



# Research for Development": Experiences from the Uplands Research and Capacity Development Programme (URDP)

Simone Vongkhamho

Forest Science Research Center, NAFRI

[simonevkh@gmail.com](mailto:simonevkh@gmail.com); [simone.v@nafri.org.la](mailto:simone.v@nafri.org.la)

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# Characteristic of Uplands

- Diverse & Fragile Environment
- Remote Communities
- High Ethnic diversity
- Subsistent farming & food insecurity
- Major incidences of poverty and food insecurity are found in upland areas
- Poverty: ADB, 2001 studied 52% in the uplands VS 20% in Lowlands



# VI<sup>th</sup> Socio-economic strategic Development plan (2006-2010)- MAF's 4 goals of development Plan

1. Ensuring food security 3.3 million tons of paddy rice by 2010, meat and fish production 40-50 per capita/year
2. Commercialization of agriculture (1 billion US\$) up to 2010.



## **VI<sup>th</sup> Socio-economic strategic Development plan (2006-2010)- MAF's 4 goals of development Plan (cont.)**

- 3. Shifting cultivation  
stabilization for poverty  
reduction by 2010.**
- 4. Sustainable natural forest  
management, (increase  
forest cover to 70% by  
2020**





**Government put more effort on stabilized shifting cultivation in last decade**





# The change of the utilization of natural resources in Uplands in last decade



High demand  
on NTFP  
(over-  
exploitation)  
Peuk muaek and  
cinnamom tree  
roots





# Land use change



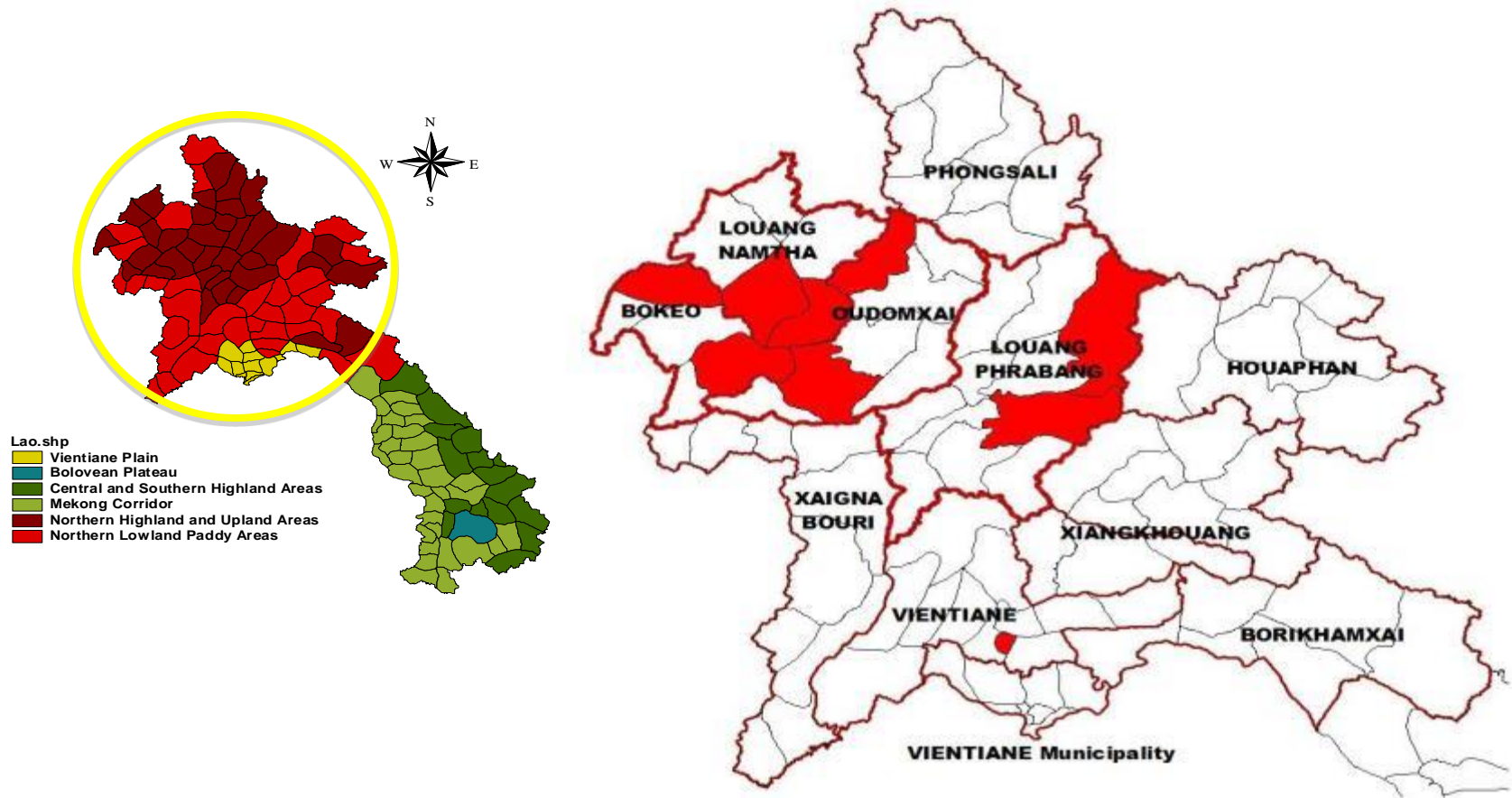
More land has been used for commercialized crops)



