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**ENVIRONMENTAL MANAGEMENT AND DEVELOPMENT
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**Analysis of Learning Cycles in Participatory
Environment and Development Projects:
Lessons from Nepal**

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1. Introduction

At the last World Summit on Sustainable Development (2003) there was a strong multi-nation plea for partnerships that would allow communities, professionals and governments to jointly take action against the continuing trend of growing inequality, energy consumption and biodiversity loss. This plea for partnerships was partially a reaction against centralised development where project designers and sponsors collect relevant information and ideas from other stakeholders and selectively incorporate these ideas into a development project or strategy. The choice concerning what was taken into account - and what was not - was often more reflective of donor priorities and values, then those of the recipient community. The unequal power relationships between external agencies and project beneficiaries meant that these sort of development projects were essentially allowing outsiders, with their strong decision-making power and access to significant resources to dominate the development agenda (Chambers 1983:2-6; Oakley 1991:4).

These concerns were not new. In the mid-1970s there was a shift away from outsider-dominated development agendas towards 'people-centred' or 'participatory' development (Oakley 1991:1-2). This approach specifically sought to empower local people (Pretty 1994:42) by enhancing their capacity to initiate action. Unfortunately many projects that have claimed to be committed to participatory development have continued to be dominated by external agendas (Michener 1998; Ahmed 1994; Pretty 1994; Landre and Knuth 1993), with many so-called 'participatory' projects still being 'top-down' in practice (Kelly 2001:15). These projects thus become devices that justify the decisions of external agencies or extend state control. Such manipulation of participatory development projects fails to devolve power and decision-making from external agencies (Pretty 1994:40).

Part of the difficulty for many participatory projects is with the underlying assumption that it is external agents who empower local people. The commitment to a true partnership where each participant can make a valuable contribution, different sources of knowledge are valued, and two way learning and collaboration can occur, is often lacking. While the participatory models attempt to place local people at the centre rather than the periphery of development, there often seems to be a crucial ingredient missing – a commitment to collaborative learning and action throughout the project cycle.

How can empowerment and collaborative learning be incorporated more meaningfully into projects? Empowerment requires the enhancing of human capacity, social networks and communication processes (Crawley 1998; Guijt and Shah 1998). Facilitation of learning within and between stakeholder groups can contribute to empowerment. Such learning takes place not just in training seminars and workshops, but also through interactive learning process as locals and project staff work together.

One way of supporting learning within development projects is to adopt the concept of experiential learning, that is 'the acquisition of knowledge or skills through experience, practice, study' (Pearsall 1998:1048). Unlike traditional views of learning, which tend to deny any role for consciousness or subjective experience, experiential learning theory emphasises the central role of experience (Kolb 1984:20). This learning theory describes a process by which learners, either individually or collectively, achieve new knowledge,

skills and attitudes through the four stages of the ‘learning cycle’—concrete experience, reflective observation, abstract conceptualisation and active implementation.

By encouraging development partners to reflect individually and collectively on their experiences greater consciousness about development opportunities and challenges can be used to bring about change and achieve local empowerment. However, such empowerment may be threatened by the dominance of project managers in development practices and learning processes. It is therefore crucial that project managers work *in partnership with locals* rather than *for(the externally conceived) benefit of* locals. This may require a ‘reversal’ in their usual roles - particularly pertaining to who learns, listens and leads - and a change in corresponding values and attitudes (Chambers 1994, 1997).

In this paper, the authors assess the extent to which the inclusion of learning cycles in community development projects can contribute to local people’s increased capacity to initiate action. A case study approach was used to test the hypothesis that:

Participatory environment and development projects that incorporate learning cycles will result in empowerment among local people.

In this research, learning cycles were defined as a ‘*continuous process of situation analysis, collaborative planning, action and critical reflection*’ (see Section 3.4), while empowerment was defined as ‘*a process through which individuals, as well as local groups and communities, enhance their capacity to initiate action to improve their well-being by gaining decision-making power*’ (see Section 2.2). Six key research questions were formulated to ensure that all these components were considered when testing the hypothesis (Section 4). The case study involved two sub-projects of a community development and forest/watershed conservation project conducted in the mid-hills of Nepal by the Nepalese Government and the Japan International Cooperation Agency (JICA).

In the sections to follow the relationship between participatory development projects and learning cycles are explored. Section 2 defines participatory development and empowerment in more depth, while Section 3 reviews three learning theories—experiential learning, social learning and organisational learning (in particular, multi-looped learning)—to build the analytical framework for the case study. Section 4 describes the research methods, including criteria for selection of case studies, and the field survey methods. Section 5 reports the qualitative field data, and discusses the extent to which the case study projects demonstrated learning cycles. Section 6 discusses these results further and presents conclusions.

2. Participation and Empowerment in Development Projects

Although the concept of participation has different interpretations in different circumstances—ranging from passive involvement to self-mobilisation—one of the unquestionable goals of participatory development is empowerment. This section explores the concepts of participation and empowerment in the context of development projects. In particular, it highlights the gap between participation theory and practice; the meaning of empowerment in the context of development projects; and the relationship between participation and the project cycle.

2.1. Defining Participation

Although the term ‘participation’ has different meanings for different people, and different interpretations in different situations, the World Bank definition directly pertains to development projects:

Participation is a process through which stakeholders influence and share control over development initiatives and the decisions and resources which affect them (World Bank 1996:3).

This definition refers both to the involvement of local people in making decisions about projects that affect them, and to the recognition of participation as a process that aims to empower local people through their involvement in development activities. Despite the rhetoric that this latter process has become ‘one of the major claims of the new orthodoxy’ (Henkel and Stirrat 2001:178), the reality is that participation is often manipulated to suit the objectives of implementing agencies (see Section 2.2).

The manipulation of participation by external agents is well enunciated by Arnstein (1969) in her seminal work on a typology of participation. In Arnstein’s typology power relations are central to participation. Indeed, power is the most common criterion used to describe different types of participation (Ross *et al.* 2002; Kelly 2001). Building on Arnstein’s work, Deshler and Sock’s (1985) typology of participation and the role of power (Figure 1) clearly articulates the relative power relationship between outsiders and beneficiaries. They use the two broad categories of ‘genuine participation’ and ‘pseudo-participation’ to indicate whether the dominant decision-makers are outsiders or beneficiaries.

Deshler and Sock’s typology shows participation as a function of power relationships and indicates that the continuum of these relationships is extensive, ranging from ‘decisions are told to people’ to ‘people take initiatives’. What the typology does not highlight, however, is the potential for power relationships to change. Whenever the term ‘participation’ is used, therefore, it is crucial to identify the objectives of the participatory process and what level of power-sharing is occurring, in terms of both overall project management and individual project activities.

Typologies can be interpreted to suggest that if participation aims to empower local people, it is essential to accommodate the higher levels of power-sharing in development projects. This implies that projects adopting lower power-sharing arrangements, through ‘pseudo-participation’, are less likely to provide local people with the skills, knowledge and resources to ensure the development processes positively contribute to their well-being. However, this type of argument simplifies a complex learning process and should be rejected as applicable to all cases.

Different types of participation may contribute to multiple levels of learning. For example, consultation is categorised as pseudo-participation, but may lead to two-way communication and learning if the initiating party makes decisions according to public input (Ross *et al.* 2002:214). Moreover, local people may gain skills and knowledge from training seminars or workshops organised by external agencies that are empowering, even though the flow of information in such cases is largely one-way. Equally, beneficiaries

can educate outsiders, particularly with respect to contextual factors affecting aid delivery and development, eg caste, kinship relations, informal institutional arrangements. The reality of participation is clearly complex—one should not simply accept that a higher level on the ‘ladder of participation’ must be good and a lower one bad, particularly with respect to social learning and empowerment.

Figure 1 Participation level

Type of Participation	Relationship	Arnstein’s Typology
I. Genuine Participation	A. Empowerment	i. Citizen control
	B. Cooperation	i. Delegated power ii. Partnership
II. Pseudo-Participation	A. Assistencialism	i. Placation ii. Consultation
	B. Domestication	i. Informing ii. Therapy iii. Manipulation

Source: Modified from Deshler, D. and Sock, D., 1985, in Michener, V. J., 1998. ‘The participatory approach: contradiction and co-option in Burkina Faso’, *World Development*, 26(12):2106.

