RLEP
Rural Livelihoods Evaluation Partnership

Poverty Elimination Through Rice Research Assistance Project (PETRRA)

Fourth Output to Purpose Review
30th November to 14th December 2003

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RLEP has been established by the Department For International Development (DFID) to: i) manage the project review process for all its rural livelihood projects in Bangladesh, ii) develop a RLEP communications strategy, to identify and facilitate the improvement of systems for lesson-learning and provision of information to decision-makers, iii) facilitate improvements in project monitoring with particular focus on developing project teams' capacity in livelihood outcome monitoring and evaluation and, iv) build up national consultancy capacity.

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Poverty Elimination through Rice Research Assistance (PETRRA)
Review Team Report for the Fourth Output to Purpose Review

CONTENTS

ANNEXES

APPENDIX

Acronyms and Abbreviations

BADC	Bangladesh Agricultural Development Cooperation
BARC	Bangladesh Agricultural Research Council
BARI	Bangladesh Agricultural Research Institute
BAU	Bangladesh Agricultural University
BRAC	Bangladesh Rural Advancement Committee
BRKB	Bangladesh Rice Knowledge Bank
BRRI	Bangladesh Rice Research Institute
BS(s)	Block Supervisor(s) (of the DAE)
CAP	(DFID-B) Country Assistance Plan
CGS	Competitive Grant Scheme
CPD	Centre for Policy Dialogue (Bangladesh)
CSO(s)	Community Service Organisation(s)
DAE	(Bangladesh) Department of Agricultural Extension
DFID(-B)	(UK) Department for International Development (Bangladesh)
DG	Director General
DoLSys	Dynamics of Livelihood Systems in Rural Bangladesh
FAC	Focal Area Committee (of the NE and NW regional focal areas)
FAG	Fine Aromatic Glutinous Rice
GO(s)	Government Organisation(s)
GoB	Government of Bangladesh
HYV(s)	High Yielding Variety(ies)
IKB	IRRI Knowledge Bank
IRRI	International Rice Research Institute
KAP	Knowledge, attitudes and practices
LP(s)	Local Professional(s)
M&E	Monitoring and Evaluation
MOA	Ministry of Agriculture
MoV	Means of Verification
MTR	Mid-Term Review
NAEP	National Agriculture Extension Programme
NARES	National Agricultural Research and Extension Systems
NE	North East (region of Bangladesh; a local operational (focal) area for PETRRA
NGO(s)	Non-Government Organisation(s)
NRI	Natural Resources Institute (in UK)
NW(R)	North West (Region); a focal area for PETRRA and local organisations
OPR	Output to Purpose Review
OVI	Objectively Verifiable Indicators
PETRRA	Poverty Elimination Through Rice Research Assistance
PI(s)	Principal Investigator(s)
PINM	Participatory Integrated Nutrient Management
PMU	Project Management Unit
PRA	Participatory Rural Appraisal
PSC	Project Steering Committee
RDA	Rural Development Academy (Bogra, Bangladesh)
RDRS	Rangpur Dinajpur Rural Service
RPA	Rice Provisioning Ability
RPRF(s)	Resource Poor Rice Farmer(s)
RRA	Rapid Rural Appraisal
SHIP	Seed Health Improvement Project
SP(s)	Sub-Project(s)
TEC	Technical Committee (of PETRRA)
VBR	Value-Based Research

Acknowledgement

The OPR-4 team extends warm thanks to all the staff of the PETRRA-Programme Management Unit (PMU) for arranging the programme of the review and ensuring that it ran smoothly. The PMU team's professionalism in their various presentations, other inputs, and constant interaction with the OPR-4 team during the review are gratefully acknowledged.

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Moreover, the team is grateful for the contributions made by men and women farmers during the team's field visits.

OPR-4 team
29 December 2003

Executive Summary

1. PETRRA (*Poverty Eradication Through Rice Research Assistance*) was formally approved by the Government of Bangladesh (GoB) in March 1999 with DFID funding of £9.5m. It commenced on 1 April 1999 and will end on 31 August 2004. The project is implemented by the International Rice Research Institute (IRRI) through its Bangladesh Country Office. It has a Project Management Unit (PMU) and the major part of its research comprises a portfolio of sub-projects (SPs) commissioned through a Competitive Grant Scheme (CGS). SP locations are geographically dispersed, with SP clusters in districts in the west, north west, north east, east, central and southern (coastal) areas of Bangladesh.

2. The *competitive process* for the award of research contracts for sub-projects (to address logframe Outputs 2, 4 and 5) requires adherence to certain specifications. With respect to PETRRA, these are that the proposed research must: (a) be demand-led, poverty focused, gender sensitive, and environmentally aware; (b) use participation and partnerships in both the design and implementation phases; and (c) commit to networking to enable more effective research, including its linkage into development processes. Thereby, PETRRA aims to achieve (a) demonstrable change in the livelihoods of the target group (resource poor rice farmers, RPRFs) in target sites, and (b) develop an institutional mode for conducting research that is well geared to contributing to the development of pro-poor rural policies and services (purpose delivered). PETRRA refers to this way of designing and undertaking research as Value Based Research (VBR).

3. ***Progess towards attainment of Logframe Outputs 1-6 (Section 3)****:*

3a. *Output 1 – communication*. During project implementation, PETRRA recognised the importance of communication and gave attention to it within SPs and the project as a whole, including addition of the aim of communication as a logframe output.

Local capacity has been built on communication planning and conducting a range of communication activities including the development of pro-poor communication materials. PETRRA's stakeholders have learnt that communication should receive attention as an integral part of research design. This is a significant institutional gain.

3b. *Output 2 – rice technologies*. In the longer duration SPs there is evidence that poor farmers have enhanced their knowledge of rice production centred around the technologies that have been tested and promoted e.g., in seed technology, integrated nutrient management, rice-duck production system. In varying ways this knowledge has helped poor men and women farmers to improve their livelihoods, including their rice provisioning ability. While PIs can articulate this social dimension of their research, it currently is poorly documented. This is a gap. An improved understanding of the link between the opportunity to use a technology and how this may result in livelihood benefits is needed.

3c. *Output 5 – uptake promotion research*. The SPs for this Output are implemented through a rich mix of GO, NGO and private sector partnerships from which PETRRA will assess different 'models' for pro-poor uptake promotion. PETRRA-PMU recognises that the research dimension of these SPs may not be as strong as wished but the input of an external consultant for analysis and reporting should help in this weaker area.

Networks have been developed to assist information flow and multi-sectoral linkages. As part of this, the development of regional fora has enabled a mix of organisations (including farmers organisations) to review progress, needs and emerging opportunities. One forum (in the NW) appears to be strong and has taken steps to sustain its operation post-PETRRA.

3d. *Output 4 – policy research and dialogues:* The scope of work for this Output has matched GOB's policies and strategies pertaining to food production, technology development, extension and rice research. Whilst the policy dialogues involved relevant key stakeholders and had media coverage, there are no indications of them receiving any significant attention at policy-influential levels (but the difficulties and lead times involved in policy changes are recognised).

Through certain Output 4 SPs (DolSys – SP 11 00; SP 24 01; 'Pathways from poverty' – SP 26 02), PETRRA has contributed to the analysis and understanding of changes in livelihoods

in rural Bangladesh. These findings, which were the basis for a policy dialogue on *Rural livelihoods and poverty reduction* (in April 2003), confirm that improvements in livelihoods come mainly from agricultural diversification and rural non-farm expansion. Agriculture remains the engine for rural development and stabilisation of rice production remains critical for household food security and can contribute to livelihood building and poverty reduction.

Policy studies are reviewed against standard criteria (2 reviews out of 5, are completed). The criteria are relatively general and do not probe areas of specific interest to PETRRA.

3e. *Output 3 – capacity building for value-based research:* PETRRA has built up a cadre of local professionals (LPs) at a range of levels located in GO, NGO and private sectors that have an understanding, in their own institutional context, of the advantages of VBR and an improved capacity to undertake it. LPs are positive about their experience of inter-organisation partnerships and the management tools they have used for accountability of SP performance (e.g., compilation and use of a logframe; the need for M&E). Similarly, the senior management of the main national partner, BRRI, sees that PETRRA's CGS has helped BRRI scientists to express their potentialities and attain specific targets.

Although there is so much that is positive, without sustained opportunity for VBR, local professionals may revert, over time, to their former ways of working. However, there are very positive developments to counter this such as the Student's Internship Programme of RDRS that links with the Bangladesh Agricultural University (BAU), in which MSc and PhD thesis research is designed in consultation with poor farmers.

3f. *Output 6 – the pilot model for effective pro-poor research:* The PMU has set up a management system for the VBR-CGS and has constantly enriched this through internalising experience on how to achieve the standards sought in VBR. Monitoring and Evaluation (M&E) is part of this system, including procedures for internal evaluation of the SP portfolio and the project as a whole.

4. ***Cross cutting elements of value-based research (VBR) (Section 4)****:*

4a *Poverty focus:* Based on limited field visits and discussions with PIs, there is evidence of SPs achieving livelihood impact for the target group (tomorrow's poor). This is a considerable achievement. Several of the rice technologies that have been transferred are pro-poor as they are low risk and largely appear not to be of interest to the rich.

The PMU has made only limited efforts to increase awareness of key stakeholders (particularly PIs and their partners) on the importance of placing technology within a wider social context. It is important, in the project's remaining months, that the rich learning (currently held in people's minds) should be captured. This can be used to learn important lessons about the (positive, negative or neutral) impact that PETRRA has had in the livelihoods of their target RPRFs and the wider community.

4b. *Participation:* BRRI scientists, NGOs and other agencies involved in SPs have taken a quantum leap forward in understanding and realising the need for adopting participatory approaches in development and promotion of rice technologies for RPRFs. The scientific community has come close to the farming community in the SP sites, which has remarkably enhanced the process of information exchange and has built up functional linkages with stakeholders at different levels. However, a lot still needs to be improved at the skill learning level in order to take forward the concept of farmer participatory research into reality and action. SPs at different locations mainly transferred technologies. However through farmers' uptake, modified technologies based on strong location specificity, diversity in livelihood circumstances and gender specificity, have emerged (but have not been documented).

4c. *Gender:* Men and women are mentioned in the PETRRA logframe at both Purpose (OVI 1.2) and Output (OVIs 2.2 and 5.1) levels, but the concept of gender is not clearly addressed. The PMU has interpreted it in terms of gender equity, or more specifically in terms of equal number of men and women participating in the project. Changes in the monitoring reporting system reflect this understanding and consist of additional questions/indicators to measure changes in the participation of women.

The PMU's commitment towards increasing the number of participating women has translated into significant progress. However, the lack of gender related OVIs and MoVs in the PETRRA logframe has limited the opportunity to mainstream gender in the project.

5. ***Overall assessment regarding Outputs 1-6 and cross cutting issues**:*

5a. *Overall findings* are positive indicating that PETRRA's research, and the management system used for undertaking it (i.e., the VBR-CGS) have:

i) Changed the way in which some organisations in NARES and the private sector, including the lead national institute for rice research, have conducted adaptive research;
ii) Created a cadre of local professionals that recognise the advantages and values of this mode of working;
iii) Reached the poor both in and around sub-project sites and had a favourable impact on their livelihoods;
iv) Sensitised some policy-relevant organisations and senior local professionals on policy issues around rice that are relevant to Bangladesh's rural and national economy; and
v) Communicated and publicised aspects of the points above at various levels and across several sectors. This includes effective communication at grass roots level.

5b. *Quality of VBR*. Whilst SPs have made a start with adherence to the key elements of VBR, there is still scope for further improvement (e.g., reaching poorer groups, improving the quality of participation, mainstreaming gender). But this finding should not detract from what has been achieved. The combination of specifying key requirements (in the research call), providing training and advise on VBR during SP implementation, and monitoring SP progress including indicators that assess the quality of performance with respect to VBR, has resulted in research that demonstrably is pro-poor and has achieved local impact.

5c. *Livelihoods analysis*. At the moment for PETRRA this area of understanding is a gap in terms of documentation but PIs, through their field work, are aware of the types of livelihood changes that are occurring for poor men and women. Documenting the dynamics of livelihood changes in Output 2 and 5 SPs, or at least in a sub-set of these SPs, would complement the findings of the Output 4 livelihood studies (see point 3d above) and may add dimensions on livelihood building that the policy-related studies have not captured.

5d. *Capacity building*. For the majority of local professionals, the VBR-CGS was an entirely new way of working. Its acceptance, and the standards achieved in its field application in only 4.5 years are highly creditable. They represent a considerable step in human capacity building that is relevant to tackling rural poverty in Bangladesh. Importantly, the progress thus far in VBR has also made evident the steps that could be taken to address weak areas e.g., improve gender definitions in the project logframe (OVIs and MoVs); add social science capability to teams so that social analysis is undertaken in tandem with technology transfer; and improve community entry and use of participation in order to reach poorer target groups.

6. ***Evaluation and Impact (Section 5)**:*

6a. *Arrangements for project and sub-project evaluation:* A well organised and thorough Evaluation Plan has been prepared, structured to the PETRRA logframe and its component SPs. Output 2 PIs are already briefed on what is required from them in respect of reporting on their SP and collecting information relating to the OVIs of Purpose 1 and Output 2 of the PETRRA logframe. PMU responsibilities and the tasks for five external consultants have been defined. Additional support at the field level might be required and this could be linked with strengthening women's participation in the SP evaluation work.

6b. *Progress towards impact: Purpose 1 (livelihoods impact)* – Findings from a small sample of interviews in the field illustrated that improvements in RPA and other favourable livelihood changes for men and women have occurred in the target sites of the SPs. *Purpose 2 (institutional uptake of SP findings)* – Use of findings by relevant organisations has taken place and should continue. *Purpose 3 (institutional adoption of key elements of VBR-CGS)* – Experience of PETRRA's VBR-CGS (through both implementation of SPs and senior level membership of PETRRA's Technical Committee [TEC]) has convinced certain organisations

(e.g., BRRI, RDRS, RDA) of the advantages of the research management system exemplified by its VBR-CGS.

7. ***Exit strategy (Section 6.1)**:*

7a. The *scope and schedule for PETRRA's exit strategy* is presented in the Working Paper for OPR-4 (Section 8, doc ref 2). In overview, it has five main thrusts:

i) Management of SP closure (financial, technical support, etc).
ii) Implementation of the Evaluation Plan including reporting of findings for individual SPs and PETRRA as a whole (see Section 5).
iii) Preparation of planned publications (e.g., those for Outputs 4 and 5).
iv) Documentation of the VBR-CGS including, to the extent possible, analytical studies of lessons learnt in respect of poverty focus, participation and gender.
v) Information Reservoir for the totality of PETRRA – Development of the Bangladesh Rice Knowledge Bank (BRKB).

7b. Although plans are in place for handling items (iii) to (v), each represents a considerable work load. The OPR-4 team cannot readily see how the workload for the final project term can be cut down as all items are important. It can only be stressed that all persons (national and international) with tasks in this period must clearly understand the assignments that they have and must commit to delivering to time.

7c. Item (v) – *the BRKB* – is vital for sustaining the use of PETRRA's research findings (of the SP portfolio) and for ensuring that the various dimensions of the management system of the VBR-CGS are available for future use in other similar schemes, if required.

