

SEED Practitioner Labs Policy Prototyping | Thailand 2020

Enhancing and Scaling MSMEs' Capacities to Reduce Single-use Plastics



Challenge hosted by



Context

Thailand has been amassing two million tons of plastic waste per year over the last ten years. To tackle the growing problem, the Thai government has issued a **Roadmap on Plastic Waste Management 2018-2030** and **Action Plan on Plastic Waste Management 2018-2022**. These two key legislative pieces are implemented mainly by the Pollution Control Department.¹ The roadmap identifies three main challenges in plastic waste management which are 1) problem in design and production and 2) problem in consumer behaviour 3) problem in waste management

Meanwhile, there are emerging MSMEs and growing markets in alternative, environmental friendly products as realistic

alternatives to plastic. Such innovations contribute to the existing action plan, and can benefit from its aim to promote eco-design and eco-product standards.

Challenge

The capacity of these innovative MSMEs to fully contribute with potential solutions are limited due to:

1. A **lack of access to market** mainly due to the higher cost structure of plastic alternative in comparison to traditional plastic products
2. A **lack of access to technology**, research and development support to

¹ Under the Thai Ministry of Natural Resources and Environment

design, test, develop and scale production and manufacturing

3. A **lack of access to funding** or incentive mechanisms enabling actors (which offer these solutions) a way to compete in normal market conditions

Opportunity

Several stakeholders are working on the waste management and plastic reduction sector in Thailand. To streamline synergies to address these common challenges and goals, SEED Policy Labs is exploring potential cooperation with **GIZ** under the ***Collaborative Action on Prevention of single-use plastic in Southeast Asia Initiative (CAP-SEA)***. The CAP-SEA project aims to reduce single-use plastics (SUP)² through: i) supporting governments to develop waste reduction policies, ii) international exchange of knowledge and policy instruments, iii) replicating business innovations, iv) develop environmental

standards for SUP avoidance, and v) promotion of SUP avoidance.

The Policy Lab will aim to unlock the potential of MSMEs to provide greener alternatives to current products and manufacturing methods through offering a shared space for multi-stakeholders to design and develop action towards successful SUP reduction in Thailand and the region.

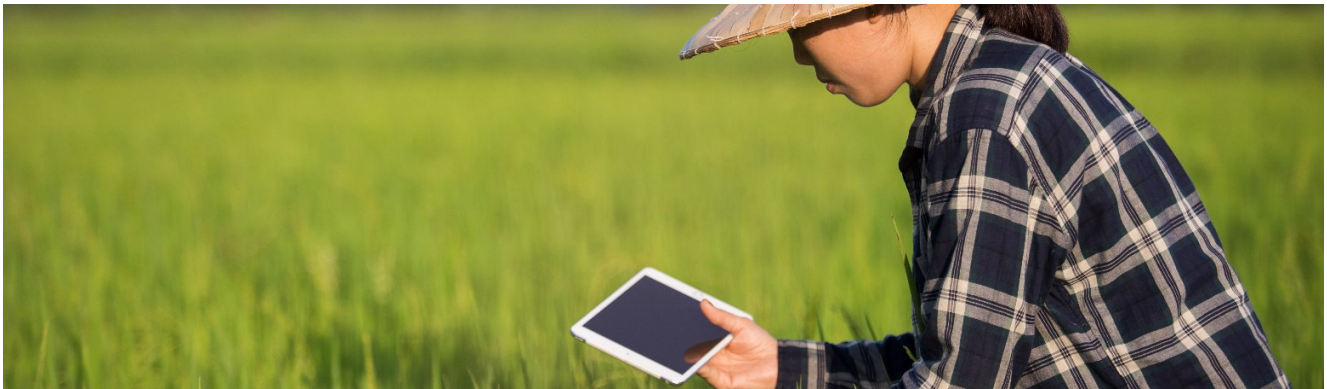
Expected Outcomes

- The Lab connects stakeholders in the plastic waste reduction ecosystem to further support MSMEs contribution to the cause
- Develop solutions to further empower MSMEs in plastic waste reduction towards a plastic-waste-free future
- Validate single-use plastic prevention mechanisms developed under the CAP-SEA programme with the PCD.

² The key is on reducing plastics and avoiding resorting to recycling which is a high-energy consuming activity.

SEED Practitioner Labs Policy Prototyping | Thailand 2020

Improving Data Management of SMAE Networks for Cohesive Smart Food Supply Chains



Challenge hosted by



Context

The agricultural sector employs more than 30 percent of Thailand's labour force. However, the agricultural sector accounts for only 10% of the countries' gross domestic product.¹ The sector shows slow growth rates and is more fragile than other economic sectors of the country. This is because most Thai farmers are trapped in traditional farming methods and monoculture. Farmers face high economic risks and earn low incomes despite significant investments in the sector

every year and agriculture being earmarked a priority sector in national strategies like Agriculture 4.0² under the **Ministry of Agriculture and Cooperatives**. Agriculture 4.0 addresses the root cause of farmers' low incomes by driving a value-based or innovation-driven economy and incorporating technology into old ways of farming. This refers to the use of precision agriculture, climate smart agriculture, digital technology and the internet of things in the production process and value chain.