It must be recognised that not all activities labelled as learning are empowering. Indeed, several authors have shown how the promise of learning opportunities can be used to disempower locals engaged in participatory development projects (e.g. Cooke and Kothari 2001; Michener 1998; Leeuwis 1995; Pretty 1994). For example, instead of establishing processes that empower people and decentralise decision-making, so-called ‘learning opportunities and partnerships’ may actually result in project costs being transferred to local people through unpaid labour or in-kind contributions (Cooke and Kothari 2001:6-7). Thus an emphasis on participatory development at the micro-level may obscure existing inequalities and injustice at the macro-level (Cooke and Kothari 2001:14). Therefore, it is necessary to consider the context whenever discussing relationships between different types of participation and subsequent empowerment and learning outcomes.

2.2 Empowerment in participatory development projects

Although empowerment has become a popular objective of participatory development, the concept is not well-understood (Henkel and Stirrat 2001:171). Empowerment has been defined as a process through which individuals, as well as local groups and communities, are able to analyse their situation, identify problems and organise actions to improve their well-being by gaining control over natural, social and financial resources, as well as knowledge and political processes (Moser 1993; Slocum *et al.* 1995; Crawley

1998). In this research, empowerment has been defined, more simply, as a process in which individuals or groups enhance their capacity to initiate action and improve their well-being through participation in decision-making.

Few authors have analysed the process by which empowerment is brought about. Kabeer (1994), however, has made detailed studies of grassroots empowerment by describing the experiences of poor women in South Asia. She presents three dimensions of empowerment strategies, namely 'the power within', 'the power with' and 'the power to'.

'The power within' suggests that women's empowerment must be based on self-generated power that creates individual consciousness, an essential prerequisite for reflection on, and analysis of, aspects of life taken for granted by women (such as subordination by men or being in a disempowering situation). Freire (1974, in Kabeer 1994:250) describes this process as 'conscientisation'.

'The power with' emphasises the importance of a collective identity and collective actions. For example, male domination may be concealed by ideological mechanisms embedded in society, but women's shared recognition of subordination can provide a basis for change (Kabeer 1994:253). Networks and alliances among poor women are crucial if they are to express their common interests in development processes.

Finally, 'the power to' articulates the necessity of organisation and mobilisation to link with the broader struggle for change at the policy level. Interventions in policy-making agenda are essential to change policies that have underpinned an unfair *status quo* and brought about inequitable and enduring influences on the course of development.

Based on the arguments above, development projects could be designed to achieve greater empowerment through the creation or support of processes whereby local people:

- reflect on and analyse the situation, individually and collectively
- share understandings
- take collective action for change
- develop social networks and a sense of identity, and
- use networks, alliances and shared knowledge to gain greater control over the development process.

This approach requires power-sharing between external agents and local people involved in a development project. The process by which empowerment occurs is important – both *within* and *between* communities. A critical issue is how the process affects power within a community, as 'local people' or 'communities' are often quite heterogeneous. Unless power dynamics *within* a community are considered, participation may actually see the power of local elites strengthened while poor and disadvantaged groups become worse off (Chambers 1997).

Another critical issue is 'for what' empowerment is intended (Henkel and Stirrat 2001:182-183). Development projects can empower people to engage in the modern sector by becoming citizens of the modern state, consumers in a global market, or rational farmers increasing GNP (Henkel and Stirrat 2001:182-183). Such goals, however, are little different from those of top-down approaches, as people are guided to think in the way determined by the project proponents or lead agencies. Further scrutiny of the

practice of empowerment is therefore required in terms of the marginalised groups in development projects.

2.3. Frameworks for participatory development projects

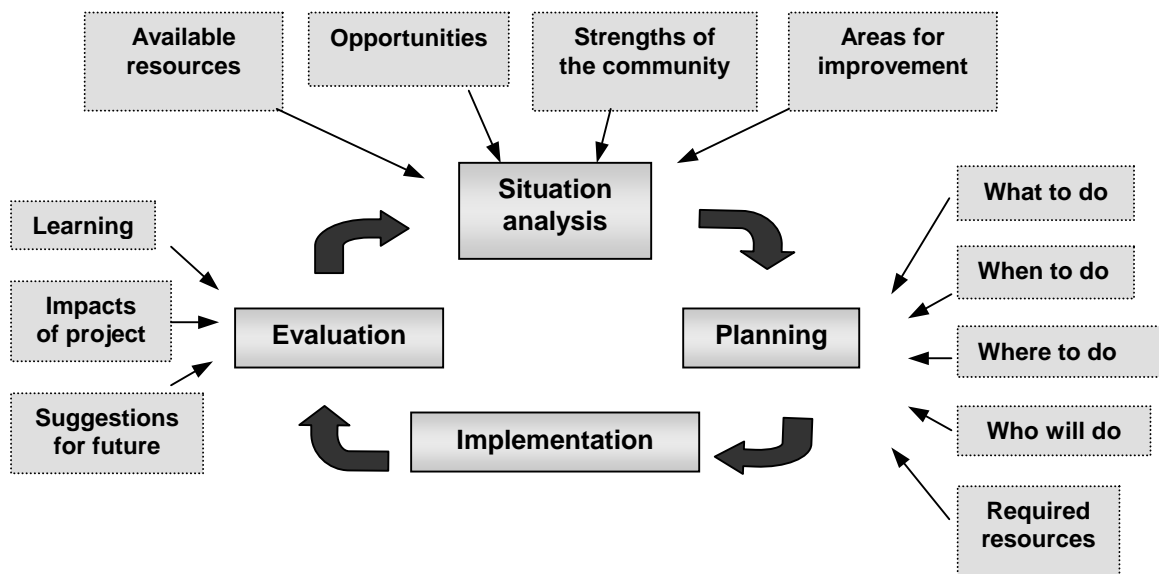
There have been many attempts to define a development project, with a simple one being ‘the investment of capital in a time-bound intervention to create productive assets’ (Cusworth and Franks 1993:3). Projects are a practical way of achieving the specific goals and targets of development, regardless of development approach (Cusworth and Franks 1993:1). Most commonly, a project has a fixed budget and time schedule and is identified and designed by development practitioners in consultation with national governments or target communities. Because projects are controlled by their planners, there may be little opportunity for local people to reflect on their own ideas and demands, and to adapt processes and practices accordingly. Moreover, rigid budgets and timetables often make it difficult for local people to play a significant role (Oakley 1991:5).

2.3.1 The Participatory Project Cycle

Even though development projects are generally constrained by limited timeframes, fixed budgets and outsider-oriented initiatives, projects can be implemented with a participatory focus. Phuyal (2002:5) developed the Participatory Project Cycle (PPC) from field experiences of participatory learning and action (PLA) used in training and community development projects with, and for, local people in South Asia. The PPC identifies four stages—situation analysis, planning, implementation and evaluation (Figure 2)—and assumes that locals are integrally involved in all stages. The PPC begins with a situation analysis that includes assessment of the available resources, opportunities, community strengths and areas for improvement. The second stage considers the ‘what, when, where and who’ of planning, as well as resource requirements. After project implementation, evaluation allows learning to occur, for example, about the project’s impacts or useful future adaptations.

Phuyal (2002:5) emphasises the role of local people in the whole process of a participatory project. Through ownership of the process, local people can analyse their situation, plan a project based on the analysed data and evaluate it after implementation by reflecting on their activities. However, this model gives little attention to how collaborative learning processes *between* donors, project managers and locals are to occur. More explicit attention to learning cycles within participatory projects is needed.

Figure 2 Participatory Project Cycle



Source: Phuyal, K., 2002. *A Brief Introduction to Participatory Learning and Action*, PLA Training November 2002, Foundation for Advanced Studies on International Development, Tokyo.

2.4. Summary

In summary, a core aspect of participatory processes is empowerment and learning. For this to occur, local people must gain ownership of the project process so that they can learn how to take action and change their own circumstances using the available resources. Although active participation is essential, different types of participation can foster multiple levels of learning and empowerment depending on local needs and situations, and the relative strengths of the development partners. The Participatory Project Cycle describes a specific framework that helps local people to structure participatory development projects, but lacks detail on collaborative learning processes between stakeholders that can enable people to sustain and advance their own development agendas. Because learning processes are central to participatory projects that aim to empower people, especially people who have become marginalised, a better understanding of learning theory can enhance the effectiveness of participatory development models.

