

ASSET in Cambodia

Key facts & Knowledge products

NATIONAL FINAL WORKSHOP IN CAMBODIA (8-10 OCTOBER 2025)

(version 01 Oct 2025)

Coordinated by





National partners









International partners











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ASSET OBJECTIVES

General: The ASSET project works across scales in Cambodia, from local interventions in Preah Vihear, Battambang and Kampong Cham provinces to national initiatives and regional engagement.

Specific:

- Strengthen and enlarge the ALiSEA network at national level towards promoting shared pathways to agroecological and safe food system transitions
- Transform ALiSEA multimedia into a Knowledge Hub that serves as a major resource to a diversity of stakeholders' engagement and actions
- Raise awareness and build capacity through multimedia communication to a wide range of targeted audience, including consumers and more largely citizens
- Co-design action research processes with local actors and support innovations at territorial level, considering youth and gender needs
- Design a common broad-based methodological framework for assessing performances and impacts of agroecology and safe food system pathways, and deriving lessons on enabling conditions
- Foster policy dialogues on agriculture, food, health and trade at national and regional levels (notably ASEAN level).

GENERAL INFORMATION



EU-AFD funding (under MoU)

2,384,290€

FFEM funding

1,300,000€



4 nationa partners

GDA, ITC, PDAFF & PMUAC

7 international partners

Uni4coop, Swisscontact, Gret, CIRAD, CDE, Smart AGRO, IRD



Around

40 collaborators



19

students including 4 PhD, 9 men and 10 women

1 post doc, 2 volontaires,

4 PhD and 12 Master



More than

35 knowledge products



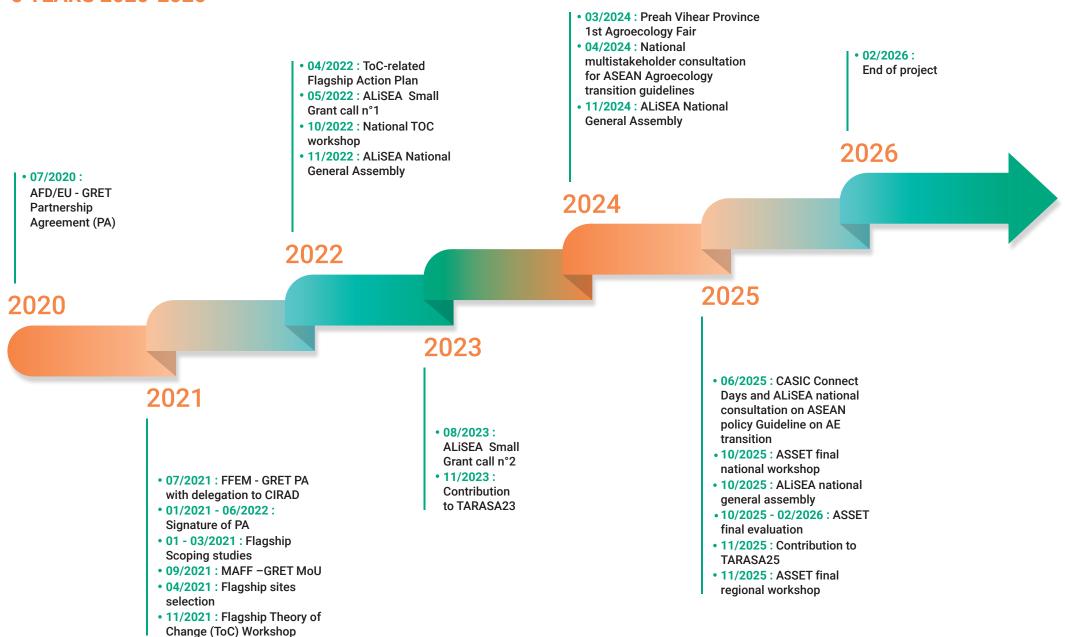
farmers and 680 ha

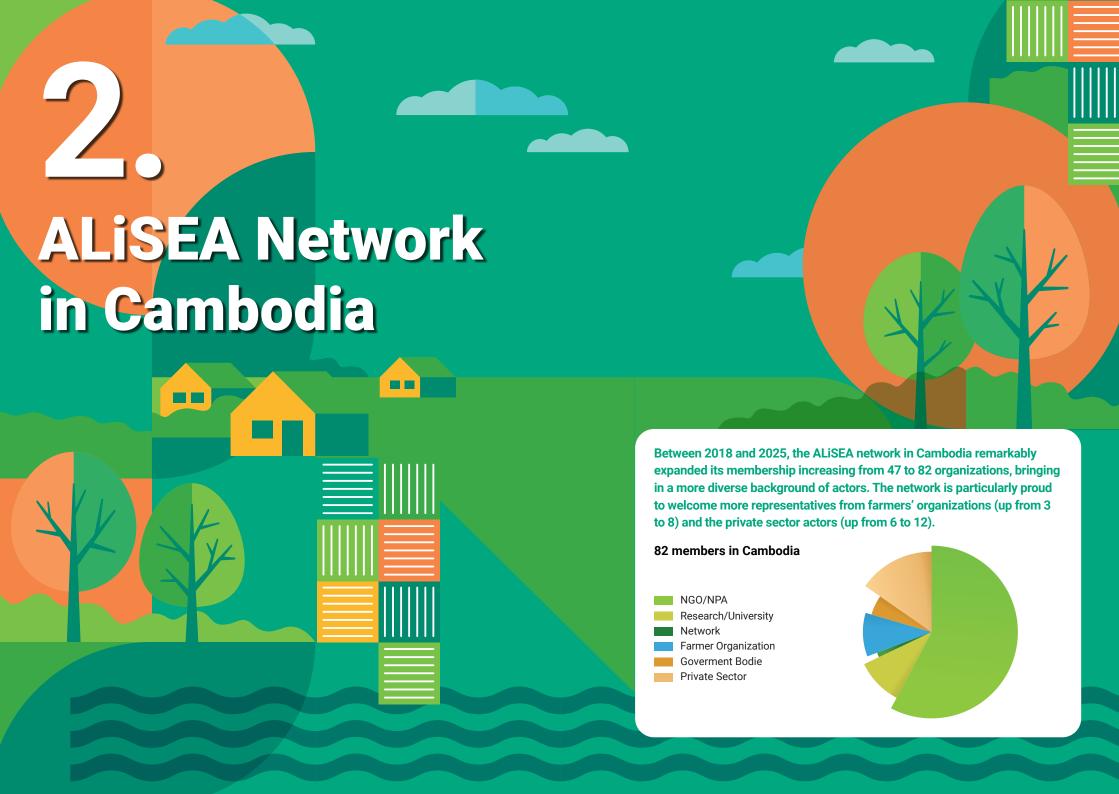


3 ALiSEA small grand calls

