

Institutional tools for the promotion of Conservation Agriculture in Lao PDR



ASIA INVEST

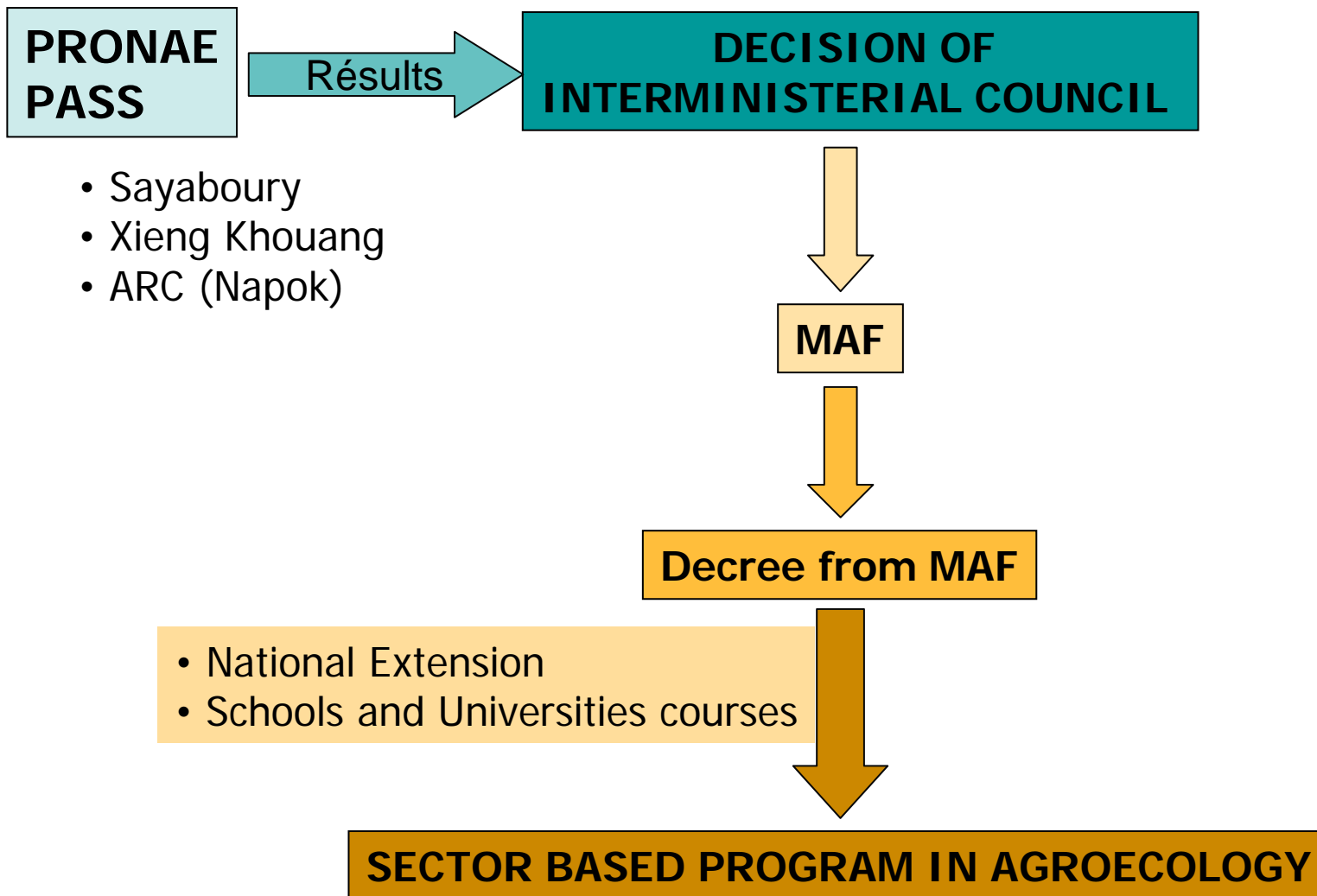


Outline

- Context and approach
- Structuring at National level
- Structuring at local level
- Training
- Teaching
- Communication tools

Context

Context



Approach

Definition of a national strategy based on three principles:

Approach

1. Need for integrating the natural capital in the rural development policies



















Document obtenu sur le site <http://Agroecologie.cirad.fr>



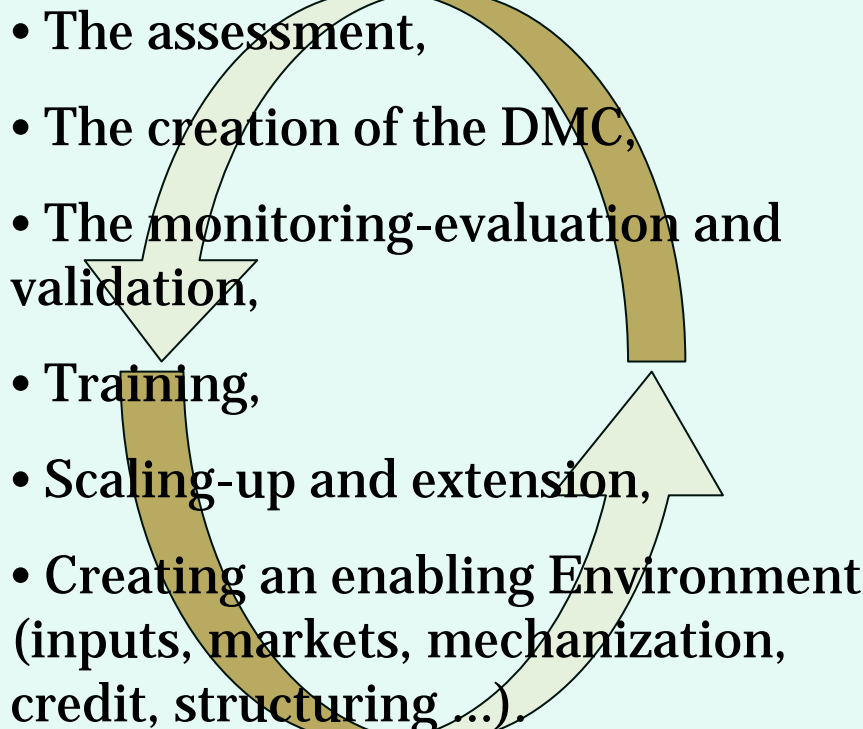
Approach

2. Need for an iterative approach **integrating continuously**

All the stakeholders

- Farmers,
 - Technicians of the projects,
 - Extension workers of DAFOs,
 - Research,
 - Private sector,
 - Banking Sector,
 - Decision makers,
 - Donors...
- 