3. Learning theories

To empower individuals, learning is needed at several levels to develop human, social and cultural capital that includes, *inter alia*, enhancing human skills and capacity, social networks and institutions, and the inclusion of local cultural norms and values into development. With some notable exceptions such as PLA (Phuyal 2002), Participatory Rural Appraisal (Chambers 1994a), and the social learning approach to rural resource management (Leeuwis and Pyburn 2002), the literature on participation and

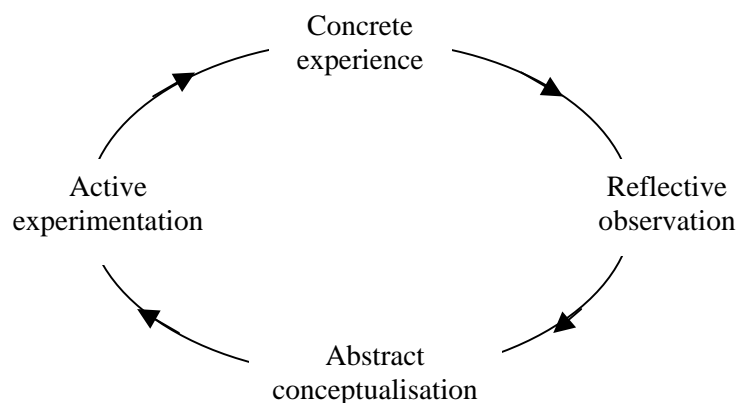
empowerment in natural resource management has largely neglected the importance of learning theory and has instead focused on skills acquisition and power relationships.

3.1 Experiential learning

Experiential learning theory highlights the importance of experience and action—a focus of participatory projects—as the core of learning (Jarvis 1995; Kolb 1984; Lewin 1951). During the last decade, experiential learning has been recognised as fundamental to meaningful adult learning (Lewis and Williams 1994:5). Although there are several conceptual models of experiential learning, Kolb’s (1984) model is particularly influential because it links theory to practice. It is also consistent with the Participatory Project Cycle concept (Section 2.3) in that it emphasises the potential for people to learn by taking part in all the processes of participatory projects.

Kolb (1984:26) describes learning as ‘the process whereby knowledge is created through the transformation of experience’, and develops the idea of a ‘learning cycle’ of four stages: concrete experience, reflective observation, abstract conceptualisation and active experimentation (Figure 3). The learning process often begins with a specific action by a person or group. The learner reflects critically on the experience by asking questions to understand the effect of the action. The learner then tries to extract general principles that describe the experience, and to draw conclusions from these. Finally, the learner tests these conclusions by applying them in a new situation. The cycle continues, with the complexity and depth of the learning increasing at each stage (Lewis and Williams 1994:7; King 2000).

Figure 3 Experiential learning cycle



Source: Modified from Kolb, D.A., 1984. *Experiential Learning: experience as the source of learning and development*, Englewood Cliffs, Prentice-Hall:21.

The direction of learning is influenced by the learner’s needs and goals, so the learning process is not efficient unless it has clear objectives (Kolb *et al.* 1984:32). In the context of participatory projects, this means that needs and goals must be identified across social groups—villagers, project staff and government officials. By providing opportunities for the integration of diverse knowledge sources, this process can create opportunities to develop knowledge partnerships and expand social networks and alliances.

3.2 Social learning

Learning occurs in groups, communities and institutions, as well as through interactions between individuals (Maarleveld and Dangbegnon 2002; Wenger 2000; Schön 1983; Argyris 1999). The many definitions of social learning (Figure 4) highlight the importance of dialogues between groups and reflection over time. In essence, the concept of ‘social learning’ refers to learning processes among a group of people who all seek to address shared problems and take action collectively (King 2000:43). The concept of social learning thus extends experiential learning into collective learning.

Within projects, social learning can be achieved through the use of ‘platforms’—contrived situations in which a set of more or less inter-dependent stakeholders are identified and invited to interact in a forum for social learning and collective decision-making, aimed at concerted action (Röling 2002:39). Ideally, local people and project staff work together to analyse their situation or problem, to plan activities to solve this problem, and to implement these activities. For this process to work smoothly, rules or principles governing engagement have to be defined and followed.

Figure 4 Definitions of social learning

- a conscientisation process (Friere 1974)
- a process of experiential learning (Kolb 1984)
- a combination of adaptive management and political change (Lee 1993:8)
- a process of collective action to solve a shared problem (Thomas *et al.* 1995)
- a continuous dialogue and deliberation among scientists, planners, managers and users to explore problems and their solutions (Maarleveld and Dangbegnon 1999, in Buck *et al.* 2001)
- a process of collective action and reflection among different actors directed towards improving the management of human and environmental interrelations (Ison 2003)
- a dynamic process which involves continuous sense-making of the world through perspectives or frames of reference based on concrete, experience-modified, knowledge, beliefs, values (Dangbegnon 1998, in King 2000).

There are three important dimensions of social learning: collective processes, knowledge-sharing, and communication and relationship-building. First, social learning describes the collective process whereby a particular group shares and accumulates new knowledge. Social learning is characterised by ‘a continuous dialogue and deliberation among scientists, planners, managers and users to explore problems and their solution’ (Buck *et al.* 2001:3). This implies that interactions among social learning participants foster mutual

understanding and trust. Working together toward shared goals is thus not only beneficial, but also generates confidence for further collaboration.

Second, the various participants all contribute different knowledge, in the form of their values, capacities, perspectives and experiences. In this way knowledge is shared, while the ongoing dialogue contributes to establishing a common understanding, even in complex situations (Daniels and Walker 1999:39). In participatory projects, different types of knowledge are essential for an effective project learning cycle, because they provide a broader perspective than any one group or individual could offer, and thus promote fresh insights and possible solutions. Frameworks and opportunities for knowledge-sharing are thus fundamental to participatory projects.

Third, social learning occurs through interaction among individuals, communities and institutions in collective and collaborative actions. Carefully-devised learning platforms can support constructive interactions among stakeholders and remove barriers to communication such as those associated with different languages, cultures, and values (Buck *et al.* 2001:4). Therefore, communication and relationship-building are essential components of social learning and are often achieved through facilitation. In participatory management, project staff usually take the facilitator role at a project's start. However, external facilitators should ideally make their job redundant over time, as groups become independent and capable of communicating and interacting without assistance (Bohm 1996). These points are succinctly summarised in Figure 5 below.

Figure 5 Core characteristics of effective learning in participatory development projects

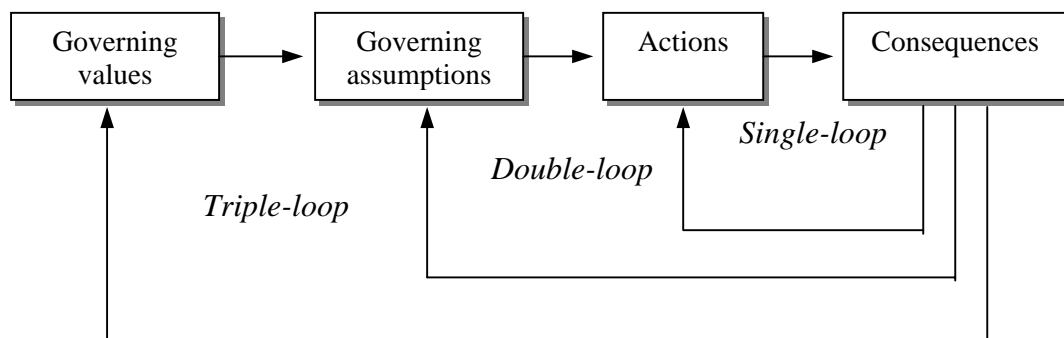
- Multiple players need to be engaged in project activities.
- Needs and goals should be collectively identified by players affected by the development.
- Knowledge partnerships should be formed across social and cultural divides.
- Constructive interactions among stakeholders should be facilitated throughout the project.
- Learning platforms can be used to create new opportunities for equitable and creative dialogues between players.
- Project staff should be trained in facilitation skills, and should aim to transfer the facilitation role to the group by the end of the project.
- Social networks may need to be enhanced to support learning processes.

When dealing across cultures, deeper levels of learning may be needed. Participatory projects may need to facilitate iterative cycles of learning to stimulate reflections about needs, development agendas, social values and dominant norms. As participatory processes do not often involve reflective forms of learning (Jarvis 1995), a discussion of the kinds of learning that bring about social change can be informed by the concept of learning cycles.

3.4 The concept of learning cycles—single, double and triple loop learning

‘Learning loops’ are a useful concept for understanding and distinguishing the kinds of learning that occur in participatory projects. The terms ‘single loop’, ‘double loop’, and ‘triple loop’ learning come from the work of Argyris and Schön (1974, 1978, 1996), based on organisational behaviour research and drawing on the original ideas of Kolb (1984). For these authors, learning is a process of critically and collectively reflecting on actions, assumptions and values (Figure 6).