8. ***Main recommendations for project exit (Section 6.2)**:*

8a. As much as possible the *recommendations for project exit* that should apply during the project's final term, January to August 2004, are linked with products (or activities associated with products) that are already planned in project's exit strategy.

8b. A *major gap* (see points 3b, 4a, 5c), concerns capturing social learning around the process of technology transfer. This must be addressed in order to:

i) To add depth to the understanding of the ways in which the project, in particular the SPs in the portfolios of Outputs 2 and 5, made an impact on the livelihoods of poor men and women and households. This understanding (positive and negative effects) will enhance the quality of information for OVI P1.2. (which, as a proxy for livelihoods impact, is restricted to an improvement in rice provisioning ability [RPA]).

ii) Linked with (i), through the understanding of how poor people who have received information and training for a particular technology, have internalised this in their livelihood strategies, to determine ways and opportunities for improving rural services for the poor

8c. In the context of points 7a-7c and 8b, specific recommendations are:

Output 1 – *Recommendation 1: For the purpose of sustainability, key areas for attention for the BRKB are:*

i) Identify a national home for the BRKB for durable longer term supply of the CD and e-file storage back up.
ii) Ensure that there is a budget provision for production of BRKD CD's in quantities that provide for longer term supplies after project exit.
iii) Consider sub-sets of the BRKB dedicated to certain highly pro-poor products and communication materials that have a strong national context.

Outputs 2 & 5 – *Recommendation 2: Revisions to Sub-project Evaluation Guidelines.* Add one section to Chapter 6 of the SP Evaluation Report Guidelines. This would be Sub-Section 6.3 – Effects of the uptake of the information and training that the SP provided on farmers' livelihood activities. A guideline note should be added to prompt PIs also to report on what failed and their understanding of the reasons for this. For the guidelines as a whole, the words 'men and women' should be added wherever resource poor farmers (RPRFs) are mentioned.

Recommendation 3: Role of female staff in evaluation work (see point 6a). Use a female staff to coordinate the collection of information from women . All the participatory meetings at SP sites for collecting information related to evaluation should be assisted, or even led, by women (e.g., female PIs or more outspoken, articulate women farmers).

Recommendation 4: PETRRA should use its links with the private sector and regional fora for frank discussion of the marketing problem encountered in SP 28 02 (Fine Aromatic Glutinous Rice). The final report for the SP concerned (FAG – SP 28 02) should report on this marketing problem and the actions taken to try to overcome it.

Outputs 2 & 5 and 3 & 6 – *Recommendation 5: Undertake economic analysis and in-depth social studies of a few SPs. Use the* findings *to support impact evaluation (PETRRA Purpose 1) and to provide insights on the modalities of making VBR operational in the field.* The PMU team should decide upon a suite of 3 or 4 SPs, of which one is SHIP (SP 00 99), for in-depth studies (but tailored for completion during the remaining project term). Existing plans for poverty studies and a gender review should be assessed relative to this recommendation and adjusted as required. PMU should then use these studies to refine the definition of best practice for operationalising and managing a VBR-CGS including mechanisms for improving poverty focus, main streaming attention to gender and improving the use of participatory methods..

Outputs 3 and 6 – *Recommendation 6: PETRRA should document a small suite of 'good practice' process recommendations.* Importantly these process recommendations would document how pro-poor research can be linked into pro-poor services and planning processes.

Recommendation 7: PETRRA's documentation of its VBR-CGS, should include communication as one of the key elements that must be included in research design and monitored during the course of project and sub-project implementation.

Recommendation 8: PETRRA's M&E documentation (as part of the VBR-CGS) must emphasise and explain how robust 'quality, quantity and time' dimensions in the definition of logframe OVIs (at project and sub-project levels) are a key component for achieving effective M&E.

Output 4 – *Recommendation 9: Ensure that livelihoods-related SPs for Output 4 (SP 24 01 and SP 26 02) have a policy focus and, linked with this, reconsider the communication stakeholders for Output 4 and determine what communication materials they require.*

Recommendation 10: Revise the criteria for the evaluation of policy studies. The review criteria for the policy study reports should be revised so that the reviewers have to consider the studies' contributions to poverty reduction, livelihood building and gender issues.

Output 5 – *Recommendation 11*: *Assess local communication stakeholders and their needs for communication materials* to ensure that findings and key messages are accessible to local stakeholders in forms that could be used for wider local replication/application.

Output 6 – *Recommendation 12: PETRRA should consider adopting the logframe revisions concerning Output 6*. A key point regarding this revision is that it explicitly shows the purpose of the pilot VBR-CGS (i.e., to provide a tried and tested model for VBR-CGS that could support the NARES capacity to undertake, including manage, such a scheme).

PETRRA as a whole – *Recommendation 13:* PETRRA should consider holding a TEC meeting in August 2004 that could perhaps be linked with the final external OPR (OPR-5).

Recommendation 14: The Chairperson of the PSC should be requested to consider signing off on an Aide Memoire that briefly reports to the Ministry of Agriculture on the favourable aspects of competitive grant schemes, based on experience of PETRRA's VBR-CGS.

9. ***Findings relevant to the DFID-B Country Assistance Plan (Section 7)****:*

i) 'Models of good practice' for the involvement and empowerment of women.

ii) PETRRA's experience of the importance of communication

iii) Insights into the way in which technology transfer (that takes the form of providing information and training) is internalised into the knowledge bank of poor men and women and then variously used in their livelihood strategies.

Poverty Elimination through Rice Research Assistance (PETRRA)

Review Team Report for the Fourth Output to Purpose Review

1. Introduction

1.1 Brief description and history of PETRRA

1. PETRRA was formally approved by the Government of Bangladesh (GoB) in March 1999 with DFID funding of £9.5m. It commenced on 1 April 1999 and will end on 31 August 2004. The project is implemented by the International Rice Research Institute (IRRI) through its Bangladesh Country Office. It has a Project Management Unit (PMU) and the major part of its research comprises a portfolio of sub-projects (SPs) commissioned through a Competitive Grant Scheme (CGS). SP locations are geographically dispersed, with SP clusters in districts in the west, north west, north east, east, central and southern (coastal) areas of Bangladesh.

2. The scope of PETRRA's research is predicated on rice productivity as an appropriate means to initiate the improvement of livelihoods. The strategy asserts that rice productivity can lead to food security (centred on rice) and, linked with this, livelihoods improvement. Arguably livelihoods improvement of the poor, even in the context of the rice-dominated agriculture of Bangladesh, may not occur through this pathway. However, PETRRA has used rice as an entry point for reaching and improving the livelihoods of resource poor men and women farmers. In the context of PETRRA, this target group is defined as households who have an annual rice provisioning ability (RPA) of 3-8 months. In policy terms this group equates with the moderate poor and tomorrow's poor.

3. PETRRA's Mid-term Review (OPR-3) was held from 29 September to 12 October 2002. The MTR report found that the project had made considerable progress against its five planned Outputs, but there were some concerns. The project prepared a response report on main points and recommendations made in the MTR report. Key aspects were some revisions to PETRRA's logframe, attention to monitoring and evaluation (M&E), and setting milestones for the next 12 months (to Oct 2003) focused on the areas of concern identified by the review team.

4. The revised logframe provides the main framework of the Terms of Reference (ToRs) for this fourth Output to Purpose review (OPR-4). In this, PETRRA's Purpose has one livelihood-related objective and two institutional objectives, which variously link with six objectives at Output level. These comprise one communication objective (Output 1); two institutional objectives linked with the CGS (Outputs 3 and 6); and three research objectives focused respectively on technical innovations for rice-based farming systems, especially rice productivity (Output 2), policy in relation to rice production and livelihoods (Output 4) and investigation of new pathways for the promotion of the uptake of research findings, mainly in relation to rice production (Output 5). For further details refer Annex 1 (ToRs) and Annex 3 (the PETRRA logframe).

5. The competitive process for the award of research contracts for sub-projects (to address Outputs 2, 4 and 5) requires adherence to certain specifications. With respect to PETRRA, these are that the proposed research must: (a) be demand-led, poverty focused, gender sensitive, and environmentally aware; (b) use participation and partnerships in both the design and implementation phases; and (c) commit to networking to enable more effective research, including its linkage into development processes. Thereby, PETRRA aims to (a) achieve demonstrable change in the livelihoods of the target group (resource poor rice farmers, RPRFs) in target sites, and (b) develop an institutional mode for conducting research that is well geared to contributing to the development of pro-poor rural policies and services (purpose delivered). PETRRA refers to this way of designing and undertaking research as Value-Based Research (VBR).

6. As part of the functioning of PETRRA's CGS, a Technical Committee (TEC) supports the PMU in the review procedures for selection of research proposals. Once commissioning has occurred, the PMU is accountable for the performance of individual sub-projects and their performance, in turn, feeds into attainment of the project's objectives at Output and Purpose levels. The PMU's M&E activities enable routine assessment of sub-project progress and evaluation of the delivery of research findings at sub-project completion. Additional special studies, focused on capturing new insights, enhance the M&E work. A Project Steering Committee (PSC) provides strategic oversight of the CGS and the functioning and delivery of PETRRA as a whole.

1.2 The review process

7. A four-person inter-disciplinary team undertook the review variously with specialisation and experience in policy, institutions, participatory methods, poverty, gender, agricultural research for development and research management including competitive grant schemes.

8. The review was conducted in the period 30 November to 11 December 2003 through a series of meetings with the Project Manager and other members of the PMU team, and with principal investigators (PIs) of commissioned SPs. These meetings covered: (a) the scope and progress made for each logframe Output; (b) the way in which PETRRA-PMU and the SPs have addressed four of the value-based elements of the research (poverty focus, participation, gender and institutions); and (c) PMU's current progress and plans for the evaluation of SPs and PETRRA as a whole and the project's exit strategy. Meetings were also held with senior-level persons of key participating organisations (BRRI, IRRI, BARC) and representatives of the Regional Focal Area Committees set up through PETRRA. There were two field visits to a selection of sub-projects, respectively in the north west and north east focal areas. (For further details on the OPR-4 team and itinerary, refer Annex 2).

9. The team was provided with background documentation. A list of the documents consulted is provided in Section 8.

1.3 Structure of this Report

10. The review team's findings regarding progress for PETRRA's 2003 milestones are reported in Section 2. Progress towards attainment of each Logframe Output is reviewed in Section 3 and specific cross cutting issues – poverty focus, participation, gender and institutions – are covered in Section 4. Section 5 addresses PETRRA's M&E activities, evaluation plan and current progress towards impact. PETRRA's exit strategy is assessed in Section 6 and recommendations to be considered as part of the project's exit strategy are presented. Section 7 comments on the findings that appear to be relevant to the DFID-B Country Assistance Plan.

11. At several places in the following text, the acronym 'PETRRA' is used. Except where a differential statement is also included, this refers to the entire entity of PETRRA (the team of the PMU and the portfolio of sub-projects with their PIs and teams composed of staff from various partner organisations).

1.4 Overall context of the OPR-4 Report

12. A review of PETRRA has to take account of the institutional context in which this DFID-funded project was commissioned and implemented. The project's contract was awarded to IRRI with the Bangladesh Rice Research Institute (BRRI) as the key national partner. Building capacity for rice research was one of the aims of the project. However, to assist in achieving this, PETRRA was required to commission research competitively and in so doing, it has been one of very few pilot projects for CGS in the Bangladesh National Agricultural Research and Extension System (NARES[1)]. The value-based specifications of PETRRA's

[1] / In this report, a wide sense definition of NARES is used to include National Agricultural Research Institutes (NARIs), Universities, GO and NGO extension agencies, and National Development Institutes. Potentially private sector companies may form alliances and undertake collaborative work with NARES.

CGS (refer Section 1.1, para 5) also were pioneering elements both for the design of research sub-projects and for the SP commissioning process. As a result, in its totality, PETRRA has been an action research project (i.e., 'learning by doing'), – a dimension that will apply through to its conclusion.

13. The OPR-4 findings and recommendations are grounded in this understanding. As with any review, there are highlights and suggested weaknesses and these are the basis on which certain recommendations are made for the remaining project term. However, all comments are framed within the OPR-4 team's recognition of the pioneering work that PETRRA has undertaken. In this way, learning derived from the successful and less successful areas of PETRRA's performance, can contribute to the management of pro-poor competitive grant research schemes in the future.

2. MTR (OPR-3) Response and Progress for 2003 Milestones

14. The detailed findings for each milestone are given in Annex 5. The review team's overall finding was that the PETRRA-PMU had conscientiously followed up the recommendations of the 2002 MTR (OPR-3). The OPR-3 recommendations that are taken forward and developed in more detail in this review are:

- Monitoring and Evaluation Plan (Annex 5, row refs 1-7; Main Report Section 5).
- Communication (Annex 5, row refs 10-11; Main Report Section 3.1).
- Capacity Building (Annex 5, row refs 14-17, Main Report Sections 3.3 and 4).
- Impact (Annex 5, row ref 19, Main Report Section 5).

3. Review of Progress for Each Logframe Output[2]

3.1 Output 1 – Communication

3.1.1 General status and background

15. During 2002, Output 1 was added to the original PETRRA logframe, because PETRRA had recognised the importance of communication and already was engaged in communication activities at project and sub-project levels. An IRRI staff made an input in February 2002 to help with development of the PETRRA Communication Strategy. A logframe for communication (i.e., specific to Output 1) was prepared together with a sub-component for creation of an Information Reservoir – the Bangladesh Rice Knowledge Bank (BRKB).

16. PETRRA has engaged in communication with a range of stakeholders and actors in GO, NGO and private sectors at macro-, meso- and grass roots policy levels. Examples are holding two Communication Fairs (Sept 2002 and Sept 2003); development and wide distribution of Newsletters in English and Bangla, use of existing media outlets and networks for news releases and as channels for feeding relevant information to a near-grass roots level. Importantly, communication activities have occurred with men and women farmers in a local context through SPs commissioned for Outputs 2 and 5 and nationally through policy dialogues (SPs commissioned for Output 4). Regional near-grass roots and meso-level communication is achieved through meetings of Focal Area Committees (FACs).

17. A PETRRA web site was launched in September 2003 and, working towards project closure, plans are in hand to build upon the IRRI Knowledge Base (IKB) to produce the BRKB. In addition to what the IKB can provide, the BRKB aims to be a comprehensive information reservoir for PETRRA's research products, communication materials and the guiding principles and operational modalities of the VBR-CGS.

[2] / The Outputs (numbers 1-6) correspond with the PETRRA logframe. However, they are presented in the order of Communications (Output 1); Research (Outputs 2, 4 & 5) and institutional arrangements (Outputs 3 and 6).

3.1.2 Main findings

18. As outlined above, PETRRA's communication activities are wide ranging and are managed directly by the PMU as well as in commissioned SPs. These should enable attainment of the purpose OVIs of the communication logframe and be a major way by which PETRRA achieves its purpose at both grassroots (P1) and institutional levels (P2 and P3).

