

DFID NRSP RESEARCH PROJECTS R7830/7839

Policy Consultation Workshop
Realising Potential:
Livelihoods, Poverty and Governance

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Contents

| | |
|---|-----------|
| OVERVIEW OF DFID PROJECTS R7830 AND R7839 | 1 |
| THEME 1 | 3 |
| INTRODUCTION | 3 |
| COMMUNITY INSTITUTIONAL INFRASTRUCTURE DEVELOPMENT | 4 |
| PROGRAMME DESIGN: BUILDING BLOCKS AND SEQUENCING | 5 |
| CAPACITY ACCUMULATION, NOT TRAINING | 6 |
| MICRO-LEVEL INFORMATION MANAGEMENT | 6 |
| INSTITUTIONAL CHANGE IN GOVERNMENT, DONORS, AND NON- GOVERNMENTAL ORGANISATIONS (NGOs) | 6 |
| BUSINESS MODELS FOR SERVICE DELIVERY | 7 |
| THEME 2 | 8 |
| INTRODUCTION | 8 |
| PARTICIPATORY PROCESS AND INSTITUTIONAL ARRANGEMENTS | 8 |
| TECHNICAL INNOVATIONS | 10 |
| RESEARCH APPROACHES | 11 |
| THEME 3 | 12 |
| INTRODUCTION | 12 |
| A NEW APPROACH TO PARTICIPATORY TECHNOLOGY DEVELOPMENT | 13 |
| LESSONS LEARNT | 13 |
| PROCESS OF THE WORKSHOP | 15 |
| INAUGURAL SESSION | 16 |
| MEASURES OF ENGAGEMENT | 21 |
| ISSUES, QUESTIONS AND COMMENTARIES | 22 |
| SUSTAINABILITY | 22 |
| SCALABILITY | 22 |
| ACCESS TO INFORMATION | 23 |
| REACHING THE POOR | 24 |
| GENDER | 26 |
| ENVIRONMENT | 26 |
| IMPACT | 26 |
| THE KEY QUESTIONS | 28 |
| INSTITUTIONS | 28 |
| PIM AND CAD | 30 |
| RURAL SERVICE DELIVERY | 33 |
| OUTCOMES | 35 |

OVERVIEW OF DFID PROJECTS R7830 AND R7839

Two sister projects: Integrated management of land and water resources for enhancing productivity (R7830) and Improved livelihoods through improved crop and soil management – Bihar and Uttar Pradesh (R7839), both funded by the UK Department for International Development (DFID) through the High Potential Production Systems Research Portfolio of the Natural Resource Systems Programme (NRSP) are working with the same communities in Bihar and eastern Uttar Pradesh in India.

Project R7830, is managed by the Patna-based institute of the Indian Council of Agricultural Research (ICAR), namely the ICAR Research Complex for the Eastern Region (IRCER) and involves Rothamsted Research (UK) and the International Water Management Institute (IWMI). R7839 is managed by Rothamsted Research and involves several project partners: IRCER, Cirrus Management Services Pvt. Ltd. (Cirrus) based in Bangalore (India), GY Associates Ltd. (UK), CABI Biosciences (UK), the Overseas Development Group, University of East Anglia (UK), and IWMI, Colombo (Sri Lanka). These projects were implemented in the command of Right Parallel Channel V (RPC-V) of Patna main canal under the Sone Canal System in Bihar and Chapia Distributary of Gandak Canal System at Maharajganj in eastern Uttar Pradesh.

Together these projects: Seek new knowledge of strategies for: **1. Effective delivery of rural services, and 2. Development of local institutional arrangements that enable rural men and women, specifically including the poor, to improve their livelihoods through agriculture-based activities, including land and water management.**

From the projects' inception the project teams were challenged to innovate within the research process. Achieving the outputs outlined above required:

- Research to be undertaken on a ‘development’ scale
- Partnership between team members with academic and non-academic research backgrounds
- Learning platforms for actors with different perspectives to share and contribute to a common objective
- Interventions and research that were not within the capacity of any single organisation involved in the project.

The projects and their materials are structured around the following overlapping themes:

Theme 1 Sustainable and scalable institutional arrangements at the community level that facilitate livelihood improvement.

Theme 2 Practical ways forward for participatory land and water management.

Theme 3 New approaches to participatory technology development.

The following provides brief introductions to each theme, which are expanded upon in the policy briefs and theme reports provided on the CD included with these proceedings.

THEME 1

Sustainable and scalable institutional arrangements at the community level that facilitate livelihood improvement: Policy implications for institutions and governance

Introduction

The dominant model for anti-poverty programmes involves the establishment of externally conceived and designed organisations and institutional arrangements. Most programmes seek to create organisations where the **locus of control** remains outside local communities. Such models typically create project dependence and perpetuate the presence of the external intervener.

One of our key findings is that existing asset- and activity-based organisational models, and even many kinds of ‘self-help groups’ (SHGs) are not sensitive to the fact that most micro-enterprises and farm-based activities are actually undertaken by individuals or small partnerships that are distinct from and non-congruent with SHGs or asset/activity-based groups. It is possible, feasible and even desirable for an individual to be an effective member of a number of organisations and networks at the same time. We argue that there is no single organisational structure that is capable of serving all needs, and that the nature and structure of each micro-organisation must be determined internally rather than externally.

