

NATURAL RESOURCES SYSTEMS PROGRAMME
Project R 8083
Strengthened Rural Services for Improved Livelihoods in Bangladesh

FINAL TECHNICAL REPORT¹

Annex A

Knowledge, information, and livelihood opportunities
for poor rural people in Bangladesh

by

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Preface

This Annex presents a largely narrative and chronological account of the project, aiming to complement that in the 'front-end' FTR which is based on the logframe. It is in turn supported by annexes B,C, and D which contain detailed (but hopefully not excessively detailed) accounts of field activities. Annexes E – H (type 3 annexes) contain the ICM database and two 'generations' of communication products: a first generation which has already been used and a second generation which it is intended to use in post-FTR uptake promotion activities.

Authorship of the report as a whole, including the Annexes, has been shared widely through the UK-based and Bangladesh-based project teams and has included also some of the project partners. However a number of other people have made important contributions to the project in support and collaborative roles, and it is necessary to acknowledge these here.

Dr. John Gaunt (of IACR, Rothamsted at the beginning of the project, subsequently of GY Associates) was a member of the project team and served as a sounding board throughout, as well as making a productive field visit in February 2005 which included the end-of-project meetings with partner organisations and other stakeholders in the regions. Ian Mattinson of Rothamsted Research (also a project team member) played a major role in providing support and assisting in construction of the ICM database in MS Access.

In Bangladesh much support was given to the project (particularly in facilitating access to relevant people and organisations) by staff of the PETRRA Project, most notably Dr. Noel Magor, Project Manager and Ahmad Salahuddin, Project Officer.

Project R8083's research collaborator was the PRA Promoters' Society Bangladesh (PPS-BD), the Co-ordinator of which, Ms Jebunnessa Lily, gave us untiring support in that role (entirely on a voluntary basis as far as her own time was concerned).

The project worked closely with as many as five partner organisations across the two components of the project, and found in all of them a willingness to engage with the project in exploring innovations to their practice as facilitators of pro-poor development. It is important to mention in particular the encouragement and support which were offered by: Andrew Gartside (Change Management Adviser, ASIRP), Sanowar Hossain Sarkar (Director, FoRAM), Ms Sumona Rani Das (who from mid-2003 took over management of FoRAM as co-ordinator), Professor Monirul Islam and Md Abdus Sobhan (Director and Associate Director of the Bangladesh Agricultural University Extension Centre (BAU-EC), Dr. Syed Samsuzzaman (Director, Livelihoods, RDRS Rangpur), MG Neogi (Agriculture Coordinator, RDRS), Mozammel Haque (Agriculture Adviser, RDRS), Dr. Zahin Ahmed (Executive Director FIVDB, Sylhet), Samik Shahid Jahan (Associate Director, FIVDB) and Zahid Hossain (Coordinator, Livelihoods Enhancement Programme, FIVDB). Qazi Khaze Alam (Director of Natural Resources, Proshika) and Dr. Zahid Hossain (Agriculture Co-ordinator) played an important role at an early stage in providing the link to the earlier project R7600, out of which R8083 largely grew. Dr. Zahid's leaving Proshika in 2002, and the difficulties which the organisation faced vis-à-vis the new government which took power in Bangladesh in early 2002, were unfortunate in that they weakened a potentially productive link of the project with Proshika.

The role of others in the project is acknowledged in the chart in section 4.2 of this Annex which shows the partner organisations' KIS teams in phase 2 of the project, and in the list of participants in the Database workshop in the Appendix to Annex B.3. Apologies are offered here to any who have been omitted.

Last – and perhaps most importantly of all – we must thank the farmers and service providers in the working areas of our two partner organisations who took part in the KIS studies in these two areas 2003, and in the subsequent exploration of information-based interventions which formed the final phase of the project. Some of their names and their voices – and some of the outcomes of their involvement with the project – are recorded in Annex D.2 and in the project video.

Abbreviations and acronyms

AKIS / KIS	Agricultural knowledge and information system / Knowledge and information system
APC	Area Project Co-ordinator (Proshika)
ASIRP	Agricultural Services Innovation and Reform Project (within DAE)
BAU	Bangladesh Agricultural University
BAU-EC	Bangladesh Agricultural University Extension Centre
CIMMYT	International Maize and Wheat Improvement Centre
CLC	Community learning circle (FIVDB)
DAE	Department of Agricultural Extension
DF	District Facilitator (ASIRP)
DFID	Department for International Development
FFS	Farmer Field School
FIVDB	Friends in Village Development Bangladesh
FoRAM	Forum for Regenerative Agriculture Movement
FoSHOL	Food Security for Sustainable Livelihoods (EU-sponsored project)
FTR	Final technical report
HEL	Higher Education Link (Programme)
IAC-KIM	International Agricultural Centre - Knowledge & Information Management Wageningen.
IACR	Institute of Arable Crops Research, Rothamsted (now Rothamsted Research)
IEA	Integrated Extension Approach
ICM	Integrated crop management
INTERSARD	Information Sharing for Sustainable Agriculture and Rural Development
IRRI	International Rice Research Institute
MS	Microsoft
MTR	Mid-term review
NGO	Non-government organisation
PDA	Programme Development Activity
PETTRA	Poverty Elimination through Rice Research Assistance (DFID-sponsored project)
PLA/PRA	Participatory learning and action / Participatory rural appraisal
PO	Partner organisation
PPS-BD	PRS Promoters' Society, Bangladesh
PRISM	Project and Research Information System Module
RAAKS	Rapid Appraisal of Agricultural Knowledge System
RDRS	Rangpur-Dinajpur Rural Service
RWC	Rice-Wheat Consortium for the Indo-Gangetic Plain
SHABGE	Project implemented by CARE Bangladesh, DFID-funded [lit. Bangla 'vegetable(s)']
UAECC	Upazila Agricultural Extension Co-ordinating Committee
Union	Group of villages (the smallest unit of local government/administration)
Union Parishad (UP)	Union Council (elected)
Upazila	Sub-district (formerly Thana)
USAID	United States Agency for International Development
WISARD	Web-based Information Services for Agricultural Research and Development

1 Background to the project

1.1 Origins of the project

The project has its origins in NRSP Project R7600 (An Assessment of Strategies for Integrated Crop Management in Bangladesh) which identified the need for a decision-support system capable of strengthening farmers' access to information on ICM-related technologies.

As part of this project an inventory of ICM and ICM-related technologies was drawn up, initially in MS Excel but subsequently developed into a searchable database in MS Access. A NRSP programme development activity (PDA) was initiated in November 2001 to assess the potential of the ICM database as an extension support tool through monitoring its use by a number of intermediary organisations in Bangladesh, and through facilitating exchange of experiences between these organisations.

1.2 Pilot test of a prototype database, and development of an AKIS-focus

An inception visit for this PDA to Bangladesh in November 2001 involved discussions with several rural service providers (as potential partners for carrying out a field-trial of the database) as well as with staff of the DFID/IRRI PETRRA Project (Poverty elimination through rice-Research Assistance) which had been an important collaborator in R7600. Some of these discussions broadened from consideration of the database to touch on (a) the wider rural knowledge and information system into which the database was about to be introduced, and (b) the effectiveness of knowledge-based development interventions in a situation such as that of Bangladesh in which structural and institutional inequalities are powerful in hindering the access of poor people to effective rural services. A discussion document (John Gaunt / John Best, November 2001) reviewed these issues and sought to identify opportunities that might exist beyond project R7600 and the ICM database PDA to address Output 2 of the NRSP High Potential logframe ('efficient systems for the provision of rural services to the poor developed and promoted'). It put forward two objectives to which research building on R7600 and the ICM database could contribute:

1. To improve the efficiency of uptake of knowledge-based interventions, bringing knowledge resources closer to the rural poor; and understanding issues related to transferability of understanding, and information, from one situation to another.
2. To raise awareness by poor rural people and agencies supporting their development of possible ways of addressing key structural and institutional factors that lead to inefficient delivery of rural services.

Following discussions with the NRSP Programme Manager a full proposal was submitted (as a non-competitive bid) for a project aimed at these issues. This project would explore how improved access to information might enable poor people in Bangladesh to make choices which could, in turn, give them better access to rural services. It was envisaged that the project would be implemented in two stages, of about 12 months each:

1. Recording and analysis of knowledge and information systems in three separate locations, in which the project would work closely with national partner organisations engaged in rural service provision.
2. An intervention based on this analysis, in which the partner organisations strengthen their information provision activities, and monitor the impact of this on their clients' ability to access a range of services, both those provided by the partner organisations and those provided by other agencies.

It was envisaged that the project would also make a contribution to the methodology of investigating knowledge and information systems (KIS), particularly in aggregating micro- data collected at household and village level.

1.3 Project collaborators, partners and time-line

The proposal subsumed the existing PDA for exploring ‘near-farm’ use of the ICM database, so that the proposed project consisted of two parallel components: ‘database’ and ‘information strategy’. The database component was to follow the original PDA proposal and time scale (i.e. November 2001-February 2003), while the information strategy component would run up to December 2004.

The project’s *research collaborator* in Bangladesh (for both components) has been the PRA Promoters’ Society Bangladesh (PPS-BD). The project engaged with different sets of *partners* in the two components which might seem to imply (not without justification) a lack of coherence between the components. However the collaborations were all productive, and engaging with so many organisations is not seen, with hindsight, as having hindered the project. Rather, it has contributed to developing the ‘constituency’ which the project can usefully engage with in uptake promotion (see section 5 below). The research collaborators and partners of the project are noted below.

Summary of partner organisations

Database component		Information strategy component	
Location	Organisation	Location	Organisation
Dhaka (also 4 out of 5 Pilot Districts for the Integrated Extension Approach)	Agricultural Services Innovation and Support Project* (ASIRP) (*within DAE)	Rangpur	Rangpur-Dinajpur Rural Service (RDRS)
Mymensingh	Bangladesh Agricultural University Extension Centre (BAU-EC)	Sylhet	Friends in Village Development Bangladesh (FIVDB)
Dhaka (also Barisal, Thakurgaon and Sylhet)	Forum for Regenerative Agriculture Movement (FoRAM)		

(other organisations with which the project engaged in early stages but which did not become partners are mentioned in sections 2.2 and 2.3 below)

The collaboration of the project with PETRRA was informal but nonetheless very significant. The synergies between R7600 and PETRRA’s work had been strong and important links were recognised between PETRRA’s outputs and those of R8083. Since dissemination and exchange of knowledge and information exchange was not addressed directly by any PETRRA sub-projects (i.e. locally-commissioned research activities), then it was agreed R8083 would add value to PETRRA’s work. It was further agreed with PETRRA (at meetings in Dhaka in February-April 2002) that the fieldwork of the information strategy component of R8083 should take place in the PETRRA focal areas and that PETRRA offered an important access route to rural development agencies in the focal areas. Thus the partners of R8083 would also be PETRRA partners (i.e. implementing PETRRA ‘sub-projects’); however it was recognised that to attempt to link R8083 activities directly to PETRRA sub-projects might well be counter-productive (leading very probably to tensions of timing/scheduling).

In the event, the information strategy component of R8083 was implemented in only two of the three PETRRA focal areas: the North-west and the North-east, not the South-west. The project mid-term review in July 2003 concluded that to implement the KIS study in three (widely-spaced) locations would have stretched the project’s resources, and that to allocate extra funding would not be cost effective.

A time-line of the project is below. Reviewing this at the end of project in conjunction with the project memorandum (the RD1), the following observations are offered:

1. The period of the database component was extremely short; it allowed less than a year for partners to familiarise themselves with the database as users, much less take 'ownership' of it.
2. The time-gap between initial exploration of the field methodologies for the information strategy component and the mounting of a full field study was rather long (May 02 to November 02); the reasons for this were largely logistic, but it meant that the field study was well-designed and well-informed.
3. The time-gap between the end of the investigative phase and the initiation of the intervention phase of the Information strategy component was also long. This was largely due to the intervention of the MTR in mid-2003 – both the MTR itself (on which the project team spent much time) but also the requirement, to emerge from the MTR, that a second round KIS study should be carried out in the North-east in order to sharpen the poverty focus of the KIS investigation and of the phase 2 intervention¹.
4. The intervention phase was shorter than had been envisaged in the project proposal, with the result that the KI interventions introduced by the partners in collaboration with the project were facilitated/supported by the project for well under a year in both NW and NE. In turn this has had the following impacts:
 - a. because the organisations themselves had a limited time to take ownership of the interventions (both at field and at management level) – the sustainability of the interventions is less certain than it might have been otherwise; however the activities of the NW partner (RDRS) in carrying forward the learning of the project is very encouraging.
 - b. upscaling and promotion activities which had been planned to take place within the project period have been curtailed by the need to close field activities within the first few weeks of 2005 and prepare a FTR. However plans for a programme of activities of this type to be carried out after the FTR has been accepted are in section 5. It may be suggested that these will be more effective at this later stage, given that the project team would by then have a firmer grasp of the lessons of the project.

¹ The MTR pointed out that the project team was unable to identify accurately the poverty status of the participants in the KIS study in the North-east, for the reason that the groups had been gathered informally (rather than being existing beneficiary groups of the partner NGO). In preparation for the second round KIS study which the MTR proposed, a more rigorous method was devised (and pre-tested in two iterations) for 'positioning' participants in terms of well-being criteria identified locally (see section 3.6 below and Annex C.2).

Time line of project R8083¹

<i>Date</i>	<i>Database component</i>	<i>Information strategy component</i>
2001 Nov	Contract for database PDA. Inception visit to B'desh: collaborating orgs identified	Discussion document (J.Gaunt / J.Best) on the broader knowledge & information context of the ICM database work
Dec		NCB for R8083 developed
2002 Jan	Modifications to database	
Feb	Training of key people in partner orgns: DAE/ASIRP, Dhaka + BAU, Mymensingh INTERSARD meeting, Delhi: collaboration agreed with RWC	Contract for R8083 Liaison with PETRRA & PPS-BD to establish basis for collaboration PETRRA / R8083, and role of PPS-BD
March	Plan for web-based database discussed with IAC-KIM Training of key people in partner orgns: Proshika, Dhaka]	Visits to proposed fieldwork sites (i.e. PETRRA focal areas) by Bangladesh team & selection of partner organisations
Apr	Protocol for web-based database agreed with RWC Training of key PO people: FoRAM, Dhaka	Pilot testing of methodology for exploring KIS at field level.
May	Database Inception report	
June		
July	Training of potential database users in ASIRP Districts:Thakurgaon + Bagerhat Refresher training / software support: BAU]	
Aug		Information Strategy inception report
Sept		
Oct	Training of potential d'base users in ASIRP Districts: Chapai Nawabganj Refresher training: FoRAM & BAU	Work on protocol for KIS field study and sampling (in UK)
Nov		Workshop in RDRS to establish sampling frame, draw sample & pre-test fieldwork protocol; pilot field visits
Dec	FoRAM workshop – Barisal] Training of potential database users in ASIRP Districts: Jamalpur	
2003 Jan	FoRAM workshop – Thakurgaon FoRAM workshop – Sylhet	Briefing to PETRRA NW Forum. Then Fieldwork in NW-RDRS – sample of 32 groups / c 550 beneficiaries.
Feb	National Databsase workshop	Familiarisation visit by JB to FIVDB Sylhet (following PETRRA PME w'shop)
Mar		
2003 Apr		Fieldwork in NE incl. sampling frame, drawing of sample, briefing of FIVDB staff. Briefing to PETRRA NE area Forum at end of fieldwork.
May	MTR meeting UK.	
June		
July		MTR visit to Bangladesh

¹ **Notes:** Shaded cells indicate visits to Bangladesh by UK project team members (i.e. months within which a visit - normally varying between 10 & 20 days - took place).

