



# GLOBAL OVERVIEW 2016

**Innovation processes  
beginning to take root**



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## Global overview 2016

### **Major leaps forward were seen in 2016, the second year of the Capacity Development for Agricultural Innovation Systems (CDAIS) project**

Institutional arrangements in each of the eight pilot countries were consolidated, and functional capacities for agricultural innovation systems began to be strengthened. Methodologies were developed into country-adapted packages for training facilitators on how to conduct capacity needs assessments, the different 'tools' available, and guidelines for monitoring, evaluation and learning at all project levels. 'Niche Partnership profiles' were made, and that proved valuable when conducting capacity needs assessment. Key issues within each partnership were defined. Details of the partnerships, activities and lesson learnt in each country are presented in separate reports. This global overview offers shared perspectives and jointly developed approaches.

#### **What is CDAIS?**

CDAIS is a global partnership that aims to strengthen the capacity of countries and key stakeholders to innovate in the context of complex agricultural systems, to improve rural livelihoods. The goal of the Capacity Development for Agricultural Innovation Systems (CDAIS) project is to promote innovation that meets the needs of small farmers, small and medium-sized agribusiness, and consumers. To do so, it is bringing together key stakeholders in agricultural innovation systems around selected niche partnerships in eight pilot countries, assessing their needs and elaborating and implementing national capacity development plans. Globally, CDAIS will use the lessons learnt in those countries to support the global Tropical Agriculture Platform to promote, coordinate and evaluate capacity development to strengthen demand-driven agricultural innovation as a catalyst of sustainable agricultural growth. Launched in 2015, the initiative is being implemented by Agrinatura, a grouping of European universities and research organizations supporting agricultural development and FAO in close collaboration with national partners, with the financial support of the European Union (EU).



## Activities

### Selecting the innovation niche partnerships

Innovation niche partnerships are the cornerstones of CDAIS activities. They are situations where actors join a learning process that could transform or create change in an organization, community or country. These are used by CDAIS to prove the concepts of the common framework. In each of the eight pilot countries, potential innovation niche partnerships were identified, prioritized and selected based on the following criteria:

1. National and global relevance: (a) alignment to national priorities as outlined in policy documents or agreed as priority by the national working group on agriculture to increase likelihood of influencing decision-making; (b) inclusiveness to women, youth and the poor; (c) focus on sustainability, considering long-term economic welfare, environmental conservation, promoting social justice, climate change adaptation and mitigation; and (d) high probability of impact with potential for out-scaling and improving livelihoods of many farmers.
2. Project relevance: (a) multi-stakeholder involvement among civil society, government, private sector, farmer groups, NGOs, etc.; (b) provide facilitation and learning opportunities with the potential to influence mindsets and behavior of agricultural innovation systems actors; (c) demand driven, with evidence of 'pull' from farmers and other value chain actors; and (d) market oriented, with the identified intervention area not excessively subsidized nor prone to unfair competition, i.e. with opportunities for fair market access.

Each country selected 4-6 innovation niche partnerships (see individual country reports for more detail), with a total of 38 niche partnerships in all (see table below). Some started with single commodities, e.g. all those in Guatemala and Honduras (cocoa, beans, honey, etc.) and Bangladesh (mango, pineapple, but also fish and poultry) which should later evolve more into niche partnerships. In other countries, there are existing niche partnerships on milk, cattle and pigs. Others niches are on multiple but related crops or systems (e.g. horticulture, aquaculture-rice), specific niches (e.g. organic, seed production), practices (e.g. micro-irrigation), and broader niches such as rural enterprises (in general), services, tenure, nutrition, or on a specific area or catchment, etc.

*Table 1. The selected innovation niche partnerships.*

Guatemala	Honduras	Angola	Burkina Faso	Ethiopia	Rwanda	Bangladesh	Laos
Avocado	Coffee	Rice	Sunflower	Malt barley	Cassava	Mango	Organic rice
Cocoa	Cocoa	Seed cooperative	Organic labelling	Community seed production	Horticulture	Pineapples	Organic vegetables
Beans	Beans	Cassava, peanuts, vegetables	Micro-irrigation	Milk processing	Community dairy centres	Tomatoes	Aquaculture-rice
Honey	Potatoes	Rural enterprises	Micro-enterprises	Veterinary drugs and feeds	Mat-imba catchment area	Fish farming	Cattle breeding
			Producer organization services	N2Africa	Nutrition and health	Poultry	Pig production
			Land tenure				



## Facilitating the innovation process

Country project managers are responsible for coordinating the planning, implementation and monitoring of the activities within the innovation process, with support from others. This requires an understanding of the agricultural innovation systems concepts and approaches. As such, each manager underwent an intensive three-week training course 'Facing Rural Innovations' in Wageningen, the Netherlands in June 2016. This was designed to strengthen the competencies of national leaders to be able to facilitate and manage capacity development for agricultural innovation systems.

"I have the theoretical knowledge of facilitating multi-stakeholder processes. But this course made it all concrete and practical", said Nasreen Sultana, country project manager in Bangladesh at the end of the course. Gilbert Kayitare, CDAIS project manager in Rwanda, believes that the course will ensure effective implementation of the CDAIS project: "This course gave me new facilitation and management skills that I can apply in work activities of managing the project."

Catalan Ramirez from Guatemala appreciated the opportunity to learn together with CDAIS project managers from the other pilot countries. "We all came from different disciplines and cultures, but after three weeks together, we now share an understanding of innovation systems and how to tackle complexity and diversity". Edgardo Navarro Enriquez from Honduras, highlights the field trips in the Netherlands as a unique opportunity to see innovation in action, and the Roundel chicken farm with a focus on animal welfare made an impact on him. "This is a very concrete example of different stakeholders working together – this farm is only possible because of the good collaboration between innovative farmers, research and the bank."

For Zacharie Segda from Burkina Faso, ICRA's approach to the courses was crucial: "It was really interactive because we learned from each other as participants and from our own experiences." Oudong Keopipheth from Laos was equally enthusiastic about the course. "It enhanced our understanding of the complexity of the innovation process especially taking into account the diversity of actors involved." Josina Amado Jacinto of Angola underlines that she has learned how to deal with different stakeholders and handle conflicts: "This is something that definitely will help us in managing CDAIS but also beyond, in both our work and personal life."

### What is the common framework?

The Framework on Capacity Development for Agricultural Innovation Systems (also called the common framework) offers guidance on more innovative and systematic approaches to improving actors' capacities to innovate, whether individuals or institutions. People engage in an innovation process if they can adapt and respond to opportunities using 'functional capacities'. These include the ability to navigate complexities, collaborate, reflect and learn, and engage in strategic and political process. Developed through the global Tropical Agriculture Platform (TAP) and CDAIS, these capacities are improved through five learning stages: (i) galvanizing actors' commitments, (ii) visioning, (iii) capacity needs assessments, (iv) strategy development, and (v) implementation. Facilitation is provided by skilled individuals who foster synergy between people and resources, enhances interaction and build relationships between individuals, organizations, and their social, cultural and political structure through a process of network building, social learning and negotiation. Emphasized through dialogue and interaction, social and collaborative learning then occurs when people start getting to know each other and work together. Through this process, actors build trust and mutual understanding, resulting in the right conditions for collective decision-making.

## National innovation facilitator training

A manual was developed as a guideline for the national innovation facilitator training across all eight countries. This training aimed to strengthen facilitation skills in general and more specifically the capacity to carry out capacity needs assessments of agricultural innovation niche partnerships and systems. The training was to be carried out by the Agrinatura focal persons and country project managers in each country, with the help of other Agrinatura and FAO support staff. These trainers had themselves gone through a training-of-trainers process to familiarize them with the manual, the interactive and participatory approach required, and the use of various facilitation tools within it.

The materials were prepared in English by a dedicated CDAIS Working Group, piloted in one English-speaking country, then made available to the other seven countries. It was never intended that the manual would be a blueprint for use in precisely the same way across all countries, but more of a general framework and approach around a series of concepts, tools and techniques. In reality, it was reviewed, modified and adapted to the national context of each country, and translated where deemed necessary (i.e. French, Spanish, Portuguese). Each manual contains: (i) session plans that provide a framework and key content for sessions with signposts to the various resource materials required, (ii) exercise sheets that provide step by step guidance on specific participatory activities and facilitation tools, (iii) powerpoint presentations with information for plenary presentation to facilitators during the training, and (iv) resource materials including training forms and templates, background information, or more detail on key elements.

## Capacity needs assessment

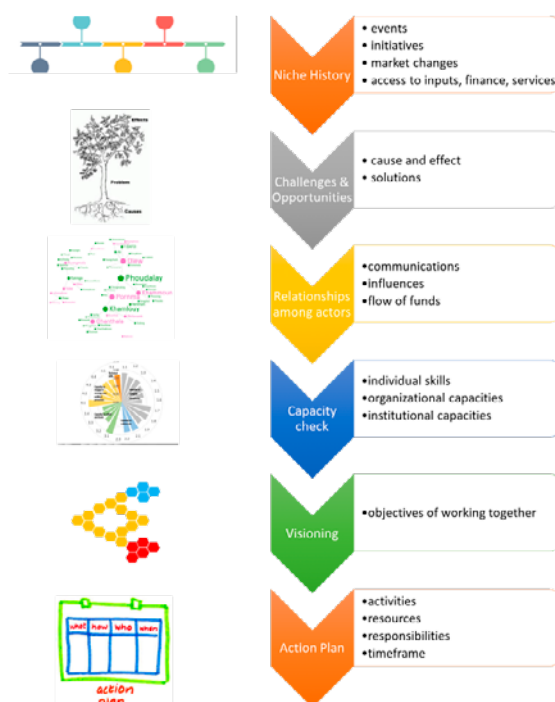
Capacity needs assessments in each niche guide the design and implementation of capacity development interventions in each country, based on an agreed vision and focus.

It identifies existing and gaps in the functional capacities of actors within the selected innovation niches. Data gathered serves as baseline information for monitoring and evaluation.

Global methodology was developed based on the common framework, which was agreed in April 2016, in Leiden, the Netherlands between the Agrinatura task team, FAO and country team members following a series of meetings and workshops.

Each assessment is led by an Agrinatura focal person, with the country manager, and others. The process was used in each country, adapted based on local context, as reported in the attached country reports.

Capacity needs assessment, in simple steps:





The capacity needs assessment of each niche partnership was conducted by a team. The tools used were identified based on their fitness to the objectives. The objectives, approaches and tools are described below for each of the identified steps.

*Table 2. Overview of Capacity Needs Assessment at Niche Partnership level.*

Step	Title	Objective	Approaches and tools
0 Prior to start of CNA.	Profiling of innovation niche	CDAIS staff understand the niche sufficiently to plan the CNA detail and brief the NIFs during their training	Desk studies/previous reports. Completion of niche profiles with stakeholders, using F2F stakeholder discussions, semi-structured around the niche profile headings
1 Start of CNA	National innovation facilitator training	Train the national innovation facilitators on skills to facilitate and tools to use for the CNA. Share the concepts of CDAIS project.	4 days participatory training – presentations, group exercises, questionnaires, using NIF Training Resources (session plans, exercise sheets and powerpoint presentations).
2 After facilitator training	Facilitator action planning	Finalize and agree the NIF workplan to conduct the CNA.	1 day meeting among NIF and CPM, using Action plan template used in NIF training
3 Stakeholder workshop (1)	Creating ownership, galvanising commitment of actors in the niches	Stakeholder awareness of project; Common understanding of niche history and actors (what is going well and what is not), what we can do together, dimension/ manage expectations.	Open invite to leaders of organizations; F2F with all actors in the niche, using Short presentation of the objectives of CDAIS to gain interest by actors in the innovation niches. Timeline tool.
4 Stakeholder workshop (2a)	Understanding the niche partnership (1)	Shared understanding of key problems (technical and functional), effects, causes and initial thoughts on solutions	Group work and plenary feedback, using problem tree/solution tree (functional capacity-focused but also recognizing technical problems)
5 Stakeholder workshop (2b)	Understanding the niche (2):	Shared understanding of who is involved; linkages and influences; structure/ governance; boundaries	Group work and plenary, using netmap tool (making reference to the findings of the Problem/Solution tree)
	Facilitated capacity self-assessment within niches	Understanding the existing capacities in the innovation niche partnerships to work together.	Individual exercise, using Capacity assessment questionnaire
6 Between workshops (2) and (3)	Analysis of capacity needs for addressing by CDAIS	Processing/reflection/collation and analysis of findings/data from visit 1 and 2.	Off-site consultations and analysis of data from timeline, problem tree, questionnaire and netmap. Capacity profile of each actor. Radar plot on capacities within niches.
7 Stakeholder workshop (3)	Visioning	Share and agree the results of the capacities analysis in each niche partnership. Discuss and agree with actors on what they want to do together	Participatory presentation of results, group discussions, joint decision making on shared vision, facilitate actor-ownership, using rich picture or future backwards to develop shared visions within niches
	Consensus on capacity development needs	Agreement on capacities required to achieve the shared vision of innovation niche partnership	Plenary proposal, dialogue, refinement, validation, using Capacity assessment report using template; Presentation
	Capacity development action planning	Agree on who, how, when, cost of CD interventions	Some plenary some smaller groups, using Action planning tools/formats
8 After the Field Visit 3.	Writeup of CNA report	To consolidate data and information on CNA	Data consolidation, and Consultation with relevant actors, using CNA report template



## Learning framework

A guideline on the project's monitoring, evaluation and learning framework was developed. The aim is to make the project more accountable to donors but also among partners at the global, national and niche level. In addition, it is a learning framework that captures lessons learnt in a systematic manner, and allows findings to be used to help plan future activities, thus engaging into a real learning cycle. Using such a system, changes in capacities within individuals, organizations and institutions are measured within a given period. These changes can be categorized into the four functional capacities as advocated by the common framework. With such a mechanism, each niche partnership can be compared with other niche partnership in any country, and in turn each country can be compared to other countries, and thus facilitating cross-country learning.

## Lessons learnt

The project started slowly, but gained momentum after the innovation niche partnerships were selected and the national innovation facilitators were trained. Country teams are now making a difference. Each country is as unique as the individuals in the country teams. Being pragmatic requires critical reflection and adaptation while implementing project activities in each country. Global consultation and feedback on the major learning cycles defined common frameworks of operation and support in each country. The core concept of continuous learning drives operations at country and global level, but importantly, the uniqueness of individuals and countries are taken as strengths that add value to project concepts.