Our experience shows how a new generation of reformed pro-poor programmes, policies and interventions could be developed which do not flood communities with funds, inputs or resources in timeframes and in quantities that they cannot usefully absorb, in ways that do not marginalise or exclude the very poor.

Further, DFID Projects R7830 and R7839, provide insights as to how communities can and will develop for themselves pro-poor interventions that are robust and sustainable, and can (potentially) attract investment and services from the private sector.

Community institutional infrastructure development

We have experimented with and established what might be called a ‘**dialectic**’ approach to **institutional infrastructure development**, which is different from conventional approaches that emphasise structure. The dialectic approach is NOT to be confused with ‘process’ approaches that are inherently slow and rely on expensive external human resources. The dialectic approach builds upon and goes beyond previous experience, theory and literature, and provides new meaning and content to the concept of ‘participation’.

Key elements of the dialectic approach include:

- Unspectacular entry into villages
- Reliance on local village-based human resources at the cutting edge, not on imported staff
- Incremental non-deterministic facilitation and self-examination by communities
- Reference to external experiences and information, review of available resources, capacities and opportunities
- Challenging assumptions held by various stakeholders, and repeated re-examination of positions and arguments
- Avoidance of distorting incentives and flooding communities with external funds, resources, technologies and advice
- Avoidance of *a priori* links to any externally conceived programme, project or activity.

This process promotes ownership, and leads to practical and manageable decisions by individuals and communities.

Some key outcomes of the process are:

- Robust, sustainable networks initiated within very short timeframes and at very low costs
- Networks that are conceptualised and designed by internal stakeholders
- Networks which sustain and grow independently, and develop capacities to cope with unforeseen stresses
- The low costs and generation of a community-based momentum independent of the project makes scaling up cost-effective, realistic and less dependent on external support
- An individual household may participate in a number of organisations
- Groups interconnect in various ways, within *panchayats* and village federations, for business collaborations, for information and market access on terms and at costs acceptable to them
- The process **STARTS** with the very poor and **THEN** proceeds to include the **entire range of poor people**, followed by the not poor, leading to improved representation and leverage for the very poor
- The process leads to exploration of ‘win-win’ solutions and ways forward in agriculture, markets, enterprise, and (possibly) governance by communities with very little external intervention or support; and reduces tensions and conflicts.

Because of its low transaction costs the dialectic process can be and is followed and fostered independently with each group in each village.

The unspectacular, incremental approach is especially useful in areas that are prone to endemic violence and suffer from poor governance.

Programme design: building blocks and sequencing

An important finding of our project is that some level of community-based institutional infrastructure development

must **precede** rather than accompany other kinds of technical activities and service delivery.

Once a certain basic level of institutional infrastructure is in place, incremental interventions of the kind discussed under Themes 2 and 3 become economically attractive to people in villages. The infrastructure makes it possible for communities to access simultaneous support independently from a number of different sources and organisations.

Capacity accumulation, NOT training

We have developed and demonstrated capacity development methods that are different, in that they are largely non-didactic, independent of literacy and education, and thereby enhance the scope for community-led and managed interventions, and the development of community-based human capital.

Micro-level information management

We have demonstrated that micro-level information systems greatly improve transparency and accountability, reinforce institutional arrangements and that such systems can be established and operated at very low costs, especially when communities contribute to system design, demand and obtain customised reports and summaries relevant to their own priorities and purposes.

Institutional change in government, donors, and non-governmental organisations (NGOs)

Our project experience shows that micro-organisations (MOs) and networks are more flexible and capable of faster, more significant change than most external organisations that

interact with them. We also note that networked micro-organisations are more robust and capable of responding to dynamic situations. When the poor and very poor dominate such networks by their numbers, as is the case with our project, the networks are far more effective guardians of the interests of the poor than any external agency (including NGOs) can ever be. This has important implications for the improvement of village-level governance (*panchayats*), poverty-focused programmes, relief work in times of calamity and distress, and service delivery.

Government agencies, research bodies, bilateral/multilateral (international) agencies and NGOs, need to develop new capacities and ways of working in order to respond meaningfully to opportunities created by the dialectic approach. They need to redefine their roles in development and research, and the way they relate to communities and to one another. Our project experience indicates some ways in which a strategy for such institutional change could develop.

Business models for service delivery

Market-based and government service providers in the organised sector have been slow to respond to opportunities created by the project.

Our project experience has ‘spun off’ and contributed to a number of business models involving actors in the organised as well as unorganised private sector.

THEME 2

Practical ways forward for participatory land and water management in canal-irrigated areas

Introduction

The projects were designed around the ‘on-farm water management’ (OFWM) idiom that was popularised in the 1970s. The OFWM approach was built on the diagnosis that irrigation problems lay ‘below the outlet’ with typical top-end – bottom-end distribution problems leading to inefficiency and inequity in water use. This resulted in the advocacy of water users associations (WUAs) formed amongst farmers served by a distributory.