19. PETRRA's learning on the importance of communication undoubtedly has given rise to a strong sense of identification with this area of work, which should in turn be an asset to those engaged in future development-oriented research in Bangladesh. Nevertheless, there were lead times to PETRRA's recognition of the importance of communication. In this regard it is unfortunate that PETRRA was unaware and therefore not able to make use of some of the findings of DFID-funded communications research that was available in 1999. Indeed, had the availability of such work been communicated to DFID country desks, it could have led to the explicit inclusion of communication in the original logframe.

20. Linked with this observation, the team is of the view that IRRI's input (see para 15) took insufficient account of the local pro-poor context of PETRRA's communication planning. Through prioritising use of the internet and national-level public media, dissemination (passive communication) was emphasised, but positioning these activities in a comprehensive (wider ranging) communication plan was missed.

21. It is very much to the credit of PETRRA's SPs that the need for pro-poor communication materials was identified and acted on as an integral part of SP implementation. Indeed, in at least two cases (SP 00 99; SP 37 02) action was in response to farmers' demand leading to communication materials that are gender sensitive. PETRRA's own interactive mode of working then enabled spread of this experience to other SPs. Had PETRRA had access to the DFID-funded communications work, guidelines on communication-stakeholder analysis and assessment of their respective communication contexts would have given a much stronger pro-poor gender-sensitive context to the communication planning. However, as stressed in this paragraph, a mix of farmers' demand and SPs' realisation of, and response to the need for communication materials that were accessible to intended beneficiaries and near-grass roots service providers, 'saved the day'. This indicates considerable learning within SP teams on communication as a component of the uptake promotion plans of research assignments and is a significant institutional behavioural gain.

22. The review examined Version 1.0 of the IKB (on CD) that will be included in the BRKB and will, in some ways, be a building block for it. Importantly PETRRA does plan that the BRKB will be comprehensive with respect to PETRRA's research products and communication materials. This is vital for its potential nation-wide use by NARES at a range of levels. Importantly, PETRRA must ensure that GO and NGO service providers will be able to access and use what the database contains so as to be able to tailor its various contents to their own localised needs.

3.1.3 Highlights of strengths

23. The PMU's and SPs' learning and actions on the importance of communication in the context of pro-poor development-oriented research are significant attainments. The indications are that experiences have been internalised and will be an asset within NARES for the future.

3.1.4 Comments on weaknesses

24. Even though all the indications are that PETRRA has done well with communication and should continue to do so, the development of communication plans would have benefited from access to DFID-funded work on communication in research project design and an analysis of communication stakeholders and their communication contexts.

25. Linked with para 24, PETRRA's plans for certain book publications (e.g., SP 24 01) appear to be driven more by supply side capability than demand side need. Questions that were not adequately answered were: Why a book (relative to other possibilities)? Who is the audience? Is a book the best form of communication for the outcome that is sought?

3.1.5 Special points concerning the elements of VBR

26. With respect to the elements of VBR, a positive aspect of the SPs' development of communication materials is that their reach and effectiveness have been considered. Within SPs, some materials were pilot-tested with RPRFs and the feedback was used for their refinement. Both PMU and SPs have produced materials in Bangla. Possibly more such materials are needed but the review could not assess this. However, PETRRA does recognise the importance of having materials in Bangla and also the need for effective communication at the grass roots level.

27. There is an opportunity in some SPs to capture the process of technology introduction and uptake in the context of the way in which men and women farmers internalise knowledge gained from information access into their practices and livelihood decisions. Technologies are honed into practice through farmers' livelihood decisions, including trade-offs. It is an area that could benefit from greater understanding and recognition by intermediate stakeholders. PETRRA should consider a sequel to SP 37 02 (Section 8, doc ref 32) to make a small contribution to this under-considered area of technology promotion (also see Section 3.2).

3.1.6 Main points for consideration in project's final period

28. Development of the e-based BRKB can provide a sustainable reservoir for PETRRA's research products and their various media forms. Nevertheless the BRKB needs a national home for durable longer term supply of the compact disk (CD) and e-file storage back up.

29. Similarly, there must be a budget for production of BRKD CDs in quantities that provide for longer term supplies after project exit. CDs are very convenient for those without reliable internet access and so demand should continue well beyond project exit.

30. PETRRA should consider sub-sets of the BRKB dedicated to certain highly pro-poor products and communication materials that have a strong national context.

31. PETRRA experience of the importance of communication, including the structural complexity of meeting the communication needs of a range of stakeholders and reaching policy actors, appears to be highly relevant to DFID-B's operationalising of the CAP.

32. Similarly PETRRA's experience indicates that attention to communication in research project design should be added to the suite of key elements of a VBR-CGS that has a central focus on contributing to poverty reduction.

3.2 Output 2 – Rice technologies research

3.2.1 General status and background

33. The portfolio of Output 2 comprises 22 SPs. One SP, the Seed Health Improvement sub-Project, SHIP (SP 00 99), was awarded non-competitively and has 22% of PETRRA's budget. It was commissioned in 1999. The rest of the portfolio was commissioned through competitive calls of which 3 SPs were contract effective in 2000, 7 in 2001 and 11 in 2002. Actual start dates indicate that some were able to operationalise to meet seasonal cropping needs – 9 in 2000 and 11 in 2001. All SPs are scheduled to end in June 2004.

34. BRRI is the lead organisation for the majority of Output 2 SPs but all SPs work in partnership with other organisations (NGOs and in some cases the private sector).

35. In the time available, the OPR-4 team was able to interact in the field with only four of the Output 2 SPs. Village sites of SHIP were visited in two focal areas (north west, NW [the complete team] and north east, NE [2 team members only]). There was interaction with the

following SPs in one focal area, NE (2 team members only): participatory integrated plant nutrient management (PINM, SP 17 01); integration of rice with duck farming (SP 19 01); production and marketing of fine aromatic and glutinous rice (FAG, SP 28 02). In addition to field interaction with SP PIs, the team held group discussions with SP PIs on three occasions (with only 2 team members present on one occasion).

36. The need to work over several field seasons is an important requirement in cropping systems research and this has to be considered in making an assessment of the progress of Output 2 SPs. In this regard, the longest running SP, SHIP, focuses on one factor in the rice production system – rice seed – and two early 2000 SPs focus on the development of high yielding rice varieties (SP 13 00, salinity tolerance and SP 15 00, hybrids). However, there are longer running projects that address improvement of the rice cropping system – rice-duck (SP 19 00) and PINM (SP 17 01), and sustainable nutrient management in intensive rice cropping systems (SP 10 00).

37. More recently commissioned projects are a mix of factor (e.g., FAG) and cropping systems research, but their context is livelihood systems.

3.2.2 Main findings

38. The Output 2 SPs are contributing to the attainment of PETRRA purpose level OVIs, especially the OVI that most directly concerns livelihoods (P1.2) and also the institutional uptake-related OVIs, P2.1 and P2.2 (also see Sections 5.2).

39. Importantly the portfolio is wider than single 'factor' testing in the context of a defined cropping system, which of itself is a very positive development. The background 'argument' here is that promotion of single factor interventions is more amenable to on-farm research, and often leads to the neglect of testing multi-factor systems interventions. In this regard, PETTRA has done well to achieve both a factor and systems research portfolio for Output 2. Although PETRRA's June 2004 end date will possibly curtail the planned delivery of some SPs, there are longer duration factor (e.g., SHIP) and cropping systems (e.g., rice-duck) SPs that should enable PETTRA to make robust assessments of purpose level livelihood impact and institutional uptake).

40. A satisfying observation for the Output 2 SPs is that, although in content they focus on a single factor or mix of factors for improvement of rice cropping systems, the PIs are assessing their work of promoting change in the management of these factors in the context of people's livelihood systems. Put another way, rather than viewing new technologies as a means to improve field production of rice, PIs are recognising the livelihoods dynamics around technological and systems management changes. Currently, this recognition is more verbal than written but it does, nevertheless, indicate a shift towards holistic thinking for which credit must be given to SP teams and the PMU's monitoring and support. This observed shift is revisited in Section 3.5 and in Section 4.

41. In spite of the positive finding in para 40, SPs' performance is uneven. Even within the accountability aspects of CGSs, uneven performance does occur. Importantly, PETRRA-PMU monitors performance and takes steps to improve weaker areas as required. In addition, PETRRA has a suite of projects, of which one is SHIP, that are performing well indicating a favourable internal rate of return for PETRRA as a whole, based largely on the Output 2 portfolio.

42. The learning and associated actions that SPs have taken with respect to pro-poor communication were covered in Section 3.1, para 21.

43. ***The Seed Health Sub-Project (SHIP)***.In addition to what is reported above for SPs as a whole, the following findings are specific to SHIP.

44. The various components of seed technology that were introduced and promoted in SHIP target sites were simple and very low risk. These features, combined with the central focus on rice seed, made the technology very pro-poor. Already in the project sites, and in

adjacent areas, there is evidence of men and women farmers seeing the benefits of improved seed technology for paddy production. They have incorporated the technology into their seed handling and crop production practices and both men and women are deriving livelihood benefits (also see Sections 4 and 5.2).

45. Probably because the project has had four years in the field, men and women farmers have had time to adapt the technology to suit their circumstances. There is a rich opportunity for scientists to understand what local adaptation looks like, particularly to learn how technology becomes practice and is integrated into crop husbandry (also see Section 3.1.5, para 27 and Section 3.5.3 regarding MSc opportunities for emerging young professionals).

46. Because of some excellent integrated work on communication as part of SHIP's research, SHIP is well placed for wider impact. Also some PETRRA uptake promotion (UP) research projects (refer Section 3.3) are centred on rice seed technology and uptake has occurred in these projects in non-SHIP sites. SHIP also has provided training on the principles and practicalities of its rice seed technology package to Block Supervisors (BSs) of the Department of Agricultural Extension (DAE).

47. As part of SHIP, BRRI has developed a laboratory with modest facilities for cellular and molecular biotechnology. Currently SHIP is the main user of this facility. However, the range of equipment is appropriate to wider applications than seed health. In this way the facility is an asset to BRRI's biotechnology capabilities.

3.2.3 Highlights of strengths

48. The emphasis here is on technical content in respect of livelihood gains. The mode of research implementation is covered in Section 4.

49. Both in and around SHIP's test sites, there is evidence of the enhancement of farmers' knowledge of seed technology leading to their production of better quality rice seed that has both a higher market value and greater assurance of leading to good seedling nurseries and subsequent greater paddy yields. Because men and women farmers have understood how to continue to apply this new knowledge, they are able to maintain their production of good quality seed with accompanying opportunities for sustaining both the improved productivity of their (paddy) crop and producing a surplus (to their needs) of good quality seed. In what amount to only a few snap shots, the team learnt a little about how these opportunities had been integrated into livelihood systems of individuals (men and women) and households (refer Section 4).

50. Farmers' internalisation of the information and training they received from SHIP on seed care is an excellent example of how a technology is integrated into men and women's management skills and variously used in their individual and household livelihood strategies (also see paras 27 and 45).

51. Although the longest running SP, SHIP, will provide the best evidence of sustainable livelihood gains (both in and around SHIP's test sites), there are indications that other SPs in the Output 2 portfolio are reaching the more advanced stage of farmers' integration of the information and training associated with factor/systems technologies into their own farm management and livelihood decision-making. These will join with SHIP as measures of attainment of purpose-level OVIs P1.2, P2.1 and P2.2.

3.2.4 Comments on weaknesses

52. *Economic analysis of Output 2 SPs*. It will be essential for longer duration projects in the Output 2 portfolio to conduct cost-benefit analyses. There are indications that PETRRA-PMU should be more pro-active in planning these and ensuring that PIs understand what data are required from them.

53. *Joining SHIP technology into other seed-based SPs in PETRRA's portfolio.* Through its products and communication materials, an opportunity has been created for SHIP to

contribute its (low risk) technology into other seed-based SPs in PETRRA's overall SP portfolio but (with the exception of the seeds systems SP [SP 02 00]) such integration has not occurred. On the part of SHIP, this represents a missed opportunity.

3.2.5 Special points concerning the elements of VBR

54. Para 40 reported the shift towards holistic (livelihoods) thinking on the part of SP teams but noted that the shift was possibly more verbal than written. In this sense there are very valuable experiences and learning in the minds of the SP research partners. Examples are: recognising that those women who work in the field are hard working and serious about understanding and applying new techniques; finding out that even women that work in the homestead wish to have access to information relating to field practices and management; noting a shift in gender roles with women moving into management of field-based enterprises (possibly with men engaging in local non-farm income earning opportunities).

55. Three issues arise from this regarding the technical aspects of Output 2 SPs. Firstly, the need for PETRRA to be pro-active to capture this learning; secondly the importance of making SP research partners part of such an exercise; and thirdly the re-inforcement that these findings give to the importance of the inclusion of gender in the key elements of PETRRA's VBR (also refer Section 4.4 and 6.2.3).

3.2.6 Main points for consideration in project's final period

56. In brief the main points for follow up, taken forward to Section 7, are economic analyses focused on a small suite of SPs (see para 52); capturing social learning and undertaking social analysis with the involvement of SP research teams (see paras 40, 54 and 55); taking action for linkage and input of SHIP products into other seed-based SPs (see para 53); understanding and internalising the evidence that there is in SHIP and possibly other SPs of how transfer of a technology in integrated into farmers' knowledge, and farm and livelihood management systems (see para 49).

3.3 Output 5 – Uptake promotion research

3.3.1 General status and background

57. Output 5 focuses on the identification and testing of improved methods for effective uptake of technologies and aims to recommend improved uptake pathways which variously may involve linkage and coordinated inputs of GO, NGO and private agencies. With respect to its research content and the institutional arrangements around the conduct and reporting of work undertaken for this Output, the SPs should make a major contribution to achieving PETRRA's logframe Purpose 2 (uptake of findings by institutions). In addition, through the pilot testing nature of the research, farmers' livelihoods also should benefit (Purpose 1, OVI P1.2).

58. The portfolio of Output 5 comprises 19 SPs and three SPs placed in the Output 2 portfolio also contribute. In addition, as SPs in Output 2 increasingly engage with communication as an integral part of their research, they will contribute findings for this Output.

59. The first round of SPs commissioned for this Output focused on rice seed (technology and systems). Following the review of Alex and Halim (April 2002), a second round of commissioning widened the technical scope of the SPs and has tested different mechanisms for uptake promotion, including specific attention to women and private sector links for input supply.

60. The establishment of FACs in the NW and NE (see para 16), and linkage with the National Agriculture Extension Programme (NAEP) in the south west form part of this Output. FACs were piloted as decentralised bodies that could improve information flow between GOs, NGOs, private agencies and farmers organisations and assist scaling-up both of technologies and effective uptake pathways.

61. In addition, an Uptake Forum was established in early 2000. The rationale was that SPs for Output 5 were treating their various assignments mainly as extension (i.e., uptake promotion) while attention to the research dimension, that could deliver new insights on uptake promotion mechanisms, was weak. The Forum has sought to enable sharing of experiences on uptake promotion amongst relevant SPs as a means of improving SP performance and building linkages and partnerships that should sustain after PETRRA's exit.

62. *The review of Output 5*. In addition to considering relevant documentation, the OPR-4 team reviewed this output through one meeting with PIs of some Output 5 SPs; field visits to four SPs in the NE and a meeting with members of the NW FAC.