Global and national level training in the second year increased individual capacities of country project managers and national innovation facilitators. Equally important, it created global and national teams with shared understanding and vision for the project. Managers from different countries shared and compared their challenges and innovative ideas in managing projects, and innovation facilitators shared and learnt different perspectives beyond their commodities and geographic areas.

The tools offered for helping with the capacity needs assessment were too many, however. It was too ambitious and did not reflect the current capacities available to support the innovation process. It was acknowledged that it is important to have: (i) focus and minimum information required for the assessment, analysis and reporting; (ii) quality assurance at all levels of engagement from data collection, to participation, to facilitation; (iii) engagement of organizations with similar principles and concepts as the project's learning and innovations; (iv) realistic timeframes and resources to support field visits and actions; and (v) shared vision of the project for each country.





## Moving forwards

The third year of the project will be critical to maintaining the momentum created at the national level. This will define if the project can make and sustain differences within countries. Expectations are high and realities are daunting. CDAIS is investing in people and organizations to make changes of all sizes and creating capacities to innovate, including in the following in 2017:

Innovation niche partnerships need thematic focus and a supporting team with the capacity to facilitate the innovation process, e.g. through developing and implementing a coaching plan.

- Partnerships to act as building blocks for constructing a national platform, e.g. with 'marketplaces' and policy dialogues at country level, as well as global consultations. E.g. through CDAIS and TAP.
- Stories of changes are documented and shared within and between countries, through website updates, quarterly newsletters, reports, and local and national media.
- Organizations that are critical to sustaining project concepts and principles are identified and supported, following capacity needs assessment on those organizations.

And with the increased capacities and confidence evident in all parts of the project, we are certain to succeed!

## Country teams



### Guatemala

- Massimo Battaglia, *Agrinatura-EEIG Focal Person (AFP), AICS*
- Julio Catalan, *Country Project Manager (CPM)*
- Maynor Estrada, *FAO Country Office CDAIS Focal Person*
- Andrea Sonnino, *FAO HQ Technical support*
- Marco Vinicio Cahueque, *National Project Coordinator*

### Honduras

- Stefano Debbio, *Agrinatura-EEIG Focal Person (AFP), AICS*
- Edgardo Navarro, *Country Project Manager (CPM)*
- German Flores, *FAO Country Office CDAIS Focal Person*
- Andrea Sonnino, *FAO HQ Technical support*
- Orlando Caceres, *National Project Coordinator*

### Angola

- Ana Melo, *Agrinatura-EEIG Focal Person (AFP), UL/ISA*
- Afonso Zola, *FAO Country Office CDAIS Focal Person*
- Abdoulaye Saley Moussa, *FAO HQ Technical support*
- Armando Valente, *National Project Coordinator*

### Burkina Faso

- Aurélie Toillier, *Agrinatura-EEIG Focal Person (AFP), Cirad*
- Zacharie Segda, *Country Project Manager (CPM)*
- Daouda Kontongomdé, *FAO Country Office CDAIS Focal Person*
- Abdoulaye Saley Moussa, *FAO HQ Technical support*
- Georges Yameogo, *National Project Coordinator*

### Ethiopia

- Hanneke Bouta Vermeulen, *Agrinatura-EEIG Focal Person (AFP), ICRA*
- Amanuel Assefa, *Country Project Manager (CPM)*
- Lemma Gizatchew, *FAO Country Office CDAIS Focal Person*
- Abdoulaye Saley Moussa, *FAO HQ Technical support*
- Chilot Yirga, *National Project Coordinator*

### Rwanda

- Hans Dobson, *Agrinatura-EEIG Focal Person (AFP), NRI*
- Gilbert Kayitare, *Country Project Manager (CPM)*
- Otto Vianney Muhinda, *FAO Country Office CDAIS Focal Person*
- Karin Nichterlein, *FAO HQ technical support*
- Charles Murekezi, *National Project Coordinator*



#### **Bangladesh**

- Claire Coote, *Agrinatura-EEIG Focal Person (AFP), NRI*
- Nasreen Sultana, *Country Project Manager (CPM)*
- Nur A. Khondaker, *FAO Country Office CDAIS Focal Person*
- Karin, Nichterlein, *FAO HQ Technical support*
- Mohammad Shahjahan, *National Project Coordinator*

#### **Laos**

- Patrick d'Aquino, *Agrinatura-EEIG Focal Person (AFP), Cirad*
- Oudong Keomipheth, *Country Project Manager (CPM)*
- Chanthath Pongmala, *FAO Country Office CDAIS Focal Person*
- Karin Nichterlein, *FAO HQ Technical support*
- Bounthong Bouahom, *National Project Coordinator*

### **Supported by:**

#### **Global core team**

- Guy Poulter, *Co-Chair Project Oversight Committee, Agrinatura-EEIG*
- Samy Gaiji, *Co-Chair Project Oversight Committee (POC), FAO – AGDR*
- Christian Hoste, *Member POC as TAP Chair, TAP*
- Richard Hawkins, *Member POC, Agrinatura/ICRA*
- Karin Nichterlein, *Member POC, FAO – AGDR*
- Myra Wopereis, *Ex-officio member POC, Project Global Coordinator, Agrinatura/ICRA*
- Magali Rouillier, *Project Financial Controller, Agrinatura/CIRAD*
- Hanneke Lam, *Project support from EEIG Sectariat, Agrinatura-EEIG*
- Francoise De Chevigny, *Project Administration Assistant, Agrinatura/ICRA*
- Bertil Videt, *Project Communication Specialist, Agrinatura/ICRA*
- Ilka Gomez, *Operation Assistant/FAO*
- Christian Grovermann, *Associate Agricultural Officer, FAO – AGDR*
- Patrick Kalas, *Capacity Development Officer, FAO – OPCC*
- Delgermaa Chuluunbaatar, *Extension Officer, FAO – AGDR*



## Country Reports 2016

**This is the second part of the CDAIS global overview. It contains updates from each of the 8 pilot countries, i.e. Angola, Bangladesh, Burkina Faso, Ethiopia, Guatemala, Honduras, Laos and Rwanda. Each country provides brief insight into the innovation niche partnerships, current capacities being developed through the country managers and national innovation facilitators and the process of conducting the capacity needs assessment. Lessons learnt from these activities are shared and considered in planning the 2017 activities.**

# ANGOLA

## 2016 COUNTRY REPORT

“Use the least technical terms possible  
and seek clarification immediately  
to engage with communities”







## Angola – 2016 country report

**The goal of this partnership is to improve capacity for joint innovation and to strengthen this capacity at partnership level, organizational level and institutional/policy level, through an iterative process of action, reflection, consolidation of lessons learned and re-planning, by the different stakeholders involved. But, preparatory actions need to be well coordinated to ensure success and continuity of the CDAIS project.**

### 1. Innovation partnerships

#### **Seed cooperative**

The goal is to strengthen collaboration among key actors in the value chain, aiming for commercialization of quality seeds produced by small producers, to be evaluated by the National Seeds Service in their central laboratory. The cooperative will provide seeds to Aldeia Nova, MOSAP, NGOs (Red Cross and People in Need). The target area will be Huambo and Bié Provinces, including the Cooperativa sementes do Planalto with 200 producers, CODESPA (technical assistance), the National Seeds Service (Certification), Aldeia Nova (Buyer), and a petrol company.

#### **Rice**

The project aims to identify suitable varieties tolerant to cold and heat for Huambo and Bié provinces, develop relevant technical agronomic packages for farmers, and preparation of a rice cultivation manual. This niche is supported by partners including JICA (Japan International Cooperation Agency), IDA (National Agricultural Development Institution), IIA (National Agricultural Research Institute), EDA (Extension National Services), DNHER (National Directorate for Agricultural Hydraulics and Rural Engineering), and SENSE (Seeds National Service)

#### **Cassava, peanuts and vegetables**

The aim of this niche is to introduce post-harvest processing of cassava and peanut for added value products, along with the improved conservation and commercialization of vegetables, through strengthening the capacity of producer associations to support their members in Uíge Province (Bungo). Producer group objectives include the improved supply of agricultural inputs, access to credit, learning and applying new agronomic techniques using farmer field schools. Partners will include JMS Angola, ten local vegetable, peanut and cassava producer association, IDA (National Institute for Agricultural Development), and AIF (Africa Innovation Foundation).

#### **Rural entrepreneurship**

The aim of this niche is to increase the production of legume to meet the demand for processing, through enhancing the business opportunities available to new agricultural entrepreneurs. This will be achieved through training to support agribusiness activities, enhance production of legumes and grasses, mainly in Kwanza Sul. Partners will include producers, BDA (Angolan Development Bank), and TF (Project Land of the future).





## 2. Activities

### Scoping study

The goal was to provide baseline information for the inception workshop and needs assessment to guide project implementation, map and characterize main stakeholders, projects, programs, actors, existing coordination mechanisms, identify on-going innovation partnerships, and establish the basis for a functional working relationship with FAO and EU country offices and government. During interviews, many actors referred to 'innovation' simply as the introduction of new agricultural technologies, though some were familiar with the concept of agricultural innovation systems as an approach involving multi-disciplinary and multi-sector group, and some organizations clearly practice the concept in their daily operation before having any knowledge of CDAIS.

The agriculture sector in Angola uses 57 million hectares (but only 8% of the total arable area) and contributes 10% to GDP (the oil sector accounts for 45% of GDP, 95% of total export value and 80% of total government revenues). Productivity is very low compared to other sub-Saharan Africa countries, with constraints such as limited farmer access to services and inputs, low technological knowledge, inadequate access to credit, damaged infrastructure such as irrigation. In recent years, great efforts were put in the agriculture sector, especially emphasizing the importance of strengthening extension services, research and higher education, but inter-agency coordination and efforts to implement national policies and achieve national goals need to be enhanced. Many stakeholders, from public to private, sense the need for a system wide analysis to strengthen innovation and technology in rural development. The scoping study identified the major actors as research Institutes, universities, extension services, NGOs, farmers/producers and farmer organizations/cooperatives, agribusiness, fertilizer dealers, distribution/logistics, and consumers.

In terms of national coordination mechanisms, most interviewed stakeholders mentioned interactions with other stakeholders within the agricultural sector during the acquisition of services (e.g. capacity building, monitoring, farmer field schools design and supervision) for specific projects or activities. For most organizations, FAO has a crucial role in providing advice, training and methodologies. Academia and research institutions beyond national collaboration, referred to solid international partnerships with CGIAR centres, and Portuguese and American Institutions.

Acknowledging the need of creating new mechanisms to coordinate and interchange among actors of the agricultural sector, some networks are emerging and consolidating, including AIA – Associação Industrial de Angola – Industrial Association of Angola; CAFANG – Associação de produtores de Café de Angola – Coffee association; APA – Associação de Agricultores de Angola – Association of farmers of Angola; Centros de Investigação Nacional, and Platform SKAN (Sharing Knowledge Agrifood Network).

### Engaging and mobilizing partners

The inception workshop was held in Huambo in May and officially launched the CDAIS project, with 26 participants representing research, extension, universities, private sector, etc. Participants acknowledged that agricultural innovation involves a complex network of players that jointly, and with the support of institutions and government policies, should introduce new agricultural products, processes and practices for social and economic use. They agreed that the agricultural sector in Angola has huge potential and must be self-sufficient, but players must work together to achieve that goal.



Stakeholder mapping during the inception workshop identified key actors, including discussion on the roles and challenges encountered when making agricultural innovations systems operational and effective. The maps identified the actors and their ideal roles. The government should also define policies to ensure sustainable national production, infrastructure investments and communication platforms for stakeholders. Universities and research must identify problems and produce information for extension services and farmers, extension services must link universities/research to farmers, NGOs are to organize and communicate among all actors, farmer cooperatives should identify and try to solve problems in partnerships, rural schools to share new knowledge, banks to finance feasible projects, fertilizer dealers to develop a product portfolio adapted to the local market, insurance companies to create farmer-adapted products adapted, and the media to disseminate all information.

At the end of the workshop, the following partners were invited to be part of CDAIS working group to select potential niche partnerships and nominate facilitators: Africa Innovation Foundation (NGO), CODESPA (NGO), FCA – Faculdade de Ciências Agrárias (University), FMV – Faculdade de Medicina Veterinária (University), IIA – Instituto de Investigação Agrária (Research), IDA – Instituto de Desenvolvimento Agrário (Extension), IIV – Instituto de Investigação Veterinário (Research), INCA – Instituto Nacional do Café em Angola (Research), and Projecto Terra do Futuro (Private sector). The selection of national innovation facilitators was conducted in July-August 2016, initiated with a call sent out to organizations who expressed interest during the inception workshop to nominate individuals, with the National Steering Committee making the final selection.

### **Capacities strengthened**

The Angola country project manager could not attend the a 3-week training course in Wageningen, organized by ICRA, to learn concepts and facilitation skills related to agriculture innovation systems, so a FAO staff member attended instead, and passed on the new knowledge learned, including the understanding rural innovation and innovation system challenges and its complexities, facilitating and managing interactions within multi-stakeholder partnerships, and using a set of participative methodologies for the capacity needs assessment and facilitation of multi-stakeholder partnerships.

The 3-day national innovation facilitators training for 11 individuals from seven different institutions was held in Chianga, Huambo Province, in October 2016. This strengthened skills in conducting capacity needs assessments, and created space to share understanding of processes within innovation partnerships. It strengthened hands-on capacity to use new tools and methodologies, built individual skills to facilitate multi-stakeholder partnerships, and created a shared understanding and consensus of the planned activities. A set of materials in Portuguese, was produced. The training highlighted the importance of the proposed facilitation exercises, the role of facilitators and the utility of some proposed tools for CDAIS and beyond. After the training, five trainees were engaged and agreed to work as a team with support from Agrinatura. The capacity needs assessment was conducted in only four partnerships, due to logistical difficulty in reaching the fifth, in Cacuso. The first capacity need assessment in October 2016 acted as a pilot, providing vital information for the success of those that followed, allowing for the adaptation of tools to local contexts, and refining details of the agenda. Each was conducted with at least one facilitator and coordinator.



### **Capacity needs assessment**

One of the major findings was that there are no real innovation partnerships in Angola. In some cases, groups have no shared vision, strategy or a space for dialogue among members, with a lack of leadership, funding and technical knowledge, limiting the potential to innovate. Some common main constraints were the lack of communication among actors and the need to formally establish partnerships. The tools used were appreciated and gave some good insights of successes, challenges, main problems, causes and effects, vision and strategy, etc. The questionnaires were important tool and starting point for the monitoring and evaluation process, though they were inadequate for partnerships and people with low education, i.e. in most of the cases. Nevertheless, there is potential for establishing effective partnerships and capacity development. A list of capacities to be developed to achieve partnership potential was compiled. Draft action plans were developed for each, and analysis of information gathered shows common needs among partnerships on capacity development. These will be presented, discussed and finalized during the validation workshop.

