

# Proceedings report for Symposium on Climate Change Resilience: “Turning a buzz-word into action”



Phnom Penh, Cambodia  
14<sup>th</sup> June 2018



## Executive Summary

The Symposium on Climate Change Resilience is framed within the EUAVACT project<sup>1</sup>: ‘European Union Aid Volunteers ACTing against disasters’.

Under this initiative, EU Aid Volunteers (EUAVs) from Finn Church Aid (FCA) and Dan Church Aid (DCA) organized this event. In addition, LWD and EUAVs from ACTED (Agence d'Aide a la Cooperation Technique et au Developpement) supported the activity.

The overall objective was to share knowledge and experiences bringing innovative solutions to enhance climate change resilience in Cambodia. It had three specific goals:

- to discuss and define what fits under the broad term of **resilience** and explore other additional value. As resilience has become increasingly trendy as a term, it has been applied to various contexts. Because of this over-use we have ended up in a situation where everything contributes to resilience and thus the term has become vague. As the term is used increasingly to justify programs, there is the necessity to nail it down.
- to discuss and define what fits under the **‘truly sustainable agriculture model’**, bringing initiatives and experiences. Alongside with resilience, the term ‘sustainable’ has also become inflated due to the use in various different contexts. However, in the context of livelihoods in Cambodia it captures concerns about agriculture and the future of the food systems. Within the framework of ‘sustainable agriculture’ there are different methodologies and approaches: climate-smart agriculture, conservation agriculture, organic, permaculture and agroecology.
- to promote **green initiatives** at individual and office level to improve resilience to climate change. Cambodians use up to 50 plastic bags every week. When these bags, together with plastic bottles, single-use straws and other plastic waste, end up in the environment they don’t only look bad but also cause harm to the environment and eventually also harm human health.

The symposium took place the 14th of June of 2018 at Himawari Hotel, in Phnom Penh, Cambodia. Around 90 participants from different local and international NGOs, various UN bodies, from the private sector and academia as well as from the Cambodian government and the EU Delegation in Cambodia attended it. A remarkable feature of the symposium was that many of the participants were representatives of local NGO’s from the rural provinces, a group often ignored in these types of events. The day was divided into 7 sessions. While the morning session was more focused on resilience and agroecology the afternoon was focused

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EU Aid volunteers initiative brings together volunteers and organizations from different countries, providing practical support to humanitarian aid projects and contributing to strengthening the local capacity and resilience of disaster-affected communities. The main areas of work are resilience-building, disaster risk management and linking relief, rehabilitation and development (LRRD). This initiative is managed by EACEA (Comision’s Education, Audio-visual and Culture Executive Agency, and funded by ECHO (European Civil Protection and Humanitarian Aid Operations).

EUAVID Volunteers ACTing against disaster risks (EUAVACT) is a project within the framework of the EU Aid Volunteers Initiative. The project is implemented by a consortium of ACT Alliance organizations and involves 38 volunteer placements. The main aim is contributing to more effective (EU provided) humanitarian response, Disaster Risk Reduction (DRR) and resilience in five countries (Ethiopia, Uganda, Nepal, Bangladesh and Cambodia) through strengthening local NGOs and vulnerable and disaster-prone communities’ members.

on plastic use awareness and green office standards as concrete actions towards reducing climate change. Most of the sessions were conducted as presentations from experts on the field, but a panel discussion was also organized. The panel brought together representatives from the UN Food and Agriculture Organization (FAO), the French Agricultural Research Centre for International Development (CIRAD), Agro-ecology Learning Alliance in Southeast Asia (ALISEA) and Research Centre for Gender, Family and Environment in Development Center (CFGED Vietnam) and was facilitated by representatives of the Center of Excellence of Sustainable Agriculture Intensification and Nutrition (CESAIN).

