

Pro-poor values in agricultural research management: PETRRA experiences in practice

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PETRRA was an agricultural research-management project which used a values-based approach in project design, planning, and implementation. Through an experiential learning process, agricultural research and development (R&D) institutes, NGOs, private agencies, and community-based organisations rediscovered and improved the understanding of their strengths in meeting development commitments. The project successfully showed how values-based research can meaningfully be implemented and a sustainable pro-poor impact achieved.

KEY WORDS: Gender and diversity; Labour and livelihoods; Methods; South Asia

Introduction

Poverty Elimination through Rice Research Assistance (PETRRA) was a research project implemented in Bangladesh from April 1999 to August 2004. It operated with a budget of £9.5 million, funded by the UK Department for International Development (DFID), and managed by the International Rice Research Institute (IRRI) in close partnership with the Bangladesh Rice Research Institute (BRRI). The project aimed to enhance the livelihood security of poor farmers by increasing the production and productivity of rice-based farming systems through poverty-focused research. Rice was the entry point, and research was to support a strategy for poverty elimination. The project avoided targeting production; instead it targeted poor farmers and not the large producers. PETRRA started with people – resource-poor farm households – not technology (Orr and Magor 2007).

The project objective and logical framework statements were adjusted over time to reflect the praxis of being poverty-focused. PETRRA managed 45 sub-projects across more than 50 institutions and organisations which represented traditional international and national research institutions, government rural-development institutions, NGOs at national and local levels, the private sector, and community organisations. Many of the sub-projects comprised partnerships. The sub-projects covered technology development, uptake-methods research, and policy research and dialogue, with more than 700 research and development (R&D) people

engaged. The project established partnerships of multiple actors with roles of either research or extension provision. For PETRRA, the challenge was to encourage a poverty focus and the processes related to such a focus. The concept of 'values-based research' grew out of the action–reflection practice that was used throughout the project (Quin *et al.* 2003). Research prioritisation began with a stakeholder analysis that was inclusive of resource-poor farmers, men and women, local and regional government and extension staff, and civil-society actors. This was a first step towards engaging farmers in identifying research issues and it opened up a more active role for the end-users in the entire development process. Overall, this illustrates a shift towards a more participatory R&D philosophy and towards a model based on multiple sources of innovation.

In the fourth year, communication was added to the logical framework as a key project output, for two reasons: (1) downward accountability – communicating innovation to the primary stakeholders, the farmers; and (2) upward accountability – communicating PETRRA management practices and project innovations to agricultural R&D organisations and policy makers. Communication emerged as a major factor in successful consolidation of the project outcomes and in ensuring greater impact.

The project management unit (PMU), donors, and reviewers were never completely happy with the formulations of the statements of the objectives (*super goal, goal, purpose, and outputs*) and their vertical and horizontal links and logics. This situation reflected the complexity and dynamic nature of the project and was seen as positive. Project stakeholders, including the donor, began to understand that they were far better placed than external consultants to make regular adjustments to the statements, since they were continuously learning. PETRRA project documents mentioned certain values as cross-cutting issues, but only after several iterations of practices and reviews did their links to the project objectives in the logframe structure become clear.

PETRRA's emerging values-based management approach

PETRRA identified, developed, and defined various cross-cutting issues, including poverty focus, demand-led research, participation, partnership, gender, linkage and network, and competition in research management. These formed the value base of the project and played a crucial role in conceptualising and developing PETRRA's agenda. Values were defined as central beliefs and purposes of the society – in this case the organisation or the project (Jary and Jary 1991). PETRRA strived for best practice in the following respects.

- Working with resource-poor farmers to address *poverty*.
- Conducting research as per *demand* and priority of the resource-poor farmers.
- Conducting, sharing, and evaluating research with both *men and women* members of resource-poor households.
- Conducting research that ensured *participation* of resource-poor men and women in all stages of the project cycle: planning, designing, implementation, monitoring, and evaluation.
- Conducting research by establishing appropriate and effective *partnership* of agencies to ensure the use of pro-poor technology, dissemination methods, and policy.
- Ensuring that research outputs were sustained through *linkage and network* development, with appropriate agencies, to ensure that the interests of the poor were represented.
- *Communicating* effectively with farmers and policy makers to disseminate, up-scale, and consolidate learning.
- Using a *competitive* process as a way of identifying competent suppliers of agricultural R&D to facilitate the achievement of pro-poor outcomes.

These practices evolved while working with poor households. At the same time, PETRRA established the definition, scope, concept, and practical means to translate the values into actions. All these elements together formed PETRRA's *values-based research approach*. Table 1 captures its systematic unfolding.

Tables 2(a) and 2(b) explore the link between the values and PETRRA outputs. In Table 1, 'communication' is mentioned as a value. It evolved during the project, finally being included as an output. In Table 2(b), 'competitive' is mentioned as a value that aimed to achieve the desired outcomes.

The values adopted by PETRRA are not new, and much literature is devoted to their usefulness for developing a pro-poor agricultural research system. The significance of the PETRRA project was to identify the important values for a poverty focus through action and reflection with partners and then incorporate these into a management system that was coupled with capacity building to facilitate the process. The actors in each sub-project incorporated the values through action and then, as a collective of sub-projects, shared that experience.