## **3. Lessons learnt**

National level policy interventions are needed in the informal sector to provide development of local markets and to institutionalize economic activities targeted at people with potential for entrepreneurship. It is very important to share lessons learnt from other countries. The scoping study did not successfully identify the niche partnerships, not all key actors were present at the inception workshop.

For the capacity needs assessment specifically, facilitators should carry out a preparatory visit to the site a few days before. There were also compensation claims to cover the three days, which forced the participants to leave their work. It is important to have a good point of contact for each partnership. Announce the beginning of each session at least one hour before the intended time. Lunch and transportation allowance is essential for the three days. Build relationships with partnership actors, in person if possible, clarifying reasons for the meeting, to avoid the sudden demarcation of the actors. Producers and merchants feel more comfortable speaking in their local language, so facilitators should tell participants they can intervene in any language and look for someone to translate, if necessary. Facilitators should emphasize things that have not been said or that have not been understood. Due to the great diversity of knowledge between actors, it is important to clarify the objectives of each tool, exercise, session and day. Propose clear actions at the local level. When there are two or more facilitators in a partnership, they must interact and not generate doubt or discomfort on the part of the actors.

After the capacity need assessment, action plans will be developed, to be validated at the partnership level with key stakeholders in a one-day validation workshop scheduled in February 2017. The expected output is an overall national project strategy supported with action plans consolidating the needs of each innovation partnerships. The overall aim is to improve the organizational culture, procedures and collective innovation processes of key stakeholder organizations. Activities will be initiated with capacity needs assessment in key selected organizations followed by implementation of iterative and experiential learning cycles. The organizational capacity needs assessment is to be started in April 2017.



## Country team

- Ana Portugal Melo, *Agrinatura Focal Person*
- Ana Catarina Henriques, *Agrinatura Focal Person support at ISA*
- Susana Costa, *Country Project Manager: (in duty until October 2016)*
- Afonso Zola, *FAO Country Office CDAIS focal person (replaced by João Vintém, Feb-Oct 2016)*
- Abdoulaye Saley Moussa, *FAO HQ technical officer support*
- Domingos MPanzo, *National Project Coordinator.*

## Supported by:

**National innovation facilitators** Docala Luisa, Imaculada Henriques, Antonino Kamutali, Agnelo Miguel, Clemente de Oliveira Paolo, Amilcar Taila



*CDAIS Inception Workshop, Huambo, Angola*

# BANGLADESH

## 2016 COUNTRY REPORT

“Innovation is the transformation  
of knowledge into value”





## Bangladesh – 2016 country report

**“Many topics in the participatory training were eye openers. I have learned a good number of techniques that will help me not only in project activities but also in my personal life. And I believe that the acquired skill and knowledge will help me support effective collaboration and dynamic stakeholder networks and local agribusiness partnerships and will help to generate new knowledge by fostering collective learning and joint experimentation.”**

*Nasreen, CPM, during the “Facing rural innovation” training session*

### 1. Innovation partnerships

#### Mango

A quarter of the national fruit growing area is under mango. Bangladesh is the seventh largest mango producer in the world but exports very little. But with increasing domestic demand and export possibilities, new orchards are being established, especially in Rajshahi, the Chittagong Hill Tracts and Khulna regions. Rajshahi alone produced 45% of all mangoes in 2013-14, mostly from Shibganj upazila (Chapai Nawabganj district). Farmers here have been producing mangoes for generations but mean daily mango consumption (10 g per head) is less than the Ministry of Agriculture wants. The ministry also wants to establish a strong position in the world mango market, but more support is needed to improve productivity resulting from poor technical knowledge, pest and disease management, irregular fruiting; poor roads, limited credit access, theft, and poor links to research and extension services. Marketing is largely in the hands of traditional intermediaries, though producers and traders in Bholahat upazila, Chapaina Wabganj district have formed a cooperative with 387 members. Major identified challenges are a lack of technical knowledge of good agriculture practices, poor harvesting and postharvest handling, lack of storage facilities at Dhaka airport, poor transport links, non-cooperation and poor institutional linkages among relevant stakeholders, no organized stakeholder platform, and an under-developed value chain and marketing systems.

#### Poultry

Poultry are part of traditionally mixed farming systems and are the main source of income for many very poor landless female-headed families. This niche aims to strengthen the value chain and commercialise production. The poultry sector has grown rapidly over the past few decades, now with some 75,000 poultry producers who meet the national demand for eggs. Most industrial-scale producers are situated in Dhaka, Gazipur and Rajshahi districts, and Kapasia upazila in Gazipur has long been considered a centre of poultry meat and egg production, so was selected for the poultry niche. This work will build on previous work by FAO and other, and will partner with the Department of Livestock Services, poultry farms, feed industries, BLRI, traders, Bangladesh Poultry Industries Coordination Committee when needed on issues of producer awareness-raising on food safety, biosecurity, antibiotics, feed, etc. Major challenges are the lack of adequate technical knowledge, limited modern equipment, expensive feed, limited marketing knowledge, little credit, lack of modern communication facilities, absence of government guidance and subsidies, and poor institutional links between stakeholders.





### **Fish farming**

Bangladesh is the world's fifth largest aquaculture producer, and fisheries is the second largest export earning sector after ready-made garments, contributing 23% of agricultural GDP and 3.7% of total GDP. In 2013-2014, total production was 3.45 MT, 17% marine, 28% capture and 55% cultured. Though the fish production area and processing industries are increasing rapidly, diets are still deficient in fish protein and current intake of fish is less than the daily recommended 55 g per person per day. Hence, increasing fish production and consumption is a major concern in the Bangladesh agriculture sector. Mymensingh district has about 40% of production, but production costs are high due to the high price of feed that makes up 60-75% production costs, and that good aquaculture practices are not followed. Many farmers are engaged in hatchery and fish production but not enough traders are involved which limited market chain development. Fish processing industries are emerging in this region and processed products are already entering the market, mainly from tilapia and pangas (catfish). Producer groups are becoming established, with support from the Bangladesh Fisheries Research Institute, but linkages with other stakeholders are poor.

### **Pineapple**

Pineapple is the third most important fruit in terms of total cropping area and production. It is grown in almost all regions but especially in Chittagong district and the Chittagong Hill Tracts (Bandarban, Rangamati and Khagrachari districts), Sylhet (Sylhet and Moulvibazar districts) and Tangail (Tangail and Mymensing districts). Tribal people in Bandarban have grown pineapples on hill slopes for generations, with the surplus supplying national markets. Farmers have good links with extension service providers but poor links with other stakeholders, and farmers complain about a limited market, that traders only offering very low prices, and lack of storage facilities near production areas leading to high postharvest losses especially in rainy season. There is also limited knowledge in year-round pineapple production, judicious agrochemical use, and postharvest management and handling. Farmers would benefit from training, better infrastructure, establishing producers groups, the development of new industries and expansion of the export market, would increase farmer interest. Establishment of multi-stakeholders platform including all possible stakeholders would help to increasing production and improve smallholder livelihoods.

### **Tomato**

Tomatoes are a major cash crop and a good income earner for farmers, with Bagharpara Upazila in Jessore district well known for supplying a large share for Dhaka markets. However, diseases can lead to huge field losses, there as gluts from the dumping of unsold or unmarketable produce, and a lack of observance of export market requirements lead to poor prices. Farmers revealed that they are not aware of the value chain, and due to the lack of organized marketing and limited trust among actors, they do not receive expected profits from tomato cultivation. Farmers showed interest in market chain development and seasonal credit facilities, and emphasized the need for cold storage near production areas. Many public, private, and non-governmental organizations are involved in supporting tomato farmers and traders in both pre-and postharvest activities and marketing, but losses are still large, quality can be poor, and farm-gate prices low. There is a need for more concerted, farmer-oriented research, extension, advice and market linkage efforts to supply good quality produce for consumption and processing at fair prices. Farmer groups need functional skills to direct research to sustainable production and negotiate with buyers to meet their needs. Innovation platforms in the main producing districts could be supported for farmers and market actors to gain these skills.



## 2. Activities

### Engaging and mobilizing partners

During the inception workshop in December 2015, 31 niches (clusters, innovation platforms, multi-stakeholder groups, themes, value chains) that could benefit from CDAIS activities were proposed and scored by participants using FAO and Agrinatura selection criteria. A shortlist of ten was selected for profiling, involving investigations into issues, needs, stakeholders, and public and private sector initiatives and linkages. These were presented to the Technical Advisory committee in May 2016 and to the Steering Committee for validation and approval in June 2016, when five were selected for capacity needs assessment, approved by the Executive Chairman of the government partner, the Bangladesh Agricultural Research Council.

The validation workshop is scheduled for May 2017 in Dhaka after completion of the capacity needs assessment workshops for all five niches. It will be organised by Rozana Wahab, Acent International, on behalf of NRI and working closely with Agrinatura. Each of the five niches will be invited to send 4-5 representatives, plus the ten national innovation facilitators and two consultants. With FAO, Agrinatura and BARC staff and private sector invitees, there will be more than 50 participants in all. Posters will be prepared, and the workshop will be followed by a 'marketplace' event, to be organised by FAO.

### Capacities strengthened

The country project manager was trained in 'Facing rural innovation challenges: linking research to inclusive development for food security' at ICRA-Wageningen in June 2016. Sessions were divided into those on context analysis, gathering practical knowledges on agricultural innovation, and developing an action plan incorporating lessons learnt. Take home messages and experiences included that we are working with and not for farmers, the name game is a good icebreaker for memorising name and creating intimacy, and that self-situation/context analysis is important for better performance. New tools were introduced and valued, including the rich picture visualization tool, participatory video making and editing, the importance of simple listening, summarizing and parroting, the shoe triangle game to understand how difficult and complex it is to work with many different stakeholders, and we can learn as much or more from mistakes than from success. Agricultural innovation is the process of knowledge transformation to address the complex challenges concerning food security, environmental issues and sustainability and change the economic situation of small and medium-sized agro-entrepreneurs, keeping gender balance in mind. Innovation system involve the interaction of multi-stakeholders with different perspective who analyse a problem, an opportunity or a business, and bring in visions that generate new options based on a consensual understanding of the space, rules and policies behind a process of knowledge co-creation for common benefits.

### National innovation facilitator training

Training of 16 national innovation facilitators was held at the Bangladesh Academy for Rural Development (BARD), Comilla in October 2016, organised by Agrinatura and the CDAIS country manager. The interactive and highly participative 4-day course introduced participants to the concept of agricultural innovation systems and the need to develop functional capacities – i.e. soft skills required to enable and empower the implementation of technical improvements. The training created a shared understanding of concepts/terminology, strengthened hands-on capacity to use different capacity need assessment tools, and shared a common understanding and



consensus for planning capacity needs assessment activities. The training established a team of facilitators having a shared understanding on tools and processes to conduct the capacity needs assessment.

### Capacity needs assessment

As the project aims to develop capacities of agricultural innovation systems, there should be an existing level of capacity, i.e. a base from where we begin to build. So the start is to assess and analyse the existing capacities with the help of trained facilitators in a participatory process in which stakeholders are involved. It was valuable to have powerpoint presentation on the understanding of CDAIS and the capacity needs assessment process prepared in Bengali. A local lead consultant was contracted to take responsibility for management and allocation of operational costs for workshops and all assessment activities, supplied by Agrinatura, and writing up the resulting action plan, with a support consultant to assist with planning, implementation, data entry and report writing. Both participated in the training. Half of the trained facilitators are meeting planned goals.

## 3. Lessons learnt

Lessons learnt from the national innovation facilitators training included that the language used in the capacity needs assessment questionnaire needs to be simplified and clarified. The questionnaire provoked a lot of discussion about the appropriateness of the questions and the terminology used. It was pointed out that a focus group does not usually follow such a structured questionnaire as was provided, but rather, involves discussion of more loosely structured points. More time should be given on completing the capacity need assessment questionnaires, individually and in focus groups, because it is the core document for collecting information on existing functional capacity needs.

Putting together the training materials and understanding them is time consuming in spite of all the great work already done on them.

A second Bangla speaking facilitator would have been useful, as a lot of the discussions were held in Bengali, and the country manager was leading the discussion so couldn't make notes at the same time. All the tool box exercise material and the questionnaire will need to be translated into Bangla. It is proposed that a capacity needs assessment manual is prepared, in English and Bangla, so each team have all the instructions clearly laid out for them, and this task could be given to the capacity needs assessment consultant who is to be recruited. The workshop benefited from the services of an FAO staff member to help with preparing and functional logistics, before and during the training. The Bangladesh Academy for Rural Development (BARD) was also an excellent location for the training, only two hours from Dhaka, and would be a suitable partner organization as staff provide training to rural groups on similar topics to those promoted by CDAIS.



## Country team

- Mohammad Shahjahan, *CDAIS National Project Coordinator*
- Nasreen Sultana, *CDAIS Country Project Manager*
- Claire Coote, *NRI Agrinatura focal person*
- Nur Ahmed Khondaker, *FAO Country Office CDAIS focal person*
- Karin Nichterlein, *FAO HQ technical support officer*

## Supported by:

**Steering committee** with 25 members, with the Ministry of Agriculture Secretary as chair and the CDAIS national project coordinator as member secretary, and committee members from diverse government departments and research institutes, FAO, and the EU Representative from the EU Delegation to Bangladesh.

**Technical Advisory Committee** with the Executive Chairman, Bangladesh Agricultural Research Council as chair and the CDAIS national program coordinator as member secretary, and diverse members from producer associations, consumer associations, export associations, NGOs, CSOs, government and universities.

**National innovation facilitators** Shorof Uddin, Jamal Uddin, Nilufa Begum, Fatema Wadud, Moshir Rahman, Zakia Sultana, Sabina Yasmin, Mitul Kumar Saha, Rokaya Begum Shafali, Ahsan Habib, Kazi Noor-E Alam Jewel, Sulogna Chakma, Rozana Wahab, Foyez Ahmed Prodhan, Shirshir Kumar Munshi, Salah Uddin Ibne Syed, Shahjahan



CDAIS inception workshop in Bangladesh.