They main key messages were:

- Resilience should be addressed systematically as a lens through which everything is viewed and should be measured in a context-specific way in programs and projects.
- The phenomenon of migration needs to be tackled in an integral way by offering support services that ensure migrants safety along with DRR programs that improve livelihoods and contribute to reduce natural disaster-driven exodus.
- Adopting agroecology as the key approach in building climate change resilience involves not only designing complex agroecosystems with low costs and impact on human health and environment, but also building a fair and equal food system. It is the truly sustainable agriculture model.
- Assessing agroecosystems requires addressing multiple dimensions and actors.
- The use of locally-adapted plant varieties, which cope better with climate change than the newly-introduced varieties is challenged by the lack of community seeds banks and limited farmers knowledge to produce and save seeds.
- The engine for agroecological transition is scaling it out by capacity strengthening and the creation opportunities for youth.
- There is a need to go beyond the pre-existent schools of sustainable agriculture to create an agroecological concept and curricula that embraces the holistic vision, and promotes fair value chains, social cohesion and equity.
- A mechanism for agroecological transition is scaling it out by capacity strengthening and the creation opportunities for youth.
- The challenge of researching agroecology remains difficulty because one needs to:
  - study complex interactions,
  - adapt technologies based on local necessities and context,
  - involve a wide diversity of stakeholders 'from the bottom to the top',
  - and convince donors that innovation shall go beyond the technological approach and shall cover social aspects and different indicators.
- Scaling up agroecology depends on reviewing/adopting regulation and policies that shift from the 'short term' to the 'long term' thinking paradigm.
- It is crucial to contribute to resilience by giving the example in our daily lives from individual to collective actions in our work space and community to reduce Climate Change impact.

The organizers were highly committed to environmental sustainability and tried to organize the event to be as “green” as possible by removing all single-use plastics from the conference halls (water bottles, name-tags etc.) and finding sustainable alternatives as well as promoting

sustainable food for the lunchbreak. The organizers wanted to also encourage the participants to continue on this path and provided the participants with a conference bag, which included a reusable water bottle, a bamboo straw that can be cleaned with the brush and used over and over again, (see ANNEX 1) among other items necessary for the conference. The bag itself can be used for instance as a durable shopping bag in the future.

## The symposium structure, content and organization

The event was organized by EU Aid Volunteers from Finn Church Aid (FCA), and Church Aid (DCA). In addition, LWD and EUAVs from ACTED (Agence d'Aide a la Cooperation Technique et au Development) supported the activity.

The event was presented by Ms. Sophon Chau, Youth Coordinator from FCA, and official remarks were made by Mr. Frank Viault, Head of Cooperation of EU Delegation of Cambodia who shared the initiatives carried out in the context of resilience, and Ms. Kristen Rasmussen, Country Director of DCA, who summarised EU Aid Volunteers initiative and the work carried out regarding Climate Change and sustainability.

The presentations carried out during the symposium were: (full-agenda attached as ANNEX1):

- **Resilience based-programming:** addressing the meaning of resilience, and how resilience can be deliberately increased as a part of various programs and projects.
- **Building resilience through agroecology:** presenting the results and recommendations drawn from a holistic assessment of social-ecological resilience to climate change of peasants growing vegetables in the provinces of Battambang and Kampong Chhnang.
- **Migration as coping mechanism to climate change:** showcasing a baseline survey carried out in Kampong Chhnang to better understand the relationship between poverty, disasters and the decision to leave ones' home.
- **Grassroot agroecological experiences:** bringing up local initiatives to empower youth, research and build knowledge.
- **Vegetable home gardens:** soil improvement and tomato grafting for production in rainy season in Cambodia.
- **Panel discussion: in search of truly sustainable and resilient agriculture – agroecological approach** (see ANNEX 2).
- **Introducing Green Office Standards:** green practices to instigate environmental change from our offices.
- **A transition into Plastic Free July and Plastic Free Awareness Week:** promoting initiatives to raise awareness about the importance of reducing the use of plastic

The wrap-up was carried out by Ms. Sophon Chau. In her speech she thanked all of the participants for their interest and commitment to the initiative highlighted the following three important lines of action:

- There is a need to promote agroecology as a key approach to develop truly sustainable agriculture.

