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Sustainability transitions of agriculture and the transformation of education and advisory services: convergence or divergence?

Toulouse, 10-13 July 2023

BOOK OF ABSTRACTS

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"Sustainability transitions of agriculture and the transformation of education and advisory services: convergence or divergence?"

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Organisational Capacity Assessment for Innovation Support: approach and results from tool applications in Cameroon and Madagascar

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Short abstract

In order to ensure sustainable support for innovations in agriculture, innovation support service (ISS) providers must intervene in timely and efficient manner, hence the need for emphasis on their capacity for providing these services. In the last decade, many donor-funded resources have been channelled into developing and applying capacity frameworks, especially within the context of north-south collaboration. While most of these frameworks have focused on public bodies, strengthening capacities of private and third sector organisations for supporting innovations in agriculture and agri-food sector have been limited. Impelled by this knowledge gap, the EU-Africa research project (SERVInnov) has developed the 'Organisational Capacity Assessment approach for Innovation' (OCATI). in this contribution, we introduce this approach and present findings from its application in Cameroon and Madagascar. Results reveal that, while some capacity components appear as well-developed, e.g. the capacity to deliver ISS services) others scored less, signalling entry points for improvement (e.g. the capacity to relate with other actors). The application has created space for reflection within these organisations, revealing i) opportunity for reflexive thinking about own position in supporting innovations, ii) the value of raising awareness for ISS, and iii) how support to innovation in agriculture and agro-food sector matter and can be enhanced.

Extended abstract

Purpose

Based on a combination of structural and functional views of the Agricultural Innovation System (AIS) (Lamprinopoulou et al., 2014; Ndah et al., 2020; Spielman and Kelemework, 2009; TAP, 2016, Audouin et al. 2018), a distinctive widening of roles for agricultural advisory services towards supporting innovations has been observed. In practice, new, and diverse service providers have emerged and have broadened service approaches, tools, and related functions. The increasing needs by innovators to receive support from service providers for innovation processes, raises attention on the management of their capacity to provide support. This calls for continuous assessment, evaluation, and strengthening of these capacities to remain competitive.

In the context of north-south, and south-south collaboration within the last decade, a lot of donor-funded resources have been channelled into capacity development frameworks for institutional governance and learning (OECD, 2006), for boosting food and nutrition security (FAO, 2010, 2012a, b, 2013), for enhancing and strengthening environmental conservation (GEF, 2010) and recently, for strengthening agricultural innovation systems (TAP, 2016). While a major part of these efforts has addressed capacity issues at national, and sectorial levels strongly linked with public bodies (or organisations) (e.g government Ministries) (FAO, 2010, 2012a, b), efforts towards assessing and developing organisational capacity to innovate or specifically enhancing their role in offering innovation support services (ISS) (Mathé et al., 2016a; Ndah et al., 2020) have been limited (Allebone-Webb et al., 2016; FAO, 2013). To ensure effective, efficient, relevant, and sustainable support for innovations in agriculture, and most importantly to meet the diverse and increasing

demand of innovators (or of adopters), there is an urgent need for timely interventions in evaluating and monitoring organisational capabilities to deliver ISS. To meet this challenge, designing robust self-assessment frameworks and tools is imperative for diagnosing as well as monitoring capacity needs related to ISS provision.

Based on the above background and knowledge gaps, the EU-Africa collaborative research project (SERVInnov) as one of its objectives, has developed an Organisational Capacity Assessment Tool for Innovation support (OCATI). The OCATI approach offers a scheme/tool for self-evaluation of organisational capacities for supporting and accompanying innovations in the agriculture and agri-food sector. This contribution, i) introduces the OCATI approach, and 2) presents findings from its application in Cameroon and Madagascar.

Design/Methodology/Approach

Objectives and origin of OCATI approach.

The OCATI approach aims at a self-evaluation of innovation support service providers (organizations) revealing their weaknesses and strengths with specific reference to 1) organisational, technical, functional capacities and skill needs, as well as 2) influencing structural conditions (enabling environment), towards providing Innovation Support Services (ISS). As a holistic approach, it systematically combines qualitative action research methods with quantitative scoring to determine the level of organisations' performance towards enhancing innovation support services. The tool is based, firstly on an extensive literature review, and secondly on a series of bilateral talks with selected members from innovation support organisations, conducted within the context of the EU-Africa SERVInnov project (https://servinnov.cirad.fr/). Further inspiration for designing this approach has come from similar assessment tools as; the Qualitative Expert based Assessment Tool for innovations (QAToCA (Ndah et al. 2015) and CDAIS organizational capacity assessment tool (FAO 2019).