# BURKINA FASO

## 2016 COUNTRY REPORT

“Concrete experiences are more important than concepts”







# Burkina Faso – 2016 country report

**From the capacity needs assessment, it became clear that to accelerate progress in innovation, there is a need to accompany niche stakeholders, both individually and collectively, to resolve problems and overcome challenges. To do so, it is important to understand how each innovation partnership functions, in particular the collective capacities, capabilities, and needs, to build ‘ownership’ amongst the stakeholders.**

## 1. Innovation partnerships

### **Micro-irrigation**

Irrigation is a critical issue for agriculture in Sahelian countries, and micro- (or drip) irrigation offers huge potential for increasing water-use efficiency, agricultural productivity, farm income and food security, especially in the dry season. The aim is to promote affordable systems for use by family farmers, increase access to credit so they can purchase them, and improve availability of training. Currently, imported systems are too expensive and are not adapted to local conditions, with too few businesses who sell or repair them. Identified needs are to increase farmers' capacities to experiment and learn collectively, share experiences, and to encourage links with researchers and small businesses to develop local manufacturing capabilities. A parallel need is to facilitate collaboration between different stakeholders to reduce costs of imported systems and develop a distribution network. Actors will include horticultural producer organizations, agricultural input suppliers, artisans in the 'inventors and innovators association' (CMABF), NGOs, and microfinance, research and government institutes.

### **Organic labelling**

In 2013, Burkina Faso approved its first organic standard, AB-NORME, conceived by the National Council for Organic Agriculture (CNABio) and its partners. And in 2016, a new label was created – BioSPG, protected by the African Intellectual Property Organization (OAPI). This allows organically produced products to be certified under a participatory guarantee system (SPG) that allows consumers to be sure that what they are buying has been produced with respect for human and environmental health. Now, the aim is to improve the organization of organic agriculture value chains, scale up the BioSPG label, and build the capacity of CNABio members. Important needs are to increase the capacity for farmers to experiment and cross-learn, to build partnerships with other agro-ecological initiatives in each region, and develop skills to manage innovation processes and build a collective strategy. The principle actors are CNABio, its 30 member organizations, and their technical, financial and commercial partners.

### **Producer organization services**

The Management Network (Réseau-Gestion) is a network of eight producer organizations that was established 10 years ago. They have collectively built a common vision based on grounded practical experiences, and were pioneers in developing the Family Farming Council (CEF). Multiple studies have shown the benefits offered by services provided by such organizations, such as increased farmer pro-activity, farm income and quality of life. The objective is to modernize and re-dynamize the Management Network, by offering financial support to build partnerships with research and communication agencies, and helping them to identify and put into place mechanisms to allow financial self-sustainability. Also important, is the need to build the capacity of the producer organization to engage in strategic and political processes to build support from ministries with responsibilities for rural development, and to better link credit services to farmers.





### **Sunflower**

The main objectives of this innovation partnership are to produce high yielding seeds that are adapted to local conditions, guarantee access to quality inputs (organic pesticides and fertilizers, etc.), and better organize producers and associated actors in the sunflower value chain. Currently, seeds are either of poor quality, with high levels of disease and low yields, or are very expensive imported hybrid seed. There is also little adapted equipment such as harrows and drills, and limited interest from investors in the chain. CDAIS will increase the capacity of farmers to experiment, and to maximise the use and value of the knowledge of innovative leader-farmers. It will also encourage organization of farmers so they can engage at the policy level, and connect with financial institutions. Implicated actors include government, research and private sector institutes, and producer organizations.

### **Micro-enterprises**

Small family agro-processing businesses are widespread. They transform crops into products which they often also market themselves. Many such micro-enterprises are managed by women. They largely own all of their own equipment, and labour is generally provided for from the family. And whereas many of the women may not be able to read or write, they have special skills in the area of processing and marketing agriculture-based products. They aim to increase product quality, improve their access to credit, and increase the availability of improved and adapted equipment. Capacity development will be provided on product processing, preservation, and machinery use and maintenance, as well as in how to engage in political and strategic processes. The main actors is the national women's cereal processing network (RTCF), and their technical, financial and commercial partners, alongside financial institutions. Others will include other producers on the raw materials, distributors and retailers, suppliers of packaging and equipment, with support from government institutions and others.

### **Tenure**

The National Policy for Tenure Security in Rural Areas (PNSF/MR) was developed in 2007, and followed by law 034-2009/AN on 16 June 2009. This brought in a tenure system to guarantee all rural actors access to equitable tenure rights, to guarantee investments, efficient resolution of tenure-based conflicts, and to contribute to poverty reduction and consolidate social peace. The aim of this partnership is to help finalize one of the major innovations of this reform – 'local tenure charters' (chartes foncières locales, CFLs), evaluate their implementation and promote the understanding of the benefits of those already in existence. There are many needs, including the clarification of unspoken issues surrounding tenure, reinforcing political dialogue, and especially, developing capacities at the commune level amongst those who practically implement the local tenure charters, and allow them to better share their experiences with others. This partnership will involve a large number of diverse actors, include those who developed the charters (including various committees and private experts), those who give value to them (village and municipal councils, the high commission), those who monitor and evaluate progress (management committees, local government), central government bodies, and those who financed the process.



## 2. Activities

### Engaging and mobilizing partners

The project steering committee was established by ministerial decree, MESRSI will lead and ensure the relevance of CDAIS activities to the national context, ensure policy links, and make recommendations. It will meet twice a year beginning in 2017. Lead by the CDAIS country manager and project managers, members include representatives from Agrinatura, FAO (regional office – Accra), FAO Burkina Faso, EU, DGESS-MESRSI, DVRD/DGPV-MAAH and CNRST-MESRSI. A technical team implements CDAIS activities, documents and analyses results, develops methodology for all aspects, and communicate results. It aims to meet at least monthly. A further technical evaluation committee ensures that CDAIS meets the priority needs for agricultural development, assesses expectations, assists with prioritization, and promotes information exchanges. It is composed of producer organisations (CPF, FENOP, FNJA), research organisations (INERA, IRSAT), education (AGRINOVIA), government bodies (FRSIT, DGRSI), civil society organisation (LCB, CCAE), private sector (Maison de l'Entreprise), technical committee, consultants, and members of the project team.

Media was invited to the national innovation facilitators workshop, and an interview by AFP that highlighted CDAIS was published in the national 'Entreprises et innovation' magazine. Information is also posted on the CIRAD website, and a special session on CDAIS was organised as part of an international conference organized by CIRAD in December 2016. Objectives for 2017 include conduct capacity needs assessments on the six niches and development of Action plans to be presented and discusses at the national validation workshop in April, a 'marketplace', and further technical and steering committee meetings. However, CDAIS activities are not yet well known at national level.

### Capacity strengthening

The country project manager attended the three week training in Wageningen, and which was considered very important in terms of the wide range of skills learnt. This new knowledge, tools and skills were usefully applied, for example, during the niche capacity needs assessment, each adapted to the specific context, and tools such as the problem and solution trees, stakeholder mapping, etc. proved valuable.

National innovation facilitators training took place over nine sessions in four days in September 2016. This capacity development event was the first step in this planned CDAIS programme, blending theory and practice, documentation and reflective analysis, improving partnerships, and implementation. Exchange of experiences and reflection brought on by discussing concrete situations were most valuable and should be considered even more in future.

Facilitators then undertook the capacity needs assessments of the six innovation niches. This allowed the team to develop a deeper understanding of what was needed and how to progress at the national level regarding accompanying partners on the road to improved innovation. This will now form the basis of developing a national strategy to anchor the project at a policy level and as a baseline to better see the necessary changes that the project can contribute to. From this, baseline information can be drawn against which progress can be measured at the niche level. The action plans should guide each niche for the first year, and help to identify other technical and financial partners, as well as serving to help ministries build a national action plan to reinforce innovation capacities.



Development of training components was discussed in partnership with the University of Ouagadougou 2, with the aim that they could also be integrated in their STIP programme (Sciences, Technologies and Innovation Policies). This is an interregional programme leading to a MSc in specialised science and innovation training.

### 3. Lessons learnt

Niche selection was a key stage, and more time would have been useful to characterize them before starting the character needs assessment, and targeting key actors and prospective workshop participants. During the national innovation facilitator training, participants found the concepts difficult to understand at first, and simplification and further clarification would have been beneficial. Also, further training methods could have been considered, such as tutorials and more academic exercises. For the capacity needs assessment, the proposed tools could have been better adapted to different situations. The national innovation facilitators found the exercise difficult, and it was hard to understand the order of events needed for the exercise. As the facilitators are still in the stage of being trained, it would have been better to have with them competent and skilled staff in support, especially for efficiently organizing and running workshops.

Regarding the training, it was considered better if it had begun with the experience of the participants and concrete examples of innovations that they could introduce, rather than starting with the concepts. Then, better to present the concepts as definitions, with the support of handouts rather than solely on-screen presentations. Furthermore, a better balance was needed between theory and practice, although it is acknowledged that this is difficult to find when participants have such a large variation in their skill and experience levels. For some, more theory would have helped. For others, more concrete examples was needed. In any case, more time was needed for group discussions surrounding the results, analysis and synthesis as this is fundamental, to ask questions and to allow the group to delve deeper in both theory and practice.

All of the questions, reflections, issues and suggestions raised by the trainees allowed the team to propose a range of recommendations, such as the preparation of a short training manual/book which include simple diagrams, definitions, and guidelines to the methods used in capacity needs assessments. Create a CDAIS network of national innovation facilitators, and encourage them to work together in groups in any one niche, in relation to their skills and availability. Ensure that facilitators develop a means for reflective monitoring and evaluation in every niche. Develop a national platforms, and involve facilitators in other CDAIS activities, such as the marketplace, workshops, documentation exercises, development of the national action plan, etc.



## Country team

- Georges Yameogo, *CDAIS National Coordinator*
- Zacharie Segda, *CDAIS Country Manager*
- Aurélie Toillier, *Cirad Agrinatura focal person*
- Daouda Kontongomde, *FAO Country Office CDAIS focal person*
- Abdoulaye Saley Moussa, *FAO technical officer support:*
- Marc Casteran, *EU point focal*

## Supported by

**PMEL team** Aurelie Toillier (CIRAD), Zacharie Segda (FAO BKF), Georges Yameogo (MESRSI), Eveline Compaore (INERA), Ibrahima Zerbo (CORADE).

**Consultative group** Saturnin Bationo (DGEES-MESRSI), Amadé Ouedraogo (DGRSI-MESRSI), Marie-Thérèse Some (FRSIT-ANVAR), Julianne N Gue (INERA), Issoufou Porgo (CPF), Issouf Sanou (FENOP), Jules Zongo (FNJPA-F), Jean Didier Zongo (CCAIE), André D Hilou (LCB).

**Consultants** Salif Derra (scoping study, niche profiling), Marion Guillet (scoping study), Beteo Zongo (scoping study), Michel Sedogo (inception workshop facilitation).

**National innovation facilitators** Gifty Narh-Guiella (CORADE), Ibrahima Zerbo (CORADE), Blaise Yoda (DGFOMR), M Seydou Hema (DGEAP-MRAH), Modibo Ouedraogo (APME2A), Gisele Kasoni (Afrique Verte), Serges Ganou (ANVAR), Raymond Kiogo (IRSAT), Dieudonné Ilboudo (INERA), Salmon Zongo (DGPV/DMMA), Marc Gnoumou (GGPv/DVRD), Djibrillou Koura (DIOBASS), Mahamadi Ouedraogo (FERT), Idrissa Nacambo (FERT), Drissa Sangare (AGROPOL), Celestin Traore (CPF), Frederic Dabire (DGAHDI), Clémence Lankouande (CNABIO), Guiadoma Ludovic Yigo (DGPER), Daniel Sawadogo (FENOP), Azara Nfon Dibie (GRET), Philippe Yanogo (CEAS), Giraude Adeossi (2iE), Lassaya Nikiema (DGRSI), Eveline Compaore (INERA).



*CDAIS group at the inception Workshop*

# ETHIOPIA

## 2016 COUNTRY REPORT

“A well-functioning agricultural innovation system is based on broad dialogue and a bottom-up approach”







## Ethiopia – 2016 country report

**When asked to formulate ideal characteristics of an agricultural innovation system, the main ones mentioned were: ‘demand driven’, ‘participatory’, ‘well facilitated’, ‘adaptive’, ‘opportunities for networking’, and ‘multi-stakeholders’. However, limited financial services in rural communities where most agricultural innovation is taking place, affects the innovation process.**

### 1. Innovation partnerships

#### **Veterinary drugs and feeds**

Meeting the quality and safety of livestock feed, vaccines and drugs remain a critical challenge. The National Livestock Master Plan puts improving livestock health services as key to improving food safety and exports, with the Veterinary Drugs and Feed Administration and Control Authority (VDFACA) established in 2013, supported by a task force including VDFACA, the Ministry of Livestock and Fisheries, donors, NGOs, the Feed Processing Industry Association, Veterinary Drug Importers Association, Ethiopian Commercial Dairy Farmers Association, Live Animal Exporters Association, Inter Governmental Alliance for Development (IGAD) and Tuft University. With high levels of aflatoxin an increasing challenge to the milk industry, Addis Ababa and some districts of Oromia will be target areas.

#### **Milk**

As demand for milk products increases, Ethiopia is a net importer of dairy products, and average milk yield from indigenous dairy cows only 1.9 litres per day. Milk processing industries have developed in the past 20 years, though the formal milk market makes up less than 20% of sales. Challenges include limited awareness amongst consumers regarding health risks associated with unpasteurized milk. Also, except in some parts of Oromia, per capita milk consumption remains low at 19-24 litres, compared to 120 litres in Kenya and 180 litres in Sudan. The Ethiopian Milk Processor Industry Association (EMPIA) is striving to stimulate demand for pasteurized milk, with industries in and around Addis Ababa being the biggest buyers, purchasing from thousands of smallholders in Oromia. The national task force aims to provide public education through the media, a school milk pilot programme, and policy influence through organizing multi-stakeholders debates. EMPIA is leading this process, along with the Ministry of Livestock and Fisheries, media organizations (WAFA), the Agricultural Transformation Agency (ATA), NGOS, donor communities and farmer organizations.

