

SUMMARY DOCUMENT

PARTICIPATORY RESEARCH APPROACHES – WHAT HAVE WE LEARNED?

The experience of the DFID Renewable Natural Resources Research
Strategy (RNRRS) Programme 1995-2005

Arthur E. Neiland ^(1*), Elizabeth Bennett ⁽¹⁾ & Philip Townsley ⁽²⁾

⁽¹⁾ IDDDRA Ltd, Portsmouth Technopole, Kingston Crescent, Portsmouth, UK;

^(*) author for correspondence: e-mail: neiland@iddra.org

⁽²⁾ IMM Ltd, The Innovation Centre, University of Exeter, Rennes Drive, Exeter, UK)

1. WHY A 'REVIEW' OF PARTICIPATORY RESEARCH?

The objective of this summary document is to highlight the experience of the RNRRS over the past 10 years with respect to the design and application of participatory research approaches. Although the range and type of participatory research (PR) has expanded greatly over the past 30 years, the defining characteristic remains that these techniques and approaches seek to involve relevant stakeholders (e.g. farmers, fishers, extension officers, policy-makers etc), in some way – for example, helping to define problems and issues for research, collaborating in data and information gathering and analysis, and / or applying the findings of the research. The international literature clearly shows that the world-wide experience of PR has generated much debate, analysis and subsequent refinement of these approaches. The current review (albeit of a limited sample of all the projects available) was undertaken to contribute to this on-going process by drawing on a decade of research project experiences in a range of sectors – forestry, fisheries, agriculture, livestock in farming and plant-breeding – implemented throughout the world under the DFID RNRRS.

2. THE IMPORTANCE OF THE PARTICIPATORY RESEARCH OPTION - BUT WHAT'S NEW?

The function of development research is to generate new knowledge which can be used, in the context of the development process, to effect a desirable outcome – in fact every development paradigm is ultimately dependent upon the creation and application of new knowledge or the application of existing knowledge in new ways (DFID, 1998). Broadly speaking, the development process aims to increase people's welfare and in doing so to eradicate poverty. But it was well-recognised early-on that the underpinning research faced both a range of opportunities and constraints, as follows:

Opportunities:

- rural people often have in-depth knowledge about the production systems and the circumstances in which they operate which might be used as a basis to identify researchable constraints to development - if only this knowledge could be accessed by researchers;
- involving local people in the research process itself might also increase the relevance (or buy-in), applicability and delivery of research findings to address development problems;
- involving local people would change the nature of research in terms of developing relatively simple, rapid and widely generalisable field techniques, which did not rely on high levels of capacity or expertise or funding, and which might help to communicate and share relevant information between stakeholders and researchers, and facilitate the research and development process overall;

Constraints:

- not all circumstances or situations allow rural people to participate effectively in research (and related development) processes, for example some communities are heterogeneous or highly mobile or disjointed;
- furthermore, the governance context may severely limit the extent to which 'participation' can be translated into meaningful outcomes, for example, rural communities may have very little voice in decision-making concerning natural resource exploitation and management, despite having helped to contribute to new knowledge in particular areas;
- it is difficult and problematic to design and implement effective participatory research projects; they require new ways of working which are often at odds with research practices pursued by conventional research institutions and funding organisations;
- often the process of engaging rural communities in the research process is perceived, particularly by researchers and specialists, to compromise the scientific rigour of the research process; depending on what is being researched this perception may be more or less justified;

Although the RNRRS Programme was not established with a specific focus on participatory research, the subsequent evolution of the programme (within different sectors worldwide) led to the initiation, development and application of a wide range of participatory research approaches. The results and outcomes provide a wealth of information and important lesson-learning to further inform and address the range of opportunities and constraints which were identified early-on in the history of participatory research (above). The fact that participatory research approaches have tended to be employed in one form or another would seem to evidence certain characteristics of the relationships between researchers and research users in the context of international development that need to be clarified and understood in more detail.

3. HOW TO CAPITALISE ON PARTICIPATORY RESEARCH? LESSONS FROM THE RNRRS

The work of the RNRRS provides a better understanding of both the opportunities and constraints for participatory research and provides at least six important lessons as follows:

3.1. Participatory research can be very effective in some, but not all, situations

It is important to recognise when participatory approaches are appropriate and when they are not, so to avoid participation becoming the end in itself, and therefore distracting all those involved from the original research objective.

The degree of participation and the purpose of participation can vary widely depending on the type of research being done. Research conducted by the PSP and the CFP, for example, has argued that whilst there are benefits to involving farmers in field trials, there are significant reasons why participation is necessarily limited (Blackie and Gibbon (2001); Witcombe *et al* (2005). Amongst these reasons they cite the high degree of the knowledge of genetics and plant breeding needed to engage in the segregating generations stage of breeding – expertise rarely possessed by farmers – and the high cost of participatory breeding. A solution to this was the use of Mother and Baby Trials¹ where participation levels have been improved whilst retaining scientific rigour and keeping costs down.