Small grants awareded

TIMELINE IN CAMBODIA: 5 YEARS 2020-2026







From April 2021, when the national boards of members were first created, to October 2025 when ALISEA Cambodia organised its 3rd General Assembly as part of the ASSET project, ALISEA Cambodia reinforced its structuration by setting up new instances including:

- the national Executive Team, composed of 3 members organizations involved in the management and implementation
- the national Board, composed of 4 members organizations involved in the strategy and advisory

These new instances aim to ensure that the diversity of the network's members is represented and to engage members in the management and coordination.

Since 2020, UNI4Coop, a consortium of 4 Belgium university NGOs, has been supporting the ALiSEA network in Cambodia by funding part of the national secretary hosted by DPA, providing 4 small grants to members and allowing the implementation of various activities (training, exchange visits, workshops etc.) in the country. UNI4Coop has recognized the ALiSEA

network as a key actor of change in promoting agroecology. This partnership played a crucial role in strengthening the network, fostering the dynamic and testing different structuring modalities.

To know more on ALiSEA Cambodia positioning on AE:

An Agroecological Cambodia by 2040 Position Paper October 2023

ALISEA ACTIVITIES IN CAMBODIA

Knowledge sharing activities

The ALiSEA network strengthens its members by testing and sharing innovations in different contexts (training, field visits), conducting joint studies, sharing results and drawing lessons collectively (online webinars). Several joint actions with members have been set up to pool resources and increase the impact of these events (Farmers Forum, training and consumer day with SSLA, TAPE survey with Ecoland, actors mapping with DCA, Uni4Coop and Ecoland).





