



ALiSEA National General Assembly In Cambodia 2025

Policy Dialogue Achievements 2025

IMPLEMENTERS



SUPPORTERS



DONORS



ALiSEA Policy Dialogue Strategy

Our Goal: Aims to foster **policy dialogue and mainstream agroecology** into national and regional **strategies and/ or laws** that can defend the interest of **agroecology farmers, consumers and environment**, to become a key player in **promoting agroecological transitions** and influencing policy towards a **conducive environment** to the implementation of Agroecology.

Our work:

- Facilitate internal discussion with members on policy engagement to develop collective understanding
- Policy engagement strategy to ensure **diverse perspectives** are heard and considered highly
- Policy reflection to get more **insights on policy needed by members**



ALiSEA History of Policy Dialogue and Approach

(1)

Consultation/ stocktaking Phase

1. Policy Dialogue was a new topic for ALiSEA (2021), stocktaking from members, members' experiences and expectations.
2. Co-developed national Theory of Change (TOC) and identify priorities pathways (2022) towards 2040
3. ALiSEA national consultation workshops (2024)
4. Join external policy dialogue platforms (CASIC, Farmers Forum, ASEAN Policy Guidelines process) (2024-2025)

(2)

Design Phase

5. **Develop Policy Dialogue Strategy/RoadMap on main problem/barrier to AE (Problem and solution trees to reach advocacy objectives, targets, messages and additional studies)**

(3)

Implementation Phase

6. Decide Actions and calendar (communication/media, policy brief, alliances/partnerships, decision maker exchanges, etc.)
7. Monitoring and Evaluation



Internal works: Key Results for End of 2024 & 2025



➤ Set up Working Group: The establishment of this policy working group is to propose solutions to promote agroecology activities and implementing its policy support to have achieved the theory of change (TOC) of ALiSEA by 2040 and beyond. Currently there are 14 interested members registered.

➤ Presentation of the rule of procedures of the Policy WG.

➤ 1 Policy Brief was developed on scaling up bio-input pathway for rice production towards agroecology transition, scope, main recommendations of the policy brief, next steps?



SCALING UP BIO-INPUT PATHWAYS FOR RICE PRODUCTION TOWARD AGROECOLOGY TRANSITION IN CAMBODIA

KEY TAKEAWAYS
This brief proposes three key policy options:
1. Strengthen Biotechnological Research by developing national laboratory capacity and investing in participatory research to ensure high-quality, effective bio-inputs. Encourage public-private partnerships and improve regulatory frameworks.
2. Support Agricultural Cooperatives: Empower cooperatives to produce and distribute bio-inputs, raising awareness and demand through local innovation and collective action.
3. Enhance Farmer Training: Deliver tailored extension services focused on bio-inputs, integrated pest management (IPM), and crop diversification, with support from NGOs and development partners.

SUMMARY
Rice is vital to Cambodia's economy and food security, accounting for 16.7% of the country's GDP in 2024. However, the increasing reliance on chemical pesticides to meet export demands and boost yields has raised concerns about environmental, health, and sustainability issues. To shift toward sustainable agriculture, this policy brief advocates scaling up agricultural bio-inputs—such as biofertilizers and biopesticides. These inputs, once common in Cambodian farming, are now underutilized due to limited research and development (R&D) capacity, high costs, market fragmentation, and doubts about their effectiveness.

PRIORITY ACTION
Strengthening biotechnological research is crucial to unlocking the full potential of cooperatives and promoting farmer-level adoption. A 4Ps model (Public-Private-Partnerships) and transition incentives, including safety nets and subsidies, are recommended to foster bio-input applications in rice production toward sustainable food systems.



Historically, we should examine the various options for scaling up the bio-input from different perspectives, including national, cooperative, and farmer levels. As the aim of this article is to explore the policy options, our results emphasize the preferred policy options as follows:

