

14

Natural resources, people and participation

by MICHEL PIMBERT

Taken as a whole, three broad themes run through the examples and lessons on livelihoods and natural resources presented so far in *Participatory Learning and Action*:

- An emphasis on participatory learning and action for local adaptive management of natural resources that is rooted in indigenous and local knowledge, skills and institutions, and in local indicators to track and respond to environmental and social changes.
- Natural resource management bureaucracies and organisations ought to challenge themselves: they have to become learning-oriented at their core. Learning-oriented organisations encourage experimentation, questioning and the abandonment of stereotypes. They develop skills in recording, applying and disseminating lessons, build relationships based on mutual respect and foster a non-threatening environment where people learn from one another.
- Facilitating and encouraging individual and collective learning for inclusive and equitable participation in natural resource management requires action at various levels, including not only local, but also national and international contexts. In fact, this is where the real constraints on the spread, scaling-up and mainstreaming of the participatory process very often lie.

After highlighting some key lessons from experiences

presented in past issues of *Participatory Learning and Action*, this paper offers critical reflections on each of these three themes. I offer an analysis rather than a description of trends, emphasising instead future challenges and opportunities. At the risk of being prescriptive, I encourage readers to focus on future visions, ways of working and longer term strategies for change.

A legacy of experience and insights

Previous contributions to *Participatory Learning and Action* have covered a wide range of situations in which people interact with the environment, with local livelihoods dependent on natural resources to different degrees. The variety of ecosystems and natural resources considered is remarkable:

- Forests and woodlands;
- Mangroves, rivers and lakes;

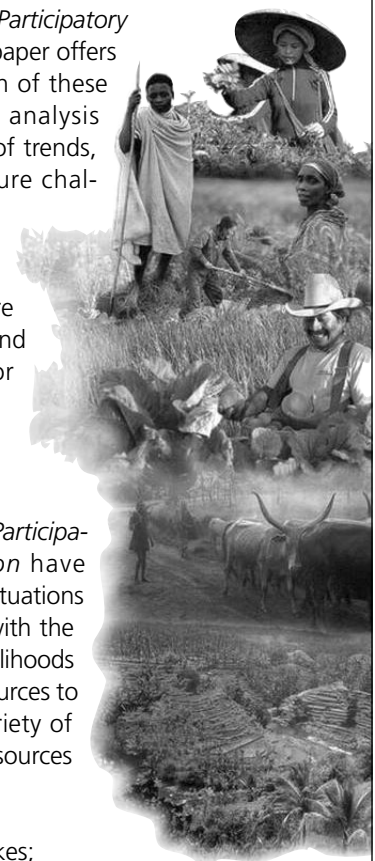


Photo: Oron Das from www.diversefoodsystems.org

Box 1: Natural resources in Participatory Learning and Action: some examples

This list illustrates the breadth of articles published in the series over the years:

- Customary marine tenure in the South Pacific: the uses and challenges of mapping. Philip Townsley *et al.*, *PLA Notes* 30: October 1997
- Addressing the challenges of fisheries development. Marie-Thérèse Sarch; *PLA Notes* 30: October 1997
- Monitoring and evaluating in the Nepal-UK Community Forestry Project. Raj Kumar Rai, *PLA Notes* 31: February 1998
- A participatory GIS for community forestry user groups in Nepal. Gavin Jordan and Bhuban Shrestha, *PLA Notes* 39: October 2000
- Farmer participation in on-farm varietal trials: multilocation testing under resource-poor conditions. Michel Pimbert, *RRA Notes* 10: February 1991
- Farmer foresight: an experiment in South India. D. Satya Murty and Tom Wakeford, *PLA Notes* 40: February 2001
- Farmers' on-farm participatory research: experiences in Ethiopia. Ejigu Jonfa, *PLA Notes* 27: October 19961
- Walking a tightrope: using PRA in a conflict situation around Waza National Park, Cameroon. Paul Scholte *et al.*, *PLA Notes* 35: June 1999
- Participatory research and ecological economics for biodiversity conservation in Vanuatu, Luca Tacconi, *PLA Notes* 28: February 1997
- Participatory facilitation inputs into land management in the City of Ottawa. Anna V Herc, *PLA Notes* 44: June 2002
- Focus groups and public involvement in the new genetics. Sarah Cunningham-Burley, Anne Kerr and Steve Pavis, *PLA Notes* 40: February 2001