ALISEA communication and sensitization:

ALISEA has built connection with local and national journalists (National Television, national radio, online TV, online newspaper) in Cambodia. As mass media, journalists are key players in promoting agroecology to the general public and supporting citizens to change their consumption practices. Awareness field day for journalists have been organized to improve the content and quality of media related to food and agriculture issues. In total, 23 journalists (9 females) were trained in agroecology related issues and produced over 80 media contents.



Small Grants activities in Cambodia:

ALISEA network has put in place enabling mechanisms to support and boost the implementation of agroecological innovations through the setting up of a small grant facility (SGF) for actors engaged in agroecology. The small grant facility allows to strengthen partnerships between the ALISEA members and non-members by encouraging joint actions. Through direct funding provided to farmers' organizations, local and national CSOs etc., the SGF enables to support and implement concrete initiatives that respond to needs on the ground. In Cambodia, 3 small grant calls were launched for the period 2022-2024 and 7 grantees were awarded:

- Ecoland and RUA Multidimensional Evaluation of Agroecology
- HEKS/EPER, Agri Smart Innovation and PDAFF of Kampong Thom -Research and demonstration of climate-resilient and agroecological cashew nuts production
- SSLA and Bayon Education School
 Empower and strengthen Youth
 Involvement in Agroecology through
 Youth Agroecology
- AVSF and PMUAC Strengthening organic sesame supply chain in Preah Vihear province by integrating AE practices and linking the products to markets

- GSF and CE SAIN Integrated Agroecology: Study, Implementation and Practice
- LHCO and FNN Fostering Agroecological System to Table
- FLO ECO-WAYS: Empowering Communities, Women and Youth in Agroforestry for Sustainability

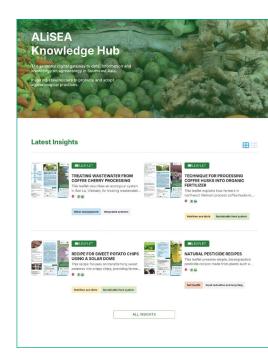
Furthermore, the small grant facility is an interesting tool for involving stakeholders in the developing knowledge products, sharing lesson learned and field evidence.

ALISEA KNOWLEDGE HUB

(https://kh.ali-sea.org/)

The ALiSEA Knowledge Hub is an open-access online platform that consolidates and shares resources, expertise, and practical information on agroecology in the Mekong Region. It offers a collection of knowledge products, a document library, maps, data visualizations, and a directory of agroecology experts with content available in English and national languages.

The ALiSEA Knowledge Hub aims to become the leading knowledge resource on agroecology in the Mekong Region. It seeks to facilitate knowledge-sharing and increase the visibility of local and national experience and insights. By promoting a diverse range of knowledge, the hub aspires to inspire stakeholders and foster networking among all actors interested or involved in agroecology.



The ALiSEA K.Hub was developed thanks to the collaboration of CDE, GRET, CIRAD, CIAT and Mediaseeds

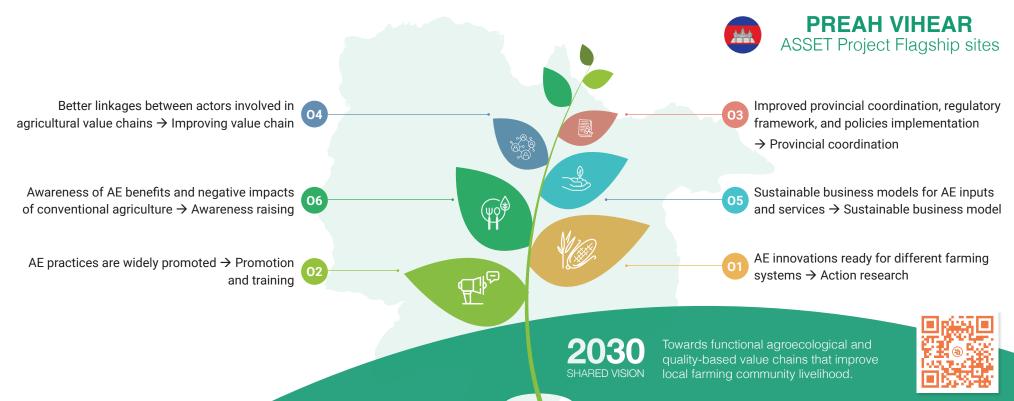
Thanks to the CASIC Sub-Committee invitation, the ALiSEA team has been participating since 2024 in one of the working groups on Agroecology Promotion and Policy Engagement in order to identify activities that are in line with the CASIC road map and contribute to co-develop the work plan.