	Visit to Thakutgaon (JB) to monitor continued use of database.	Discussions began with RDRS to plan phase 2
Aug		Pilot of poverty- focused PLA as proposed by MTR
Sept		Briefed NWFocal Area Forum meeting on KIS findings Draft Communication strategy
Oct		Briefed FIVDB on proposed 2nd round KIS study in NE]
Nov		2nd round field study in NE: 11 groups / c 250 beneficiaries
Dec		Analysis of 2nd round NE field study data NW: phase 2 planning meetings with RDRS
2004 Jan		NW: Planning workshop at Lalmonirhat for RDRS staff +stakeholders NE: Discussions with FIVDB to plan phase 2
Feb		NW: Baseline (i.e. initial interaction with FFS groups & orientation of farmer promoters); phase 2 fieldwork started Service providers workshop Video shooting (1st round)
March	Visit to Thakurgaon to monitor use of database	NE: Planning workshop at Sylhet for FIVDB staff; phase 2 fieldwork started NW: Phase 2 fieldwork continued
2004 Apr		NE: Baseline & orientation of FIVDB staff + service providers NW: first progress review of phase 2
May		Communication plan finalised NE,NW: phase 2 fieldwork continued
June		NE,NW: phase 2 fieldwork continued NW: trouble-shooting visit – recording/reporting Work on communication products
July		NE,NW: phase 2 fieldwork continued NE: mid-term review phase 2 NW: mid-term review phase 2 + exchange visit NE to NW + PETRRA NW Fair
Aug		NE,NW: phase 2 fieldwork continued
Sept		NE,NW: phase 2 fieldwork continued NE: FA Forum meeting + exchange visit NW to NE NW: FA Forum meeting
Oct		NE,NW: phase 2 fieldwork continued
Nov		NE,NW: phase 2 fieldwork continued
Dec		NE,NW: phase 2 fieldwork continued NW Second round video shooting + video editing
2005 Jan	Liaison with RWC Systems Manager (meeting in Dhaka) to determine process for including ICM database in RWC website	NE,NW: phase 2 fieldwork continued NE: Final debriefing workshop with FIVDB & focal area forum Final video editing; work on FTR with PPS-BD
Feb		NE,NW: project support to partners ended; KIS team continues in NW NW: Final debriefing workshop with RDRS & focal area forum In-office uptake promotion meetings (FoSHOL; Action Aid)

2 The ICM database

2.1 Early development of the database

As noted above, the ICM database had its origins in Project R7600 (An assessment of strategies for integrated crop management in Bangladesh) in 2000. This project identified that elements of ICM are undertaken by farmers, researchers and intermediaries (i.e. GOs and NGOs promoting change at farm level), and it further identified the need for a decision-support system which could strengthen farmers' access to information on ICM-related technologies. As part of the project an inventory of ICM and ICM-related technologies was developed, initially to provide the project team with an information resource (and an evidence base) for the feasibility of improving and promoting ICM in Bangladesh. Initially drawn up in *MS Excel*, this inventory consisted of technologies relevant to the Indo-Gangetic Plain gleaned from published and 'grey' literature; these included some which had been validated on-farm in Bangladesh but a larger number which were regarded as promising as a result of field or farmer trials elsewhere in the region.

At the suggestion of the NRSP Programme Manager, the inventory was developed into a searchable database in *MS Access*. This was designed to be compatible with WISARD and INTERDEV, with advice from IAC-KIM, Wageningen.

A prototype version of this database was demonstrated to a number of intermediaries in Bangladesh during March 2001, as the final piece of fieldwork of Project R7600. The FTR of R7600 (in appendix 7) reports on intermediaries' responses to the database. These can be characterised as ranging from 'interested' to 'favourable' as far as the database itself was concerned (as distinct from the concept of ICM). The discussions led to several different suggestions of ways in which intermediary organisations might use the database.

A proposal for a programme development activity involving pilot-testing of the ICM database in Bangladesh was submitted to NRSP in September 2001 and approved in November 2001 (see section 1 above). This PDA proposed to assess the potential of the ICM database as an extension support tool through monitoring its use by a number of intermediary organisations in Bangladesh, and by facilitating exchange of experiences between these organisations. It was also planned that a version of the database would be posted on the web-site of the Rice Wheat Consortium (RWC), New Delhi, and thus be made available to scientists, institutions and agricultural practitioners throughout the region. Subsequently the present project (R8083) was approved by NRSP; and the database testing and development continued as a component of the larger project according to the original proposal and time scale (i.e. November 2001-February 2003).

This section of the report narrates the experience of work with the database between the dates mentioned above, and also recent discussions with RWC, New Delhi which have resulted in the database being posted on the RWC website:

2.2 Identifying partner and target organisations in Bangladesh

The initial inception task was to translate the general interest in the database expressed in March 2001 into an undertaking on the part of intermediary organisations in Bangladesh to engage with the database and explore the scope for using it as an extension support tool.

The project proposal envisaged two intermediary organisations ('partner organisations') in Bangladesh undertaking to adopt and adapt the database with close monitoring and support. Other organisations expressing an interest ('target organisations') would be given copies of the database together with training in its use, and would develop the database with less support. Both 'partner' and 'target' organisations would need to commit resources (principally staff time) to (a) familiarisation with the database, (b) using the database to support extension activities and (c) enriching the database with information drawn from their field activities.

The distinction between 'partner' and 'target' organisation was based on the assessment that it was desirable to make copies of the database available to any organisation showing an interest, but that, given the resources available to the project, close support could not be offered to more than two organisations. It was anticipated that some target organisations might develop the database in innovative ways which close monitoring and support might have led them away from. Others by contrast might well not find the database user-friendly enough to enable them to adopt it without close support. The documented results of either experience would contribute to the project output.

The project collaborator to provide monitoring support to the POs and to facilitate the exchange of experience at the end of the project period was to be the PRA Promoters Society Bangladesh (PPS-BD).

An inception visit by members of the UK project team (John Gaunt, John Best, Ian Mattinson) was made to Bangladesh in November 2001. This had the purposes of: recruiting partner and target organisations, familiarising them with the database, ensuring that they could run the database with the organisation's existing hard-and soft-ware, exploring with them ways in which they might use the database within the organisation, and identifying the training needed to enable this. Discussions were held with:

Proshika (Natural Resources Division)

The Department of Agricultural Extension (Agricultural Services Innovation and Support Project - ASIRP)

FoRAM (the Forum for Regenerative Agriculture) an umbrella organisation of NGOs involved in sustainable agricultural development

CARE Bangladesh

The Bangladesh Agricultural University Mymensingh Extension Centre (BAUEC)

Gonno Unnayan Prochesta (GUP) - a small NGO working in Faridpur District.

Proshika had been a collaborator in project R7600 and thus had been aware of the development of the database from an early stage. The prototype version had been demonstrated to Proshika staff in March 2001, as it had also been to ASIRP staff. The Director of FoRAM had also taken part in evaluating the prototype.

CARE Bangladesh was approached in the expectation that its commitment to a farmer-led extension approach might lead at least to useful discussion. The connection with BAUEC stemmed from the ongoing higher education link (HEL) between the Extension Department at BAU and the International and Rural Development at Reading. The connection with GUP was also via IRDD, Reading.

In general 'buy-in' by these organisations was more enthusiastic than was anticipated. Proshika envisaged that the database could be used as a resource by its Natural Resources Division's recently appointed Area Project Coordinators (APCs – 19 in all). ASIRP saw scope for its use in a similar way by District Facilitators it planned to appoint in early 2002 to support the piloting of separate integrated extension models in 5 separate Districts. CARE had already identified the need for a database to record the experience of farmer field schools in adapting and developing technologies at micro-level, so welcomed the opportunity to explore whether the ICM database could meet this need. The smaller organisations had less clear ideas in an immediate sense of how they could use the database, but in general found it accessible and expressed an interest in its potential.

2.3 Partner organisations' progress with the database in Bangladesh

A visit to Bangladesh in February 2002 (by John Best) aimed to agree plans with partner organisations for their use of the database and for the training and support which the project will

offer. A major challenge, it became clear, was to match the expectations of the partners with the limited resources of the project. Thus while the project logframe provided for the Project's working with two partner organisations in three locations, three partner organisations had come forward with a firm commitment, and offered between 20 and 30 possible locations. Training and development activities carried out between February and December 2002 were as follows.

DAE/ASIRP: A half-day training of four of the five District Facilitators (by Tawheed Noor and John Best) took place at ASIRP on February 8th 2002. To limit the amount of travelling involved, the decision was taken that the database should be used in only 4 of the IEA pilot areas, instead of all 5, as originally proposed by ASIRP¹. Regular visits to DFs by the change management advisers from Dhaka would include monitoring of the database and identifying support needs. The database software would be located in the DFs' office-cum-residences, on new desk-top computers supplied by ASIRP. ASIRP proposed that the first monitoring visit should incorporate a half-day workshop in each location attended by people whom the DFs (during their first 4-6 weeks in post) have identified as potential users of the database. Subsequently one-day training workshops (facilitated by Tawheed Noor of PPS-BD and some attended also by John Best) were held as follows:

Thakurgaon: 2 July 2002

Bagerhat: 15 July 2002

Chapainawabganj: 24 October 2002

Jamalpur: 2 December 2002.

Proshika: Three locations were identified for piloting the database, all in the North-west: Nachole, Raipur and Bogra Sardar Upazilas. The choice of a cluster of locations was made to limit the amount of travelling needed to provide support, and the North-West was chosen because it offers a wide diversity of crops and systems. As with ASIRP, the APCs' line managers were intended to take it as part of their task for the duration of the project to monitor APCs' use of the database. The database software would be located in Proshika Thana offices, using existing desk-top computers². Training of APCs (by Tawheed) took place on March 29th 2002. Following this the first monitoring visit will ensure that the software is running and offer some one-to-one refresher training. However two events in mid-2002 affected Proshika's involvement with the project: first that the main contact in Proshika, Dr. Zahid Hossain, left the organisation; and second that Proshika was preoccupied by a conflict with the new national government after the 2001 elections.

The ASIRP and Proshika training is reported on in Annex B1.

CARE: The organisation took the decision to substantially revise the database (amounting to a re-write) with the objectives of (a) limiting the fields to information for which it has identified a need and (b) making some very simple screens to make the database friendly to users and also to reflect the simple paper forms which will be used to record information for the database at field level. While they accepted that objective (a) could be achieved by adopting the ICM database and simply not using redundant fields, they felt that objective (b) could not be achieved in this way. CARE had the in-house capacity for this (i.e. a programmer in the M&E unit) and their move was supported by the project in that adaptation of the database was foreseen during planning of the project. In the event, the programmer had some difficulty in reconciling briefs she was receiving from different stakeholders within the organisation and translating these into coherent structure (At one point she complimented us on the structure of the ICM database). In the event (in March or April 2002) the programmer's time was withdrawn from the project within

¹ Thakurgaon, Jamalpur, Bagherat and Nawabganj (not Rangamati, which is in the Hill Tracts).

² These were without CD drives: a version of the database on diskettes was provided to PROSHIKA but was never successfully loaded. The project then provided an external CD drive which could be taken to the database locations and the software loaded from a CD.

which the database was being developed (the SHABGE/DFID project) at the same time as some members of our contact group were transferred; thus the continuity of our contact with CARE was lost.

GUP: The project's interest in GUP lay in the fact that it is an organisation which appeared to be able to bring the database very close to farm/village level. It was recommended by the Director of FoRAM as a useful partner (although the project's contact with GUP had another basis). GUP's field centre at Rajoir Thana, Faridpur District, is a base from which village level workers and support staff operate, returning to the centre most evenings and holding regular meetings at the beginning of the day's work. It appeared that for the database to be located here would provide an opportunity for it to integrate closely with the village level work of GUP, and to be piloted in this fairly challenging context. However, discussions with GUP left doubt as to whether there was enough understanding of the purpose of the project at the head of the organisation or enough time and enthusiasm at the field centre level to provide a favourable environment for the database to be piloted. Although GUP has a computer at its Rajoir centre, used for correspondence, e-mail and accounts, it was clear that this could not sensibly be used for the database in that there would be a conflict between this and the other uses, as well as with the protocol that only the designated computer operator should use the existing computer. Any small NGO is likely to be in a similar position, but some organisations in Thakurgaon District, helped by the ASIRP District Facilitator, did make a start to become database users (see section 2.5 below and Annex B.4).

BAUEC: The Department of Extension Education at the Bangladesh Agricultural University manages an extension service based at the Department and operating in 24 villages of Mymensingh Sardar Thana. Village-level workers are 12 Block Supervisors seconded by the DAE, and these are supported by 11 subject-matter officers based in the Department. The post of Director of BAUEC is held in rotation by a member of the Department's academic staff, while a permanent Deputy Director is the executive head. The database software was loaded onto the BAUEC computer in February 2002 and a group of BAUEC subject-matter specialists together with the Deputy Director and the computer operator were briefed on the database (by John Best initially in February 2002) and subsequently supported to gain familiarity and add records during the remainder of the year (as John made visits to BAU in connection with another project under the DFID Livestock Production Programme).

FoRAM: the attempt to recruit a grassroots NGO into 'full' partnership having failed, FoRAM proposed to engage in the project and facilitate contact with potential near-farm users of the database by holding regional workshops with some of its 200 member organisations, and using these as a means of generating farmer-validated records to add to the database. FoRAM would maintain a version of the database including these records. For this purpose a laptop computer was provided to FORAM in mid-2002. Three workshops were held by FoRAM in December 2002 – January 2003 (co-facilitated by Tawheed Noor). These resulted in the addition of some 60 records to the database. A report of these workshops is in Annex B.2.