3.3.2 Main findings

63. The portfolio of SPs for Output 5 is diverse in terms of technical content and the institutional arrangements (partnerships) that are used for SP implementation. Uptake pathways are being tested that can serve poor men and women farmers. The partnerships involve public and private organisations and include the establishment and development of effective links along the market chain from input manufacturer through to the targetted purchasers, men and women RPRFs. Overall it is a rich picture which should yield new insights on how to achieve effective pro-poor rural services. Already it is evident that diversity is part of this service provision. Several uptake pathways are effective but with varying features depending on client groups and the nature of the service. Thus OVI-1 for Output 5 (impact on the target group of RPRFs) and OVI-2 (uptake of findings by partner organisations) should be achieved.

64. An interesting point reported by one of the SPs (SP 38 02 – Network development for mobile pump marketing) is the breadth of human capacity building that is needed to support pro-poor service delivery. In this SP, training was required at many levels including farmers (for pump use); mechanics (for pump repairs); and dealers (to understand the product they were selling). Also joining up information services was needed – in this case technical information on the pump itself together with information on suppliers and on sources of credit. Staff of DAE have brought this information together in their support to pump-promotion.

65. It was gratifying to learn that an effective national rice seed system (SP 02 00 – National Rice Seed Network) has been developed that can both deliver quality seed and regularly make new improved rice varieties available to poor farmers. The network currently involves four GOs, 12 NGOs and 37 private sector companies, operating country-wide and involving trained farmers and farmers organisations (federations) as outgrowers and quality seed providers respectively. This has been built up from the low (and ineffective) service base of only 4 GOs in 1999. The provision of training in seed technology at a range of levels has been an important contributor to the network's success especially in respect of quality control. The findings of SHIP (refer Section 3.2.2) have contributed to this effort.

66. The Uptake Forum has helped to strengthen the research aspects of the Output 5 SPs. In addition, PMU has contracted an international consultant to take the lead in the preparation of a book on uptake and extension methods. This publication will document the various experiences of the Output 5 SPs and will be compiled interactively with SP PIs through preparation of case studies and writers workshops. In addition, findings will be reported at a national seminar (Section 8, doc ref 23). These activities will satisfy Output 5 OVI-3. In addition, it is assumed that the book and symposium presentations will be added to the BRKB, and hence Output 5 OVI-4 will be achieved.

67. Both of the regional (focal area) fora are functioning and that of the North West appears to be strong and well set to sustain after PETRRA's exit. It will continue to promote PETRRA's VBR elements as these align well with the priorities of a major player in the forum, the NGO, RDRS. Importantly, RDRS articulates what can be gained from the operation of the forum in respect of accessing sources of expertise (for rice production) and

positioning these in the context of the practical needs and emerging opportunities for poor men and women farmers. The apparent strength of the NW FAC indicates that Output 5 OVI-5 will be attained.

3.3.3 Highlights of strengths

68. The Output 5 portfolio contains a rich mix of uptake research SPs. These range from a nation wide seed system to the promotion of well targeted inputs e.g., mobile pumps to use surface water resources in the south (Barisal); and identifying the untapped resource of the NGO, Sushilan, in the south west coastal area (Satkhira), and building their capacity for linking up with expert inputs relevant to farmers' particular circumstances in that area.

69. Cross sectoral linkages are in place and are part of the research learning on pro-poor service provision to reach both men and women farmers.

70. Similarly, the development of the regional fora has enabled a mix of organisations (including farmer federations) to exchange information on progress, needs and emerging opportunities.

3.3.4 Comments on weaknesses

71. It is apparent that changes are taking place in SP sites as a result of implementation of Output 5 SPs. PETRRA-PMU has been aware that PIs have had some difficulties in capturing the research aspects of uptake promotion. The Uptake Forum has helped to overcome this problem, but it still will be essential for PMU to ensure that insights are documented in a well structured way.

3.3.5 Special points concerning the elements of VBR

72. Following on from para 71, it is planned that the research aspects of Output 5, including new insights on pro-poor uptake promotion models, will be compiled as a book. It will be essential that the style of this book is accessible to those stakeholders who in the future may be major players in pro-poor service delivery in Bangladesh.

73. Is a book the best way to reach these stakeholders especially in regard of key considerations for the process of service provision that can reach the poor and be gender sensitive? The proposed book will be excellent for capturing the learning associated with Output 5 but there may also be a need for second generation materials. These would focus on the presentation of main findings, in an accessible way, for the range of organisations that the research of Output 5 has shown can be involved in pro-poor service delivery.

3.3.6 Main points for consideration in project's final period

74. It was apparent that PIs closely identify with the work of their various SPs and hence, it is likely that some of the organisations involved in Output 5 SPs will internalise the learning on pro-poor services and this should be an asset to future pro-poor service provision.

75. Arrangements are in place to report the findings on uptake promotion research in the form of a book and at a national symposium. It may also be necessary to consider other communication materials that would be accessible to service providers. The book may not meet this requirement but the materials for the national symposium could be planned to cover this perceived gap.

3.4 Output 4 – Policy research and policy dialogues

3.4.1 General status and background

76. Rice plays important role in the economy and politics of Bangladesh where around half of the population lives below the poverty line. Extreme food poverty makes rice indispensable for the livelihoods of millions of people both in rural and urban areas. More than 13 million farm households are involved in rice production.

77. Given the above, it has become an imperative for the policy makers to place rice and rice research at the top of their policy agenda and political mandate. The policy and strategy papers of the government, including the Five Year Plan documents and the recently prepared iPRSP pay special attention to the rice sector.

78. Since rice production is a land based activity, land owners derive the direct benefits from an increase in rice yield. This straight forward conclusion genuinely poses the question regarding the relevance of rice research aimed at benefiting those 50 percent of the population who are resource poor and do not own any land. The answer is that increased food supply due to increased yields as a result of research and extension has contributed to the lower food prices – within the affordable limits of the landless and the poorer segments of the population. Strategy documents project that food grain production and availability, and sustainable access of the poor to food – their food security – largely depend on the new research findings and efficient introduction of new technology, based on research.

79. In this context, the PETRRA logframe (Output 4) specifies the identification of policy constraints to rice-dependent livelihoods and presentation of recommendations relating to these constraints in key policy fora.

80. Six policy studies were implemented for this Output, of which two (SP 11 00 – Flood prone village study revisit and SP 24 01 – Dynamics of livelihood systems in rural Bangladesh) formed part of the DoLSys[3] study. Three studies are already completed of which two have been reviewed by independent reviewers using assessment criteria that PETRRA provided.

81. The Centre for Policy Dialogue (CPD), has taken the lead in organising four policy dialogues (marked * in the list below), three of which formed part of DolSys while one (the fourth listed below) was part of CPD's programme activities. DolSys arranged two additional dialogues and one dialogue formed part of PETRRA's OPR-2. The sequence of the dialogues is as follows:

- 23 Sept 2001 – *Poverty and agriculture (part of OPR-2)*
- 8 Jan 2002 – *Rice seed delivery system and seed policy (*)*
- 20-21 April 2002 – *Strengthening rice research and extension linkages in Bangladesh*
- 8 July 2002 – *Promoting rural non-farm economy: Is Bangladesh doing enough? (*)*
- 8 Jan 2003 – *Liberalisation of the crop sector: Can Bangladesh withstand regional competition? (*)*
- 20 April 2003 – *Rural livelihoods and poverty reduction*
- 8 Sept 2003 – *Sustaining agricultural growth in Bangladesh: Should we go for biotechnology for rice improvement? (*)*
- *28 Jan 2004 – Pathways from poverty (planned National Workshop)*

82. CPD also has hosted and provided secretarial support to the PETRRA policy cell (comprising eleven recognised professionals in policy research and advocacy).

83. *The review of Output 4.* The main basis for the OPR-4 assessment of Output 4 is a half-day meeting with CPD staff and the progress report for CPD's contribution to Output 4 (Section 8, doc ref 19). The team also held one shorter meeting with the PI of DolSys (from IRRI) and examined other Output 4 related papers (Section 8, doc refs. 20, 21 and 26).

[3] / Dynamics of Livelihood Systems in Rural Bangladesh: Generation of Information for Facilitating Dialogues on Strategies and Policies Pertaining to Elimination of Poverty. The DolSys study is grounded in a set of baseline data collected in 1987-1988 by the Bangladesh Institute of Development Studies (BIDS) from a sample of 64 villages all over the country. SP 24 01 revisited the village sites and collected a second set of point data. IRRI has replaced BIDS as the leader of DolSys, under the umbrella of PETRRA.

3.4.2 Main findings

84. A considerable amount of policy-relevant publications has been prepared (Section 8, annexes of doc ref 19, and doc refs 39 and 40) on various rice, agriculture, livelihoods and poverty issues. These variously have drawn on expertise in partner organisations in Bangladesh (e.g., BIDS, BRRI, BRAC, CPD, Socioconsult Ltd) and overseas (IRRI, NRI). They have been distributed in Bangladesh (for which CPD holds records and also keeps track of feedback) and are available internationally via the CPD web site.

85. The policy dialogues involved a wide range of stakeholders – government officials, private sector business professionals, academics/researchers, MPs and politicians, NGOs and CSOs, development partners and the media. The CPD records show rather poor representation from the donor community although there were a few participants.

86. Overall, the work for Output 4 indicates a considerable amount of awareness raising at a level that could be a resource for policy-relevant inputs to national policy processes, if called upon. The structuring of the policy dialogues enabled stakeholders to give feedback on a keynote paper and these views were taken into account in finalising the paper and producing the associated policy brief. Some of the findings of PETRRA policy papers and study documents were used by the PRSP team.

87. While all these are good achievements, the creation of a favourable environment for the sustainability of the project achievements, within and beyond the project life, depends, among others, on the optimal use of the policy findings at different levels. In this context, there would be a need for more proactive and intensive dialogue and interactions with the policy makers to have in practice 'improved policies for rice production'. However, the OPR-4 team recognises the difficulties and lead times involved in policy changes.

3.4.3 Highlights of strengths

88. The scope of PETRRA's policy research and dialogues has matched GOB's policies and strategies pertaining to food production, technology development, extension and rice research. The policy dialogues involved relevant key stakeholders.

89. Not so much a strength, but a favourable outcome is the change in CPD's capacity for agricultural policy studies and dialogue. Prior to CPD's involvement in DolSys and PETRRA, the organisation had very little capacity in agriculture. CPD now sees that this was a gap that the work for PETRRA has helped to correct.

3.4.4 Comments on weaknesses

90. The final reports for the three completed SPs (SPs 12 00; 14 00 and 24 01) were not examined. However, the criteria for evaluating the policy studies were reviewed. While these criteria are adequate for a general review, the absence of any questions relating to VBR is striking. Why are there no questions that query whether the work contains policy relevant insights on poverty reduction, livelihood building and gender issues? The criteria appear to have no context that is specific to PETRRA, except for point 1 that queries the consistency of the completed study with the commissioned proposal.

91. Whilst the policy dialogues appear to have had good media coverage, there are no indications of them receiving any significant attention at policy-influential levels (however, also see para 87).

3.4.5 Special points concerning the elements of VBR

92. Based on research products for this Output thus far, it appears that the policy studies did not give attention to gender nor did the institutions participating in the dialogues cover this area. Certain livelihoods-related research assignments are yet to be completed for this Output which may strengthen the gender dimension.

3.4.6 Main points for consideration in project's final period

93. It will be important for PETRRA to ensure that the three policy dialogues on poverty and issues around building livelihoods of poor men and women are well documented. Production of a short well focused synthesis paper, targeted on policy-relevant stakeholders, should be considered.

94. The review criteria for the policy study reports should be revised so that reviewers consider the studies contribution to central elements of PETRRA's research – poverty reduction, livelihood building and gender issues.

3.5 Output 3 – Capacity building for value-based research

3.5.1 General status and background

95. As briefly summarised in Section 1.1, PETRRA's SPs have been commissioned through a Competitive Grant Scheme (CGS). In making this operational through research calls, PETTRA set out certain specifications that were derived directly from the requirements in PETRRA's PEC Memorandum (Section 8, doc ref 1). These requirements, with an added depth of understanding of their importance, are now defined as the key elements of 'Value Based Research' (also see paras 1 and 5).

96. The sole exception in respect of competition is SHIP (SP 00 99, see para 33), although, as a PETRRA-funded SP, SHIP has had to position its management and accountability within the guiding principles of VBR.

97. The key elements of VBR all aim to improve the effectiveness of research particularly in respect of the lead times for achieving sustained developmental impact on a specified target group – resource poor rice farmers (RPRFs) (also see para 2). Moreover, the whole SP portfolio (technical and policy-focused, together with communication) can be regarded as development-oriented research with VBR encompassing the required modalities and processes for research delivery to a stage where it is feasible for scaling-up in pro-poor development planning and pro-poor rural services provision.

98. When PETRRA began, VBR was a new concept for local professionals (LPs) in the NARES. Thus, whilst the stipulations of VBR were guiding the PMU's management of the CGS and its commissioned portfolio of SPs, the LPs were on a learning curve with respect to the realisation of what VBR practically entailed in SP implementation and management. Similarly PETRRA-PMU was on a learning curve regarding the extent and forms of support (including training, mentoring, and monitoring) that LPs would need for achieving VBR in the implementation of any commissioned SP.

99. From slow beginnings, PETRRA now has a total of 45 sub-projects, variously drawing on partnerships between some 40 NARES organisations and about 5 private companies and involving over time about 700 (currently about 500) local scientists and development professionals of which ten percent are women (full details are provided in doc ref 10 [see Section 8]). Linked with this, since January 2000, PETRRA has put out five calls for Concept Notes resulting in 391 submissions and 16 sittings of the TEC for the CGS selection process.

100. On the ground, in the most recent *boro* season (winter rice) there was work with more than 12,000 farmers, of whom 41 percent were women, in 533 villages across 37 Districts and 102 Upazilas. Together with this, two regional FACs (in the NW and NE focal areas) have functioned to assist networking and the local uptake of PETRRA's findings and institutional ways of working.

101. Section 4 of this report presents the OPR-4 team's findings in respect of what VBR 'looked like' in the implementation of SPs and what has been gained in terms of research effectiveness for pro-poor development.

102. In this section, the focus is on the potential of NARES LPs to internalise their experience and the skills gained through involvement in PETRRA for which three questions are pertinent:

(a) Has PETRRA built up a cadre of LPs, at a range of levels, which have an understanding, in their own institutional context, of the advantages of VBR and an improved capacity to undertake it?

(b) In what ways did the international partner assist in building human capital in PETRRA which directly or indirectly assisted this understanding and the capacity building of LPs for undertaking VBR?

(c) What does it all add up to? Has VBR as conducted in PETRRA had an impact on the poor?

103. In addressing these three questions, the review team is drawing particularly on the findings of three discussion sessions with PIs of the SPs linked to logframe Outputs 2 and 5; meetings with some members of PETRRA's TEC and PSC; and some meetings with IRRI headquarters staff pertinent to SHIP (SP 99 00) and PETRRA as a whole. Findings during the whole course of the review also contribute.