Theoretical basis for the OCATI approach

The term capacity is widely understood as the ability of achieving to realise a targeted state or process. Particularly, in the context of development cooperation, capacity has been referred to as "the ability of people, organizations and society as a whole to manage their affairs successfully" (OECD, 2006). The OECD defines capacity as the process whereby people, organizations and society unleash, strengthen, create, adapt, and maintain capacity over time, while the UNDP links capacity to the ability of individuals, institutions, and societies to perform functions, solve problems and set and achieve objectives in a sustainable manner (UNDP, 2006). Linking "capacity" to "innovation", Allebone-Webb et al. (2016) state that actors can produce and sustain innovation processes in a dynamic systems environment by continuously identifying constraints and opportunities, and mobilising capabilities and resources in response.

Studies on capacity development distinguish three interdependent levels or dimensions of intervention i.e the individual, the organizational, and the systemic level (FAO, 2010, 2012a, b; GEF, 2010). While looking at capacity to adapt and respond towards promoting innovations, the Tropical innovate' (C2I) as an emerging concept, have outlined four core capacities areas, the capacity i) to envision and create new ways of doing things, ii) to connect with others to access and understand new information and resources, iii) to experiment, test, assess, and adapt, and, iv) to work with others to achieve action and change. The authors conclude that the capacity to innovate (C2I) concept puts a spotlight on process-driven approaches to innovation that have previously been undervalued.

In a related light the Capacity Development for Agricultural Innovation Systems (CDAIS) project has proposed a similar framework for strengthening organisational capacity (FAO and Agrinatura, 2019). As a guideline for capacity coaching and development process, it has been used for building the capacity of organisations that provide innovation support services (ISS) in the food and agriculture sector (Toillier and Kola, 2018; Wopereis-Pura et al., 2019). The CDAIS framework bases its capacity analysis on three main pillars 1) Capacity to organise - which deals with the organisation's internal operation relating to its identity, capital, and formal and informal arrangements; 2) Capacity to relate – which deals with organisation's

relationships with the outside world and; 3) Capacity to deliver – which addresses organisation's services and products – i.e., the technical know-how, and the relevance, effectiveness and sustainability of the ISS developed by the organisation.

The above frameworks are observed to have predominantly focused on public institutions and/or organisations operating at national, regional, and sectorial levels. On the other hand, holistic capacity assessment frameworks and/or tools with attention on enhancing private, farmer-based organisations (FBOs) and non-governmental organisations' capacities for enhancing innovation processes in the agriculture and agro-food sector have been limited. It is for this reason that the Organizational Assessment Tool for Innovation (OCATI) approach has been developed.

Steps and procedure for OCATI approach application

Drawing from the methodology used in literature as well as lessons derived from bilateral talks with project partner organisations, the OCATI approach makes use of six participative iterative steps for its implementation as outlined in Figure 1.

