



Synthesis of scientific priorities MARD - CIRAD 2009-2013

MARD-CIRAD meeting
Hanoi, May, 29th



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The research platforms in MARD-CIRAD partnership

PCP-MALICA

Markets and agriculture linkages for cities in Asia
Nguyen Van Bo (Vaas) / Dao The Anh (Cirad)

PCP-PRISE

Risks associated with the intensification of livestock productions
Truong Van Dung (Nivir) / Cédric Le Bas (Cirad)

Management of mountainous natural resources

Mountainous Agrarian Systems (SAM)
Le Quoc Doanh (Nomafrsi) / Damien Jourdain (Cirad)

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Main common research questions to answer

- In terms of **public policies**, how can agricultural production contribute to reduce structural inequality and poverty ?
- In terms of **food production**, how to develop safe and productive farming systems based on intensive agriculture taking into account the natural biological and ecological processes?
- In terms of **food quality and safety**, how to innovate in order to make food accessible in quantity, of nutritional quality and safe in both rural and urban areas ?
- In terms of sustainable management of **rural areas**, how can we balance the areas used for crop, forestry and animal production with other ecosystems in order to renew and preserve natural resources?
- In terms of **biofuel** development, how to use agricultural and forest biomass as bioenergy avoiding competition with food crop production ?
- In terms of **infectious disease risks**, how to anticipate and manage the sanitary risks (chemical, microbial, toxins...) linked to wild life and farm animals?

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Main common research questions to answer

- In terms of **public policies**, how can agricultural production contribute to reduce structural inequality and poverty ?

MALICA

- Integrating the poor in the stakeholders' organisation for food quality chains
- Market opportunities for small farmers in the dynamics of domestic food market
- Employment of the poor in the different types of distribution (street vending, shops, markets, supermarkets...)

PRISE

- Economy of the different farm animal commodity chains
- Involvement of the poor farmers in the management of agricultural policies (sustainable integration of agriculture and animal production)
- Adaptation of biogas technology and its socio-economic impact for the poorest farmers in the mountainous regions

NOMAFSI

- Policies to promote adoption of sustainable agricultural practices
- Development of new cash opportunities with permanent crops and bio-fuels (rubber as a new opportunity in north-west Vietnam)

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Main common research questions to answer

- In terms of **food production**, how to develop safe and productive farming systems based on an intensive agriculture taking into account the natural biological and ecological processes?

PRISE

- Socio-economy of the different farm animal commodity chains
- Management of agricultural policies for a sustainable integration of intensive agricultural and animal production
- Management of animal waste in industrial productions
- Fodder production for erosion control and sustainable livestock production

NOMAFSI

- Sustainable intensification of food production in upland areas
 - ecologically oriented production of highly competitive quality products
- Increase land and water productivity of upland terraces
- Further development of Direct Seeding Mulch-based Cropping Systems (DMC) for sloping land
- Rubber production as new cash opportunity in the mountainous regions

MALICA

- Ecological intensification of cropping and animal systems for food quality productions
- Production protocols for safe food products and geographic indications
- Evolution of quality standards in relation with changes in domestic and external markets

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Main common research questions to answer

- In terms of **food quality and safety**, how to innovate in order to make food accessible in quantity, of nutritional quality and safe in both rural and urban areas ?

MALICA

- Involvement of small farmers in the production of food quality products
- Role of private and public rules for food safety control (safe vegetables and meat)
- Social change in food consumption, consumers' risk perception
- Impact of trade opening measures on local domestic food chains
- Access of the poor to safe and diversified food

PRISE

- Epidemiology of the sanitary risks linked to the intensification of animal production (hormones, antibiotics, heavy metals, bacteria, viruses, parasites, toxins...)
- Risks linked to the management of farming practices, animal effluents of industrial production in rural areas
- Technologies of contaminant detection and analysis (microbial, chemical...)

NOMAFSI

- Sustainable intensification of food production in upland areas
 - oriented production of highly competitive safe and quality products

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Main common research questions to answer

- In terms of **sustainable management of rural areas**, how can we balance the areas used for crop, forestry and animal production with other ecosystems in order to renew and preserve natural resources?

NOMAFSI

- Increase land and water productivity of upland terraces
- Further development of Direct Seeding Mulch-based Cropping Systems (DMC) for sloping land
- Fodder production for erosion control and sustainable livestock production
- Development of new cash opportunities with permanent crops and bio-fuels (rubber as a new opportunity in north-west Vietnam)

PRISE

- Economy of the different farm animal commodity chains
- Involvement of the poor farmers in the management of agricultural policies (sustainable integration of agriculture and animal production)
- Adaptation of biogas technology and its environment impact in the mountainous regions

MALICA

- Impact of Geographic Information Systems on territorial development

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Main common research questions to answer

- In terms of **biofuel** development, how to use agricultural and forest biomass as bioenergy avoiding competition with food crop production ?

NOMAFSI

- Development of alternative sources of energy using agricultural products of the mountainous regions (jatropha, cassava, sugar cane..)

PRISE

- Adaptation of biogas technology as renewable and sustainable bioenergy
 - for the poorest farmers in the mountainous regions
 - in industrial animal production areas

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Main common research questions to answer

- In terms of **infectious disease risks**, how to anticipate and manage the sanitary risks (microbacterial, toxins, parasites..) linked to wild life and farm animals?

PRISE

- Epidemiology of the risks linked to the intensification of animal production
- Emerging and re-emerging of animal and human diseases
- Risks linked to the management of farming practices and animal effluents of industrial production in rural areas
- Impact of the transboundary diseases
- Biotechnologies of disease diagnostics

MALICA

- Risk management policy and structural impact on the commodity chains

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Formal signature of a new cooperation agreement 2009 - 2013 between MARD and CIRAD



Hanoi, May 29th, 2008

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Cam on
Thank you



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