3.5.2 Main findings

104. *Question (a) – cadre of VBR capable LPs?* The review team's finding for this question is that the answer is 'Yes'. The extent to which the GO and NGO PIs of SPs articulated their experiences of VBR was impressive. Much of this was positive, indicating engagement with the elements of VBR and the rationale for them. Areas of concern were not expressed as aspects that were rejected but rather as areas where they saw the need for further advisory support. Importantly they had engaged not only with VBR's key elements (demand-led, participation, gender etc) but also with the management tools for the accountability of SP performance (e.g., compilation and use of a logframe; the need for M&E).

105. For a mix of reasons, NARES in both the North and the South have to overcome organisational barriers and revisions of attitudes to accept a mode of research design, implementation and accountability for the provision of research funding of the type that PETRRA exemplifies. The review team has evidence that PETRRA has lowered these barriers and enabled LPs in NARES-Bangladesh to experience and come to appreciate a new mode of working.

106. Several features of the CGS and the PMU's mode of working have figured in this achievement. There is the call process itself (particularly the review criteria and TEC's role in the review and selection of initial concept notes and subsequent proposals). Linked with this is the PMU's tight oversight of commissioning to ensure that promised features of a proposal become a reality in project implementation e.g., strict adherence to the institutional partnership stipulations of VBR. Finally there is the constant work of the PMU team on capacity building drawing on their own internal and some external expertise. This work is well documented and shows evidence of considerable effort, even though there are areas of under performance e.g., gender sensitivity (see Section 4.4).

107. The strategic decision to work in three regions well out of the Dhaka environs also helped some LPs, especially BRRI scientists, to break away from research work norms. The physical distance to test sites combined with the dialogue and networking facilitated through the regional fora helped to strengthen new alliances and reduce slippage back into more well entrenched working relationships.

108. The coalition that has developed in the NW region – 'NWR Focal Agencies Forum' – indicates that partners have recognised the value of a structured arrangement for information exchange and planning. The NW forum includes GOs, NGOs, the private sector and the local Farmer Federations under the umbrella of the NGO, RDRS. Such a coalition should sustain PETRRA's VBR concept and working model beyond the project's life.

109. *Question (b): IRRI's direct or indirect help to attaining 'yes' for question (a)?* IRRI does not have a comparative advantage for management of a CGS. The whole task of setting up and running such a scheme was therefore vested in the PMU. IRRI's key role has been to provide facilities in their country office and to pre-finance the CGS thus enabling PETRRA to provide funds to SPs in a timely way and avoid delays in research implementation. PIs expressed appreciation of the timeliness of receipt of funds and attributed it to PETRRA, but IRRI's pre-financing was behind this. In addition to various technical inputs into SHIP (SP 00 99) and involvement in the policy research and dialogues of Output 4, IRRI scientists have made inputs into PETRRA in areas that concern VBR e.g., gender. However, non-IRRI local and international consultants have covered other areas such as capacity building for participation and M&E. In sum, IRRI's intellectual support to PETRRA has mainly been through the research inputs contained in SPs (for which they had budgeted headquarters staff time). Support for the modalities of the VBR-CGS was not their area of expertise and so the intellectual support (in terms of staff time) was modest.

110. Some internalisation of the experience of PETRRA's VBR-CGS at IRRI has occurred. IRRI senior staff commented that PETRRA has helped some IRRI scientists to better understand the role they can play in adaptive research. It also has helped them to see the importance of considering improvements in terms of livelihood system gains (as well as/rather than paddy yields).

111. *Question (c) – What does it all add up to with respect to impact on poor men and women?* As reported in other sections of this report (Sections 3.2.3, 3.3.3 and 4), in some SPs, there has been impact on participating farmers and others living in the environs of project target sites. VBR combined with appropriate technical interventions for rice seed and rice-based cropping systems has resulted in pro-poor outcomes and livelihood impact.

3.5.3 Highlights of strengths

112. The review team did not investigate 'without project' sites. However, in a Bangladesh context, the indications are that PETRRA's VBR-CGS model did enable research reach and impact on the poor. As a result, OVI-1 of Output 3 (focusing and reaching RPRFs) will be achieved, but with an emphasis on tomorrow's poor (see Section 4.2.2).

113. *NARES favourable attitudes to VBR-CGS*. From meetings with TEC and PSC members, and senior line managers of some PIs, it is evident that participation in PETRRA has made highly experienced senior LPs aware of what a VBR-CGS can achieve. An institutional gain has therefore occurred at senior levels as well as amongst LPs who have implemented SPs (also see Section 4.5.2).

114. OVI-3 of Output 3 concerns measurable change in the knowledge, attitudes and practices of LPs associated with PETRRA, The findings reported in Section 3.5.2 indicate that this OVI will (or already is) achieved.

115. A similar finding applies to Output 3/OVI-2 that requires evidence of research partners pro-activity during the life of PETRRA to maintain links after project exit. This has already happened in the NW forum (Section 8, doc ref 33; also see Annex 5, row ref 8). There are indications from contact with some NE FAC members that this FAC may not sustain[4] but this finding does not detract from the highly creditable institutional progress that has occurred in the NW focal area.

3.5.4 Comments on weaknesses

116. Although not so much a weakness, there is the issue that without sustained opportunity for VBR, LPs will revert, over time, to their former ways of working. However, there are very positive developments to counter this such as the Student's Internship Programme of RDRS that links with the Bangladesh Agricultural University (BAU), in which MSc and PhD thesis research is designed in consultation with poor farmers.

[4] / Based on discussions during the NE field trip.

3.5.5 Special points concerning the elements of VBR

117. Refer to Sections 4.2 to 4.5.

3.5.6 Main points for consideration in project's final period

118. NARES have developed favourable institutional attitudes and national capacity at a range of levels has been built for VBR, based on LPs experiences of PETRRA's VBR-CGS.

119. There are some particular areas of experience that are relevant to any future similar scheme, e.g., a process for achieving the participation of women in regional fora, based on PETRRA's experiences in the NW region; the process of participatory development of communication materials at the grass roots level.

120. PETRRA's learning on VBR is valuable. During the course of PETRRA's implementation this has been fed back into the CGS management system (also see Sections 3.6 and 5.1). It is important that this learning is documented but care must be given to deciding priority areas and ensuring that these areas are covered before project exit. This point links up with points made in Sections 3.2.6, 3.3.6 and 3.6.6.

3.6 Output 6 – The pilot model for effective pro-poor research

3.6.1 General status and background

121. Output 6 concerns the setting up and efficient management of the PMU, as a pilot model of a management system for a pro-poor CGS. The Output has three OVIs. OVI-1 and OVI-2 define what management procedures (administrative and financial) must be established and managed. OVI-3 requires a critique of the PMU's performance with respect to the CGS itself and in comparison with other funding mechanism used in Bangladesh and other parts of South Asia.

122. The review of progress for this Output is based on information that the PMU team provided during the course of OPR-4 including one meeting specifically on management procedures held with the Project Manager, the Manager of Research Administration, the Assistant Manager Finance and other staff of the PETRRA Finance Unit.

3.6.2 Main findings

123. Essentially OVI-1 and OVI-2 of Output 6 are activities (rather than measures of change) and they are already achieved/completed. The evidence for OVI-2 is the progress reported in Sections 3.1 to 3.5, combined with past and forecast expenditures that account for 98% of the total project budget. With respect to OVI-1, even at this stage of the project's term, certain aspects of the management responsibilities will continue to be revisited and further improved. This particularly applies to OVI-1, point (h) (concerning the key elements of VBR) and links with the PMU's M&E responsibilities (see Section 5.1). This continuing improvement of VBR is entirely to be expected in the sense that achieving the desired quality in commissioned research needs constant attention, and how this is done continually feeds back into the management system.

124. The PMU plans to include the procedural documentation of the CGS in the BRKB (also see Section 3.1.2). The team endorses this course of action. This documentation of PETRRA's VBR-CGS should be valuable to any subsequent CGSs in Bangladesh (and also elsewhere).

125. Given the present levels of documentation of the management procedures of the PMU, and the combined experience of the PMU team, OVI-3 is attainable. However, meeting the indicator's specifications imposes an analysis and reporting burden on the PMU's already very full schedule of work. The review team questions the value of achieving this OVI, as compared with the importance of completing other VBR-related studies (see Section 4.2).

126. *CGS management costs*. It was not possible to assess the CGS management costs as a percentage of total budget. The budget line item for management is not dedicated solely to

these costs. It includes additional expenditures on various aspects of capacity building for the sub-project portfolio and consultancy inputs to support the PMU. As it stands, the management budget line item accounts for 26% of the total budget. A commonly accepted target for a CGS is that management costs of new schemes should be about 15% falling to 12% after five years and falling again to 10% once the scheme is well established. As capacity building was essential for the successful implementation of the SP portfolio, an expenditure of 26% of total budget on the combined work of CGS management and support to SPs appears reasonable.

3.6.3 Highlights of strengths

127. The development of the management system for PETRRA's VBR-CGS has been enriched through the PMU's constant internalising of experiences on how to achieve the standards sought in VBR. As reported in Section 4, the OPR-4 team found that there is some variability in the standards achieved for VBR. Nevertheless, a management system for a VBR-CGS is in place that includes tried and tested formats for administrative, financial and technical reporting of SPs. In turn this reporting links into the monitoring of SP progress and the evaluation of SP performance.

3.6.4 Comments on weaknesses

128. Whilst not strictly a weakness, there are grounds for deleting OVI-3 and re-capturing some of its features by a slight revision to the wording of Output 1/OVI-4 and by adding two additional OVIs to Output 3. This proposal links up with findings that are reported for the key elements of VBR (see Section 4 and also Sections 3.2.6, 3.3.6 and 3.5.6).

129. In concept, Output 6 is a research management function that underpins the attainment of Outputs 1-5 which then links into the attainment of the purpose-level OVIs. Whilst it was useful to specify the need for the PMU in the early years of PETRRA, arguably it now would be preferable to position the functioning of the PMU as one measure of capacity building for undertaking VBR (Output 3). Documentation aspects of the VBR-CGS, as developed and managed by the PMU, can be included in the communication output (Output 1).

3.6.5 Special points concerning the elements of VBR

130. Points in Section 4 are relevant to Output 6/OVI1-1(h) (processes for integration of the key elements of VBR – poverty, participation, gender and environmental impact – in a CGS are designed, implemented and improved, and documented). PETRRA definitely made progress in the integration of the key elements of VBR into research design and implementation and, through its management procedures, the PMU has monitored progress and taken action to improve the standards of attainment of VBR in individual SPs. The standards achieved have been uneven but this should not detract from the fact that under the stimulus of the PMU, NARES took on board new guiding principles for research design and new ways of working for SP implementation.

3.6.6 Main points for consideration in project's final period

131. OPR-4 strongly recommends a rationalisation of Output 6, mainly because PETRRA has moved on since the time of its formulation. It is preferable now to integrate Output 6 into Outputs 1 and 3.

132. OPR-4 endorses PMU's plan to include documentation relating to the management of a VBR-CGS, which PETRRA exemplifies, in the BRKB.

133. Linked with the recommendations in paras 131-132, there must be careful priority setting and scheduling of studies that link with the institutional outcomes and livelihoods impact of undertaking VBR.

4. Cross Cutting Elements

4.1 Introductory remark

134. In this section, PETRRA's performance with respect to four of the key elements of VBR are examined in the sequence – poverty, participation, gender, institutions. Findings cut across the project's six Outputs and examine the roles, contributions, attainments and weaker points of PETRRA with respect to fulfilling the conceptual standards of VBR and, in so doing, having a near term impact on poverty (Purpose OVI 1.2) and building capacity for longer term pro-poor research (Output 3, Purpose OVI 3.1).

135. Particular attention is given to how best to document PETRRA's experience of VBR.

4.2 Poverty

4.2.1 General status and background

136. Food security in Bangladesh means rice security. Bangladesh has achieved rice self-sufficiency since the late 1990s. However, rice productivity levels need to be continuously enhanced to ensure low prices in face of increasing demand of urban dwellers and a growing population (an increase of two million persons each year).

137. PETRRA's focus group (RPRFs) is defined as those households with 3-8 months net household food security from their own rice production and with more than half the household's income derived from their own farm production. This broad category is further divided into: households with a rice provisioning of 3-5 months and those with rice provisioning of 6-8 months which, in the Bangladeshi context, correspond to the moderate poor and tomorrow's poor.

138. To identify the target group, PETRRA used two main criteria namely:

- *kine khowa*, or the number of months that a household buys rice; and
- the rice provisioning ability (RPA) which measures food availability in the households irrespective to whether it is produced, exchanged or purchased.

139. In this context, OPR-4 has assessed the poverty focus of the SPs in the portfolios of Outputs 2, 4, and 5; considered gaps and identified areas where PETRRA's documentation of its poverty focus could be strengthened.

4.2.2 Main findings

140. Discussions with SP PIs and field visits revealed that the identification of RPRFs occurred through participatory approaches often facilitated by local NGOs. A wealth ranking exercise and commitment from farmers to participate were also taken into account. Indications are that most participating RPRFs are in the upper band of PETRRA's classification, mostly because of the additional conditions imposed by access to land and involvement in rice production.

141. Based on the OPR-4 team's limited field visits, it appeared that it was not always clear to farmers why they had been selected, particularly for women who often were included because of their 'wife' status. PIs explained that farmers were selected according to the criteria (but discussed and adjusted to a local context) and then modified in light of interest and willingness of the farmer to be involved in the initial trial. It was not clear how additional farmers were selected in the following seasons. In general, most of the interviewed farmers characteristically had more than 6 months rice provisioning and owned or accessed about 100 decimals (0.40 ha) of land.

142. For the target group (tomorrow's poor) there is convincing evidence in some of the sites of SPs of Outputs 2 and 5 that PETRRA has succeeded in achieving improvements in rice productivity (at times above expectation) and rice provisioning at a household level (indicated as additional meals and/or extension of the duration of rice stocks). The additional rice was produced either as direct output of the technology introduced, or was achieved

through sale or exchange of seeds. Farmers reporting this change were involved in SHIP, FARMSEED and FAG (respectively the SPs 00 99; 05 00; and 28 02).

143. Within SPs of Outputs 2 and 5, the impact of PETRRA, beyond RPA and in respect of other aspects of livelihoods' change, has not been documented. However, the evidence gathered in discussions with PMU, PIs and farmers (men and women) strongly suggests that some livelihood changes have taken place.

144. The most relevant changes brought about by PETRRA's SPs, as reported from the farmers themselves, are:

a) Building of human capital through acquisition of technical knowledge on seed, rice husbandry, and soil and water management as well as on safety, hygiene and environmentally friendly practices. Linked with this, men, more visibly than women, had also improved their self-esteem.

b) An improvement in social capital derived from:

i) increased admiration by the community for a visibly excellent crop;

ii) interaction and exchanges with educated people and scientists;

iii) ability to distribute part of the benefit to other family members and neighbours;

iv) capacity to expand/teach the acquired knowledge to other village members.

c) Improved intra-household relationships as a consequence of higher food availability and reduced stress associated with debts ("there are less arguments now in the household" a male farmer simply reported). Men were publicly recognising the key role of women in crop improvements as main providers of good quality seeds. Women in some locations were able to influence household decisions over crop selection and use of the produce (whether and how much seeds/rice/ducks had to be sold, eaten or kept as assets for future needs). They were also able, at times, to sell small quantities of good quality seeds without informing their husbands.

d) Households reported that decisions on the use of additional rice or income was jointly taken (a statement that could not be verified), with women often being more cautious in determining the quantities of rice and seeds to be sold and those to be kept in the household. Whilst the use of additional resources changes from place to place, it seems that additional rice or income is primarily used to improve food availability at household level (passing from two meals a day to three, providing additional rice for 1 to 3 months). When more seeds/cash are available, the choice is between reduction/repayment of debts, improvements in the house (purchase of tin roof, water-pump, etc), purchase of farm tools, education costs (listed mainly by women) and purchase of clothes.