Figure 6 Single-loop, double-loop and triple-loop learning



Source: Modified from Argyris, C., 1999. *On Organizational Learning*, Blackwell Business, Malden, Mass.:68.

Single loop learning occurs when the focus is on technical skills, usually at the individual level, and involves little reflection. Goals, strategies, frameworks and values are often externally defined or assumed to be homogeneous across stakeholder groups. The emphasis in this type of learning is on techniques and tools that contribute to increased effectiveness and efficiency, rather than on questioning strategies or assumptions (Usher and Bryand 1989:87).

Double loop learning requires an examination of a program’s purpose in terms of its goals, achievements and constraints. It incorporates feedback from experience into planning, allowing underlying assumptions to be challenged and hypotheses tested publicly. Double loop learning requires moves into areas of uncertainty, beyond routine actions, and relies on individual and collective reflection. Double loop learning is thus compatible with Kolb’s learning cycle (Section 3.1) and the ideas underpinning social learning theory.

Triple loop learning—a much deeper form of learning—affects the existing values and norms of people, and can occur through reflection on single and double loop learning, to examine the gains made by program participants in terms of skills, understanding and stakeholder values. In essence it is a consideration of why we do, what we do. Constructive interaction among different players with different values is crucial. Again this reliance on collective reflection is consistent with social learning theory.

3.5 An analytical framework: integrating learning theory into participatory environment and development projects

Drawing on both experiential and social learning theory, a learning cycle in participatory development projects may be depicted as a continuous process of situation analysis, collaborative planning, action and critical reflection (Figure 7).

By combining ideas from experiential, social and multi-looped learning theory, the learning cycle can be considered three-dimensionally (Figure 8). This model highlights the different levels of learning consistent with different types of change, and reflects the relationship between values, governing assumptions and actions—and the learning pathways associated with the different stages of the participatory development project cycle.

Figure 7 A learning cycle in development projects

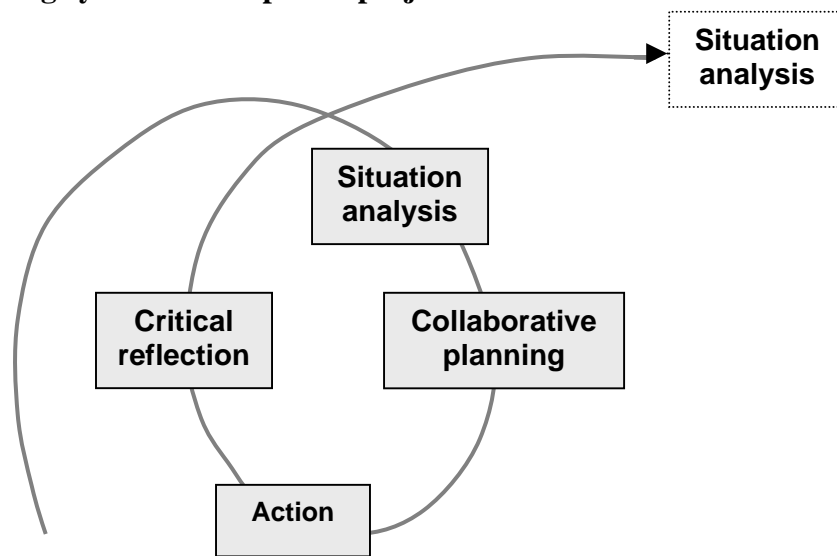
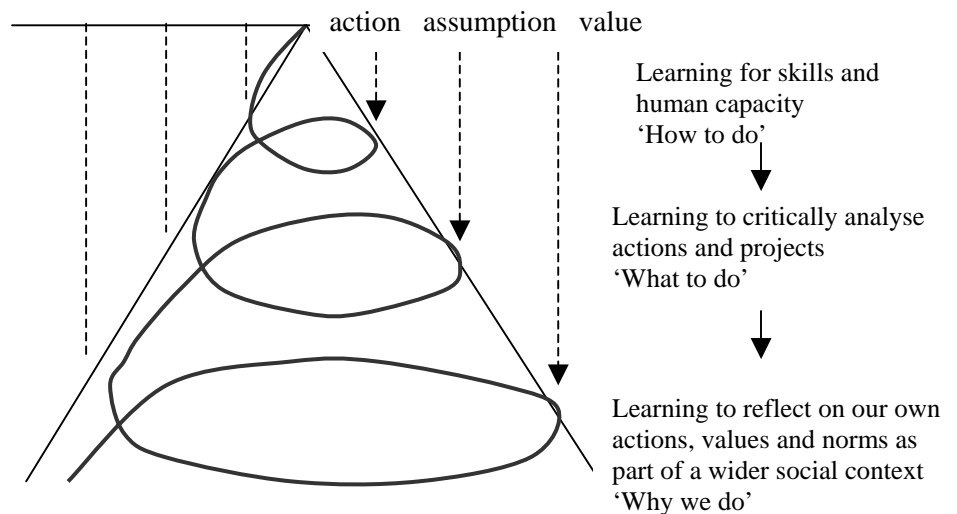


Figure 8 Single loop, double loop and triple loop learning in development projects



4. Research Method

A case study approach was considered the best way to describe learning processes in development projects so as to assess whether the inclusion of learning cycles could help empower the local communities. A case study allows us to understand a situation in depth, recognising its complexity and context (Punch 1998:150). Moreover, it allows researchers not only to describe decisions but also to examine why they were taken, how they were implemented and with what result (Schramm 1971, in Yin 1994).

To test the research hypothesis that ‘participatory environment and development projects which incorporate learning cycles will result in empowerment for local people’, six research questions were developed as described in Figure 9.

4.1 Case Studies

For this research, it was considered that, to serve as appropriate case studies, the development initiatives had to meet the following criteria:

- environment and development project activities involved local community members
- learning components were part of the development project, e.g. skill building
- opportunity for participant observation of the project process by the researcher
- availability of secondary information
- strong likelihood of a complete learning cycle occurring within one case, and
- strong likelihood of an incomplete learning cycle occurring within one case¹.

These criteria were satisfied by Community Development and Forest/Watershed Conservation Project (CDFWCP) sub-projects conducted in the mid-hills of Nepal by His Majesty’s Government of Nepal and the Japan International Cooperation Agency (JICA) from 1994 to 1999. This project aimed to improve the natural environment in the hill areas of Nepal through community resource development and conservation (JICA 1999), and had three major characteristics (JICA 1999). First, to implement environmentally sound development activities, including infrastructure improvement and income generation, a fixed budget was assigned to target Village Development Committees (VDCs)². Second, development activities—referred to as ‘sub-projects’—were identified by local villagers within the target VDCs. Although local villagers selected the sub-projects, the process was strongly influenced by project staff. Third, user groups were organised by concerned villagers to implement each sub-project. Disadvantaged people within the target VDCs, such as women and members of the occupational caste³, were encouraged to form and join these groups (JICA 1999).

Therefore, two groups were selected from among those in Deurali VDC⁴ that were implementing different sub-projects—the Raikar Ginger Cultivation (RGC) Group and the Marjangkot Duck-Raising (MDR) Group.

¹ Flyvbjerg (2001:78) suggests that, in the selection process, researchers look for either ‘most likely’ or ‘least likely’ cases, that is, cases that are likely either to confirm or to refute the hypothesis.

² In Nepal, a Village Development Committees (VDC) is a form of local administration at the district level.

³ In Nepal, the occupational caste is the lowest caste: Kami, Damai, Sarki (KDS) are typical occupational caste groups.

⁴ One of the authors (Hiyama) had worked in the Deurali site office of CDFWCP from 1997 to

Case study 1—Raikar Ginger Cultivation (RGC) Group

This group of 13 women was formed in March 1996 in Raikar area, Ward No.2, Deurali VDC. The group was ethnically homogeneous⁵, so they were able to represent their interests with a single voice to outsiders (Thapa *et al.* 1999:6). Members had support from their husbands, and the group had a good leader (Nonoguchi 1996:203). All members started ginger cultivation in April 1996 and goat-raising in May 1998. Both activities are still continuing, although various problems have meant that the scale of activities has been reduced. The group also had literacy classes for nine months during 1998.

This case was assumed to have a ‘strong likelihood of a complete learning cycle occurring’ because:

- the group initiated goat-raising and literacy classes themselves, following critical reflections about the strengths and weaknesses of their first community development experience - ginger cultivation, and
- in 2003, they were still involved in ginger cultivation and goat-raising, and had extended their influence and networks both within and outside of the village.