2.4 Experiences of the database to emerge at the February 2003 workshop

In February 2003 a two-day workshop was held in Dhaka to which all users of the database were invited. It was attended by 30 participants in all (including project team members as facilitators). 19 of these were the main users of the database in the partner and target organisations (and there were no absentees from this group). The workshop aimed to identify the successes of using the database as well as the constraints which were met by users, and also to explore the scope for future use of the database. The report of the workshop proceedings is in Annex B3.

It emerged from the workshop that the key users of the database were groups centred around the ASIRP District Facilitators in the four Districts of Thakurgaon, Bagerhat, Chapainawabganj and Jamalpur. These were convened by the ASIRP DFs and consisted of both government and non-government organisations locally. These four groups had used the database with varying

degrees of engagement; in all some 90 records were added by the user groups. BAUEC had seen potential in the database, rather than having found it useful in its present form, and had added a few records. FoRAM (as noted above) had perhaps tested the database most rigorously and - as a result of workshops with some of its member organisations - had entered some 60 records. The other organisations with which contact had been made at the beginning of the project (including Proshika and CARE which initially had seemed the most enthusiastic) had hardly engaged with the database.

Participants working in groups reviewed their *experiences of using the database*, identified some *key issues relating to its use and development*, and finally carried out *visioning exercises* which projected how an electronic information resource might be used in the future. Inevitably there was a certain amount of overlap between outputs of the groups, the main points of which are summarised below.

Experiences of using the database reflected issues of design, of scope, of language and of user skills.

Participants suggested that the database seemed not to have been designed specifically for the context in which it was being applied, or for its user groups.

A Bangla-language version would have been more friendly to them, and would certainly allow the database to be used closer to farm level (possibly even by some farmers).

The value of a information resource for use at this level is increased the broader its scope is; so the lack of information on fish and livestock (or even on broader livelihood topics) was seen as a limitation.

To include pictures and charts (e.g. images of pests and diseases and of different crop varieties) would greatly enhance the value of the database as a resource.

A point of design which apparently caused some difficulty (and which was mentioned not only in this workshop but in feedback more generally) was that of blank fields appearing on-screen or in printed records, which made them seem incomplete.

The level of computer literacy among users meant that, for most, a day's training was not really sufficient to allow them to use *MS Access* confidently. However the general response to the exposure which the project offered was very positive, and users valued this as an introduction to skills which they felt they would use in the future.

Key issues relating to *the use and development of the database* were grouped within the workshop under the headings of 'dissemination', 'enrichment' (populating the database), 'management' and 'validation'.

The task of *dissemination* was interpreted as two-fold: to make it possible for ('tens of thousands of') farmers without direct access to electronic media to be able to gain information from the database; and to enable 'farmers who have a good technology to come forward and offer it to the database' (which relates to the issue of enrichment). The group working on this issue depicted in a chart a complex of possible linkages via which the database supported 'conventional' extension contact with farmers but at the same time 'empowered' field extension people to report technologies from the field to populate the database.

The group working on *enrichment* stressed the importance of farmers' knowledge, of two-way information flow and that a database used as a resource by extension service providers should have a broad technical focus, including information on livestock, fisheries and forestry as well as crops. Its solutions however were along the lines of 'the database (should be) institutionalised under the care of a national body', so were not strong.

Management of the database was interpreted more in the sense of development. This group (also) stressed the desirability of a database (or related databases) covering a broader range of topics than crops alone, of including illustrations, of it being easy to print-out to formats which were friendly to farmers and field-workers, and (related to this) of including a high

enough level of detail to enable ESPs to promote technologies from the database to their farmer clients.

The issue of *validation* (closely related to this last point) is one which raises major questions of authenticity of information recorded at farm level (without statistical or experimental support), and of intellectual property rights. There was little progress made on these questions, as is reflected by the group's conclusion that '(a) methodology should be developed to validate the data to be inserted'.

In the *visioning exercise* workshop groups were given an open brief and used different approaches to depict their visions as well as choosing different time-scales:

The focus of all visions involved an information facility at either Union level or at Upazila level, where e-based data would be accessible by ESPs and farmers.

All visions stressed two-way communication between organisations and individuals at all levels. Three out of the four groups took a 10-year vision, and the fourth a 3-year vision, which saw a databank serving UAECs by that time.

One group saw the possibility of a livelihood databank being operational in 5 years, although all agreed that farmers' accessing e-data at Union level would take 10 years.

Finally the database user groups were invited to draw up *action plans* addressing the issues which had been raised earlier in the workshop and drawing on what elements of the 'visions' they chose. A guideline of a 6-months planning horizon was suggested, influenced by the fact that ASIRP was due to end in mid-2003. There are important commonalities across the action plans, summarised as follows:

In developing the database, three of the groups separated the data collection process from the data entry process, recognising the importance of validation. Some saw scope for entry of farm practices; others saw validation as a matter for professional experts. making these decisions.

The action plans all include training and skills improvement for staff members.

None of these short-term plans saw farmers being able to access the database directly; it would thus be important for the organisations to use existing mechanisms to produce the relevant communication and media products to communicate information to the farmers.

In terms of institutional dissemination, the groups proposed dissemination to the Upazila-level extension co-ordinating bodies (UAEPC and UAEC). One group mentioned a (hard-copy) 'list of available technologies' circulated to a wider audience of ESPs.

Only one of the action plans specified modification of the database, for which technical support would be needed; other groups mentioned technical support more generally.

Two action plans mention a Bangla language version.

In discussion of the action plans the contrast was highlighted between the visions (several of which had taken a 10-year time scale) and the action plans (6-12 months). It was noted that a number of the action plans specified quite important roles for the project or for ASIRP, both of which were however about to close. FoRAM is in a position to disseminate and to monitor use of the database quite widely among its member organisations; the FoRAM action plan if implemented has scope for considerable impact. However implementation will depend on initiative taken by FoRAM itself (which would include finding funding)¹.

BAU-EC (whose position is secure within BAU) operates with fewer resource constraints than the other partner organisations and is therefore the most likely to continue use of the database, within its own (small) geographical area of operation. Dissemination of a version of the database

¹ Subsequently FoRAM has undergone some contraction; it has however become the Bangladesh 'hub' for Intersard.

successfully developed by BAU-EC would be facilitated by BAU-EC's 'hot line' to teaching in the BAU Extension Department.

2.5 Post-workshop development and prospects for sustainability

A useful insight into some detail of the way in which the database was used in the field – as well as its capacity for sustainable use – was provided by a short workshop in August 2003 at Thakurgaon followed by visits and informal discussion with some of the database user group members. Thakurgaon, it emerged in the February 2003 workshop, was the single location in which the database was most actively and widely used, thanks largely to the engagement of the ASIRP District Facilitator, Apurba Deb Roy. The workshop took place at the ASIRP office at Thakurgaon on the morning of 9 August, and was attended by (in addition to DF Apurba and project team member John Best) a total of 7 participants, representing 5 members of the database users group (the Department of Agricultural Extension, the Department of Livestock and three local NGOs: CARE, HADS, and JSS).

The Thakurgaon workshop and associated visits are reported in Annex B4. A summary of feedback from the District Facilitator (DF) and database users in the district is:

By the close of ASIRP in August 2003, the database had been in use in Thakurgaon for only just over one year. In May 2003 the number of records added by all members of the database users group stood at 48 and by August 2003 it was estimated at around 65.

Group members felt that the initial orientation and training for the database was quite inadequate. It amounted to one day in July 02 (half a day of orientation and half a day of hands-on training, at which there were only 2 computers between 9 participants). The background information and the training itself (by Tawheed) were commended; but there was just too little of it, given that the participants had little computer experience.

The DF was willing to load the database for any organisation which asked for it (and spent a significant amount of time on this). However, he felt seriously short of expertise (and backup support) for the task and was not always successful. (In one case the software failed to install at the first attempt but he succeeded a few days later; in another the system lacked a crucial file; In yet another the software remained unuseable for a whole year for a trivial reason¹, namely that the screen-size settings on the computer meant that only part of the record screens appeared.)

Apart from this the DF also felt lacking in ability to demonstrate data-entry effectively: he was not able to think of good examples of information to enter into various fields, and thus to 'sell' the database.

Two users are known to have lost data after system crashes which involved re-loading Windows.

Users faced problems in being able to decide which fields should be used for which pieces of information; the DF was not able to make good suggestions about this; in some cases the field headings indicate meanings with quite subtle differences (e.g. 'purpose' and 'advantages')²

Partners were not all well-placed to develop the database because few had 'the right combination of resources', namely a computer with spare access time, and the necessary skills to use the software on the part of the dedicated computer operator, where the organisation uses a dedicated operator.

¹ Such experiences were matched in BAU-EC which was unable to enter records for several months because they had not unchecked the 'read-only' box when reinstalling after a hard disk crash.

² It appears that no user has got to the point of recognising that the general field headings (as distinct from the required fields) are unimportant: the crucial thing is to get info into the record somewhere (all in the 'feedback' field if necessary).

In general a good relationship of liaison was built up via the DAEPD between DAE, NGOs the research institutes at District level and the private sector, and the DF worked hard to coordinate the activities of the different Partners via the periodic progress reviews and meetings. This was not always easy: the database was a 'little separate thing' to the main work of both the DF and of the partners.

The conclusion from the above which it is hard not to draw is that it was not appropriate to introduce the ICM database into this particular environment (in terms of level of computer literacy/skill, and availability of computer hardware) without being able to offer considerably stronger training and back up support. This is reinforced by the knowledge that the only database user which has come close to developing a sustaining process for data validation/entry/feedback (to field staff and farmers) is CARE. However the DF feels that he was unable (largely because of lack of time) to facilitate/support CARE in developing such a process.

That the unfavourable environment mentioned above may be changing is indicated by a comment from the District Facilitator that the *general* level of computer literacy and awareness of among the 'peer group' from which participants have been drawn had increased even in the 13 months since the introduction of the database to the ASIRP/IE Districts. This is indicated by the fact that local organisations, having discovered that the database was in use locally, began to approach the DF (just before the end of ASIRP) and ask for copies.

2.6 Collaboration with the Rice Wheat Consortium

Discussions in May-2001 with the Rice Wheat Consortium for the Indo-Gangetic Plain, at CIMMYT, New Delhi led to RWC agreeing in principle to program a version of the ICM database to be posted on the RWC website, and this initiative was therefore included in the project proposal. There was some debate over whether the database would be linked with the PRISM web-site or kept on the RWC web-site. It was decided in April 2002 that the database would be on the RWC web-site with hyper-link to the PRISM web-site. This also would avoid future confrontations with INTERSARD.

Further discussions with RWC were held during a meeting of likely partners in the projected INTERSARD network, held at CIMMYT in February 2002, and these established the basis for collaboration with RWC. A plan for developing a web-based version of the database was concluded during a visit by Monika Gupta (Systems Manager CIMMYT, New Delhi) to UK and the Netherlands in early April 2002. This included drawing on experience with the CD version of the database to design an interface for the web version; user feedback on draft and dummy versions; and identifying users (potentially in all IGP countries) to actively enrich the database in the early stages.

This plan foundered because Monika Gupta left CIMMYT in June of 2002 and was not replaced for some months. The R8083 project leader was consulted by the country Director of CIMMYT about the person specification for her replacement, Barath Krishnan, who however took up his post only in early 2003, close to the end of the database component of the R8083. Contact has been maintained throughout the project with the RWC, and recently – at the suggestion of the NRSP Programme Manager at the FTR – resumed discussions with Barath have led to the posting of the database on the RWC website¹. It is available (in MS Access files available for download) in its four separate versions, namely the original 'Rothamsted' version (with 400 records), and the versions generated by FoRAM (with 80 additional records), by BAU-EC (with 7 additional records) and by CARE Thakurgaon (with 10 additional records).

RWC suggest that the RWC website is the appropriate 'home' for the database since the site is 'of the region, by the region, for the region'. It would also be appropriate to include a summary of the project on both the RWC and the PRISM websites.

¹ www.rwc.cgiar.org

2.7 Review of the experience of the ICM database

The project proposal envisaged two 'partner organisations' (POs) using the database in perhaps three separate locations with close monitoring and support from the Project. In the event, the database was used in some way in five separate locations and an attempt was made to add records in three of these. No partner organisation made any changes to the database itself in order to 'customise' it. It is suggested that sustainable use of the database was not established by any of the users.

Salient features of the experience of the database component (summarised from the foregoing sections) are:

- Enthusiastic buy-in by potential partner organisations and also by the individuals who took part in the training/orientation
- A key role played by the ASIRP District Facilitators in forming database user groups
- Positive atmosphere in training sessions with members of user groups
- Lack of confidence on the part of many users of the database
- Adequate access to hardware by the key users in partner organisations, but a severe lack of general software support¹ (i.e. not specifically related to the database)
- Very little support offered to users by the project, once the initial training period was over
- A very short time-scale for development of user skills, and considerable amounts of time wasted because users were unable to overcome small software problems.

All these contributed to the picture gained in Thakurgaon (and outlined in 2.5 above) of an endeavour that had been inadequately resourced in terms of the limitations of skills and infrastructure which characterised the institutional environment in which it was being made, and which had an unrealistic time-frame. However, towards the end of the period of the database component there a few opportunities emerged which might have been built on. Significant among these were:

- Visions which emerged at the March 2003 workshop: of how a e-database could be used as an extension tool, and which revealed a continuing enthusiasm on the part of some users,
- Spontaneous approaches to the ASIRP District Facilitator by potential grass-roots database users in Thakurgaon
- The existence of a user in Thakurgaon (namely CARE Thakurgaon) which was close to sustainable use; this possibly offered the opportunity to keep in existence the user group in Thakurgaon.

It may be noted that Thakurgaon is within the North-west focal area selected for the Information Strategy phase of the project; an opportunity was possibly missed to continue support for the user group in Thakurgaon (in low key and probably with existing project resources), around CARE, after the end of ASIRP and the withdrawal of the District Facilitator. Such an initiative could well have been linked with the information strategy component of the project.²

¹ the potential partner organizations within which software support is thought to have been reasonably good (CARE and Proshika) did not continue with the project.

² There were other circumstantial and temporal factors contributing to the failure to pursue such an initiative in Thakurgaon. One of these was that the project had not at this stage such a close working relationship with RDRS Rangpur (the chosen PO for the information strategy component) as subsequently developed, and RDRS would not have had a direct part to play in a database development initiative in Thakurgaon. Further, Enamul Huda – whose role in the information strategy component was critical - had no familiarity with (and possibly little interest in) the ICM database.

The project MTR in July 2003 (which took place just before the Thakurgaon visit) concluded that 'failure of project design to include sufficient communication and IT skills amongst project collaborators and/or to allocate insufficient resources against these functions appears to have been an important contribution to limited progress. As a result the ICM database does not appear to have achieved adequate threshold for application as needed to address Outputs 1 and 2.' The MTR went on to identify a 'potential research task concerned with exploring E-based provision of technical information to ESPs working with (poor) farmers'; it mentioned Thakurgaon as a possible location for this, but pointed out that the only project partner to respond positively to this suggestion in discussion during the FTR was ASIRP (soon to be ended); it concluded that such a research task should not be an add-on to R8083 but be put out to tender 'so as to allow a "fresh start"'.