In a number of RNRRS projects, participation has been a central element in the research, as for example in the FMSP projects that examined adaptive learning processes (e.g. R7335 and R8292) in relation to fisheries co-management arrangements. Here, the very mechanisms by which different

¹ Mother and baby trials allow farmers and researchers to test best-bet new cultivars. Mother trials are conducted by researchers on a research station where a full range of options can be looked at. Parallel satellite or 'baby' trials are conducted in the same geographic area by farmers who test those options that most interest them.

stakeholders participated in the process was itself a topic of the research and mechanisms and capacity for improving participation in decision-making about fisheries management was one of the key outputs of the research overall.

However, in some situations, participatory approaches have been included into research projects for no apparent reason – other than that this is perceived by the researchers involved that participation should be a part of all research projects within a development context (and more cynically that this ticks the right boxes with funding agencies). When this happens, the participatory elements in the research were often inappropriate to the research objectives and may have detracted from the achievement of its scientific goals.

3.2. Participatory approaches to research encourage end-users to articulate demands, and therefore raises their expectations. This means that participatory research approaches are most appropriate where there are opportunities for long-term engagement with the end-users so that these demands can be met.

A real problem experienced by many development projects making use of participatory approaches to research is that the act of asking stakeholders to define their problems and participate in the search for a solution can raise expectations about what solutions reasonably exist and how such solutions might work. This was a problem encountered by the PHFP (Ward *et al.*, 2001). Using a Participatory Interventions Approach the PHFP sought to define a menu of possible interventions (technical and economic) to help post harvest fish workers to improve their product and thus the sustainability of their livelihoods. They discovered that using an open forum to seek suggestions from the fish workers as to possible interventions produced a list of possibilities that contained inappropriate ideas (too expensive, not technically feasible) and also raised the expectations of the participants that their ideas would be put into practice. Using a panel of development experts, the initial list was revised to produce a more workable set of solutions and this list was then fed back to the original participants for further input. During this final process of establishing a menu of possible interventions it was discovered that establishing *why* particular interventions were considered acceptable or otherwise by the fish workers was an important part of understanding how their livelihoods were formed. A continual reminder had to be issued that the interventions selected may not work and it was only through field testing of the interventions that the feasibility of each was established.

3.3. Conducting participatory research within an appropriate research and development framework can increase its effectiveness considerably.

The management, communication and application of knowledge derived from participatory research can be very challenging. Consideration of how this will be achieved and the establishment of an appropriate framework that can incorporate new and innovative approaches can contribute to this.

Farmer Field Schools (FFS), an idea developed by FAO in SE Asia during the 1980s as a way for small-scale rice farmers to investigate and learn for themselves the skills required for and the benefits to be obtained from adopting integrated pest management practices in their paddy fields, represent an example of how this has been achieved on the ground. The aim of FFS is to build capacity to analyse production systems and identify main constraints, to test possible solutions, eventually identifying and adopting the practices most suitable to their farming system. As experience of FFS has grown, so they have been adapted to many different environments. The AHP together with the FAO supported a research and development project led by the International Livestock Research Institute (ILRI) to adapt the FFS methodology for livestock production systems (Minjauw, 2001). The FFS constitute a valid framework within which research, communication, and the subsequent application of research findings, can be carried out in close collaboration

between managers and eventual end-users. The notion of FFS required a major paradigm shift for traditional extension workers in the region concerned who were more used to a 'top-down' approach to working than the FFS methodology idea which promotes participation and uses facilitators (rather than trainers) to create conditions for farmers to learn through observation, experimentations and discussions. Through the FFS livestock farmers are able to investigate the problems that they themselves define and they are able to control the process of investigation and adaptation.

3.4. Participatory approaches to research may well promote new forms of institutional arrangement and can help to change attitudes and build capacity to make these new institutional arrangements effective.

Over the course of 10 years, the RNRRS has demonstrated that an appropriate institutional base is essential in order to engage in participatory research or for promoting the benefits of participation after a project has finished. For example, Nepal and India, Forest User Groups (FUGs) are an established part of the national forest management process and have been for many years. Whilst some FUGs are more mature and effective than others (involving a broad range of stakeholders working together in an effective manner), they have proved to be vital entry points for conducting participatory research on common pool resources in the Himalayas. Recent such work has also looked to strengthen the management capacity of FUGs by helping to resolve the internal contradictions (resources not being equitably shared; the poor and marginalized having little voice in the management process – see R6778 for further information).