ENABLING THE ENVIRONMENT FOR BIOTECHNOLOGICAL RESEARCH AT NATIONAL LEVEL
As mentioned in our previous studies, the primary lock-in in bio-input production and application is the efficacy of bioinput products. Currently, some bio-input companies import and/or replicate microorganisms from abroad for the production of bio-inputs due to limitations in laboratory technology and infrastructure. In addition, this would be constrained by their perception of the efficacy of locally produced bio-input, which is less competitive with synthetic input. By nature, it would be difficult for Cambodian farmers to isolate and produce beneficial microorganisms for their locally produced bio-inputs. This implies an urgent need for biotechnological laboratory research to produce high-quality bio-inputs as a precondition for their widespread application and adoption. Networking among stakeholders – including scientific laboratory researchers, biotechnology companies, farmers, and farmers' organizations (Goulet et al., 2024) – will be beneficial in breaking the chain of bottlenecks. This would require policies for investing in and/or promoting biotechnological R&D, regulating pesticides, and raising awareness of effective and affordable agricultural bio-inputs. This would also enable enterprises to improve their investments in the production and supply of highly effective bioinput products. To achieve this, properly allocating public budget for biotechnology and laboratory facilities should be considered. It is essential to have policies that encourage private-sector partnerships in R&D and commercialization, aiming to increase the availability and affordability of effective bioinput products. It was believed that it should have been engaged in participatory research collectively to improve the technical knowledge and understanding of challenges.

LEVERAGING THE ROLE OF AGRICULTURAL COOPERATIVES IN BIO-INPUT PRODUCTION AND APPLICATION
Collective action in resolving these challenges would be crucial for the development pathway. This communication by agricultural cooperatives will be at the center of promoting the bio-input application. This may trigger a surge in demand and result in an increase in its supply. A case of biofertilizer, highlighted the importance of agricultural cooperatives in facilitating the availability and accessibility of bio-inputs. To remain competitive in the fertilizer and pesticide market, the strategy involves raising awareness among producers and consumers by focusing on innovation—technical, financial, and organizational—within sustainable and safe food systems, starting internally and expanding through their networks.

TAILORED EXTENSION AND TRAINING TO FARMERS
It emphasized the need to reinforce and scale up awareness and practices of bio-input production at the farm level. A tailored extension and training program is also recommended for farmers to enrich alternative practices, including not only bio-inputs (natural pesticides and biopesticides) but also crop diversification and integrated pest management (IPM). Non-Governmental Organizations (NGOs) and development partners (DPs) should support studies, research, certification, and selection for farmers and extension workers on the long-term use of bio-inputs to achieve sustainable, safe, and healthy food systems. With its cost efficiency and sustainability benefits, farmers' demand may be triggered, and the application of bio-inputs among farmers would be scaled up. Moving forward, sustained collaboration and engagement will be essential for realizing the full potential of bio-input innovation in the country.



For instance, a regulatory limit of 0.01 mg of Trifluralin per kilogram of milled rice was introduced and enforced by some regions or imported countries (Hong, 2025). In response to this change in market demand, the Royal Government of Cambodia (RGC) has issued a call for responsible chemical pesticide use, urging all relevant stakeholders to practice alternative and natural pesticides to meet the rice export market. It may be, however, challenging as it was reported that rice farmers were reliant on chemical pesticides and herbicides to protect their crops and increase rice yield (Flor et al., 2019; Ngyu et al., 2025). In addition, FACOSTAT showed a dramatic increase in chemical pesticide use in Cambodia over the last three years (2019-2021), even higher than in the rest of nations in ASEAN and globally (FACOSTAT, 2025).

While the current trend of rice intensification has recently increased, there has been concern about its impacts on various dimensions, especially market dynamics, sustainable, safe, and healthy food systems, the environment, and biodiversity (Bureau-Point, 2021). Aiming to contribute to resolving these critical risks, this policy brief explores various options and provides strategic recommendations for scaling up agricultural bio-inputs that contribute to addressing the root cause of unsustainable food systems.

A study conducted by the Agroecology Learning Alliance in Southeast Asia (ALiSEA) using the Tool for Agroecology Evaluation (TAPE), developed by the Food and Agriculture Organization (FAO), among 433 farmers in 5 different provinces, shows a red light (overall score: 1.23), indicating unsustainable practices. These unsustainable practices of pesticide exposure specifically refer to higher use of synthetic pesticides over natural or organic pesticides; the toxicity of the used pesticide is classified as moderately toxic; there are fewer than four mitigation measures (mainly masks, gloves, and protected clothing); and there are fewer ecological management practices and bio-inputs.