From these observations, one could assume that the members had developed their skills and capacities through multiple learning loops.

Case study 2—Marjangkot Duck-raising (MDR) Group

This group of 13 women was formed in May 1998 in Marjangkot area, Ward No.8, Deurali VDC. The group members were mixed socially, including *Gurung*⁶ and occupational castes. They started duck-raising in June 1998 but stopped in 2002 when the ducks died. The group did not appear to have reflected on the failure of their activity but had simply given up, suggesting that this group had not experienced a complete learning cycle.

4.2 Field Survey

To obtain the qualitative data required to test the hypothesis and research questions focus groups were held with case study group members to allow the researcher to gain an understanding of the group’s history in terms of skill acquisition and the occurrence of learning cycles through their group activities. These discussions took place in a casual setting through an assistant interpreter.

1999 as a community development worker, and thus had had opportunities for participant observation on the processes of these group activities.

⁵ All members belonged to the occupational caste, with similar (poor) economic conditions.

⁶ Gurung is one of mountain tribes in Nepal, categorised as a middle caste.

Figure 9 Research Questions

1. *How can participatory development projects incorporate a learning cycle?*
2. *Did the group members analyse their current situation to identify the goals, criteria for success and constraints of their activities?*
3. *Did group members and project staff apply goals, criteria and constraints in collaboratively in the design of their project?*
4. *During implementation did group members critically reflect on their actions in terms of achieving their goals?*
5. *Did they use these reflections to learn from experience and thus adapt their project?*
6. *Overall, did they acquire skills, capacities and networks through group activities relevant to their development needs?*

In addition, semi-structured interviews were conducted with selected group members and key informants, including relevant villagers, project staff and government officials (Table 1). Key informant interviews were conducted to obtain information related to any social learning, as well as to allow cross-checking of information gained through focus group interviews. Village informants were selected from those villagers who had been involved in the group activities (such as village leaders, the family of group members and voluntary social workers in the village).

Table 1 Summary of interviews

Relevant Research Questions (see Figure 9)	Number of Interviewees			
	Group members	Other villagers	Project staff	Government officials
Q3	6	6	4	1
Q4	6	6	4	1
Q5	6	5	4	1
Q6	6	4	3	0
Q7	6	6	4	1

⁸ Gurung is one of mountain tribes in Nepal, categorised as a middle caste.

5. Learning cycles in a participatory development project: case study analysis

5.1 Case study 1: Raikar Ginger Cultivation (RGC) Group

5.1.1 Situation analysis for identifying goals, criteria for success and constraints

The RGC group started its activities for two reasons. First, project staff were charged with establishing participatory development initiatives which targeted occupational caste women for income-generating sub-projects (M. Budhathoki 2003, pers. comm. 23 January). Second, the members themselves realised that they could improve their living conditions through sub-project activities (B. Shrestha 2003, pers. comm. 16 January). In particular, there was strong leadership from the group's head, who understood the benefits of the sub-project, and expressed her strong interest in joining the project activities (Nonoguchi 1996:202).

The group's positive attitudes to the project were driven by recognition that the difficulties in their daily lives could be overcome through the establishment of strategic partnerships that would enable them to access resources and learning. Their difficulties were mainly caused by poor economic conditions, discrimination against low caste women, no opportunities for education and no support from other people, including external agencies (P.A. Pariyar and A.M. Nepali 2003, pers. comm. 11 January). Although the project staff did not facilitate a community-based analysis of these difficulties and their causes, the group members had already identified these issues, and as such had conducted a 'grassroots' situational analysis that they used to inform themselves and the project staff.

Overall, then, the group did have a clear goal, namely to overcome their economic and social disadvantages. However, the group did not conduct a detailed and formal situation analysis with the project staff to understand the group's strengths and weaknesses, opportunities or threats (SWOT). While a collaborative situational analysis was not done, the key groups did have an informal understanding of the situation, although the project staff may have not fully understood the needs of the women and their skills. If they had collaborated in a situational analysis, the problem definition and proposed activities may have been more compatible with community needs.

5.1.2 Collaborative planning using the results of situation analysis

Initially the group members considered various options for income-generating activities, including potato cultivation, bee-keeping or goat-raising⁹. However, the project staff believed that these options would be too difficult for the group to implement—potato cultivation required irrigated land and fertilisers, which the group did not have (R. Ghimire 2003, pers. comm. 11 January) and bee-keeping required intensive training they could not afford (B. Shrestha 2003, pers. comm. 27 January). The project staff and group recognised that goat-raising was risky as a first activity because the goats might die and members had no money to replace them (P.A. Pariyar and A.M. Nepali 2003, pers. comm. 11 January).

⁹ These suggestions were made by R. Ghimire (pers. comm. 11 January 2003), P.A. Pariyar and A.M. Nepali (pers. comm. 11 January 2003) and B. Shrestha (pers. comm. 27 January 2003) respectively.

Project staff suggested ginger cultivation instead (Nonoguchi 1996:202), as this required only a small area of land without irrigation and other investment. The group considered this suggestion for a few days and decided that they would try it (Nonoguchi 1996:202). The staff largely determined the group's decision, rather than facilitated its learning processes. Nevertheless, by providing a rational explanation for their advice, the staff modelled the type of project analysis that could be used by the group in the future. Although activity planning was not collaborative, both sets of participants had shared their ideas, and the rationale for those ideas. In this first cycle, the staff directed the planning and the group members followed the advice. Thus the form of participation was on the lower end of the participatory typology (consultation), but as discussed later, may still have been effective.

5.1.3 Critical reflection and adaptation of activities

Although the members of the RGC group did not analyse their situation in detail nor plan the activity collaboratively with project managers, they were able to reflect critically on their experience after they had sold the harvested ginger. They realised that the market price of ginger was too low to contribute significantly to their household income¹⁰. They discussed this issue in their monthly meetings¹¹ and agreed that they needed an additional activity. On reflection, they returned to the idea of goat-raising.

At this stage they conducted their own analysis of their situation and were able to argue more strongly for their favoured activity, making the following observations with the sub-project staff. First, three group members had experience of goat-raising. Second, there was no lack of a market and the prices for goats were good. Finally, the goat dung could be used as a manure for the ginger, so there was a positive secondary effect¹². In addition, the risk of goat-raising could be mitigated by reserves in the group's monthly savings fund which was established at the start of the ginger cultivation (P.A. Pariyar and A.M. Nepali 2003, pers. comm. 11 January). With this rationale, it was agreed that the group would start goat-raising as its second activity. The facilitation of the process had subtly shifted from the project staff to the group's leader, and the rigour of the group-based analysis had certainly improved. The group had developed skills in project management, and had made critical reflections on their experiences and needs.

The group then realised that its ability to engage in economic transactions, manage crops and animals, and take part in decision-making was being adversely affected by a lack of literacy. The members proposed to the project staff that literacy classes be organised. Eventually such classes were provided and the women were able to improve their literacy skills, and engage more fully in social affairs. This type of learning was empowering, as they could now take action more easily and were not reliant on others to read and write for them.

¹⁰ This point was suggested by M. Budhathoki (pers. comm. 23 January 2003) and B. Shrestha (pers. comm. 27 January 2003) respectively.

¹¹ The group held regular meetings, usually once a month, to monitor and review their activities.

¹² These were suggested by P.A. Pariyar and A.M. Nepali (pers. comm. 11 January 2003) and B. Shrestha (pers. comm. 27 January 2003) respectively.

5.1.4 Acquired skills, capacities and networks

Through group activities, the RGC members acquired skills, capacities and networks to support their economic activities (Tables 2 and 3 and Figure 10 respectively). The skills were basically obtained through the group's activities: ginger cultivation, goat-raising, literacy classes and regular meetings.

Table 2 Skills acquired by members of Raikar Ginger Cultivation Group

Activities	Skills	Number of group members (n=7) acquiring these skills
Ginger cultivation	Seed treatment skill	5
	Soil preparation skill (manure)	7
	Planting skill	5
	Medicine distribution skill	4
	Storage skill	3
	Marketing knowledge	5
Goat-raising	Pen making skill (size, place)	3
	Goat selection skill (species)	5
	Feeding skill (grass selection)	5
	Medicine-giving skill	0 *
Adult literacy class	Writing skill	5
	Reading skill	5
	Calculating skill	5
Regular meetings	Meeting facilitation	7
	Saving for the fund	7
	Problems sharing and solving	7

Note: * If necessary, the members asked a veterinary officer to medicate sick goats.