The project agreed with these recommendations at the time, and it is probably with the benefit hindsight that missed opportunities are identified. The end of ASIRP, which had proved an important champion of the database both in advocacy and in practice, almost certainly an important influence on the project team's view.

An attempt is made in the chart overleaf to summarise the above points in terms of a SWOT (strengths, weaknesses, opportunities and threats) matrix – although historical use of this technique (as here) is thought to be unconventional. However it works well to the extent that features of the database itself and of our approach to introducing it to potential users can be set out in the 'strengths' and 'weaknesses' columns. The 'opportunities' column lends itself to identifying possible 'opportunities missed' i.e. those which presented themselves around the time of the database workshop in March 2003, but which could not be pursued due to the decision not to carry forward work on the database after the project MTR in July 2003. Appropriate use of the 'threats' column is problematic. Here it has been used simply to accommodate a note on the decision to end work on the database, which is what prevented the opportunities in the previous column from being developed.

SWOT Analysis of the ICM database

		Strengths	Weaknesses	Opportunities	'Threats'
Database design		Robust Readily used at 'entry-level' after training/orientation	Regarded by users as complex; (even relatively complete records would include empty fields)	Reconstruct front-end of database (with local software support?) Bangla-language version	
Database content			Initially only 10% of records farmer-validated in-country; Information relating to some fields missing for many records (<i>was the database over-designed?</i>) Confined to crops No problem-focused fields (e.g. pests/diseases)		
Training/orientation		Carried out by a good facilitator with appropriate skills level (i.e. computer-literate not 'geeky' so able to relate to skills level of users)	Severely inadequate in relation to users' skills		End of ASIRP in mid-2003 Decision of R8083 MTR to keep to original end-date of the database component.
Development into environment which introduced (institutions, users)		At beginning of project: good appreciation by partners of the role of a database / 'knowledge bank' in institutional technology development & extension objectives. Hardware capacity adequate	Level of users' skills limited (General) software support zero 'Refresher' training & support for database v. limited. Buy-in generated training demands which stretched project capacity	At March 03 workshop: visions of how a e-database could be used as an extension tool Spontaneous approaches to DF by potential users in Takurgaon.	
Protocol for entering and validating records			Not considered thoroughly at an early stage (although paper forms designed) No protocol in place for co-ordinating updates by different users. No rigorous criteria for farmer validation.		
Time-scale			20 months too short a period to establish a process of: -user familiarisation -recognition of need to add records locally -user learning to add records -user learning to add/remove fields -user 'ownership'.	2 users (CARE Thakurgaon and BAU-EC) capable of sustained use (with some support) Link-up with Thakurgaon user group in Phase 2 of Info Strategy component.	

3 Exploring the scope for KIS-focused research

3.1 Previous work on knowledge and information systems

At its inception, the information strategy component of the project was seen as building on two strands of work, carried on throughout the 1990s: (a) a conceptual strand, associated with work of Röling (1989), Röling and Engel (2001) and Engel and Salomon (1997), and (b) an empirical strand, represented by a set of field studies which had investigated in an inductive sense at micro-level the ways in which farmers accessed, transacted and evaluated knowledge and information (e.g. Ramirez 1997, Ramkumar 1995, Rolls et al 1994).

The concept of an Agricultural Knowledge and Information System' (AKIS) has been of great importance in enabling both thinking and (subsequently) practice to move away from the linear '*Research-Extension-Farmer*' model which assumed that most significant knowledge was generated by formal research and that the most important flow of information (which it was necessary to foster) was that of technical information from research via an extension provider to farmers (Garforth 2002).

Röling and Engel [1991] offer the following definition of an (agricultural) knowledge and information system (AKIS): 'The persons, networks and institutions, and interfaces between them, which engage in the diffusion and utilisation of knowledge and information, and which potentially work synergistically to improve the goodness of fit between knowledge and environment, and the technology used in agriculture.'

The empirical studies mentioned above depicted actual information networks used by rural people, and offered some important insights. They showed that information networks are *complex*, that from which farmers draw information from *multiple sources* and, in some cases, that *official extension services are unimportant* as information providers compared to informal sources (Ramkumar, op. cit.). The strength of this early empirical work was its micro-scale: mapping specific information transactions within a narrow subject area (e.g. animal feeding regimes) and limited geographical confines (e.g. a single village or a small cluster of villages) was important to enable complex networks to be identified.

Work carried out as part of an earlier NRSP project (R5984) made an important contribution to understanding the developmental role of agricultural knowledge and information systems (Norrish and Lawrence, 1997). Case studies (in the Philippines, India and Bangladesh) constructed 'communication diagrams' based on semi-structured interviews: these were able to identify such key factors as gender differences and discrepancies between large and small farmers in accessing information. A conclusion of the FTR was that 'farmers need a varied supply of high quality information to help them in decision-making. This is particularly the case in respect of "sustainable" technologies which must be adapted...to local farm circumstances.' The FTR goes on to prescribe: 'the only way in which information can be made useful, useable and accessible to farmers is through their involvement in all stages of its creation. This is where extension needs to concentrate its efforts to ... support sustainable agriculture.'

In the context of project R8083, the significance of work on knowledge and information systems was that NRSP had the objective of developing and promoting better (and more sustainable) strategies for land management, for which ICM was considered a major contributor. Thus AKIS methods were seen as a means for NRSP to identify ways by which to better understand - and provide services to support - farmers' ICM.

3.2 Advancing the methodology for investigating KIS: starting point

In investigating AKIS, the methodology commonly used has been that of group and individual semi-structured interviews in which knowledge and information systems are charted by a diagram-drawing or 'mapping' approach – e.g. Norrish and Lawrence (op. cit), Garforth (2001), Ramirez (op. cit.), O'Farrell (2001). An aspect of this methodology that – at inception of the project – remained to

be developed was the ability to aggregate data from a number of observations so generalisations relating to particular groups (e.g. sharecroppers, women) could be made with some validity. This would overcome the 'sample of one' syndrome which is a danger of work based on participatory approaches and which makes generalisation risky. In this particular case it was important to avoid a situation in which AKIS were depicted which did not include the poorest and most vulnerable people. To advance the methodology of AKIS was a task addressed by the project.

We saw this task as having three (related) elements:

1. to identify methods of engaging with poor rural people which would facilitate dialogue about knowledge and information, and would enable them to articulate problems and needs relating to knowledge and information.
2. to develop a sampling scheme which would enable generalisations to be made from a series of such engagements, relating to a particular socio-economic group or to a particular geographical region.
3. to ensure that information gathered/generated by semi-structured methods is all captured and that it is stored/processed in a form which makes it accessible to the project itself and suitable for dissemination.

3.3 Development of a methodology for investigating KIS: field pilots

A first pilot, which focused on (1) above, was carried out in Northwest Bangladesh in May 2002 with the help of the partner organisation in that location, RDRS (recruited in liaison with PETRRA). The objective addressed at this point was to identify some tools for working with groups of poor rural people which would enable knowledge and information issues to be explored.

Thus semi-structured interviews set up informally with groups of RDRS beneficiaries, into which several methods of visualising knowledge and information were introduced by the facilitators. These were adapted from tools which feature in the KIT RAAKS pack (Engel & Salomon 1997) drawing also on PPS-BD's experience (noted below):

- a pie-chart of information sources/providers,
- a simple information map based on a spider diagram (as developed in JCM Medical Services on Human Development Project, but also resembling Engel & Salomon's 'basic configuration'),
- a chart of concentric circles in which information sources are ranked (similar to Engel & Salomon's 'communication network' sheet),
- a 'demand/supply table' (similar to Engel & Salomon's 'source-intermediary-user' matrix).

These were constructed by respondents together with the facilitator on sheets of brown paper with marker pens, and with beans used for scoring.

Two groups of (mainly landless) women completed pie-charts; both ranking RDRS as their main source of information with others playing a very minor role. A group of women farmers constructed a basic information map indicating that they access a fairly wide range of sources (with other farmers and RDRS prominent among these). A mixed group of men and women constructed both a communication network chart and a 'source-intermediary-user' matrix. In free discussion, this group readily identified and ranked the areas ('themes') of information which were critical to them (health, agriculture, education, income, environment, in that order) and also the important topics ('strands') within each area. Since this group ranked health first with agriculture second and education third. they were therefore invited to construct the matrix in relation to health. With another group, we were able to focus the discussion on 'crop production', and generate themes and strands within this narrower area (themes were: inputs, irrigation, technology, marketing). Bangla terms used for 'information' were '*khobor*' (colloquial tr. 'news' [about]) and '*tottha*' (standard Bangla tr. 'information').

Observations from this set of interactions with groups are:

1. The rural people we engaged with are able readily to identify sources of information.
2. Access to information is limited, and people recognise this; it is interesting that the group completing the demand/supply matrix was readily able to identify information gaps and cases where there were no particular gaps.
3. One feature of the matrix is that some of the entries in the 'information gap' column indicate that the respondents probably lack not so much for information as for good quality services.
4. Scoring of 'importance' is based on a combination of frequency of contact with, ease of access to, and perception of the quality of information from a particular source.

The overall conclusion of the fieldwork pilot was that it is not hard to engage with respondents in discussions about information sources, networks and needs, using an approach grounded in PLA methods. However the visualisation tools need more refinement, and possibly more should be trialled. (Possible candidates were identified from the RAAKS manual, as well as the problem tree (Garforth 2001) and the scored causal diagram (PETRRA 2001)). It would also be necessary to pay attention to the size and composition of respondent groups, given the objective to explore in depth information on information 'themes' and 'strands'; it was envisaged that this would require moving away from generalisations regarding say information sources and intermediaries, to tracing in a highly empirical sense ways in which specific pieces of information have been transacted.

Issues of sampling were highlighted by the obvious variability of the different environments observed during the field pilot (there are 3 main agro-ecological zones in the focal area), by the size of the a priori universe (the area has a population of some 6 million, at least 60 percent rural), and by the need to position R8083 field work to be useful to PETRRA (which has sub-projects in six separate locations. A further issue was whether to engage with non-RDRS beneficiaries (including some non-poor, who may have different information networks than the poor). The importance of balance between depth in fieldwork and the ability to achieve good cover was apparent.

All of these issues were the subject of a second pilot, again in the North-west, in November 2002. On this occasion the focus was on a sampling scheme (task 2 in section 3.2 above) and on developing a protocol for recording the outputs of working sessions with groups of rural men and women (task 3). These are dealt with in turn in the following section, while the final two sections of this chapter show how the methodology developed in the pilots was used in the two fieldwork locations.

3.4 Advancing the methodology for investigating KIS: sampling, fieldwork and recording protocols

3.4.1 Sampling

The primary need in sample selection is to ensure that information gathered from the selected units, will allow conclusions to be generalised across all units that fall within the population domain of interest. This in turn means that the domain to which results are expected to apply must be clearly defined. The following principles were established to govern sampling in the KIS studies:

Population domain was taken to be the total population of each regions which the PO regarded as its beneficiary (or 'target') population. In the NW this was people with no more than 1.5 acres of cultivable land, including rented land; in the NE it was households which can manage food for no more than three months a year from their own production and sell labour for the remaining nine months (a poorer target group),

Geographical coverage was taken to be the whole of the PO's working area (with, in the NW, the exception of the Char lands in the far east of the region, where livelihoods are not mainly dependent upon crop based agriculture, and where no PETRRA activities were located),

Sampling unit was taken in the NW to be the (existing) *RDRS group*, and in the NE the *village* in which FIVDB is active (since FIVDB has not based its programmes on a group approach),

Sample size was determined by resource constraints; but the large size of the population and the variability within the regions led to a decision to choose relatively large samples (at least in PLA terms); the sample in the NW was of 32 groups and in the NE 12 groups in the first round and 24 in the second round (see

Sampling method involved random selection at the final stage, having purposively selected locations to provide a good representation of the population domain in terms of agro-ecological zone, degree of isolation/accessibility and in general geographical cover.

Considerable time was spent discussing the above issues with partner NGOs and team members to decide on (a) methods of selection; and (b) the number of sampling units to select at different levels. Members of the partner organisations participated in drawing the sample. The procedures in both NW and NE are mentioned in sections 3.5 and 3.6 below, and are given in detail in the full reports of the KIS studies in these two regions in Annexes C.1 and C.2.

3.4.2 Working sessions with groups

During the second pilot in November 2002, several further participatory exercises were developed (based on the experience of the first pilot) and pre-tested. The areas covered and the methods used are described below:

Assessing information needs and knowledge gaps:

Group participants were asked to identify one main topic about which they required information, and to list different information needs – referred to as themes (e.g. seed, fertiliser use, technical knowledge, markets) that related to their chosen topic (e.g. rice cultivation).

Participants were then asked to score the themes (by dividing up 100 seeds) according to the importance they place on receiving information relating to that theme. In order to assess the extent to which there were gaps in receipt of information, one particular theme was selected for further discussion. Specific items of information required about the theme (termed strands) were listed, and participants asked to indicate, with a show of hands, whether they had ever received information about each strand. Those who had received information were also asked further probing questions about the quality of the information received. Key points raised and discussed were noted.

Understanding instruments and mechanisms by which people obtain information:

Group participants were asked to explain how they are getting information from different sources and how such information is passed on to others. They were asked to show this on the ground by drawing a flow chart in two steps – first, from whom they receive information and how, and secondly, whether they pass on the information to others and if so, to whom and how.

Preference for different information channels (media):

To determine participants' views about the best means of communication for them, they were asked to list media by which they would like to receive information. Facilitators engaged in a discussion about the effectiveness of these different media as a means of receiving information about agriculture. Participants' comments about the potential effectiveness of these media were noted. The suggested media were then written on cards, or a picture drawn, to represent the means of communication. Two sets of these were done and placed on the ground to represent rows and columns. A pairwise ranking of the media was then done, i.e. the media were considered in pairs, and the group asked about which media they preferred and why. The preferred medium was noted on a card and placed in the corresponding cell of a matrix drawn on brown paper, and reasons for preference noted in the facilitators' notebooks.

Evaluation of sources of information:

Participants were asked (as a group) to list sources from which they had received information on a number of strands corresponding to the specific theme (e.g. seed, fertiliser) discussed earlier when assessing information gaps. The sources and strands selected were written on cards and pinned on a cloth 'pocket chart' (in matrix form) so that rows represented information strands and columns represented sources. Participants then 'voted' individually to indicate what they thought about the quality of the information they received from each source by placing 0-5 seeds in each cell (pocket) of the cloth matrix. Participants were told that if they

thought the information received was completely useless, they could allocate 0 seeds, while if the information was very useful, the maximum number of 5 seeds could be allocated. Each participant voting was also asked to consider whether they really had some knowledge (direct or indirect) to form a judgement about the information sources being evaluated. If not, a small card (provided by the facilitator) should be placed in the pocket.