Based on the literature, there is strong evidence that pesticides, though vital for modern farming, pose serious risks to human health, the environment, and food safety. Their effects extend beyond application sites, contaminating water, soil, and air. In Cambodia, the heavy use of pesticides—especially in rice farming—raises concerns about agricultural practices, environmental pollution, and public health. This suggests that current pesticide practices in Cambodia should be revised to promote sustainable development. Alternatively, there were different alternatives in integrated pest management (IPM) for farmers to be independent of synthetic inputs, such as bio-inputs and ecological management practices. Various studies (Baret, 2017; Flor et al., 2019; Ngyu et al., 2025; Ram et al., 2021; Ramasamy et al., 2020) claimed that bio-inputs (biofertilizer and biopesticides) were generally reported as potential alternatives. In fact, bio-inputs like compost, crop and animal waste, and various natural pesticides were common agricultural inputs for Cambodian farmers before the 1980s, when farmers produced for self-sufficiency.

In order to break the vicious cycle identified above, various actions have been proposed by interviewees and different stakeholders. Addressing the locks to agricultural bio-input production and application requires a holistic approach to the entire value chain of bio-inputs, encompassing policy reform, technical capacity building, and targeted marketing strategies. By addressing these key challenges, stakeholders can unlock the full potential of bio-inputs to enhance agricultural sustainability and resilience in the face of evolving environmental and economic pressures.

The first historic National Assembly-Senate of the Kingdom of Cambodia, held on June 3, 2005, fully endorsed the Royal Government of Cambodia's Paragon Strategy Phase I and its agricultural policy priorities. The congress endorsed all related strategies and action plans aimed at promoting sustainable agriculture, benefiting farmers and processors while considering both economic and environmental sustainability. It also reaffirmed its commitment to advancing agricultural programs focused on irrigation, horticulture, and land diversification to enhance resilience to climate change and external shocks, thereby ensuring food security and improving livelihoods and the national economy. Cambodia has promoted various standards of agricultural practices, including Cambodia's Good Agricultural Practices (GAP) and largely natural-friendly agriculture, as well as common principles in applying bio-inputs and reducing harmful pesticides. Therefore, bio-input plays an important role in producing safe and healthy agricultural products to meet the demands of both local and international markets.

Logically, the application of bio-inputs among farmers may occur only if effective and competitive bio-inputs are widely available and accessible in Cambodia. In this context, we argue that the first and most prioritized option would be to ensure that biotechnological research functions in response to bio-input products. It also implied that the first option in biotechnological research remained the precondition for the second and third options mentioned above. To make it work, we believed that prioritized strategies in implementing this policy as the following:

- 1. Promoting the Public-Private-Partnerships (4Ps) model in bio-input production offers a strategic approach to strengthening Cambodia's agricultural transition. With the increasing demand for alternatives to synthetic pesticides and pesticides, a 4Ps framework encourages the government to provide enabling policies that support private enterprises in investing in localized production technologies, distribution networks, and quality control. At the same time, people's organizations—such as farmer cooperatives and community groups—can lead the demand-driven co-production and localized validation of bio-inputs, ensuring cultural relevance and ecological fit. Through this collaborative model, Cambodia can foster innovation, reduce reliance on costly imported agrochemicals, and empower smallholders to create sustainable, self-reliant farming systems.
- 2. As an economic return is a main driver of farmer's behavior change, during the initial stage of policy implementation, it would be crucial to have both a safety net for bio-input production for the investors and subsidies to compensate for the transition period and farmers (usually the decelerated yield of crops once converted from the conventional practice).