All the activities

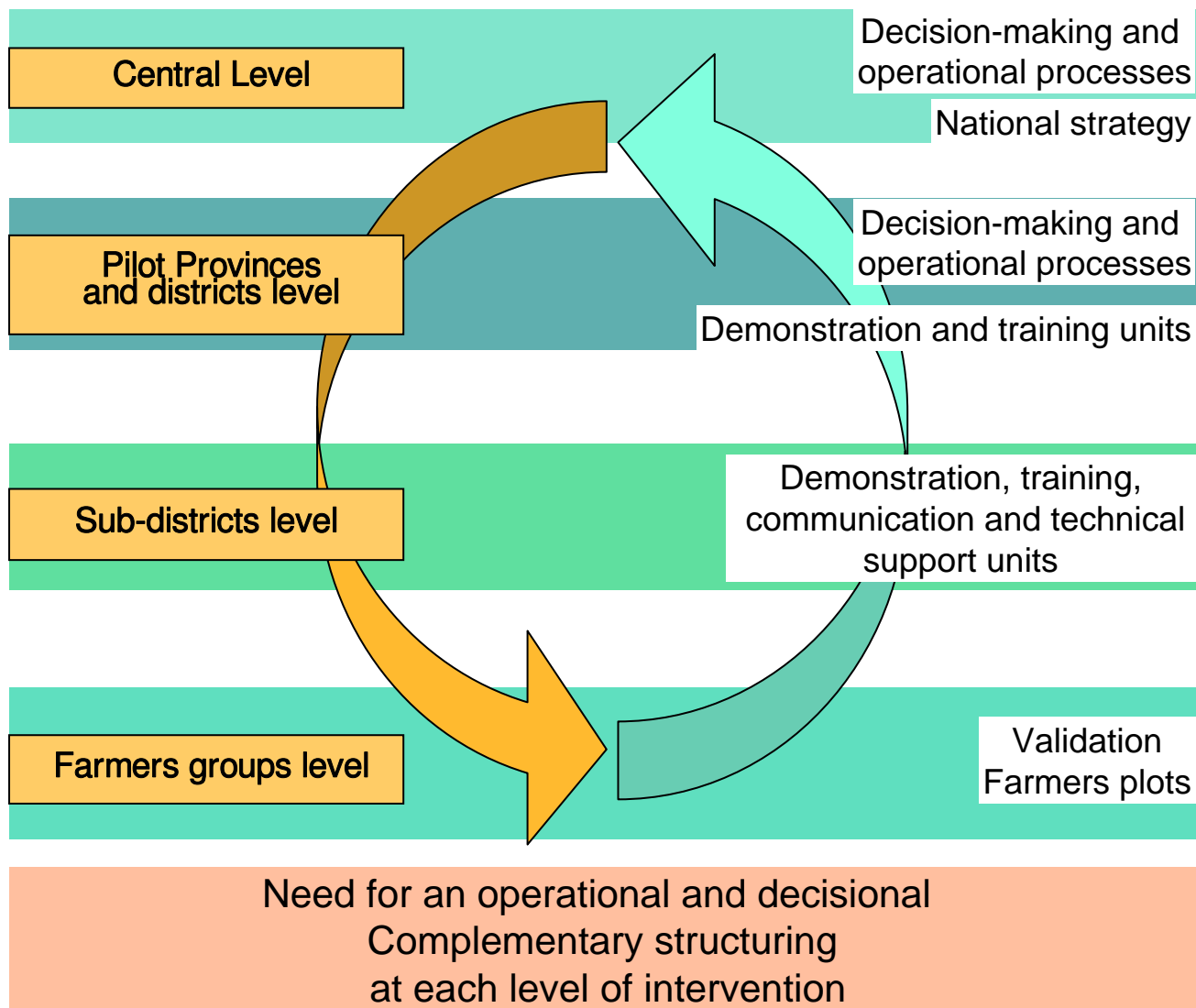
- The assessment,
 - The creation of the DMC,
 - The monitoring-evaluation and validation,
 - Training,
 - Scaling-up and extension,
 - Creating an enabling Environment (inputs, markets, mechanization, credit, structuring ...).
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Approach