3.

Flagship Preah Vihear

A SHARED VISION OF CHANGE

Preah Vihear Province was selected as a flagship site during the regional scoping studies, making it one of the three ASSET flagships where action-research with local actors and territorial innovations will be implemented. In Battambang and Kampong Cham Provinces, activities focus more specifically on fighting against global warming and agricultural land degradation through Soil Carbon sequestration and greenhouse gas (GHG) mitigation, carried out in close collaboration with CARDEC.



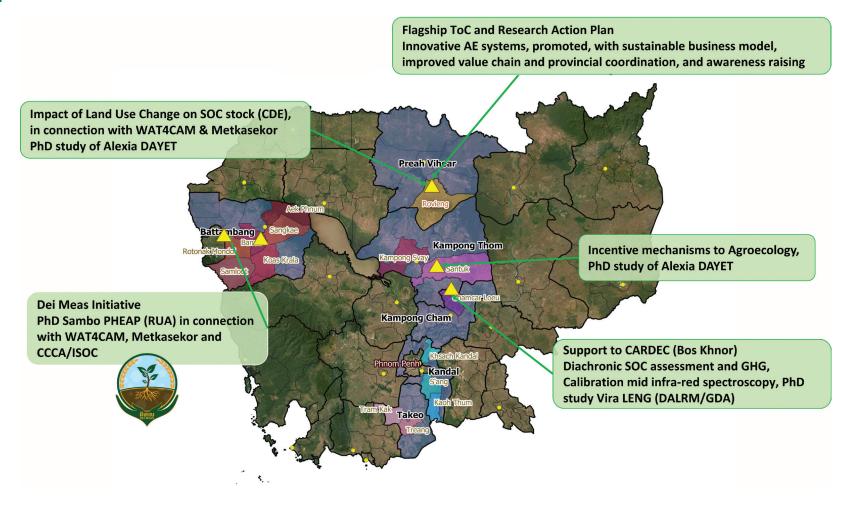
PREAH VIHEAR DISTRICT

Lowlands: Medium-to-poor soils and sloping land -> Rice-based systems remain the cornerstone of food and farming systems, with the key challenge of sustaining rice production.

Uplands: Good soils and flat land

→ Crop-livestock-forest rainfed
systems and fruit production
expanding, with the main challenge of
preserving uplands against social and
environmental degradation.

- Hotspot of forest and biodiversity with deforestation prevention as a key challenge
- Face land degradation and biodiversity losses and support other crops sustainable development (cassava, cashew nut, banana, rubber)
- Organic rice by default and risks of conventional intensification with pesticides, chemical fertiliser Support to organic value chain is a priority
- Provincial authorities' willingness: to develop organic value chains



AGROECOLOGICAL RICE SYSTEMS

Innovative AE systems tested for lowland paddy rice production with cover crops used as green manures (Green manure versus Conventional), and a collection of 33 local rice varieties, under different ecosystems (upstream, lowland, and irrigated) and management practices (broadcasted,V transplanted). Preliminary results after 3 years experiments showed that Green manure (GM) increased rice grain yield by 12% in the irrigated scheme, 14% in the lowland and decreased grain yield by 8% in the upstream. Overall, the most adapted variety for GM conditions in the irrigated scheme were Campei Sr 70, Kraches, NeangSar and Prich. In the lowland, most adapted variety were Neang Ork, Phka Rumdoul, Prich and Russey, and in the upstream the variety Neang Ork did respond positively to GM.In term of pest and disease, 2 main pests were observed: stem rot and narrow brown spot. The varieties that seemed the most resistant are Kraches and Re.