Although this last process was pilot-tested (and even used in the early stages of the fieldwork proper), it proved quite complicated for the participants, as well as time consuming. Nor could the results be meaningfully interpreted.

3.4.3 Recording

If the information gathered from the group work was to be analysed and used effectively, then an approach was needed which ensured (a) that each group interaction followed a similar procedure even when facilitated by different individuals (and at different times and locations) and (b) that similar information was recorded from each group interaction. This led to our devising a protocol which is both structured and standardised to the extent that it was designed to ensure that comparable information was recorded from each group activity. However it did not prevent in any way exploration [in 'free-form' discussion] of issues which arose in the course of any of the group sessions.

Key tools of this approach were a 'field manual' and a 'debriefing document'. The field manual was intended to serve as a prompt for the facilitator of issues to be explored and the methods to be used for each (e.g. matrix scoring, pairwise ranking) as well as a check-list of materials to be used (e.g. flip-chart sheets, cards). The de-briefing document was developed to record information from and about the group sessions. The term 'de-briefing' was used because the aim was for facilitators to de-brief themselves and other team members by using their field notes and their recollections from field work, to record key components of the discussions, while at the same time recording systematically any information gathered using field instruments such as cards, matrices, or other. Large blank boxes can be included in the schedule to record the qualitative information, while flip-chart results from the field can be recorded in exactly the same fashion. The field manuals and debriefing documents used in the NW and the NE are in Annexes C.1 and C.2.

Developing the de-briefing document was done with the subsequent data analysis procedure closely in mind. Thinking forward to the data analysis was critically important to ensure that information collected from the field could be meaningfully interpreted and used. This included preparing some 'dummy' tables for the data analysis (i.e. tables with appropriate titles, and row and column headings), to ensure that the information gathered from many focus group discussions could readily be summarised, and more generally to ensure that each issue being explored made a useful contribution towards addressing the study objectives.

Pilot testing of the field procedures emerged as crucial: to ensure that planned field procedures are practically possible, to check the timing of field operations, and to check that the de-briefing document is suitable for use. This in turn means that the field procedures should be documented in a *Field Manual* at the planning stage, and revised after the first pilot run. All persons involved in field activities should be included in discussions concerning the field procedures, as well as in pilot testing. In this project two rounds of pilot testing were found to be barely sufficient because major revisions were made to the field operations after each pilot. Use of several pilot runs for those embarking on KIS studies using participatory approaches is therefore to be recommended. Typically there may be 2 or 3 runs. Additional runs of the pilot would be necessary unless subsequent revisions to the field manual and the de-briefing document were very minor.

3.5 The KIS study in the North-west

The field study of knowledge and information systems of poor farmers in the North-west was carried out in January 2003 (in extremely cold conditions), using a set of PRA methods which had been developed as described above. In all 32 groups were covered, totalling 546 people. 20 of the

groups were existing RDRS groups (male and female), while 12 were non-RDRS ('control') groups. A detailed account is in Annex C.1

The hypothetical population for the study was the RDRS target population (i.e. households with not more than 1.5 acres of land). 82.3 percent of the people in the study fell into this category, with only 17.7 percent owning more than 1.5 acres. About a fifth of the participants (21.1%) were landless, while almost half (46 %) owned less than 0.5 acre. Because RDRS targets women groups, 14 of the RDRS groups were women's and 6 men: of the control groups, 5 were women and 7 men.

As expected, the women's groups had on average lower levels of education than the men's with over 65% of participants of women's groups having no education, as against 38% for the men's groups.

Well over 50% of respondents (including at least some participants in all of the 32 groups) gave their primary source of income as agriculture. Some 20% described their primary source of income as business, which *includes* day labouring at skilled trades (e.g. carpenters, masons, mechanics, tailors, welders, leather workers). (Unskilled) day labouring (including rickshaw/van driving, and stone collection by women in Panchagarh) was said to be their main livelihood source by some 15% of respondents.

During the PRA, participants were first asked to identify a crop-related *topic* and then to identify – and to rank - *themes* related to this topic about which they needed information. Rice predominated overwhelmingly among the topics chosen (20 of the 32 groups). 4 groups mentioned wheat (in Panchagarh and Thakurgaon), 2 groups potato (in Thakurgaon) and one group watermelon (also Thakurgaon).

Among the themes chosen by those selecting rice as a topic, 'seed' was the most common closely followed by 'fertiliser'. With respect to seed, respondents identified as many as 10 information *strands* i.e. specific questions on which they need information. These included: where to get good quality seed, what types of seed to use, how to identify good quality seed, and seed preservation techniques. With respect to fertiliser, information needs included how fertiliser should be used, price and adulteration. More generally, respondents felt that much of the information to which they have access is incomplete or unclear. One reason for this is language – a problem which is said to apply not only to broadcast media but to printed media (posters etc.). Beyond this, institutional and structural constraints prevent people from using information which they do obtain (e.g. the opportunity to sell paddy at government price to the food department is frustrated by officials of the Department demanding bribes), while access to information may be restricted by lack of money to (e.g.) travel to an Upazilla or District Centre to attend events at which information would be exchanged, and lack of free time in which to do this.

In RDRS groups, RDRS field workers were said to be the main *source* of information, closely followed by 'other farmers'. In non-RDRS groups other farmers were most important. In RDRS groups, RDRS were also the *preferred* information source; control groups stated DAE as their preferred source. Very few groups made positive comments about BS of DAE – there was an indication that DAE as an information provider was not adequately responsive to the needs of the poor farmer because more involved with larger farmers.

With regard to information *channels* (which were not always clearly distinguished from information *sources*¹), respondents preferences were assessed through pairwise ranking. Face-to-face discussion (i.e. farmer- to-farmer) and field staff visit were the preferred channels. Radio is also important, but there were also some negative comments on radio: several groups commented that the language was difficult, and the medium does not offer the facility for asking questions. TV was ranked quite highly; but discussion with respondents showed that they have limited access to TV (typically only a few households in a village have TV equipment and lack of electricity restricts the use of TV).

Within individual groups, only a small proportion of participants reported that they had ever received information on the strands of a selected theme (e.g. seed) chosen for further discussion. In only 3 of the 32 groups was this proportion greater than 50%. In 16 of the 32 groups, fewer than 25% of the group had ever received any information previously about the strands under discussion. Concern was expressed on many occasions about the quality of information (and of products) provided by dealers and seed companies. In many cases, seeds bought from dealers were found to be poor, while some groups commented on being sold adulterated fertiliser.

In spite of this supposedly being the 'information era', the overall picture to emerge from the study is one of people largely dependent for information on a narrow range of sources and on interpersonal contact, and facing quite serious gaps in access to information about topics which are important to their livelihood.

3.6 The KIS study in the North-east

The study in the North-east was carried out in two stages, the first in April 2003 (KIS-1) and the second in November 2003 (KIS-2). The second stage was the result of a finding of the project mid-term review that the first study lacked a sharp poverty focus, as well as covering a rather small sample in relation to the wide range of livelihood sources on which poor people in the region were believed to draw. The second stage of fieldwork was preceded by a revision of the fieldwork protocol, based on two pilots in August and October 2003.

The specific tasks of devising a revised survey methodology were seen as:

1. to devise a locale-specific wealth / well-being index, against which members of any group with whom we were interacting could be 'positioned',
2. to explore the scope for recruiting very poor people to PRA-based group interactions,
3. to devise a PRA protocol (and field recording sheets) which accounted for a wider range of livelihood activities, including those followed by very poor people,
4. to devise a simpler sampling frame and draw up a sample.

The first of the two 'pre KIS-2' pilots explored (1) and (2) in a relaxed approach to a very small number of villages; the second pilot trialled a protocol (and a draft field sheet) in four villages (with the help of FIVDB field staff) and then finalised these. The sampling scheme aimed to enable differences to be explored between KIS in remote and less-remote locations, between the very poor and the less poor, between women and men, and between beneficiaries of the partner NGO and non-beneficiaries. A sampling process was carried out in participatory mode with a group of FIVDB people: FIVDB created strata by classifying villages according to the above criteria (except for gender), and then the project team generated random numbers which FIVDB used to select villages from each stratum.

¹ The project found it useful to distinguish *channels* (generally the media through which information is passed, including face to face communication, radio, print, and television) from *sources* (i.e. the origins of the information, including formal and informal research); however this is not a distinction which we attempted to carry through to interactions with rural people via PLA.

In respect both of its fieldwork methodology and also its sample, then, KIS-2 is regarded as having generated more robust findings than KIS-1.

In KIS-1 the fieldwork team interacted with 11 groups and 162 people in all; in KIS-2, 24 groups were involved (8 of them women-only) and a total of 243 people. Annex C.2 covers both stages of the study in the North-east, for the most part aggregating the findings of the two stages. The remainder of this section highlights some of these.

11 'themes', and 36 'strands' of information were identified by the respondents as important to them. The six most important *themes* were (in order of scoring): agriculture knowledge, health knowledge, vegetable cultivation, employment opportunity, education, poultry rearing. Women scored health knowledge and vegetable cultivation higher than did men. Men scored agricultural knowledge and employment opportunity as the most important.

In case of *strands*, highest priority was given to the following topics under the themes of agriculture and health:

Agriculture. Strands: seed, fertiliser, pesticide

Health. Strands: health service providers (good treatment at low cost), food and nutrition.

Narratives of how specific pieces of information have been accessed and used were recorded in order to identify (in a highly empirical sense) which information *sources* and *channels* are most used, and also what information is most commonly transacted or exchanged.

Only a minority of respondents (20%) were able to say they had accessed and used information on any of the themes or strands mentioned. However examples were given of successful application of information on preservation of rice seed and fertiliser application rates and placement. Sometimes information could not be used because it was not clear (in terms of the – written or broadcast – language through which it was accessed), or was incomplete (e.g. it had been gathered from a radio programme and there was no opportunity for querying or verifying). Some information was not useful because it related to benefits which were hijacked by vested interests (e.g. free issue of rice seed, government purchase of rice at a guaranteed price).

As far as channels of information are concerned, 12 channels in all were identified. *Visits by field staff* of development agencies were regarded as clearly the most important. In FIVDB villages the *FIVDB field staff* were the single most important channel; in 'non-FIVDB' villages, FIVDB was also regarded as an important information provider, but *staff of government departments* were relied on also. Next to interaction with staff of development agencies in the village, *visits to the local agencies' office* were important. *Personal contact with neighbours* was also rated as important. All of these interpersonal channels were rated higher than any of the mass media - radio, television, print (newspapers, posters, books and pamphlets). Of the mass media, radio was rated the most important. Training was scored relatively highly, and was said to be effective because it usually gives the opportunity to develop skills hands-on and also because it gives very complete information.

Examples were given of favourable impact on livelihood of accessing information (from various organizations), including vegetable and rice cultivation, and health and hygiene. On the other hand some narratives were recorded of information which had negative impact as a result of its being applied. Mention was made of a particular radio programme on planting of papaya tree and fish cultivation which led to adoption of the broadcast technology and its subsequent failure.

This study of KIS in the North-east of Bangladesh indicates an unfulfilled information need across a wide range of themes and strands which people are readily able to identify. This need is hardly less in 'control' villages than in those influenced by programmes of FIVDB. Face-to-face means of accessing information are valued well above media-based means of communication.

4 Phase 2 of the project: piloting knowledge interventions

4.1 Objective

Phase 2 of the information strategy component of the project was planned with the project's two partner agencies as a pilot programme in which they would work with a small number of their beneficiaries in an approach to development interventions which was based not on introduction of particular programmes (credit, sanitation, poultry raising, homestead gardening etc.) but on facilitating a beneficiary group to identify its information needs, and then supporting it to meet these needs. This would in turn – it was anticipated – involve enabling beneficiaries to accessing services (e.g. veterinary, mother and child health, agricultural extension) which would address the substantive problems which were reflected in expressed needs for knowledge or information.

4.2 Planning and setting up

Phase 2 required a good deal of planning alongside the partners. This involved in part interpretation of the phase 1 KIS studies, and in part examining how the insights offered by phase 1 into the ways in which poor rural people used and transacted information (and expressed knowledge and information needs) might inform the programme of an agency with a remit to facilitate the improvement of rural livelihoods. The particular tasks involved were:

- a) Exploring with senior people in the partner organisations the scope for interventions, in the terms outlined above
- b) Planning a programme of work on this basis of this
- c) Orientation of field staff
- d) Communicating with other stakeholders, including representatives of other development agencies (addressed mainly through the members of the Focal Area Forums for the North-east and the North-west), but also rural people.

These processes began as early as July 2003 (in the North-west), although fieldwork for phase 2 did not begin until February-March 2004 in either location. A chronology of activities in the two regions is overleaf. This indicates a similar *pattern* of interactions with each of the two, in which a sharing of the findings of the KIS study led to a consideration of how the type of intervention which the project envisaged for phase 2 related to existing activities and patterns of work in the the partners organisations. That the interaction with RDRS was more vigorous – and certainly involved more people – than was the case with FIVDB, is indicated by the chronology. However, the project team were confident, towards the end of the phase 2 planning process and as fieldwork got underway, that both of the partner organisations had a good level of commitment to collaboration with the project.

The planning process culminated in a set of terms of reference for each of the two partners (RDRS and FIVDB) which set out the activities agreed to implement phase 2. These are in the (rather cumbersome) Annex D.1 which also includes reports of the key planning meetings and workshops detailed in the chronology. The terms of reference¹ provided a framework only; at this stage it could not be known what would be the outcome of the interventions being planned.

¹ The ToRs were never formally concluded and signed; however the process of drawing them up with the partners was an important one. It will be seen that they refer to the University of Reading rather than to Rothamsted Research. This is inappropriate in that the lead institution is Rothamsted; however Reading was holding the funds which were used to finance the project partners' activities in phase 2. Since the ToRs were not signed, the question of which would be the appropriate signatory institution from the project side did not really arise; and the ToRs served their purpose.