3. Need for defining at the national level and the local level:

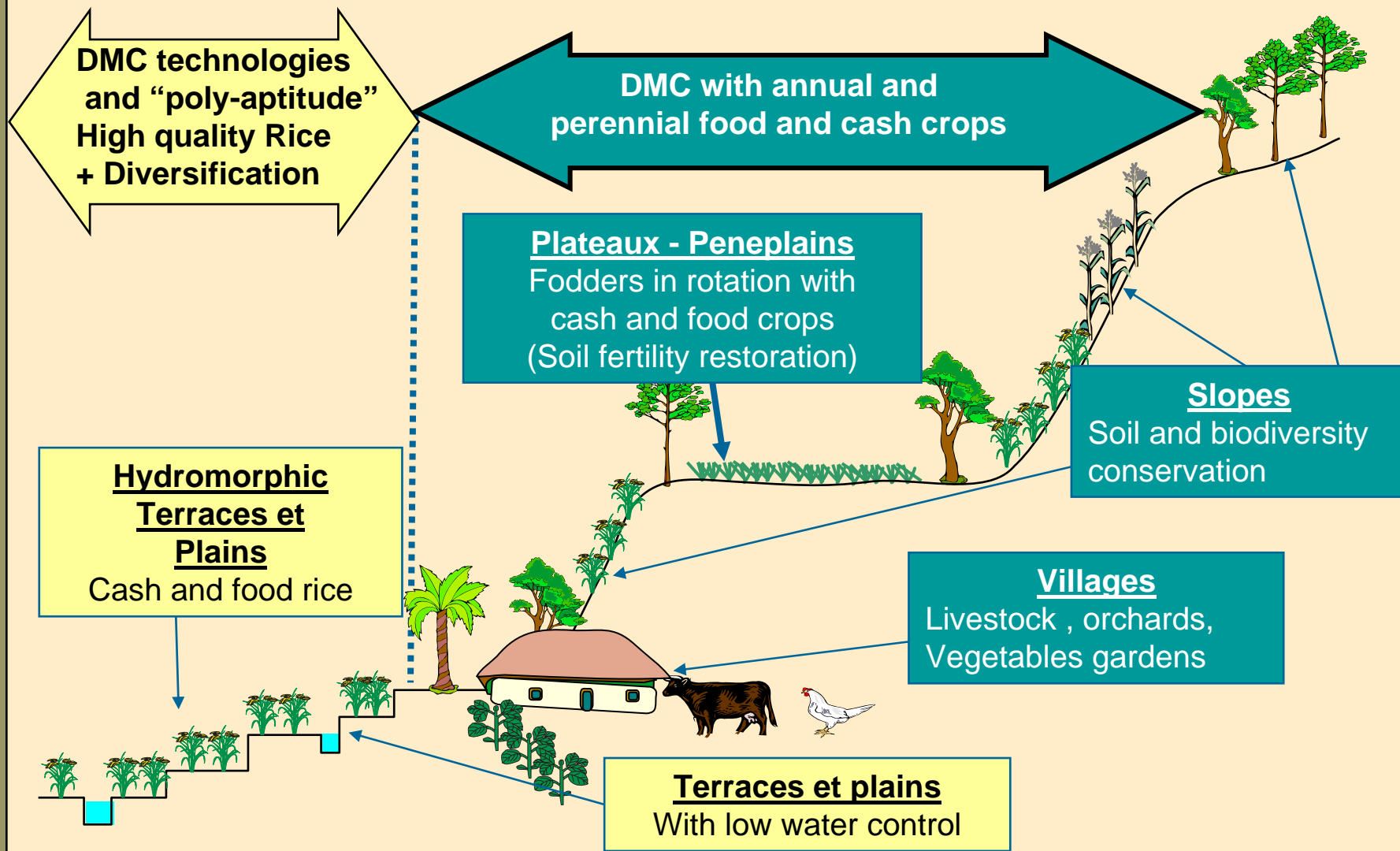
- Decision-making processes allowing to define the priorities in term of dimensioning and according to the socio-economic and environmental challenges,
- the procedures allowing to implement these priorities,
- Methods for the capacities building by training and teaching,
- Methods to finance the extension of Conservation Agriculture,
- Methods to share information among the whole of the actors, including the decision makers and the backers.

Approach



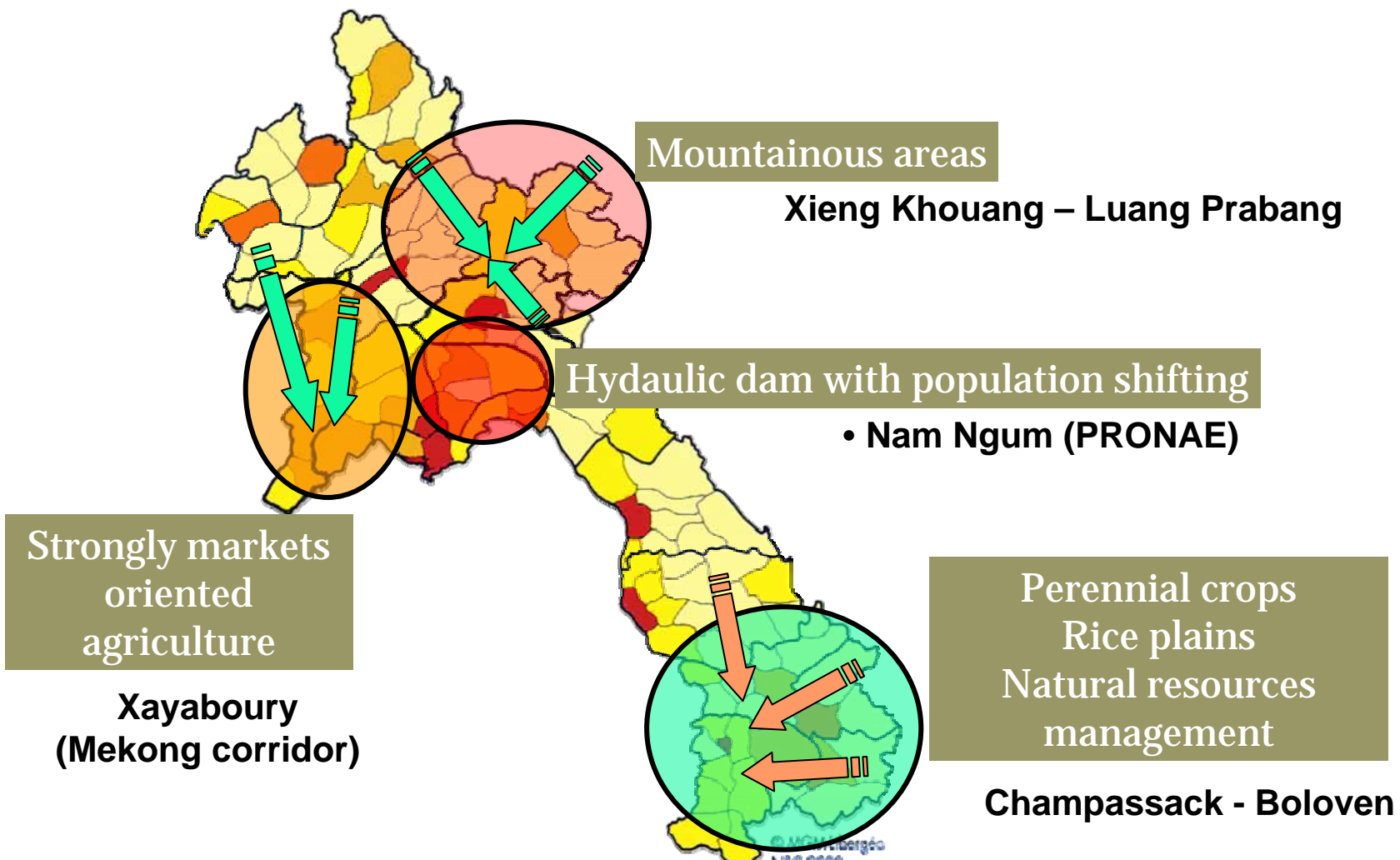
Approach

Main bio-physical and socio-economical challenges



Approach

Representative areas of socio-economic diversity and the environmental and social main issues



Approach

Need for defining:

- A **National Action Plan in Agroecology** defined and implemented according to a national structuring,
- and some **Provincial Action Plans in Agroecology** defined and implemented at the local level.