Sources: N.R. Adhikali 2003, pers. comm. 26 January; B. Shrestha 2003, pers. comm. 27 January.

Table 3 Capacities acquired by Raikar Ginger Cultivation Group

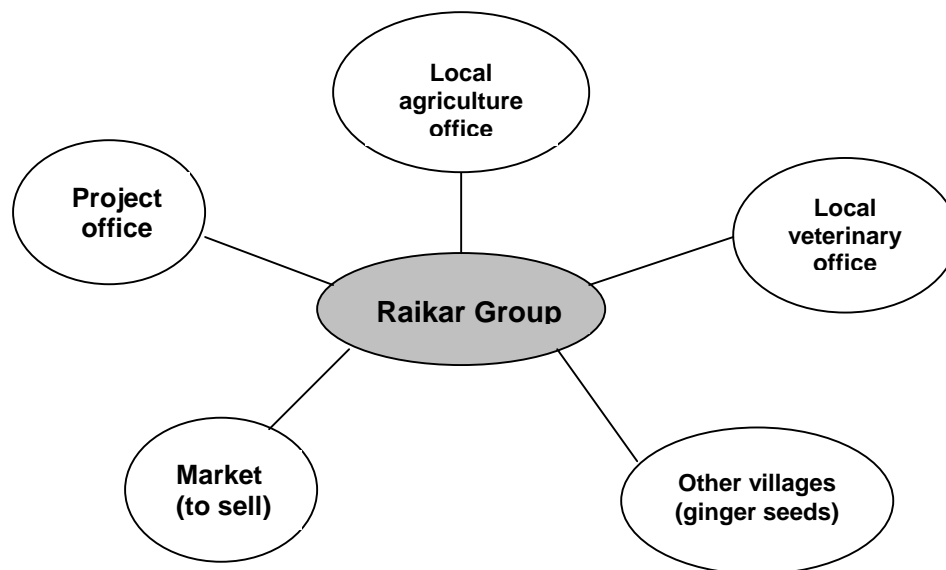
Activities	Capacities	Number of group members (n=7) acquiring these capacities
Whole activities	Giving opinions in mass meetings	4
	Speaking with local elites	3

Sources: R. Ghimire 2003, pers. comm. 11 January; B. Shrestha 2003, pers. comm. 27 January.

As the women gained skills, they felt empowered and began to express their opinions in village meetings and to village elites, a change observed by other villagers (B. Shrestha

2003, pers. comm. 16 January) and by project staff (R. Ghimire, 2003, pers. comm. 11 January), as well as by the women themselves (P.A. Pariyar and A.M. Nepali 2003, pers. comm. 11 January). Traditionally, it is difficult for women and low caste people to express their opinions in mass meetings in rural Nepal. Before group activities, the group members had not expressed their opinions but through their various activities to generate income, the women realised the need to speak out. They succeeded not only in changing their own behaviour, but also in subtly influencing the behaviour of others, and the assumptions being made about their caste and their needs, and the value of their ideas and knowledge.

Figure 10 Expanded networks of Raikar Ginger Cultivation Group



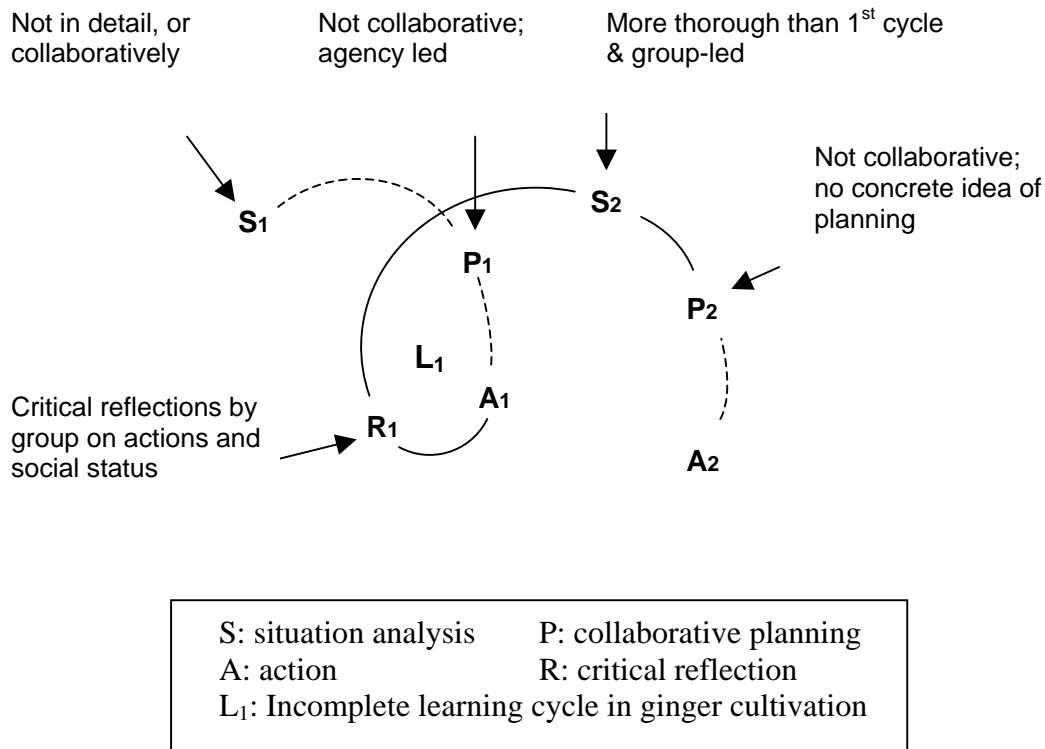
Social networks were also expanded (Figure 10). Before group activities, members did not have close contact with local agriculture and veterinary officers. Through continuing income-generation activities, however, the members met these officers and began to ask for help with problems, resources and information. Group members also went to the nearest market to sell ginger, as well as to nearby villages to obtain good ginger seeds. Their interactions in these places gave them a better understanding of markets and institutions. The women also developed close relations with project staff and would go to the project office to raise their concerns or access information that they needed. These social networks and knowledge partnerships were lacking before the group's activities and provided useful information, resources and skills to its members.

5.1.5 Implications of the findings

While the group's experience of learning cycles diverged from the ideal (Figure 11), the members did acquire skills and social networks. Their new skills enabled them to engage in higher level learning and action, including challenging the assumptions being made at meetings about their needs, and re-assessing the values they wished to promote within the group with respect to equitable decision-making, participation and education. Their

success was in part due to the strong leadership within the group, and their ability to facilitate their own development process independently.

Figure 11 Learning cycles in Raikar Ginger Cultivation Group



5.2 Case study 2: Marjangkot Duck-Raising (MDR) Group

5.2.1 Situation analysis for identifying the goals, criteria for success and constraints

When the MDR group was formed, the members had different kinds of problems as their social and economic status were so different¹³ (B. Shrestha, 2003, pers. comm. 27 January). They did not conduct a detailed situation analysis, have strong internal cohesion or leadership, or share a common goal for the activity. The differences within the group could have been foreseen, as traditionally people in Nepalese society do not work closely if their castes are different (Thapa *et al.* 1999). Unfortunately there appeared to be little awareness amongst project staff of the challenges that this mixed group would face given the social context, and surprisingly they did not take the opportunity to learn about the social context before developing the project.

¹³ In general, the economic situation of *Gurungs* was better than that of the occupational castes because the latter's work opportunities were limited by discrimination from higher castes.

5.2.2 Collaborative planning using the results of situation analysis

After the group was formed, its members discussed different income-generation activities. Potential ideas included poultry farming, bee-keeping, duck-raising and goat-raising¹⁴. Poultry farming was not feasible because it needed electricity that was not available in their village (J.M. Gurung and N.P. Gurung 2003, pers. comm. 13 January). *Gurung* members were interested in bee-keeping but it was impossible as a group activity because higher caste people would not buy honey made by occupational castes, to which four of the members belonged (R. Ghimire 2003, pers. comm. 27 January). The project staff supported the duck-raising option (D.S. Gurung 2003, pers. comm. 26 January), partially because there had already been a goat-raising group and the staff believed a different activity would bring different skills to the village in which other villagers could share later.

Some group members also favoured the duck-raising option because they had observed that ducks grew quickly and easily (J.M. Gurung and N.P. Gurung 2003, pers. comm. 13 January), although they had little other relevant knowledge because no member had personally been involved in duck-raising. The group chose to raise Chinese ducks, which they erroneously assumed did not need a water body. The villagers did not have any external sources of information on duck raising, and the project staff did not facilitate learning activities which would inform the decision making process.

