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# Core Activities of the Pilot Project

**Title:** : Climate-Smart Crop Residue  
Management in Lao PDR

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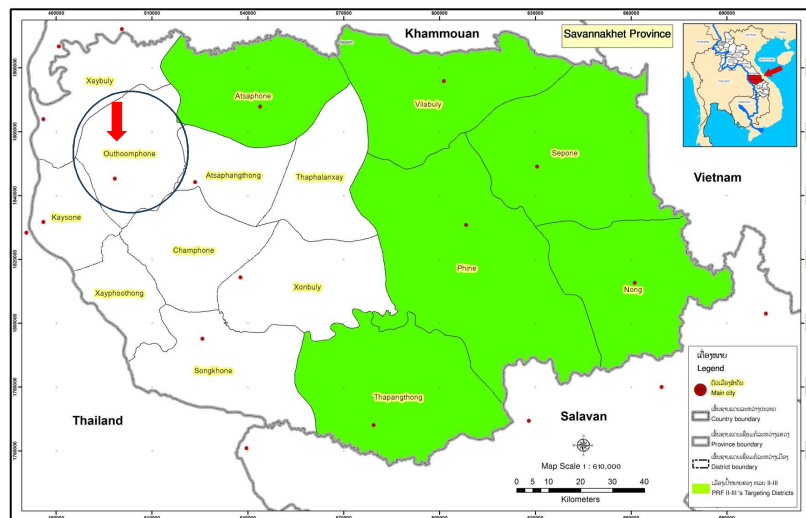
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# Introduction



- Project Title: Climate-Smart Crop Residue Management Practices in Lao PDR
- Duration: April 2025 – March 2027 (24 months)
- Implementing Partners:
  - Department of Agriculture Extension and Cooperatives (DAEC), Ministry of Agriculture and Forestry, Lao PDR
  - Savannakhet University- SKU
  - Centre for Sustainable Agricultural Mechanization (CSAM), ESCAP
- Target Location: Khangphosee Village ,  
Outhoumphone District, Savannakhet Province, Lao PDR



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# Background and Rationale

- **Problem Statement:**

- Unsustainable crop residue management practices, such as **burning**, contribute to **greenhouse gas emissions, soil degradation, and environmental harm**
- Farmers lack access to mechanization-based solutions and knowledge for **sustainable residue management**.
- The project introduces smart, sustainable methods.

- **Opportunity:**

- Promote climate-smart practices that **reduce reliance on crop burning and enhance soil health**.
- Support small-scale farmers in **adopting integrated straw management systems**.





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# Objectives of the Pilot Project

- Establish a pilot demonstration site for **integrated straw management**.
- Build capacity for farmers, technicians, and **policymakers**.
- Promote regional knowledge exchange and **sustainable mechanization**.





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# Key Activities

## • Year 1:

- Identify pilot site and conduct baseline surveys.
- Organize inception workshop.
- Equip pilot sites with required agricultural machinery. (construction facilities: rice hay storage, green house, Mushroom house... Value chain )
- Conduct field trials and adapt machinery to local conditions.

## • Year 2:

- Conduct awareness and demonstration sessions. (family run)
- Organize multistakeholder dialogues and training programs.
- Document and share project outcomes through policy briefs and regional platforms.



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# Overview of Key Project Activities

- Six core activities are being implemented under this pilot
  - A1- Select the site with farmers
  - A2- Launch with this workshop
  - A3- Bring machinery like compost houses, choppers
  - A4- Test these tools on real farms
  - A5- Adjust machines to local needs
  - A6- Raise awareness and shape policy
- These activities cover everything from community engagement to machinery use, field testing, and policy advocacy
- Timeline: April 2025 – March 2027



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# Activity A1 – Identification of Pilot Site

- Conduct participatory meetings with farmers and stakeholders
- Carry out baseline data collection on:
  - Soil quality and fertility
  - Mechanization availability and gaps
  - Role of women in farming
- Use collected data to select and validate a suitable pilot site
- Timeline: April – May 2025 (Q1, Year 1)



Area: 3.80 ha or 9.40 ac

Khangphosee Village, Outoumphone District

<https://maps.app.goo.gl/7grhvzZSd2Rv2TfX9>



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## Activity A2 – Inception Workshop

- Official launch of the project with key stakeholders
- Present findings from baseline assessments
- Raise awareness about the environmental risks of straw burning
- Gather feedback to refine project implementation
- Timeline: **April 2025 (Q2, Year 1)**



# Activity A3 – Equip Pilot Sites

- Provide key machinery and facilities:
  - Compost house construction
  - Reaper binder for rice and corn
  - Straw chopper for fodder preparation
  - Power tiller with rotary cutter attachment □
- Additional machines in Year 2:
  - Baler and rake for straw collection
  - 3-wheel dump trailer for transportation
- **Timeline:** Q3–Q4, Year 1 and Q1–Q2, Year 2