Structuring at the national level

- **Decision making processes**

Decision making processes are ensured in MAF by the Department of Planning (DOP) in dialog with:

- The Permanent Secretariat of the Minister,
- Various technical Departments of the MAF: Agriculture, Breeding, Forests, Irrigation...
- The Department of Human Resources,
- The Institutes and Centers (NAFRI, NAFES).

The decisions are transmitted to the Provinces by the correspondents of the MAF attached to each concerned Province.

Structuring at the national level

- **Operational processes**

Operational processes are ensured in MAF by:

- Various programs working in agroecology (PROSA, PRONAE and PASS)
- Development projects rural,
- Centers of services providing established on the level of under-districts (Kum Ban Pattana),
- And various technical departments: Agriculture, Breeding, Forests, Irrigation...

The provincial correspondents of MAF are in charge of the follow-up of the implementation of these activities.

Structuring at the national level

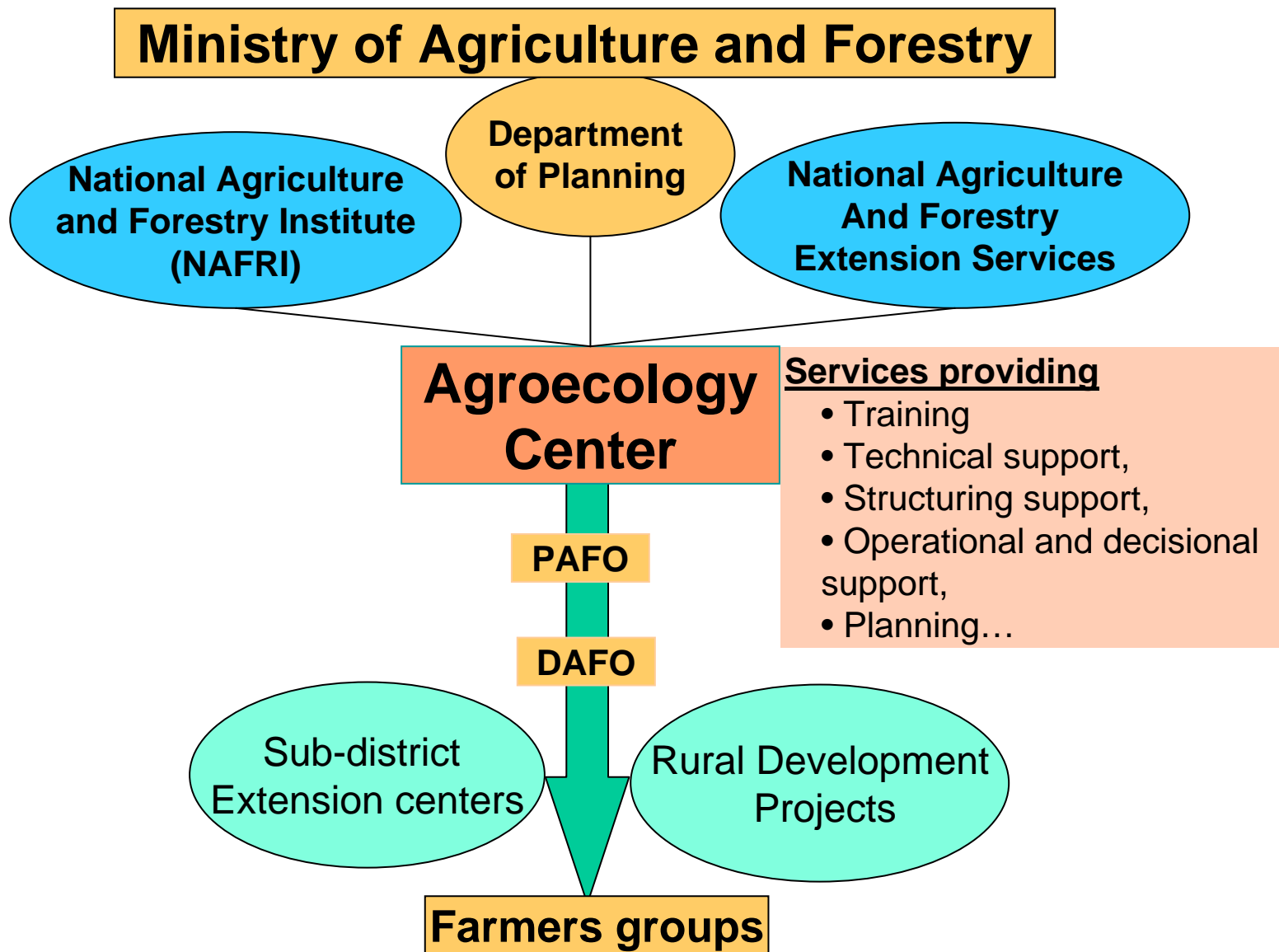
- **Services provider Center**

A single structure having for functions:

- Technical services providing,
- Support to planning and implementation,
- Research for creation and adapting innovations,
- Training,
- The promotion of the integrating and systemic approach developed and implemented by the projects in agroecology.

These functions can be proposed to the private sector, structured if possible (groups, associations...), to the projects, to the local agencies and to the national authorities.

Structuring at the national level



Structuring at the local level

Provincial, district, sub-district, villages, and farmers levels

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Provincial, district, sub-district, villages, and farmers levels

Local planning :

- engages all the local stakeholders in a mobilizing plan for the future allowing the valorization sustainable of the human, natural and agricultural local resources,
- allows them to translate this project in plans and action plans which they control,
- creates conditions so that the local actors can negotiate between them and with the official and private sector.