- Developing mechanisms that ensure the participation of women and youth is one of the top priorities while designing strategies and policies to fight Climate Change and build resilient communities.
- To plan better and to use scarce resources, various stakeholders need to improve communication and coordination.

## **The key messages and findings of the symposium**

**Resilience should be addressed systematically as a lens, through which everything is viewed, and it should be measured in a context-specific way in programs and projects.**

One of the many definitions of resilience is, that resilient systems are those that are able to minimise the exposure to shocks, adapt to changing situations, enable changes in different levels of the system (policies, regulation..) and to be able to take preventive actions to anticipate potential disasters. However, more effort has to be done to clarify and address the resilience in programs and projects. The importance of addressing resilience as a lens through which everything is viewed instead of as a sector was highlighted, as well as the fact that resilience should be addressed deliberately, and therefore mainstreamed systematically.

VCA (Vulnerability Capacities Assessment) and similar tools should be used to assess not only vulnerability, but also capacity. These methods are an integral part of disaster preparedness and contribute to the creation of community-based disaster preparedness programmes at the rural and urban grass-roots level.

There is a need for better understanding the characteristics that are believed to lead to an increase in resilience. Based on that, case-specific indicators should be created, which focus on the loss of a system's functionality, such as the loss of soil fertility. Each system has specific components, interactions and structure, goal, behaviour, and life cycle that make its performance unique. Therefore, resilience should be measured in a context-specific way for each project.

**The migration of rural population is a phenomenon that needs to be tackled in an integral way by offering support services that ensure migrants safety along with DRR programs that improve livelihoods and contribute to reduce natural disaster-driven exodus.**

A recent study, presented during the symposium, analysed the push factors for migration in 5 provinces of Cambodia: Battambang, Pursat, Kompong Chhnang, Kompong Speu and Svay Rieng. These drivers were ranked by level of importance: low income, lack of home ownership, lack of/limited access to land, lack of a vehicle, high debt, low rice yield and cheap rice price, natural disasters (flood and drought) and a decline in natural resources (fishery and forest). This multifactorial-driven exodus – the correlation between poverty, natural disasters and migration – should be addressed in an integral way undertaking the following actions:

- providing consultative services for safe migration
- advocating the legalization of international migration
- supporting income generating activities

- promoting stakeholder cooperation to combat trafficking and exploitation
- promoting sustainable agriculture approaches and disaster risk reduction interventions.

**Adopting agroecology as the key approach to build climate change resilience involves not only designing complex agroecosystems with low costs and impact on human health and environment, but also building a fair and equal food system. It is the truly sustainable agriculture model.**

Agroecology was described as a science, a movement and a practice. It holds a holistic approach to strengthen the sustainability of all the parts of the food system, from seed in the soil to table, and back to soil again. It includes ecological knowledge, economic viability, and social equity. It seeks to optimize the healthy interactions between water, air, soil, plants, animals, microorganisms, human and the environment while taking into account the socio-economical dimension required for building a sustainable and fair food system. It mobilizes biological processes in ecosystem to increase productivity through use low costs, low impacts on natural resources and human health. Therefore, this approach contributes to the truly sustainable agriculture model. Agroecology combines key lessons from traditional and indigenous peasants responding to climatic conditions in innovative forms with elements of ecological and agronomic science.

There is a widely accepted ecological principle considering that the more complex the systems are the most stable they remain under shock and perturbances. Therefore, taking actions to make agroecosystem more complex make them more resilient because they have more mechanisms for self-regulation. In this context, agroecology promotes the following strategies:

- increasing richness of species and varieties, diversity of agricultural activities and/or landscape (unmanaged areas, connectivity buffers.)
- boosting beneficial interactions among different elements of the agroecosystem. Given the example of using techniques such as intercropping, rotation or push-pull pest management systems.