The aim in Theme 2 was to facilitate the formation of institutions and the development of strategies for sustainable and socially acceptable land and water management through community participation. This required innovation in the following areas:

- The development of participatory processes that would involve wider constituencies in land and water management than under the existing WUAs, and the development of new institutional arrangements
- Development of tools to facilitate/support this participatory process.

Participatory process and institutional arrangements

Involving a wider constituency of stakeholders (SHGs and other interest groups) as well as the formation of outlet management groups (OMGs) supported by tactical/strategic demonstration and communication activities (as an alternative to purely subsidised or incentivised approaches) enabled ideas to be developed. As a result:

- Innovative ideas came forward that led to increased agricultural production and diversification
- Such innovative ideas were more implementable as the newly included groups had higher personal stakes in the outcomes (being generally poorer)
- The process could become self-sustaining because it did not depend on a ‘top-down’ but rather a ‘bottom-up’ process.

OFWM approaches that ignore problems caused by erratic and unpredictable main canal system management can only have limited success. Experience suggests that it is vital to establish linkage and dialogue between water users and canal managers through:

- Developing an institutional mechanism for dialogue between the two
- Need-based technical back-stopping arrangements to achieve the desired output.

The project developed:

- An effective method to construct cadastral maps, using a differential global positioning system (GPS), a hand-held laser range-finder, and a geographic information system (GIS) database to capture directly observable characteristics of plots (using survey forms on Palm hand-held computers that were integrated into the GIS)
- A simple interactive spreadsheet tool for economic analysis of the options for conjunctive use of canal and groundwater
- An interactive decision-support tool based on a water-balance approach and linked with the GIS at the distributary level to illustrate various water management options and their effect on spatial and temporal water availability in the command area.

Feedback to date suggests that these tools have value, not only in awareness and capacity building and in knowledge sharing to support OFWM decisions at the distributary level, but also in providing essential information that can be used to assist main canal management decisions.

The project explored how water balance models could be used as dialogic tools that met the needs emerging from the participatory technology development (PTD) process and dialogue about linking the main canal management and OFWM. The development and testing of these tools formed part of the PTD process itself, and represents an important innovation in the research approach, away from a linear technology development and transfer paradigm.

Technical innovations

Conjunctive water use

Recognising the potential benefits of increased yield in rice and wheat through optimisation of rice transplanting time, a shift in crop establishment has been achieved.

Based on this success key demonstrations and further low-cost interventions were undertaken:

- About 75 farmers raised the bund height around their fields from 7.5–15 to 25–30 cm in order to store and use rainwater;
- Water users installed low-cost wooden gates on the outlets of RPC-V. These gates not only reduced water congestion in the outlet commands but resulted in a 25–30% water saving.

Multiple use of water bodies

Growing fish in previously underutilised ponds and waterlogged areas and rice–fish culture have been very successful. The results have produced an overwhelming response and their benefits are beginning to spread through word-of-mouth. Villagers are enthusiastically taking up these interventions and about 20 farmers/groups are adopting them.

Research approaches

The project provided a learning platform for partners with different perspectives to share and contribute to a common objective. Beyond the project team, partnerships between actors with varying focus and capacity at local level have become key to achieving lasting livelihood improvements.

Effective relationships within the project team required considerable time to develop (much more time than most projects are able or willing to invest). The convergence of approaches and the development of new ideas within the project was a notable achievement of this process. As working relations developed the project team was able to move forward more effectively.

THEME 3

New approaches to participatory technology development

Introduction

Reforms in agricultural extension policy signalled under the Government of India's 10th 5-Year Plan envisage that **'Demand-driven extension mechanisms will be created, by providing farmers with access to linkage mechanisms through which they would be provided all relevant information/data to help them articulate their problems and needs with reference to their production and marketing plans.'** Further, the framework envisages a policy environment that will; **'Promote private extension to operate in roles that complement, supplement, work in partnership and even substitute for public extension.'**

Programmes for the delivery of rural services that can reach the poor and socially disadvantaged whilst not excluding other clients, are needed. This reach must be achieved in situations where typically a single Extension Officer has to serve more than one hundred thousand individuals.

Participatory research where scientists engage directly with beneficiaries have high transaction costs and generally need external funding. Therefore, research by Theme 3 sought to develop and test methods to stimulate technology evaluation, adaptation, and development, that were inclusive of the poor and socially disadvantaged, and could be operated effectively on a development scale.

A new approach to participatory technology development

The approach differs from typical models of PTD in the following ways:

- It is non-deterministic and supports exploration of any livelihood opportunities perceived by an individual
- It is flexible, opportunistic and demand responsive
- Rather than relying on prioritisation and definition of technology development priorities or objectives it stimulates experimentation through provision of broadly targeted information, ideas and support where requested - it uses simple data collection and management systems as tools to identify potential customers
- It is preceded by social and community development activities supported by local volunteers. Initial activities focus on livelihood development, strengthening social and human capital and encouraging savings and loaning activities within SHGs that are completely independent of technology or activity-based technology promotion or awareness raising exercises.