Structuring at the local level

Local Planning: Provincial Action Plan in Agroecology

It must include the short, medium and long terms defined from:

- a current local situation,
- a shared diagnosis,
- the implementation of a very short term concrete program,
- and the definition of a long-term local development plan (4 or 5 years).

Structuring at the local level

Need to well define:

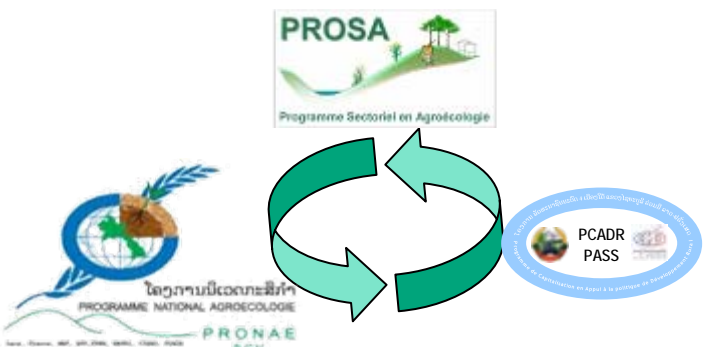
- Decision-making processes,
- the procedures allowing to implement the decisions,
- Methods for the capacities building by training and teaching,
- Methods to finance the extension of Conservation Agriculture,
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Provincial workshops 2007



120 people in Xieng Khouang Province

- Farmers
- Pafo-Dafeo
- Province-Districts
- Private, trade, banking sectors



Provincial workshops 2007



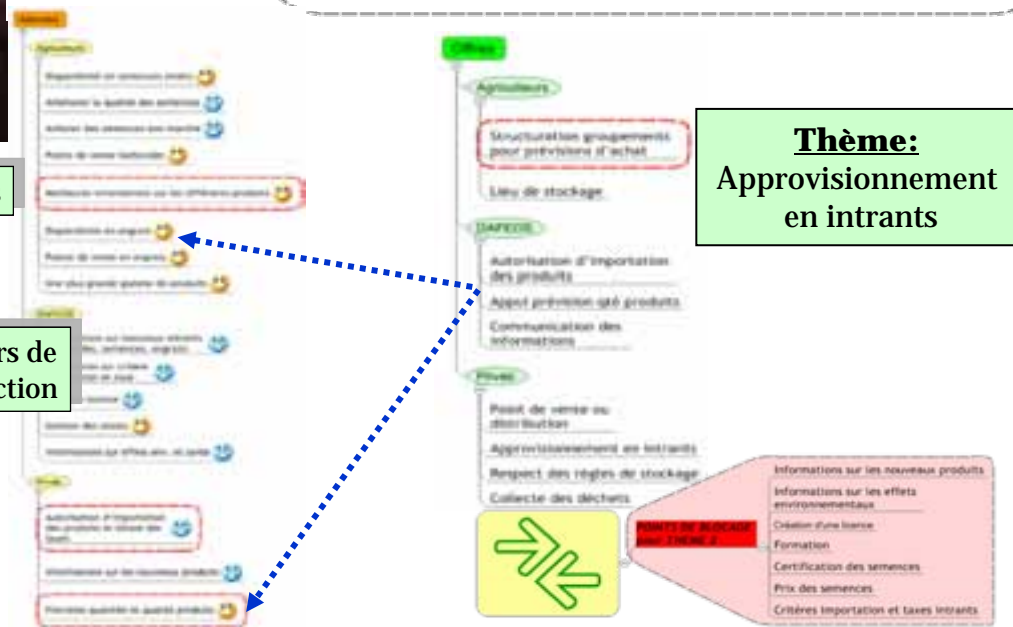
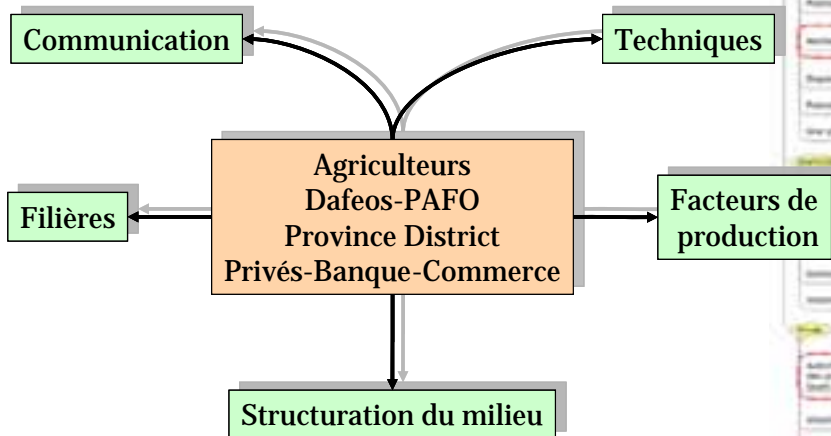
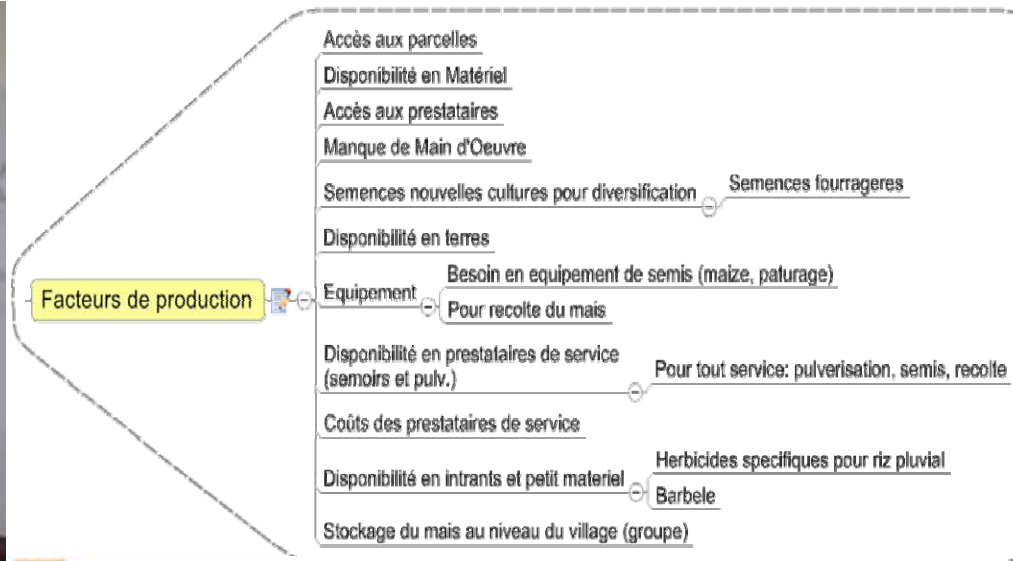
120 people in Xayaboury Province