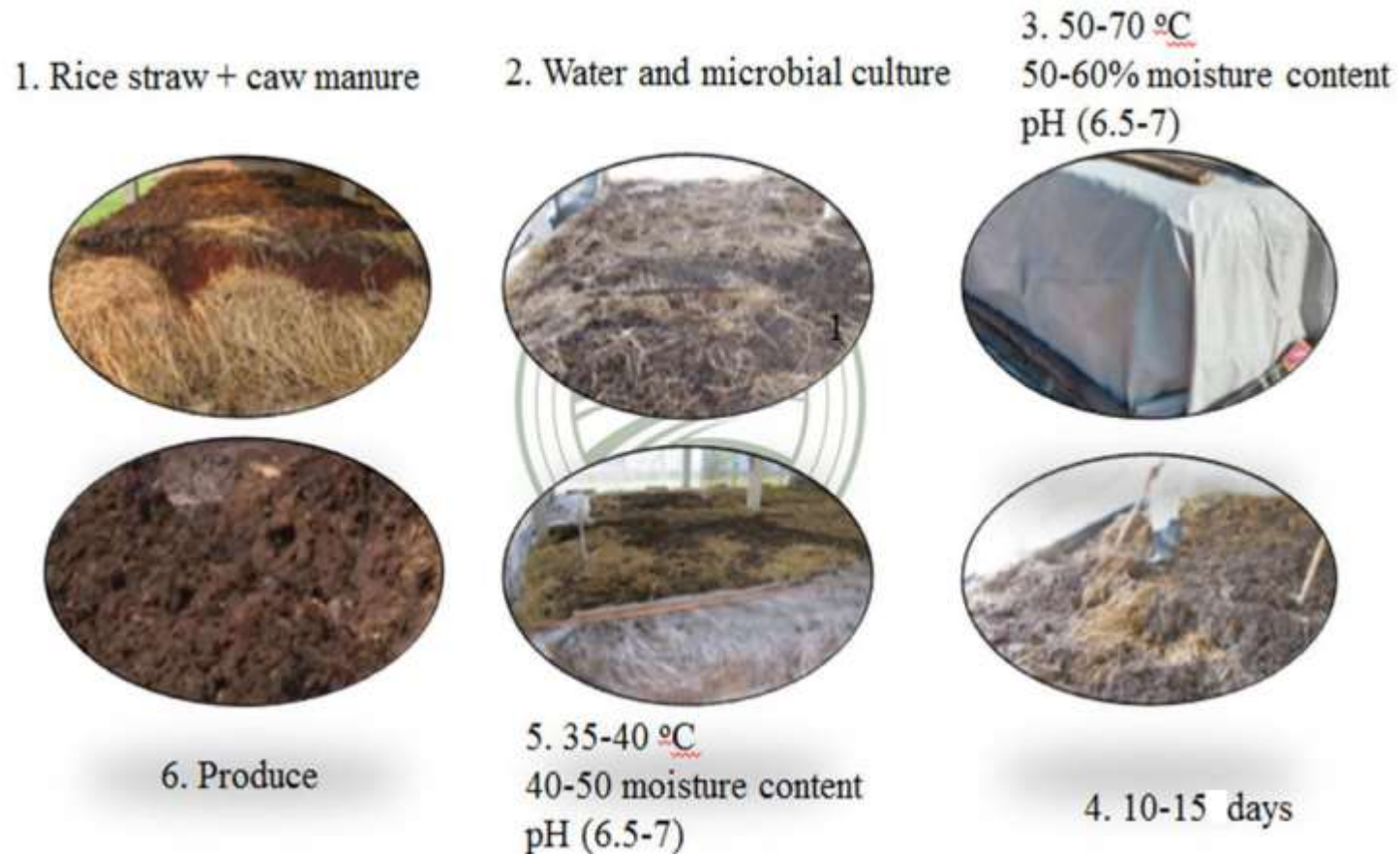
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## Activity A4 – Conduct Field Trials

- Test new equipment in real farm conditions
- Train farmers and local technicians on use and maintenance
- Implement straw management techniques:
  - Straw-based composting
  - Straw as livestock feed
  - Trials in mushroom cultivation using straw
- These trials provide evidence of what works best **Timeline: Q4, Year 1 to Q2, Year 2** □





Produce organic fertilizer from rice straw (rice straw composting technique)

Mushroom cultivation processing (Indoor cultivation)



Mushroom cultivation processing (Indoor cultivation)



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Mushroom house



Step of straw management and processing (Outdoor cultivation)



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## Activity A5 – Adaptation/Modification of Machinery

- **Modify machines** based on performance in the field
- **Adjust tools for local soil, crop type, and handling capacity**
- Provide continuous technical assistance during field use
- **Document technical lessons learned**
- **Timeline: Q4, Year 1 to Q2, Year 2**

## Activity A6 – Awareness Raising & Policy Engagement



- Organize two public awareness events to showcase results
- Conduct one training on custom hiring service models
- Prepare a policy brief to promote straw management at national level
- Facilitate a national stakeholder dialogue
- **Timeline:** Throughout Year 2





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# Activity Implementation Timeline

Activity	Year 1	Year 2
A1.1.1: Pilot Site Identification	☐ Q1	
A1.1.2: Inception Workshop	☐ Q2	
A1.1.3: Equipment Installation	☐ Q3–Q4	☐ Q1–Q2
A1.1.4: Field Trials	☐ Q4	☐ Q1–Q2
A1.1.5: Machinery Adaptation	☐ Q4	☐ Q1–Q2
A1.1.6: Awareness & Policy Events		☐ Q1–Q4



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Thank you