145. In locations where women's mobility was greater (due to social, cultural or economic reasons) women were working in the rice fields or were involved in non-farm activities (such as handicraft). Women were managing the sale of seed to men and women from other villages and were eager to have better outlets for their products. In locations where NGOs are the SP leader, often the selected farmers are part of existing groups. In one women-led project, the additional money obtained through the sale of quality seeds was deposited in existing personal saving accounts.

146. Some spill over/trickle down effect to poorer groups was noted. Poorer, non-targeted, farmers were learning and replicating knowledge and technology and adapting and engaging in new livelihood opportunities (leasing land to apply the new rice technology, extending water management to other crops, etc).

147. As part of the sustainability of some SPs, BRRI has identified DAE (block supervisors, BSs) as the most appropriate agent for wider promotion of the new technology e.g., SHIP has trained BSs in seed technology. The limited evidence gathered in the field from both PIs and farmers was that government officials rarely reach male RPRFs and, even less so,

women. Thus there is a need for the communication materials that SPs have developed to be well tested with respect to intended users and to be made widely available (this links in part with the BRKB, see Section 3.1.6, paras 28-30).

148. The research partners of many SPs include NGOs. However, the involvement of NGOs in agricultural research by itself is not a guarantee for ensuring inclusion of poor men and women. It appeared that in several instances the partner NGOs had no previous recent experience of working with PETRRA's target group. The involvement of the private companies in some SPs was successful in linking the poor with this sector. Marketing can be a weak link affecting the potential of certain technologies to impact on livelihoods and it appeared that private sector links should be further enhanced to make sure that innovative marketing and processing activities are introduced and accessible to the poor. For example, the introduction of new FAG rice (SP 28 02) has been extremely successful. However, in spite of the experience of the lead partner (the NGO, HEED) in establishing marketing chains, the lack of a small manually operated milling machine in the country and of a locally developed marketing chain, is limiting crop expansion and appropriate financial returns.

149. Through certain SPs of Output 4 (DolSys – SP 11 00; SP 24 01; 'Pathways from poverty' – SP 26 02), PETRRA has contributed to the analysis and understanding of changes in livelihoods in rural Bangladesh. These findings were the basis of a policy dialogue held at BARC in April 2003 (also see Section 3.4.1). Papers prepared for this dialogue (Section 8, doc refs. 21 and 26) confirm that improvements in livelihoods come mainly from agricultural diversification and rural non-farm expansion. Agriculture remains the engine for rural development and stabilisation of rice production remains critical for household food security and can contribute to livelihood building and poverty reduction.

150. The sample villages of the livelihood studies of the SPs of Output 4 are different from those of the SPs of Outputs 2 and 5. However, these SPs (of Outputs 2 and 5) also can provide information on livelihood changes related to access to information and training on new technologies. Poverty is a complex phenomenon that is strongly determined by the livelihood context in which a person lives and operates. Only an in-depth analysis, which looks beyond the simplistic impact of a technology, can shed some light on the effects of rice-based technologies on the well-being of men and women in the target groups. At the moment for PETRRA this area of understanding is a gap in terms of documentation but PIs, through their field work, are aware of the types of livelihood changes that are occurring for poor men and women. When prompted they can talk about this, but it is not, as yet, formally reported. Documenting the dynamics of livelihood changes in Output 2 and 5 SPs, or at least in a sub-set of these SPs, would complement the findings of the Output 4 livelihood studies and may add dimensions that they have not captured.

4.2.3 Highlights of strengths

151. It is difficult to achieve and measure impact for relatively short duration SPs. However, based on limited field visits and discussions with PIs, there is evidence of SPs achieving livelihood impact for the target group (tomorrow's poor) and this is a considerable achievement.

4.2.4 Comments on weaknesses

152. Whilst important improvements have been made in key M&E tools to incorporate indicators able to measure the quality and level of participation of male and female RPRFs, no indicators exist in the regular monitoring system for SPs of Outputs 2 and 5 to assess the wider impact of PETRRA's intervention on the livelihood status of its target groups and neighbouring farmers

153. Livelihood analyses were conducted in three SPs of Output 4 (see para 149) and reports/papers were widely circulated and used to increase awareness and debate (policy dialogue, April 2003). Opportunities to share and learn about livelihoods changes related to Output 2 and 5 SPs were also created during workshops and the annual Fairs. However, it

appears that the PMU has made only limited efforts to increase awareness of key stakeholders (particularly PIs and their partners) on the importance of placing technology within a wider social context.

154. To ensure that an integrated analysis of impact could be achieved, PETRRA should have invested more resources to providing adequate training, capacity building, guidelines and procedures to assist more structured social observations and analysis. It is extremely important, in the project's remaining months, that the rich learning (currently held in people's minds) should be captured. This can be used to learn important lessons about the (positive, negative or neutral) impact PETRRA has had in the livelihoods of their target RPRFs and on those living in their community (also see paras 40 and 54).

155. The focus of the project was on RPRFs. However, there were opportunities to extend part or all of the new technologies to poorer landless farmers. (It is realised that this target group was not in the project design and is not allowed for at PETRRA's Purpose level, but reaching this group is envisaged in the longer term [see Goal level, OVI-G3). Towards this OVI, poor women could have been involved in duck raising (rice-duck, SP 19 01) or trained in seed management (SP 00 99) as a potentially saleable skill.

4.2.5 Special points concerning the elements of VBR

156. Communication strategies should be tailored to the needs of men and women stakeholders, including end users. The ability of farmers to benefit from a particular communication tool can be greatly determined by the cultural context in which they live. During the field visit, it was interesting to note that women in a more traditional village did not perceive the use of a video as their preferred learning tool for seed technology. Instead they were more comfortable with a 'face-to-face' woman trainer. A great richness of communication materials has been produced in several SPs, and it would be very interesting for the communication specialist to assess the degree of effectiveness these tools have in reaching different stakeholders, particularly resource poor men and women and possibly even poorer groups, to optimise the potential for wider dissemination of pro-poor technologies.

157. The content and quality of the SP Evaluation Plan (Section 8, doc ref 3) is excellent and should be extremely effective in capturing important qualitative information to learn about the achievements and effectiveness of PETRRA at a field level (also see Section 5.1). However it is felt that, given the limited time available and capacity limitations at field level, it might be too demanding and additional support might be required. The evaluation report should also document 'unsuccessful' stories. This might prove very important and be used to make necessary adjustments in, for example, communication materials. The positive and negative learning would also help assess the likelihood for a technology to be replicated in various socio-economic and cultural contexts.

158. The reach of GO extension services (DAE) appears to be limited. There could be opportunities to support and accelerate the uptake of several technologies with the assistance of local NGOs. These NGOs could use trained farmers as trainers, disseminate information on different technologies suited to their area using existing communication materials, and provide credit facilities for the purchase of required inputs (seeds, ducks, fertilisers etc).

4.2.6 Main points for consideration in project's final period

159. The involvement of NGOs in agricultural research by itself is not a guarantee for ensuring inclusion and participation of poor men and women (i.e., partnerships are not a proxy for reaching the poor). Therefore, in projects with major technical content, the key elements of VBR (demand-led, poverty focus, participation and gender) must be effectively included and operationalised in SP design, implementation, monitoring and evaluation. It is very important that concluding documentation on PETRRA's CGS (Section 8, doc ref 2,

page 105) sets out clear guidelines on how these elements (and the various facets of them) are factored into the operation of the CGS and the monitoring system for its component SPs.

160. For the stage that PETRRA has now reached, with all SPs scheduled to end in June 2004, it is important that plans for SP closures include documentation of livelihood changes beyond the evidence of adoption of specific technologies. In this regard, the scope of the social study (planned work of Professor Bayes) was not clear. However, if this study is the 'assessment study of poverty focus of SPs' (Section 8, doc ref 2, page 106), the points made above on livelihood change analysis should be taken into account in this study.

161. In addition, the following recommendations require follow up during the remaining project term: (a) strengthening women's participation in the SP evaluation work; (b) evaluation of the efficacy of SP communication materials in order to best ensure wider reach to men and women RPRFs and also to poorer (landless) households;

162. There is at least one example in the SPs of Output 2 where lack of processing facilities and marketing channels jeopardises the sustained adoption (and favourable livelihood impact) of a rice technology. PETRRA should use its links with the private sector and regional fora for frank discussion of this problem to see if a way to solve the problem can be identified.

4.3 Participation

4.3.1 General status and background

163. Participation is a central pillar of PETRRA's value-based research. The aim is that resource poor farmers will participate and that their views and perceptions will be incorporated from the design of a sub-project through to implementation, and its monitoring and evaluation.

164. Attempts have been made to assess the quality of the application of participatory methods in PETRRA in respect of identifying RPRFs' demand, including them in design and implementation of research (sub-projects) and the wider contacts with stakeholders and supportive actors. OPR-4 has examined the extent to which the voices of the poor have been captured and conscious attempts have been made to address these views through research and the process of institutionalisation of participation.

4.3.2 Main findings

165. *Use of participatory methods in research design, implementation and M&E*. There is no doubt that the BRRI scientists, NGOs and other agencies involved in the PETRRA's SPs have taken a quantum leap forward in understanding and realising the need for adopting participatory approaches in development and promotion of rice technologies for RPRFs. However, the change in the mind-set amongst the scientific community has just begun, and there is a long way to go before the approach could be referred to as Farmer Participatory Research or Participatory Technology Development. Most of the technologies were not developed with active and equal full participation of the farmers. Rather, technologies were introduced from outside and farmers mostly were at the receiving end of technology and good practices transferred from the research stations. However, these technologies were appropriate for the target group variously resulting in enhanced rice yield, adoption of better crop husbandry practices, improved seed storage techniques, and improved capability to diversify farming activities and manage inputs.

166. The rigour and extent of involving the practising farmers in the entire process was not very prominent. Clients were selected on the basis of pre-determined criteria (also refer Section 4.2.1, paras 137-139). Demonstrations were carried out on farmers' fields; inputs were supplied from outside; and training was provided by external specialists. The extent and intensity of farmers' participation varied at different stages of the SP cycle. For example, after the initial selection of RPRFs, participation widened after the free/returnable supply of critical inputs for the technology demonstration. Thus, in some places, it was evident the

typology of farmer participation was 'Participation for material incentives' and not the higher form of 'Interactive Participation'. To help the link up of PETRRA's work into existing grass roots institutional structures, some NGO partners selected farmers (men and women) from their beneficiary groups formed earlier as part of their own pre-determined agenda. This resembled or at least was somewhat similar to 'Functional Participation'.

167. Overall the approach has been more of a 'Transfer of Technology' mode rather than 'Participatory Technology Development'. Nevertheless, after introduction, local verification, and further development and adaptation of technologies have occurred. Technologies have spread amongst the target farming communities and have been modified by the farmers to suite their local situations. The spread and adoption of some of the technologies at various situations was remarkable. Farming communities in several places, according to their different well-being profiles, have adopted and modified technologies to suit their diversified local conditions and needs.

168. *Participation as a dimension of the formation and operation of research teams*. Partnerships between organisations have been central to PETRRA's efforts in introducing and using participatory approaches in the conduct of research. Possibly for the first time in Bangladesh, major agricultural research institutions like BRRI and BARI, government agencies like DAE and BADC, NGOs, and private sector agencies have worked together as research teams with the resource poor farmers at village level. PETRRA has played a very significant role in enhancing the direct and face-to-face interaction of many local professionals of research and extension agencies with farmers.

169. PETRRA has facilitated bringing different players onto a common platform, and moving forward from this to enhanced community participation in village level research. It appears that the element of institutionalisation of participation has been different in different institutions but progress has been made after a slow start.

170. Training and capacity building inputs for SP research team members on participatory development approaches came several months after SPs had begun. By the time participation, as a key element of the project, was introduced quite a lot was already decided regarding the criteria for selection of RPRFs and what the participating farmers should be doing. Given that this mode of working was largely a new experience, the number and intensity of training offered to different sub projects was not adequate. Unfortunately, provision of one training session to all the front line SP staff could not be given. (This view is based on PI feedback, and discussion with the local consultant that assisted PETRRA with the training).

171. Initial participatory approaches were used more like RRA than PRA mode. Tools were largely used for information extraction and not so much for local action and empowerment. An additional constraint was that a more general PRA training was offered much of which was not topical nor SP focused. The job of translating the principals and main learning from the PRA training to the context of SPs was left to the partner agencies and their local professionals, many of whom did not have earlier experience of working in a participatory mode. Thus the use of participation had an uneven start and presented some difficulties to the SP teams.

172. *Were there efficacious outcomes?* All the SPs have tried their best, within the given framework of VBR, to ensure the participation of the RPRFs. The intensive technology transfer undertaken in SPs has produced favourable results (refer Section 4.2.2 above). In some instances, benefits have been restricted to those who have access to more favourable land situations that suit growing rice in all three seasons. Poorer farmers could not reap the total benefits of technologies because their land access was restricted to lower lying areas. For example, early inundation of haors and flooding of lowlands prevented some poor rice farmers from taking best advantage of the moderate to long duration HYVs of rice that a PETRRA SP introduced.

4.3.3 Highlights of strengths

173. PETRRA has been basically committed to participation and the overall performance in this given context was not too bad. With all its sincere efforts PETRRA have been able to bring the scientific community close to the farming community, which has remarkably enhanced the process of information exchange and has built up functional linkages with stakeholders at different levels. This is a new and significant development.

174. Through PETRRA's facilitation (training, exposure visits and other capacity building initiatives), local professionals now have a better knowledge of participatory approaches, and the need and scope of farmers' involvement in rice research is better understood.

4.3.4 Comments on weaknesses

175. However, linked with the comments in para 171, a lot still needs to be improved particularly at the skill learning level in order to further strengthen the concept of farmer participatory research and take it forward into reality and action.

176. The criteria for RPRFs were pre-determined and local poverty profiling with clear description of a typology of the poor and their direct and indirect links with rice farming and other livelihood links was not undertaken.

177. The final product of the initial stakeholder analysis (problem prioritisation) seemed to be somewhat supply side driven. Though the process of priority setting was initiated from the bottom, the final products looked strikingly different from the initial analysis done by the farmers. The final product was not revalidated with the farmers of different locations for their acceptance.

178. Most of technologies that SPs have transferred mostly appear to have remained isolated from each other. It is recognised that this has avoided confounding of the objectives and OVIs of individual SPs, and helped to simplify and aid SP implementation (as links have both transaction lead times and administrative costs). However, there is now a need for the functional linkages and participation amongst SPs to be improved. This should enhance the outcomes and impact of PETRRA's research. There is an opportunity for proposing integrated models for technology testing and promotion incorporating lessons from different SPs.