#### **Community seed production**

A critical shortage of improved seed (hybrid or self-pollinated) undermines smallholder productivity. To help overcome this, a farmer cooperative union (EDGET) was established by Self Help Africa to produce and market improved seeds. Seed producers from the target areas now manage to meet 20% of the seed demand for the entire region. Suppliers give priority to commercial seed producers and government owned seed companies, and less to research and farmers organizations. New efforts require engaging the cooperative union, research organizations, cooperatives promotion office, public extension organization, finance institutions, quality control organizations and projects such as CDAIS. Improved capacity will allow EDGET to become a specialized farmer-owned seed company and to increase production of self-improved seeds to meet the needs of its members.





### **N2Africa**

N2Africa aims to build sustainable, long-term partnerships to enable smallholder farmers to benefit from symbiotic nitrogen-fixation by grain legumes. The International Livestock Research Institute (ILRI) leads the innovation process, collaborating with research, extension and farmer organizations, NGOs and private companies. N2Africa has developed and operationalized public-private partnerships with actors in the legume value chain, integrating delivery, dissemination and a strong monitoring, evaluation and learning loop. In 2015, 25,000 smallholders received new legume technologies including bio-inoculants, training, improved seeds and agronomic practices. But, despite encouraging achievements, major challenges remain, such as a lack of reliable markets, and limited capacity especially amongst cooperative union leaders regarding business and leadership skills. The niche in Gonder, Amhara region is led by Tsehai Union, one of the biggest cooperative unions nationally, in partnership with Baher Dar University, other research and extension organizations, and private input supply companies.

### **Malt barley**

The market for malting barley is growing at 15-20% per year, driven by a corresponding growth in beer consumption and investment in breweries. Demand in 2014 reached 214,000 tonnes but with only 40% met through domestic supply, thus a huge opportunity to enhance production and substitute imports with intensified research and development efforts along the value chain. The Sinana Research Center (EIAR) and other stakeholders have been making efforts to support farmer cooperative unions in Arsi zone of Oromia so they can meet demands from breweries for quantity and quality. EIAR is also supporting two malt barley seed and grain producing farmers' cooperatives, Tuka-ketara in Lemu-Bilbilo district and Hunde Gudina in Munesa district, to supply high quality seeds to their members. EIAR, public extension offices, the Asella malt factory and the Asella seed quality control and certification laboratory, the cooperative promotion agency office, Galama Farmers Cooperative Union, breweries, malt barley grain and seed traders, and involved NGOs will be the main actors.

## **2. Activities**

### **Engaging and mobilizing partners**

Conducting the scoping study, inception workshop, innovation niche identification, national innovation facilitator training and initiating capacity needs assessment, were the main activities in 2016, in close collaboration with FAO, the Ethiopian Institute of Agricultural Research (EIAR) and Agrinatura, with full operation of the project following recruitment of a national project manager in September 2016. The steering committee met five times between September 2016 and February 2017, discussing selection and training of innovation niche and national innovation facilitators, the capacity need assessment, and the Agrinatura/EIAR partnership. Also advising the country team on implementation, the technical committee including extension organizations, NGOs, private sector actors and universities, organized three meetings from September 2016 to February 2017.

The inception workshop in April 2016 was attended by 58 participants, who were asked to formulate ideal characteristics of an agricultural innovation system. Participants generally agreed with the list of main stakeholders as presented by the scoping study, but the country team agreed not to present the stakeholder map as it had created significant discussion in an earlier technical validation meeting. All groups agreed that there are many actors involved and relationships are often complex. Groups also derived a statement on how innovation systems should look in 2025, and that they should comprise of several interacting actors that improve agricultural yields. The criteria used to select the innovation niches presented in the scoping study were also presented. Participants agreed that the technical working group would further refine the suggested list.



The project has been promoting itself by engaging with Farm Radio International, enriching the Ethiopian page of the CDAIS website, presentations in conferences with relevant professional associations and meetings called by similar projects, inviting the media and preparing press releases for workshops, policy dialogues and the marketplace.

## Scoping study

The scoping study included a literature review and interviews with four categories of stakeholder; a technology generation, a dissemination group, the enabling environment, and donors. Ethiopia's economy is founded on agriculture, and despite of changes in economic development, agriculture will continue to be the most dominant sector. It still accounts for 46% of GDP, 73% of employment, and 80% of foreign export earnings, with 11.7 million smallholder households accounting for some 95% of agricultural GDP and 85% of employment. The strategic interest of the government in the agricultural sector is expressed in a relatively high budget allocation (around 16% of the GDP), establishment of the Agricultural Transformation Agency (ATA), investment in rural infrastructure, electricity, roads and telecommunications, and tax incentives for agricultural production, processing and marketing.

Ethiopia put agriculture at the heart of its economic development through its Agriculture Development Led Industrialization strategy in 1999, and its Policy and Investment Framework in 2010. But the expansion of priority export commodities: coffee, livestock products, fruits and vegetables, flowers, oil seeds and pulses, natural gum and spices, is still lacking. Emphasis is given to value-added commodities and promoting investments in underexploited sectors, but many agricultural products are still exported unprocessed. The overall trend is encouraging in terms of agricultural productivity, however, but agriculture remains predominantly low input, low-value and subsistence oriented, and is vulnerable to frequent climatic shocks.

Well-functioning agricultural innovation is based on broad dialogue and a bottom-up approach. While certain attempts have been made in this direction by establishing the Agricultural Development Partners Linkages Advisory Council (ADPLAC), limited resources and structural problems inhibits its functionality, and platforms vary in terms of their level of achievements and successes. Where platforms are strong and vibrant, remarkable success stories like the East Shewa Zone ADPLAC platform have been reported, where a range of stakeholders including agricultural research centres, zonal and woreda agricultural development offices, NGOs, private input suppliers, private and governmental seed enterprises, exporters, agro-industries and farmer organizations, developed an exemplary innovation system around export-type haricot bean varieties.

## Capacities strengthened

Due to the late recruitment of the country project manager and later visa problems, he was neither able to attend the June training in Wageningen nor the conference organized in Montpellier. However, following meetings with the Agrinatura focal person from ICRA, FAO focal persons from Rome and Addis Ababa, and the EIAR coordinator, enough orientation was received to start work. Also, the CDAIS Rwanda team offered the help of one of their trained facilitators for the first capacity needs assessment that was conducted in February. The national innovation facilitators training workshop was planned for the autumn of 2016 but due to the political instability at that time, it was postponed until January 2017.



### 3. Lessons learnt

Main target vs outreach targets. The Technical Working Group and the CDAIS Steering committee agreed to have two categories of innovation niches, main and outreach. The main niches are those which are entitled to receive all supports that falls within the scope and capacity of the project, while the outreach niches are those which will not receiving any direct financial support from CDAIS except that the facilitators will attend all training courses to be organized during the project period. In this regard, the cost of facilitation in these innovation niches will be met by the host organization of the innovation niche/partnership. The host organization of the outreach niches need to express their commitments that they will be sharing the principles and approaches of CDAIS for better results and improved outcomes. This means all the outreach facilitators will be able to be 'on the same page' with the main target facilitators during training and sharing events.

The Agricultural Development Partners Linkage Council (ADPLAC) plus other national platforms. At the beginning of the project, this was considered to be the only viable national platform that could potentially host innovation. However, through time, it was realized that there are other national value chain based platforms as well as donor and government initiated national platforms that could serve the same purpose. Therefore, the CDAIS country team considered commissioning a study to better map these platforms for a complete picture of the agricultural innovation systems in Ethiopia.

Selecting innovation facilitators. The original idea that the selection of innovation facilitators should be open to everyone with an interest and the potential to do the job. The Technical Advisory Group, however, suggested drawing facilitators only from the selected innovation niches, to help them to facilitate meetings more easily through prior familiarity and contacts they will have with members of the innovation partners, and which the country team accepted.

Hiring a part time coordinator with additional support. The CDAIS project manager was recruited part time (at 50%). With the increased number of niches in Ethiopia and complications related to innovation systems, it was agreed to offer additional support to the country project manager. Accordingly, ICRA recruited the assistance from participants of the national innovation facilitator training program.



## Country team

- Chilot Yirga, *CDAIS National Project Coordinator*
- Amanuel Assefa, *CDAIS Country Project Manager*:
- Hanneke Vermeulen, *Agrinatura focal person*
- Lemma Gizachew, *FAO Country Office CDAIS focal person*
- Abdoulaye Saley Moussa, *FAO HQ technical officer support*

## Supported by:

**Steering committee** includes the EIAR, NPM, FAO-Ethiopia Representative, ICRA representative and the EU representative, Lead Technical Advisor from FAO: Lema Gizatchew, *FAO country focal person*; Amanuel Assefa, *FAO National Project Manager*; Hanneke Vermeulen, *Agrinatura Focal Person*; Eshetu Mulatu, *EU*; Saley Moussa Abdoulaye, *FAO Rome Technical support*

**Technical committee** Elias Zerfu, *Yardistik College*; Fasil Kelemework, *Self Help Africa*; Tiruwork Zelalem, *Baherdar University*; Beruck Yemane, *Ethio feeds*; Hailu Tadesse, *Selale Dairy Union farmer organization*; Akalu Teshome, *Ministry of Agriculture and Natural Resource Management*; Abiro Tigabe, *Amhara Region Agricultural Research Institute*

**National innovation facilitators** Getachew Asmare, Yohaness Tsegaye, Tiruwork Zelalem, Abiro Tigabe, Zerihun Abebe, Endalkachew Abe, Hailu Araya, Gemechis Jaleta, Tatek Tesfaye, Tollosa Alemu, Rehima Mussema, Demeke Wondemagenge/Temsge, Liya Girma, Mathios Belesa, Tegenge Wakoya, Kibebew Wakjira, Kebebe Erango, Tafesse Mesfin, Selamwit Getachew, Eshete Amsalu, Birhanu Urgessa



*CDAIS group at Capacity Needs Assessment in Butajira*



# GUATEMALA

## 2016 COUNTRY REPORT

“Encouraging direct contact between producers and buyers strengthens and integrates value chains”





## Guatemala – 2016 country report

**Innovation is a collective process of negotiation and learning that seeks to add economic and social value to a community. Limited financial resources, political instability and institutional discontinuity in the public sector compromise the efficiency and effectiveness of agricultural research and innovation initiatives, affecting potential opportunities by the generation of distrust in public institutions. However, best practices could still be identified as a basis of lessons learnt in agricultural innovation systems.**

### 1. Innovation partnerships

#### **Avocado**

The main aim of the niche is to increase the income of the producers by improving the agro-industry and by exporting Hass variety, through new technical skills and strengthening the capacity of producer organizations, principally in San Andrés Semetabaj municipality, Sololá department. Here, the avocado chain involves an important number of smallholders suffering from pest infestations that affect cultivation and market demand, so it is important to ensure planting stock quality and good agricultural practices. CDAIS will build on the EU-funded Regional Program for Innovation and Research for Value Chains (PRIICA) and will reinforce the functional capacities of the established consortium. Partners will include Ministry of Agriculture regional extension offices, National Council for Rural Development, Institute of Agricultural Sciences and Technology, local government, and national and local producer organizations.

#### **Cocoa**

This niche will improve transformation processes and strengthen the capacity of producer organizations to meet national and international market demand for high quality products. It will promote public and private coordination to conserve and multiply native cocoa clones, and improve postharvest procedures through new collection centres and protocols. Native varieties have the organoleptic characteristics that the market desires, and disease-tolerant clones are needed to ensure productive capacity. Improved management will also increase quality and productivity, through pruning and disease control. The project is estimated to reach 70-80% of Guatemalan cocoa producer in the northern region, particularly in Lanquín, Santa María Cahabón and Cobán municipalities, and whereas smallholders have already formed cooperatives, there is yet no national entity that links different actors in the cocoa chain. Potential partners include the National Cocoa Agro-business Working Group (CONADEA–MAGA), the National Strategy of the cocoa agro-chain's Institutional Technical Team (ENAC-ETI), Ministry of Agriculture regional extension offices, Fundasistemas (NGO), and different producer associations (ADIPKAKAW, ADIXKAKA, ADIOESMAC, FUNDALACHUA).

#### **Beans**

Increased diffusion and production of the biofortified 'ICTA Chorti' bean variety is the main aim of this partnership, in Jocoatán and Ipala municipalities in Chiquimula department, and Atescatempa municipality in Jutiapa department. Bean production is typically a family farming enterprise, with youth and women active from field to market, but only 20% of producers achieve good yields and they lack post-harvest management. There are more productive and pest resistant varieties but many smallholders cannot afford quality seed for new planting. Also, producers often sell to intermediaries and do not get a fair price, strengthened business capacities at individual and organizational level will bring immediate benefits. The niche will involve partners such as the Institute of Agricultural Sciences and Technology (ICTA), Biofort Platform Plataforma BIOFORT, National Coordinator of Basic Grain Producers (CONAGRAB), Ministry of Agriculture Livestock and Food





(MAGA), National Council for Agricultural Development (CONADEA–MAGA), Guatemala's seed producers network (REDSGEGUA), and seed producers and beans exporters VEDEX, S.A.

### **Honey**

This will strengthen honey producer business capacities and optimize hive management, production and commercialization of honey and other bee products. There are an estimated 3,500 beekeepers and 150,000 hives nationally, 80% being small and medium-sized producers owning less than 50 hives. Bulk exports to Europe account for 90% of production, though only 30% is exported directly by producer cooperatives (25% produced directly by exporters, the rest bought by intermediaries). The aim is to guide cooperatives in Huehuetenango department, specifically in Cuilco, La Democracia, San Pedro Necta and Tectitan municipalities towards productive and commercial autonomy. Here, women play an important role in honey harvesting and commercialization and several groups of women beekeepers have been established. Partners include the Ministry of Agriculture Livestock and Food (MAGA), National Council for Agricultural Development (CONADEA–MAGA), Guatemalan Beekeeping Registry (REGAPI), Apiculture Health Program (PROSAPI), Fair Trade FLO Guatemala, AGEXPORT Beekeeping Committee, and the SIPAC Cooperative.

## **2. Activities**

### **Engaging and mobilizing partners**

From January to March 2016, meetings developed in collaboration with the Ministry of Agriculture identified potential stakeholders in five niches, within the framework of national agricultural policies. From March to May, innovation niches were shortlisted through stakeholder interviews using a list of criteria. These were, in order of importance: (1) inclusion and empowerment of women / youth / people with limited resources, (2) alignment with national priorities, (3) focus on economic, ecological and social sustainability, (4) opportunities to replicate on a large scale, (5) part of an insufficiently addressed industry, (6) participation of multiple stakeholders representing multiple sectors, (7) a proven oriented market space with a focus on quality, (8) confident enough to impact, and (8) affordable. Results were integrated with outcomes from the First Meeting for the Formation of a National Team for the Evaluation of Needs for Capacity Development in Agricultural Innovation Systems, held in April 2016. Stakeholders representatives in each priority value chain then made concrete inputs to integrate niche profiles, finalized in July 2016.