5.2.3 Critical reflection and adaptation of activities

After the MDR group began raising ducks, it faced unexpected problems such as difficulties in hatching eggs, threats from foxes and eagles, damage to vegetable fields, and pollution from duck droppings²². In addition, after the planning stage it was discovered that Chinese ducks need a great deal of water, and the group members did not have access to adequate water supplies (J.M. Gurung and N.P. Gurung 2003, pers. comm. 13 January). As the group members could not find effective solutions for the problems and did not have the social networks to support their inquiries, they did not take any actions to solve them²³. As a result, the total number of ducks decreased and all members

¹⁴ These suggestions were made by J.M. Gurung and N.P. Gurung (pers. comm. 13 January 2003) and R. Ghimire (pers. comm. 27 January 2003) respectively.

¹⁵ When the MDR group formed, there were already goat-raising, bee-keeping, pig-raising and ginger cultivation groups in Deurali VDC.

¹⁶ This was suggested by J.M. Gurung and N.P. Gurung (pers. comm. 13 January 2003), D.S. Gurung (pers. comm. 26 January 2003) and R. Ghimire (pers. comm. 27 January 2003).

¹⁷ In general, the economic situation of *Gurungs* was better than that of the occupational castes because the latter's work opportunities were limited by discrimination from higher castes.

¹⁸ These suggestions were made by J.M. Gurung and N.P. Gurung (pers. comm. 13 January 2003) and R. Ghimire (pers. comm. 27 January 2003) respectively.

¹⁹ When the MDR group formed, there were already goat-raising, bee-keeping, pig-raising and ginger cultivation groups in Deurali VDC.

²⁰ This was suggested by J.M. Gurung and N.P. Gurung (pers. comm. 13 January 2003), D.S. Gurung (pers. comm. 26 January 2003) and R. Ghimire (pers. comm. 27 January 2003).

²² These were suggested by J. M. Gurung and N. P. Gurung (pers. comm. 13 January 2003), D. S. Gurung (pers. comm. 26 January 2003) and R. Ghimire (pers. comm. 27 January 2003) respectively.

²³ These were suggested by J. M. Gurung and N. P. Gurung (pers. comm. 13 January 2003), D. S.

stopped raising ducks during 2002 (J.M. Gurung and N.P. Gurung 2003, pers. comm. 13 January).

If the members had reflected critically on their experiences at the time, possible actions might have been to stop raising ducks and to negotiate a new activity with the project staff. However, there was no formal reflection on the failure of the project, and thus neither the staff nor the villagers had been able to draw lessons from their experience that could be used in other sub-projects, or indeed to improve their own decision making. With such a heterogenous group, the project staff needed to play a greater facilitation role and assist the group to build a stronger sense of identity. Overall this sub-project suffered from poor leadership, weak project facilitation, the lack of a group identity, and the lack of project management skills.

The group did have monthly meetings to monitor and review their activities, and did create a group fund. The members reported problems in the meetings, but did not have the skills to resolve them or to consider the wider conditions that mitigated against their sub-project (D.S. Gurung 2003, pers. comm. 26 January).

5.2.4 Acquired skills, capacities and networks

Although all members had stopped raising ducks by 2002, they had gained some experience. Nevertheless, their acquired skills (Table 4) were limited compared to those acquired by the RGC group (Section 5.1.4). While most MDR members acquired feeding and pen-making skills, none acquired the skill of egg-hatching, which was the critical reason that they could not continue raising ducks. As no members raise ducks currently, the feeding and pen-making skills are of little value. The MDR members still continue to meet monthly and maintain their savings fund (D.S. Gurung 2003, pers. comm. 26 January), but they still have not developed a strong group identity. Their experiences have not led to the development of other capacities such as expressing their opinions in mass meetings, affecting wider decision making processes, or seeking literacy skills (as with the RGC group).

As the MDR group had only one activity, there was little expansion of social networks (Figure 12). The members had only limited contact with the local veterinary office because the ducks did not get sick (J.M. Gurung and N.P. Gurung 2003, pers. comm. 13 January). As the group did not have a strong collaborative relationship with project staff, there were few visits to the project office. As there was always a demand for ducks in the village, buyers usually came to members' houses so group members did not go to market. Overall, then, the skills and social networks obtained by the group were limited because the learning process lacked a clear objective, appropriate facilitation and opportunities.

5.2.5 Implications of the findings

The MDR group did not demonstrate a complete learning cycle: there was no detailed situation analysis, collaborative planning or reflection on members' experiences (Figure 13). As with the RGC group, some technical skills were acquired independent of the learning cycle. However, due to the termination of the relevant activity, these skills are probably of little value to the MDR group now.

Gurung (pers. comm. 26 January 2003), R. Ghimire (pers. comm. 27 January 2003) and P. Thapa (pers. comm. 27 January 2003) respectively.

Table 4 Skills acquired by members of the Marjangkot Duck-raising Group

Activities	Skills	Number of group members (n=13) acquiring these skills
Duck-raising	Pen-making skill	8
	Feeding skill (cereals)	13
	Egg-hatching skill	0
	Small pond making skill	2
	Disease knowledge	3
Regular meetings	Monthly meeting	13
	Saving for the fund	13

Sources: J.M. Gurung and N.P. Gurung 2003, pers. comm. 13 January; D.S. Gurung 2003, pers. comm. 26 January; R. Ghimire 2003, pers. comm. 27 January.

Figure 12 Expanded networks of Marjangkot Duck-raising Group

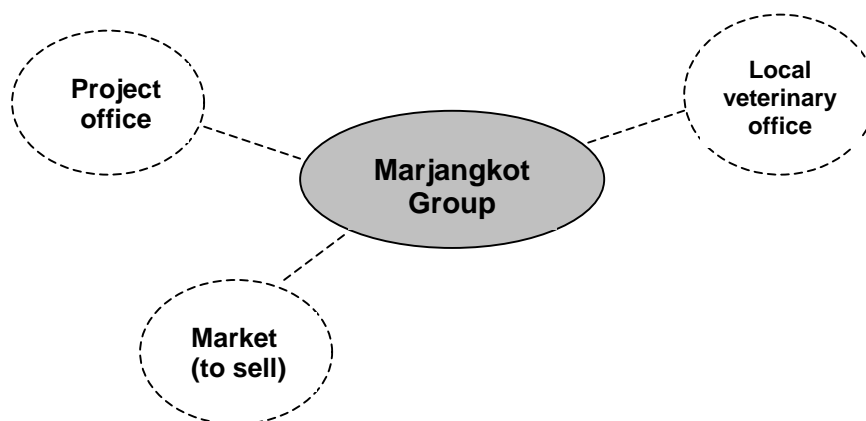
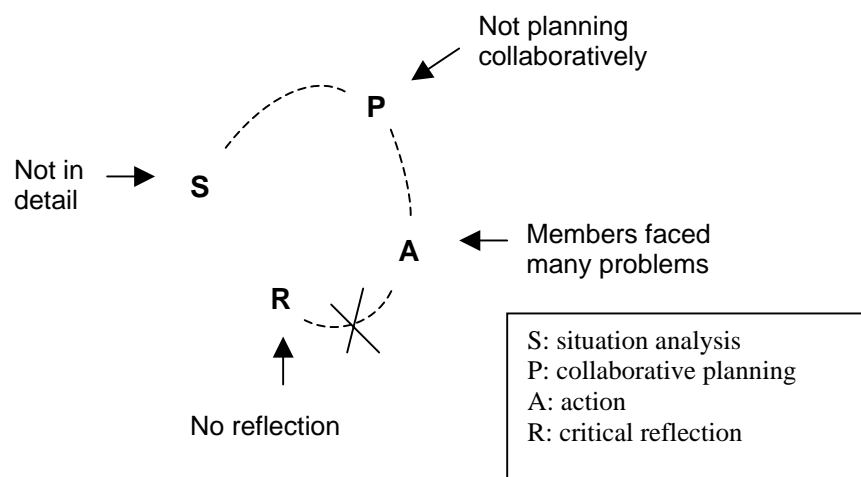


Figure 13 Incomplete learning cycle in Marjangkot Duck-raising Group



5.3 Lessons learnt from the two case studies

Comparative analysis of the two case studies (Table 5) showed that both demonstrated learning cycles that were incomplete or diverged from the ideal.

Four critical factors affected the learning processes of the two groups:

1. Situational analyses coupled with clear and shared goals
2. Social and collaborative learning commitment
3. Social networks and learning partnerships development, and
4. Facilitation by the project staff.

