

Louvain Cooperation

Minority Organisation for Development of  
Economy - MODE

## **Food and Economic Security and Improvement of Environment and Livelihoods (FESIEL) Project.**

From Individual to Collective Self-Support on  
Sustainable Agricultural Practices

**HEAN Saray**

Project Coordinator MODE

[heansaray@gmail.com](mailto:heansaray@gmail.com)

**Amaury Peeters, PhD**

Country Director

[apecters@louvaincooperation.org](mailto:apecters@louvaincooperation.org)

21-22<sup>nd</sup> March 2017

Angkor Paradise Hotel, Siem Reap

ACADEMIC & in SOLIDARITY





# Outline

- FESIEL Project:
  - Intervention Areas
  - Beneficiaries
  - Project location
- Individual Training & Follow-up Methods
  - Sustainable Agriculture (SA) Farmers
  - Model Farmers
- Collective Training & Follow-up Approach
  - Self-Help Group (SHG)
  - Emergence of Agricultural Cooperatives (AC)
- Research collaboration first results



# FESIEL Project – Intervention Areas

- Food and Economic Security (Result1)
- Economy and Access to Market (Result2)
- Income Generating Activities (Result 3)
- Environment Protection and Awareness (Result 4)
- Institutional strengthening of MODE organization on management and technical skills and financial sustainability (Result 5)





# FESIEL Project – Beneficiaries

- Selection Process:
  - Community Meeting
  - Individual Interview with farmers
  - Check with village chiefs and key village informants
- Beneficiary categories:
  - Women headed households/Widows
  - Poor families
  - People with disability
  - Vulnerable Families
  - People affected by diabetes, high blood pressure or other non-communicable diseases
  - Families with people living with mental problems



# FESIEL Project – Project Location

- Previous projects (2011-16): 8 communes in Kampong Thom
- 5 years program (2017-21): extend to 6 more communes (2 in Kampong Thom & 4 in Kampong Cham)







# Individual Support - SA farmers

- Sustainable Agriculture (SA) Training

- 8 days training spread over 2-3 weeks on

- > Soil fertility management;
    - > Composting techniques;
    - > IPM & Natural pesticides production & use
    - > Water management;
    - > Seed selection & conservation
    - > Crop rotation & species diversification
    - > Integrated farming practices

- Using video showing, pictures, flip charts, field visits and practices

- Follow-ups by Field Facilitators

- Monthly Informal follow-up
  - 3 times formal follow up (every 3-4 month)
  - Interview & Observations
  - Information collected in forms





# Individual Support - Model Farmers

- **Training of Trainers (TOT):**
  - Model Farmers selected among SA farmers based on performance, commitment and willingness to share experience
    - 1 full day training on how to prepare lesson plan and facilitation skills
    - using short technical videos, the use of flipcharts and reference documents produced
    - using role play technique
- **Follow up Methods:**
  - Monthly informal follow-up
  - at least 5 times of formal follow up (every 3 month)
  - agricultural technique & how to disseminate the knowledge and experience of model farmers.