AGROECOLOGICAL CASSAVA SYSTEMS

Innovative AE systems tested comparing monocropping with rotation and intercropping system with rattlepod (Crotalaria spp) or Stylo (stylosanthes g. cv Ubon) as cover crop and seeds production, with or without Biochar. Preliminary results show a high variability between plots and treatments but globally significant positive impact of cover crops introduction on cassava yield. Following two first year results, no significant effect of biochar. The results are to be confirmed over a longer period of time as cumulative effects (biochar, cover crops) are expected.

AGROECOLOGICAL CROP-PROTECTION FOR CASHEW NUT PRODUCTION

The innovative agroecological cashew systems focus on a combined approach that integrates the management of weaver ant populations with intercropping of cover crops to control Tea Mosquito Bug in 8 pilot cashew nut plantations. Sensitization and promotion activities in partnership with the NGO HEKS. 8 pilot farmers interested to pursue model testing. Need for additional monitoring to assess longer-term weaver ants behaviors (in and out migrations) and ant colony management requirements. Different pedagogic material developed (paper and videotechnical guide - links).



SUSTAINABLE EXTENSION MODEL WITH METKASEKOR EXTENSION MODEL



The Public-Private extension model combined capacity building, field showcases, and farmers' exchange field visits, large-scale demonstrations to enhance knowledge sharing and the out scaling of cover crops use for farmers from Rovieng and other districts with involvement of PDAFF-PVH, PMUAC, and the private sector. Over the past 3 years, more than 2,000 farmers participated in the Metkasekor events in Preah Vihear including 21 Demand Creation Meetings, 18 Field Showcases, 12 Farmers Exchange Field Visits.

SUSTAINABLE BUSINESS MODELS FOR AE INPUTS AND SERVICES WITH KROPUCHKASEKOR MODEL

Consultative meetings involved development partners and private sectors to discuss pricing strategies, work synergies and promotion of cover crops. The successful registration of 15 cover crop species into the national portfolio is a key milestone for the value chain development of cover crops and the larger-scale



dissemination of innovative systems in Cambodia. Quality Declared Seed (QDS) Guideline for the cover crop species is published with guidelines on cover crops management.

DEI MEAS INITIATIVE (GOLDEN SOIL) - FINANCIAL SOLUTIONS FOR SUSTAINABLE FARMING



The objective of the Dei Meas pilot initiative is to explore financial mechanisms for a sustainable and long-term transition of smallholder farmers toward agroecological practices. Dei Meas is implemented in two pilot areas in Battambang province in Sanghae (irrigated rice) and Rattanak Mondoul (annual rainfed cropping systems) districts. The implementation of the model goes through 4 main stages: 1) Farmers selection involving key local actors (notably the unions of agricultural cooperatives), 2) Support to transition including improving farmers access to AE inputs and

services (cover crops, CA machinery), farmers capacity building, and technical mentoring, 3) Monitoring of adoption impacts (agro-economic benefits, SOC & GHG emissions dynamics, changes in soil health), and 4) Rewarding farmers according to the intensity of engagement into agroecological practices (from 35 to 75 USD/ha).

Main results after 3 years of implementation: 193 farmers impacted, 6221 hectares under agroecological transition, 40.000+ USD of incentive distributed to farmers, 3 innovative MRV technologies calibrated, 550+ soil samples analysed, 8 business approaches on transition finance analysed. Dei Meas is recognized as part of the RECSOIL network.

BOS KHNOR CONSERVATION AGRICULTURE RESEARCH FOR DEVELOPMENT CENTER (CARDEC)

The CARDEC Road map has been officially approved and endorsed in 2022. Over the past 3 years, ASSET Project supported CARDEC in line with the strategic plan developed by



BETTER LINKAGES BETWEEN ACTORS INVOLVED IN AGRICULTURAL VALUE CHAINS ightarrow IMPROVING VALUE CHAIN

The project supported organic paddy collection and sales with improved traceability, enhanced transparency and satisfaction among AC members. PMUAC strengthened governance and transparency of contract farming through trainings with farmers in Rovieng and Chey Saen districts. Network analysis of organic rice and cashew nut value chains identified strengths and gaps in public and private roles, highlighting farmers' informational

marginalization and risk transfer to cooperatives. A socio-economic assessment and structured inventory of agricultural quality instruments mapped institutional interactions and informed a collaborative digital toolbox, including stakeholder directories, certified area mapping, process sheets, and case studies. These activities also explored the potential for a territorial branding strategy linking standards, marketing, and tourism.