179. In most cases SPs at different locations transferred technologies uniformly (same package under one technology) but, through farmers' uptake, modified technologies have emerged based on strong location specificity, diversity in livelihood circumstances and gender specificity. This local adaptation of technologies has not been documented.

180. Evidence of shifts from 'verbal' to 'visual' use of PRA tools for capturing local diversity and from information extraction to collective local planning and action were not very strong.

4.3.5 Special points concerning the elements of VBR

181. In the context of the complexity of poverty and of reaching and working with the poor, it is extremely important to document the technology modification process that has occurred subsequent to technology introduction and provision of farmer training. In the SPs of Output 2 and 5, it is important to learn what local adaptation looks like and for what reasons the farmers modified the technologies transferred to them.

4.3.6 Main points for consideration in project's final period

182. It is noted that PETRRA plans to document the project's experiences and lessons learnt on participation (Section 8, doc ref 2, page 107). It is suggested this should be undertaken through a more detailed investigative study of a selected small suite of projects. This could be linked with the study of livelihood change associated with technology adoption (also see paras 152 and 178).

4.4 Gender

4.4.1 General status and background

183. Whilst gender is one of the key elements of VBR, women's involvement in the SPs came at a later stage. Women were invited to participate in the second stakeholder analysis at which the role of women in rice-based system was discussed. In the second research call (July 2000) the 'participation of women in research' was included as condition for project submission and approval of Concept Notes.

184. In October 2000, the Gender team of the Participatory Gender Review and Support Consultancy for DFID-B's Rural Livelihood Projects, in combination with OPR-1, made a series of recommendations on how to address gender concerns in PETRRA. The PMU responded positively by inviting the IRRI Gender Specialist to develop a Gender Strategy, carry out a Gender Audit and set up guidelines for gender mainstreaming and a gender sensitive monitoring system. A gender strategy was soon realised and circulated to all staff members. An attempt was made to recruit a gender specialist, but no suitable candidate was identified, and PETRRA decided to build the capacity of one member of the PMU staff.

185. PMU provided Gender Impact Assessment Training and conducted an awareness raising workshop on Gender and Development for PIs and stakeholders in November 2001 and February 2002 respectively.

186. In 2002, PETRRA put out a special call (part of the fifth call) that was designed to promote the involvement of women in research (as researchers, implementers and farmers). The theme of the call was on uptake innovation in post-harvest handling of rice and seeds and this led to the commissioning of SPs for women-led extension methods (SPs 37; 39; 41; 42; all in 2002).

187. Activities are planned for Jan-July 2004 on gender, culminating in documentation of PETRRA's lessons learnt and case studies of gender success stories (Section 8, doc ref 2, pages 106-107).

188. Against this background, OPR-4 has assessed the gender sensitivity of the SPs in the portfolios of Outputs 2, 4 and 5, considered gaps and proposed areas where PETRRA's documentation of its poverty focus could be strengthened.

4.4.2 Main findings

189. Men and women are mentioned in the PETRRA logframe at both Purpose (OVI 1.2) and Output (OVIs 2.2 and 5.1) levels, but the concept of gender is not clearly addressed. The PMU has interpreted it in terms of gender equity, or more specifically in terms of equal number of men and women participating in the project. Changes in the monitoring system reflected this understanding and consisted of additional questions/indicators to measure changes in the participation of women.

190. The PMU's commitment towards increasing the number of participating women has translated into significant progress, at both SP and management levels as follows:

a) Nine SPs (out of a total 38 SPs) in the Output 2 and Output 5 portfolios target mainly women. Best partner organisations are RDRS, BARC, Shushilan and Proshika – each has achieved equal or more than 50% women's participation. Four SPs (SPs 37, 39, 41, 42) work exclusively with women. However, in 18 SPs there are still no women.

b) The proportion of women targeted and trained in rice-based technology increased from 10% of the total participating farmers in year 1 to 40% in year 4. In SHIP (SP 00 99) research activities were initially conducted exclusively with men, while now 43% of the participating farmers are women. The involvement of NGOs e.g., RDRS has been critical in making this possible.

c) PETRRA was also successful in improving gender equity in project staff. In SPs, 8 out of 45 PIs are women. Two professional women, including a gender specialist, are members of the TEC (out of a total of 17 members); equal numbers of men and women are invited to attend PETRRA's workshops, fairs and other initiatives; and 20% of students who received in-country fellowships for Masters Degree were women.

191. In addition, discussions with farmers, PIs, BRRI representatives (including the DG) and the IRRI Gender Specialist revealed that the project has been able, in a relatively short time, to raise significantly the profile of women, at different levels. This is a very significant achievement considering the very conservative environment that surrounds rice-based research and production. Examples are that PETRRA has:

a) Brought women's KAPs' needs to the attention of scientists and other stakeholders involved in the project by imposing the presence of women in stakeholder analyses and in research calls.

b) Given women scientists, professionals and farmers the opportunity to operate, participate, be more visible and valued in a male dominated sub-sector.

c) Offered women technical knowledge, high quality inputs and training normally not available to them.

d) Provided women with additional income opportunities (such as the sale of seeds and eggs), and improved their awareness on hygiene and safety in the use of fertilisers (e.g., in rice-duck (SP 19 01), ICM (SP 25 01);

e) Involved women in development of communication materials (posters, leaflets and video), giving them the opportunity to describe in their own way the technologies learnt to help other rural women to learn (SPs 00 99 and 09 00).

192. In some SPs, women directly contribute to the increase in rice production and rice provisioning through, for example, the improved management and sale of good quality seed, rearing of ducks, improved management of water and soil. Improved seed storage has made possible delays in sales of good quality seeds, which in turns allows for better profits. Women also contribute to household finances through the sale of seeds from home.

193. PIs and farmers reported that women were better at testing and adapting innovations than men. This was due to the fact that agricultural activities for women represented their main source of income, whilst men have access to other better remunerated activities off-farm. SP experience has led to the recognition of women as 'fast trackers', a reality that has been overlooked or missed in development.

194. Turning from women to gender, an excellent gender strategy was developed (see para 184), but the PMU has been unable to implement it and to provide support to SPs to operationalise it. With respect to end of project plans on gender, the IRRI Gender Specialist and the PMU gender focal staff confirmed that the ToRs for the Gender Equity Review are not yet been drafted. Its focus will be on capturing positive and negative changes in women's lives and their learning experiences.

195. The Evaluation plan has a very good section dedicated to verifying the quality of participation of women as research team members and as female farmers (management of gender equity).

4.4.3 Highlights of strengths

196. The project has been able to stimulate stakeholders to consider women's issues (by involving women in participatory activities at different levels) and to see technology as a part of a wider picture where both men and women play important roles.

197. The project introduced good gender practices within the office allowing staff to travel with young children and accompanying support, and encouraging personal development.

4.4.4 Comments on weaknesses

198. Arguably the lack of gender related OVIs and MoVs in the PETRRA logframe has limited the opportunity to mainstream gender in the project. This could have been corrected. The PMU could have adopted a more pro-active attitude such as: revising the logframe to clarify the concept of gender; recruiting a long term external consultant to implement the gender strategy and provide the required support to the PMU and the SPs[5].

199. The involvement of women as well as men in the identification or development of technology was found to be very limited. In most cases a researcher-proven technology was tested with men and women farmers. However, farmers' participation in the selection of a technical intervention and its further development and assessment was weak.

200. The partnership with NGOs was not by itself a sufficient condition for ensuring equal involvement of women. HEED, a large NGOs with more that 85% women clients, implements the FAG SP (SP 28 02) in the tribal area of Madhopur in Sylhet, where women work alongside men in the field. Only 25% of the SP's participants are women. This shows that to ensure the achievement of gender equity, clear guidelines on targeting need to be set in the SP design and an effective monitoring system needs to be established.

201. Only two gender courses, limited in scope and duration, were provided to staff and partners. They were not followed up by a refresher course nor supported by guidelines that could have assisted SPs to implement what was learnt. Staff who joined PETRRA after 2002 did not receive any training or awareness raising work on gender.

202. There are no disaggregated indicators in the PMU's regular monitoring system that would allow measuring the wider concept of gender equity (in terms of use of and benefits from resources, decision making, etc).

203. Women reported that, particularly in the initial stage, the uptake of new technologies resulted in substantial increases in the workload (sorting and cleaning of seeds; rearing ducklings – "is as demanding as a baby" – most women said), but there are no indicators that permit verifying whether this has been done at the expense of other activities and/or greater involvement of other family members (children and elderly). Future SPs should incorporate a system to monitor and measure social costs.

204. With respect to Output 4 (policy), the planned policy brief on gender (OVI 4.2) has not been produced.

4.4.5 Special points concerning the elements of VBR

205. The Evaluation plan will assess the quality of participation of women in research (see paras 195 and 202). It would be advantageous to utilise female staff to collect the above information on women's participation.

206. The PMU might want to consider the inclusion of gender issues (the positive and negative changes that technologies have had on women's life and on their learning experience) in the livelihood/social study (see para 160). This could add to (or perhaps replace) the planned gender review. The IRRI Gender Specialist should oversee the preparation of the questions and take part in the analysis of the results.

4.4.6 Main points for consideration in project's final period

207. With specific reference to Section 2.1 of the Evaluation plan (Section 8, doc ref 3), it is recommended that a female staff is used to coordinate the collection of information from women. In conditions of short discussions, poor women are often unable to articulate their views and needs. All the participatory meetings organised to collect information related to the evaluation work should be assisted, or even led, by women who are well-accustomed to

[5] / A comparison with PETRRA's attention to communication is valid here. The importance of communication was recognised and this led to its inclusion in the logframe as an Output and to the recruitment of a Communications Specialist.

such fora, possibly female PIs or more outspoken and articulate women farmers, to ensure that women's learning experiences are appropriately considered.

208. See Section 4.4.5 para 206.

4.5 Institutions

4.5.1 General status and background

209. OPR-4 has assessed institutions at three levels:

- the partnerships that are formed for undertaking SP research assignments;
- the networking that builds on SP partnerships and operates through decentralised regional fora;
- senior level participation in PETRRA that provides strategic oversight and can act as a national level advocate for PETRRA's VBR-CGS, research findings and guiding principles.

210. PETRRA's CGS constitutes the major catalyst for ensuring that research partnerships are formed between GOs, NGOs and the private sector which then link with farming communities for SP design and implementation (also see para 168).

211. The meso-level networking dimension of PETRRA's institutional mechanism involves decentralised coalitions of organisations directly involved or associated with the SPs in particular geographical (focal) areas. It has a role in sharing SP information and positioning this in the wider context of regional developments and also national level considerations.

212. The apex level covers policy relevant institutional linkages, mainly with GOB agencies: MOA and affiliated institutions (BRRI, BADC, DAE, BARC, BARI). The PSC, headed by the Secretary, MOA and the TEC, chaired by the DG, BRRI are the two most important established institutional arrangements for PETRRA's formal linkage with NARES. Through these two bodies, PETRRA's policy and strategy issues are handled and there is oversight of the quality and accountability of PETRRA's CGS.

4.5.2 Main findings

213. For institutions, the OPR-4 ToRs specify that the extent to which BRRI and other research partners have taken on board the key elements of VBR should be assessed. The assessment of progress for Output 3 (capacity building for VBR-CGS; see Section 3.5) has already covered this subject in respect of the attitudes of partners that form the SP research teams (see para 104) and meso-level networking (see paras 67, 107-108, and 115). No further comment is given here except to emphasise again that a very good achievement of PETRRA is its institutional mechanism (embedded in the CGS) that is conducive to promoting partnerships and the use of this strength as a tool for SP implementation and linkage into developmental processes.

214. The NGOs that are actively involved in SPs include some of the leading NGOs in Bangladesh e.g., BRAC, PROSHIKA, GKF and RDRS. Similarly, the key NARI for rice, BRRI is a major stakeholder and BARI scientists and DAE field staff have participated in some SPs. In addition, private sector links have included major input suppliers (e.g., Syngenta) and output marketers (e.g., Bangladesh Rice Exporters Association, BREA). As a result, there is a cadre of local professionals that have participated in PETRRA, found it a positive experience, and are now advocates for adaptive research as undertaken through the PETRRA CGS model.

215. Further comments in this section concentrate on the apex institutional level particularly BARC, BRRI and DAE and the operation of the TEC.

216. The BARC Chairman's view on the PETRRA model for research funding was positive. Points noted were that it had brought about stakeholder interaction, was less bureaucratic and had flexibility. At the same time, it had a mechanism for meeting specifications and for

accountability. As a result, decentralisation had been achieved, to good effect. The overall experience of a CGS, as undertaken in PETRRA, was viewed as a gain for the Bangladesh NARES.

217. The Director General of BRRI has experienced PETRRA in two main ways – in his capacity as head of BRRI and as Chairman of the TEC. PETRRA was BRRI's first experience of competitive bidding. Initially the DG had to explain to BRRI scientists that they should overcome their reluctance and commit to the competitive process in order to access PETRRA funds. A major change was that scientists had to state the aims of their proposed research and plan how to deliver on these specifications. However, now that BRRI scientists have experienced PETRRA's VBR-CGS, it is evident that it has helped them to express their potentialities, attain specific targets and give attention to the social aspects of the research. In addition, the partnerships used for undertaking research and for linkage into local development planning has broadened BRRI's experience and given BRRI a higher profile.

218. As Chairman of TEC, the DG had come to value its inter-disciplinary structure. TEC members have broadened their thinking in terms of the dimensions of a research assignment that should be considered in order to be pro-poor, gender sensitive etc. Whilst taking on board the competitive element was hard, at the same time, it has been an asset to human resource development.

219. Overall, the DG could see the advantage of having a competitive component for at least a portion of a research programme.

220. The OPR-4 team did not meet with a senior person in DAE, but there were indications that the partnerships formed for SPs, that included DAE, had helped to improve the quality of the interaction and dialogue between DAE and BRRI at a more senior planning level.

4.5.3 Highlights of strengths

221. Local government institutions at the grass roots level constitute efficient agents for the promotion of technology and implementation of support programmes. GOB policy spells out the necessity of the involvement of local government bodies and NGOs in the grass roots level developmental process[6]. Thus, the GOB macro-policies have the potential to support the type of institutional arrangements that were used and tested in the PETRRA model.

222. PETRRA's institutional mechanism for SP commissioning is effective for the delivery of needed services to required destinations and obtaining feedback from the grass roots level via the SPs and FACs for regional development planning.

223. The accountability mechanisms of PETRRA are accepted as good and relevant to the conduct of at least part of an agricultural research institute's work programme[7].

224. The PETRRA concept has been able to initiate collaborative fora that are viewed as relevant and useful in at least one case[8]. The sustainable existence of such collaborative fora and their ability to move with a clear pro-poor mission, related to the PETRRA's guiding principles on institutional links and networking, within a local context and mandate, could provide an institutional arrangement that improves the reach and performance of rural services for the poor.

4.5.4 Comments on weaknesses

225. Although DAE field staff have been involved in PETRRA SPs, and some of the SP findings have been fed into capacity building for DAE BSs and added to their technical messages, OPR-4 did not obtain a view of the senior (apex level) attitude of DAE to PETRRA's mode of research implementation including linkage with rural service providers. This was a gap.