Institutionalising values-based research

The scope of the initial proposal was rather limited, but that did not prevent the project from becoming innovative. In a way it allowed the project to blossom naturally. The donor and host agencies also allowed the project to evolve: they were not rigid, but rather appreciative of new ideas and innovations.

The PMU was open-minded and strove to be responsive to the needs of resource-poor farmers. It initiated ideas, included new outputs, adjusted project purpose, invited and entertained new ideas from project stakeholders and outsiders, reviewed suggestions, and reacted according to the situation. It also exercised the freedom to be neutral, even towards its own organisation, IRRI.

Although the project recognised and brought into practice various values, a lot could still be done to establish these values within agricultural research institutes like IRRI and BRRI, and to identify appropriate ways to institutionalise them in the overall R&D system. Some researchers emerged as 'champions' promoting values, but the extent to which this learning carried over into day-to-day work beyond the specific sub-project varied. To establish a culture that embraces values within a project is not enough: those values need to be embedded in the agencies, so that the praxis continues. International organisations like IRRI have the scope to influence national agricultural research systems (NARS) in rice-producing developing countries. Through PETRRA, IRRI showed that it can facilitate and establish an effective values-based research culture.

Various examples show PETRRA's continued impact. The World Bank and the International Fund for Agricultural Development (IFAD) decided to jointly support the National Agricultural Technology Project, with an estimated grant of US\$ 84.5 million (BARC 2007). PETRRA values such as a competitive grant system, demand-led research and extension, poverty focus, and partnership are included. Immediately after the project ended, DFID agreed to establish a *Projukti* (technology) Foundation in Bangladesh that would reflect PETRRA values – but not much progress was made, as the government did not agree to make it a body independent of government control.

Some project partners acquired grants from the CGIAR Challenge Program for Water and Food to follow up on their successful PETRRA research. The two projects provide IRRI with further experience to consolidate and internalise values-based research.

PETRRA's experiences with extension methods research were documented in the book *Innovations in Rural Extension – Case Studies from Bangladesh* (Van Mele *et al.* 2005). In his review of the book, Robert Chambers commented: 'if any donor agency is looking for a

Table 1: Changes in partners' perceptions about values within PETRRA

Value	Year 1	Year 2	Year 3	Year 4	Year 5
Poverty focus	Partners were not aware of it	Agreed but most were not aware of the rationale and approach	Started practising well-being analysis	Revised the portfolio of clients	Most clients were resource-poor
Demand-led	Sub-projects defined demands	Sub-projects referred to demands expressed from the stakeholder analysis done by PMU	Sub-projects conducted extended analysis to sharpen the demands of the resource-poor farmers	Integrated resource-poor farmers' demands into the project management cycle	Partners recognised demand as the basis for responsive research
Gender	Partners were confused about the importance	Agreed to be more inclusive of women; gave some training on post-harvest issues	Agreed to train women in, and discuss with them, all aspects of farming (not just post-harvest)	Appreciated the importance of women in all aspects of farming	Appreciated the concept of family approach and women accessing all aspects of knowledge
Participation	Partners were aware, but did not practise and often resisted	Agreed to take training	Started using the approach	Started to appreciate its importance	Agreed participatory approach as a guiding principle
Partnership	Partners uncommon	Reluctantly accepted the idea of forming partnership	Started to realise the advantage	Started to appreciate the importance	Agreed to sustain the relationship for future collaboration
Linkage and network	Partners hardly had any linkage among GO–NGO, or GO–PS, or NGO–R&D institute	Government policy and project facilitated the relationship	Started appreciating the advantages	Appreciated the importance for sustainability of the innovations and impact	Most have recognised the advantage and a few have institutionalised the relationship and signed MoU between organisations
Communication	Partners never interacted with farmers; scientific papers were the only targets	Farmers asked for materials	Partners participated in communication fair and contributed to newsletters	Started to appreciate materials for farmers and secondary stakeholders	All sub-projects produced a set of materials for farmers and shared the pride

GO – government organisation; PS – private sector; MoU – memorandum of understanding.

