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## **Learning, research and collaboration: challenges and opportunities**

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### **Abstract**

Drawing on our experiences from the Australia Centre for International Agricultural Research (ACIAR) funded research project 'Improving Livelihoods with innovative cropping systems on the East India Plateau' this paper outlines a simplified, practical approach that uses learning as the basis. Our approach to learning has been captured in the term an 'Inclusive Learning Approach'. Learning forms an important basis for development of individuals and groups of people with that learning and development taking place through experiences embedded in the context in which they live. In the Inclusive Learning Approach, learning is considered to be controlled by cognitive and affective elements, with experience, and its interpretation through those elements being key to learning. The approach depends on a willingness and openness on the part of 'experts' to, acknowledge their own world-view and assumptions (both cognitive and affective), and possess a desire to learn. Research, the second key element in the approach, occupies several positions in this context and is not purely the domain of, nor controlled by the academic researcher. While the individual is the focus, groups are the unit of engagement for most activities and groups play an important role in the approach and in research. Many groups can also be considered as learning groups and groups appear to generate enhanced learning. The enhanced learning that occurs in groups has multiple elements some of which relate to the ability to access skills and knowledge across the group, and access to the cognitive processes of other individuals in the group, while others are unexplained but appear to be emergent and greater than the sum of individual learning.

**Key words:** inclusive learning approach

### **An inclusive learning approach**

In development we are working with a diverse complex situation and attempting to control the situation is difficult, probably impossible. Therefore, we need to think about how to provide an environment in which the improved situation can emerge. In doing so we acknowledge this is not a situation that we control but rather one in which we facilitate a process that enables change to develop. However, we need a framework in which we can work to facilitate that process. One way is to take a learning approach. Learning is generally regarded as a good thing in the scientific and research communities. Learning is often mentioned but not so often described in the development literature. However, there are some issues with using learning as a focus. First learning is often associated with teaching with the expert teaching the novice. Second when both groups are adults and experienced in life the relationship and association is different to the usual master pupil relationship. But learning has a major advantage; it is something over which we as individuals can exercise control.

The paper will draw on our experiences from the ACIAR funded research project 'Improving Livelihoods with innovative cropping systems on the East India Plateau'. In this project we have developed a simplified, practical approach that uses learning as the basis. Our approach to learning has been captured in the term an 'Inclusive Learning Approach'. That approach has been derived from various observations and theoretical approaches and is based on the way in which PRADAN

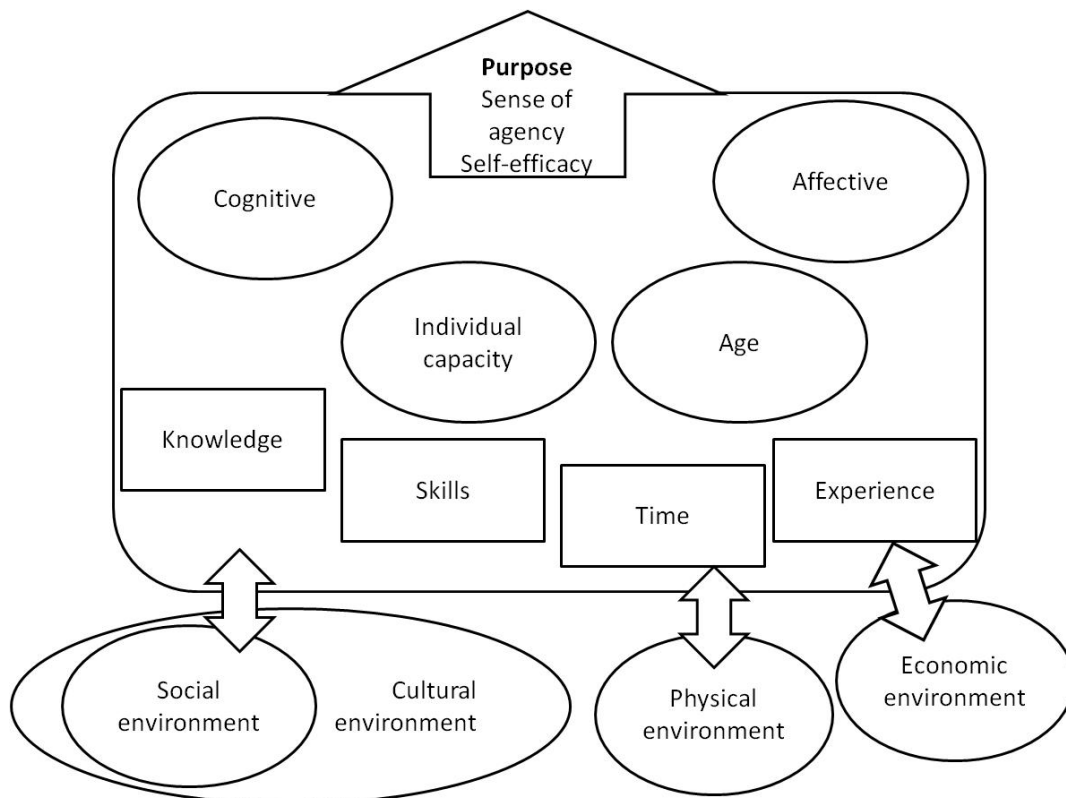
operates. The Inclusive Learning Approach has two key elements, namely people, and research and has the following foundations.