# How URDP responds to MAF's development goals?

1. Research for Technology Development and Poverty alleviation
  - Target groups: Poor Farmers (from subsistent to Commercialised oriented production)
2. Research for Capacity Development
  - Improve the Capacity of Research Centres (NAFRI), District, Kum Ban (Cluster Villages) and participated Farmers.
3. Research for policy and planning recommendations
  - MAF and its line departments and programmes

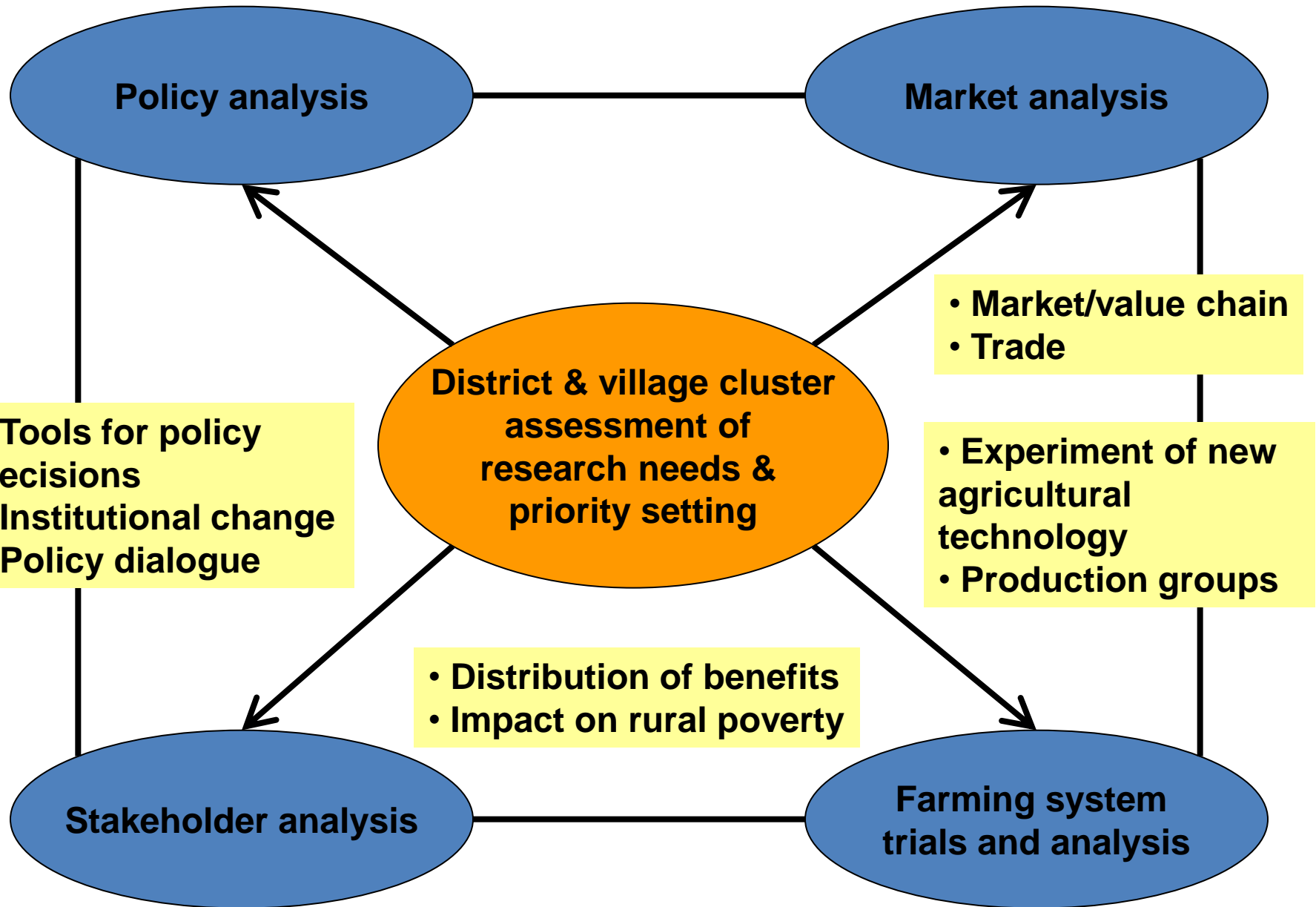
# Project Areas



1. Focus on 8 poor target district in 4 provinces (Louang Prabang, Oudomxai, Louang Namtha and Bokeo)
2. Two Phases: First Phase 2002-2006 and Second Phase 2007-2012



# Research Methodology



# Research oriented to farmers' need

## Participatory Community planning



Farmers participated in planning activities



# Annual Research Planning, Management and Review cycle



# Participatory monitoring and evaluation



Farmers participated to evaluate rice production trials



# 10 Research Areas

- 38 Research topics implemented by researchers from various national and regional research centres