# Collective Support - Overview

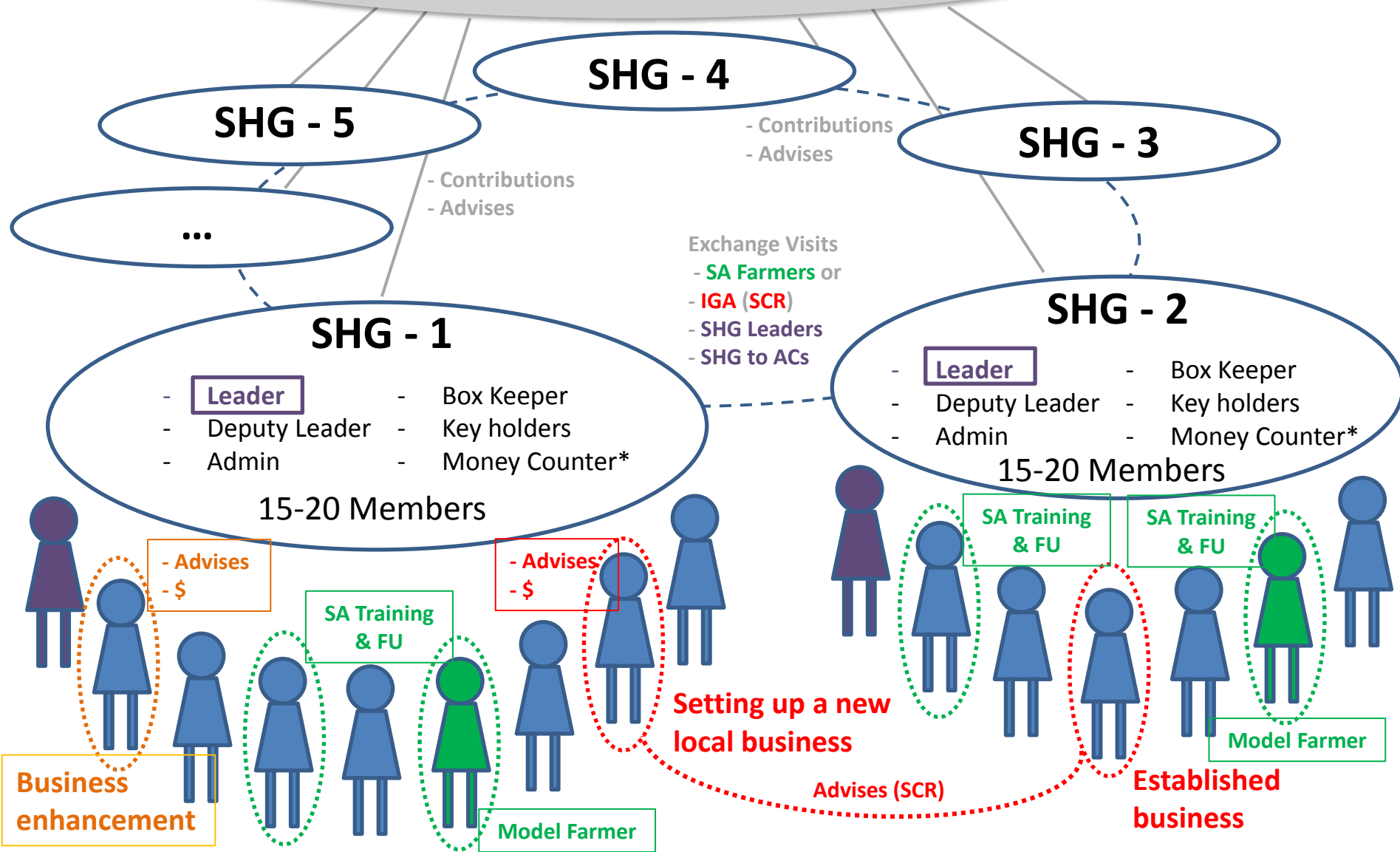
- Setting up of Self-Help Group (SHG) & Saving Groups
- SHG capacity building & follow up
- Networking and Exchange visits (internal & external):
  - SHG leaders
  - SA farmers & Model farmers
  - Income Generating Activities (IGA) using Success Case Replication (SCR) methodology





# MODE

- Services to set up SHGs & eventually Saving groups & potentially ACs
- SA Trainings & FU incl. Model Farmers selection & training
- Advisors to business development (IGA)
- Networking & Exchange visits with other SHGs for Model Farmers, SHG Leaders & for business development (IGA - SCR methodology)





# Collective Support – Self-Help & Saving Groups

- SHG Leaders training on group management, conflict resolution, book keeping, marketing, group members selection.
- Tools: Good practices videos and pictures group regulations and management guide
- Exchange visits within SHG network





# Collective Support – Agric. Coop. Emergence

- SHG (with at least 15 members) who expressed their interest and have high commitment to become AC.
- Collaborate with Federation of Farmer Associations promoting Family Agriculture Entreprise (FAEC) to conduct information sessions, additional trainings
- Tools: Videos & documents
- Internal & External exchange visits to existing AC with the support of MODE and FAEC