Lessons learnt

This approach to stimulating ‘participatory research’ led to a wide range of innovation and experimentation around the key ideas or technologies that were broadcast.

Focusing on social development, provision of relevant information and the involvement and development of local professionals providing service delivery led to a change in the role of scientists and other technical experts in the projects. Rather than leading or initiating interventions they began to operate as a resource in ‘consultancy mode’ acting in response to an expression of demand from an interested group.

- **Experimentation, technology adoption and suitable modification can be stimulated without scientists being**

required to take a central role and without taking recourse to subsidised intervention.

- **Local professionals/entrepreneurs emerge seeing opportunities for ‘delivery of services to the door’. These services include provision of information, access to agricultural inputs and credit.**
- **Existing service providers become involved in the research and rapidly establish links with farmers they previously ignored as potential customers.**

These findings suggest that the opportunities do exist to lower the costs of participatory technology development.

In addition to the findings with relation to the process, such shifts imply a major change in how the impacts of such programmes are judged.

Conventional agricultural research goals and objectives are set in terms of outputs. As with many development and research projects these are typically judged and monitored by their disbursement of inputs or activities (value of credit disbursed, value of loans, meetings held) or output (areas under a particular crop, yield, numbers of pieces of equipment distributed, technologies developed, linkages made, etc.). These measures presume that beneficial livelihood outcomes will follow and therefore this is rarely explored (except with macro-economic data).

PROCESS OF THE WORKSHOP

This workshop engaged a policy-influential audience in the examination of the processes used by the projects, both to validate the lessons learned and to consider their implications for future policy or further research. The workshop also wanted to engage with people who might draw upon the projects' findings to further their own work.

The workshop sought to address the following key questions:

- How can government agencies, international donors, markets, banks, the scientific establishments, and NGOs redefine their roles and relationships with poor people in order to bring about institutional changes that will deliver pro-poor, livelihood-focused research and subsequent development impact?
- Given the dependence of the national economy and the agricultural sector on water availability, how can we achieve effective implementation of participatory irrigation management (PIM) through the linkage between on-farm and main canal water management?
- How can rural service delivery be made most relevant to the needs of the poor and socially disadvantaged?

Participants were not offered travel, per diem and accommodation expenses to attend the workshop (except where protocol dictated otherwise). Rather, prior to issuing invitations the project team sought to create demand for participation in the workshop.

The projects have produced considerable documentaton. Given the specific aim of this workshop, distilled Policy Briefs for each Theme were prepared. They were targeted at different policy audiences, to present project findings in a way that indicated the lessons learned and implications for future policy or further research. Supporting Theme Reports and posters highlighted the outcomes or products of collaborative work, and provided details and background.

On the first day presentations were made to introduce each Theme and participants were invited to review the posters and Policy Briefs that would prepare them for working groups that deliberated each Theme.

These groups reviewed the Themes' work in the light of participants' shared experiences. The discussions sought to identify the strengths or weaknesses of the research presented and to identify issues where further clarifications were needed.

From each working group the rapporteur, facilitator and an observer then formed a group to synthesise the outcomes of the working groups and develop a matrix that illustrated frequently asked questions and issues across the themes.

Many of the frequently asked questions were answered by an additional presentation on the process of the dialectic approach and the lessons learned from its implementation.

The participants then split into three different working groups (that were not theme-bound) to discuss four further issues and questions.

Inaugural session

Welcome address – Alok Sikka

Alok Sikka welcomed all the participants from India and abroad. He expressed his gratitude to Dr J S Samra, Deputy Director General, Natural Resources Management, ICAR who has been an inspiration to the project team, Dr Margaret Quin for her advice and guidance and Dr S R Singh, the erstwhile Director of the IRCER who framed the project proposal and took it forward.

Introduction to the Project – John Gaunt

The history of these two projects goes back to the early 1990s when DFID NRSP supported two workshops hosted by ICAR,

on water issues (held in Patna) and soil fertility issues in high potential, irrigated systems (held in Bhopal). These workshops led to two research proposals. These workshops recognised the gap between actual and potential productivity in high-potential systems and identified opportunities to improve agricultural productivity through conjunctive water use and improved soil fertility management. It was recognised that knowledge and technologies existed which could achieve a higher level of production than was currently being achieved in various parts of the Indo-Gangetic plain.

Subsequent to these workshops a change in DFID policy gave a very clear emphasis that research should focus on strategies that would lead to the elimination of poverty. This led to a focus on people's livelihoods and to a recognition that the gap in production could be due to non technical production factors, such as failures in the delivery of rural services or the ability of these individuals to practice agriculture.

At the Inception Workshop Dr Samra said the projects had to be innovative, find new ways of research and thinking and new ways of operating as a team.

He said that IWMI should be applauded for the way they handed over leadership of the project to IRCER. That symbolises the positive experience of this project.