In relation to people the approach is based on:

- A focus on the development of people as the key priority.
- Acknowledgement that people develop individually but also in groups; groups form an important element in the approach and appear to enhance the ability of individuals to learn. This element takes advantage of the, often high, levels of social capital in remote and rural communities.
- The development of the people is focused on both cognitive and affective areas of learning, where both cognitive and affective elements, and their interaction, are believed to control learning as well as being derived from learning.
- Cognition is considered to be the way in which people make sense of and learn from experiences and other sources of knowledge.
- The affective elements relate to the emotional side of learning, including connection with others and the response to an experience.
- The overall approach is collaborative and co-operative.

The development perspective in the first point is based on the belief that even the very disadvantaged have the potential to change their own lives and influence change in the lives of others, a potential that can be realised by altering their self-view. In this approach development involves a process of change in self-perception leading to a change in behaviour, a human process. Learning forms an important basis for development of individuals and groups of people, and with that, learning and development taking place through experiences embedded in the context in which they live. Everyone, including the most disadvantaged are able to learn and commence transformation of their lives, and active participation in a deliberately planned research activity that facilitates learning can play a significant role in that process.

In the Inclusive Learning Approach learning is considered to be controlled by cognitive and affective elements, with experience, and its interpretation through those elements being key to learning. A conceptual model of a person from a learning perspective that introduces some of the relevant elements is provided in Figure 1. Learning enables people to develop their capabilities and a sense of agency to effectively use those capabilities and take control of their own lives. It is important to note that with a learning approach, all participants are learning, and the learning is not restricted to those who are regarded as 'undergoing development' but importantly, also includes those facilitating the research and development. The approach depends on a willingness and openness on the part of 'experts' to, acknowledge their own world-view and assumptions (both cognitive and affective), and possess a desire to learn.



**Figure 1. Simplified representation of a person from a learning perspective.**

The second key element research, occupies several positions in this context and is not purely the domain of, nor controlled by the academic researcher. The role of research includes the following:

- Research enhances the experience, learning and development of all involved in an activity, including farmers, other members of the farm community, development practitioners working with the community and researchers.
- Participating farmers are acknowledged by researchers as research partners, meaning they are closely involved in developing research questions, implementing the research, collecting experimental data, interpreting the data, and communicating results within and beyond their community.
- Individual research topics and results are consequentially highly relevant to local needs and circumstances.
- Research farmers experience success through their participation in research and this experience contributes to their sense of agency.

