



Ministry of Agriculture and  
environment



ASSOCIATION  
OF SOUTHEAST  
ASIAN NATIONS

A COMMUNITY OF  
OPPORTUNITIES FOR ALL

# Freshwater Weed Industry small scale in Lao PDR



**Ms. Daovieng Yaibuoathong**  
**Fisheries Division**  
**Department of Livestock and Fisheries**  
**10 September 2025, Tawau, Sabah, Malaysia**



## Outlines

- ❑ Overview of Lao PDR
- ❑ The State of Freshwater weed
- ❑ Environmental and Social Benefits
- ❑ Challenges and Government Support
- ❑ The Future of the Freshwater Weed Industry small scale





# Overview of Lao PDR

Lao People's Democratic Republic (Lao PDR) is a **landlocked country** in **Southeast Asia**.



## Population and Area

Total area 236,800 square kilometers and population around 7.7 millions.



## Myanmar Border

The northwest border shared with Myanmar.



## China Border

The northern border shared with China.



## Vietnam Border

The eastern border shared with Vietnam.



## Cambodia Border

The southern border shared with Cambodia.



## Thailand Border

The western and southwestern borders shared with Thailand.

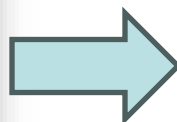


## The State of Freshwater weed

In Laos, the most freshwater weed is "Kai Pen," which is a type of filamentous green algae from the genus *Spirogyra*.



Washed and pounded



Pressed into thin, large sheets, seasoned with ingredients like garlic, tomatoes, and sesame seeds and sun-dried



Local food from Kai Pen



Products for domestic and export



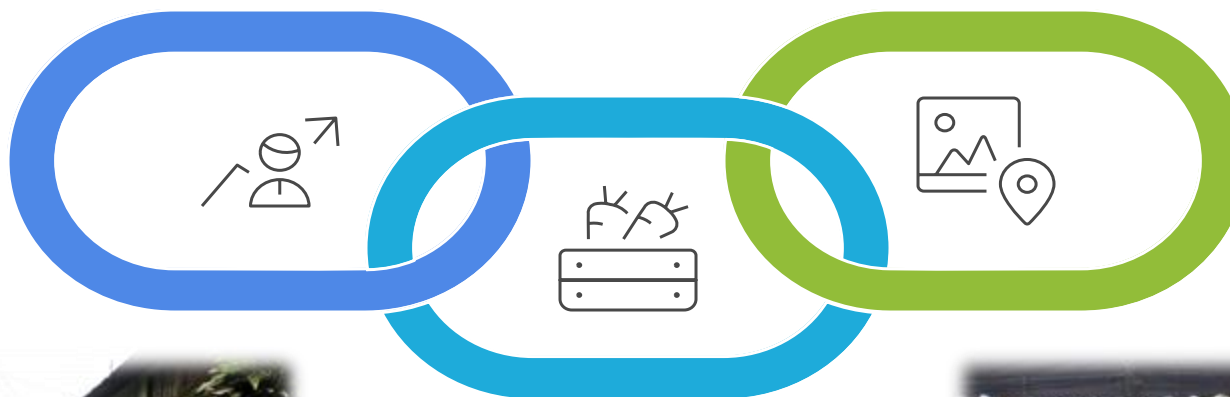
# Market and Economics

## Market Dynamics

Focuses on the local and domestic market interactions.

## Cultural Linkages

Emphasizes the connection to tourism and food culture.



## Income Generation

Highlights the economic benefits for rural families, especially women.





# Kai Pen Production in Luang Prabang province in 2024

No	Name of District	Amount (kg)	Value (USD)	Sales Market (%)	
				Domestic	Export
1	Nambak	75,000	25,000	95	5
2	Viengkham	2,396	6,846	100	
3	Phonthong	90,600	30,200	100	





