Forming a community of practice to strengthen the capacities of learning and knowledge sharing centres in Latin America and the Caribbean: a Dgroup case study

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Introduction

According to Wenger (undated), communities of practice are basically defined as groups of persons who share a passion for something that they know how to do and who interact regularly to learn how to do it better. In many cases, those forming the community of practice can be scattered over a broad geographical area and use virtual media and/or communication channels to share knowledge and experiences, as well as operate as a social network that does not depend on the variables of time and space to inter-communicate (Allen et al. 2003)

A community of practice within an organization or social network fulfils a number of functions to help keep the organization healthy (Wenger 1998). These functions include the following:

- It serves as an appropriate space for the exchange and interpretation of information, where those who participate in the community of practice have a shared understanding that allows them to communicate and move information that is coherent and aligned with their work, the goals they share, and the challenges they face.
- It preserves and collects the tacit or implicit aspects of knowledge that cannot be captured by more formal and structured systems such as databases, reports, brochures, and proceedings of workshops and meetings.
- It provides a home to build and strengthen identities. To belong to a community of practice serves as a filter to facilitate the effective navigation in the sea of information available on the Internet.

Despite these valuable benefits, to create a community of practice is not always as simple, fast, and successful as put forth in theory because, in real conditions, it can be quite a challenge, when dealing with individuals from different cultures and addressing needs and challenges specific to the contexts in which they interact. Tackling this challenge can produce outcomes somewhat different from those normally expected from a community of practice.

This case study considers the application of theory to a real life situation in the formation of a community of practice by the IPRA Participatory Research Project of the International Centre for Tropical Agriculture (CIAT), using Dgroups and a
qualitative monitoring technique known as Most Significant Change, MSC (Davis and Dart 2005).

The community of practice under study was formed by 14 learning and knowledge sharing centres, known as CAIS\(^2\), located in different countries of Latin America and the Caribbean, from Mexico to Argentina.

**Learning and knowledge sharing centres**

According to the Latin American and Caribbean Network for Food Security and Sustainable Development (Redlayc, its Spanish acronym), a CAIS is:

>a functional training and demonstration social entity that designs, plans, and develops a knowledge building process and renders services to the families of the communities in their area of action to promote integrated sustainable development.

CAIS centres use participatory principles and methodologies to demonstrate ecosystem-friendly technologies for household food production and for adequate resource and environmental management, for example adequate water harnessing, conservation, and use. The CAIS centres also hold events where local farmers, youth group members, local authorities, social organizations, and high-level state, departmental, and national representatives can receive training and exchange experiences. These centres were established as a result of the implementation of a food security strategy called the Human Nutrition Programme, under the leadership of Heliodoro Díaz and financed by the W.K. Kellogg Foundation.

The growth and evolution of these CAIS centres over the past years made it necessary to design a strategy that would ensure their sustainability and autonomy, but also promote interdependency among the centres forming part of the community of practice. As a result, a proposal was developed for the Institutional Capacity Building Project, again to be funded by the W.K. Kellogg Foundation. The main aim of the proposal was to contribute to the improved efficacy and efficiency of the work carried out by the CAIS centres to fulfil their mission as participatory local development agents.

The Strategic Planning Workshop held in March 2006 at CIAT headquarters in Palmira, Colombia, was the first step taken by the CIAT’s IPRA Project to give birth to this community of practice integrated by the 14 CAIS. The methodology used, Participatory Impact Pathways Analysis (PIPA) (Douthwaite et al. in press), allowed participating CAIS centres to reflect on key issues related to their future as an organization, such as the social capital present in the social relationships that make up their networks. The mapping of social networks also allowed the CAIS centres to analyze their current situations and visualize future situations regarding key issues such as fund raising and resources. The differences observed between current and future networks of each CAIS centre provided valuable insight into the actions that
should be undertaken if the objectives of sustainability and institutional strengthening of each CAIS were to be achieved.

This analysis of the social networks of each participating CAIS as part of PIPA led the facilitation team to pose the hypothesis that the creation of a community of practice integrated by the centres could prove to be a strategy to facilitate knowledge sharing and exchange of experiences among them. This sharing would help reduce the duplication of efforts and allow more experienced centres to help those in early development stages.

The main reasons behind the proposal of the facilitation team to form a community of practice comprised:

- The need to interconnect these centres scattered over a broad geographical area, from Mexico to Argentina, to promote and propitiate the habit of sharing knowledge and experiences under a common goal.

- The free-of-charge virtual platform, Dgroups, made it possible for the CAIS centres to contribute to other centres in a flexible, virtual environment that transcends barriers of time and space.