- Farmers
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- Province-Districts
- Private, trade, banking sectors



Provincial workshops 2007

Participative and integrative approach



Thème:
Approvisionnement en intrants

Provincial workshops 2007

Priority axes of thinking, dialog, negotiation and action:

The following topics are evoked like federators, concrete and priority:

- Organizational, decisional and legal structuring of the PAPAs,
- How to finance the Provincial Action Plans in Agroecology,
- Implementation of a training programs for the whole of the actors,
- Professional structuring (farmers groups, traders associations...).

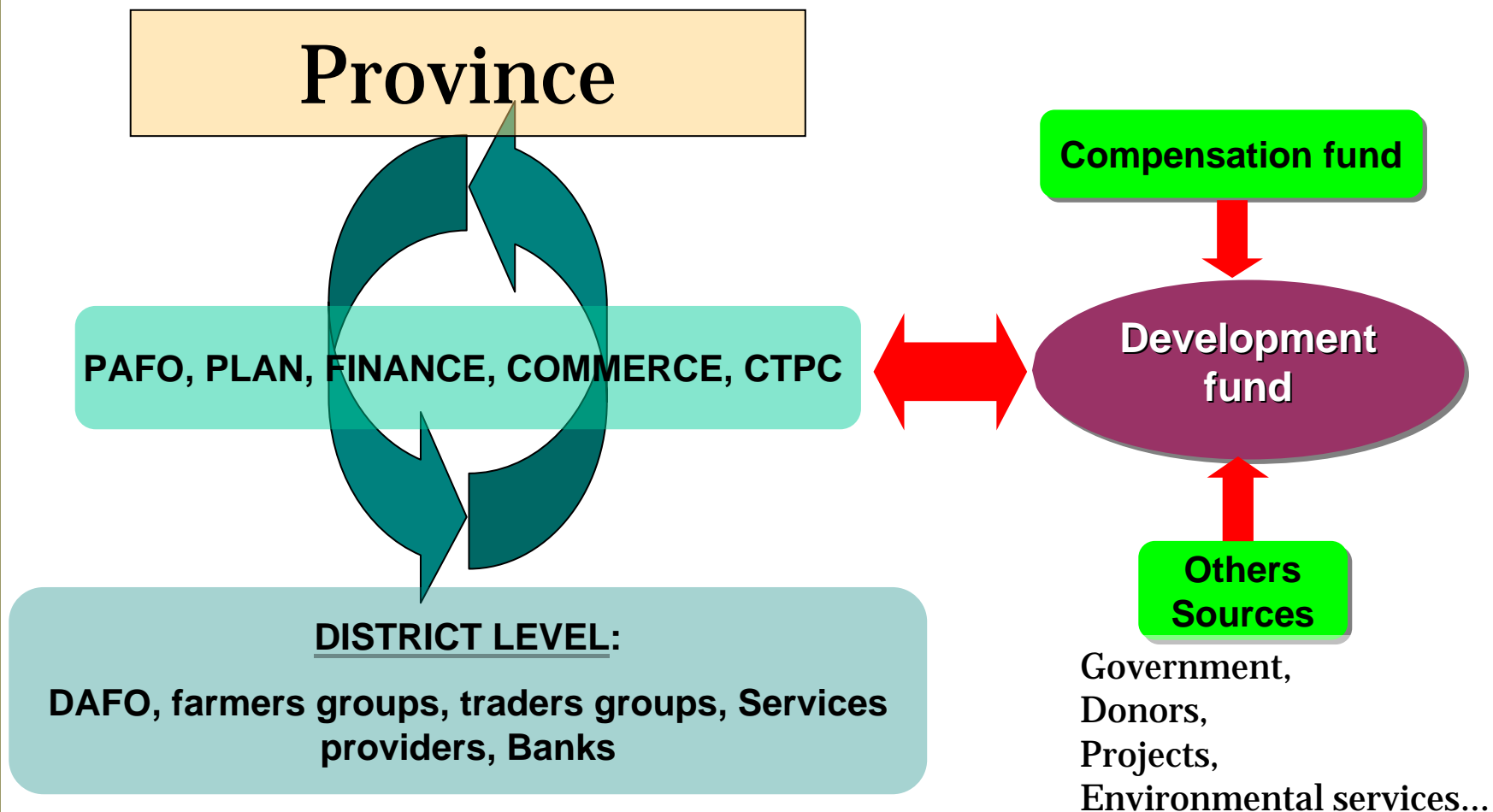
Financing PAPAs

Main potential sources of financing:

- Development funds,
- Compensation funds,
- Individual and collective credit,
- Saving,
- Subsidies,

Financing PAPAs

Study case of Xayaboury Province: Development Fund at Provincial level

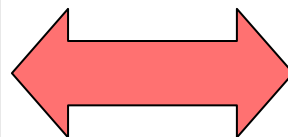


Financing PAPAs

Study case of Xayaboury Province: Compensation Fund

Compensation for

Huge environment degradation due to conventional practices for corn production exported to Thailand market



Taking away at the border of 1 \$ per ton of exported corn (potential more than 180 000 tons/year)

Financing PAPAs

Possible use of the fund of development

- Complementary fund for the DAFO and the NAFRI for research and the extension,
- Capacities building of the various actors (technical support, sensitizing, training, trips studies,...),
- Structuring of the actors (groups),
- Projects to submit to donors,
- Definition of specific credit lines and implication of the banking environment,
- Studies of environmental impacts and defining Payments for Environmental Services.