- Coastal areas and marine ecosystems;
- Rangelands and farming landscapes;
- Desert ecosystems;
- National Parks and biodiversity rich areas;
- Bodies of natural resources in urban areas; and
- Waste products of human activity and newly engineered life forms (e.g. genetically modified organisms (GMOs)).

Just about all areas of human needs have been considered through structured processes of group learning and action in these diverse settings: food and water, health, energy, shelter and culture. External actors involved in these processes either worked for government departments or non-governmental organisations. Local actors have been women, men and children from diverse backgrounds, engaging from different positions of strength in usually unequal power relations. Whilst the majority of contributions to *Participatory Learning and Action* on 'natural resources, people and participation' have been from the South, a significant number of experiences from the North have also enriched our collective learning.

For many natural resource professionals who have shared their experiences in this journal, participatory learning and action seemed to offer new possibilities to offset two dominant biases in particular:

Illustration from cover of *PLA Notes* 35: Community water management



Cartoon: Regina Faul-Doyle

Ecologically blind science and neglect of dynamic complexity

The science of parts (reductionism) – **as opposed to knowledge and ways of knowing that integrate the parts** – has largely failed to guide ecosystem and natural resource management. Narrow lens, universal and reductionist explanatory models have generated crisis in natural resource management through their inability to come to terms with the dynamic complexity and variation within and among ecosystems (Gunderson *et al.*, 1995). Daily, seasonal and longer-term changes in the spatial structure of ecosystems are apparent at the broad landscape level right down to small plots of cultivated land. Environmental dynamics and effects are usually long-term and their emergent complexity calls for more holistic and transdisciplinary ways of knowing. Moreover, new ecological knowledge systems need to work with the complexity of ecosystems in a constructivist approach to science so that innovation and learning becomes embedded in management. This emphasises the need for flexible individual and collective responses in which local resource users are central actors in analysis, planning, negotiations and action. Participatory learning and action was thus seen as key for the local adaptive management of ecosystems and natural resources (Holling *et al.*, 1998).

Social marginalization and exclusion

This manifests itself through the neglect of local people, their knowledge, priorities, management systems, institutions and social organisation, and the value to them of local

assets (natural, social, cultural). Within this dynamic of 'denying and undermining the other', powerful actors seek to control natural resource management through discourse, law and coercion. Soil erosion, degradation of rangelands, desertification, loss of forests, the destruction of wildlife and fisheries – all of these problems appear to require intervention to prevent further deterioration, and local misuse of resources is consistently defined as the principal cause of destruction. Policies and practice, therefore, aim to exclude people and so discourage all forms of local participation. Such top-down, imposed natural resource management all too often results in huge social and ecological costs in areas where rural people directly depend on natural resources for their livelihoods. In contrast, methods and approaches for participatory learning and action offered an alternative to create spaces for 'voices from below', and **potentially** reconnect citizens – and poor people first of all – with the natural resources that sustain their livelihoods and culture.

These two biases endure today, and have formidable sticking power. But important shifts have occurred too:

Learning by doing

Much of the experiential learning reported in *Participatory Learning and Action* has had (and still has) an impact on the cultural imagination and work of some professionals. After initially working in the South, many practitioners introduced and adapted participatory methods and approaches in the North. Yesterday and today, small or big personal 'mind flips' often lead to a commitment to socially and ecologically responsible practice, one that resonates with an ethics of democracy and accountability.