- 42 Scaling-out activities implemented by district staffs

# 1. Tea

1. Natural tea survey; collecting 75 tea samples for quality analysis in Germany
2. Marketing survey
3. Planting introduced tea from Vietnam







# Rubber

1. Inter-cropping cash crops with rubber
2. Inter-cropping fodder in rubber
3. Rubber germplasm collection



# 3. Maize

1. Inter-cropping legumes in maize
2. Rotation maize with legumes
3. Maize variety trials
4. Production group formation & Value added to maize





# 4. Livestock

## 1. Improved cattle production

- Fattening Cattle
- Production group formation
- Improved forage production
- Improved husbandry (housing)



# 4. Livestock (cont.)

## 2. Improved pig production

- Feed processing and feeding
- Housing and health





## 4. Livestock (cont.)

### 3. Improved Poultry production

- Feed and feeding
- Housing and health



## 4. Livestock (cont.)

### 4. Improved goats production

- Feed and feeding
- Housing and health





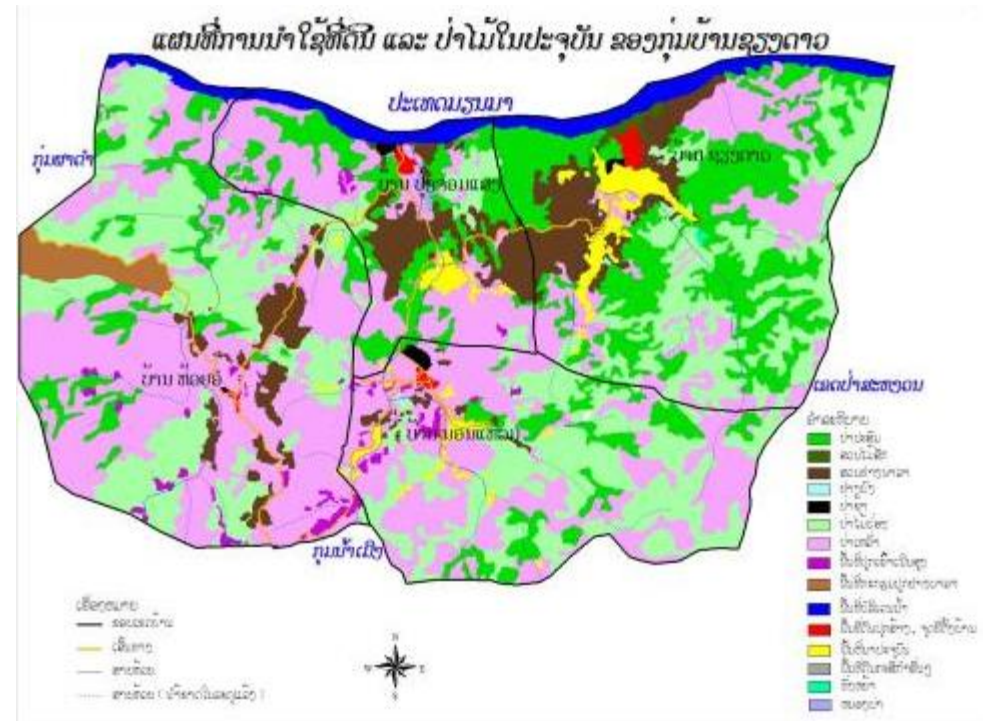
## 4. Livestock (cont.)

