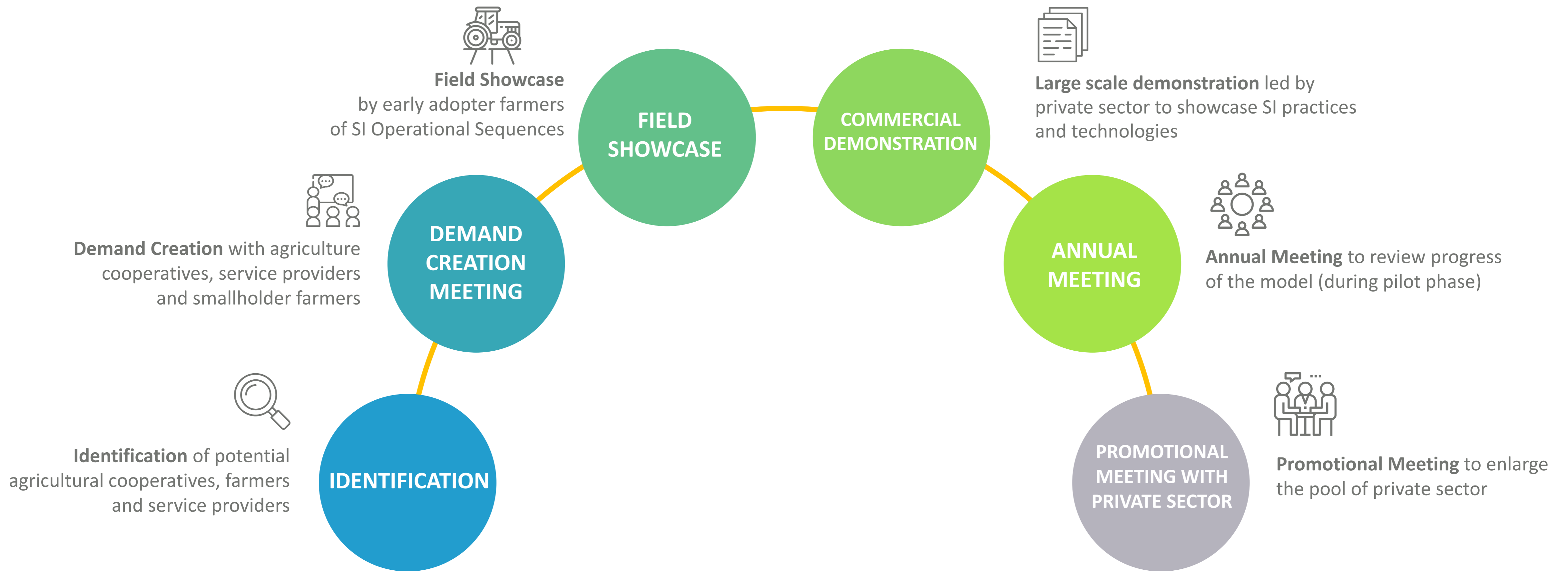


Step 5
Plant cover crop/main crop

No-till planter
(Sunnhemp or rice)



Metkasekor Steps



Testimonials



Mrs. Kim Davin
Director of Tonle Sap
Agribusiness Project (AMK)

MetKasekor Model shown to be transparent, with Swisscontact being neutral and government partners provide technical supports. It allows private sectors like us (AMK) to fully take ownership and easily implement such as providing products and promotional supports, especially, in term of financial clients where farmers/lead farmers are the target groups. This model also practical for farmers where AMK able to help the whole chain of farmers who practicing CA.



Mr. Sar Veng
Field Coordinator of CASC

I am excited to implement this model and also is interested in each step of MK, first it started from search and demand creations for farmers based on their need. The linkage between all stakeholders allows smooth implementation, producing effective results. MetKasekor also provides good trainings and capacity building for all the actors including private and public sectors and our ground team by connecting and networking with different stakeholders.

Testimonials



Mr. Leng Vira
Project Coordinator, CASC

The model is very effective for promoting CA and sustainable agriculture, starting from step 1 – step 6 it helps my team a lot where all the resources are used without any waste and the implementation is a promise activities that we can really reach the targets that we have projected.



Mr. Marc Eberle
CEO, SmartAgro

Metkasekor works well as a model in the Cambodian context. The model seeks to marry the public with the private sector to ensure legacy on the ground and serves to scale-out innovations from public research institutions.

CONTACTUS

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EXPANDING

your business in the sustainable intensification (machinery, credit, inputs, etc)



PROVIDING

support to expand the MetKasekor model or parts of it in other parts of Cambodia



DOING

more research on how sustainable intensification can scale up in Cambodia



Results to Date



2000+

Farmers exposed to CA



27

Machineries sold



20+

service providers



5

tons of cover crop produced



4

Private sector involved



2

provinces



2000+

ha of land covered