From diagnosis to process

Several early practitioners moved on from an initial emphasis on diagnosis and appraisals to exploring longer-term participatory processes that could benefit both local communities and the environment. Participatory planning, decision-making, monitoring and evaluation in natural resource management established itself as an important way of rebuilding local assets (natural, social, human, physical and financial) and regenerating ecologies. A variety of participatory or co-management initiatives led to negotiated agreements on the use of natural resources (forests, fisheries, common property, land, water bodies). More generally, collective action, based on social learning and negotiated agreements among relevant actors in an ecosystem, was increasingly viewed as a condition for sustainable use and regeneration of that ecosystem (Borrini *et al.*,

Box 2: Fishing associations and the co-management of freshwater ecosystems in Sweden

Local fishing associations are common in Sweden. These associations, which in many respects resemble common-property systems, manage many of Sweden's vast number of lakes, rivers and streams. National laws introduced over the last 20 years make it possible for freshwater associations not only to manage lakes and rivers but also watersheds. Fishing associations also have the right to make decisions concerning fishing and fish conservation. The national government, however, is still in charge of some decisions such as instituting bans on certain fishing methods and granting permission for stocking and transfer of fish and shellfish.

A detailed study of the management of the Lake Racken watershed has highlighted the key role of local fishing associations in sustaining crayfish populations and the larger ecosystem. The institutional framework for the management of crayfish populations is made up of a nested set of institutions at different organisational levels. Rules for the management of crayfish are both informal and formal, and are embedded in local fishing associations and government. But much of the learning by doing for the adaptive co-management of fisheries is carried out by the local fishing association, whose members actively develop site-specific ecological knowledge as well as flexible institutions and adaptive organisations.

Adapted from Olsson and Folke, 2001

2004). **Platforms** that brought relevant actors together are seen as key in mobilising capacity for social learning, negotiation and collective action for natural resource management and sustaining critical ecological services. Platforms ranged from Joint Forest Management (JFM) committees, Farmer Field Schools (FFS), local fishing associations (Box 2), user groups and so on.

Putting methods into context

The use of complementary methodologies became increasingly necessary to facilitate collective learning and action in the different phases of a participatory management process: preparing for partnerships, developing management plans, negotiating agreements, monitoring and evaluation. It is worth noting that innovations around methodological complementarity brought together actors from different disciplines (e.g. local economic valuation tools combined with methods for participatory learning and action; methods for stakeholder analysis with conflict resolution tools; citizen panels and future



Photo: Oron Das from www.diversefoodsystems.org

Box 3: Community Integrated Pest Management in Indonesia

Integrated pest management (IPM) emerged in Indonesia in the late 1980s as a reaction to the environmental and social consequences of the Green Revolution model of agriculture. A cooperative programme between the United Nations Food and Agriculture Organization (FAO) and the Indonesian Government centred on Farmer Field Schools (FFS), which are schools without walls. The FFS aimed to make farmers experts in their own fields, enabling them to replace their reliance on external inputs, such as pesticides, with endogenous skills, knowledge and resources. Over one million rice paddy farmers and local resource users are now involved in this national programme in Indonesia.

Over time, the emphasis of the programme shifted towards community organisation, community planning and management of IPM, and became known as Community IPM (CIPM). Agroecosystem analysis and methods for group dynamics were initially used to enhance farmers' ecological literacy as it related to plant-insect ecology. Farmer IPM trainers and researcher/scientists learnt facilitation and presentation skills and how to make basic experimental designs to analyse and quantify ecological phenomena. The principles of FFS have now been extended from rice to the management of natural resources, from IPM to plant breeding and participatory water management, and from technical domains to broader engagement with policy issues, advocacy, and local governance.

Learning to analyse policy, deal with high-level decision makers in government, and produce a newspaper with a print run of 10,000 are all key in enabling farmers and other natural resource users to become organisers, planners, advocates and activists seeking to influence policy processes. This empowering dynamic has led to a variety of campaign strategies, including a national IPM farmers' congress and the development of a charter for peasants' rights. These activities, together with the strengthened voice of farmers brought about by the Community IPM process, have built a groundswell of support for a national peasants' movement in Indonesia.