Policy dialogue in Cambodia

Evidence-based
multistakeholder policy
dialogue and advocacy: a
multilevel process combining
ASEAN-based orientations
and framing developments,
national level policy
developments and concrete
local policy actions in support
of agroecological transitions
from plot, farm, to territorial,
market and food system levels



being nurtured under CASIC and fed into the ASEAN level policy processes supported by ASSET. The knowledge and experiences gained from these Cambodian approaches and reflected on and shared by Cambodian partners, CIRAD and SwissContact in different occasions throughout the multistakeholder policy dialogue process facilitated by ASSET under the lead of UN ESCAP, CIRAD and FAO brought critical insights into the practical development of the guidelines led by LICA.









Support to evidence based multistakeholder policy dialogue and advocacy - provided via a collaboration with MAFF led by GDA in close relation with CIRAD - notably included contribution to conduct a variety of multistakeholder policy dialogue events. ASSET, under GDA lead, also organized a series of local multistakeholder policy dialogue events in the Flagship site, Preah Vihear. These dialogues were held in coordination with the research platform in partnership ASEA and ALISEA.

RECENT EVENTS SUPPORTED BY ASSET IN CAMBODIA NATIONALLY

- CASIC Connect Day at RUA in June 2025 to bring together several key stakeholders to raise awareness of the benefits of agroecology and highlight its importance for the sustainable transformation of agricultural sector in Cambodia. This event was organized backto-back with ALISEA national consultation workshop to enhance understanding of ASEAN policy guidelines on agroecology transitions, to identify priorities, gaps, leverage points that the network and stakeholders should
- address and to foster collaboration among of ALiSEA members, stakeholders and governments in scaling up agroecology
- Cambodian Agricultural Science
 Academy (CASA) Roadmap
 Development Workshop in
 August 2024 to discuss the CASA
 initiative, refine it, including through
 discussing its alignment with the
 government's Pentagon strategy,
 and strengthen support from varied
 stakeholders.
- CASIC co-hosting of the World Day to Combat Land Degradation

- and Drought in June 2024, which gathered about 600 participants (government officials, national and international organizations, farmers, and students)
- National multistakeholder ASEAN guidelines consultations in July 2024 organized by AsiaDHRRA and FAO with ASSET policy partners and ALiSEA (including government officials, national and international research and development organizations but also a large representation of farmer organizations and civil society organizations): part of the process of completing the ASEAN guidelines ahead of their final endorsement by the ASEAN Member States in October 2024.
- Soil First Workshop conducted in January 2024 to promote agroecology, improve soil quality, farmers' income and food security.

RECENT EVENTS SUPPORTED BY ASSET IN PREAH VIHEAR:

Multistakeholder policy Dialogue Workshop conducted in October 2024 in Rovieng district by DALRM/GDA with PDAFF,PDoWRAM, PDoE, andPDoWA: building of common policy lessons from flagship site visit and bringing together a diversity of stakeholders to improve and better align local and national level policy support (technical & market changes).







List of students per diploma: Post Doc/ PHD/ Master



1 Post doc, 4 PhD students, 2 volunteers, and 12 master students

POST DOC AND VAE

Dr. Myriam Allo	Quantify past and present SOC loss due to LULCC in sub-regions of Cambodia and Laos for major LU-trajectories
Mr Pierre-Antoine Vernet	The Dei Meas initiative: a transitioning system for a change towards agroecological practices in Cambodia
Mr Titouan Filloux	Mid Infra-red (MIR) spectroscopy approaches for SOC and N estimation