BIBLIOGRAPHY

- Baret, P. V. (2017). Acceptance of Innovation and Pathways to Transition Towards More Sustainable Food Systems. *Plants Research*, 6(2), 383-388. <https://doi.org/10.1007/s12042-016-0104-1>
- Bureau-Point, E. (2021). Pesticides et santé des zones d'exportation cambodgiennes. *Anthropologie et Santé*, 22. <https://doi.org/10.4000/anthroposante.6054>
- Cambodia Rice Federation. (2025). <http://www.ricfed.org/>
- Flor, J., Maat, H., Haas, S. A., Kuster, V., & Cassola, N. (2019). Do food-loss preventers of Cambodian farmers protect a pesticide lock-in? *Field Crops Research*, 235, 66-74. <https://doi.org/10.1016/j.fcr.2019.02.019>
- Goulet, F., Truong, S., Ribaut, J., Helder, P., Oka, S., Srinivasan, S., Vanhulst, S., Vanhulst, N., & Van Loan, J. (2024). The emergence of microbiopesticides and their application in Cambodia: Implications for food and nutrition security. *Agroecology and Environmental Science*, <https://doi.org/10.1007/s10388-024-00810-9>
- Hong, P. (2025, January 25). *MAFF urges responsible pesticide use amid EU countermeasures*. *Times News*. <https://www.timesnews.com/1010275294/maff-urges-responsible-pesticide-use-amid-eu-countermeasures>
- Hou, G., Tempeh, I., Dumet, R., Nguyen, S., & Ngyu, Lema. (2024). *Monoculture-Based Innovation Process: Agricultural Bio-Inputs in Cambodia*. *Journal of Agricultural Science and Technology*, 2(2), 1-10.
- Nguyen, L., Bureau-Point, E., Di, P., Gassan, S., Hou, S., Helder, B., Lefebvre, P., Ngyu, S., & Sauer, M. (2025). *Toward a comprehensive analysis of pesticide use in Cambodia: Inventory and identification of users by reduction*. *Cambodia Agriculture*, 24, 12. <https://doi.org/10.1007/s10388-025-00201-0>
- Ngyu, L., & Ribaut, J. (2021). *Biofertilizer production in Africa: Current status, factors impeding adoption and strategies for success*. *Scientific African*, 11, e00696. <https://doi.org/10.1016/j.sciafr.2021.000696>
- Ramasamy, S., Saito, P., Lu, M., Hong, C. H., Kang, S., & Sarker, G. (2020). *Validation of a bio-based integrated pest management package for the control of major insect pests in Chinese Mustard in Cambodia*. *Crop Protection*, 126, 104728. <https://doi.org/10.1016/j.cropro.2020.104728>