See www.communityipm.org; Fakhri *et al.*, (2003).

search conferences). However, with the growing focus on issues of access, benefit sharing and control over natural resources, the place of methods in participatory learning and action was gradually reassessed. Whilst still important, methodological issues are now increasingly seen in the context of a more relational understanding of participation in which power and knowledge are centre stage. For example, by specifying the roles, rights, responsibilities and benefits of the different actors, co-management bodies and other platforms for collective action bring into sharp focus governance issues. Federations of FFS have thus moved on from using discovery learning methods to solve natural resource management problems to engage in national policy processes and political change in Indonesia (Box 3).

Creating inclusive platforms

Over time, reflections on participatory practice have led to more critical views on the nature of platforms (user groups, co-management bodies, FFS) for local adaptive management. Platforms are not always welcoming spaces for women, nor inclusive of the weak and marginalized, nor free from manipulation and co-option by more powerful insiders and/or outsiders (Box 4). More generally, important differences have surfaced between two radically different types of spaces for participation in the governance of natural resources: **invited spaces from above** and **popular or citizen spaces**. Governments and donor-led efforts to set up co-management committees and resource user groups are examples of invited spaces from above. In contrast, citizen or popular spaces are created by people who come together to create arenas over which they have more control, e.g. indigenous peoples platforms for negotiation and collective action; do-it-yourself Citizens Juries that frame alternative policies. Whilst there are notable exceptions, popular spaces are arenas within which, and from which, ordinary citizens can gain the confidence to use their voice, analyse, deliberate, frame alternatives and action, mobilise, build alliances and act. But it is worth noting that such popular spaces may also reproduce subtle forms of exclusion in the absence of a **conscious** social commitment to a politics of freedom, equity and gender inclusion (see Box 4).

From participation to transformation

'Participation' has sometimes been seen as a panacea or a 'technical fix' for natural resource management. But all too often large-scale participatory approaches have failed because of inequitable rights of access, use and control over natural resources, macroeconomic policy or corporate interests. Many practitioners have increasingly learnt to see 'participation' as part of, and dependent on, a wider structural change towards more equitable people-centred processes and democracy. In this vision of the future, 'participation' and 'transformation' are organically linked – in theory and practice (see Pettit and Musyoki, this issue).

The challenge of social learning for local adaptive management**Transforming knowledge and ways of knowing**

Eliciting and making visible diverse **local** realities, priorities, categories and indicators through participatory learning is still very much needed today to challenge top down, 'one size fits all' science, policy and practice in natural resource management. However, claims that one tradition of knowl-

edge and practice (local, vernacular systems **versus** external science-based systems) is always better than the other may ultimately restrict possibilities. Instead, a key challenge for participatory learning and action lies in creating **safe** spaces where plural traditions of knowledge can be purposefully combined for the local adaptive management of natural resources and their equitable use.

At heart, local adaptive management of natural resources (forests, fisheries, biodiversity) depends on platforms of local resource users and other citizens having safe spaces to deliberate, arbitrate, act on feedbacks from the environment and **produce new knowledge for action**. This implies a greater commitment to democratic pluralism and cross-cultural dialogue in the production and validation of knowledge. And in future, the framing and boundary conditions for participatory learning need to be kept as open and flexible as possible, with facilitators comfortable with diversity, surprise and the 'unusual'. For example, combining at least four types of indicators in a single process may be desirable to deal with increasingly uncertain change in both social and ecological processes.

- Indigenous or experiential indicators used by rural people and reflecting **experience-based** changes in environmental or socio-economic conditions. These are site specific and reflect the different needs and expectations of community members.
- Technical or scientific indicators that are universal, disciplinary and quantitative enough to allow for **comparisons** between locations and across time.
- Indicators that can help **relate** scientific knowledge and methods to local people's experiences.
- Indicators that can help **relate** local people's knowledge to scientific methods and knowledge.