The RGC group informally conducted their own situational analysis and a clear goal was shared by all members. This enabled the group to overcome difficult problems. Although members did not benefit from collaborations with project staff in conducting their situation analysis and planning, clear goals coupled with strong internal leadership and group homogeneity guided their activities and created the opportunity for critical reflection and empowerment.

Conversely, the MDR group did not have a clear goal nor strong facilitation, so when the members encountered unexpected problems, they simply gave up. The lack of collaboration with project staff was much more damaging in this case, particularly when difficulties arose. Without strong facilitation or an understanding of project and learning cycle processes, the MDR members were unable to deal with their problems constructively, nor did they have the social networks to assist them to access needed information.

The RGC group was ethnically and economically homogeneous so that members' interests and values did not differ markedly, and there was no obstacle to constructive interaction and collaborative learning within the group. In contrast, the MDR group consisted of different ethnic groups with different social and economic status. This worked against establishing shared goals, as well as against the development of trusting relationships to support dialogues, social learning and collaborative planning. The group did not have appropriate facilitation to foster mutual understanding and trust, and leadership within the group was lacking. This provides some evidence for how crucial the role of the project staff as facilitator/partner can be in situations of high group heterogeneity and no group identification. Facilitation could have assisted this group to expand their social networks to allow them to gain knowledge, resources and skills, or at the very least, to recognise early on that the composition of the group mitigated against success and another arrangement made before resources were committed to the development effort.

In neither group was there strong facilitation of the learning process, because the project staff did not take the time to learn from the villagers about their problems and situations²⁴, nor to establish strong learning processes that could endure after the project's completion. Without a clear understanding of facilitation in learning processes, and its importance, the

²⁴ This was partly because the staff's workloads were very high, so it was physically difficult to pay enough attention to these groups.

staff tended to dominate villagers' decisions without taking into account their learning needs and social contexts. The project staff would have benefited from regular reflection on their own roles as facilitators and their commitment to social learning processes.

6. Conclusion

Neither case study demonstrated an ideal learning cycle, nor ideal participatory development project characteristics. However, the RGC group did achieve internal group learning and empowerment, with the participants able to engage in higher levels of learning (double, and possibly even triple, loop). The group's learning process appears to be enduring because of the acquired skills, the enhanced social networks, and the greater understanding of the social context of development and decision-making. In contrast, the MDR group showed none of the four key elements of the learning cycle, and only acquired the most rudimentary skills.

Two lessons can be drawn from the RGC study. First, there is a relationship between empowerment and the learning cycle, even if the latter initially involves lower levels of participation and is less than ideal. In this case, the group members were empowered to the extent that they were able to choose an alternative activity by themselves when the first did not meet their needs. This occurred through the sharing of a clear goal and reflection on personal and group progress, as well as through a sense of group identity, internal group trust, and expanded social networks.

Although the RGC sub-project was really focused on single loop technical learning, skills in project management and improved literacy enabled the group to begin to challenge assumptions and values proposed by project officers and expressed at village meetings. Over time, the RGC women appeared to think more deeply about their place in society and the need for structural and cultural change (that is, change in decision-making structures and the value of participation by lower caste women). Initiating single loop learning can thus lead to higher levels of learning and empowerment, although these case studies did not provide adequate data to clearly define the empowerment process.

Second, the RGC case study lends support to Kabeer's (1994) analysis of empowerment strategies. The women in the RGC group drove their learning from power 'within' themselves and their group—the project officers were unable to give much real support or direction. Part of the RGC group's success was also related to 'power with', in terms of a strong sense of group identity and purpose, and expanded social networks. By the time of this study, the RGC group was moving into the realm of 'power to', as they were beginning to change the broader social and political structures through more active participation in village decision-making. Participatory development projects may therefore need to facilitate the development of management skills, group identity and social networks to lay the foundations for empowering strategies.

Accommodating a learning cycle in participatory development projects is a subtle process, requiring careful facilitation to realise all four stages. Indeed, a learning cycle will rarely occur in a development project unless facilitators and stakeholders consciously make it happen. They need to clearly understand what they have to do at each stage of the cycle, and to organise meetings and workshops to implement these stages accordingly. Ideally, platforms for learning will be structured to ensure that dialogues among stakeholders contribute to increasing knowledge and resolving conflict, which lays the

Figure 14 Comparison of the two case studies

Learning cycles	Raikar Ginger Cultivation Group	Marjangkot Duck-raising Group
1. Situation analysis - Identifying a shared goal - Understanding of strengths, weaknesses, opportunities and threats	<ul style="list-style-type: none"> Members were selected by villagers based on consultation with project staff. Members had a clear shared goal. Members made no detailed situation analysis, but informally assessed their needs and had strong internal leadership. 	<ul style="list-style-type: none"> Members were selected by villagers based on consultation with project staff. Members had no clear shared goal. Members made no detailed situation analysis and the group was heterogeneous.
2. Collaborative planning - Utilisation of situation analysis result - Collaborative work by stakeholders	<ul style="list-style-type: none"> Members had no collaborative planning based on a situation analysis, but in the second cycle of learning were able to apply their experiences to improve their analyses. Members just accepted project staff's suggestion in the first cycle; in the second cycle they took control of the development agenda.. 	<ul style="list-style-type: none"> Members had no collaborative planning based on a situation analysis. Members accepted the staff's suggestion.
3. Reflection & adaptation - Critical reflection on actions to achieve goals - Adaptation of reflection to shape/improve activity	<ul style="list-style-type: none"> Members reflected on ginger cultivation in terms of improving their household income, and reflected on their need to improve literacy skills to empower themselves. Members concluded that ginger cultivation had not contributed to improved household income. They conducted their own situational analysis in the second cycle and used it to develop another sub-project. 	<ul style="list-style-type: none"> Members encountered many problems. Members conducted no critical reflection or action designed to solve these problems. All members stopped raising ducks during 2002.
4. Outcomes - acquired skills - enhanced capacities - expanded networks	<ul style="list-style-type: none"> More than half the group members each gained 16 skills. Two capacities were enhanced for some group members. Five networks were expanded. 	<ul style="list-style-type: none"> Seven skills were acquired. Specific capacity were not enhanced. Social networks were not expanded significantly.

foundations for all four stages of project and learning cycles. Merely creating the space for people to come together to participate in development is not adequate: more attention needs to be paid to the institutional arrangements, the processes and the social context.

These case studies suggest ways of improving the project framework so as to support learning cycles in participatory development projects. For learning cycles to occur in participatory development projects, local people need a framework—understood by all players—to ensure they are involved in decision-making. While proving or disproving the hypothesis of this research requires cases that implement learning cycles more rigorously and completely, these cases have provided some useful lessons and avenues for future research.

The Community Development and Forest/Watershed Conservation Project (CDFWCP) had intended that local people would take the main role in formulating sub-projects, but there was little real guidance in this. In reality, however, critical conditions in the project framework limited the incorporation of learning. First, criteria for sub-project selection were developed by CDFWCP with little scope for modification by villagers. Second, neither staff nor villagers had a good understanding of project or learning cycles. Third, there were no effective monitoring or evaluation mechanisms built into the projects to encourage reflection and collaboration. This encouraged local people to select sub-projects which clearly met the project criteria, and thus gain access to resources, with little consideration of the processes or power relations affecting their activities. In addition, the villagers did not have the means to ensure that relationships between them and project staff would be supportive and reflective.

This project and sub-project structure did not lead to deep reflections on needs and how villagers wanted to develop their village. The fixed budget for sub-projects was allocated to each ward before sub-project planning and, unless the funds were spent within the three-year period, the remaining budget returned to the project. This condition, clearly announced to villagers in the information dissemination meeting before sub-project selection, naturally encouraged villagers—as well as project staff—to develop sub-project ideas quickly so as to spend all the available funds within the period, regardless of their real demands or the time required for villagers to assess their needs critically and plan a learning and development process. This led to weak collaborations between villagers and project staff, which adversely affected situation analyses, collaborative planning, implementation and critical reflection.

Clearly, there was always a risk that the CDFWCP project would not induce strong and complete learning cycles because of its restrictive conditions and the lack of stakeholder understanding of learning and project cycles. Stronger collaborations and learning could have occurred, however, had facilitation been more appropriate, and had greater attention been paid to the core characteristics of effective learning in development (Figure 5). To achieve this, the project staff (and the project) needed to reflect carefully and continuously on their role, and on the participatory development process. Participation is not just about getting people to do projects—it is about empowering them so they can sustain the development process into the future.

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