Training

Who ? The target groups

- Farmers,
- DAFOs, Technicians of Provincial and sub-district Centers, Technicians of Rural Development Projects, Technicians of the Services provider Center,
- Trainers,
- Private sector,
- Researchers,
- Teachers,
- Students

What ?

The main objective is training for the agroecologic practices included the choice, the setting up, the management and the fine tuning of the DMC.

What ?

But to extend Conservation Agriculture, it is also needed to train about:

- **how to structure the stakeholders (farmers groups, traders associations, decisional and operational processes...,**
- **economic domain: provisioning of inputs, management of the credit, transformation of the products...,**
- **decisional capacity according to the rural development policies and the need to integrate the natural capital,**
- **and capacity of dialog and negotiation with the others partners of the official sector and the private sector.**

What ?

Particular skills are then necessary in order to reinforce the capacities:

- To analyze and diagnose agrarian realities to define the priorities of rural development,
- To identify and test adapted innovative alternatives DMC,
- To define more powerful forms of organization and structuring,
- To acquire the instruments and methods of follow-up-monitoring.

How ?

Keys of success:

- Training is anchored in reality;
- Training takes into account the knowledge of each one;
- Training includes practical but such theoretical aspects which will be able to explain and justify the new practices;
- Training is organized in successive modules, each module having a particular significance in itself and preparing at the same time later acquisitions.
- The effectiveness of training is directly related of a true dialog and a horizontal training link between the trainers and the recipients;
- Need of follow-up in order to check if training caused changes of practices and behavior, the difficulties encountered in their implementation...

How ?

Need for defining a minimum level of knowledge and know-how to gain according to the category of stakeholders and their specific functions:

<u>Minimum level to gain</u>	Knowledge	Know-how
Farmers	1	2
Technicians (Province, District, sub-District, projects)	2	3
Technicians of the Services provider Center	3	3
Trainers	4	4
Teachers	4	1
Students	3-4	2

1: Basic but relevant and practical level..... to 4: High level

How ?

Training is organized in theoretical and practical short and long duration modules :

- Short duration thematic training modules,
- Short duration practical training modules,
- and long duration practical training modules.



How ?

Short duration thematic and practical training modules :

- They concern the whole of the users of the same technique (examples: management of the direct seeders, use of the pesticides...).
- This training is provided in real situation (fields, cattle, by respecting the farming calendars...). It is done in the form of practical demonstrations, of fields visits organized about a precise topic.
- An important place is granted to the justifications of the techniques suggested and their constraints to their adoption.
- It is accompanied by theoretical trainings sessions.

How ?

Short duration thematic and practical training modules :



How ?

Long duration practical training modules (One cropping season) :

- Training of “specialists” charged from their functions (DAFOS, service providers) to have a technical function.
- The objective is to train some “multi” qualified specialists, most autonomous as possible and who use their knowledge and know-how for the collective interest.

Demonstration and training site of Ban Poua: 20 ha + 416 visitors in 2007



Demonstration and training site of Ban Poua: 20 ha + 416 visitors in 2007

- DMC in real scale (1 ha for one plot)
- 3 levels of intensification (mineral fertilization)
- Rotations of annual crops



Demonstration and training site of Ban Poua: 20 ha + 416 visitors in 2007

Cattle fattening



Demonstration and training site of Ban Poua: 20 ha + 416 visitors in 2007

Seeds multiplication



Training

Conclusion

- Training is a requirement so that the stakeholders of rural development control the technical, economic, social, environmental and cultural changes.
- The effectiveness of training is related to several factors:
 - Training must be planned and belong to a coherent strategy (Local and National Action Plan);
 - Training is inseparable from the action;
 - An effective training requires important human resources, and material, teaching and financial means.
- Training would be a public service mission which it is necessary to take into account in the rural development policies and in processes of transfer.

Teaching Conservation Agriculture

Teaching Conservation Agriculture

Inscription of agroecology in the course of Faculty of Agriculture of Nabong (Vientiane)

- Communication/Sensitizing about agroecology
- Fields Visits
- Themes of training courses to be developed as from 2008
- Study trip for the teachers and students
- Collect and synthesis of teaching documents,
- Organization of special communication days in agroecology (25 teachers in July 2008)
- Search for complementary funds (French Embassy)
- Contribution to the creation of a Master in sustainable Management of the agricultural resources
- Links to establish with foreign universities (France, Brazil, USA...)

Field visits FoA/Nabong



59 students and 8 teachers
during 7 days in 2007
21 teachers during 7 days in
2008



Field visits FoA/Nabong

Specific communication dayx in Agroecology at FoA/Nabong July 2008 (25 teachers)



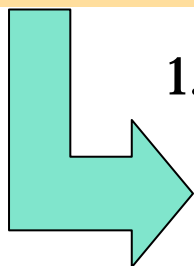
Training courses for students



Building a national network

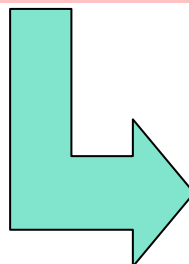
Building of a national network of schools and faculties of Agriculture to teach agroecology

- From the 28 to the 1 of November: **first three events in Conservation Agriculture** in Lao PDR