In other research projects, institutions have been established by the project in order to promote participation, cooperation and co-management of resources. One good example is the establishment of the Local Resource Users Groups (LRUGs) by the project looking at the importance of Self-Recruiting Fish Species on Livelihoods in Bangladesh (R7917). LRUGs were set up to promote knowledge-sharing between stakeholders based on floodplains where livelihoods and resources are often closely interlinked.

Finally, the Self Help Groups (SHG) established as part of the NRSP work on rural service delivery enabled increased participation by the poorest in projects because it provided them with a means to access credit through small revolving loan schemes. A key constraint to participation by rural stakeholders (farmers, fishers) is often the lack of land, capital, tools, labour or time. The SHGs have proven to be very successful and have a shelf-life well beyond the completion of the project (see R7830 and R7839 for further information).

These represent examples of how institutional arrangements established initially for the purposes of the research process have proven to have relevance beyond their original research "functions" and have acquired a life of their own beyond the end of the research project itself. While these institutional forms have often been established at the behest of the projects concerned, the participatory approaches used to promote their development and the adaptation of their structures to the needs and capacities of their members seem to have contributed significantly to their broader relevance and usefulness for their memberships.

3.5. PR originally tended to focus on the relationships between primary stakeholders (farmers, fishers) and researchers and sometimes ignored the linkages that were required in order to effectively inform and influence policy-makers regarding the new knowledge and innovations generated. Engagement with stakeholders at all levels is essential.

A key criticism of participatory approaches is often that they are very localized and non-replicable. Truly participatory research is always likely to be thus – given that it is a time-consuming and

expensive mode of research and not likely to be conducted over a large area. But a drawback of the localized nature of PR is that it rarely involves or is able to influence policy makers. Thus whilst PR may be able to improve the uptake of research outputs and the sustainability of research on a small scale, it is rarely able to effect any change on policy. Clearly, where decision-making mechanisms are more decentralized (as in the case of the PHFRP in Ghana), greater opportunities to influence local level policy-making can arise. Many projects attempt to include a wide range of stakeholders in their research to try and obviate these problems, yet the very act of participation may be hampered by the presence of more senior and powerful figures especially where patron-client relations are able to exert a hold over the poor and marginalized. On the other hand, participatory research processes can create opportunities for bringing together decision-makers and the poor which might not otherwise occur and this can positively influence attitudes and perceptions on both sides. What is clear is that the mechanisms and pathways by which the outputs of participatory research are likely to influence policy and decision-making have to be as carefully thought through as in more traditional research approaches.

3.6. Wider application of participatory research approaches in development work will have important implications for how research relates to the development process – greater integration of the two will be essential with participation built into both.

As the debate on participation has progressed and matured over the past 30 years, so the relationship between researcher and subject has been constantly reassessed. This reassessment has taken many different forms and the focus has changed over time. In the 1970s, Freire, Gutierrez and Illich called into question the relationship between the westernised and largely urban outlook of most academics, including researchers, and the rural poor who they purported to be “researching”, advocating a radical reorientation of the whole process of generating knowledge so that the poor and marginalised would be empowered to “generate their own knowledge”. In subsequent decades, many researchers (i.e. Chambers, 1997) have commented on the way in which the institutional, political, economic and cultural priorities of the non-poor – whether urban elites, political leaders, donors or extension agents - continue to dominate the development agenda, and the research programmes that contributes to that agenda.

Ways of addressing these issues range from the radical reshaping of the whole institutional and political framework within which development and development research take place to attempts to adapt research carried out within existing frameworks to be more participatory, collaborative and empowering. In the context of the RNRRS, the focus has tended to be on the generation of research programmes that are more closely related to the realities of the poor in the field and better able to accommodate the diverse knowledge and experience of different stakeholders, including the poor, into the research process.

This understanding of participatory research has clearly gone beyond the early interpretation of participation as simply co-opting village people into activities conceived and designed by outsiders. There is now a more advanced understanding which recognises the advantages of closer relationships between stakeholders at different levels of society (partnerships), to the common identification and solution of problems over time (research), and to establishing structures and mechanisms (institutions/processes) which capitalise on these new relationships and knowledge for the overall benefit of people (through equitable and sustainable welfare increases, and improved livelihoods). In other words, multi-stakeholders engagement in the research process in order to link it more closely with the overall process of development.

In the future, new projects and programmes which seek to integrate participatory research and development as part of a process of development might also consider a range of additional opportunities as identified by Campbell and Salagrama (2001), who contributed to the PHFP,

including:

- a detailed review (ongoing) of participatory research experiences and performance as a basis for the development of lesson-learning, best practice and decision-making frameworks (is participatory research appropriate in a particular situation?);
- creating an effective interface between indigenous and formal knowledge systems in particular sectors (or multi-sectoral approaches);
- capitalising on approaches and techniques (some of which have been identified within the RNRRS) which lead to an improvement in the balance and quality of participation at all stages of the research process (including design and implementation, data analysis and interpretation, communication and dissemination of findings and integration into policy processes).