Chronology of planning activities for phase 2 of the project

North-west

Date	Activity	Objective (see above)	Notes
July 03	Staff workshop at RDRS	(a)	Attended by approx 20 RDRS staff (HQ and District) with whom the project had interacted during the KIS study. Aimed to communicate preliminary findings of the study and also to facilitate RDRS people's thinking of RDRS as an information provider
Sept 03	Meeting of NW Focal Area forum	(a), (d)	Attended by approx 20 forum members plus RDRS staff (by invitation). Aimed to communicate findings if KIS study (now at a more advanced stage) and update FA Forum members (whom we had first addressed about the project in Jan 03)
Nov 03	Stakeholder workshop at RDRS	(c), (d)	Held at Lalmonirhat RDRS Zonal Centre (office and training facility). 17 participants including project team RDRS HQ and field staff and also 8 RDRS Federation representatives (i.e. members of RDRS-facilitated self-help groups)
Dec 03	Management planning meeting	(b)	Small but critical meeting with MG Neogi and one of his staff in RDRS M&E cell: budget and schedule for phase 2 agreed
Jan 04	Orientation workshop for field staff and stakeholders	(b) (c) [also (d)]	5-day workshop at Lalmonirhat attended by 15 RDRS staff, 10 farmers* (Federation representatives) and 8 local representatives of development agencies* (govt. & non-govt.) [*part-time]

North-east

Date	Activity	Objective	Notes
Dec 03	Staff workshop at RDRS	(a)	Met with a group of 5-6 senior managers to communicate preliminary findings of the KIS study and to establish principles of engaging with FIVDB as a partner for phase 2
Jan 04	Management meeting at FIVDB (also village visit to meet a 'community learning circle')	(a), (b)	Met with similar group as in December and explored synergies between R8083 objectives in phase 2 and FIVDB's programmes. Agreed a day workshop on March 4 for planning the phase 2 programme
March 04	Management planning meeting	(b)	Met with 6 senior managers; protocol, budget and schedule for phase 2 agreed (March 4th)
March 04	Orientation workshop for field staff	(b), (c)	Small workshop (6 participants in all) to brief potential members of FIVDB team for phase 2 + other staff who would be closely involved. Role of KIS team, process of phase 2 and monitoring/reporting agreed
March 04	Visits to candidate villages / groups for participation in phase 2	(c), (d)	Met with (existing) village-level groups to introduce the project and establish participation in phase II.

Each of the partner organisations set up dedicated 'KIS teams' (a term coined by RDRS) to implement this phase of the project. In both regions two separate locations were identified to operationalise the project. In the North-west the scale was considerably larger in that 10 groups were recruited in each of the two areas, while in the NE only one group was initially recruited in

each location. We were keen that the partners should move at a pace with which they felt comfortable and that the extent of cover should be similarly determined. In the NW the partner was fairly ambitious. RDRS was in process of ‘mainstreaming’ (i.e. establishing throughout their working area) farmer field schools, following what they felt had been a successful pilot using this approach in collaboration with the DAE’s ASIRP¹ project. The KIS intervention (as it became known) which R8083 was promoting appeared to offer a means of engaging with the FFS which it was worth exploring. This coincided with a restructuring of RDRS in which field activities were to be managed from two zonal centres, in Thakurgaon (west zone) and Lalmonirhat (east zone). RDRS’s proposal was that a ‘KIS team’ should be created in each location, managed by a ‘Team Leader’. The teams would consist of a co-ordinator (dedicated to R8083-related work) plus the regional subject-matter specialists (‘manager’ in RDRS parlance) whose time and knowledge the co-ordinator could call upon. R8083 agreed to fund the salary of the KIS co-ordinator in each zone and also direct costs associated with work on the project by other team members.

In the North-east we agreed to different terms being applied to similar roles. Thus the team leader was termed ‘co-ordinator’ and this role was taken by Malik Anwar Khan (FIVDB’s PETRRA co-ordinator). The two dedicated KIS staff (funded by the project) were termed (District) ‘organizer’. The organizers collaborated with the FIVDB local staff, although the latter were not recognised formally as members of the KIS team. The chart below shows the structure within the two POs.

‘KIS teams’ for phase 2 of the project in the North-west and North-east

North west, RDRS		North east, FIVDB	
<i>KIS Team leader:</i> MG Neogi (Snr Programme Manager, Agriculture)		<i>KIS co-ordinator:</i> Malik Anwar Khan	
<p>W. Zone, Thakurgaon</p> <p><i>KIS Co-ordinator:</i> Emran Hossain (Snr Manager, Livestock)</p> <p><i>Field location:</i> Roypur Federation</p> <p>5 men’s FFS groups</p> <p>5 women’s FFS groups</p>	<p>E. Zone, Lalmonirhat</p> <p><i>KIS Co-ordinator:</i> S.P. Sarkar (Snr Manager, Crops)</p> <p><i>Field location:</i> Panchgram Fed.</p> <p>5 men’s FFS groups</p> <p>5 women’s FFS groups</p>	<p>Sylhet District</p> <p>KIS Organizer Shameem Ahmed</p> <p><i>Field location:</i> Gopal Ramchandrapur, Biswanath Upazila</p> <p>1 men’s FLE group 2 women’s FLE group</p> <p>Subsequently: Tantikona Village, Biswanath FLE men’s group</p>	<p>Sunamganj District</p> <p>KIS Organizer Nehar Sinha</p> <p><i>Field location:</i> Shatoromordon, Sunamganj Sadar Upazila</p> <p>1 CLC group (household-based)</p> <p>Subsequently: Teghoria village FIVDB core credit group</p>
<p><i>Other KIS team members:</i> Mgr Livestock Snr Mgr Crops Snr. Mgr Fisheries Mgr Women’s Rights Mgr Agr Engineering Mgr Social Orgn.</p>	<p><i>Other KIS team members:</i> Mgr Livestock Mgr Crops Mgr Fisheries Mgr Women’s Rights Mgr Social Orgn.</p>		

¹ Agricultural Services Innovation and Reform Project (DFID-funded)

In the North-east the context into which a knowledge intervention approach might be introduced was less clear. The FIVDB Livelihoods Enhancement Programme does not work with groups (as we had discovered during the phase 1 investigation of KIS in the North-east); however a group was perceived as the only appropriate framework for what we (the project and FIVDB) were aiming for in phase 2. In the event, it proved possible to recruit groups which had been formed under the FIVDB's long-established Community Learning Circles (CLC) programme and also the much more recent farmer-led extension (FLE) initiative – in which FIVDB had collaborated with ASIRP (between 2001 and 2003), as had RDRS to pilot the farmer field school model. Thus in one location in Sylhet District (Gopal Ramchandrapur Village under Biswanath Upazila), one men's and one women's (ex-FLE) group were recruited and in one location in Sunamganj District (Satromordon Village under Sunamganj Sadar Upazila) a (household-based) CLC group was recruited.

4.3 Timescale and management

A timetable of phase 2 is overleaf; this picks up the chronology from the orientation workshops in January (NW) and March (NE), and carries it forward to the end of the project. Notes are:

The operational part of phase 2 lasted just about 12 months in the NW (February 04 to January 05 and a month less in the NE). This was considerably shorter than had been provided for in the project plan, mainly for the reason that the start of phase 2 had been delayed by the need for a second-round survey in the North-east to complete phase 1.

The programme in the North-east was quite seriously disturbed by flooding in April/May-July 2004. Worse, the impact of the flood on Shatromordon village was quite severe in that a flash-flood in April prevented many village people from completing the harvest of their Boro rice crop; then in June a regular flood submerged the village under 7-8 feet of water, causing all the members of the group we were working with to abandon their houses (with their livestock) and live in boats or on flood-free roadsides. This prevented visits to Shatromordon for a period of almost two months. The other location (Dohalramchandrapur) was flooded but less severely, so losses of crops and property were not very significant. By September, however, people were back in their houses and the delayed recruitment of other groups was underway.

It had been recognised that two groups in one location and one in another made for a very small base in the North-east, but the project team was reluctant to push the PO into a heavier workload than it felt comfortable with (this was in marked contrast to the North-west where the PO volunteered to cover more ground in phase 2 than we had envisaged). FIVDB agreed to move towards recruiting additional groups once work with the initially formed groups had got underway and the facilitators had come to feel confident with this. In both Sunamganj and Sylhet Districts the flood prevented new groups from being recruited before September; but at this point the facilitators started to work with an additional group in each District. Although this was apparently at rather late stage in the project, the feedback from members of these groups after some 3 months of contact with their KIS facilitator was positive (see Annex D.2).

Input by the project team was made almost monthly, at least during the first half of phase 2 when all the events noted in the columns headed 'team-facilitated activity' involved a visit by the project team. There was also telephone contact between the Bangladesh member of the project team and the POs during this period. This reflects the close working relationship which developed between the POs and the project team. The 'trouble-shooting visit' in June to the North-west was occasioned by the fact that monthly reporting (using a format which had been jointly drawn up and agreed in the January orientation workshop) was proving to be seriously inadequate, with much too little narrative included in the monthly sheets which the field teams submitted to the team leader and thence to the project team. There was no question of work not having been done; only that detail had not been recorded and so the rich picture which was subsequently captured on video (and which emerges also from Annex D.2) was in danger of being lost.

Chronology of activities in phase 2 of the project

Month	North- west team-facilitated activity	fieldwork	North- east team-facilitated activity	fieldwork
December 03	Planning mtg - outline schedule + ToRs			
January 04	Orientation workshop for HQ + facilitators		Planning mtg – outline schedule + ToRs	
February 04				
March 04	'Baseline' of groups	Meeting with service providers at village Federations	Orientation workshop for HQ + facilitators	
April 04	Review of programme	Visits to SP offices in Upazila Centres	'Baseline' of groups	Meeting with SPs at Upazila
May 04		Interaction with FFSs Monthly reports by KIS teams to project		Visits to SP offices in Upazila Centres
June 04	Trouble-shooting visit (monthly reporting)			Interaction with groups Monthly reports by KIS teams to project
July 04	Internal mid- term review with RDRS ¹		Internal mid-term review with FIVDB ¹	<i>FLOOD</i>
August 04			<i>FLOOD</i>	<i>FLOOD</i>
Sept 04			Recruitment of new groups in both locations	
			Information-sharing meeting – FA Forum	
October 04	Information-sharing meeting – FA forum			
November 04				
December 04				
January 05			Final debriefing – FA Forum	
February 05	Final debriefing – FA Forum			

1,2 These internal mid-term reviews are to be distinguished from the project mid-term review (by NRSP) which took place in mid 2003. They were aimed at assessing progress of phase 2 of the Information strategy component of the project at its mid point. The review in the NW was combined with a cross-visit by members of the KIS team from the NE (FIVDB) to RDRS.

4.4 Process and achievements

Annex D.2 provides an account of the process of engagement with the farmer¹ groups in phase 2 and of the main achievements to emerge from this. These are also the subject of the project video. The remainder of this section aims to elucidate the experience which emerges from phase 2 of the project.

The stages which the KIS teams adopted in working with farmer groups are:

1. Identifying needs in dialogue with group members : this has been termed a 'baseline' (the term applying both to the activity and to its output), and it involves use of some of the PLA tools developed in phase 1, notably the scored diagram indicating information needs and the matrix for indentifying information gaps & sources (see Annex C1 for a detailed account of these tools).
2. Facilitating a 'village-level' meeting/workshop between group members and selected service providers (government and NGO); local representatives of service-provider organisations explain what they are able to offer
3. Visits to service providers in their offices by representatives of farmer group, to make specific requests
4. Action in follow-up of this which may take any of several forms such as attendance at a training course by a group member, or village visits by representatives of the service providers to give a talk or method demonstration.

Stage 1 provides a means of enabling people to identify problems through the proxy of their perception of a need for information. This in turn points the way to a solution, if a source of information can be identified, even though the solution may require an input other than information (such as a credit loan to make an investment). The process also involves identifying information providers (see tables in Annex D.2); experience is that group members have some knowledge of these and that sharing of it is helpful and signals that the group is not wholly dependent on the facilitator. In both North-west and North-east most themes are NR-related but health and legal rights have emerged as important, and in the North-east a non-NR income generating activity, namely sewing/tailoring.

Stage 2 is a point at which the role and status (including the institutional affiliation) of the facilitator / co-ordinator become important, since a certain amount of leverage is necessary to secure the presence of service providers at a village meeting. In the North-west, all these meetings were held in villages; a favourable venue was provided by the Federation Centres which exist in both the project communities and indeed throughout the RDRS working area. In one location in the North-west the meetings were held in the Upazila centre (in one of the local government buildings), for the reason that there appeared to be no venue in the village. In the other location the meetings were held at the FIVDB cluster centre (i.e. local base with office and training space). It might be thought important that the meeting should take place in the village as a signal that the service providers are coming to their clients on their home ground. However this may not be very important, if logistics such as distance are going to prevent a 'critical mass' of service providers coming to the village (in Sunamganj the Upazila centre is 21 km from the village). In such case a meeting on 'neutral' ground in the Upazila centre, facilitated by the co-ordinator, may be as effective.

Stage 3 proved to be revealing to participants, who in the past have tried to approach officials in their offices without good effect, or who have been reluctant to do so. Again the role of the co-ordinator in facilitating this contact is important. However feedback from group members that this

¹ This term is used even though some group members are functionally landless, and many have other sources of income than farming. Livelihoods are predominantly natural-resource based.

experience has been so positive and that they have quickly gained in confidence and are now willing to engage with service providers to make requests on their own initiative. It would be very useful to monitor the sustainability of this confidence post-project, to see whether it survives personnel changes in the offices of the service-providing organisations.

The speed is noteworthy with which activities in stage 4 have followed on from stage 3 (largely in the North-west). By the mid-term review of phase 1 (i.e. in well under 6 months), there are substantial examples not only of information interventions having resulted in new practices, but of their having been translated into livelihood improvements. Examples are the women who received training in livestock vaccination and are now offering a service as mobile vaccinators (for payment), and the three (men) farmers in Roypur (featured in the project video) who have quickly put into practice training they received nursery cultivation, fish culture and broiler poultry production. Only the last of these needed additional financial and technical support (which was forthcoming from RDRS via micro-credit loan).

An interesting by-product of the process has been that members of the KIS teams have – according to them – increased their own knowledge about service availability (particularly from organisations other than their own) and that this has strengthened their capacity (and thereby that of their organisation).

Although benefits have been quickly gained by some participants in the project, questions can legitimately be raised of the *depth* of the livelihood impact within the groups with which the project has been working, as well as its capacity for being *sustained*. Particularly in the North-west there is good promise of sustainability (see section 4.5 below), and also of the approach being extended to other groups (which is the partner organisation's intention). But there remains a question of whether beneficiaries will be confined to the minority who have so far been able to implement change (which has involved taking risks and making investments), or whether it will extend to most group members. A 'deep' impact may depend as much on facilitating access to information on health, legal rights and small-scale income-generation as to that on agriculture or livestock.