## **Multidimensional benefits of smallholder farmers' good practices**

### *A case study in Kampong Thom, Cambodia*

MEUNIER Félicien<sup>1</sup>, HEYLEN Camille, PEETERS Amaury<sup>2</sup>, EK Sreykhouch<sup>3</sup>, NEANG Malyne<sup>3</sup>, HEAN Saray<sup>4</sup>, PEANH Sinal<sup>4</sup>

<sup>1</sup>Earth and Life Institute, Université catholique de Louvain, Belgium

<sup>2</sup>Louvain Coopération au Développement, Louvain-la-Neuve, Belgium

<sup>3</sup>Ecoland Research Center, Royal University of Agriculture, Phnom Penh, Cambodia

<sup>4</sup>Minority Organisation for Development of Economy, Kampong Thom, Cambodia







# Research Collaboration: First Results

- Problematic identification:  
*Agriculture sustainability of smallholder farmers in Kampong Thom*
- Methodology selection based on literature review: SAFA (FAO, 2013) Framework of Agric. Sustainability
  - 1) Env. Integrity, 2) Social Wellbeing,
  - 3) Good governance, 4) Econ. Resilience
- 80 out of 105 indicators selected based on their local relevance
- Questionnaire design, reviewing and testing
- Communes and villages selection
- 100 interviewed farmers

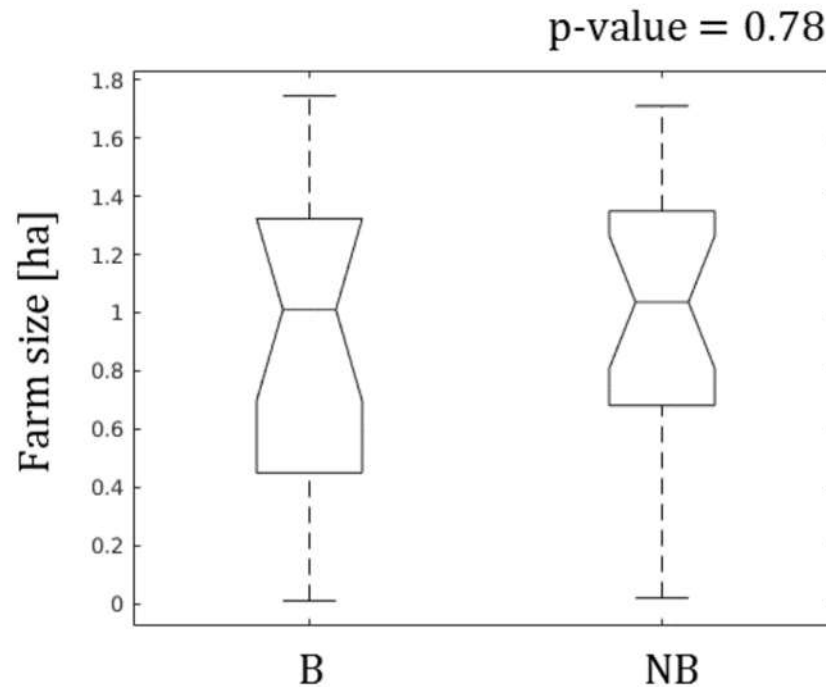




# First Results: Comparable Groups (1/3)

Comparable groups (beneficiaries & control group):

- Farm size
- Family structure
- Access to natural resources (water)
- Access to facilities (main roads)