5. Commercialized forage seed production in Phonthong cluster village; produced about 5 tones annually



## 5. Land management

1. Land use planning at cluster village level (Xieng Dao)
2. Conducted a field survey and soil sampling to determine land suitability
3. Conducted a trial on sloping land management





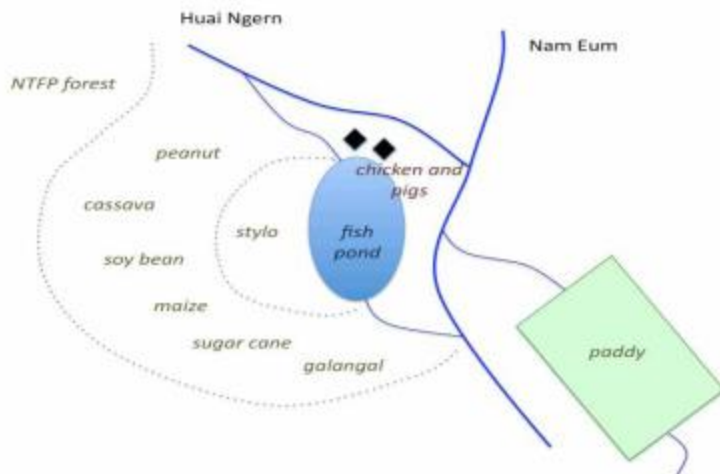
## 5. Natural forest and biodiversity management

1. Community natural forest management at cluster village level (Xieng Dao)
2. Field survey to determine the density of NTFPs
3. Monitoring and evaluation of community forest management in Nomo



## 5. Natural forest and biodiversity management (Viengkham district) collaboration with CIFOR

1. Training staffs to use the tools (GPS)
2. Demarked the villages' boundary and conducted land use planning in 6 relocated villages
3. Finished land use planning for two villages (Phakhong and Phousaly).





## 6. Sticklac

1. Conducted marketing survey in 5 districts of 3 provinces (LPB, ODX, LNT)
2. Conducted on-farm trials of sticklac production



# 7. Vegetables and fruit trees

1. On-farm trials of Fruit tree and vegetable production
2. Training farmers on management and propagation of fruit trees
3. Conducted vegetable marketing survey in 3 districts





## 8. Fisheries

- ❑ Conducted trials on improved fishery productivity of farmers' aquaculture in two districts (Phonthong and Nalea)
  - 64 participated farmers in two districts



## 8. Fisheries (cont.)

- ❑ Training farmers and districts staffs on fish fingerling production
  - Constructed facilities and conducted field demonstration on fish breeding and fish fingerling production



Training farmers and districts staffs on fish fingerling production



## 8. Fisheries (cont.)

- ❑ Village participatory planning for natural fish management (Wasangouan/conservation deep pond) in Nalea, Luangnamtha province
  - 9 Wasangouan in 3 villages



# 9. Rice (Lowland and upland rice)

- ❑ Rice variety trials to improve lowland rice productivity
- ❑ Cold tolerant rice variety trials for second crop rice production in Naxeingdy, Houn district.
- ❑ Upland rice variety trials and multiplication of upland rice seed in 8 districts



Rice planting techniques  
(transplanting and direct-seeding)



Cold tolerant rice variety trials



Upland rice variety trials



# 10. Technical service centre (TSC)

1. Determined mandate of TSC
2. Improved information and research activities at TSC
3. Training and Demonstration activities