### **The nature and operation of groups**

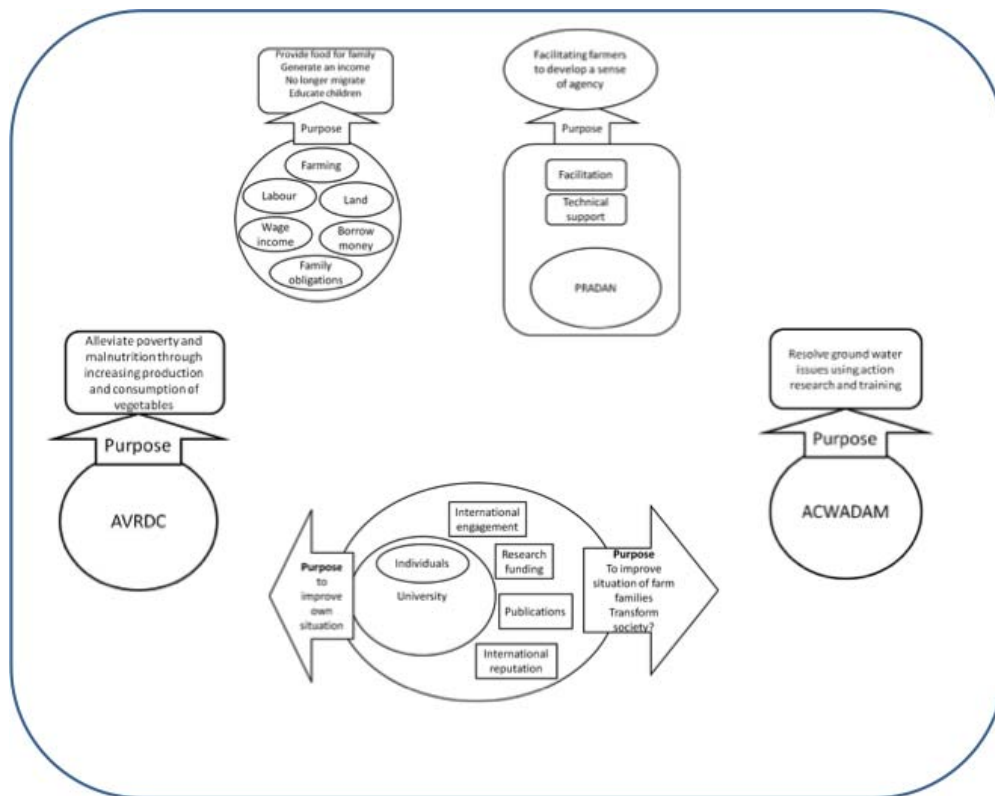
While the individual is the focus, groups are the unit of engagement for most activities. Groups play an important role in the approach and research and will form the focus of the rest of this paper<sup>1</sup>.

<sup>1</sup>Organisations form a particular type of group and research organisations fit into this category. But, interestingly research organisations are often unable to learn other than about the specific topic areas they are engaged with and can only learn using the particular methodologies and methods with which they are familiar. The collaborative groups/teams in complex projects cross discipline boundaries and these groups pose particular issues. Disciplines operate in various modes and one of those is a competitive mode. The competitive mode operates at an affective level rather than a cognitive level. In a competitive mode dialectical discourse is a biased process related to power and prestige rather than inclusive learning.

Research teams can also be considered to be groups where learning takes place. Such groups have members with various backgrounds and skills as well as different cognitive frameworks through which they interpret the experiences they are having. PRADAN works with communities through an initial focus on women and the development of self-help groups (SHGs).

The SHGs can also be considered as learning groups that enable communication between the communities and other bodies from within and outside the community. The group appears to generate enhanced learning. The enhanced learning that occurs in groups has multiple elements, some of which relate to the ability to access skills and knowledge across the group, and access to the cognitive processes of other individuals in the group, while others are unexplained but appear to be emergent and greater than the sum of individual learning. In an affective sense, the conception that the team through its collective efforts has a power that exceeds those of individuals working apart and that power will enable the desired outcomes to be achieved, has been termed 'collective agency' (Bandura, 2000). Collective agency is an extension of individual agency and is not the sum of the efficacy beliefs of the individual members, but is an 'emergent group level property' (Bandura, 2000). Bandura further asserts that for a group or team to function effectively a high perceived efficacy is required. Both affective and cognitive elements are therefore required to develop a high performing group.

The various groups involved in the ACIAR project are illustrated in Figure 2. The project involves various farm communities in east India, PRADAN an Indian Non-Government Organisation (NGO), The World Vegetable Centre (AVRDC), Advanced Centre for Water Resources Development and Management (ACWADAM) and several Australian universities. Each group (some of which are organisations), has a different reason for existing (purpose) and different organisational culture. In addition, the various organisations are different to each other due to the languages spoken, social environments in which they function, educational background including academic discipline and training, nature and types of experience and their purpose. Therefore their priorities, including the outcomes they expect to gain from participation in the project are different for each group/organisation. That is the organisations are not aligned.