1. Regional Workshop
2. Agricultural Fair

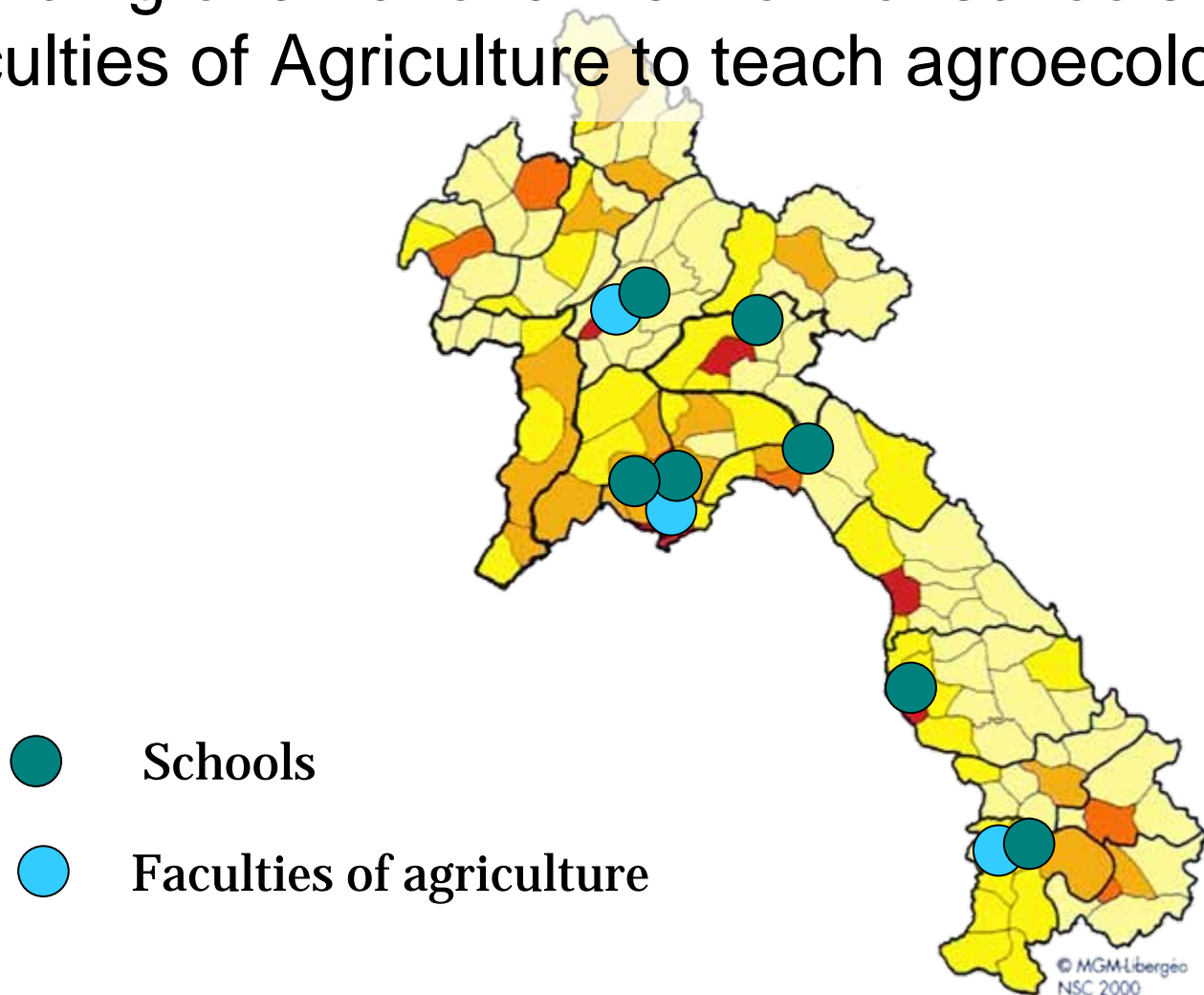
3. National days about Conservation Agriculture



- Provincial stakeholders meetings
- **Teaching sector: schools and universities**

Building a national network

Building of a national network of schools and faculties of Agriculture to teach agroecology



Building a national network

Objectives and expected outputs

- To study the relevance and the feasibility of a national network for the teaching of Conservation Agriculture,
- Progressively, to integrate schools and others faculties in a national network for teaching Conservation Agriculture,
- To exchange on the courses in order to highlight the lacks in term of teaching on the basic principles of the Conservation Agriculture and the complementarities existing between the various structures of teaching (Faculties and schools),
- To identify the requirements in teaching documents, capacity building and human resources,
- Nomination of the representatives of each institution in the national network,
- Programming of the activities 2009.

Communication tools

We note the importance of information flow between the stakeholders and the quality of the multimedia documents for the communication and sensitizing strategy.



This is why the various programs and components which work on Conservation Agriculture, PRONAE, PASS, PROSA, PCADR Central Unit, attempted to work out a joint activity of communication and realization of documents of capitalization and training.

Communication tools

Products	Expected results	Broadcasting and targets
DATABASE	Exemplary practices in CA	Website and VCD, CD-Rom Policy-makers, Agronomists, Educational institutions and International community
AUDIOVISUAL	Documentary to be broadcast on international network	TV + DVD + website, wide audience
	Thematic issues (6 to 8) to be broadcast on national network	TV + VCD + website, wide audience
	Technical issues	Lao Extension system (VCD) + website, smallholders, extension officers, educational institutions, agronomists
FIELD GUIDE	Detailed technical issues in CA	Books, Website and CD
TRAINING MATERIALS	Field guides for trainers, agronomists and educational institutions	Books, Website and CD
SYNTHETIC AND SCIENTIFIC ARTICLES	Scientific information in CA (characterization of no-till systems ; adoption processes and methodology)	Articles, scientific community + website

Conclusion

To ensure a sustainable strategy of development of the agroecology in Laos, it is necessary:

- To precede in a integrative and participatory way since, only the direct and volunteer involvement of each actor will make it possible to make sure that the objectives and the means mobilized to achieve these goals are well shared and accepted by each one,
- To approach jointly and in close interaction with the technical aspects all the socio-economic favorable conditions for the appropriation, the diffusion and sustainability of dynamic in progress.

Conclusion

In particular, it will be necessary to take into account :

- **Legal and lawful aspects:** Making contract between the actors, Policies of land allocation, landscape and territories management...
- **Aspects relating to the financing of the Action Plan in Conservation Agriculture:** Development funds, compensation funds, credit, saving, subsidies, individual and collective credit...
- **Human resources management, capacity building...**
- **The process of planning:** Diagnosis, concerted analyzes, objectives and priorities, programming, implementation, follow-up-evaluation...,
- **Decision making and operational processes,**
- **Processes of transfer of competences and responsibilities, in particular associated with the communication and the training on the technical sides but also on organizational and decisional aspects.**

Thank you for your attention