After a year of facilitating the formation of a community of practice, the IPRA Project’s team decided to step back and reflect upon this experience and the lessons learned so far. These reflections that are set forth in this case study.

**Methodology**

A case study is an empirical inquiry that investigates contemporary phenomena within a real life context especially when the boundaries between the phenomenon and the context are not clearly evident (Yin 2003, p13).

This case study addressed the following question: How effective was the use of Dgroups in facilitating the formation of a community of practice?

To answer this question, the community of practice was first defined as unit of analysis because, for the purpose of this study, the important elements are not the CAIS per se nor the specific use of Dgroups or any other virtual tool but rather the interactions and relationships that create an operational community of practice.

At the beginning of this process, the facilitation team had already clearly defined what it wanted to achieve. However, it had not defined how it would use Dgroups to apply the MSC qualitative monitoring technique to form a community of practice. A process of mutual and simultaneous learning thus ensued. Members of the facilitating team had belonged and participated in Dgroups, both individually and as a group, and were positive about the following features:

- The supply of information.
Notiﬁcation of new messages or new resources posted on the platform was made through the e-mail account in use.

The tool is user friendly, thus ensuring its efﬁcient use.

These characteristics motivated the facilitation team to consider Dgroups as the platform that most suited the needs of the CAIS in terms of know-how of information and communication technologies (ICTs), application of MSC, and subsequent exchange of content.

Participatory observation served as main source of information. This dynamic used an approach in which the observer did not play a passive role but actually participated actively in the events analyzed and studied (Yin 2003). In this speciﬁc case, the facilitation team, supported by participatory observation, was able to understand the social situations occurring during the establishment of the community of practice (Burgess 1993).

The facilitation team, in its role of participatory observer, compiled the data by putting together a diary that recorded day-to-day events of the CAIS. This diary examined factors that inﬂuenced the effective use of Dgroups, such as connectivity, use of virtual tools, personal interests, and the inﬂuence of gender on participation and decision making within this emerging community of practice.

All the affinities, misunderstandings, agreements, alliances, and relationships inherent to the CAIS network also inﬂuenced the use of Dgroups. No one could argue that they did not see a message or could not read a given document or that they were not aware of a particular group conversation because all messages, all information resources published, and all documents were posted in this virtual space. This openness can be uncomfortable for those who prefer to work in a very closed circle and avoid sharing knowledge.

Playing both the role of facilitator and moderator of the Dgroup provided a unique opportunity to observe typical situations dealt with by these centres, for example the organization of workshops, face-to-face meetings, and deﬁnition of work agendas.

Discussion

What were the initial expectations about the creation of a community of practice, using D-groups, and what did the facilitation team do?

The team saw the potential of the community of practice as enabling the sharing of what each centre knows about how to stay aﬂoat despite economic difﬁculties, how to better organize the centre, how to keep members working together as a team, how to diffuse ecosystem-friendly technologies, how to promote the participation of target beneﬁciary communities, and how to lobby and vote in important decision-making spaces.

The facilitation team used the Dgroup and MSC as a mechanism and strategy for improving communication and sharing of experiences, respectively. The team also
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sought to empower the community of practice by changing the way the different
centres and their representatives listened to each other. Although they had worked
 together for 13 years and supposedly respected each other, there was an evident need
of increased reflection about the concerns and challenges of the other centres without
the attitude of ‘here we go again…the same person expressing the same ideas
again…’

Having had the support of the same donor over a period of several years seems to
have created a feeling of comfort and protection in the CAIS centres and, as a result,
they did not actively seek funding or establish strategic alliances. The facilitation team
had expected that, by belonging to a larger group such as this community of practice,
the CAIS centres would have felt more confident to search for new donors and make
new contacts.

The facilitation team did not only consider it important for the CAIS centres to learn
fund-raising skills, but also saw the community of practice as an opportunity for the
centres to understand the importance of documenting the lessons learned. This process
of documenting lessons implies that the members of the community of practice have
to improve their own skills to conduct interviews, gather information, find literature
relevant to their own interests, reflect on issues such as participation in workshops and
meetings in order to be able to provide input to the community of practice.

The facilitation team saw the call for stories of MSC as an opportunity to initiate this
type of documentation. These stories would also serve as a qualitative monitoring
process that could help identify unexpected outputs and determine the impact and
wealth contained in everyday situations of the CAIS centres, their projects and
initiatives.

The dynamics of this call for stories of MSC consisted in four 6-month rounds,
distributed over the two years of the CAIS Capacity Building Programme. At the end
of each round, a winner story that meet pre-established criteria jointly defined with
the CAIS was selected by a story selection committee formed by one representative
from CIAT, one from the CAIS, and one from Redlayc. Dgroups was the means used
to share and diffuse the different stories among the other CAIS centres, constituting a
first move toward adopting the habit of sharing knowledge and using a virtual media
to communicate and exchange knowledge.