**Figure 2. A representation of the project team as a system.**

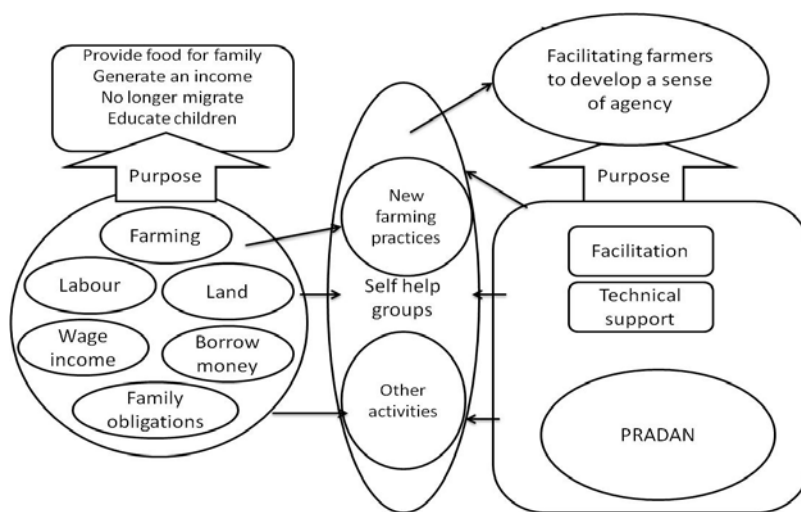
As outlined, the groups in which research is carried out and learning takes place are usually heterogeneous with that heterogeneity both within and between groups. A group from a village such as a SHG is expected to be heterogeneous due to different age, experience, capacities and capabilities of the various members with associated variations in their cognitive frameworks. Heterogeneity increases in the women’s SHGs that are facilitated by PRADAN, an outside organisation that introduces the development professional with their cognitive frameworks to the group. As we expand and develop research groups the group gains members from various organisations (and other groups) and a research group’s membership crosses additional boundaries in culture and education. That is a group from one community is heterogeneous but less so than one that involves farmers, scientists and other researchers with those group members who come from outside the farming community also belonging to multiple organisations with their own organisational culture. Given the diverse backgrounds, experiences, skills and knowledge of the various participants it is reasonable to assume the groups to which they usually belong would learn in different ways and gain different learning from participating in the same experience.

## Management in an Inclusive Learning Approach

Many activities in development, such as in our project, involve multiple groups working together to form a project group. It is often assumed that those heterogeneous project groups are able to work together effectively and without facilitation, an expectation that is not supported by evidence. Collaboration between the various groups is dependent on multiple factors including communication.

Communication between people with different cognitive frameworks can be challenging. Members of heterogeneous groups need to learn how to communicate and work with people with cognitive frameworks that are different to their own. That learning requires cognitive development because for that communication to be successful it must cross the barriers of language, culture, education and distance. That cognitive development includes enhancing their ability to participate in what has been called 'critical dialectical discourse' (Mezirow, 2003), loosely defined as the ability to determine the validity of assertions of others through conversation. In addition, participants need to be able to determine the relevance of information provided to them.

PRADAN already has a relationship with the farmers and community in which the project is operating. That relationship takes the form of women's SHG. The SHG is not a separate element in the project but an integrated part of the relationship between the farmers and PRADAN, and forms a place where the interactions between the two take place as illustrated in Figure 3. PRADAN's expectation is that the members of SHGs will take control of the SHG and the way in which it interacts with PRADAN and the rest of the environment outside the farm community.



**Figure 3. Diagrammatic representation of the link between the farmers and PRADAN.**

The link between PRADAN and the farmers through the SHG provides the main communication conduit between the other members in our project team and the farmers. This relationship between PRADAN and the farmers is developed over many years and involves a strong element of trust as well as mutual understanding. This relationship and understanding has a strong focus on building the capabilities and sense of agency of the community members.

Initially in the project our focus was on each group in the project communicating with farmers in order to carry out what was essentially a form of experiential learning/action research. We did not focus on communication within the project team perhaps because it was assumed, though never stated, that because we shared a common goal and had equivalent cognitive frameworks

communication would not be an issue. However, in many cases the work was not always clearly linked and at times the various research groups within the project operated independently. A benefit from using a learning approach is that it provides us with some additional models to enhance the way in which we understand and work with the various groups involved with the project. It also provides a mechanism to modify the way in which we understand ourselves, and the context in which we are working as well as a mechanism to modify our approach as required. In an Inclusive Learning Approach all participants are considered to be learners and that learning is an integral part of communication. Effective learning and communication requires understanding of the drivers, knowledge base and cognition of other group members. Therefore, management of the whole process including coordination and communication requires an understanding of one's own epistemology<sup>2</sup>, as well as a shared understanding and respect for the epistemology and knowledge of the other participants. It is therefore important that those coordinating the process have high order cognitive skills at the level of meta-cognition<sup>3</sup> or epistemic cognition<sup>4</sup>. In addition, collective efficacy forms an important affective element in management.

Improved communication and understanding can enable the formation of larger and more diverse groups. Larger groups would also be expected to produce the same emergent learning as smaller groups such as SHGs, and therefore enhance the capability of both individuals and the group as a whole.