At the First Encounter Workshop held in April 2016 in Guatemala City, integrated working groups were provided with Terms of Reference to apply to be facilitators for the capacity needs assessment, with 18 applications received in May and 12 shortlisted for participation in the 4-day national innovation facilitator training in August 2016 in Santa Rosa de Copan, Honduras.



## Scoping studies

These were completed in ten weeks, including 29 interviews, and a diagnosis of agricultural innovation systems that considered the national legal framework, key stakeholders, and related current projects. Guatemala does not have specific public policies that give priority to capacity development, agricultural research and innovation, but does have institutions that work on them. Concerning capacity development, non-formal education includes courses, workshops, field schools and field tours for producers. The National Planning System (SNP) is the public institution that articulates national policies that promote human development for implementation by all government bodies. Selected public policies analysed were the Comprehensive Rural Development Policy, the Agriculture and Livestock Policy, the Agricultural Policy and the National Policy on Climate Change, the National Development Plan, and the Vision 20/25: Science, Technology and Innovation for the Americas: Hemispheric Cooperation for Competitiveness and Prosperity in a Knowledge Economy. Based on CDAIS methodology, after this literature review, a list of potential stakeholders was drawn up, including organizations representing public and private sectors, academia, international cooperation, smallholders, etc. And after the first round of interviews, the list of potential stakeholders was expanded to 29 institutions.

Private sector priorities for agricultural innovation are yield improvement, introduction of new technologies, and increased competitiveness of the most exportable products (vegetables, sugar, coffee and fresh fruit). Most replied that innovation is the answer to the specific needs of producers, but the 'innovation system' concept was not widely known. Public institutions orient agricultural innovation towards primary production (basic grains) and technologies to meet food security and sustainable natural resource management goals, and add social welfare and human development to private sector production and commercial objectives. Public institutions also promote more of a systems approach with coordination among different sectors. An important initiative that marks this approach is the creation of the Sub-National System for Research, Innovation and Agricultural Transference (SNITA), a consortium/platform integrating public, private and academic institutions involved in research, innovation and agricultural knowledge transfer. International cooperation agencies also play an important role promoting networking and partnerships of stakeholders from different sectors. Producers tend to define innovation as the answer to their needs for change in different areas, e.g. new crop management practices, improved product quality, new crops, diversifying traditional production against effects of climate change, and access to new markets, but also demand external support for technical assistance, training, and access to finance.

## Capacity development

The national innovation facilitators training strengthened capacities to implement the capacity needs assessments for each innovation niche, created a shared understanding of concepts and terminology, increased hands-on capacity to use different tools/methods, exercised facilitation skills, and developed the understanding of planned activities. Based on performance and attitude shown during the workshop, eight facilitators were selected, assigned to value chains, and started to work within the need assessment study in October, facilitating the three scheduled workshops for each chain, and applying the methodology acquired during the training. Another output of the training was a program of activities for September to December 2016. The team worked together to facilitate discussions with diverse actors from each niche and consolidate findings at national level. A follow up meeting with national innovation facilitators and a technical committee meeting were held in September to validate geographic areas for each niche, and the capacity need assessment started with the first niche visit in October.



### 3. Lessons learnt

Seven main lessons were identified. These were; (1) networking and working in partnership with other institutions can generate synergies and promotes knowledge transfer and dissemination. (2) involving local institutions (municipalities, associations and the Department Development Council (COCODE) for community participation mechanism) adds value to traditional knowledge and promotes the multidisciplinary nature of innovation processes by building trusting relationships between institutions and producers, and (3) promoting farmer participation in agricultural innovation processes and taking into account their ideas and experiences facilitates the process of knowledge transfer and ownership, and contributes to the continuity and sustainability of the proposed innovation. Other lessons include (4) facilitating interaction between researchers and public and private stakeholders in the different supply chains that allow the application of research into new commercial and technological products and processes that meet the very real needs that directly benefit farmers, (5) strengthening organizational capacity of smallholders increasing leadership in business and commercial areas and contributing to a formalization of producer organizations that increases production and leads to greater quality control, and improves marketing skills, and (6) diversifying production that secures new smallholder revenue and strengthens resilience to climate change.

All interviewed institutions confirmed the importance and necessity of agricultural innovation, and showed interest and enthusiasm for integrating local and international knowledge. The application of collaborative approaches between different institutions, and participatory approaches including producers, are important in ensuring the success of innovation systems. The following are some main factors contributing to these dynamics: articulated scientific contributions from public, private and academic sectors for the generation of innovations such as the development of new technologies and products, increased yields and improved production quality; promotion of public-private partnerships towards innovation and improved service delivery; improved capacity of producers in organizational and technical skills to respond to changes in condition of production and trade. Strengthened national systems and institutions for agricultural innovation and capacity building through the support of international cooperation agencies, and utilization of networks to transfer and dissemination successful experiences in innovation carried out at national or international level.

Regarding the national innovation facilitator training, some of the materials prepared by Agrinatura were very useful. However, better translation would have avoided confusion, and more solid examples and clear illustrations would ensure then participants can understand the main points more easily. Also, creating a glossary could lead to a more harmonized understanding between actors in different niches. The methodology proposed, with new and rather abstract concepts, is difficult at first for participants who for the most part are not familiar with the innovations systems approach. But results have been positive. Analyzing the suggested concepts and tools through practice, and through which the field day was particularly valuable, provided an excellent basis for facilitators to understand concepts and use of the proposed tools. It also proved very useful to include various different types of working processing and dynamics during the course, such as break-out groups, role playing, etc., and which maintained interest during the workshop.

The following recommendations were made. Firstly, stakeholder analyses could be expanded to help define prioritized project niches, particularly regarding the selection of producer associations that could be included, and that results could be complemented with direct field visits that will also contribute positively to establishing trusting relationships regarding the project. Existing SNITA and SNER national systems must be strengthened. Furthermore, promote information exchange and systematization to achieve shared working strategies that result in decisions, agreements and collaborative commitments, and evaluate the extensive experience and



knowledge of certain international, along with priorities set by the national rural and agricultural policies. Finally, assess the replicability of experiences must be another niche selection parameter, and attract and train young researchers, and appreciate the research experience of public institutions such as ICTA and SENACYT.

## Country Team

- Marco Vinicio Cahueque, *CDAIS National Coordinator*
- Julio Catalan, *CDAIS Country Manager*
- Massimo Battaglia, *Agrinatura focal person*
- Maynor Estrada, *FAO Country Office CDAIS focal person*
- Andrea Sonnino, *FAO HQ technical officer support*

## Supported by:

**Steering committee** Diego Recalde, Maynor Estrada, *FAO Representación Guatemala*; Mayra Vasquez, Julio Catalán, *Ministerio de Agricultura*, Marco Vinicio Cahueque, Max González, *Ganadería y Alimentación MAGA*; Andrea Sonnino, Ilka Gómez, *FAO Roma*; Massimo Battaglia, Chiara Sgreva, *AGRINATURA*; Nicola Arbace, Nury Furlán, Stefano Del Debbio, *AICS*; Richard Hawkins, *ICRA*; Claudia Barillas, *Unión Europea Guatemala*

**Technical committee** Sector Gobierno: Hugo Figueroa, *SENACYT*; Max González, *MAGA*; Elías Raymundo, *ICTA*; Marco Tulio Cuevas, *SNITA*; Sector Privado: Beatriz Moreno, Sector Académico: Vilma Porres, *Universidad del Valle de Guatemala*; Aldo Mario Tobar, *Universidad de San Carlos*; Cooperativa Samac/ La Voz que Clama en el Desierto: Waldemar Pacay Sacrau, Andrés Isaías Cutuc Méndezy Gloria Floricelda Pouu Pacay; Cooperación Internacional: Juan Carlos Marengo, Carolina Vargas

**National innovation facilitators** Cacao: David Alvarado Güinca; Marlon Fernando Ac Pangán; Miel: Cristian Porfirio Miranda Fuentes; Víctor Hugo Paz Rosas; Aguacate: Marcos Antonio Martínez; Frijol: Mirna Lisete Ayala Lemus



*CDAIS group in Guatemala*



# HONDURAS

## 2016 COUNTRY REPORT

“Government participation is critical  
for catalyzing agricultural innovation”





## Honduras – 2016 country report

**CDAIS has helped us to develop a much deeper understanding of key concepts, such as multi-stakeholder partnerships, innovation, capacity building, niches, common vision, and the complementarity of functional and technical capacities using concrete examples. This project has also showed the benefits of participatory methodologies and innovative communication technologies through the practical use of brainstorming, interviews, video presentations, needs prioritization, etc.**

### 1. Innovation partnerships

#### **Coffee**

International demand for specialty coffee is increasing, but there is no Honduran quality standard. Some producers of small batch 'microlotes' now find a market niche, but many others have not yet entered the market. Microlotes is a very high quality coffee that is produced with the strictest methods and sold in limited quantities to specific buyers willing to pay higher prices. Speciality coffee production is concentrated in western Honduras, and the niche includes two municipalities in Lempira Department. The aim is to improve smallholder livelihoods by increasing commercialization of specialty microlotes coffee based on four components. These are (i) strengthening cooperative organization and business management; (ii) improving market trade links; (iii) institutional coordination with other rural development actors; and (iv) strengthening investment capacity and links with the financial sector. The Ministry of Agriculture considers that innovations will be replicable in other chains, and the niche driver is the governmental Instituto Hondureño del Café (IHCAFE) who identified the Association of Honduran Western Coffee Producer and the HWC brand. Other actors are coffee chain stakeholders in Copán, Ocotepeque, Lempira and San Juan Intibucá departments, and two producer associations, Caja Rural de Ahorro y Bienestar de Copantillo (CRAC) and Cooperativa Cocatecal.

#### **Cocoa**

Olancho on the Atlantic coast has the best agro-climate conditions in Honduras for growing cocoa. National annual production is 1500 tonnes, but only 10% is exported as high quality cocoa. Improving productivity will increase producer livelihoods, but most cocoa farmers cultivate less than 2 ha, have limited financial resources, only basic technical knowledge, and little trading experience. Producers receive low farm-gate prices and are reluctant to improve quality and marketing opportunities, with poor internal communication in producer organizations, weak social cohesion, and lack of postharvest processing identified as the main limiting factors. This niche aims to encourage producer partnership to improve postharvest handling and quality and increase exports through building capacity of smallholder farmers' associations, through strengthening their management and entrepreneurial vision, improving access to technical and financial services, storage facilities and other infrastructure, and the standardization of quality cocoa. Other aims include improving links with national and international markets, increasing institutional linkages with other stakeholders in the value chain including in the financial sector. The main driver is CURLA (Centro Universitario Regional del Litoral Atlántico), already working on research with FHIA (Fundación Hondureña de Investigación Agrícola) in creating the first cocoa diploma.





### **Beans**

Beans, produced mainly by smallholder farmers, are very important to food security in Honduras. Olancho, the largest of the country's 18 departments, supplies 40% coming of national production. Many smallholders are organized in associations, including ASOPRANO (Asociación de productores agropecuarios del Norte de Olancho – large producers association) and marketing organizations with 1171 members. In support, the National Beans Commission has been established by the Directorate for Agricultural Science and Technology of the Honduran Ministry of Agriculture (DICTA), linking bean producers and other stakeholders in the value chain. This strategic niche is aligned with national policies, and is focused on improving this stakeholder platform to increase impact at an organizational level. The ministerial Programa Nacional de Desarrollo Agroalimentario (PRONAGRO) also participated in niche visits and is spreading CDAIS methodology to other production areas, and which may lead to the organization of an inclusive commission to stimulate continuous dialogue among actors and respond to issues at the political level.

### **Potatoes**

There are 6000 mostly smallholder potato producers in Honduras, cultivating 2,500 hectares mostly in Intibucá, Ocotepeque, La Paz and Francisco Morazán departments in the western region, generating some 15,000 permanent jobs. Most are from the Lenca and Chortí ethnic groups, having less than half a 'manzana' (0.70 ha). Annual national production is about 40,000 tonnes which meets most of the domestic demand. The potato niche will cover San Miguelito, Yamaranguila, La Esperanza and Intibucá municipalities in Intibucá department, and Santa Elena, Yarula, Santa Ana, and Opataro municipalities in La Paz department. The potato niche aims to improve negotiation skills in producer organizations, improving yields through best practice, value-added processing and improvement of marketing. DICTA is the main driver, has proposed the main facilitator and is developing a financial strategy between producers and financial support.

## **2. Activities**

### **Engaging and mobilizing partners**

A technical advisory group was created in November 2015 during the inception workshop, shortlisting potential value chains in February 2016, with final selection overseen by the national steering committee. During the Tegucigalpa meeting in April 2016, it was agreed that to ensure continuity to niche profiling, the project team should consult with stakeholder and value chain representatives. The EU Delegation representative was actively involved in all implemented activities, participated in meetings and issued an inception message from the donor. The EU logo is included in all official documents together with the CDAIS logo, and reporting in the local/national media always underlines the EU as the donor. In the April meeting in Tegucigalpa, the CDAIS approach was well disseminated, local partners were engaged, and this formalized the national innovation facilitator selection process. Constant communication is ensured through the FAO Office in Rome and FAO Representative in Honduras, with a common understanding and a shared vision of activities being a key element for smooth project management based on a solid partnership and complementary collaboration.

The project is creating linkages among actors within and outside each of the niches. With the beans niche, a partner from PRONAGRO (Programa Nacional de Desarrollo Agroalimentario) started to visit the niche to spread the methodology to other production areas. With the potato niche, DICTA proposed the principal facilitator, and was fully engaged in the capacity needs assessment and has used the results to help develop a financial strategy between producers and banks. Also, Italian Cooperation has recently implemented some similar projects, developing a strategy based on the communication of ideas that gradually became common and shared within partners, including through newsletters and whatsapp groups, and took a regional approach.



## Capacities strengthened

The country project manager participated in the three week training in Wageningen in June 2016. This provided an overview of agricultural innovation systems, concepts and general CDAIS approach. The April meeting helped in building a national team, as during this organizations involved were invited to propose staff as candidates to become national innovation facilitators, so helping to ensure a deeper engagement of organizations that had already participated in niche identification.