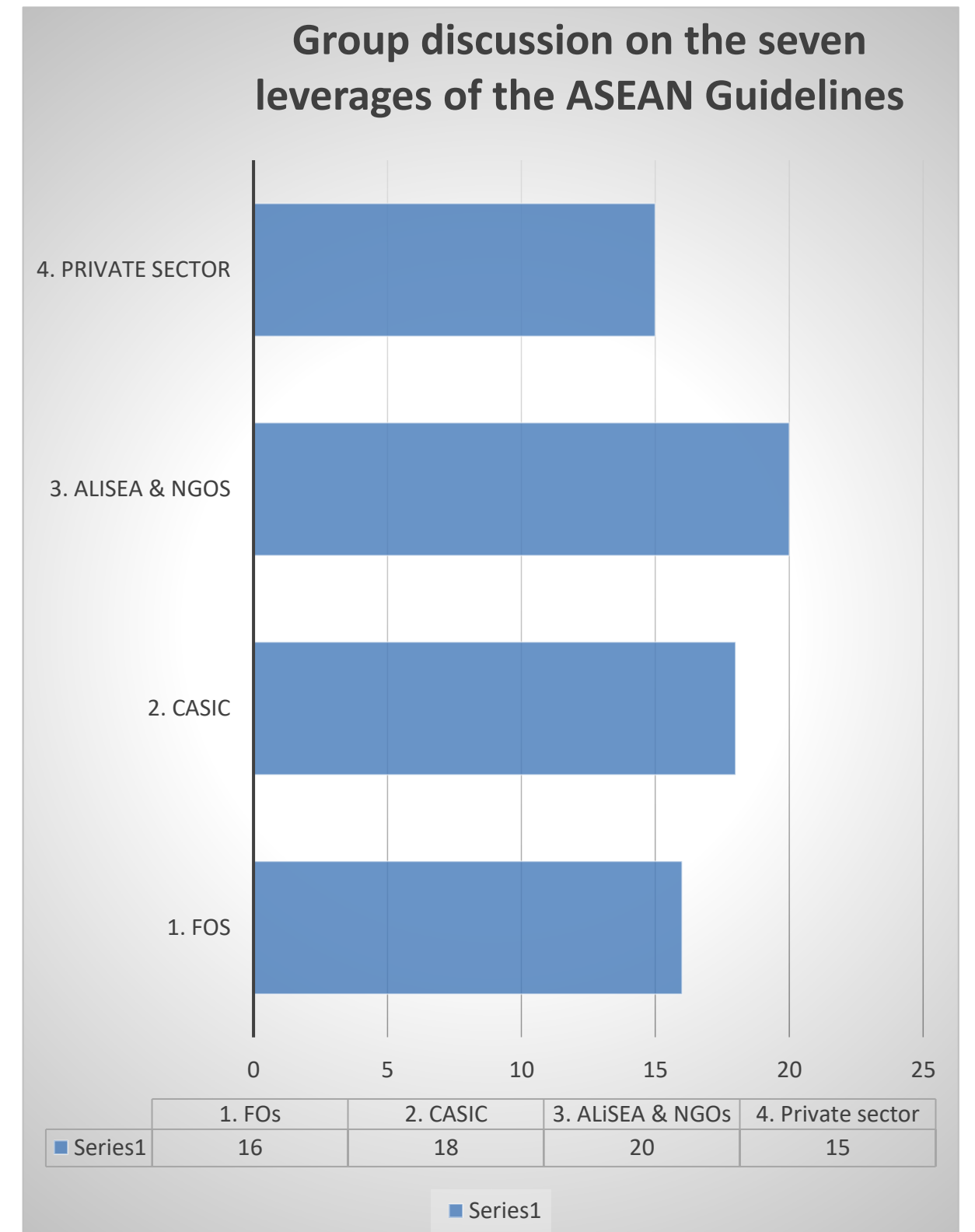
ASEAN Policy Guidelines

ALiSEA Engagement at National/Regional levels: National Consultation on ASEAN Policy Guidelines



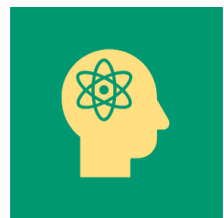
Back to back with CASiC connect days on 25 June 2025

Results	Conclusion
<p>ALiSEA members: Highlighted many activities related to AE initiatives and transitions. Need relevant actors to reach farmers, limited support to farmers</p>	<p>Priorities: Developing clear guidelines (financing, framework, MRV, and technical), national policy on AE, training on AE</p> <p>Gaps: Lack of knowledge on AE, knowledge on AE policy dialogue, Key actors are not working in a loop yet.</p> <p>Leverage points: Capacity building, financing AET, work in a 4Ps modality,</p> <p>The participants got better understanding of the ASEAN policy guidelines in AET.</p> <p>Follow up the agroecology policy implementation at the grassroots, sub(national) levels.</p>
<p>CASiC: Defined the role and responsibility clearly of all actors, contribution to initiatives of the seven levers</p>	
<p>Farmers Organizations: highlighted less activities related to AE initiatives</p>	
<p>Private Sectors: Highlighted partnership with commercial traders and working with farmers</p>	
<p>Everyone: 4P model, incentive/subsidy, innovation and markets were highlighted collectively.</p>	



ALiSEA Engagement at Regional level :

Consultation on ASEAN Policy Guidelines on Agroecology Transitions in Cambodia on the 7 leverage points



Capacity building and knowledge sharing

- National strategy on **capacity building and certify the extension officers and technical staff** in agroecology
- Agroecology technical training to FOs



Promoting transitions across the agrifood value chains

- **Agri Food Value Chain:** Efforts are underway to promote safe food production, encourage the use of organic inputs.
- **Promoting new technology:** Solar irrigation.
- **Development Laws** on contract farming



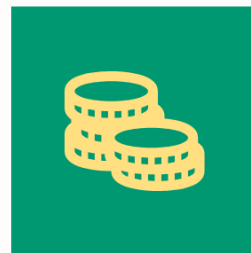
Working with farmers

- **Farmers' engagement:** pilot farms have been established, Partnership with commercial traders and working with farmers



Developing a research agenda

- Develop **national research agenda** to scale up agroecology transitions, innovations, and measure impact
- **Accumulate agroecology field evidences** at national level and regional level which advance forward multi-purposes (knowledge sharing, policy...)



Financing agroecology transitions

- Introduce safe agroecological products into **national public procurement systems**
- **Subsidy fund and Incentive** for AE business for FO (agriculture cooperatives, agro-tourism)
- **Agricultural insurance** for agroecology farming to ensure sustainable practices
- Political engagement with **banks and microfinance institutions** to provide preferential interest rates for agricultural loans.



Planning for agroecology transitions

- **Developing contract farming guidelines and enabling contact farming agreements**
- **Engaging/encourage private sector to invest in agroecology production (agricultural product and input)**



Multistakeholder engagement

- **Multi stakeholders engaging:** Local authorities and CAOs, CASIC, ALiSEA and public – private people's organizations partnership (4Ps).