This issue has important implications for the poverty impact of the KIS approach. The early beneficiaries are not the poorest members of the groups: those mentioned above have some land and/or have shown by taking loans that they are not risk-averse in the sense that extremely poor people (almost necessarily) are. For the KIS approach to benefit the poorer members of groups (whose needs may relate to topics other than agriculture) very probably requires it to achieve the deep impact mentioned. But there can be little doubt that the *process* which has been established of approaching and relating to service providers will benefit. On the broader question of whether the partners' beneficiary groups in both North-west and North-east represent and include the poorest people, some insights are offered by the process which was carried out in the North-east (following the Project MTR and in preparation for the second-round KIS study) of identifying and applying well-being criteria. In this it became clear that the poorest of the poor are barely 'visible' in the sense that they may not even own houses but live with others as servants or be itinerant in search of work for much of the time; they are not readily mobilised into groups. Those with whom the project has come into contact would more probably fall into the categories of 'Moderate poor' and 'Neo-poor'¹, than that of 'hardcore poor'

¹ There have been several approaches to categorizing rural poverty. These terms/concepts are from one by SLDP (2002):

Neo-poor: Just above poverty line; land ownership 0.5 to 1.5 acre; cultivation & wage labour; vulnerable to falling into poverty;

Moderate poor: Poverty line (2112 Kcals/head/dy), 'functionally' landless (0.5 ac. or less); dependent on wage labour

Hardcore poor: Below poverty line, landless (less than 0.1 acre, or live on other's land); dependent on wage or migrant labour; qualify for vulnerable group development (VGD) programme support.

(Moderate poor and Neo-poor are calculated as accounting for some 48 % of rural households)

4.5 Sustainability

4.5.1 RDRS

The prospects for the approach of R8083 both sustaining and being developed in RDRS are good. The timing of R8083 has been fortuitous for this in that it has overlapped with PETRRA (in which RDRS has been heavily involved as partner in several sub-projects) and also with the collaboration between RDRS and ASIRP in a pilot of a farmer field school model as a component of its Integrated Extension Approach (IEA). Informed by the experience of these initiatives, RDRS took a decision (in 2003) to adopt a farmer field school (FFS) model throughout its working area. It now refers to a 'core' FFS model with three 'variants', of which the KIS model is one (the others being a farmer-led extension model influenced by ASIRP and a 'PETRRA' model which puts emphasis on farmer-innovators as a link to extension service providers rather than on groups).

RDRS sees the distinguishing feature (and an important strength) of the KIS model is that it enables all possible interventions that might improve livelihoods to be addressed, including health, social development and women's rights. MG Neogi, the KIS Team Leader in RDRS has commented

"Members of KIS-based FFSs are found to be knowledgeable on a whole range of topics (from fish culture to dowry law) and able to generate demand on service providers (NGO, Government and Local Government - UP) for all things... Before, we thought 'integrated approach' meant intervening in ways that observed synergies between crop, livestock and fish production. Now we see it is about meeting all beneficiaries' livelihood needs - including rights, especially gender rights. The KIS approach has shown how the whole RDRS District team (including health, social development and women's rights advisers) can be involved in the farmer field schools."

In partnership with other NGOs, RDRS is aiming to form FFSs throughout its working area (see box on the following page). It is RDRS's intention to keep together the existing KIS teams based in Lalmonirhat and Thakurgaon and that the teams will carry the approach they have developed into new FFSs.

4.5.2 FIVDB

In the North-east, the environment appears to be less favourable for sustaining and upscaling the KIS initiative in its existing form. There is a much smaller 'critical mass' in terms of number of groups and of FIVDB people who have been involved, nor is there in the North-east an existing network of groups to which the project approach (which critically depends on groups) could be introduced by FIVDB.

Further, FIVDB has less freedom of movement than RDRS in the North-west, in that it receives little core funding and its activities are therefore somewhat 'donor-driven'. However, FIVDB sees scope for bringing the ideas of R8083 into existing activities in the following ways (based on discussion with Dr. Zahin, Executive Director of FIVDB on 2 March):

Child-to-adult communication: this is already being promoted within FIVDB's core primary education programme (DFID funded) via a SCF-UK initiative. So far this is confined to health and hygiene practices, and it is not certain how effectively the approach could be extended to livelihood issues where messages are more complex.

Union Parishads as resource centres: UPs (constitutionally) have a developmental role as a conduit for rural services. The scope for UPs to develop a role as resource centres has been mentioned in the context of R8083 in both the North-west and the North-east, in terms of low-cost initiatives such as a notice board / billboard). However, FIVDB is now a partner in a major USAID project 'Strengthening Union Parishads' which is likely to offer scope for important development in this direction.

Both of these provide possible ways of scaling up some of the findings of R8083. The proposal for a set of uptake promotion activities, which forms section 5 below, includes engagement of the project team with both of these initiatives during the final few months of NRSP.

Scaling up of a knowledge and information based approach to pro-poor by RDRS, within a farmer field school framework

RDRS took the decision to build its activities around 'farmer field schools' (FFS) in 2003. This followed what it regarded as successful collaboration with the DFID-funded Agricultural Services Innovation and Reform Project (ASIRP) within DAE, in which the Farmer-led extension approach promoted by ASIRP had been piloted in Rangpur District. The aim is that farmer field schools will gradually replace the network of primary and secondary groups and federations (with a largely micro-finance focus) on which RDRS's activities have been based since the 1970s, although this will take some time since there are some 300,000 households under the RDRS 'umbrella'. The purpose of introducing FFS is that they are thought to provide a vehicle through which a 'livelihoods approach' to poor rural people's well-being.

This concept of a farmer field school is different from the traditional one which has the purpose to teach and promote a particular technology (or set of technologies) such as integrated pest management or rice-fish culture. Rather the intention is to provide a space within which poor people can articulate development needs and be facilitated to meet these. Thus the approach will be far from the prescriptive one of the traditional FFS.

To date 800 FFS have been initiated by RDRS directly (absorbing 40 field staff who cover 20 FFS each), and 700 through partners (8 or 9 local NGOs). The latter is a more cost effective approach, although the challenge to RDRS is to ensure quality of facilitation and of achievement – which is to be achieved by monitoring and capacity building. The target is 3,000 FFS by 2006-07.

The KIS approach of project R8083 was originally thought by RDRS to be rather 'theoretical'. Now it has been 'shown to be practically useful', and provides a model which is being applied via RDRS-promoted FFSs. It is not being used universally throughout the FFSs, but is being tested alongside the farmer-led extension model and a RDRS 'core' approach (not discussed in detail but essentially one which draws largely on RDRS as a service provider - including a provider of technical support in e.g. livestock, crops, fisheries).

The recording process which was put in place by project R8083 is valued by RDRS – both the baseline report which was made by the KIS teams of each group at the beginning of its engagement with them and also the monthly monitoring reports (see Annex D1). A version of these is now used by all the RDRS farmer field school facilitators.

Notes based on interview with MG Neogi, RDRS Rangpur on 18.10.05

5 Uptake promotion

5.1 The project's constituency

The project has had important contacts during its life with the following stakeholders and potential stakeholders:

The two project partners (POs): RDRS in the North-west and FIVDB in the North-east.

PETRRRA, through which we were able to make links to the two POs and also to the 'Focal Area Forums' established by PETRRRA in the NE and NW. (PETRRRA is now closed, but the core of the team which managed the project is still together in IRRI Bangladesh and managing the EU funded project FoSHOL [Food Security for Sustainable Household Livelihood]).

Members of the North-west and North-east Focal Area Forums, namely local representatives of

(a) Government Departments providing rural services (Agricultural Extension, Livestock, Fisheries),

(b) organisations in the national agricultural research system, and (c) non-government development organisations.

Local (District- and Upazila-level) representatives in the North-west and North-east of Government Departments providing rural services, and also local NGOs.

Members of the PPS-BD (PRA Promoters Society Bangladesh) network of some 75 members, who represent a wide range of development organizations, mainly national non-government organisations, but including international NGOs and also some international donors.

National NGOs with which the project worked in the database component, including Proshika, CARE Bangladesh and FoRAM.

These have formed the project's immediate constituency for uptake promotion. In terms of the NRSP conceptual impact model (CIM), the targets are mainly in domains W and X, although, as noted above, the PRA forum gives access to some international stakeholders, while the partner organisations are immediate beneficiaries as well as – possibly – the 'engine of spontaneous spread'¹ and are thus in domain V.

To the above list it is necessary to add:

The Department of Agricultural Extension at national level – to which we have not a 'live' link since the end of ASIRP (Agricultural Services Innovation and Reform Project - DFID), which was R8083's main partner in the database component.

DFID Bangladesh.

An opportunity to broaden our constituency was lost when the project missed the opportunity (towards which we were working) to mount a stand at the PETRRRA 'closing event' in early July. However, other opportunities for this have now emerged.

¹ See NRSP's Conceptual Impact Model (CIM)

5.2 The project communication strategy and additional UP activities

A proposal by the project for additional uptake promotion activities was agreed by NRSP in June 2004. These were intended to reinforce the project communication strategy (of September 2003), and were:

Participation in the *PETRRRA end-of-project 'communication fair'*, due to be held in July 2004, *Focal Area Forum meetings*, to be called (and funded) by the project, following-up those held in April 2003, (in the North-east), and January 2003, September 2003, and January 2004 (in the North-west),

An end-of-project workshop, to which the objective would be to invite senior people in target organisations with decision-making capacity,

Exchange visits by the FIVDB's KIS team in the North-east, to RDRS in the North-west; and a similar visit by RDRS people to the North-east to FIVDB project sites.

These activities would be supported by the following 'communication products':

A video, based on footage already shot in the North-west in April/May 2004, to be shown at the Focal Area Forum meetings, at the PETRRRA communication fair, and at the end-of-project workshop; and also to be distributed as a V-CD,

A policy brief for distribution at the PETRRRA fair, at the Focal Area forum meetings, and at the end-of-project workshop.

5.3 UP activities to date, and communication products

The activities above have been carried out (up to February 2005), with the modifications noted:

PETRRRA fair: a breakdown in communication meant that we failed to mount a stand at the main event in Dhaka in early July 05 (which, as things turned out, was smaller than planned). This at the time seemed to be the loss of an important opportunity to broaden the project's constituency. However, other opportunities for this have now arisen (see 5.4 below). Further, the project mounted a stand, and showed clips of the project video, at the PETRRRA North-west fair, held at RDRS compound in Rangpur at the very end of July 05. This was attended by some of the project's farmer participants and the video generated a lot of interest.

Focal Area Forum meetings were held as follows:

North-east (September 2004, January 2005),

North-west (October 2004, February 2005),

(The January/February meetings were termed 'final debriefing meetings'.)

Exchange visits were held as follows:

North-east to North-west: July 2004 (coinciding with the North-west PETRRRA fair),

North-west to North-east: September 2004 (having been delayed by flooding in the North-east during July-August 2004, but coinciding with the NE Focal Area Forum meeting).

The *end-of project workshop*: it was agreed with NRSP (at the pre-FTR meeting in November 2004) that this should be replaced with a series of 'in-office meetings' with key members of the project constituency¹ (and the January/February meetings of the Focal Area

¹ This decision was significantly influenced by PETRRRA's experience of organizing its final events. The dates of both the Dhaka and the Rangpur fairs were changed several times to enable a deputy Minister to attend and were finally fixed rather soon before the events. This uncertainty contributed towards the project's failing to participate in the Dhaka fair, and it highlighted the difficulty of procuring the high-profile people in stakeholder organizations which we were hoping would take part in an end-of-project workshop.

Forums were seen as complementing these.) These in-office meetings were held in February 2005 as follows:

- a. with PETRRA - the former Project Manager and some of the ex-PETRRA project staff now implementing the EU-funded Food Security for Sustainable Livelihoods (FoSHoL) project, at the IRRI Bangladesh Dhaka office (at our request),
- b. with Action Aid Bangladesh - some 15 HQ staff, in the conference room of the AA Dhaka office (at the invitation of Acton Aid's Director of Research).

These UP activities have been supported by the communication products which are detailed in the chart below and samples of which are in the annexes indicated.

Communication products prepared to support project UP activities (*first generation*)

Title	Description / notes	Details	Annex no
Project Brief	Distributed at the PETRRA fair, also used at the September-October Focal area Forum workshops	A4, 8 pages, 4-colour, 'glossy' English & Bangla	F
Posters (set of 3)	Intended for / used at the PETRRA Fair, also distributed to KIS teams	A2, 4-colour, English with (part) Bangla translation	G
Video	Shot in NW with KIS team & farmer participants. (Clips of the Bangla version shown at the NW PETRRA fair, July 04)	VCD, 2 versions: Bangla - 32 mins & English (voice over) 8.5 mins	Not included
Training guidelines	Prepared following the Jan 04 orientation workshop in NW (see section 4.3 above) for use by KIS field teams	A4, 16 pages, mono (Xeroxed), Bangla only	H
Project Brief (<i>revised</i>) Policy Brief	Prepared for final debriefing meetings; presented at these meetings along with the 'Training Guidelines' (above) in a presentation folder.	A4, 8 pages, mono (Xeroxed) English only	J
Presentation folder	To hold Training Guidelines and Project and Policy Briefs for final de-briefing meetings	Pocketed folder; A4 oversize; 4-colour	J

These communication products have all had some weaknesses:

The *Project Brief* was intended to draw general lessons from the experience of the project, rather than being preoccupied with the process of the project – as seems to be the case with the version which finally appeared, and which has possibly therefore missed its target.

The *Posters* were useful for the stand at the PETRRA fair (where members of the project team were on hand to elaborate on them verbally), but probably failed to communicate any specific messages effectively. One ('no information, no solutions') contains good images, but too few words to carry the message further than its very general, 4-word head. The others contain flow charts which are probably too complex to be communicated via this medium.

The *video* generated a lot of interest at the North-west PETRRA fair (in the Bangla version); however the English version is not suitable for international distribution (on account of its length and the style of the commentary).

The *Training Guidelines*, which were based on the January 2004 orientation workshop in the North-west and prepared to support the KIS teams in phase 2 of the project, exist at present in a Bangla-language version only. It has generated particular interest on the part of Action Aid (see section 5.4 below) and may justify an English version if the project approach is to be communicated in detail internationally¹.

¹ A English version of the Training Guidelines could usefully be linked to a re-worked/strengthened English-language version of the video

The uptake promotion activities have not been without impediments, most notably a negative response at the Focal Area Forum meetings from some senior, District-level government people to the voices of rural people which we had recorded in the KIS study and in the project video. Examples are:

An objection in the North-east Focal Area Forum meeting in September 04 by a District Senior Livestock Officer to the bullet point in the Project Brief (Annex F, p.1) which summarises a finding from the KIS study that respondents are 'wary of being neglected or ignored if they go to government offices asking for services (such as livestock vaccination) or even for information about these services'.

A (more general) challenge by several (government) participants in the North-west final debriefing meeting to the assertion made by some of the farmers appearing in the video that they had difficulty in accessing information from service providers. The officials countered that their departments (notably the DAE) had made information provision their main activity for the past 25 years and had a network of village-level Block Supervisors with this as their main task. (There was also a concern expressed that the video, if shown internationally would give a negative image of Bangladesh.)