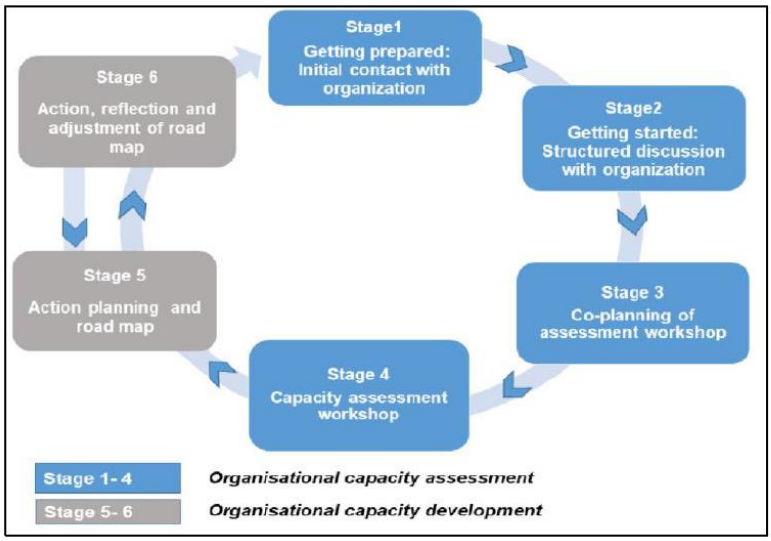

Figure 1: Steps and procedure of OCATI Approach

In an OCATI implementation process, while steps 1 - 4 refers to the capacity assessment process, steps 5 and 6 refers to capacity development processes. In the application cases where data is generated for this contribution, we limited activities to capacity assessment (1 - 4). Nevertheless, provision is made within the tool guide (ndah et al. 2021) for organisations to always finalise steps 5-6. Besides, the approach function on the assumption that partner organisations once successfully completed steps 1-4, become self-motivated in using generated results for further drafting internal action plans or constructing a joint vision for the organisation towards strengthening capacities (5-6) for supporting innovation processes.

Technical scoring tool associated with OCATI approach.

Besides, the participative action methods embedded in steps 1, 2, 3 of the "OCATI" approach, it makes use of a MS-excel based quantitative scoring tool for assessing innovation support capacities. As a decision support tool, it is comprised of five thematic components: 1) Organisational positioning, 2) Capacity to internally organise, 3) Capacity to deliver ISS, 4) Capacity to relate, and 5) enabling environment (Figure 2).

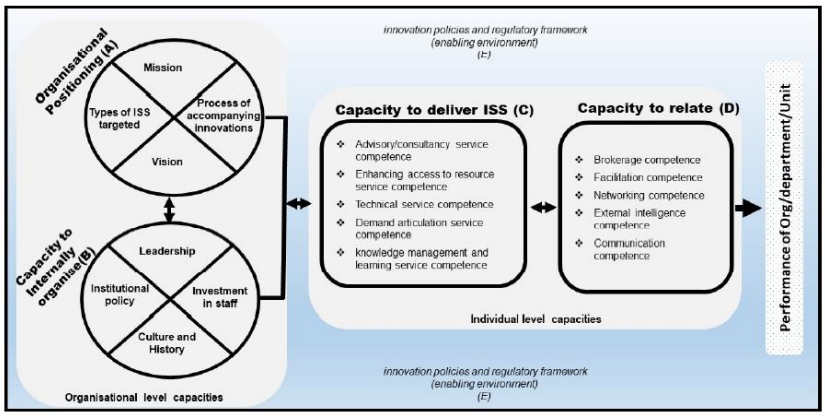

Figure 2: Structure and components of OCATI technical scoring tool (Own design with adapted elements from Wopereis-Pura et al. (2019), Toillier and Kola (2018), FAO (2013))

The assessment of these thematic components and their successful interplay of the mentioned capacities feeds into a general results part indicating the performance of an innovation support organisation, department, or sector under assessment (Figure 2). Each of these components has been designed to comprise a list of indicators (49 in total), all linked to operational statements, which in turn are connected to an assessment scale.

Based on this scale, responses from scoring are aggregated and results are quantitatively visualised in form of tables, graphs and or bar charts. When processing the recorded scoring data, scores from the different statements are averaged per component and weights are applied. This weighting is especially important as the total number of statements across the components varies. The technical tool is used in guiding discussions during the assessment workshop in step 4 (Figure 1).

Application of OCATI approach

Case studies

Organisations that support innovations face several challenges in carrying out their mission. For instance, they must respond to the specific needs of innovation communities by offering training, coaching, support, and capacity-building services that will enable innovation project leaders to progress. Moreso, they must position themselves in relation to other organisations operating in the area, and lastly, they must act in a changing economic and political context.

Table 2: Characteristics of case study organisations

Organisation/Country	**Organisation X1 (Cameroon)**	**Organisation X2 (Madagascar)**
Type of organisation	Civil Society Organisation	Farmer Based Organisation (FBO)
Year of creation	1987	1989
Spatial coverage of organisation (districts/regions)	Centre region (Mfoundi Lekie)	National coverage
Number of farmers reached	>5000	300,000
Number of staff dedicated to supporting innovations	more than 54 permanent employees and the rest are consultants	51 employees (with 25 for accompanying innovations)
Types of innovations supported (social, organisational, technical, etc.)	Social innovation, Organisational, Marketing, and technical innovations	technical, organisational, service, and institutional innovations

It is on this basis, that the OCATI tool was applied to one civil-society organisation in Cameroon (X1) and in one farmer-based organisation in Madagascar (X2) with the main objectives of examining and best understanding how these organisations are positioned to meet the challenges of innovation support. The

results of the tool's application provide an image of a certain situation at a time "t". They can be used to change the way the organisations organise themselves internally and/or to compare changes and progress made in the pursuit of accompanying innovations across subsequent years.