Table 2(a): PETRRA outputs and their linkages with the values

Value	Technology	Communication	Uptake
<i>Output statement</i>	<i>Improved rice production technologies appropriate to poor farmers identified or developed and tested in collaboration with them, PETRRA sub-project partners, and PMU</i>	<i>PETRRA management practices and research findings effectively communicated to relevant organisations and individuals involved in agricultural research and extension, and to policy makers</i>	<i>Improved methods for effective uptake of technologies identified, pilot-tested, and recommendations for improved uptake pathways made by PETRRA's sub-project partners and PMU</i>
Poverty focus	Select appropriate clients to work with, i.e. poor farming households	Ensure that poverty remains as the main focus of all communication activities, no matter whether the materials are targeted at farmers, extension workers, scientists, or policy makers	Develop innovative and appropriate pro-poor uptake methods that may or may not be different from those of non-poor
Demand-led	Research priorities based on needs of the clients, not decided unilaterally by the researchers	Guarantee and monitor demand for materials from all levels; sometimes may need to create demand for tested materials	Identify gaps in the system and identify appropriate uptake methods; farmers' demand should be at the centre of the analysis, which needs to be compatible with the interests of the partners concerned
Gender	Work with both male and female members of the households	While developing, testing, and disseminating communication materials (e.g. leaflet, poster, video, fact sheet), engagement with both men and women is considered; sometimes specific attention and tools are needed for women	Ensure that uptake methods for technology dissemination take into account the interests of both men and women. Where the target is the household, both men and women should be involved; each can be involved separately, if that appears more appropriate
Participation	Ensure participation of poor men and women farmers in all stages of the project cycle	While developing, testing, and disseminating communication materials, participation of both men and women is ensured in all stages	Involve farmers (men and women) and stakeholders of all levels in the research–development process
Partnership	Ensure proper partnership that can effectively help to develop, disseminate, and sustain the technology	Ensure appropriate partnership is formed at all levels for developing, testing, and disseminating communication materials; ensure that resource-poor farmers and material developers become partners	Establish strategic partnerships based on comparative advantage to ensure development of, research on, and sustainability of uptake methods

(continued)

Table 2(a): Continued

Value	Technology	Communication	Uptake
Linkage and network	Establish linkage and network during the project and thereafter, to help eliminate structural and institutional barriers to technology adoption	Ensure that partnerships are not lost once project ends, with ability to expand the social capital for potential future investments	Design a sustainable linkage and network as part of the research on uptake methods; this should not be threatened to be discontinued immediately after the project ends
Competitive	Commission most research on a competitive basis to identify competent suppliers; create level playing field through open bidding	Select partners for development and dissemination on competitive basis	Gather ideas from different suppliers of research through competition; uptake-methods research requires a series of facilitated discussions to develop and articulate research outlines

PMU – Project Management Unit.

Table 2(b): PETRRA outputs and their linkages with the values

Value	Capacity	Policy	Pro-poor model
<i>Output statement</i>	<i>Capacity of rice research system to undertake demand-led research sustainably enhanced</i>	<i>Key policy constraints to improved rice-dependent livelihoods identified and recommendations presented in key policy forums by PETRRA policy-research partners</i>	<i>A pilot model of an effective pro-poor competitive rice-research management scheme established and managed effectively by PMU</i>
Poverty focus	Train/orient researchers in different ways and means of poverty-focused research	Ensure that poverty issues are central to any policy research agenda	Ensure that poverty focus remains as the key value
Demand-led	Train/orient researchers in different approaches and techniques to identify poor (men and women) farmers' demands	Identify policy researchable issues with poor men and women farmers; avoid a top-down agenda	Monitor and adjust the model's relevance to ensure that it remains demand-led
Gender	Train/orient researchers in approaches and dimensions of gender-balanced research	Identify context of both men and women in policy research and formulate recommendations for both men and women	Ensure that gender-awareness is a strong component in the model

(continued)

Table 2(b): Continued

Value	Capacity	Policy	Pro-poor model
Participation	Train/orient researchers in approaches and techniques of participatory research in all stages of research	Involve in research the people who are affected by policy issues; concerned stakeholders should be involved during research and policy dialogues	Ensure that participation becomes the culture of the model
Partnership	Train/orient researchers in approaches and advantages of partnership for conducting demand-led participatory research	Involve all stakeholder levels (farmer, field worker, <i>upazila</i> /district, and national) in policy research, as national-level stakeholders are not able to represent all	Ensure that the model finds its strength in partnerships
Linkage and network	Train/orient researchers in approaches and inform them about the advantages of linkage and network to sustain the technology among its users	Establish linkage and network for continued follow-up and policy dialogue for sustainability	Ensure that the model always advocates linkages and networks to strengthen and sustain the model itself
Competitive	Train/orient researchers to equip them to participate in the competitive bidding system and be successful	Conduct policy research on a competitive basis by NGOs, community-based organisations, local government, private sector, media, and whoever is working with or for resource-poor farmers	Ensure that the model is developed, tested, and sustained through a competitive process and is exposed to competition

PMU – Project Management Unit.

cost-effective investment, it would be hard to do better than to provide the means to make this book cheap and accessible, and to send a great many copies with a covering letter to those concerned with agricultural research and extension policy and practice around the world’ (Chambers 2007: 36). The ‘Focal Area’ concept developed during PETRRA is now commonly used by government and non-government organisations to jointly address poverty in northern Bangladesh. Partners formerly involved in extension-methods research continue to expand their activities in-country (for example, farmer-oriented seed models) and across South Asia (for example, women-oriented video production). BRRI continues to develop the Bangladeshi version of the rice knowledge bank (www.knowledgebank-brri.org), which is focused on semi-literate farmers and extension workers. These are but a few examples.

Conclusion

PETRRA offered an opportunity to experiment with socio-technical and institutional innovations for the development of a pro-poor agricultural research system. It created a lot

of enthusiasm among its partners and wider stakeholders. Although its implementation efficiency was criticised, this was the price paid for operating in a mode of experiential learning. PETRRA successfully demonstrated the means by which such an endeavour can be shaped.

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