The facilitation team’s main objective was to create a dynamic community of practice,
bursting with discussions, that would strengthen the social network and make use of
its internal social capital that is just as valuable as the economic capital that so
concerns the CAIS, or perhaps even more, to guarantee their continuity, sustainability
and autonomy. The facilitation team sought to sensitize the CAIS about the wealth
they possess in terms of knowledge and experience, both as centres located in their
respective countries and as networks covering much of Latin America and the
Caribbean.

This sensitization would lead the CAIS to dream and act as an integrated group,
linked by a common objective, contributing to:
• Reduce the stress and concern of CAIS centre leaders who perceived themselves as alone in the search for funds to ensure their continuity.
• Increased possibilities of successful fund-raising.

The facilitation team hoped that, by forming this community of practice, the CAIS centres would recognize the value of maintaining a fluid communication among the different centres regarding concerns, doubts, questions, challenges, and key contacts, enabling them to better tap emerging opportunities.

What changes did the formation of a community of practice really bring to the CAIS?
Factors such as connectivity, personal interests of the representatives of each CAIS, cultural diversity, gender, and experience in using virtual tools limited the use of Dgroups and implementation of MSC as proposed by the facilitation team. Because the CAIS are distributed throughout Latin America from Mexico to Argentina, Internet accessibility and quality and frequency of access vary widely and depend on the level of development of each centre.

The survey conducted to assess the connectivity conditions of each CAIS indicated that not all the centres had installed capacity and several did not even have a computer to connect to the Internet. The survey also showed that, although several centres had an Internet connection, in many cases it was not appropriate in terms of security and frequency. This finding shed light on why CAIS representatives were not able to take full advantage of the amenities and tools offered by Dgroups.

In this case study, difficulties in using Dgroups could be attributed not only to the lack of installed capacity, but also to the personal interests of most of the community leaders and CAIS representatives. Their understanding of virtual tools and their experience in using them was not wide. Furthermore, the age of most participants ranged between 40 and 60 years and they preferred face-to-face communications and meetings, instead of virtual encounters.

Deficient listening skills triggered a lack of interest in writing stories and reading the contributions made by the other CAIS centres. Questions arose such as: Will others really want to read these stories? What is there new to say after 13 years of working together? This attitude was coherent with what was observed during the workshops in the way participants formed different groups and the somewhat aloof way that several referred to projects or concerns. Based on the above situation, the facilitation team decided to limit the call for stories of MSC to only one round of the four initially planned. As a result, the Dgroups tool was underused because it ended up being used to send workshop logistics and store documents, for example reports to donors or workshop information.

The experience of facilitating the creation of this community of practice was characterized first by the unilateral insistence of the facilitation team that Dgroups should be used and that it was important to adopt the form and dynamics of
communities of practice, and secondly by the indifference, almost apathy, showed by the CAIS centres. However, the CAIS centres cannot be blamed for what happened.

The facilitation team did the thinking for themselves and for the CAIS and unilaterally decided to propose that Dgroups should be used and that communities of practices were the ideal form of organization for these centres. Although it may seem that the process of forming the community of practice was planned unilaterally, at no time were the CAIS centres forced to participate against their will. In fact, a strategic planning workshop was held in March 2006 in which CAIS representatives were informed about the proposal of the community of practice and were given the opportunity to discuss and reflect about their situation as a network and the challenges they were facing at that time.

This workshop also made it possible to:

- Convey and explore the options that Dgroups, as tool, offered regarding the exchange of messages, the storage of information, and promotion of discussion.
- Become familiar with the MSC qualitative monitoring technique by conducting a pilot round in which CAIS representatives had the opportunity of defining, by themselves, what a most significant change is, the topics they would be interested in writing about, the frequency that these stories should be send, the fundamental characteristics that the winner story should have, among other issues.
- Experience the process of selecting winner stories. Authors received symbolic awards, with which the facilitation team hoped to further reinforce sharing and exchanging by participants.

The CAIS carried out all the exercises planned for this workshop and expressed their commitment to conduct the call for stories of MSC by themselves. The call for stories would serve to initiate the formation of the community of practice. This, however, did not happen over the following months and the call for stories did not occur.