Special address – Margaret Quin

Often the early stages of a project are about enthusiasm and getting busy and the latter are: Search for the Guilty; Punishment of the Innocent and Glorification of the Uninvolved. However these two projects are exceptions. They have come a long way, through a long inception period and several ups and downs. There has been a learning curve and some distinctly divergent views that have led to some very interesting insights on how one can enable change that is pro-poor and can also contribute to general economic growth.

As with all research, a lot is new, but gaps are evident and people are signaling what else there is to do. Prof Hugh Bunting said, “Research should add to the knowledge base for development,” but we are running out of time. We desperately need to solve some of the deep-rooted development problems, one of which most assuredly is that of acute poverty. Therefore we cannot elegantly add to the knowledge base for development. We have to show the way in which research can positively, practically and with near immediacy contribute into development by taking on new agendas and breaking out of previous formal concepts where research should be positioned. In their own small way these two projects have taken on that challenge.

Inaugural address – J S Samra

ICAR has had a long-lasting relationship with DFID with a shared interest in the participatory process in watershed management. Both countries are interested in natural resource management but today there has been a global paradigm shift in that both bio-physical and socio-economic issues must be integrated. This shift is very important to India because our natural resources are both privately and publicly owned and the relationship of society with natural resources is very intimate. Both countries are also interested in poverty alleviation.

The mobilisation of social capital is very important and with more commercialisation and a market-oriented economy the social capital has to be used in NRM, but through participatory processes and partnerships so that the process changes with the market forces and is demand-driven. All NRM programmes globally are changing; we need to keep in tune.

In 1974 ICAR introduced the concept of participation and empowerment of the local communities in watershed programmes that had hitherto followed a government-driven,

top-down approach. The participation was around sharing of water and other natural resources.

All the elements of participation – transparency, contribution by beneficiaries, creation of alternative institutions, policy for sustainability of the project – were defined and actually implemented by ICAR. This led to greater involvement of the people and empowerment of the community, specially the weaker sections. ICAR also worked on sensitising and training government officials.

Now, under the Hariyali guidelines, *panchayats* have been included so that the process can be decentralised. The government is also forging partnerships with NGOs and private companies.

These projects are a continuation of the path we have set out over the past few years which have been refined and distilled.

One of the problems always faced has been transaction costs. NGOs claim a relative advantage over government because their transaction costs are lower. This could be because of inefficiency or because the product is of higher quality. These issues should be examined because healthy competition between the government and the NGO sector is good. The project should look at convergence between government and NGOs or private organisations that have low transaction costs.

The outcomes of these project should be different from others. They are small projects and we cannot recommend any drastic policy changes until they have been replicated. They are also very typical for the region so we need to be cautious when drawing conclusions.

Water has become a larger issue internationally. In India legislation is being brought in on participatory irrigation management. To make it more effective, engineers and other government officials involved must internalise the participatory process.

Vote of thanks – M S Ashok

Ashok thanked the communities who have shown us the way, DFID NRSP and ICAR for their support of the project, and all the participants for joining the workshop. He noted that most of the participants had funded their own participation. Many who could not come are off-line participants.

He said it is difficult to apportion credit at the individual level, but singled out Sunil Choudhury for his unfailing commitment and insights; Alok Sikka who provided a turning point to the project and John Gaunt for his vision and unfailing patience.

MEASURES OF ENGAGEMENT

Of the 71 workshop participants only 6 external participants were funded by the project (in response to a request, and if it was judged they could make a significant contribution). 40 participants paid all their own expenses, and of these 16 came from outside Delhi, thus funding their own travel and accommodation costs. This signifies the high level of interest in the meeting and its content.

Almost all the participants stayed for the full duration of the workshop and actively engaged with the discussions and outcomes. The attendance and active involvement on Day 2 of the workshop by Dr A S Dhingra, Commissioner, Ministry of Water Resources, Command Area Development (CAD), Government of India and Dr J S Samra, Deputy Director, NRM, ICAR indicate the level of engagement with the findings of the project.

Beyond the actual participants, a consequence of the approach described was that in addition to 71 actual participants the workshop generated a wider constituency of 'virtual participants' who engaged with the project and its findings and requested both copies of the proceedings and to be involved in further follow up activities.

ISSUES, QUESTIONS AND COMMENTARIES

The frequently asked questions and issues across the Themes which came out of the deliberations of the working groups were synthesised initially as a matrix – and then answered through through both working group discussions and a presentation by Sunil Chaudhary. The issues, question and responses are summarised below.

Sustainability

How are micro-organisations sustainable?

The Sustainable Livelihoods Promoting Society (SLPS) and Centre for Promoting Sustainable Livelihoods (CPSL) are sustainable to some extent and aspire to be self-funding through contributions from clients, commissions on sale of inputs and services (including accounting) to clients (members and others) and start-up capital funds from micro-finance institutions (banks, NGOs) seeking to extend credit to clients.

What are the sustainable PTD institutions?

What are the sustainable water management institutions?

In order to establish sustainable water management institutions the SLPS and CPSL need to develop and cement linkages at local level with Outlet Management Committees (OMCs), WUAs and *panchayats*, and with canal and water management institutions at higher levels (Irrigation Projects and State Irrigation and Water Resources Ministries).