This is all about bridging the local and global to generate context specific knowledge (social and ecological) that is needed to sustain livelihoods in the face of dynamic complexity and diversity. The kind of knowledge that emerges from this decentralised process of social learning has been well described by James Scott in his book *Seeing like a state* (1998). He speaks of 'forms of knowledge embedded in local experience' (mêtis) and sharply contrasts them with 'the more general, abstract knowledge displayed by the state and technical agencies'. 'Mêtis', says Scott, is 'plastic, local and divergent... It is, in fact, the idiosyncrasies of mêtis, its contextualities, and its fragmentation that make it so permeable, so open to new ideas.' This kind of participatory, experiential understanding takes involvement with our surroundings seriously. Its criteria of validation and quality are

Box 4: The type of resource management agreement depends on who has the right to speak! An example from the Solomon Islands.

Resource management agreements must be located in their cultural context. In the Solomon Islands, customary law has a profound influence on the capacity to participate in decision-making. Land and marine tenure systems define the rights and entitlements to speak about and for resources. Individual legal titles to specific marine or land areas do not exist. It is membership in corporate, kinship-based clans or *butubutus* that defines a person's relationship to resources. Although resources are claimed and controlled by the *butubutu* as a collective, there are clear distinctions between the power to speak about resources (and frame the resource management agreements) and the rights to merely use them. Rights and entitlements are unevenly distributed within and between communities, and are coming under increasing pressure from new commercial forces.

Women have inherently weak negotiating positions in traditional community institutions and decision-making processes in the Solomons. They are often uninformed about resource management issues and do not participate in public debate and in the framing of resource management agreements. By custom it is male relatives who speak on behalf of a woman landholder. However, customary law does not oblige them to consult with the women. 'In decision-making processes, a male relation's vote is seen as equivalent to her choice'. Where women do find the confidence to talk as a group against the decisions made by men, it is likely they will be ignored. When the Tobakokorapa Association took the decision to designate an area used by women as protected, Michi women expressed their dissatisfaction at a general meeting. They were overruled by the elder men and told they would get 'used to' the idea.

Gender bias is thus expressed not just in community structures but, more fundamentally, in intra-community power relationships and the type of resource management agreements negotiated between members of the community.

Adapted from Adams, (1996) cited in Borriani *et al.*, (in press).

much broader than those of the positivist social and natural sciences that still inform much of natural resource management today. Future participatory learning and action could actively explore these new frontiers by opening up new communicative spaces in which democratic inquiry can take place.

But more immediately, there is a renewed urgency to debunk crisis narratives and neo-malthusian claims that largely blame the poor for environmental harm and degradation of natural resources. These policy (or crisis) narratives are usually robust, hard to challenge and slow to change. They play a key role in policy and

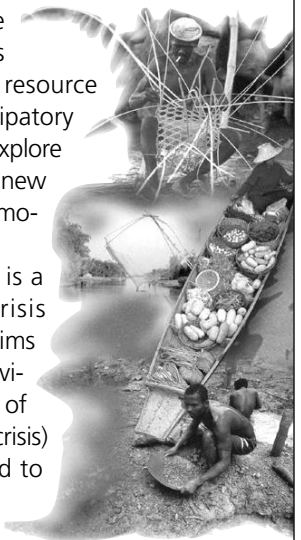


Photo: Oroon Das from www.diversefoodsystems.org

Box 5: Debunking myths on people-environment interactions

Recent research has fundamentally questioned many of the environmental crisis narratives and received wisdoms on the supposed destructiveness of rural people on the environment. A combination of historical analysis, social anthropology, participatory methods to understand local resource users' knowledge and perspectives, and insights from non-equilibrium ecology has challenged some of the environmental knowledge taken for granted by government bureaucracies and donors. For example, historical research in West Africa has shown dominant deforestation estimates to be vastly exaggerated. Many of the vegetation forms that ecologists and policy makers have used to indicate forest loss, such as forest patches in savanna are, according to the knowledge of local resource users and historical evidence, the results of landscape enrichment by people.