PhD

Mr Sean Chanmony	Co-design of relevant indicators for M&E and strategies and tools for impact analysis in Cambodia
Mr Vira Leng	Assessing the impacts of conventional plough-based management and no-till cropping systems on soil organic C dynamics and greenhouse gas emissions in the uplands of Cambodia Sustained (defended in 2024)
Ms Alexia Dayet	Exploring and testing financial mechanisms to support the transition to CSA systems
Mr Sambo Pheap	Impacts of Conservation Agriculture on Ecosystem Services and Soil organic Carbon in the uplands of Cambodia



MASTER'S & OTHER

Kim Lan Mas	Exploring relational infrastructures in commercialization strategies for agroecological products: Case studies in Xieng Khouang (Laos) and Preah Vihear (Cambodia)
Jade Boucher	Multi-criteria Analysis of an Agroecological Transition for Irrigated Rice Crops in Battambang Lowland, Cambodia
Alexia Dayet	D'une riziculture traditionnelle aux cultures d'exportation : quel avenir pour la filière rizicole biologique de la commune de Rik Rey ?
Mathilde Malagié	Analysis of policies and strategies for combating and adapting to climate change: focus on Cambodia, Laos and Vietnam
Cecile Hello	Modélisation de la dynamique du carbone dans le sol et des émissions de gaz à effet de serre pour des systèmes de culture agroécologiques à base de manioc
Alban Sena Soedji	Efficiency of contractual arrangements in Preah Vihear Province Cambodia
Seam No	Soil Organic Carbon and Nitrogen assessment using Mid Infra-red (MIR) spectroscopy
Romain Moussa	Supporting sustainable transitions through high quality instruments: the case of the Cambodian agriculture
Mateo Petitet	Test au champ d'une application pour smartphone de suivis de parcelles agricoles et assistance à la mise en place d'une base de données sur le carbone organique des sols
Zoe Behiels	Agroeconomic assessment of Dei Meas pilot
Lou Zaytouni	Assessing farmers perceptions and motivations for engaging into AE transition
Leone Gentet	AGRI PLOT WATCH (APW): Newly developed data collection device user guide



List of knowledge products

(OCT 2025)



Agroecology evaluation

Scientific article – Pheap S., Thoumazeau A., Murase J., Seng V., Sarthou J.-P., Sar V., Kimbo L., Kheam S., Chan P., Srean P., Leang S., Hok L., Tivet F., Multicriteria assessment of recently implemented conservation agriculture cropping systems across farmers' plots in northwestern Cambodia, Farming System, Volume 3, Issue 2, 2025, 100140, ISSN 2949-9119, RUA, CIRAD



Agroecology transition

Report - Diepart J. C. and Kong R. 2022. Towards an agricultural land use plan to support an agro ecological transition in the O'Kambor and O'Sakarach watershed areas in Rik Reay commune Rovieng district, Preah Vihear province. Agroecology and Safe food System Transitions (ASSET) project. Phnom Penh, Cambodia. 48p. **CIRAD**



Agricultural Crop Protection (ACP) and Input reduction

Technical leaflet- Weaver ant, a natural ecological practice to protect cashew nut plantations – CIRAD HEKS



Khmer Version



Video - Agroecological Crop Protection (ACP) strategies to control Tea mosquito bug in cashew nut plantation – **HEKS CIRAD**



Practice brief – Testing of agro-ecological practices/techniques to address pest/insect reduction in the cashew farm –– **HEKS** under **AliSEA small Grant**: Research and demonstration of climateresilient and agro-ecological cashew nuts production



Research brief – Input Reduction in Agroecological Practices: A Case of Local Practices in Horticulture Production in North-West of Cambodia- Ecoland- under AliSEA small Grant ALiSEA Small Grant: Multidimensional Evaluation of Agroecological (MuLAgE)



Research article and Poster – Understanding Farmers'
Perceptions and adoptions of Agroecological practices in Rotonak
Mondol District, Battambang Province Ecoland- under AliSEA
small Grant ALiSEA Small Grant: Multidimensional Evaluation of
Agroecological (MuLAgE)

Conservation agriculture

Research brief - Evidence on the impacts of long-term cassava-based conservation agriculture systems on soil organic carbon and greenhouse gas emissions in Cambodia – **GDA**, **CIRAD**