# Research Results and Impacts



# The extension of research results into Large scale



**Farmer training on production in Pha Oudom district**

# The extension of research results into Large scale



**Commercialized vegetable production in Phonxay**



# The extension of research results into Large scale





# The extension of research results into Large scale



Cattle and goats production in Phonxay district



# The extension of research results into Large scale



Improved pig and poultry production

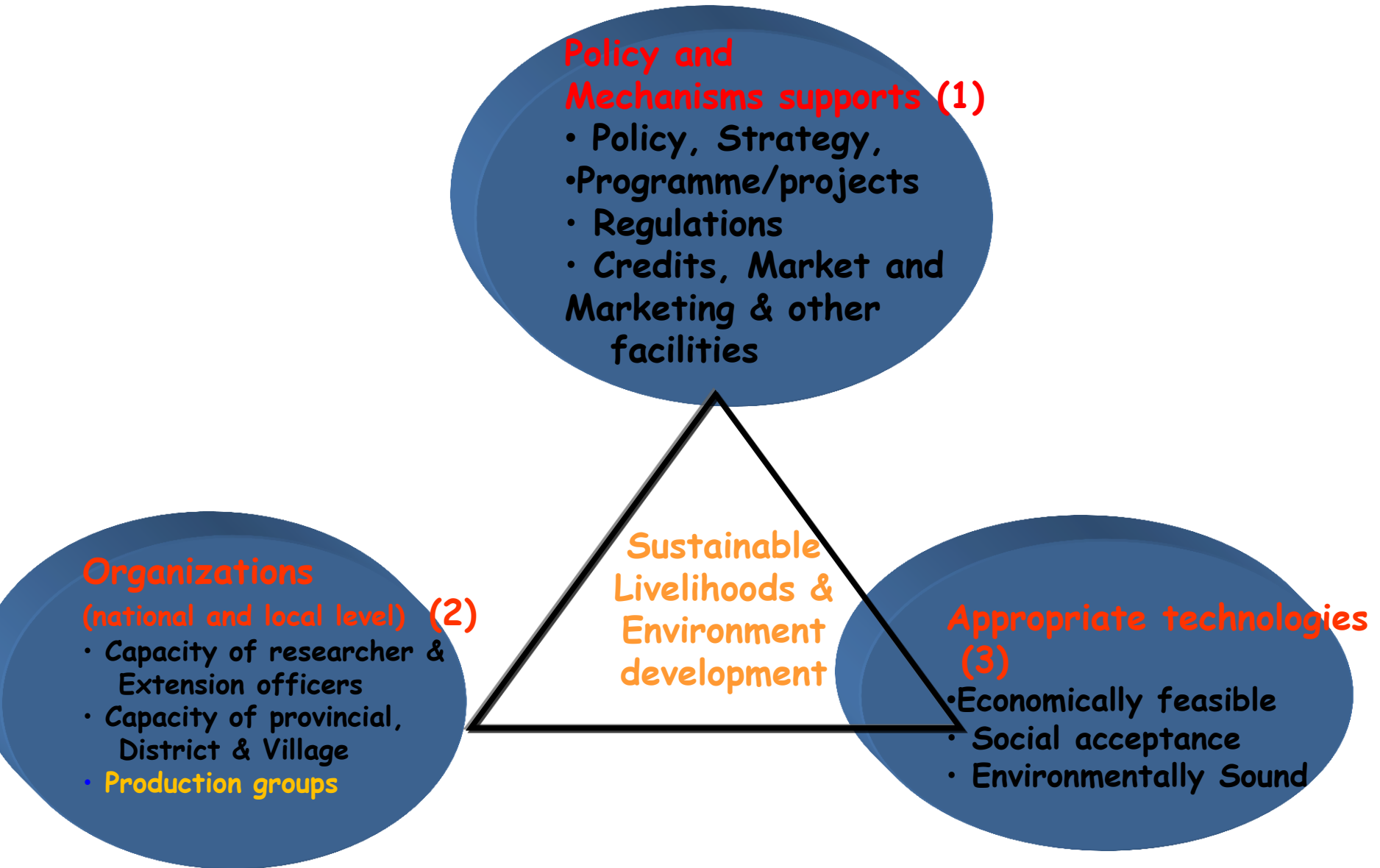
# The extension of research results into development (Phonxay district)

- The PMO and provincial governor meeting 21 April 2010 “New options for stabilized shifting cultivation and poverty alleviation through commercialized production”
- Stakeholder meeting 18-21 May 2010 in Phonxay district
- Technical team; developed project proposal for an integrated rural development in Phonxay district.





# Lesson Learnt “to be success”



# Conclusion & Recommendation

- From the PM&E indicated that the research results have been scaling up and extend into development
- New techniques (technologies) to be applied and adapted by farmers a range of institutional mechanisms need to be put into place so that farmers have access to the appropriate support and market structures,
- Formation of production group and/or Farmers association and support agri. products processing, marketing and linking farmers to appropriate input i.e. banks/credits are key importance for agricultural development in uplands,



## Conclusion & Recommendation (cont.)

- Improve the capacity of district and cluster villages through technical service centers are an important factor for the dissemination and adoption of technologies and approaches
- Strongly participation of stakeholders (including govern. and private sectors) are key importance for agricultural development in uplands.
- The continuing support of Lao Agricultural Research Fund (LARF) at NAFRI would be a potential to continue research for development in Uplands

Thank you