See Leach and Mearns, (1996); Pimbert (in press).

project level decision-making. They structure options, define relevant data and exclude other views within bureaucracies and professional circles. And yet, recent research has debunked several orthodox views on people-environment interactions (Box 5). A future challenge lies in bringing together such plural forms of knowledge within a more comprehensive, **power equalising** dynamic of participatory learning and action. One in which final objective answers will matter less than a concern with processes of emerging democratic engagement and equitable outcomes.

Analysis of difference as a basis for 'ground truthing'

Throughout the world, the community based and co-management experience highlights the recurring need to purposefully 'give voice' to local resource users in evaluating and reviewing the means and ends of natural resource management regimes. The analysis of difference is a key future challenge here. It is also a much needed antidote against possible self deception on a grand scale. Different social actors may have different views of what constitutes a positive impact as well as different criteria of evaluation. It is important to include such plural views, indicative of how natural resource management contributes to:

- community empowerment in planning, implementing, and assessing results;
- resolving conflicts;
- fostering cooperation with government and/or outside organisations;
- regenerating or maintaining the health of natural resources and ecosystems; and
- sustaining local livelihoods and equity.

Different indicators are likely to be utilised by women and

Box 6: Institutionalising participatory approaches and people-centred processes

The term 'institutionalisation' describes the process whereby social practices such as participation become regular and continuous enough to be described as institutions. The dynamics of 'institutionalising participation and people-centred approaches' imply long-term and sustained change, which in turn recognises the conflict between different sets of interests, values, agendas and coalitions of power. In practice, this process of institutionalising participatory approaches emphasises several interrelated levels of change:

- spreading and scaling up change from the micro (e.g. project/local) to the macro (e.g. policy/national) level;
- scaling out from a single line department or sector or initiative, to catalyse wider changes in organisations (e.g. government and donor agencies, non-governmental organisations, civil society groups and federations, private corporations), and in policy processes;
- changes in attitudes, behaviour, norms, skills, procedures, management systems, organisational culture and structure as well as policy change; and
- the inclusion of more people and places through lateral spread, from village to village, municipality to municipality, district to district and so on.

men, the poor and rich, the young and old, and between residents and migrants. For instance, indicators used to evaluate the performance and impacts of co-management are likely to differ according to the individual's degree of dependence on the natural resources. Thus, decision makers at different levels, e.g. a woman head of household and a national policy-maker, use different kinds of information to guide their decisions. The monitoring and evaluation phase in natural resource management needs to sensitively explore and build upon such different perspectives of what is relevant and important.

The challenge of institutional transformation

With few exceptions, participatory learning and action for natural resource management has been limited to the local level for many years. More recently, the focus on the micro has given way to attempts to adopt and apply these participatory approaches on a large scale. For example, many large, public and private agencies, including government departments, development agencies, non-governmental and civil society organisations and research institutes, now seek to spread, scale up and mainstream participation in natural resource management. Embedding and situating 'peoples' participation' at the heart of policy decisions, organisational procedures and resource allocation has thus become a fundamental challenge. Such institutional transformation involves several interrelated levels of change (see Box 6).

Evidence presented in *Participatory Learning and Action*

Table 1: Institutionalising participation and people-centred approaches: the spectrum of current practice in natural resource management

