

Innovation, knowledge management and researchers' postures: exploring their linkages for improving the performance of innovation platforms

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1 Introduction

Multistake holders innovation platforms (IPs) are increasingly used by research and development (R&D) initiatives to actively facilitate social and economic changes in developing countries. In the agricultural innovation systems thinking (Klerkks *et al.* 2012), IPs aim at strengthening the capacity to innovate throughout the agricultural production and marketing system thanks to the creation of spaces where to share and discuss ideas, listen and learn, think and talk, and collaborate. Knowledge and learning issues are central to IPs. However, scientists often wear multiple hats when intervening in IPs, such as facilitators, coordinators, experts or even evaluators. This raises questions about their legitimacy, skills and efficiency in being able to perform such diverse roles and functions, and about the possibility for them to produce generic and useful knowledge for supporting the learning processes that underlie innovation. While much has been discussed on how best to organize IP, choose stakeholders, distribute roles and tasks and plan each step (Kilelu *et al.*, 2013), less is known about how and why learning processes and knowledge should be managed. Hall & Andriani (2003) showed that depending on the nature of innovation, knowledge gaps to be filled differ. And this in turn influences the nature of the knowledge transformation processes to be managed. Lopez-Nicolas & Merono-Cerdán (2011) showed that knowledge management (KM) strategies affect innovation and performance through an increase of stakeholders' innovation capability. But these relationships are not well-understood yet. In this paper, we propose to explore these relationships, between innovation and knowledge management, in order to propose a knowledge-based view of the performance of IPs, with a particular emphasis on the ability of researchers to face KM challenges.

2 Materials and Methods

This paper synthesizes a comparative analysis of six IPs set up at different times between 2000 and nowadays in West Africa (CORAF OID, ABACO, CCV ferti, CARBAP), Meso America (ASOSID) and the Mediterranean area (Aquamed MSHP). The six case studies represent a wide diversity of IPs with regards to their general aim (e.g. improve productivity and competitiveness, transfer and adaptation of agricultural technologies, improve the innovation system itself), the main drivers of innovation (e.g. solution-driven, value chains approach-based, issue-driven), scales of intervention (local, regional, national) and researchers' roles. Each case study was described regarding i) main innovation features and knowledge gaps; ii) types of learning processes that were supported and the knowledge management strategies used to overcome knowledge gaps; iii) researchers' posture and implication in the knowledge management process. We developed a comprehensive framework that integrates three research streams: learning, knowledge management and innovation to test the relationships between IPs functioning, knowledge management and researchers' postures. Data for this analysis included reports, publications and other outputs from IPs, as well as personal experience and reflexive analysis. Analyses were carried out at the aggregate level (not individuals) in order to highlight pervasive features and common issues between case studies.

3 Results – Discussion

We distinguished four roles for KM, associated to different key perspectives of “knowledge” seen either as a process grounded in learning cycles, a tool to structure stakeholders gathering, or a commodity to be transferred (tab.1). The role given to KM and the way researchers involved in the IPs functioning conceptualized the relationships between knowledge system and innovation process appears to be well correlated (fig.1). No links exist however with the features of targeted innovation or knowledge gaps to be filled. Researchers' postures changed overtime, as a consequence of the growing awareness of the role of multiple knowledge sources in innovation processes, the importance of situated learning for the production of useful knowledge and the existence of distributed knowledge systems. In practice it led researchers to ensure a growing responsibility in the support of innovation process and a stronger commitment to stakeholders to achieve the expected results. Nevertheless, the principles of complexity and emergence remained difficult to put into practice, apparently because of increasing tensions due to the multiple hats researchers wear. Different KM strategies co-existed within some innovation platform, reflecting difficulties to effectively switch from a KM perspective (knowledge as commodities) to another (knowledge as a process embedded in organizational

processes). For instance, decision-support tools are still widely used in the different IPs, reflecting an eagerness to disseminate knowledge possessed by researchers with an epistemology of commodification of knowledge. Some authors suggest that the lack of tools dedicated to the facilitation of learning processes could explain gaps between intention and action in IPs. Our results did not give insights into the influence of KM strategies on innovation. They raised question on the capacity of researchers to operationalise KM concepts for agricultural innovation, so that their approaches and methods become more in line with innovation features, knowledge gaps to be filled in each situation and stakeholders' learning needs.

Table 1. Knowledge management approaches, learning issues and researchers' postures associated to innovation processes in innovation platforms

| Role of KM | Key perspective | Learning issues | Researchers' postures | Drawbacks |
|--|---|---|--|---|
| Structure stakeholders gathering and strengthen communication processes that would result into new practices, standards, knowledge | Knowledge sharing between organizations | Create a shared vision and knowledge on innovation issues | Translator-researcher Involved in the mobilization and enrolment of stakeholders in order to create a network able to support innovation process | Role of « safeguard », responsible for IP functioning and innovation outcomes Strong commitment to stakeholders |
| Achieve learning cycles (knowledge explication, conceptualization, socialization, practice) | Knowledge process embedded in organizationnal processes People centric and Practice-based Co-learning | Transform stakeholders know-how, routines, or perspectives | Entrepreneur-researcher Posture of partner and co-designer of the innovations, which requires capacities to stimulate a demand, make the understanding of innovation issues evolve, influence strategies of the innovation stakeholders | Difficulties to produce generic knowledge due to controversies on legitimate knowledge to be used for action. Risk to produce knowledge to justify the action itself |
| Knowledge creation and dissemination | Knowledge as commodities | Produce standard knowledge aiming at minimizing risks and uncertainties | Expert-researcher Posture of knowledge producer | Unfocused or useless knowledge due to incomplete vision of the innovation processes and stakeholders' learning needs Risk to produce knowledge to justify the action itself Space for individual values and ideology. |
| knowledge dissemination and application | | | | |

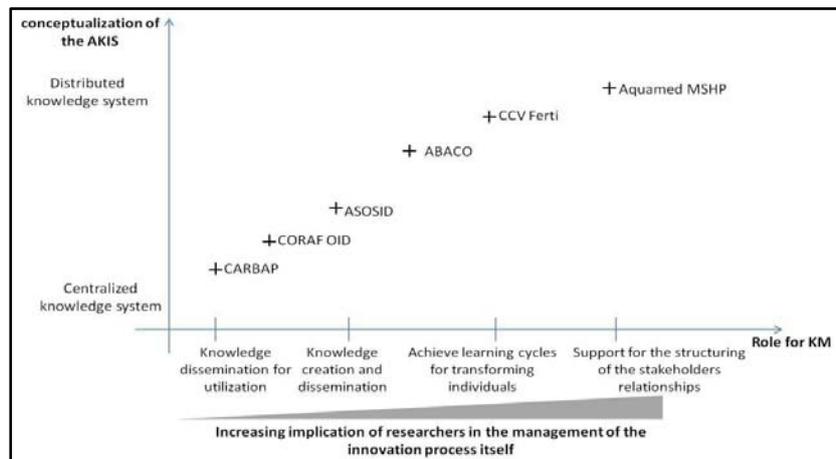


Fig. 1. Correlation between the evolution of the understanding of AKIS (agricultural knowledge and innovation system) and the dominant role given to knowledge management in innovation platforms.

4 Conclusions

While IPs are very diverse in practice with respect to their structure or their objectives, knowledge and learning issues are at the heart of their functioning in multiple ways. Taking into account KM issues associated with innovation could help IP stakeholders to better define research needs and researchers' roles and could contribute to increase the performance of IPs. For this to happen, more attention should be paid to the development of R&D projects which test the efficiency of different KM approaches on innovation processes.

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