Training of national innovation facilitators occurred in Santa Rosa de Copán in August 2016, to strengthen capacities for implementation of the capacity needs assessments. Participants were nominated by project partners and main stakeholders involved in innovation niches, with final selection ensuring the creation of a motivated group interested in the project's vision and objectives. Training lasted four days with a one day field visit, and created a shared understanding of CDAIS concepts and terminology through hands-on exercises in the use of different capacity need assessment tools and methods. National innovation facilitators became familiar with tools including netmap which helps to understand interactions between actors, and the problem tree for recognizing productivity bottlenecks. Facilitators also found it very useful to learn about complementarities and differences between functional and technical capacities. The field visit to a coffee cooperative was crucial to analysing suggested concepts and tools through practice.

An output was a program of activities for September-December 2016, agreed by facilitators of the four selected niches, with main facilitators responsible for programming along with the project team. Facilitators also offered to organize a meeting to share their understanding and use of the concepts learnt during the training, to increase knowledge of the innovation processes within each niche, and which took place in September 2016, when the main concepts were consolidated and the logistics and budget niche level meetings were organized. It was also decided to implement preliminary niche meetings to share concepts learnt and the approach with identified niche representatives, with the costs for these meetings covered by FAO.

## Capacity needs assessment

Activities conducted and responsibilities in the capacity needs assessment included the final consolidation of the niches by national teams and working group in April-June 2016. The selection of facilitators was undertaken by Agrinatura and FAO in August 2016, followed by a review of methodology, budget review of each niche and issuance of facilitators contracts in September. The capacity needs assessment itself began in April 2016 and was due for completion in January 2017. Actions will be finalized by January 2017, with a follow up meeting in Siguatepeque in February 2017, and the validation workshop in March 2017.



### 3. Lessons learnt

Niche/partnership profiling. This activity is one of the pillars on which the whole activity of learning cycles is built. For this reason, the niche selection process requires the involvement of the main representative stakeholders of the national agriculture system from the inception workshop forwards. Once strategic value chains have been identified, it is necessary to count on a 'catalyst person' who can collect, analyse and characterize the main information on stakeholders working in each niches. For this reason, the person appointed for conducting the scoping studies was ideal for this role.

Identifying actors in the niches/partnerships. While elaborating the niche profiles, more time with niche representatives would have been advantageous, to consolidate ideas and to develop a consensus on objectives at niche level. As a result, a dedicated meeting was organized in April with the main stakeholders of the four identified strategic value chains.

Capacity needs assessment. Some aspects were not covered in the facilitator training and which may affect the assessment. Although the facilitators have a deep knowledge of the niche they are working with, they might find it difficult to fully implement a participative approach. As such, it might be useful to reinforce facilitators' skills on collaborative learning. Logistics surrounding niche meetings also deserve particular attention, as they involve participants from different areas, representatives of the niches and the facilitators themselves who dedicate time to the project in addition to their regular jobs. This implies good preparation by the facilitators (accommodation, transport, catering, etc.) and the project team.

Regarding the national facilitators training, some of the materials prepared by Agrinatura was very useful, but translation into national languages (Spanish) must be done carefully to avoid mistakes and confusion during the course, using the right terms, and with more precision. Terminology in the material was at times too specific, and more concrete examples and more graphical illustrations would ensure participants get the main points more easily. Although the methodology proposed, with new and rather abstract concepts, could seem difficult for participants who for the most part are not familiar with the agricultural innovations systems approach, results have been positive. Analysing the suggested concepts and tools through practice, and from the field day in particular, provided an excellent basis for the national innovation facilitators to internalize the concepts and tools. It is very useful to mix different types of dynamics throughout the course of day's training and the course as a whole, e.g. plenaries, working groups, role playing, etc., to maintain a high level of energy and attention.



## Country team

- Francisco Herrera, *National Coordinator*
- Edgardo Alberto Navarro, *Country Manager*
- Stefano Del Debbio, *Agrinatura focal person*
- Lenin Edgardo Gradiz, *FAO Country Office CDAIS focal person*
- Andrea Sonnino, *FAO HQ technical officer support*

## Supported by:

### Workshop facilitators

Coffee – Rudy Omar Mejia (IHCAFE), Leonel Ilario Guevara (IHCAFE)  
 Cocoa – Verónica Bejarano (COMLESUL), Bertin Maldonado (CURLA), Elsy Michelle Chirinos (CURLA)  
 Beans – Julia Cruz (DICTA), Roberto Carlos Ordoñez (CURLA/IHCAFE)  
 Potatoes – Hector Garcia (DICTA), Arlis Imelise Zepeda (ASOFAIL)

### Support to working groups

Coffee – Carmen Alejandra Rivera (HQC), Juan Rafael López (IHCAFE)  
 Cocoa – Miguel Romero (ASEPRA), Jesús Chávez (IHCAFE)  
 Beans – Luz María Herrera (ASOPRANO), Gilberto López (ASOPRANO)  
 Potatoes – Eudora Méndez (ECARAI), Jesús Chávez (Corporación Dinant)

Backstopping the niche profiling and needs assessment (Mar-Oct 2016).  
 Pablo Flores Sierra (consultant)



*CDAIS group at Inception Workshop*

# LAOS

## 2016 COUNTRY REPORT

“Self assessment is not  
a linear process”







## Laos – 2016 country report

**The theoretical objectives of a capacity needs assessment is to bring together the diversity of niche stakeholders – farmers, companies, bankers, technical advisors, government officials, etc. – and help them to set their own assessment of gaps in their functional capacities. In Laos, there were initial issues regarding selection of who, and complex terminology, but these have been overcome during this first year and the project is well underway.**

### 1. Innovation partnerships

#### **Organic rice**

The Support and Export Agri-products Association in Savannakhet Province brings together farmers' groups, smallholder millers and traders involved in the rice value chain. They have launched an innovative process to improve marketing of sticky and fragrant rice through professional product packaging, with links to international traders in China and Viet Nam, in partnership with IDP, the largest milling company in Laos. Farmers, millers, traders and IDP are interested in working together to improve and integrate internal quality assurance and monitoring systems, and marketing, with support from CDAIS. The association also wish to be involved in other innovation niches such as organic vegetables and cattle breeding, as they see complementary linkages with their own practices.

#### **Organic vegetables**

The Organic Vegetable Association of Vientiane City brings together 11 farmer groups from six districts, who sell to organic markets in the capital city. The capacity to increase association size is important for innovative farming, meet market requirements and develop new partnerships. The first step is to organize discussions among smallholders farmers. Main identified needs are improved quality control especially technical monitoring and marketing strategies within each farmer group, and at the national level, to establish loan facilities, improve transport and market access. Farmers also want to be involved in the cattle breeding partnership as they use manure for growing their organic vegetables.

#### **Integrated cattle breeding**

An innovative cattle breeding value chain has been launched in Vientiane province resulting from a contractual partnership between cattle farmers and the Phonesack Company. This provides a selected cow to a farmer who raises it until it produces its first calf which must be given to the company, to be able to keep the cow and consequent calves. This is so beneficial to farmers that they have invested in intensive breeding, irrigated forages crop production, processing and storage. Stakeholders ask for support to consolidate early success and respond to challenges such as poor access to quality forage at the end of the dry season, technical issues, organization between farmers and extension services, marketing capacities, and cascading the benefits.

#### **Aquaculture-rice**

Farmers groups in Outhoumphone district, Savannakhet Province, use an integrated agro-ecological farming system combining rainfed rice with aquatic farming systems, increasing food security and nutrition, and supplying national and regional markets. Farmers ask for support to increase both their production and marketing capacities. Many insights were gained in recent years regarding nutrition impacts (from fish, frog, snails and insects) and an FAO project raised awareness especially on state services on the importance of such an integrated farming system. NAFRI and PAFO teams assessed the quality and the diversity of





products and consequently launched support programs. Now, we are ready for the exciting step of setting up partnerships to develop a national value chain for nutrition purposes, from this endogenous and local innovative practice.

### **Pig production**

Pork meat is an affordable protein source, but smallholder pig raising is uncommon due to a lack of technical ability. NAFRI and PAFO have found solutions, with Thai companies selling piglets along with technical advice. A womens group has formed and set a strategy to enhance productivity by (i) integrating processing at the village level; (ii) improving technical advice to produce well-bred piglets; (iii) national partnerships with traders and processors; and (iv) reflection on market prospects. The government and banks agreed to issue specific loans and have increased production through modern housing, forage production and assured markets through partnerships with local traders, with more than 30 households involved.

## **2. Activities**

### **Capacity need assessments**

These were undertaken as a process of self-assessment, because it is counterproductive to impose on stakeholders that they have to work with other stakeholders. Furthermore, the project team should not decide which stakeholders to involve as this is contrary to the concept of strengthening functional capacities. Consequency, in Laos, the project team identified the 'primary niche stakeholders', and then allowed them to identify people *they* wanted to involve through conducting an iterative self assessment of their capacities, i.e. a capacity needs self-assessment. Through these processes, the project team progressively facilitates stakeholders identifying which people they think need to be involve in future CDAIS niche activities.

### **Capacities strengthened**

The first stage of a learning process to improve the functional capacities of individuals or groups, is to expose them to situations where they can realize the gaps in their own capacities, rather than having a third party assume the gaps in their skills. Only with such logic can a learning process be effective. Therefore, two processes were used as a first step in a learning process. Firstly, an explore and practice process. By providing practical exercises, a target group of people realizes their lack of skills, hence appreciates the opportunity to join the learning process. The second, a selection process, where people who are aware of their skills gap are identified to join the learning process.

The national innovation facilitators training in Laos can be considered as an example of a selection process where individuals are aware in the gap in their skills. For these individuals to reach this awareness, they must have experience in facilitation. This was the key criteria in selecting the national innovation facilitators for the training.

Given that the training purpose is to select relevant and suitable people, a large number (40) of potential facilitator were brought together in the training sessions. The major output of the training was the identification of eight national innovation facilitators from different Lao institutions. At the training, the NIFs were presented the CNA tools. The sessions at the training was too limited to allow the NIF to fully own the CNA process and hence the mastery of tools. Therefore the first session of the training was dedicated to letting the NIFs understand the objectives, process and tools of the CNA. The concept of 'learning-by-doing' was the core of the NIF training. NIFs will progressively improve their skills and knowledge of CDAIS concepts and tools.



In concrete terms, that means there two consecutively clearly distinguished action plans are being developed in advance of the national validation workshop. The first is being developed by the primary stakeholders with no additional elements introduced by the project team, while the second action plan contains additional activities proposed by the CDAIS team. This distinction is crucial for two reasons. Firstly, this is because understanding the need to work with other stakeholders is a primary functional capacity, and secondly, because national innovation stakeholders and other local advisors are often resistant to behavioural change, e.g. from *telling* to *explaining* what stakeholders should/could say/know. Results from the capacity needs assessment show a clear distinction between what stakeholders say and what they really want to do, with a need to constrain national innovation facilitators from acting as advisors during the assessment process, and which was a very huge hurdle. The capacity need assessment was in itself a true learning-by-doing process.

At the end of 2016, the activities related to all five innovation partnerships has been implemented. These included organic rice in Savannakhet district, organic vegetables in Ban Non Tae, cattle contract farming in Ban Kheun, aquatic animal protein in ricefield in Outhompone district, and the pig value chain in Xanakham district.

### 3. Lessons learnt

The Laos country manager attended training in Wageningen in June 2016. However, it was considered that this had limited added value because the Laos country manager was not yet sufficiently aware of, or understood, the value of functional capacities beyond the project. This is not the fault of the individual but a weakness of the framework, i.e. considering that training is the first stage of a learning process, and there being no plan for a first practicing/selecting stage. Consequently, the Laos country project manager was not able to gain the skills intended by the training, and therefore was not able to implement the capacity needs assessment process. To fill this gap, national consultants were recruited to conduct the capacity needs assessment activities and coordinate the training of and support to the national innovation facilitators. It would be an added value if these key Laos consultants attend a training similar to that held in Wageningen in June.

Based on experiences in 2016, two key weaknesses were seen. The first was that self assessment is not a linear process, and the second was that self assessment can produce incomplete, and even wrong, results and outputs. Regarding the first, most stakeholders at the outset were not fully aware or did not understand the meaning of 'functional capacities', and which led to a lack of interest at the beginning. It was clear that the learning-by-doing process that has been started will be a long one, in fact that will continue throughout the project lifetime. In such a situation, there are two possibilities. Either stakeholders don't master the process, i.e. cannot themselves identify who should be involved in the need assessment workshops, cannot recognize their lack of capacities and cannot themselves prepare an action plan; or alternatively, stakeholders implement everything then progress through capacity needs, stakeholders involved, activities required. The latter is a true learning-by-doing process, and is considered as the only way to develop complex functional capacities. However, concerned actors started to put into place different stages without fully mastering them, and only slowly, did they begin to fully understand the role, framework, and most important questions and activities that are needed.



So, we need to think about a true apprenticeship through practical experiences, and that does not consider the initial results from the capacity assessment and action plan as definitive, but rather as a provisional draft that has to be updated, revised and continually improved as the project develops. For example, It is important that stakeholders including national innovation facilitators become progressively self-aware about the need to involve other stakeholders (as one of the functional capacities). However, often it seems that naturally, niche stakeholders prefer not to involve other stakeholders, and many stated a preference that the CDAIS project would work only with them. Of course, an important aim of CDAIS is to build the capacity of stakeholders, and one way for progress is that they become aware of the important and mutual benefits from involving other stakeholders. This means, however, that awareness of niche stakeholders to involve other non-niche stakeholders is not part of the initial stages of CDAIS project activities, but is in fact an output.

But being in a learning-by-doing framework means initial results are not always accurate, and the purpose of support is to make the target group progress by themselves and improve their understanding, knowledge, and skills regarding functional capacities. There is a need to verify and adjust the initial outputs through monitoring, evaluation and learning. But participants, and even to a certain extent the national innovation facilitators, do not have a complete understanding of the meaning of functional capacity, and as such, do not feel the need for gaining these capacities. Given this, the project team progressively improves their understanding of functional capacities, and build a deeper awareness of their own lack of skills.

Training sessions are not seen as the best way for the first stage of transferring CDAIS skills. Theoretical niche profiling is quite confusing, and if not an innovation system, project support may be not useful. Or does a niche have to be a promising context to develop an innovation system? If so, criteria set for niche selection are not met. Consequently, in Laos, different niche profiles were selected and can be grouped into three categories. These were; (i) already functional and needing less support (organic rice and organic vegetables), (ii) promising contexts (pig production and aquaculture-rice), and (iii) an innovation system but with significant constraints (cattle contract farming).