Tackling agroecology includes promoting strategies and activities that ensure:

- fair prices for farmers by strengthening short canals and local markets access, raising awareness of consumers about the importance of buying agroecological products. Shifting from the idea of value chains to food systems. Protecting the right of farmers and consumers to make decisions about the food systems, or in other words, their food sovereignty.
- gender equality from the household decisions to the market. Providing with a safe environment for women to participate and lead initiatives, adapting tools, supporting capacity building, ensuring leading roles in the cooperatives, etc.
- social cohesion and trust in the communities, farmers groups and other institutions. Promoting participatory and cooperative approaches, improving governance systems, etc..

- access to natural resources (land, water and seeds).

**Assessing agroecosystems requires to address multiple levels, dimensions and actors.**

The assessment of agroecosystems should consider different levels, dimensions and actors, as it was described:

- Plot/farm/territory levels
- Production/environmental/social/economical dimensions
- Farmers/household/agricultural groups/community/civil society/university and research centres/local, provincial and national govern/ international organisms/women/youth/consumers.

Agroecosystems and project/program indicators should measure not only the performance in terms of ecological parameters, but also social equity, economic fairness and environmental sustainability.

**The use of locally-adapted plant varieties, which cope better with climate change than the newly-introduced ones, is challenged by the lack of community seed banks and limited farmers knowledge to produce and save seeds.**

Increasing the use of locally adapted seed varieties was urged to be an important necessity to build resilience in Cambodia. There are only a few initiatives pointing to this direction, such as community seed banks, and they are mainly focused on rice. The importance of preserving seeds is enrooted in four main premises:

- Better adaptation to the environment, shocks and disturbances: protecting successive generations of the same types of seeds will allow it to adjust to the climate and environment in which it is being grown. Greater resistance to pest outbreaks and water stress conditions have been described due to higher genetic diversity.
- Farmers control the quality of seeds: farmers can control the entire gene pool for different aspects such as optimal germination, ripening time, drought-adaptation, flavour, disease-resistance, colour among others. This sort of practice over generations enable farmers to keep better the context-specific selected traits and create their own locally-adapted 'supercrops' based also on their personal interests.
- Preserve diversity heritage: commercial production of seeds usually tends to reduce intra- and inter- specific diversity as it usually is market-economy driven. In consequence, it leads to the loss of species, genetic diversity and diversity within a specimen. Local seeds preserve the agrobiodiversity heritage, improving the stability of the system.
- Preserve cultural-historical heritage: local seeds are closely associated with the traditions, the knowledge, the habits, the dialects and the occurrences of the human population that have developed it and/or continue its cultivation. Therefore, they are precious cultural-historical heritage that should be preserved.
- Strengthen seeds security and food sovereignty: resilience of agroecosystem depends on a certain degree of self-sufficiency. Seed saving allows farmers to take control of their own supply and reduce external costs. Furthermore, farmers can adapt their

products to their cultural taste preferences and nutritional needs. Some initiatives such as the seeds swaps or the introduction of underutilized species additionally perpetuate knowledge sharing, improves diversity and household nutrition.

**There is a need to go beyond the pre-existent schools of sustainable agriculture to create an agroecological concept and curricula that embrace the holistic vision, and promote fair value chains, social cohesion and equity.**

There are many schools building knowledge on sustainable agriculture such as Organic Agriculture, Integrated Farming System, Conservation Agriculture, Agroforestry, etc.. Most of them share many of the principles and techniques promoted by agroecology. However, and specifically attending to the economic and social aspects, these disciplines usually present some gaps. As follows there are some questions that were shared during the conference: Cambodian rice certified as organic and sold in Europe, is it considered agroecological? How Conservation Agriculture principles address the strengthen of short market canals? How integrated Farming System principles address the lack of access to land for small-scale farmers?

In general, it was perceived that some participants have doubts about the concept and ways to promote agroecology. If the concept is diffuse or unclear, it is difficult to create strong policies and regulation to scale it up. Therefore, it is necessary to do a critical analysis of these pre-existent schools and think about the sort of development that agroecology is promoting. Efforts should be made on creating an agroecology strong concept and curricula that embrace the holistic vision, including the promotion of fair value chains, social cohesion and equity.