Institutionalisation as mere labelling.	'Participation' used only as a label while continuing to use methods and the discourse in an extractive manner to make proposals and rhetoric attractive to donors.
Institutionalisation as use of participatory methods and approaches for staff training.	Participatory methods primarily used for one-shot training of staff members. No commitment is demonstrated to use methods for field action and policymaking, no effective skills are available. Lack of commitment and resources prevent the continuation of the approach for programme management and organisational development.
Institutionalisation as the use of participatory methods and approaches for project management and policy consultations.	Participatory methods are used at the appraisal stage and to develop more effective policies and programmes but are not linked with institution development aspects. The use of methods and participation discourses are sustained as long as funding is available but tapers off on withdrawal of resources in absence of effective local organisations.
Institutionalisation in which participatory approaches are used for local institutional and organisational development.	Participatory approaches and methods are used effectively for policy processes, programme management and local institutional development, which shows short and long-term impact. The process, however, may not be accompanied by corresponding changes in policies and support organisations at larger scales (e.g. in policy reforms, learning environment, structures, funding and evaluation mechanisms).
Institutionalisation of participation as transformation for organisational change, lateral learning and inclusive governance.	Participatory processes, approaches and methods used as part of a strategy of policy and organisational transformation as well as local institutional development. This dynamic of transformation involves deliberations, appraisal, planning, negotiation, bargaining and conflict resolution together with lateral expansion of local organisations through resource user to resource user, village to village mechanisms. Safe citizen spaces and federated networks (national and international) are key for decentralising governance and for re-localising/democratising 'power'.

Adapted from Pimbert (forthcoming)

and elsewhere point to a continuum of practice in which issues of power, knowledge and learning for change are key (Table 1)¹. Simply put, the dynamics of institutionalising participation are **substantially** different depending on whether they are primarily used to justify external decisions and control by powerful actors or aim instead at devolving power and decision-making away from external agencies, (re)building local assets and people's sovereignty.

Change and learning

Change and learning are central issues for the individuals and organisations involved in this spectrum of practices. At its simplest level (e.g. towards the top of Table 1), learning is a process through which new knowledge, values and skills are acquired. At a deeper level (e.g. towards the bottom of Table 1), learning involves 'a movement of the mind' (Senge, 1990). Different orders of change or learning are involved here.

- No change – no learning. Denial, tokenism or ignorance. This is still widespread today, both in the South and the North. More often than not the rhetoric of participation is institutionalised, without corresponding changes in organisations, policies and practice.
- Accommodation – first order learning, adaptation and maintenance of the *status quo*. How can we deal with the problem we face? How can we avoid the mistakes we are making? Much of the focus of first order change is on making adjustments to the existing system – doing more of the same, but doing it better (emphasis on efficiency) or by reorganising components, procedures and responsibilities (emphasis on effectiveness).
- Reformation – second order learning, critically reflective adaptation. The organisational culture and facilitation continuously encourages the questioning of existing practices, rules, procedures and regulations. It seeks to expand collective knowledge and understanding by learning about the assumptions and goals behind existing routines, practices, theories and policies.
- Transformation – third order learning, creative re-visioning and re-design of the whole system. This involves 'seeing

¹ For example see the IIED and IDS action research on *Institutionalising participatory approaches and people-centered processes in natural resource management* (www.iied.org/sarl/research/projects/t1proj01.html)

Box 7: Globalisation and participatory natural resource management: emerging constraints

- With globalisation, natural resources such as water, forests, biodiversity and land are of particular interest to the State because, unlike money and the corporate sector, they are not 'mobile' and cannot re-locate. At the same time, the State is challenged both from above, for example by transnational corporations, and from below, by citizens and communities. In this emerging context, the State seeks to keep control over at least one of three stages of decision-making for natural resource management, be it policy-making, operations, or ownership of the resource. Under pressure from above and below, the State uses a very particular strategy of separating policy-making over the use of resources from both the operational activities and the ownership of these resources. As in the past, the State thus continues to strengthen its own development interests today by removing decisions over the management of natural resources from local users and communities.
- Decentralisation policies are also a reaction to the pressure to redistribute responsibilities because of the diminishing financial capacity of the State. Diminishing State subsidies and relatively weak local capacities lead to situations in which private sector involvement is increasingly seen as necessary for the provision of what were originally public services and free ecosystem services. This trend is reinforced by higher environmental standards, whose compliance requires investments and technologies that overwhelm local government capacities and resources.
- In the context of globalisation and increasing competition, public administrations everywhere tend to see citizens as clients or consumers, and consequently ask for their financial participation as well. For example, both OECD and World Bank recommendations basically aim to progressively reduce the citizen's rights to have a say in management to those consumers who can pay. A water management system in which drinking and sewage services are contracted out to transnational corporations is, according to The World Bank, the model for developing countries. Under new trade agreements, the secular right to participate in saving, multiplying and selecting seeds on farm is being denied as farmers have to pay for seeds and other genetic resources over which corporations hold exclusive patent rights.