Policy Brief - Building soil health in crop systems with resilience to CC – **GDA**



Media Article - How agriculture can make the most of one of the world's biggest carbon stocks, soil. In: The conversation on-line journal. Released December 6, 2023, the Conversation, December 6th 2023 – **Montpellier Univ., CIRAD**



Scientific article - Leng, V., Cardinael, R., Tivet, F., Seng, V., Mark, P., Lienhard, P., Filloux, T., Six, J., Hok, L., Boulakia, S., Briedis, C., de Moraes Sá, J. C., and Thuriès, L.: Diachronic assessment of soil organic C and N dynamics under long-term no-till cropping systems in the tropical upland of Cambodia, SOIL, 10, 699–725,



Policy Brief - MetKasekor: Unlocking Conservation Agriculture with Public-Private Agricultural Extension in Cambodia – **Swisscontact**



Cover crops

Video - Dei Meas (Transition Financing) Farmers Share Their Experience on Adopting Cover Cropping in Battambang province - **SwissContact**



Practice Guide - Cover Crops: Allies for the soil, crops, and farmers - GDA CIRAD



Guideline - QDS Guideline on cover crop seed production - GDA SwissContact



Markets and Certification

Scientific article - Dayet A., Diepart J.-C., Castella J.-C., Sieng S., Kong R., Tivet F., Demenois J., Can organic rice certification curb the pressure of the agrarian transition in Cambodia? A farming system approach, Agricultural Systems, Volume 217, 2024, 103953. ISSN 0308-521X - IRD CIRAD



Research brief - Can organic rice certification curb the pressure of the agrarian transition in Cambodia? A farming system approach - CIRAD IRD



Video - Good practices of agroecological sesame product - AVSF under **AliSEA Small Grant**: Strengthening organic sesame supply chain in Preah Vihear province by integrating AE practices and linking the products to markets



Practice brief - Understanding farmers' perspectives and benefits in the transition from traditional to organic sesame farming in Chey Saen District, Preah Vihear province - AVSF under AliSEA **Small Grant**: Strengthening organic sesame supply chain in Preah Vihear province by integrating AE practices and linking the products to markets



Rice cropping system

Research brief -Unlocking local diversity potential: disentangling variability in Agroecological ice cropping system CIRAD GDA



Technical leaflet - Participatory Rice Varieties Evaluation: Empowering Farmers Through Collaborative Assessment -**CIRAD GDA**



Video - A Participatory Approach in Cambodia's Agroecological Rice Fields. Preah Vihear flagship site - CIRAD



Video - Finding the Best Rice: A Participatory Approach in Cambodia's Agroecological Rice Fields - CIRAD



Policy Brief - How to promote organic rice production in Cambodia - Uni4coop



Report - Alternate wetting and drying period (AWD) pilot. Kanghot irrigated perimeter, Battambang province, SWISS Contact



Policy Brief - Scaling up bio-input pathways for rice production toward agroecology transition in Cambodia, AliSEA Cambodia



Soils

Dataset - Gomez, F., Carcedo, A., Mean, C. M., Reyes, M., Hok, L., Tivet, F., ... & Ciampitti, I. (2024). A dataset for soil organic carbon in agricultural systems for the Southeast Asia region. Scientific Data, 11(1), 374.



Youth

Practice Brief - An educational curriculum for high school students to engage with Agroecology Teaching and Best Practices - GSF under AliSEA Small Grant: Integrated Agroecology: Study, Implementation and Practice (IASIP)



Guide - Student Guide Document - GSF under AliSEA Small Grant: Integrated Agroecology: Study, Implementation and Practice (IASIP)

Video - Study, Implementation and Practice Summary - GSF under AliSEA Small Grant: Integrated Agroecology: Study. Implementation and Practice (IASIP)

Video – Young Farmers Testimonies to capture the AE Caravan experience - video - SSLA under ALiSEA Small Grant: Empower and strengthen Youth Involvement in Agroecology through Youth Agroecology Caravan (YAC24)



Video - The sharing experience - SSLA under ALISEA Small **Grant**: Empower and strengthen Youth Involvement in Agroecology through Youth Agroecology Caravan (YAC24)



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