To develop these groups to the stage where they are effective requires multiple changes to the way in which the various members of the group function, including:

1. Experts to give away their status as a superior to become a partner and collaborator.
2. Farmers to become partners and communicate their way of operating as well as their needs and experiences to others in the group.
3. Both farmers and experts to gain appropriate sense of agency as well as intellectual capacity to be able to engage in a discourse that investigates the validity of assertions made by others and the applicability of those assertions to the situation of the individual and others with whom they are working.

The changes are both cognitive and affective with particular emphasis on the development of higher order cognitive functions to enable enhanced emergent learning and co-learning to take place. It is probable that learning will take place without any focussed activity to facilitate the change, but it is unlikely that the learning that takes place will be to the extent and type that can be gained from the experience with appropriate facilitation. What we realised we needed was our own SHG as illustrated as an overlapping integrating subsystem in Figure 4, a group that functions between the various partners to build the required understanding and trust between them to enable an enhanced collective agency and build a high perceived efficacy in the group. This symposium and workshop are part of that process and will help to shape the function and structure of that SHG.

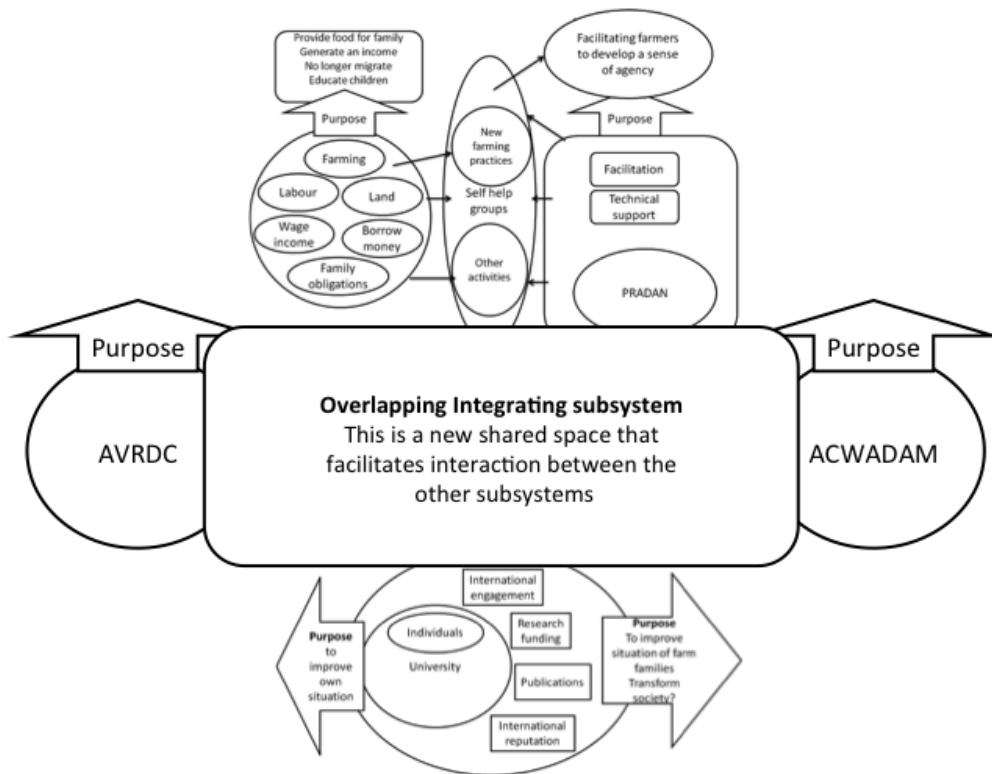
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<sup>2</sup>Epistemology, how we know what we know, the nature of knowledge.

<sup>3</sup> Meta cognition, involves thinking about thinking, including how one plans and monitors one's understanding and performance. It involves thinking of yourself as a learner and understanding how you respond to the environment and experiences, that is, it involves deliberately using different types of thinking to make sense of and act in various situations.

<sup>4</sup>Epistemic cognition, evaluating the nature of what they know and how they know it, involves an understanding of and control over cognitive processes.





**Figure 4. The project team incorporating an integrating subsystem.**

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### References

- Bandura, A (2000). Exercise of Human Agency Through Collective Efficacy. *Current Directions in Psychological Science*, **9(3)**, 75-78. doi:10.1111/1467-8721.00064
- Mezirow, J (2003). Transformative Learnings as Discourse. *Journal of Transformative Education*, **1(1)**, 58-63. doi: 10.1177/1541344603252172