However, the development and adoption of new approaches to participatory research will also require changes in the relationships between formal researchers and the target stakeholders in developing countries – to consider different views (and possibilities) on the way in which knowledge systems are created, owned and used. Institutional resistance to change will be encountered, but in the long-run if the value of appropriate participatory research for natural resource management and development can be demonstrated then the necessary changes are likely to follow.

4. FUTURE CHALLENGES FOR PARTICIPATORY RESEARCH (PR) - CONCLUSIONS

The results of the review lead to three conclusions about the future challenges which must be addressed to ensure that PR makes an effective and valuable contribution to natural resource management and development, as follows:

First, it is important to build upon the success and experience of the last 10 years concerning the development and application of PR approaches. There is a need to undertake a critical assessment of when and where different forms of PR are appropriate; and to establish a framework and mechanism (e.g. PR database, new tool-books and kits) whereby lesson-learning and best practice in the use of PR can be disseminated and shared by different stakeholders;

Second, it is important to identify and assess the options for developing new types of research projects and initiatives which link and integrate participatory research and development processes; and with particular emphasis on linking the micro-level (the usual domain of participatory work) with the macro-level (where participatory policy work has still be fully explored); to consider the ‘success stories’ of the initiatives already undertaken within the RNRRS, and to develop new strategies and approaches for overcoming institutional and other constraints;

Third, in order to do the above, it will be necessary to invest time and resources in building partnerships for undertaking these new forms of research activity, both in developed and in developing countries. It will need to be recognised that the creation of effective partnerships often requires a significant amount of time and patience. In the context of participatory research approaches, particular attention will be required to developing the capacity to meet specific needs or roles (functional and/or enabling participation), to accommodate diverse knowledge systems and to improve the ways in which they can enter into the research and policy process.

REFERENCES

Blackie M and Gibbon D (2003) *Enhancing Impact: strategies for the promotion of research technologies to small holders of Eastern and Southern Africa*. NR International: Aylesford.

Campbell, J. and Salagrama, V. (2001) *New Approaches to Participation in Fisheries Research*. FAO Fisheries Circular No. 965. Rome: FAO.

Chambers, R. (1997). *Whose Reality Counts? Putting the Last First*. ITDG Publishing, U.K.

DFID (1998) *Research and the Sustainable Rural Livelihoods Approach*. In: Carney D. (ed) *Sustainable Rural Livelihoods: What Contribution Can We Make?* London: Department for International Development.

Freire, P. (1972). *Pedagogy Of The Oppressed*. Penguin: Harmondsworth.

Gutierrez, L. & Nurius, P. (1994). *Education and Research for Empowerment Practice*. Center for Social Policy and Practice, University of Washington: Seattle, WA.

Illich, I. (1976). *Celebration of Awareness: a Call for Institutional Revolution*. Penguin: Harmondsworth.

Minjauw (2001). *Training Of Trainers Manual For Livestock Farmer Field Schools Based On A Participatory Workshop Held On The 17th To 29th September 2001, Mabanga Ftc, Bungoma, Kenya*. FAO:Rome

Ward, A; Salagrama, V and Joseph, M (2001). *Participation and Post-harvest Fisheries: An Approach to identifying appropriate interventions*. NRI: Chatham.

Witcombe, J.R., Gyawali, S., Sunwar, S., Sthapit, B.R. and Joshi, K.D. (2005) *Participatory plant breeding is better described as highly client-oriented plant breeding*. I. Four indicators of client-orientation in plant breeding. *Experimental Agriculture* 41:299

RNRRS Projects referenced:

R6918 *Forest user Groups Forest Management Project*. Final Technical Report, May 2001. FRP: NRI

R7335 (2002) *Adaptive Learning Approaches*. Final Technical Report, FMSP: London.

R6778 (2000) *Community Forestry in Nepal: Sustainability and Impacts on Common and Private Resources*. Final Technical Report . NRSP: Hemel Hempstead

R7917 (2004) *Self-Recruiting Species In Aquaculture –Their Role In Rural Livelihoods*. Final Technical Report, FMSP and AFGP: London and Stirling

R7830 *Integrated management of land and water resources for enhancing productivity in Bihar and Eastern Uttar Pradesh*. Final Technical Report. NRSP: Hemel Hempstead

R7839 *Improved livelihoods-Bihar and Uttar Pradesh*. NRSP: Hemel Hempstead