ALiSEA Engagement at National level



- **Collaboration with National Farmers' Forum Committee: Platform to share experience and challenges on agriculture sector**
 - ALiSEA joined (1). to promote AE to farmers representatives, (2). to develop collaboration with NGO Forum, the public sector, multi stakeholders and existing platforms in policy engagement.
 - From year to year, more speakers invited to share AE initiatives, experiences working with farmers and results of AE practices
 - Policy Brief: **Promoting Sustainable Agriculture in Cambodia** (After the 13th National Farmers' Forum)
 - Enabling AE farmers access to financing, TOT training on AE, ensuring that AE farmers get premium prices.
- **Collaboration with CASIC as a sub-committee member since 2024**
 - SC on promotion: Update quarterly achievements of members on AE

ALiSEA Policy Dialogue RoadMap

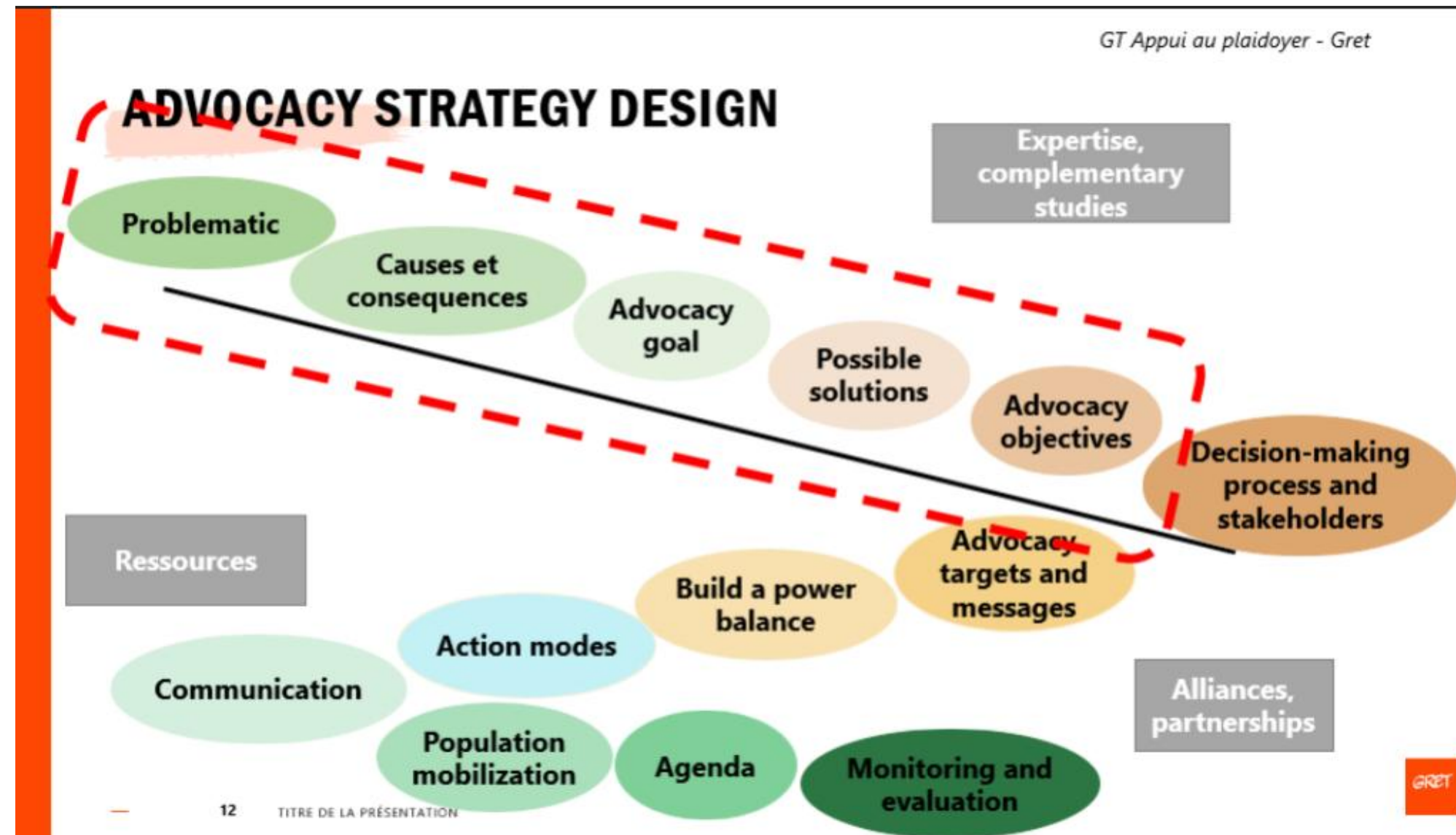
Objectives :