Findings

Overall and thematic capacity performance across components

The findings reveal an overall average capacity performance for both organisations (Org) with 57.1% for organisation X1 (Cameroon) and 57.4% for organisation X2 (Madagascar).
With regards to capacity performance per thematic components, it is for both organisations largely similar but for a few variations (Figure 3). Firstly, the capacity to deliver ISS services (C) emerged as the main strength of both organisations with an overall score of 100%. This is closely followed by organisational positioning (A) with a score of 73% for organisation X1 and 70% for organisation X2, while the capacity to internally Organise (B) emerged from the 3rd position with a 62% score for org. X1, and 59% for org. X2. (Figure 3). On the other hand, Capacity to relate (D) linked mainly to networking facilitation and brokerage and enabling environment (E) linked mainly with policy context and programs for innovation, emerged as the most limiting capacity components across both organisations - all scoring less than 50% (Figure 3).

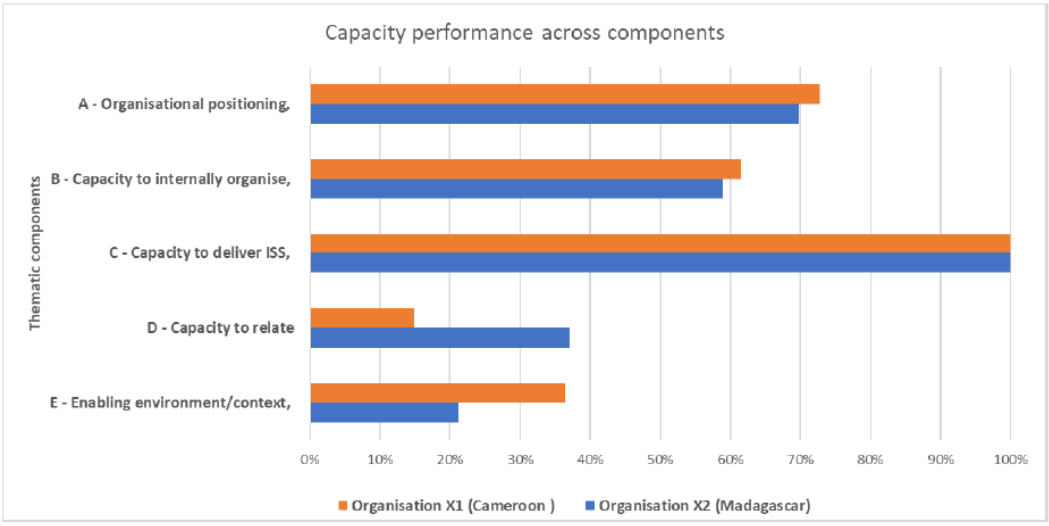

Figure 3: Organisational capacity performance across components for Organisation X1 and X2

Critically limiting competencies within capacity components

For organisation X1, the assessment revealed i) feedback mechanisms (D7), ii) communication channels (D8), iii) economic factors (E4), iv) policy frame conditions (E2), and v) the percentage of the national budget for innovations (E11) as areas with critically limiting competences for its overall performance. In contrast, organisational risk management (B9), organisational history (A11), clear services and products (A7) and the organisational mission (A1) are assessed as areas with critically limiting competencies for the overall performance of organisation X2 (Table 1).

Table 1: Key limiting capacities across the two organisations.