The project team attempted to give a robust response on both occasions, saying that what the communication products presented was exactly what poor rural people had said. They were supported quite strongly by one of the partners, less so by the other, which (the team recognised) needed to maintain a good working relationship with their counterparts in government departments at District level.

It should be noted that at Upazila (sub-District) level, good cooperation was achieved between the partners' KIS teams, the project beneficiaries and the representatives of government service-providing organisations¹.

The negative responses outlined present an interesting task for a communication strategy with these government departments as TIs. It is a duty of researchers to communicate fully their findings (and verbatim feedback from poor rural people is often appropriate in reporting on fieldwork). However if there is a reaction from a target audience which may *prevent* effective communication, then this needs to be taken account of in a communication strategy, in communication products and in uptake promotion activities.

5.4 Broadening the constituency

The in-office meetings held in February 2005 (and described in the section 5.3 above) were intended to serve as a pilot for a series of such meetings post-FTR, using revised communication products as well as the strengthened understanding of project outputs which would stem from the processes of preparing the FTR and the FTR review. The format of the 'in-office' meeting proved very successful. At both of the meetings, the project team feel they had a very interested hearing. As importantly, both meetings generated suggestions for further UP contacts and activities, as follows:

¹ A conversation with an Upazila veterinary officer who had collaborated closely with the project gave an important insight into the limitations placed on a service provider to implementing a poverty-focused approach. He explained that his objective is to maintain as high as possible a level of animal health in the area of his remit, with limited resources (funds, field staff). This leads to his having to opt for a stock-based approach rather than a farmer-based approach. Thus in a poultry epidemic he would see it as necessary and as efficient use of his resources to give priority to peri-urban commercial farms, rather than to people in hard-to-reach villages with a 10-bird flock.

(A means of enabling village people with small flocks to access veterinary care for their stock has been devised in the project in the North-west, namely for village women to be trained as vaccinators, for them to buy the vaccine from the vet office, and for them to offer a service to people in villages thereby earning income for themselves – see section 4.4 above and the project video.)

- a) The PETRRA meeting: an invitation to present outputs of R8083 to a forum of the partners of the FoSHoL, namely Action Aid Bangladesh, CARE Bangladesh, ITDG and Proshika.
- b) The Action Aid meeting: a request to use the R8083 'Training Guidelines' for briefing AA field and management staff working in the 'Reflect' programme, plus some support for this in terms of training. The guidelines are regarded by AA Bangladesh as a useful complement to the Reflect generic materials¹ in that they are practical in tone and set entirely in the Bangladesh context.

In addition, the following have emerged from end-of-project discussions with partner organisations and other stakeholders:

- a) A useful access point to grassroots organisations is provided by existing contact between PPS-BD and the 'learning circle' of NGOs supported by Dan Mission (a Scandinavian church-based donor organisation). These are all poverty-oriented (small) NGOs working on self-help approaches using a participatory approach. All reject external credit but depend on facilitating beneficiaries to build resources from savings. An interest was expressed by one of the organisations (SUPOTH, Dinajpur) in R8083's work in the North-west, which could be built on.
- b) Both partner organisations, RDRS and FIVDB have identified Union Parishads (UPs) as important players in development. This is confirmed by interaction with people in RDRS's and FIVDB's target groups during the KIS studies in 2003. Officially UPs have a developmental role as a conduit for rural services, and a USAID-funded project 'Strengthening of UPs' is currently being implemented. Engagement with the UPs could be achieved initially in Dhaka by liaison with USAID, and with the National Upazila Parishad (UP) Forum.
- c) A further stage of work with Upazila Parishads could take place in the regions with the partner organisations, with a view to encouraging UPs to develop their role as information brokers. This could take the form of regional-level workshops in NE & NW along with our partner organisations (which would depend on invitation by the National UP Forum), or more informal meetings with local UP chairmen in FIVDB and RDRS working area aimed at linking the UP with local information/service providers
- d) FIVDB has also proposed that follow-up to R8083 could take the form of strengthening its 'child-to-community' extension programme (which is an initiative in partnership with SCF UK implemented within FIVDB's [DFID-sponsored] Primary Education Core Programme). The aim would be for the programme to covers livelihood-related information on a broader set of topics than the mainly health-related themes on which it has concentrated to date. This would raise the possibility of impact on

5.5 Proposed UP activities and communication products

A set of uptake promotion activities which are based on the contacts set out above and the interest already shown in R8083, are set out in the chart below. These are grouped according to their logistic and resource requirements:

Activities in group (A) could be undertaken with quite a light input of resources. The UK project team would not require extra days for its input to these; however it is suggested that our research collaborator PPS should not be required to undertake these activities without funded days. (The estimated number required is set out in the right-hand column of the chart overleaf. Other costs would be small, limited mainly to those of refreshments, local transport and photocopying/paper.

¹ see www.reflect-action.org

Activities in group (B) would require more resources, including time devoted to liaison with the stakeholders identified, and possibly holding some meetings/workshops outside Dhaka.

Group (C) activities would carry UP activities back to the regions and resume the partnership with FIVDB and RDRS.

It is suggested that there is a trade-off between on the one hand costs and on the other the scope for achieving some impact on the 'further' domains of the conceptual impact model (i.e. domains V and Z). Thus the activities in Group A (i.e. low-cost, readily mounted) would impact mainly on domains X and Y; and to some extent on domain W. Those in Groups B and C (which are more resource intensive) offer additionally some scope for reinforcing or extending impact in domain V (primary stakeholders in project sites) and for horizontal scaling-up in domain Z (primary stakeholders in non-project sites via engagement of a secondary stakeholder).

There are residual funds in the project which would allow the Group A and some Group B activities to be undertaken. It is planned that this should be done post-FTR, with the possibility of embarking on one or more activity in Group C if time and funding is available.

The activities outlined would be supported by the following 'second generation' communication products, developed form and based on the lessons of the 'first generation':

Communication products: second generation

Title	Description / notes	Details	Annex no
Project brief Policy brief	For in-office meetings and other UP activities held September- December 05; to be presented with a CD copy of the video	A4, 6 pages/3-fold, colour, 'glossy'	M
Video	Revised version of 'first generation' video with additional footage (shot December 04); to be shown at in-office meetings etc. and presented with Project and Policy briefs	VCD, 2 versions: Bangla – 19.5 mins & English (voice-over) 8.5 mins	K
Presentation folder	To hold Project and Policy Briefs (and other documents) for final de-briefing meetings, also project video	Pocketed folder; A4 oversize; 4-colour or 2-colour; Bangla and English	M

A general approach to finalising the communication products will be to ensure they are fit for their purpose (as outlined in the second column above) and also, by and large, used for this purpose. Posters may serve their primary purpose of communication even if they are used for lining the inside walls of houses (which is important in cold weather, as emerged from discussion in the January 2004 workshop in the North-west). CDs however do not serve a communication purpose if they are used to for bird-scaring or to decorate rickshaws.

Proposed 'post-FTR' UP activities

Group A: National stakeholders, established contacts

Organisation / stakeholder	Justification	Means of approach	Planned outcome	Resources	Days (PPS)
1. DFID B'desh	DFID is funding/managing a range of rural livelihood projects, notably Char Livelihoods (also the 'mature' projects which are part of RLEP (below)	Contact with Snr Livelihoods Adviser to brief on R8083, and take advice on planned UP activities	DFID informed of R8083 outputs, and of initiatives to communicate these to projects	Policy and project briefs & VCD	1
2. RLEP	Relates to major DFID-funded projects (although several are now closed). Has remit to communicate learning of projects	Liaison with RLEP coordinator. Put report of R8083 (based on project & policy briefs) on RLEP (electronic) Learning Circle?	RLEP member projects informed of R8083 outputs	Policy and project briefs & VCD	1
3. PPS members & associates	PPS has 75 members, who represent a wide range of development organizations, mainly non-government, also international donors	A meeting (half-day) called by PPS to which it invites individuals with whom it has credibility (possibly PPS's regular monthly information sharing meeting; possibly specially called)	Members informed of of R8083 outputs, and of initiatives to communicate these to projects. PPS identifies level of interest and needs for support in members' organisations/projects	Policy and project briefs & VCD+meeting/venue costs	2
4. FoSHoL	Builds on PETRRA; also has as partners 4 key national NGOs: CARE Bangladesh; Action Aid; Proshika; ITDG	Presentation to FoSHoL partners and feedback. Identify further activities based on feedback.	Project lessons identified by partners for their own programmes esp. process-oriented (e.g. CARE Participatory Partnership Agreement). Crossovers between social and economic empowerment explored.	Policy and project briefs & VCD + meeting costs	2
5. Action Aid (A)	AA has developed Reflect – an information-based advocacy approach; they propose using our Training Guidelines as a means of orienting field staff on practical aspects of identifying information and services at local level	Follow-up meeting to 23 Feb and to FoSHOL contact	AA feed back on experience with R8083 Training Guidelines & identify scope for R8083 input to briefing of AA people and partners		1

Group B: National and some regional stakeholders, existing contacts developed

Organisation / stakeholder	Justification	Means of approach	Planned outcome	Resources	Days (PPS)
6. Action Aid (B)	Follow-up / response to (5) above	Briefing to AA people and some AA 'Reflect' partner organisations.	AA and partners facilitated to take ownership of the Training Guidelines, if it proves to meet their needs	Guidelines (Bangla) + Field workshop costs	10
7. Dan Mission partners' learning circle: PARI, Mymensingh; SUPOTH, Dinajpur; SATHI, Dhaka-slums; PROTTASHA Kishoreganj	These are all poverty-oriented (small) NGOs working on self-help approaches using a participatory approach. All reject external credit but depend on facilitating beneficiaries to build resources from savings	Contact with the 'Learning Circle' i.e monthly meeting of Senior Management in Dhaka. Offer briefing/presentation to a regular meeting	Learning Circle members establish linkages between their SHGs and service providers; also strengthen their field people's knowledge of available services and thus their role as resource people	Policy and project briefs & VCD (Bangla) + Guidelines + Misc materials for presentation+ meeting costs+	2
8. National Upazila Parishad (UP) Forum	Fieldwork has identified UPs as important information providers (potential/actual); response to local approaches (see below) will indicate whether national-level approach would be productive	Dialogue with USAID project 'strengthening UP' and with exec cttee of UP Forum (approx 50)	Project invited to facilitate one or more regional UP workshops.	Policy and project briefs & VCD (Bangla) + Directory of services + Venue costs	4

Group C. Regional stakeholders (NE & NW)

Organisation / stakeholder	Justification	Means of approach	Planned outcome	Resources	Days (PPS)
8. FIVDB (NE) / RDRS (NW), Union Parishad at local project locations (in both areas)	Fieldwork has identified UPs as important information providers (potential/actual); FIVDB is a partner in USAID 'strengthening UP' project	Meet with local UP chairmen in FIVDB and RDRS working area	Link established between UP and local info/service providers: UP members' interest in an information-broker role for UP assessed	Guidelines & VCD (Bangla) + Directory + workshop costs for 4 x meetings in 4 locations	12
9. UP Forum at regional level in NE/NW	Follow up to (6) & (8) above, depending on invitation of UP Forum	Regional-level workshops in NE & NW (if invited by UP Forum - see above)	Wide awareness by UP members of actual & potential role of UP as information provider	Policy and project briefs & VCD + guidelines	6
10. NE/FIVDB	FIVDB's Primary Education core programme (DFID funded) and Community-based Education Management Information System (SCF UK) recognise the scope of schools to provide children with livelihood information (currently mostly health-related), and for 'child-to-community' transaction of knowledge and information.	R8083 outputs communicated to teachers in the programme(s); probable roles of children identified. GO and NGO service providers invited into schools. Appropriate communication products (e.g. poster, chart) developed (by FIVDB material development section)	School children are informed about GO and NGO service provision to enhance livelihoods, and share this with parents and neighbours (successful example of mobilising school children as information providers and change agents is the Total Sanitation Programme of DANIDA /UNICEF/Water Aid)	Guidelines & VCD (Bangla) + materials for learning products (limited) in say 10 schools (out of 90 FIVDB schools in all)	12

6 Research Contribution

The purpose of the project, broadly stated, has been to enable organisations in Bangladesh that provide agricultural extension and related services to poor rural people, to enhance their own service provision and also to facilitate their clients' access to services of other providers. This would be achieved by facilitating organisations' understanding of processes by which information is exchanged, evaluated and used by their clients, and then by monitoring a series of interventions aimed at strengthening clients' access to information relating to their access, use and management of natural capital. The research findings should be applicable primarily to Bangladesh but also relevant to other high potential areas of South Asia.

The project has addressed its purpose through five outputs. The first three have involved pilot testing a database which was seen as an element in a strengthened decision-support system that would enable information on potentially farmer-useable technologies to be accessed at near-farm level. The work of the project in addressing this task proved to be largely aimed at strengthening the skills of District-level users in an environment which was hardly favourable to the development of an electronic information resource. Although one of the project partners explored quite vigorously a means of populating the database with farmer-reported technologies, this was not developed into a sustainable protocol with a process for validating information added to the database. Nor did the project ever reach the point of exploring near-farm level dissemination of information held on the database. The project's achievement has thus been largely one of alerting a few users to the potential of an electronic information resource; with hindsight it is doubtful that more could be expected within the 20-months' life of the this component of the project.

In its other component (addressed by the last two logframe outputs), the project has been able to contribute to understanding both of poor rural people's knowledge and information networks and systems, and of brokering of knowledge, information and services as a type of development intervention. Specifically it has:

1. explored PRA-based methods of interacting with rural people to explore their knowledge and information systems,
2. in conjunction with this developed a PLA protocol enabling relatively large numbers of observations to be made and analysed statistically,
3. identified important aspects of information needs of poor rural people, including (e.g.) the time and resource limitations which hinder their searching for information as well as the limited range of information channels on which they can reliably draw,
4. facilitated the piloting of an approach in which a development agency can determine the service needs of poor people and facilitate relevant service provision (which may involve poor people themselves becoming service brokers),
5. seen the scaling-up of this approach by one of its partners, and the adoption of monitoring tools developed within (4).

In (1) and (2) above the project has hopefully contributed to the 'parti-numbers' discourse on the scope for combining participatory and statistical tools, and in (1) and (3) to the general body of work on knowledge information in the context of rural extension. Perhaps more significant is its contribution via (4) to the findings emerging from elsewhere in NRSP (e.g. projects R7839, R8334) relating to scaleable approaches to working with groups of poor rural people to enable them to access rural services

The environment in Bangladesh appears favourable for scaling-up of the approach which the project has developed. This has been indicated by contact between the project and a range of target institutions with which links have been made and developed throughout the project; and the task will be pursued through a series of (post-FTR) uptake promotion activities.

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