Scalability

How long does it take to establish SHGs and MOs?

Where will the SHG/MO process work?

The process is designed and has been implemented in high potential–low productivity areas where productivity gains are readily achievable and reliable and can fund the institutional process.

Can land and water management institutions and technologies be scaled up?

Can the PTD processes be scaled up?

In principle, the self-extending SLPS/CPSL process can progress as volunteers come forward. However, the natural or organic process of extension does not necessarily fit the hydraulic units within which land and water management must take place. In order to extend SLPS to neighbouring micro-catchments, watersheds and command areas a process of mobilisation by CPSL is required that needs seed or start-up capital. It is possible that this can occur in the long-run through retained revenues from client funding and commissions on service and input delivery, but in order to establish working examples, external funding especially in the initial stages may be required (as well as cooperation from canal management authorities).

Access to information

How do the projects provide access to information?

Information is provided through scientist to volunteer (SLPS/CPSL) communication; scientist to SHG member communication; field demonstrations; SLPS/CPSL information-seeking activities (from market and other sources); and a village level network among SHG members and volunteers through which information is disseminated and discussed.

What learning takes place?

The dialogic process inevitably involves the emergence of information and promotes understanding. This is well

explained in the Freirian concept of conscientisation and works for both clients and scientists. The full extent of learning in these processes will only emerge over time.

What types of information are available through the project institutions?

Information on agricultural (inputs and their use; irrigation), livestock, poultry, and fisheries technologies.

What are the costs to the users to access information?

Time must be spent on group meetings and management. These times are arranged at the convenience of SHG members since volunteers are members of the same communities and have shared interests and commitments to the SHG process. Inputs and accounting services are roughly 10% more costly than local prices, but quality is assured through the CPSL supervision.

What are the costs to information providers of participation in project institutions?

SLPS and CPSL interface with outside organisations which must provide staff time to negotiate relationships and provide information etc. For research institutions scientist time is critically scarce but over the longer term of the project the evolving relationships between ICAR scientists and CPSL/SLPS communication has become more efficient.

Reaching the poor

Who are the poor who have been reached?

More than 2,700 individuals constituting nearly half the people identified as poor by the dialectic approach to communities within RPC-V have joined SHGs.

How are the poor benefited?

Members of SHGs are able to draw on loans from group funds starting with small consumption loans, but as confidence and capacity accumulate, to start taking loans for productive and investment purposes including agriculture and other natural resource based activities. Further information can be obtained from the reports under Theme 1.

Who is excluded from the SLPS/CPSL process?

Within the communities contacted there are no explicit exclusions, but there are people who choose not to form or join groups because it is not in their interests. The main reason for not participating seems to be that the opportunity cost of time for non-joiners is higher than for people who join. Women as well as men form groups and become members of SLPS.

Are the benefits to the poor sustainable?

As the activities of the groups under the SLPS are linked to their self-identified interests and are not imposed by project priorities they are likely to be further developed and sustained. The pattern of taking frequent small loans from group funds for consumption purposes (including emergencies and health care) suggests a strong sense of ownership of group funds.

In what other ways do the poor need support?

Groups need to establish strong links with financial institutions so that as credit-worthiness develops, access to funds for larger-scale and more remunerative activities can be obtained. Government services such as roads and electricity, and public health and education measures, as well as security of property etc. are required to enhance and sustain these processes. On-going access to new information through the SLPS and CPSL institutions will facilitate sustainability and further growth of the SHG processes.

Gender

How and in what ways are women involved in project institutions?

A gender-aware approach was adopted from the start and women are nearly equally represented in micro-organisations and financial transactions with men. There are women's groups and men's groups and not mixed groups except in the case of groups of volunteers.

Environment

What are the environmental impacts of project technologies and institutions?

The better management of natural resources in the project area does not have immediate environmental impacts. However, if significant economising of water flows in canals is achieved through the use of outlet gates and restricted water flows, downstream water flows will be affected with positive and negative implications. It is envisaged that by the time significant downstream externalities appear, the SLPS will be well linked to the WUA and these externalities should be negotiated in public through representatives in these organisations.

Impact

What impact assessments have been conducted?

Project documents and databases provide evidence of activities and outcomes, but it is too soon to assess impact in its broader sense. Impacts will depend on whether ongoing processes and activities are sustained, whether further innovation takes place and so on. In the longer run the

projects seek to have initiated processes whose impacts will be evident in official statistics (of agricultural production, health and well being) for geographical areas where productivity has been raised and natural resources better managed.

Is this approach sustainable and how can trends in livelihoods and experiences be followed after the formal involvement of the project ends?

Evidence to date suggests that the dialectic approach is sustainable. The early project withdrawal of support to groups and volunteers and an explicitly addressing the short term nature of the interaction appears to have avoided a dependency on project resources. This however creates challenges to follow trends in livelihoods. This needs to be tracked as a separate activity. The project was not required to do this.

What is an appropriate framework for the analysis of costs?

