Innovations in project documentation

Paul Van Mele, Ahmad Salahuddin and Noel P. Magor

Introduction

How can we improve the documentation of project experiences? And how can a concerted and coordinated writing exercise contribute to increased ownership and learning?

Funded by the UK Department for International Development (DFID), The Poverty Elimination Through Rice Research Assistance or PETRRA project managed 45 sub-projects between 1999 and 2004. These focused on: pro-poor policy (6), technology development (19), and uptake and extension (20). After a year of intensive interactions this last group became the subject of the book 'Innovations in Rural Extension: Case Studies from Bangladesh' (Van Mele et al., 2005).

In this paper, we present some of the strategies followed in documenting highly diverging projects, followed by a summary of the different sections of the book.

Documentation: an iterative process

We consider writing as an integral part of the learning process: putting things on paper helps people to reflect, structure, analyse, synthesise and capitalise their experiences. Considering its importance, we have to think carefully about how we best go about facilitating such a process, making best use of available resources and capacities.

Formal reports give us insights in mainly quantitative impacts, but are limited in telling what really happened and even more importantly how things happened. To help us understand people’s work and put their experiences in a historical, sociocultural and institutional context, we used a broad range of tools, including narratives. The concept was relatively simple, let people tell a story while reflecting on key points.

“Stories help explain themselves; if you know how something happened, you begin to see why it happened.”

Fernandez-Armesto, 2003

Learning through documentation was further stimulated in a writers’ workshop and various mini-workshops in which we relied on photographs, enterprise webs, actor linkage maps and various tools used in innovation systems analysis. Innovations in Rural Extension presents not only a wide range of project experiences, but also the tools that helped to document them. In what follows, we present some of the lessons learnt related to putting project experiences on paper.

- Many people with exciting field experience lack writing skills and considerable interaction is needed to help them reflect on and articulate their experiences;
- As most people are only familiar with formal reports (often in bullet-point style), training is needed on writing narrative stories. This has to take place from the very on-set of the project. Narratives complement formal reports and help those who facilitate documentation and learning to see experiences in a human context;

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Each project has their own strength, and generic writer’s guidelines for case study preparation has to allow for different accents. This is particularly challenging considering the inflexible mindset of people when confronted with guidelines, even if creativity and flexibility with structures and style is stimulated;

Starting the documentation process at the last year of a project puts a lot of pressure on staff to comply with monitoring and evaluation procedures;

High rank people insist taking the lead in writing case studies, even if they are not involved in the actual implementation of the project. Consulting field staff within their own organisation is below their status;

If project experiences have an international relevance, ideally a ghost writer is attracted with experience in the subject and skills to facilitate learning among partners. This person may or may not be the same as the one who trained project staff in writing narratives earlier on in the project.

This is a small selection of lessons learnt, which we believe may be of use to a wide audience. Other important strategies that contributed to this international publication include the provision of stepping stones for authors, exit strategies for projects that did not meet international standards, and peer review.

*Innovations in Rural Extension* presents the evolution of methods, outlines them in contextual detail, and presents the reader with the keys to success and some of the difficulties he or she may encounter while implementing them. The book has six parts, of which the short introduction is Part I. The next four parts are each introduced by an overview chapter written by external people, followed by a number of empirical cases. The last part summarises findings and offers some fresh perspectives.

**Gender**

Thelma Paris and colleagues launch Part II on gender in agricultural extension. Poor women are eager to learn about all aspects in agriculture, not just on the roles they traditionally fulfil, and have proven to be innovators and committed extension agents.

Most of the women who work in field agriculture are from households with very small holdings (200 to 1,600 square meters), followed by women in landless, small and medium size farms. In addition, in the present transitional rural society of Bangladesh, temporary migration of men is common with women becoming *de facto* heads of households who make all agricultural decisions, hire labour, sell crops and control – at least partially – the farm income. It is more common for smallholder women to head households and make farming decisions than official statistics suggest.

Rice research and extension institutions have tended to exclude women not deliberately but more an omission of not seeing. The PETRRA project, through ‘a learning by doing approach’ and a commitment to include women discovered that women want more agriculture
The case studies show how partners broke down barriers through women led extension for promoting seed drying tables and plastic drums for seed storage. Through colour photographs of seed drying tables women spread this message to neighbouring villages. The family extension approach was extended from post harvest to rice production as a whole and it was found that for this training both men and women together gave the best output. A conclusion here was that even if women do not work in the fields, training in all aspects gave them a voice in household decision making. One exciting innovation brought science to life through video development for women-to-women extension. The videos were made with households that had been experimenting with the technology for seed care. Village women had a say in the script and were the actors. Communication and adoption barriers were broken down. Another experiment built on a local organization's expertise in picture songs or jari gan. Their theatre troupe that normally promoted health messages and social issues expanded its expertise to include agriculture messages.