# 2 community at Luang Prabang province support by Korea

## Bom Village



## Lee Village



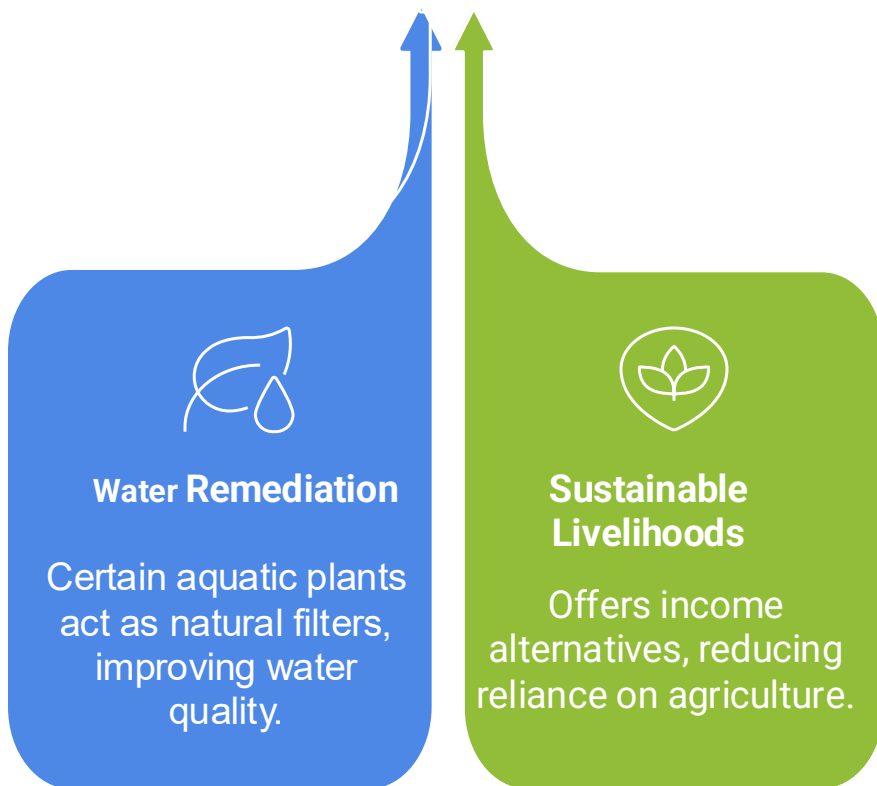
ປາຍກາໝາຍ ສິນຄ້າໜຶ່ງເມືອງ ໜຶ່ງຜະລິດຕະພັນ ແຫ່ງຊາດ  
 ONE DISTRICT ONE PRODUCT ( ODOP )  
 ຜະລິດຕະພັນ ໄຄແຜ່ນເມືອງນ້ຳບາກ  
 ກຸ່ມຜະລິດໄຄແຜ່ນ ບ້ານບົມ-ບ້ານລີ້ ເມືອງນ້ຳບາກ  
 ທີ່ ບ້ານລີ້, ເມືອງນ້ຳບາກ, ແຂວງຫຼວງພະບາງ, ຄັ້ງວັນທີ 18 ພະຈິກ(11) 2022