Costs have been identified as a key determinant of scalability; they can be determined from a number of perspectives:

- Implementing a PTD project
- Facilitating SHG formation
- Delivery of microfinance
- Allocation within an organisation

The shared consensus of the second-round working groups lead into a final session where the ways forward were debated in the light of the three original questions.

THE KEY QUESTIONS

The workshop sought to address the following key questions:

Institutions

How can government agencies, international donors, markets, banks, the scientific establishments, and NGOs redefine their roles and relationships with poor people in order to bring about institutional changes that will deliver pro-poor, livelihood-focused research and subsequent development impact?

The workshop addressed both issues of sustainability and scalability of the dialectic approach developed by the project. It was recognised that the dialectic process which avoids taking on staff as fixed costs offers a way to achieve significantly lower costs for implementation when compared to other models. Further the non-incentivised approach appears to have been effective at reaching the poor. However, questions remain as to whether provision of grants or other mechanisms could be introduced to enable the ultra-poor to access credit.

It was recognised that in addressing sustainability it is important to understand the assets that individuals draw upon and the policies, institutions and processes that enable an individual to pursue livelihood outcomes.

The workshop participants identified the development of networks and partnerships as one of the keys to strengthening institutions and relationships. These occur in a number of ways. *Ad-hoc* and flexible networks (manifest through formation of interest groups, formal and informal interactions) are a natural product of the dialectic process that convene and disperse as required to meet felt needs.

These experiences contrast sharply with an alternative model which anticipates a more structured approach to the formation of community-based organisations and networks. Experience

suggests that these *ad-hoc* and flexible networks can be robust over time. In the case of land and water management the formal institutions of the WUAs have developed productive relationships with the informal networks and groups.

An implication of this finding, if validated, is that by supporting the development of micro-organisations and networks both the government and non-governmental sectors could achieve efficiencies in their activities intended to reach the poor and indeed strengthen the performance of existing institutions.

Research partnerships

It was recognised that the projects have explored and developed innovative ways to develop partnerships. This was manifest, not only in the attitudinal changes within the project team regarding the promotion of technologies, but also in its successful experience at working in effective interdisciplinary partnerships.

The team was encouraged to document and analyse its learning on how to form effective interdisciplinary partnerships.

Further, the workshop identified the opportunity that exists to draw out lessons on participatory technology development, and wider experiences in rural service delivery across projects and programmes. Beyond the question of how this learning would feed into the reservoir of information available to all participants was the recognition of the need for a platform, at an appropriate level, and with a sufficient mandate from government and other sponsoring organisations for an open and frank exchange and analysis of experience.

PIM and CAD

Given the dependence of the national economy and the agricultural sector on water availability, how can we achieve effective implementation of PIM through the linkage between on-farm and main canal water management?

Two questions were posed to the participants:

What are the contributions of the project findings to PIM and what is the way forward?

What factors will lead to the further development of groundwater and its conjunctive use?

Several questions were raised and discussed:

What are the implications of the projects for PIM and CAD?

Participation in water management institutions by all local stakeholders in land and water management can be achieved through organisations working among the poor to develop information and service delivery institutions that can reduce the transaction costs of water management below the outlet. The process of communication with canal and water resources managers can be facilitated through the use of simple spreadsheet and GIS-based tools that model management regimes and facilitate participatory discussions among less-expert stakeholders whose participation in water management is essential to the efficacy of CAD, PIM and irrigation management transfer.

Are OMGs effective, sustainable and scalable institutional innovations?

It is too early to tell whether OMGs are the missing link in irrigation management. Indications are that a stronger basis of cooperation is required to effectively manage water below the outlet and it is suggested that the SLPS institution may extend to provide water management services because they have interests and costs that are consonant with the requirements in

ways that are not characteristic of typical WUA members who have higher opportunity costs.

Why is groundwater irrigation and conjunctive use relatively limited in the project area, and how is it envisaged that these practices will develop?

Probabilistic analysis of the frequency of canal water shortages in the upper reaches, together with the unreliability and uncontrollability of canal water supplies make returns from the relatively heavy capital investment in groundwater pumping in the upper and middle reaches relatively unremunerative. A number of subtle technical and institutional innovations seem necessary to induce a willingness to invest in supplementary groundwater irrigation. The most important single factor is likely to be ensuring that harvest prices of rice and wheat are not depressed by harvest gluts when poor farmers and sharecroppers are forced to sell in order to repay production credit. This could be achieved by the State moving harvest prices support achieved through strategic grain reserve purchases from the advanced agricultural regions for example, the western Indo Gangetic plain to support poorer farmers in the Eastern region.

Can water-logged lands, roadside pits, and so on be used for aquaculture to the benefit of the poor?

The demonstration of aquaculture has attracted considerable interest and parts of the technology have been adopted in neighbouring regions. Further information can be obtained from ICAR.

Is conversion of crop land to ponds of aquaculture in the interests of the poor?

At the moment we are not in a position to evaluate the relative merits of alternative uses of crop land in crop production or aquaculture. This is the subject of on-going research and further information can be obtained from ICAR. The best potential for aquaculture seems to lie in roadside and other under utilised seasonally flooded land.