¹ Bank of Thailand, 2019. "ภูมิทัศน์ภาคเกษตรไทย จะพลิกโฉมอย่างไรสู่การพัฒนาที่ยั่งยืน?" (Thai agricultural landscape: How to change to sustainable development?). Retrieved from https://www.bot.or.th/Thai/ResearchAndPublications/articles/Pages/Article_26Sep2019.aspx

² Ministry of Agriculture & Cooperatives, 2017 "แนวคิดเกษตร 4.0 ของรัฐมนตรีฯ การกระทรวงเกษตรและสหกรณ์." (Agricultural Concept 4.0 of the Minister of Agriculture and Cooperatives). Retrieved from http://survey.rid.go.th/th/images/file/circular_notice/4523-60.pdf

Challenge

In achieving this policy goal, an intervention from high-value MSMEs (agri-tech Startups) is required. This will support in closing the gap of low productivity and added value of most agriculture yields and products leveraging the aforementioned technologies.

However, the basic requirement for agri-tech startups to generate such advice is sufficient and good quality data. **ListenField**, an eco-inclusive enterprise with experience of working with more than 30 farmer communities throughout Thailand, has identified 1) insufficient access to data and 2) data decentralisation as two main challenges that hinder a sound analysis.

Opportunity

SEED sees the opportunity of the SEED PLPP as a platform to bring together relevant stakeholders and prototype solution ideas based on good examples initiated and implemented by ListenField, currently in 30 farmer communities. The Lab will emphasize the complementary strengths between agri-tech startups and SMAEs as well as draw synergies between the public sector, SMAEs and technology.

Expected Outcomes

- SMAEs are better supported with innovative action/proposal that directly target in enhancing their specific needs
- Agri-tech startups are better recognised as key stakeholders contributing to national policy agenda solution
- Showcase ListenField's data management model as a good practice for potential replication and scale

The Lab contributes to forging partnership between the public sector, agri-tech startups and SMAEs in enabling smart agriculture/smart farming.

SEED Practitioner Labs Policy Prototyping | Thailand 2020

Supporting MSMEs in the Transition to Circular Economy



Challenge hosted by



Context

As part of Thailand's wider efforts to climate change adaptation and sustainable economic growth, the **Ministry of Industry** has proposed the circular economy framework as the future direction of "Factory 4.0" for Thai industries¹. The circular economy model - an alternative to the traditional linear economy's production process of 'take, make, dispose' - will also increase competition and growth in the Thai economy by focusing on four areas²:

1) Manufacturing/Production - by promoting circular product design and developing efficient production processes to design innovations throughout the product life cycle;

- 2) Consumption - by encouraging reduction, reuse, and use-if-necessary concepts;
- 3) Waste Management - by improving waste management procedures and long-term investments into waste management; and
- 4) Use of second-cycle raw materials and efficient recycling processes.

A circular economy model would promote responsible resource management in a way that improves environmental and social

¹ Ministry of Industry, 2017 "รัฐมนตรีสมชายฯ เปิดงานสัมมนา "ทิศทางพัฒนาอุตสาหกรรมไทย...ในอนาคต" พร้อมกล่าวปาฐกถาพิเศษ "การขับเคลื่อน Factory 4.0 and Circular Economy"" (Somchai Minister Seminar opening "The

direction of Thai industrial development ... in the future"). Retrieved from <http://www.industry.go.th/industry/index.php/en/about/2017-04-20-15-23-14/item/40601-2019-03-13-09-15-58>
² *ibid.*

sustainability³. In support of these policies, other departments such as the **Board of Investment** have also introduced favourable incentives for companies that use second-cycle raw materials, operate waste recycling or are in the business of improving environmentally friendly production processes.

Challenge

Although some policies and infrastructures are in place, the implementation of circular economy in Thailand has not achieved its full potential. This is due to a number of internal and external factors such as

1. Slow change in **consumer behaviour** towards products and services produced under circularity model
2. **Enterprise cost structures** that may have limitations on additional costs incurred as a result of circularity practice
3. **Insufficient skilled labour** to develop or use advanced technology necessary for circularity practice
4. The **risk of changing** to new business models or practices
5. **Insufficient institutional support** from policy and regulators⁴ since the efforts to promote circular economy transition is still largely focused on big industry players⁵.

However, these challenges present an opportunity to advocate for MSMEs' significant potential - to increase business activity, generate employment, and create investment opportunities - in the national movement towards a circular economy, especially in a time that demands urgent green recovery.

³ Bangkok Post, 11 Sep 2018, "Circular model going to cabinet". Retrieved from <https://www.bangkokpost.com/business/1537718/circular-model-going-to-cabinet>

⁴ Insights garnered from SEED research with SEED-supported eco-inclusive enterprises.

Opportunity

The **Stockholm Environment Institute (SEI)** in Thailand is conducting a research project on "Transition to Circular Economy for Private Enterprises in South East Asia" that aims to highlight the barriers and challenges faced by the private sector that hinder transition towards sustainable production and adoption of circular economy business models⁶. The research will identify key enablers that would alleviate these barriers and create an enabling environment for the adoption and deployment of a circular economy.

MSMEs in Thailand will be invited to complete a needs assessment survey, which will provide an understanding and overview of the implementation level of circular practices and the practical challenges faced by the companies. **The SEED Lab will provide a platform for further dialogue for stakeholders in public sector, private sector, financial institutions and intermediaries.**

Expected outcomes

- The Lab connects stakeholders in the OSMEP network with SEI's research project on private sectors in the transitioning to circular economy
- MSMEs are acknowledged as a key player in the private sector's transition to a circular economy
- Verification of findings and insights to challenges and barriers faced by MSMEs
- Contribution to policy development for the circular economy in Thailand and the ASEAN region by providing a science-based research.

⁵ Board of Investment Thailand, 2019 "Thailand Investment Review" Vol 29, November 2019. Retrieved from http://www.boi.go.th/upload/content/TIR5_2019_5e2e95134a76b.pdf

⁶ Ibid.