**The engine for agroecological transition is scaling it out by capacity strengthening and the creation opportunities for youth.**

Many young people are forced to migrate from rural to urban areas due to the lack of work or low incomes perceived through agricultural activities. It is a complex issue, caused a variety of reasons like the degradation of natural resources, difficulties in access to the land, poor linkages to the market, climate change aspects. Young people are normally more open to learn and change their practices, and therefore they are the engine of change in rural Cambodia.

**The challenge of researching in the area of agroecology remains in the difficulties of:**

- **studying complex interactions,**
- **adapting technologies based on local necessities and context,**
- **involving a wide diversity of stakeholders ‘from the bottom to the top’,**
- **and convincing donors that innovation shall go beyond the technological approach and shall cover social aspects and different indicators.**

In this context, it was highlighted the importance of:

- Studying the ecological interactions between the different elements of the agroecosystem, genetic resistance to climate change and the long-term profits of adopting agroecology.



- Setting the research priorities based on the socio-economic context and necessities (baseline studies) prioritizing truly sustainable initiatives and protecting the cultural heritage.
- Rescuing native knowledge on sustainable practices.
- Promoting 'farmer to farmer' knowledge sharing.
- Creating technological parks that are economically self-sustainable.

**Scaling up agroecology depends on reviewing/adopting regulation and policies that shift from the 'short term' to the 'long term' thinking paradigm.**

The current global paradigm development is shifting from the industrialization paradigm to one or more forms of a sustainable paradigms. The 'drivers' of this change are diverse: increased greenhouse gas emissions, increased food waste, fisheries collapse, tropical deforestation, biodiversity loss, and much more. It entails new ways of thinking, acting and regulating, and it applies to all the elements of the society, including the food system. However, the current political and business cycles push short-term solutions to the forefront. In the case of food system, farmers are bound by the expectation they have nurtured among consumers: cheap and varied food during the whole year. In this context, supermarkets normally dictate which crops should be grown based on short-term commercial considerations. This situation puts pressure on the farmers, especially the ones who are transitioning to long-term natural synergies in diversified agroecosystems.

On the other hand, diversified agroecosystems offer major benefits for individual farmers and for the society. However, the advantages will not be immediately visible. Improving the soil health, raising awareness of consumers or increasing biodiversity takes time. Undertaking the transition to agroecological approaches involves economic risks for farmers. Therefore, political and business approaches should have a long-term approach, for instance by creating incentives for those farmers transitioning to agroecology.

**It is crucial to contribute to resilience by giving the example in our daily lives from individual to collective actions in our work space and community to reduce Climate Change impact.**

There is a huge need to be coherent with the programs and researches that most of the attendants are promoting. Everybody should start with small actions that can have big impact. From the household to the community, there are plenty of actions that can be carried out:

- limit air conditioning
- turn-off the lights when leaving the room
- use recycled paper
- print double-side
- idling off vehicles
- use alternative transport
- organizing events
- promoting sustainable events (i.e: plastic free policy, organic and local food,..)
- field trips (i.e.: avoiding plastic bottles, bringing your own take away coffee cup...)
- taking environmental conditions when making procurements.