# Environmental and Social Benefits

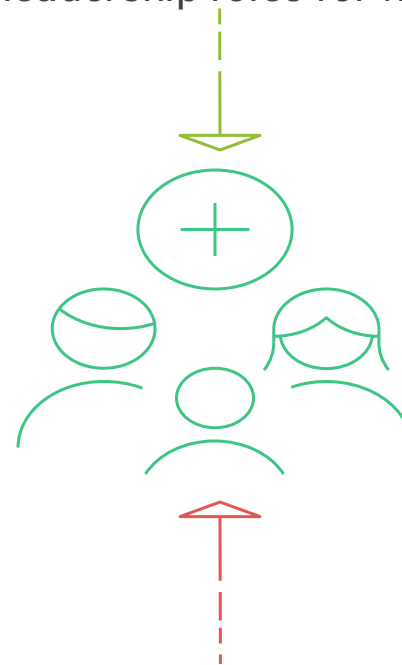
## Environmental Benefits



## Social Benefits

### Women's Empowerment

Provides financial independence and leadership roles for women



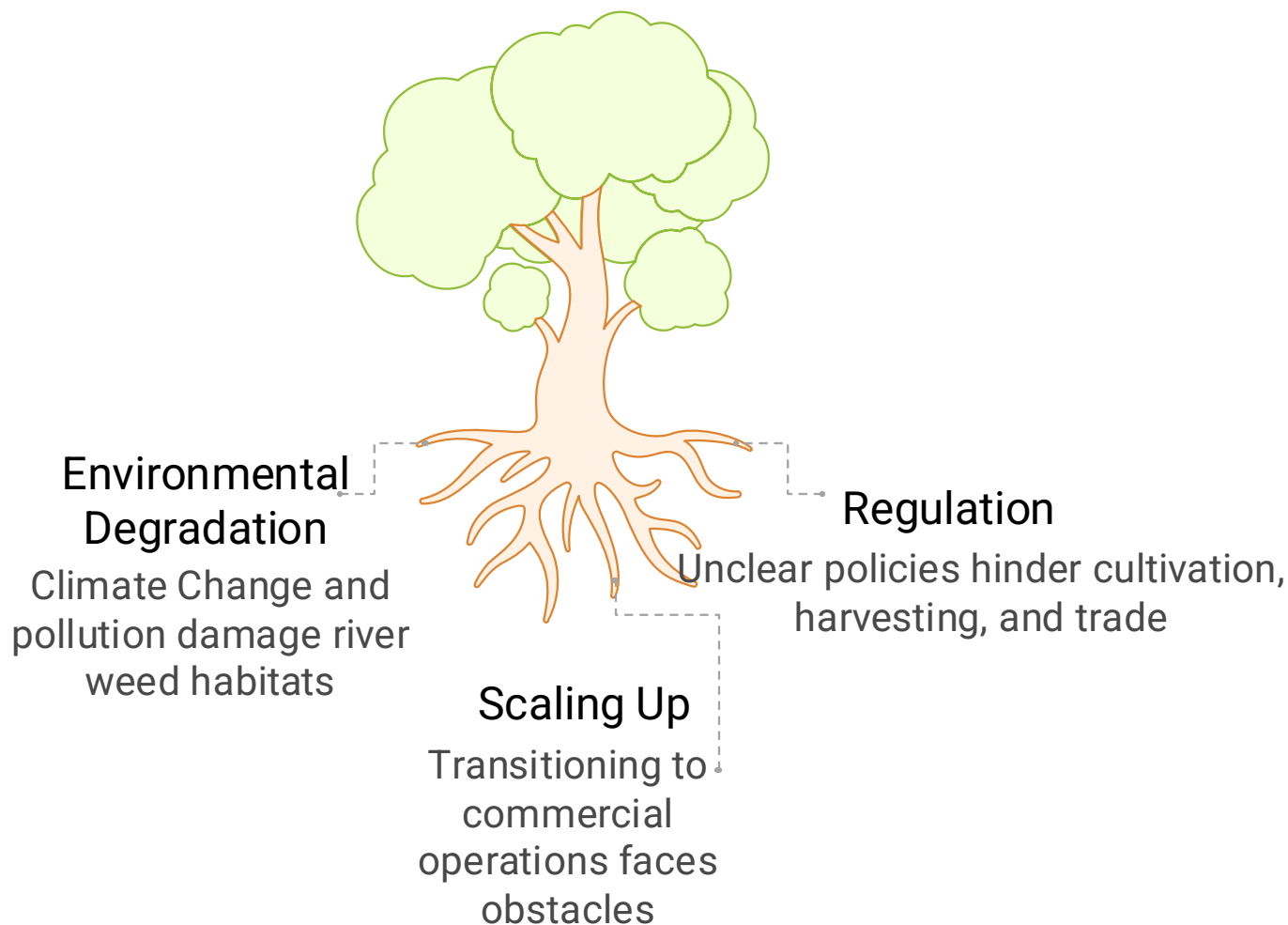
### Food Security

Enhances nutrition and diversifies food sources in rural areas



# Challenges and Government Support

## Freshwater Weed Industry small scala Stalled by Multiple Challenges





# Government Support



Aquatic Animal and Fisheries Law



## Government Focus

The government's commitment to sustainable development and the blue economy.



## Policies Framework

Laws and strategies designed to protect and manage aquatic resources.





# The Future of the Freshwater Weed Industry small scale

- ✓ **Advanced Cultivation:** Implementing techniques to increase yield and quality while managing potential risks.
- ✓ **Product Diversification:** Exploring new products such as fertilizers, animal feed, and other commercial goods.
- ✓ **Export Potential:** Tapping into regional and international markets for niche products.

**Conclusion:** The freshwater weed industry small scale in Laos, while facing challenges, presents a significant opportunity for sustainable economic growth, environmental protection, and social development.



# How to Process Kai Phen



**Kob Jai**  
**Thank you for your  
attention**