See Finger-Stich and Finger, (2002).

things differently', 'doing better things' and re-thinking whole systems on a participative basis. As such, it is a shift in consciousness and is a transformative level of learning. Individuals and organisations 'see' the need to **transform in order to be transformative**.

Most readers of *Participatory Learning and Action* would agree that institutional reform and transformation are key challenges for the future. Experience to date suggests that the following enabling conditions and drivers for change are key.

- Actors with emancipatory values, attitudes and behaviours.

The history of participatory natural resource management shows that innovative, charismatic and dynamic people have championed changes in policies, field practices, training and organisations. Field observations also highlight the central importance of attitudes and behaviour in enabling or inhibiting the scaling up of people-centred innovations.

- People-centred learning and critical education which promotes ecological knowledge for sustainability, both among natural resource users and those who work with them.
- Enabling organisations which emphasise resource users' abilities, promote organisational learning and which are flexible in their structure and procedures.
- Existence of safe spaces where natural resource users and other citizens can get together, share problems and decide on action. Linking together these safe spaces and local groups into broader federations has helped resource users capture power back from centralised, top down agencies and corporations.
- Policy spaces from above and below. Enabling national policy decisions by the State are complemented by resource user led attempts to contest and shape policies from below.
- A context in which resource users have some control over funding decisions and allocations made by local, national or international funding bodies.

Globalisation, natural resources and participation: emerging challenges

The effectiveness of changes for participation at any given level is usually limited when there is no corresponding change in other levels and in the processes that influence or govern them. In this regard, newly emerging global trends are deeply problematic (see Box 7). If unchecked, these trends could largely inhibit direct participation in civic affairs and freedom outside the market and commodity relations.

Reversing such structural constraints to participation in natural resource management will require a strong commitment to non State-led forms of deliberative democracy and making



Photo: Oron Das from www.diversefoodsystems.org

global institutions accountable to citizens, particularly those most excluded from decision-making (see Rahman, 2004). Bold innovations will be needed to simultaneously.

- Strengthen the voices of the weak in setting research agendas and framing policies and regulatory frameworks for natural resource management, at local, national and global levels. To reverse the current democratic deficit, participatory processes will need to stress relevance, social change and validity tested in action by the most at-risk stakeholders or actors.
- Create safe spaces and participatory processes in which corporations and expert knowledge are put under public scrutiny through appropriate methods for deliberation and social inclusion (e.g. citizen juries, scenario workshops, citizen panels, multi-criteria mapping).
- Link formal decision-making bodies and processes with spaces in which corporations and expert knowledge are put under public scrutiny, by engaging relevant social actors and coalitions of interest. A key challenge lies in creating new forms of accountability based on the concept of extended peer review, – a more inclusive and plural process in which farmers, local resource users, food workers, consumers and other citizens have as much say as scientific specialists, planners and other professionals

in validating knowledge and policies.

- Support the emergence of transnational communities of inquiry and coalitions for change committed to equity, decentralisation, democratisation, diversity and dynamic local level adaptation.

But there are very few examples of participatory learning and action that address and seek to reverse large scale or macro structural problems such as the ones listed in Box 7. This must surely be a new frontier for PLA practitioners in the future. This is a difficult challenge. But we know from experience that change is usually messy and chaotic – once a process has been catalysed, many different dynamics can unfold. Perhaps the inherent open-ended uncertainty, latent creativity and unpredictability of change is a reason for hope and renewed commitment to transformative action.

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