## ANNEX 1: AGENDA

14 June 2018, Thursday		
Time	Activities	Responsible officer/s
08.30 – 09.00	Registration	<i>Finn Church Aid (FCA), Dan Church Aid (DCA)</i>
09:00 – 09:30	<b>Opening Welcome</b>	Sophon Chau <i>Project Officer FCA</i>
	National Anthem	
	Opening Remarks and Official Opening	Kristen Rasmussen <i>Head of Program DCA</i>  Frank Viault <i>Head of Cooperation European Union Delegation in Cambodia</i>
09:30 – 09:45	<b>Resilience Based Programming</b>	
		Mikael Ashorn <i>Program Development Officer EUAV-FCA</i>
09:45 – 10:00	<b>Holistic Assessment of Resilience: agroecology and Climate Change</b>	
		Celia del Campo Aragonés <i>Agriculture and Climate Change Advisor EUAV-DCA</i>
10:00 - 10:30	<b>Coffee break</b>	
10:30 – 10:45	<b>Migration as a coping mechanism to climate change</b>	
		Virak Kann, <i>Program Officer LWD</i>
10:45-11:00	<b>Grassroot agroecological experiences: empowering youth, researching and building knowledge</b>	
		Rith Viraklakkhena, <i>Agriculture Technician Vivre de sa Terre</i>
11:00-11:30	<b>Vegetables home-gardens: soil improvement and tomato grafting for production in rainy season</b>	
		Pao Srean <i>Dean of Faculty of Agriculture and Food Processing at Battambang University, and founder of Master's programme in Sustainable Agriculture University of Battambang</i>

11:30 – 12:30	<b>Lunch</b>	
12:30 - 14:00	Panel discussion – In search of truly sustainable and resilient agriculture – agroecological approach	
	Facilitated by Lyda Hok	<p>Dao Duc Liem <i>Program Officer</i> <i>CFGED Vietnam ((Research Centre for Gender, Family and Environment in Development))</i></p> <p>Iean Russel <i>Senior Policy Officer - Food Security</i> <i>EU-FAO First Program in Cambodia</i></p> <p>Florent Tivet <i>Scientific Advisor</i> <i>General Directorate for CIRAD (Centre de Coopération Internationale en Recherche Agronomique pour le Développement)</i></p> <p>Veata Mey <i>National Secretariat ALISEA</i> <i>Agriculture Technician Louvain Cooperative</i></p>
14:00 - 14:15	<b>Afternoon Tea Break</b>	
14:15 - 14:45	<b>Green Office Standards</b>	
	Introducing Cambodia specific Green Office Standards	<p>Jessica Sinclair <i>Communication Officer</i> <i>EUAV-ACTED</i></p> <p>Mikael Ashorn <i>Program Officer</i> <i>EUAV-FCA</i></p>
14:45 - 15:00	<b>Plastic Awareness</b>	
	A transition into Plastic Free July and Plastic Free Awareness Week.	<p>Jessica Sinclair <i>Communication Officer</i> <i>EUAV-ACTED</i></p>
15:00-15:30	<b>Wrap-up</b>	<p>Sophon Chau <i>Project Officer</i> <i>FCA</i></p>

## **ANNEX 2: PANEL DISCUSSION - In search of truly sustainable and resilient agriculture – agroecological approach**

### **BACKGROUND**

On the understanding that sustainable agriculture makes communities more resilient to Climate Change, we believe it is crucial to promote this approach. The concept “sustainable” although controversial and wide, it is useful because it captures concerns about agriculture and the future of the food systems. As it was said before, within the framework of “Sustainable agriculture” there are different methodologies and approaches: climate-smart agriculture, conservation agriculture, organic, permaculture, agroecology.. However, some of these approaches still perpetuate somehow the neoliberalism model that in agriculture had its milestone with the Green Revolution of the 60’s ending up in an environmental and food systems crisis. There is still the prevalent idea that pest, nutrients deficiencies or other factors are the cause of low productivity instead of thinking that only pest and nutrient become limitans if there is not “equilibrium” in the agroecosystems. There is still the philosophy that science goes separated from the indigenous and traditional knowledge that have been and still are managing sustainable and efficient food systems worldwide. Therefore, we believe that another agriculture system is needed to reach truly sustainable, biodiverse and socially just agriculture. In this context, the science of Agroecology which is defined as the application of ecological concepts and principles to the design and management of sustainable agroecosystems provides a framework to assess the complexity of agroecosystems. As science and as a movement, there are still transects to walk and questions to answer to address food sovereignty of farmers and consumers. We believe that agroecology plays and will play a relevant role in the future of Cambodian food systems and therefore, we would like to gather experts with different backgrounds to bring knowledge and experience to build answers and networks.