	Organisation X1 (Cameroon)		Organisation X2 (Madagascar)		
ID	Indicators	Evaluation	ID	Indicators	Evaluation
A7	*Clear Services and products*	1	A1	*Organisational mission*	0
A9	*Status of employed staff for accompanying innovations*	1	A3	*Process of accompanying/supporting innovations*	1
A11	*Organisational history*	1	A4	*Diversity in portfolio of ISS provided*	0
B2	*Consultative decision making*	1	A5	*Network with other actors*	1
B3	*Incentive structures*	1	A6	*Responsiveness to changing clients' needs*	1
B5	*Conflict management*	1	A7	*Clear Services and products*	0
B6	*Staff ownership and responsibility on decisions*	1	A8	*Percentage of human resources dedicated for accompanying innovations*	1
D2	*Facilitation competence*	1	A10	*Methodological approach for accompanying innovations*	1
D3	*Exploring complementarity and synergies*	1	A11	*Organisational history*	0
D4	*Tools and networking platforms*	1	B2	*Consultative decision making*	1
D6	*Knowledge of other actors and their influence*	1	B6	*Staff ownership and responsibility on decisions*	1
D7	*Existing feedback mechanism*	0	B9	*Risk management*	0
D8	*Communication channels defined and used*	0	C5	*Capacity building - technical training competence*	1
D9	*Communication strategy planed and resources allocated*	1	E9	*Plans, and programmes for innovations*	1
E1	*Political frame conditions*	1			
E2	*Policy frame conditions*	0			
E3	*Administrative setup*	1			
E4	*Economic factors*	0			
E9	*Plans, and programmes for innovations*	1			
E10	*Appropriateness and effectiveness of innovation policies*	1			
E11	*Percentage of national budgets for innovations*	0			

Key	
0	Critically limiting capacities
1	Limiting capacities

Practical Implications

The above presented results signal that in their endeavours towards enhancing the process of accompanying and supporting innovations in agriculture, both organisations must pay careful attention to improving capacity for components E (i.e., enabling environment) and D (i.e., capacity to relate - linked with networking activities with external actors).

Specifically, the highlighted critical limiting competences under component E (enabling environment) call for policy lobbying and institutionalisation, while those linked with component D (capacity to relate) beckons for specific actions related with planning and organising feedback mechanism with beneficiary of services (D7), as well as defining, and putting in place clear communication channels (D8). This tallies with other studies where inter-organizational capacities have been highlighted as the main shortcomings to support local-led innovations in Madagascar (Audouin et al 2021). Besides, there is a strong need for improving the organisational risk management strategy by relying on regular employee feedback (B9); defining clear services and products offered by the organisation (A7); revising the organisational statement of purpose to include the promotion of innovation as one of its intended goals (A1) - especially for the case of organisation B (Madagascar). Especially the need for regular feedback and definition of clear services,

tally with the call for gender and more inclusive approaches proven to be critical for efficient service provision (Crestin-Billet et al. 2022).

Moreso, the results call for a general need to raise awareness of the support agents about their effective role towards supporting innovation guided by the 07 types of ISS emphasised in recent innovation support-related studies (Mathé et al. 2016, Ndah et al. 2018 and Faure et al. 2019) and embedded in the OCATI approach as well (i.e., knowledge awareness, technical advice, market access, network facilitation and brokerage, capacity building, enhancing access to resources and institutional support). For instance, most of the participants highlighted during discussions that until the workshop, they had not realised that they were effectively involved in supporting innovation. Gaining awareness and even redrawing their formal mission including supporting innovation activities, would strengthen the capacity of these organisations to monitor their ISS. The OCATI approach, therefore, helps to support organisations to extract and develop their core competence of innovation support, to develop a strategy for further strengthening this, and to become more professionalised and recognised.

In sum, by making use of both qualitative and quantitative action research methods within a single approach, resulting in in-situ results, the OCATI has provided a chance for reflections within the same assessment workshop, therefore, bringing to the doorsteps of targeted partner organisations, i) the opportunity for reflexive thinking about their position with regards to supporting innovations, ii) the added value of raising awareness for innovation support services, and iii) an opportunity for revealing how support to innovation processes within agriculture and agro-food systems matter and can be enhanced directly or indirectly by development organizations.

Theoretical Implications

While the OCATI approach follows a similar pattern as used in other approaches in the literature, its holistic and comprehensive strategy makes it robust and unique. Especially, its focus on (new) cutting-edge topics of organisational capacity for innovation support in agriculture and agri-food systems makes it novel. It further boosts the experiential learning approaches and is a timely add-on to the widely used monitoring and evaluation (M&E) tools for extension and advisory Service (EAS) organisations.

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