Process

- Define a specific problem
- Identify goal of advocacy
- Existing policy documents
- Political context
- Possible solutions
- Advocacy objectives
- Analysis decision-making process
- Who is/are our targeted group(s)
- Who is/are our main allies/partners
- Main Messages

Next steps :

- Identify/decide the topic, develop draft roadmap and discussion/consultation with policy working group members, members and ALiSEA related team



Engagement in national and regional policy processes : Upcoming events



- **AE Coalition GA 2025** on 4-5 Nov, 2025: To review achievements 2025 (Webinar)
- **Agricultural Cooperative Business Forum (ACBF) November 12-13, 2025:** organized by CamboDHRRA, aims to minimize gap among stakeholders, digitalization to strengthen businesses and required policies to support digitalization development
- **Cambodia Agriculture Forum & Exhibition (CAFE25) November 13-16, 2025:** a flagship initiative organized by MAFF, to promote local producers. ALiSEA/CFAP involved in preparation of the CAFE25
- **TARASA25 Conference** in November 24-27, 2025 in Laos: aims to support the transition towards agroecology through a dialogue in a loop and knowledge exchange in a 4P model

វេទិកាអន្តរកិច្ចសហគមន៍កសិកម្មឆ្នាំ២០២៥ "ការកសាងសហគមន៍កសិកម្មឱ្យកាន់តែរឹងមាំ តាមរយៈដំណោះស្រាយឌីជីថល"

ទិដ្ឋភាពទូទៅ

- ឈ្មោះវេទិកា: វេទិកាអន្តរកិច្ចសហគមន៍កសិកម្មឆ្នាំ២០២៥
- ប្រធានបទ: "ការកសាងសហគមន៍កសិកម្មឱ្យកាន់តែរឹងមាំ តាមរយៈដំណោះស្រាយឌីជីថល"
- កាលបរិច្ឆេទ: ១២-១៣ ខែវិច្ឆិកា ឆ្នាំ២០២៥
- ទីកន្លែង: សណ្ឋាគារ ខាំបូឌីយ៉ាណា (ភ្នំពេញ)
- រយៈពេល: ពីថ្ងៃ
- អ្នកចូលរួម: 200 នាក់ (សមាជិកសហគមន៍ខាំបូជ្រា តំណាងសហគមន៍កសិកម្ម បណ្តាញស្ត្រី និងយុវជន ជនជាតិដើមភាគតិច មន្ត្រីរដ្ឋាភិបាល វិស័យឯកជន ស្ថាប័នហិរញ្ញវត្ថុ និងដៃគូអភិវឌ្ឍន៍)
- សហការរៀបចំដោយ:



Supported by:

Co-Organizers:



ALiSEA Policy dialogue perspectives

✓ Continue work on:

- 1) Appropriation of policy dialogue process by ALiSEA members
- 2) Facilitate internal discussions and exchanges
- 3) Policy Dialogue Engagement, contribute to national policy dialogue platform

✓ Further development:

- 1) Establish partnership for joint advocacy and policy dialogue activities
- 2) Engage members in evidence creation (position paper, field-evidence)

- ## ✓ Next actions: Formalise and draft a clear policy dialogue strategy/roadmap to ensure consistency of actions and transparency of decision and priorities.





Thank you!

Contact: Mr. SOK Sotha
soksotha@cfap-cambodia.org



@បណ្តាញកសិអេកូឡូស៊ីនៅកម្ពុជា



www.ali-sea.org



IMPLEMENTERS

SUPPORTERS

DONORS



In partnership with



Co-funded by the European Union



FONDS FRANÇAIS POUR L'ENVIRONNEMENT MONDIAL



Schweizerische Eidgenossenschaft
Confédération suisse
Confederazione Svizzera
Confederaziun svizra



Belgium partner in development