Also, the planned schedule for the national innovation facilitators training could not be implemented because participants did not understand CDAIS powerpoint presentation, though they were translated into Laos language. It was seen as far too complex and too theoretical for the participants, and consequently, the schedule was modified during the training.



## Country team

- Bounthong Bouahom, *Director general of NAFRI, CDAIS National Coordinator*
- Oudong Keomipheth, *CDAIS Country Manager*
- Patrick D'Aquino, *Agriatura focal person*
- Stephen Rudgard, *FAO Representative, FAO Country Office focal person*
- Karin Nichterlein, *FAO HQ technical officer support*

## Supported by:

**Steering committee** Stephen Rudgard, *FAO Representative to Laos*; Koen Everaert, *EU Representative to Laos*; Bounthong Bouahom, *DG of NAFRI*; Patrick D'Aquino, *CIRAD & AGRINATURA Laos Focal point*; Oudong Kepmipheth, *CPM of CDAIS Laos*; DAEC

**Technical committee** NAFRI, MAF; Department of Agriculture and Extension Cooperative, MAF; Department of Agriculture, MAF; Department of Livestock and Fishery, MAF; Department of Agriculture Land and Management Development, MAF; Department of Internal Trade Promotion and Management, MCI

**Capacity needs assessment team** Patrick d'Aquino, *CIRAD & AGRINATURA Focal point*; Oudong Kepmipheth, *CPM of CDAIS Laos*; Lampheuy Kansombath, *CIRAD Consultant*; 10 National facilitators; PAFO and DAFO staffs

**National innovation facilitators** Souksamlane Khamphoumy, Khanthanou Lorsavanh, Chanthava Nikhom, Korakot Phommalin, Khamla Sengphaxayalath, Khamta Singdala, Xayasin Sommany, Vanasy Syphachan, Khamla Thamachack, Bounsong Vongvichitch



CDAIS group in Dongkha Village

# RWANDA

## 2016 COUNTRY REPORT

“We have to work *with* farmers,  
not *for* farmers”







## Rwanda – 2016 country report

**Innovation needs motivation, and is an evolving process. This was a key lesson learnt this year. It can be simple or complex, but whatever, all actors have to work together for innovation to be effective. Innovation has to respond to an observed challenge and not just an interesting topic which doesn't solve any problem. It must be linked with agribusiness, and has to be coordinated by a 'champion' or local leader.**

### 1. Innovation partnerships

#### **Cassava**

Cassava is one of the major food crops, grown mostly by smallholders over 10% of all arable land. Ruhango district produces 21% of all cassava in Rwanda. This niche aims to develop partnerships between farmers, traders, and public and private research and extension services, leading to sustainable production of disease-free cassava. Led at the district level, niche actors include the Rwanda Agriculture Board (RAB) which oversees research and extension, and the Kinazi Cassava Plant, a factory working with farmers and others to ensure cassava marketability in Ruhango and neighbouring districts is feasible. CDAIS supplements the current phase of the national Strategic Plan for Agriculture Transformation (PSTA 3) which emphasizes market oriented and privately driven commodity development systems.

#### **Horticulture**

Within the framework of land use consolidation under the Crop Intensification Programme in Gatsibo and Nyagatare districts in Western Province, this is implemented on 925 ha. It employs 1545 farmers in irrigation, terracing, cropping, animal husbandry, feed and fodder production, artificial insemination, cooperative governance and innovation platform functioning. It has a vision of becoming a higher crop and animal yielding catchment, improving livelihoods of households/actors inside and outside the niche. This work builds upon the World Bank-funded, Land Husbandry, Water Harvesting and Hillside Irrigation Project (LWH) partnership, part of the Rural Sector Support Project (RSSP) in Gatsibo District.

#### **Matimba catchment**

This 900 ha government initiatives in Nyagatare District involves 1100 farmers on crop production and other agricultural activities, also aiming to boost food production in Rwanda under the Crop Intensification Programme. It builds on stakeholder motivation of and the potential of high yields from fertile soils and irrigation schemes. Maize and horticulture are the common crops. The scheme is championed by the Rwanda Agriculture Board (RAB), but includes other active stakeholders such as the of Nyagatare District Farmers Association, Water Users Association, African Improved Foods, the Clinton Development Initiative, and Kenya Commercial Bank (KCB).

#### **Community dairy processing centres**

The community dairy processing centre in Burera district, Northern Province, serves 1026 farmers though there are more than 25,000 cattle farmers in the District. The centre was one of the first that overcame marketing constraints in northern Rwanda, and plans to become a central catalyst in modern milk production and trading systems. Established by the Ministry of East African Community, Trade and Industry (MINEACOM), the National Industrial and Research Development Authority (NIRDA), the Rwanda Agriculture Board (RAB), and the Business Development Fund (BDF), it only operates at 11% of full capacity. Reasons for this include challenges ranging from low milk yields (6 litres per day compared to a potential of 30 litres per day),



to farmer-to-factory supply chain issues. It is led by local government, farmer cooperatives, milk collection centres, milk traders, veterinary services, commercial banks, animal feed factories, and public based institutions.

### **Twigire-Muhinzi – mainstreaming nutrition**

National food security has improved significantly in the past decade, with poverty reduced from 56% to 39%. However, malnutrition rates still remain high in Musanze district, a food basket of Rwanda, with 38% stunting in 2015. Only a newly established farmer extension system, Twigire-Muhinzi lacks nutrition-related information, and there is a need to establish collaboration with community health advisors to tap into a new partnership opportunity – the Twigire health system. Under local government supervision, this niche involves the District Plan to Eliminate Malnutrition committee, agricultural extension and public health services, and support organizations such as UNICEF's Access Project and USAID's Garden4Health.

## **2. Activities**

### **Engaging and mobilizing partners**

The inception workshops in September and November 2015 provided guidance, proposing 26 potential innovations partnerships where CDAIS could intervene. A technical team shortlisted 11, from which the steering committee selected the final five. The steering committee held its first meeting in March 2016, reviewing and finalizing the scoping study and inception workshop reports. It recognized the role played by the Tropical Agricultural Platform, Assembly, and associated meetings that took place in January 2015 that strengthened the understanding of capacity development for agricultural innovation systems, discussed processes especially related to capacity needs assessment, methodologies, terminology, and developing a common understanding. The meeting in December 2016 reviewed capacity needs processes, lessons learnt, organization of the validation workshop and marketplace. A recommendation included formation of a technical committee to support project activities, tasked with fine-tuning selection criteria for innovation niches and scoping study findings, to be composed of key actors in agriculture innovation platforms around the country in different sub-sectors.

At the country level, activities promoted the project and engaged partners. The project concept note and flyers were distributed during the needs assessment and at various national and various niche-level workshops, and project activities have been communicated through local printed and online newspapers, CDAIS and FAO tweets and newsletters. The national capacity needs assessment validation workshop in December 2016 brought together key actors from each niche, national and local government officials, development agency representatives, and others, to consolidate and enhance needs assessment outputs as a precursor to identifying partners and resources for implementing coherent capacity development plans at niche level. The 'marketplace' that followed introduced a commendable approach for pro-active engagement between different niche groups, and development partners and service providers. They all expressed willingness to contribute to addressing functional and other capacity gaps based on their specialist areas of intervention and expertise. It also increased awareness of CDAIS activities and pulled in other potential stakeholders who are prepared to contribute.

### **Capacity needs assessment**

This was conducted for the five selected niches, identifying what key capacities already exist and what capacity gaps need to be filled to reach CDAIS objectives. For this capacity needs assessment process, a team of 10 people was engaged from September to December 2016, for the series of visits, analyses and discussions. It identified both functional and technical capacity gaps, highlighted possible interventions to address these



needs, resulting in a comprehensive list of needs to focus on, with corresponding costs and timelines. This generated an understanding of capacity assets and needs for formulating capacity development responses/ plans to address missing capacities, and strengthen and optimize existing capacities that are already strong and well founded. It also set the baseline for continuous progress monitoring and evaluation against identified indicators, and helped create a solid foundation for long-term planning, implementation and monitoring.

The process began with niche profiling, as a foundation to plan the assessment and brief the facilitators during their training, before engaging the other facilitators from other institutions. This was followed by site visits and the use of diverse tools and methods, and finally, the validation of findings. An initial site visit raised awareness, galvanized stakeholder commitment and prepared the logistics at niche level. Secondary visits increased awareness of the project, and developed a common understanding of the niche history (timeline tool), key problems, causes and effects, and initial thoughts on solutions (problem tree/solution tree), who is involved, linkages, influences, structure, governance, boundaries (netmap tool), identifying existing and required skills (cards), strengths and weaknesses self-assessment (questionnaires), desk analysis of capacity needs to be addressed by CDAIS (data tables, capacity profile, radar plot), and reflection on the future (visioning rich picture). A third visit led to agreement on what additional capacities will help the niche get to where it wants to get to, leading to a capacity development action plan (action planning tools).

### **Capacity development**

The country programme management training in June 2016 in the Netherlands introduced new approaches and tools for designing and facilitating stakeholder participation in rural innovation, including effective collaboration, dynamic stakeholder networks, and local agribusiness partnerships. It used group discussions, exchanging experiences, presentations, guided field visits, and introduced capacity needs assessment, workshop and marketplaces discussions, policy round table and other key required preparatory and decision making sessions. Participants generated new knowledge by fostering collective learning and joint experimentation, and received exposure to facilitation and coordination skills that have helped them to better address agricultural development issues, motivate multi-stakeholder involvement in innovation, lead negotiations towards win-win situations, and manage dynamics within the 'challenge to change' process from knowledge to value during CDAIS processes.

National innovation facilitators were trained during four-day course in Kigali, starting on 30 August 2016. This led to a shared understanding of concepts and terminology, strengthened hands-on capacity to use new methods such as the netmap tool and the problem/solution tree, developed facilitation skills, and planning of required activities for capacity needs assessments.

## **3. Lessons learnt**

During niche profiling, it was observed that a meeting of key niche actors is needed early on in the process, as just sharing the format and asking stakeholders to fill in forms did not work. Also, key niche actors are difficult to identify online, and it is essential to discuss in person, including sectoral figures who have already assessed the niche and can offer guidance on the potential impact of CDAIS contribution to increased productivity, the number of beneficiaries/ farmers involved, realistic area to be covered, etc. Actors differ from area to area in the same value chain so it is also valuable to sample. Identifying actors in the niches/partnerships is always complicated, especially where processes are not well documented. We thought that we had a full list of all actors at niche level during the capacity needs assessment, but only later was this built up after other actors were brought in, and especially during the netmap exercise.



The following issues were highlighted as needing more attention during preparation and execution of future national innovation facilitator training. (a) The scoping study report and the TAP framework need to be shared well in advance, (b) given examples of innovation systems and success stories, (c) being consistent with terminology, e.g. innovation niche/partnership through all documentation, (d) with translation of terminology and questionnaires into local languages, and (e) that the netmap should be linked to but come after the problem tree. Furthermore, at the end of the training, the team should assess and score participant confidence, motivation, facilitation skills, and understanding of AIS concepts and the toolkit. Logistically, all resource materials must be available in advance, e.g. room, separate folders for each of the session plans and exercise sheets, trainers' folders, etc., flipcharts, paper, markers, notepads, masking tape, reading materials and certificates of completion. Ensure participants have laptops closed and telephones muted for maximum concentration.

Capacity needs assessment is not an easy process, requiring good preparation, resources and timing to get the right respondents. Key needs are: (a) a pre-assessment visit to the innovation partnerships by the programme manager and consultants is critical to raise initial awareness, galvanize stakeholder commitment and prepare logistics; (b) timely invitations sent to key stakeholders, and (c) a well-prepared facilitation team who can ensure common understanding and commitment among stakeholders about niche needs, challenges, opportunities, vision and initial actionable recommendations for improvement. Other needs included that (d) time management is important during and between sessions, and that (e) all material including the CDAIS powerpoints and questionnaires need to be translated into local languages, but that this takes time, and consensus on the final version needs to be reached several days before the pre-assessment preparation day. In addition, it is important to have agreed text on the meanings of key terms (e.g. enabling environment, influence, climate change etc.) ready in writing for each facilitator to use when explaining the questionnaire.

Reflecting on the impact of the project's activities, it is still too early to observe tangible impacts. Nevertheless, all five niches are government-led initiatives, but each includes significant amounts of private sector investments. However, all niches experience a lack of strong partnership and coordination, and CDAIS activities are being well-received, as innovative/new approaches to sustainably managing agriculture programmes with business-oriented mindsets.



## Country Team

- Charles Murekezi, *CDAIS National Project Coordinator*
- Gilbert Kayitare, *CDAIS Country Project Manager*
- Hans Dobson, *Agrinatura Focal Person*
- Otto Vianney Muhinda, *FAO Country Office, CDAIS focal person*
- Karin Nichterlein, *FAO/HQ technical support officer*

### Supported by:

**Steering committee** Charles Murekezi (NPC and Chair); Arnaud De Vanssay (EU); Otto Vianney Muhinda (FAOR); Hans Dobson (AFR); Gilbert Kayitare (Country Programme Manager, and Secretary)

**Technical committee** Otto Muhinda (FAO Rwanda, Assistant FAOR), Gilbert Kayitare, (FAO/CDAIS National Project Manager); Lucy Mwangi (Rwanda Agriculture Board, Agriculture Extension Expert), Bernard Netlyn (ICCO Deputy Regional manager), Senge Moussa (Rwanda Agriculture Board, Planning/OAF), Dieudonné Safari (World Vision Rwanda, FMNR Project Manager), Anita Mutesi (National Capacity Building Secretariat, Government Cluster Specialist).

**Capacity needs assessment team** Gilbert Kayitare (CDAIS Country Project Manager); Straton Habumugisha, Augustin Mutijima (consultants); Corneille Ntakirutimana, Leon Niyibizi, Anita Mutesi, Octave Nshimiyimana, Leonidas Dusengemungu (niche facilitators); Hans Dobson (Agrinatura Focal Person); Patrick Kalas (FAO Capacity Development Specialist)

**National innovation facilitators** Leon Niyibizi, Octave Nshimiyimana, Corneille Ntakirutimana, Leonidas Dusengemungu, Innocent Bisangwa, Gisele Ntakirutimana, Anita Mutesi, Josaphat R. Mugabo, Straton Habumugisha, Augustin Mutijima



*CDAIS group during the Validation Workshop*