The group also raised the following issues:

- The base of the WUAs has to be widened to include other stakeholders at the local level. How can this be done?
- How can the present composition of the WUAs be amended? Should they be mandated by government? *or* given a broad structure for their composition which could, for example, include representatives of the micro-organisations such as SHGs, other interest/focus groups or panchayati raj institutions (PRIs)? Should SHGs or other such groups develop some interface with the WUAs?
- Flexibility is very important. No participatory process can have only one universal model. The project has successfully demonstrated participatory processes and approaches in the RPC-V command area. They may not be applicable in other areas, but do provide guiding principles, as demonstrated in the project.
- A blend of top-down and bottom-up approaches may be needed. The project should be driven bottom-up but facilitated top-down. Civil societies could be a source of social pressure.
- For effective OFWM activities, the outlet being the hydraulic unit, the Outlet User Group (OUG) should be preferred over the village-level unit/committee as it will have more of a voice in the WUA.
- Linkages are required between the supply and demand groups, between WUAs and the main canal systems. This is not easy as there are many players. The institutional arrangement for such linkages could be provided not just through government but also through private partnerships, private service providers or through a consortium approach.
- The process of sensitisation through workshops and consultative meetings is very important, in order to create attitudinal change at all levels for effective planning and implementation of PIM.

Rural service delivery

How can rural service delivery be made most relevant to the needs of the poor and socially disadvantaged?

All the discussion groups recognised that there is a demand for information as a component of rural service delivery and that there are significant transaction costs in accessing existing sources of inputs and information (from purchase of inputs – credit).

The following models are currently being proposed and tried.

- The ‘one stop shop’ model as being initiated in a number of venues, for instance through the Support to Regional Aquatic Resources Management Initiative (STREAM) programme and under the National Agricultural Technology Programme (NATP). These models aim to reduce the transaction costs to farmers by bringing services under one roof and providing linkages to other actors (finance, training, scientists etc.). These models are as yet not operating on a commercial basis in that they are being supported either by projects or governmental organisations. However, in some instances the plans are that these organisations will be initiated by capital grants and loans from financial and other institutions, and paid for by user charges and commissions on inputs and services.
- The private sector responsive model. Projects R7830 and R7839 have demonstrated a model where individual service providers have emerged to facilitate access to information, inputs and linkages to other services, supported as necessary by research organisations.
- The full service product. This model was described including, for instance, a full service product where farmers were paying Rs.500 per season for management advice for the rice crop.

A major limitation to the delivery of credit services is the difficulty faced by both the private and public sector financial institutions in assessing the credit-worthiness of poorer clients. These clients, whilst often representing good potential customers, with respect to their ability to utilise loans and

make repayments, often do not meet formal requirements to be eligible for loans.

There is evidence that the low costs of the dialectic model presented to facilitate the formation of micro-organisations, coupled with analysis of community databases enables micro-finance organisations to both reach this customer base and analyse their potential as customers. Likewise, micro-organisations have used the database to promote their potential as customers to finance organisations. The database is marketable because it:

1. Provides evidence of credit-worthiness of non-conventional customers for credit, and
2. Information for marketing and targeting by service and input providers.

Considering provision of services further, the key implications of the discussions were that:

1. If the costs of providing these services to the vast client base for rural services are borne by research organisations this will limit their scalability and scope. The prospect of commercial models for delivery of services offer a route for scaling up.
2. Rural services can and are being delivered under commercial models. These models can go a long way towards meeting the demand for information.
3. Both commercially driven and public sector/externally-funded models for provision of access to information can draw upon the services of research organisations as a source of information, products and specialised training.
4. The positioning of research organisations as partners in commercial service delivery, offers the opportunity to develop products that better meet the needs of their clients.

OUTCOMES

As a result of the strategy for engagement prior to the workshop, active participation, sharing ideas, and rigorous discussions during the meeting in both formal and informal sessions the project will move forward in various uptake and promotion goals.

1. The frequently asked questions that helped to steer the direction of the workshop discussion are now feeding directly into the project research process.
2. There is direct engagement with stakeholders (both participants and virtual participants) in several ways:
 - Importantly with the Ministry of Water Resources through the continuing dialogue on ways forward for PIM and the involvement of a wider base of stakeholders
 - Donors and donor-sponsored programmes, who evinced keen interest to engage with the dialectic approach and with many other aspects of the workshop
 - State governments in India
 - Several NGOs
 - Academic (non-agricultural) institutions
 - Health services and insurance opportunities.

These are now sufficiently engaged to be prepared to proceed on the basis of direct discussions.

This represents a considerable move forward that bodes well for the long-term promulgation and expansion of the processes and approaches developed by the project. It also indicates that the uptake of project products will make a positive contribution to improving rural livelihoods, particularly those of the poor.

The CD accompanying this booklet contains:

- The workshop programme
 - The list of participants
 - The composition of the discussion groups
 - A photo gallery
 - An overview of DFID projects R7830 and R7839
 - Theme 1, 2 and 3:
Policy brief
Report
Presentation
Posters
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