Video proved successful to catalyse local experimentation on a large scale. We ensured widespread dissemination of the videos by stimulating stakeholder ownership and pride in the project. The latter project won a prestigious international award for effective communication.

Learning tools and methods

Part III on learning with rural communities is introduced by Jeffery Bentley and Paul Van Mele. They discuss the specific role farmer-to-farmer extension has in learning about local knowledge and developing mass media communication messages. A first case ‘Watch and Learn’ shows that video, made by a multidisciplinary team and involving peers, has a higher impact on rural women’s seed health practices compared with farmer-to-farmer extension.

The next case ‘Village Soil Fertility Maps’ gives impressive evidence of how within a short time and with limited financial resources, the NGO Agricultural Advisory Society (AAS) improved soil fertility management in more than 200 villages by combining principles of soil fertility mapping, participatory research and farmer-to-farmer extension.

How green is green?

Integrating village soil fertility maps with other visual tools such as the leaf colour chart would further improve accuracy of timing and reduce dosage of fertiliser applications. In some villages, AAS initiated both approaches side-by-side and farmers are eagerly observing each others’ experiments.
The last two cases in this part build on old forms of reaching rural audiences, namely going to local markets or other public places and using folk songs. They have been revived into new agricultural extension methods called Going Public and picture songs, the latter bringing entertainment-education to rural women.

Developing rural enterprises

Part IV on enterprise webs is introduced by Noel Magor, who stresses that complex linkages are essential for poor farmers to adopt certain technologies. It places extension in a broader context and looks at rural development from a business perspective. Tools such as enterprise webs can help organisations to analyse the weakest links of an enterprise and to make decisions about where vertical integration would be better than strategic partnerships or vice versa.

The visual nature of the enterprise web helped service providers clarify essential activities. Each enterprise web included an activity for identifying poor farmers. In this activity NGOs that already have an established village level network have a comparative advantage. In pro-poor extension this organizational social capital is critical.

Developing an enterprise web is an iterative process that starts by identifying all discrete activities and causal links between activities. The centre stage is given to the principal client. In our case, the clients are resource-poor farmers, but could equally be a processing mill. All activities for a farmer to receive necessary knowledge and inputs to effectively adopt the technology are drawn above and all activities utilising the products are drawn below (see Figure 1).

Figure 1: The enterprise web
After visualising the discrete activities, an efficiency boundary can be drawn. All activities within the boundary are integrated and performed by the service agency. Activities outside the boundary are performed by another organisation. The enterprise web is technology specific and adapted to the governance structure of the principle disseminating agency.

Cases are presented on establishing integrated rice-duck farming, pro-poor markets for mobile pumps and a value chain for aromatic rice.

- The integrated rice duck system is a low cost, organic farming method for small entrepreneurs. Ducks at a specified age and for a specified time period are grown together with rice with benefits to ducks and the rice. Access to ducklings and vaccine were two critical inputs that were lynchpin activities for the dissemination of the technology. These were the weakest links. An organisation must build surety around these activities. This case study makes the important observation that the extension strategy for a given technology is organization dependent.

- The second case study focuses on the manufacturing, marketing and use of the mobile pump for small scale irrigation. In the tidal area of southern Bangladesh surface irrigation for vegetables and rice was highly appropriate. The NGO International Development Enterprises (IDE) with marketing expertise established a local manufacturing in a nearby town and three marketing outlets each with trained mechanics. Farmers were the beneficiaries of this market network. IDE activities included building an effective network and the promotion of the mobile pump. For sustainability of the technology it was necessary for the manufacturer, the dealers, the mechanics and farmers to make a profit.

- The final case study introduces the value chain approach for production and marketing of aromatic rice. Once again the visual use of the enterprise web helped identify interdependent activities, namely establishing a grower base, the rice millers and the national exporters group. The NGO APEX was strong at linking to the Exporter Association but not so strong in group organizing of farmers. There were potential local partners who could do the latter. In this regard, the use of transaction cost theory (Williams, 1979, 1981, 1985, 1991, 1996) helped challenge the culture of an organization going solo. Rather than APEX vertically integrating it made more sense to contract out the establishment of grower groups.