### **PARTICIPANTS**

#### **Facilitator:**

Lyda Hok, Director of CESAIN (Center of Excellence on Sustainable Agriculture Intensification and Nutrition)

He holds a Ph.D. in Environmental Soil Science from North Carolina A&T State University, the United States. Currently, he is a lecturer and center director of USAID-funded Center of Excellence on Sustainable Agricultural Intensification and Nutrition (CE SAIN), Royal University of Agriculture. He has been working with different stakeholders to implement various projects on conservation agriculture, integrated crop-livestock systems and climate-smart crop production and soil management in Cambodia.

#### **Participants of the roundtable:**

Dao Duc Liem

*Senior Program Officer*

*CFGED Vietnam ((Research Centre for Gender, Family and Environment in Development)*

Dr. Liem holds a PhD in Economics from National University of Economics (NEU) Hanoi, with a background in Engineer of Agronomy. Currently, he is Senior Officer of CGFED (Center for Gender, Family and Environment in Development). He has more than 20 years of experience in community development, climate change, sustainable agriculture and rural economy.

*Senior Policy Officer - Food Security*

*EU-FAO First Program in Cambodia*

Dr. Russell is currently working as a Senior Policy officer for the EU-FAO FIRST Programme in Cambodia. In this role he works in support of the Royal Government of Cambodia for issues relating to food security and nutrition and sustainable agriculture. Prior to this appointment he was an advisor in Resilient Farming Systems for the Life and Nature Project, working on climate change adaptation, watershed management and enterprise development for women. He has previously served as Project Coordinator for the Census of Agriculture for the Kingdom of Cambodia 2013, and Project Manager for the MALIS project in Cambodia (Improving food security and market linkages for smallholders in Oddar Meanchey and Preah Vihear Provinces). He was Programme Advisor for the FAO-EU Food Facility Project in Cambodia and before coming to FAO, he worked for 25 years for The University of Queensland as a Senior Lecturer in Resource Economics. During this period he worked on numerous development projects in long- and short-term roles in education, agriculture, forestry and fisheries sectors in the Asia Pacific Region. His roles have included team leadership, monitoring and evaluation, project design, and specialist roles in agri-business, extension and socio-economics. He has a strong interest in systems approaches and interdisciplinary work in dealing with complex development problems. He has a PhD in development management from The University of Queen.

Florent Tivet

*Scientific Advisor*

*General Directorate for CIRAD (Centre de Coopération Internationale en Recherche Agronomique pour le Développement)*

Dr. Tivet holds a PhD in Crop Science from National Institute of Agronomy, Paris and has conducted Post-Doc research in Soil Science in State University of Ponta Grossa, Brazil. He has been a visiting scientist in the School of Environment and Natural resources, Management and Sequestration Center at Ohio State University, USA. He is an agronomist with over fifteen years of experience from South-East Asia and Brazil. Dr. Tivet has extensive knowledge on conservation agriculture, cropping system design, managing a large diversity of crops and cover crops, tropical cereal and legume-based cropping systems, and soil organic and dynamics.

Veata Mey

*National Secretariat ALISEA (Agroecology Learning Network in Southeast Asia)*

*Agriculture Technician Louvain Cooperative*

Mr. Veata holds a master's degree in Agribusiness from the University of Melbourne, Australia, and a bachelor's degree in Agronomy from Royal University of Agriculture, in Cambodia. He has more than 6 years of experience in agricultural sector working with several organizations such as Helen Keller International, Sreer Khmer and USAID Harvest Program. He

has involved in many agriculture development projects including organic agriculture enhancement, homestead food production and nutrition promotion, women empowerment and livelihood improvement. Currently, he is working as a National Secretariat for Agroecology Learning Alliance in South East Asia (ALiSEA) based in Cambodia, and he is also a Sustainable Agriculture Technical Assistant for Louvain Cooperation. The joint goal of both work is to promote agroecology and sustainable agriculture development in Cambodia and the Mekong region.