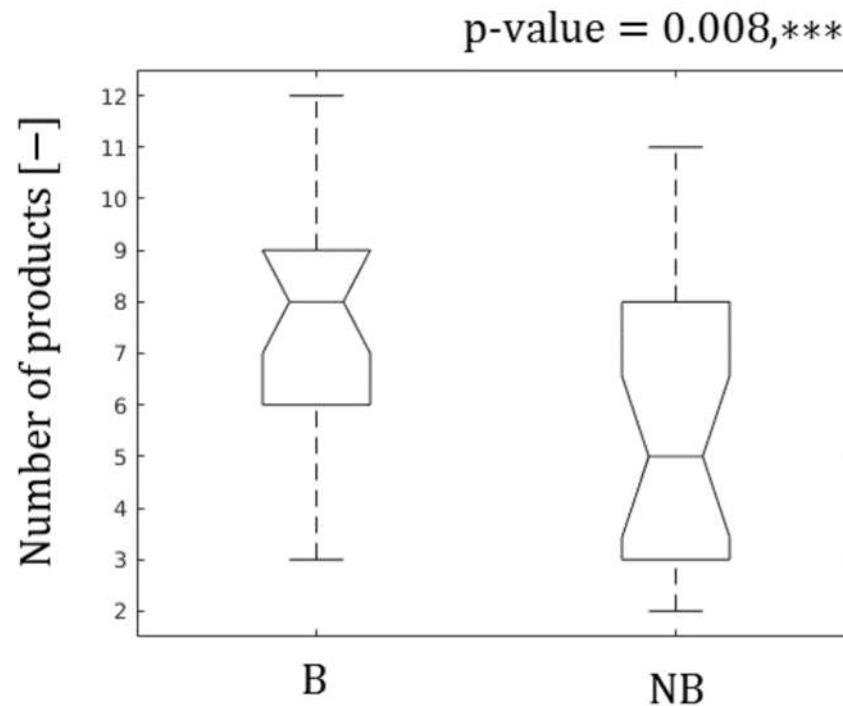


## First Results: Significant Differences (2/3)

Higher total number of products among beneficiaries (graph)

>> Increased production diversity thanks sustainable agriculture practices trained & kits provided

- Higher number of produced vegetables
- More diverse animal husbandry





# Higher risk's Assessment & Mitigation (3/3)

	B			NB			p-value	significance
	Mean	Min	Max	Mean	Min	Max		
Farm size [ha]	1.05	0.05	1.75	1.1	0.09	1.7	0.78	
Family size	4.9	1	9	5	1	8	0.6	
Number of products	7.9	3	12	5.3	2	11	0.008	***
Number of detected risks	9.55	1	20	6.9	0	12	0.043	*
Number of produced vegetables	3.18	0	6	1.16	0	5	$2.10^{-6}$	***
Number of animal species	2.7	0	6	1.2	0	3	$10^{-3}$	***
Number of taken risk mitigation measures	5.1	0	11	2.6	0	6	0.006	***
Number of planned risk mitigation measures	2.5	0	5	0.4	0	2	$10^{-4}$	***

>> SA Farmers higher # risks identified: soil & water quality, water res. availability, climate changes (Env. Pillar) & lack of agric. knowledge.

>> SA Farmers higher # risk mitigation measures planned & already taken





# Research Collaboration: Next Steps

Conference	Date	Location	Status	
Agricultures, ruralities and development	22-24/05/2017	Brussels	Accepted	
6th French Network for Asian Studies International Conference	26-28/06/2017	Paris	Accepted	
19th Organic World Congress	09-11/11/2017	New-Delhi	Abstract accepted	

- Abstracts Submission
- To complete database with remaining questionnaires
- To run additional statistical analyses on complete database
- Paper writing and presentation of final results (peer-reviewed process)
- Script writing & video shooting of key elements from research results by private film company
- Share and communicate using the produced video



# Thank you for your attention



## Minority Organisation for Development of Economy (MODE)

Kampong Thom Village  
Kampong Roteis Sangkat  
Stung Sen Town, Cambodia  
[www.modecambodia.org](http://www.modecambodia.org)  
[peanhsinal@modecambodia.org](mailto:peanhsinal@modecambodia.org)

## Louvain Cooperation Cambodia Country Representation

#17A, Street 282, BKK I  
Chamkarmorn, P.O. Box 112,  
Phnom Penh, Cambodia  
[apeeters@louvaincooperation.org](mailto:apeeters@louvaincooperation.org)  
[www.louvaincooperation.org](http://www.louvaincooperation.org)



ACADEMIC & in SOLIDARITY