**Lessons learned**

- To form a community of practice or any other type of knowledge sharing endeavour or strategy, researchers and facilitators must use a participatory approach that uses the understanding of the needs, motivations, interests, and challenges of potential stakeholders as starting point.
- Communication with participants of the proposed community of practice must be adequately adapted and clear regarding what a community of practice is, how it operates, and its characteristics, advantages, disadvantages, commitments, and possible outputs.
- Despite the constant lack of recognition and the low importance given to communities of practice, facilitators should be highly motivated and show a creative and positive attitude toward working with complex groups of users, such as the CAIS.
- The formation of a community of practice not only demands a fully operational platform or communication channel, but also requires that participants have the
necessary understanding and expertise to use it. Even though participants knew how to use this virtual tool and have technical accompaniment and support, it is still vital for them to begin to share, listen to others, show interest in the discussions, and debate ideas and concepts. This requires time and dedication that cannot be remunerated in money because the benefits obtained are in terms of recognition and generation of public goods.

- When the importance of forming a community of practice is duly endorsed by the directives of the executing entity, then the facilitation team receives recognition and its work is appreciated.
- Cultural, geographical, professional, gender, and generational diversity should be considered an advantage when forming a community of practice. These differences can be used to find interesting and innovative elements for others who discover in them new sources of knowledge.

As stated above, there are CAIS centres located from Mexico to Argentina, embracing a broad range of cultures and work styles. Such diversity triggers affinities and differences and was evident in both real and virtual scenarios.

During the workshops it was observed that most participants sat at tables and formed work groups depending on the region where they were from. There was a large group from Mexico, another from Central America and the Caribbean, and another from the Andean and Southern Cone regions. Because most CAIS representatives are men, the women sat together and welcomed each other to the group as they arrived. This dynamic was also obvious in the virtual scenario. When the regional workshops were organized, participants preferred to circulate information only among those who belonged to the region where the workshop was being held.

Another situation that is worth mentioning is that when a representative of the Southern Cone region sent a message to all Dgroup members, most of the replies came from CAIS centre located in the Andean region, whereas those in Mexico, Central America and the Caribbean did not respond. The same occurred when a centre of another region sent a message. These situations show that diversity can be a barrier and not always an opportunity to better understand the situations faced by CAIS centres in everyday realities.

**Conclusions**

Although some may consider that this experience was not a success for the facilitation team, the CAIS centres at least had the opportunity to discuss implicit issues addressed in the following questions:

- If we are all part of a Latin American network, why don’t we behave as such?
- If all CAIS share similar concerns about autonomy and fund raising, why don’t we get together and discuss how we can design a strategy that will benefit us all?
- If we have spent 13 years listening to each other, why don’t we really try to understand what our partners are saying and better seek our commonalities instead of the differences that separate us?
For the facilitation team, it was obvious that the creation of a community of practice supported by the Dgroup and applying the MSC technique would be the answer to all the above issues. For the CAIS centres, it was something that needed to be worked on so that they could move forward.

Creating a community of practice is a human process that combines several components. In the case of the CAIS centres, the network analysis and survey helped them understand the importance of designing a communication strategy that would strengthen them as a network and allow them to share and exchange knowledge and experiences, discuss ideas and projects, among many other interesting and valuable activities and practices. But this was not enough to ensure success. Why? Because several necessary ingredients were still missing: (1) a participatory facilitation approach that would allow the CAIS centres to choose among several alternative ways of organization and communication, not pushing them to become a community of practice; (2) the endorsement of this community of practice by the IPRA Project leader so that it would be viewed as a key component to accomplish the project’s objectives; and (3) added value of the community of practice as motivation for the CAIS to begin discussion groups, write and review proposals, develop concepts, share experiences, and invest time in a dynamic that would only produce returns in the longer term.

References
Allen, S; D. Ure; and S. Evans (2003) *Virtual Communities of Practice as Learning Networks*. Brigham Young University Instructional Psychology and Technology: Provo, Utah, USA, 51pp


Abstract
This paper presents a case study of the work carried out by CIAT to facilitate the creation of a community of practice, using Dgroups and taking advantage of this virtual space to apply a qualitative monitoring technique called Most Significant Change. The experience reported here mixed key ingredients to create and facilitate a community of practice to facilitate knowledge sharing and communication flow among 14 learning and knowledge sharing centres in Latin America and the Caribbean. To create a community of practice, it is not enough to have a common and free virtual space, technical support, and on-line facilitation. Factors such as connectivity, experience in using virtual tools, personal interests, influence of gender on participation, and decision making play key roles in determining the success of a community of practice. A major lesson learned was that a community of practice is an initiative that must build on its membership and not outsiders who only are taking into account some issues, one side of the situation and not the whole context.

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1 D-groups are the online home for groups and communities interested in international development. This initiative is headed by international organizations such Bellanet, World Bank and the Department for International Development (DFID), among others. For more information on the call for stories of most significant change, see http://www.dgroups.org/groups/cgiar/CambiosCAIS/index.cfm.

2 Centros de Aprendizaje e Intercambio de Saberes.