**Seed systems**

In Part V, Solveig Danielsen, M. K. Bashar and Mark Holderness investigate the emergence of pro-poor rice seed systems in Bangladesh. The first two cases illustrate significant changes in mindset among senior scientists of the Bangladesh Rice Research Institute in validating technologies with NGOs and poor farmers, and in channelling multiple partnerships into a rice seed network. The last three cases shed light on the experiences from the three diverse NGOs in training farmers as seed producers and involving them in extension and marketing efforts.

**Pro-poor innovation systems**

Part VI puts all experiences in a broader context, makes a qualitative comparison of existing extension methods and presents suitable circumstances in which these may be used.

External reviewers asked us to make comparisons between extension methods, but this would mean taking methods out of their context: any method may have a high or a low impact, be cost-effective or not, depending on those implementing the method, the learning content, and the characteristics of the clients and communities. Nevertheless, we have tried to extract some generic characteristics in terms of investment requirement and anticipated outputs (see Table 1). A service provider who wants to try out any of these methods could use this as a decision-making tool.
In Table 2 we present the potential circumstances in which each of the methods described can be used. As stated earlier, these offer some broad guidance only.

Table 2: Suggested use of extension methods

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<th>Method</th>
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<td>Women-led group extension</td>
<td>Requires communities where a certain critical mass of social capital is already in place</td>
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<tr>
<td>Family approach in training</td>
<td>Is applicable for any community, irrespective of the level of social capital</td>
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<td>Farmer-to-farmer extension</td>
<td>Requires solid organisational support for it to be effective and will work best if implemented alongside other rural development activities</td>
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<td>Farmer field schools</td>
<td>Requires skilled facilitators and high initial investment cost. Ideally used in pilot phases to develop and test learning tools that can be incorporated in all other methods. Principles and processes could be built into curriculum of wide range of service providers</td>
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<tr>
<td>Video-supported learning</td>
<td>Requires multidisciplinary approach in developing scripts. Adds value to any other method. Can be effective to educate farmers in remote areas without the need for well-trained facilitators. May need adjustment to fit regional or local culture</td>
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<td>Going Public</td>
<td>Can be tried by any service provider with little preparation. Lends itself well to reach people in remote areas where general organisational support may be weak</td>
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<td>Entertainment-education</td>
<td>Requires multidisciplinary approach in developing scripts. If no use is made of radio or TV, the method is limited to areas where live performers operate. Highly appropriate to reach rural women</td>
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<td>Primary school and college education</td>
<td>Requires flexibility of education system and teachers’ corps to include processes and tools of farmer field schools, or to organise video or agricultural entertainment shows. Children welcome this as a shift from sterile teaching methods in most rural areas</td>
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During the documentation of the cases presented in this book, which was considered an integral part of the institutional learning process, we used narratives, enterprise webs, photographs, innovation systems research methods and various other social science methods. We agree that more tools are needed to analyse organisational cultures and personal behaviours. At the same time we recommend a wider use of tools for stimulating creative thinking and local ownership (see also Box next page). Throughout the book the tools used to support reflection on and analysis of experiences have been presented to the extent possible.
We found many local organisations doing exciting work, but why is this ignored so often? The simple answer is poor documentation. Writing things down takes time, a certain creativity and persistence. It also has to be seen as rewarding in its own right. We hope that the efforts made in writing this book help to shine the light on the forgotten heroes of local development, and that the chapters are seen as a warm tribute in part to local creativity and methodological diversity.

Apart from the last section of the book, which looks at extension from an innovation systems perspective and applies the transaction cost theory to rural extension, the bulk of the book merges quantitative impact assessments with more qualitative process analysis. It has been written in a simple style to offer ‘relaxed reading’ for development workers, service providers and university students. We want others to enjoy reading what we have enjoyed doing.

**Suggestions for Successful Innovation Systems**

1. Avoid funding or promoting a single blue-print extension method
2. Use actor analysis to analyse organisational cultures, strengths, ambitions and weaknesses in engineering partnerships
3. Apply innovation systems research in planning projects and identifying local innovations
4. Create early, low-budget opportunities for multiple actors to interact and learn to work with each other
5. Train people involved in community needs assessment to distinguish between implicit and explicit demand
6. Link agricultural R&D activities, whether by government, non-government or private sector, more closely to the established education system
7. Incorporate communication specialist and broad-based professionals with experience in learning approaches from the beginning of the project
8. Build adult learning and discovery learning principles into mass media programmes
9. Increase understanding of institutional elements that are important in developing local ownership over technologies and extension methods
10. Develop mechanisms to increase creative thinking capacity among all actors
11. Introduce new ideas in the system as early as possible in a subtle way
12. Allow for a flexible management structure that can be responsiveness to opportunities

**Reference**


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