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[6] / The Fifth Five Year Plan 1997-2002. Planning Commission. Ministry Planning. GOB.
[7] / Based on expressed views of BRRI DG and Chairman of BARC.
[8] / Based on field visits, this applies to the NW FAC.

226. Even though the BARC Chairman (representing PETRRA's PSC) and the DG of BRRI (representing a major stakeholder and PETRRA'sTEC) were positive about their experience of the PETRRA model, there is a danger that the achievements of PETRRA may eventually evaporate due to a lack of policy support. The lack of macro-level institutional interest to promote the PETRRA model could lead to a failure to sustain PETRRA's achievements.

4.5.5 Special points concerning the elements of VBR

227. The institutional arrangements developed at the grass roots level, including the strengthening of village-level social capital (see para 144-b) within the PETRRA context, are in a position to contribute to the local poverty reduction efforts.

228. The NGO ownership of some of the PETRRA concepts and integration of these with their own gender and poverty related mandates could institutionalise research activities and build scientific capacity with a more pro-poor and equitable dimension.

4.5.6 Main points for consideration in project's final period

229. The PETRRA concept is seen as valuable at a senior level in NARES. The project also has been able to establish partnerships and meso-level collaborative fora that are relevant to an agenda of poverty reduction. At least one collaborative forum has built on the PETRRA experience and has positioned itself to continue pro-poor institutional arrangements.

230. Some evidence, by end of project, that the principles exemplified in PETRRA's VBR-CGS have the SPC's policy support should be considered as a closure act of this committee.

4.6 Conclusion

231. Overall the findings on the cross cutting elements are positive indicating that PETRRA's research, and the management system used for undertaking it (i.e., the VBR-CGS) have:

- changed the way in which some organisations in NARES and the private sector, including the lead national institute for rice research, have conducted adaptive research;
- created a cadre of local professionals that recognise the advantages and values of this mode of working;
- reached the poor both in and around sub-project sites and had a favourable impact on their livelihoods;
- sensitised some policy-relevant organisations and senior local professionals on policy issues around rice that are relevant to Bangladesh's rural and national economy; and
- communicated and publicised aspects of the points above at various levels and across several sectors, including communication at the grass roots.

232. However, as discussed in Sections 4.2-4.5, whilst SPs have made a start with adherence to and application of the key elements of VBR, there is still considerable scope for further improvement. But this finding should not detract from what has been achieved. The combination of specifying key requirements (in the research call), providing training and advisory support on VBR during SP implementation, and monitoring SP progress with indicators included for assessing the quality of performance with respect to VBR, has resulted in research that demonstrably is pro-poor and has achieved local impact.

233. To achieve this in 4.5 years with local professionals for whom the VBR-CGS was an entirely new way of working is highly creditable. It represents a considerable step in human capacity building that is relevant to tackling rural poverty in Bangladesh. Importantly, the progress thus far in VBR has also made evident the steps that could be taken to address weak areas e.g., improve gender definitions in the project logframe (OVIs and MoVs); continue to strengthen participatory aspects of technology development; add social science

capability to teams so that social analysis is undertaken in tandem with technical research; improve community entry in order to reach poorer target groups.

5. Evaluation and Impact

5.1 Arrangements for project and sub-project evaluation

5.1.1 General status and background

234. M&E is one of the functions of the PMU and is part of the PETRRA CGS model. Thus, PETRRA's Evaluation Plan builds on the monitoring work that has taken place routinely for SPs during the life of PETRRA through use of the following accountability tools:

- Quarterly and Annual Progress Reports and Seasonal Reports
- Quarterly Financial Statements
- Field visits by PETRRA and Field Verification Reports
- SP External Audits

235. PETRRA has prepared an Evaluation Plan (Section 8, doc refs 3 and 4, also see Annex 5, row refs 1-7). In scope it covers the evaluation of PETRRA as a whole, based on the PETRRA logframe, and the individual SPs of the Output 2 and Output 5 portfolios, based on their respective individual logframes. The procedures followed for SPs of Output 2 and 5 will differ, mainly because of work load and differing plans for final reporting. Output 4 SPs will be evaluated through the review of their final technical reports against a standard set of criteria (but see Section 3.4.4, para 90).

236. Planning and interaction has already taken place with the PIs of Output 2 leading to finalising guidelines for preparation of the Output 2 SP Evaluation Reports. In addition, PIs either have already or will receive guidance on how to assess their SP's performance in terms of the SP's logframe. Questions have been developed, to which PIs will respond, that will link SP performance with the PETRRA logframe and assist the PMU to determine PETRRA's attainment of the OVIs of Purpose 1 and Output 2. Similarly, plans are in place for the evaluation of Output 5 SPs against the Output 5 OVIs and this work links with the reporting plans for this Output (see Section 3.3, paras 72-73 and 75).

237. Other documents that will contribute to the evaluation exercise are the benchmark survey and the reports of two Output 4 SPs (SP 24 01 – Dynamics of livelihood systems in rural Bangladesh; SP 26 02 – Pathways from poverty).

5.1.2 Main findings

238. The Evaluation Plan is comprehensive, thorough and well organised. Its basis is the PETRRA logframe and it focuses on evaluation of OVIs at purpose and outputs levels. The benchmark survey will provide data for the future assessment of PETRRA at goal level. Through the use of tightly focused stakeholder questionnaires, the Plan addresses a weak aspect of PETRRA's logframe – namely that some OVIs at Output level specify completion of an activity rather than specifying (i.e., providing a measure of) what the activity was planned to achieve. This action should overcome the logframe's deficiencies and provide the needed information on institutional/social change.

239. Implementation of the Evaluation Plan will entail a lot of work. However, PETRRA has already interacted with SPs on what is required and, in addition to PMU staff, external consultants will be used for part of the work.

240. Section 4 of this report proposed areas where poverty focus, gender sensitivity and participation could have been strengthened. These findings have implications for the Evaluation Plan and the proposed way that the work is conducted. Points of concern are elaborated in Section 5.1.5 and also in Section 6.2.2.

241. At various points in preceding sections of this report we have noted gaps and how these could be covered by additional studies. These studies can further enhance PETRRA's evaluation work. However, it is realised that PETRRA has a considerable work load for the final eight months. For this reason, recommended studies that can enhance the evaluation work are kept to a minimum. As much as possible these studies are linked with existing work plans (Section 8, doc ref 2, Appendix 7.3). Details are given in Section 6.2.3.

242. The MTR (OPR-3) suggested that TEC potentially could contribute to M&E. This has not materialised in any substantial way owing mainly to the other work commitments of TEC members (also see Annex 5, row ref 4). It would however be advantageous for the apex-level institutional memory of PETRRA (after project closure) if TEC members could have some sense of ownership of the overall evaluation.

5.1.3 Highlights of strengths

243. A well organised and thorough Evaluation Plan has been prepared structured to the PETRRA logframe and its component SPs. Output 2 PIs are already briefed on what is required. PMU responsibilities and the tasks of five external consultants have been defined.

5.1.4 Comments on weaknesses

244. Additional support at the field level might be required and this could be linked with the recommendation of strengthening women's participation in the SP evaluation work. Without this affirmative action, women's views may not be well captured (this links with Section 4.2, paras 157 and 161).

245. Sections 3.2 and 4 have stressed the importance of documenting livelihood changes beyond the evidence of adoption of specific technologies. Although the Output 2 SP Evaluation Report format is regarded as finalised, an amendment that could be considered is to specify 'men and women' wherever RPRFs/resource poor farmers are mentioned. In this way, those preparing reports will constantly be prompted to think about two types of end-users rather than one (which could slip into consideration only of male end users).

246. Even though there are reporting guidelines, PIs may not report what failed/did not work. The Evaluation should document 'unsuccessful' stories because there will be learning in these (see Section 4.2.5, para 157).

5.1.5 Special points concerning the elements of VBR

247. See section 5.1.4 above.

5.1.6 Main points for consideration in project's final period

248. See section 5.1.4 above.

249. Ways to enable TEC members to have some sense of ownership of the overall evaluation should be considered, e.g., holding a TEC meeting in August 2004 that could perhaps be linked with the final external OPR (OPR-5).

250. PETRRA's learning on VBR-CGS management, which will be part of the documentation for the BRKB, should include a section on the need to have robust 'quality, quantity and time dimensions' in the definition of logframe OVIs (at project and sub-project levels), as a key component for achieving effective M&E.

5.2 Progress towards impact

5.2.1 General status and background

251. The second OVI of Purpose 1 (ref P1.2) provides the proxy for measuring livelihoods impact through the extent of change in RPA defined as 'at least 50% of SPs participating RPRFs (male/female) (have) increased rice provisioning ability of at least one month by the end of the project'.

252. With this OVI in mind, during field visits, the OPR-4 team framed discussions with men and women farmers in ways that would provide information relevant to this OVI.

253. Purposes 2 and 3 express institutional objectives covering respectively uptake of the research findings of SPs by GOs and NGOs, and adoption of the key elements of PETRRA's VBR-CGS.

254. Progress towards attainment of these OVIs was assessed throughout the review.

5.2.2 Main findings

255. *Purpose 1*. The findings for men and women's responses to questions relating to OVI P1.2 are provided in Annex 6. Although these are only a small sample, the findings illustrate that improvements in RPA and other favourable livelihood changes for men and women have occurred in (and around) the target sites of the SPs that were visited. Some further details were reported in Section 4, paras 144 and 191-192). Overall, the indications are that OVI P1.2 will be attained.

256. *Purpose 2.* OVIs P2.1 and P2.2 specify use of SPs' research findings both during and by the end of the project. For P1.2, DAE, BARD and RDA are named as GOs together with a total of 8 NGOs. During the course of the review, it was evident that the use of findings by relevant organisations has taken place. For example, the Rural Development Academy (RDA), Bogra not only recognises the relevance of the technical messages of the seed health sub-project (SHIP) but also favours the grass roots community entry that SHIP used and is promoting these principles in its Union and Upazila level management training. At a decentralised level, the DAE has taken up messages from PETRRA's SPs e.g., the technical, input supply and credit aspects of mobile pumps (SP 38 02).

257. *Purpose 3.* The OVI (P3.1) has the measure that at least two funding bodies will adopt key elements of a VBR-CGS, tied specifically to rice (this specification may prove to be restrictive in the sense that adoption of VBR-CGS would be worthy enough, and need not be only with respect to rice).

258. There is no doubt that having experienced PETRRA, certain organisations (e.g., BRRI, RDRS, RDA) are convinced of the advantages of the research management system exemplified by its VBR-CGS. With respect to BRRI, this organisational learning has been internalised to a point where revisions to the way in which some portion of its research funds are allocated, may be considered. However, achieving official adoption by the end of the project may be problematic simply because organisational revisions take time even when the good sense of a change in institutional procedures is well understood.

259. In sum, PETRRA definitely should be able to show good progress towards attainment of Purpose 3, but may not attain it exactly as specified.

6. Exit Strategy

6.1 Overview

260. The most enduring legacies of a project, such as PETRRA, are twofold:

- Firstly there are the project's research products which should contain the project's findings, insights and messages in forms that are accessible to the project's stakeholders and actors (i.e., persons and organisations in comparable circumstances to PETRRA's stakeholders, who were not involved with PETRRA during its life).
- Secondly there is the building of human capital that has taken place during the life of the project that should be an asset to the continuing promotion of the project's products after project exit.

261. Section 5 summarises PETRRA's plans for assessment of the second legacy and the reports in Sections 3 and 4 assess the present level of achievements in respect of human capital development of men and women at grass roots, meso- and apex stakeholder levels.

262. The following sub-section on exit strategy concentrates on the first legacy – the project's research products.

263. There is another dimension to exit – namely that funds are available from other sources (not necessarily through a CGS) to continue parts of the technical research and maintain the partnerships that have developed. It appears that this possibility is very limited in the near term. IRRI mentioned that there might be opportunities to maintain the work in the south of Bangladesh on salinity tolerant varieties under another funding stream.

6.2 Project products

6.2.1 General status and background

264. The scope and schedule for PETRRA's exit strategy is presented in the Working Paper for OPR-4 (Section 8, doc ref 2). In overview, it has five main thrusts:

a) Management of SP closure (financial, technical support, etc).
b) Implementation of the Evaluation Plan including reporting of findings for individual SPs and PETRRA as a whole (see Section 5).
c) Preparation of planned publications (e.g., those for Outputs 4 and 5).
d) Documentation of the VBR-CGS including, to the extent possible, analytical studies of lessons learnt in respect of poverty focus, participation and gender.
e) Information Reservoir for the totality of PETRRA – Development of the BRKB.

6.2.2 Main findings

265. Although plans are in place for handling items (c) to (e), each represents a considerable work load. It will be essential that consultants and SP teams that have tasks assigned as part of (c) and (d) keep to agreed deadlines and work to the specifications of their terms of reference.

266. Items (c) – (d) feed into item (e). Item (e) is vital for sustaining the use of PETRRA's research findings (from the SP portfolio) and for ensuring that the various dimensions of the management system of the VBR-CGS are available for future use in other similar schemes, if required.

267. The OPR-4 team cannot readily see how the workload for the final project term can be cut down as all items are important. It can only be stressed that all persons (national and international) with tasks in this period must clearly understand the assignments that they have and must commit to delivering to time.

6.2.3 Main recommendations for project exit

268. This section presents the recommendations for project exit that should apply during the project's final term, January to August 2004. As much as possible the recommendations are linked with products (or activities associated with products) that are already planned in project's exit strategy . The recommendations draw on points made in earlier sub-sections of the report (sub-sections x.x.6) which, for easy reference, are consolidated in Annex 7.

269. ***Output 1 – The Bangladesh Rice knowledge Bank (BRKB)***. OPR-4 endorses PETRRA's plan to develop the BRKB. The recommendations address concerns about the sustainability of this e-based information reservoir after project exit

270. *Recommendation 1: For the purpose of sustainability, key areas for attention are as follows:*

- Identify a national home for the BRKB for durable longer term supply of the CD and e-file storage back up.

- Ensure that there is a budget provision for production of BRKD CD's in quantities that provide for longer term supplies after project exit.
- Consider sub-sets of the BRKB dedicated to certain highly pro-poor products and communication materials that have a strong national context.

271. ***Output 1 – Further development of communication materials****.* Although SPs have made good progress in the development of communication materials there is scope for their further development especially with respect to improving their accessibility for women. A related aspect is the lack of reach of the DAE thus making grass roots NGOs the more likely source of information for poor women (see paras 156-158).

272. It is realised that to find time for further work on communication materials will be difficult. Therefore attention to this weakness is not put forward as a recommendation. However, the need for further attention to this area of communications work is mentioned, to alert PETRRA in case an opportunity arises that could enable the project to make progress on this matter before project closure.

273. ***Outputs 2 and 5 – Evaluation Plan, Sub-project Evaluation Report Guidelines: Making sure PIs think about men and women farmers; capturing social learning around the process of technology transfer; reporting what failed (was unsuccessful) and the apparent reasons for this***. Several sections of the preceding report have emphasised the importance of capturing social learning around the process of technology transfer. There are two main reasons for the constant attention to this point:

i) To add depth to the understanding of the ways in which the project, in particular the SPs in the portfolios of Outputs 2 and 5, has made an impact on the livelihoods of poor men and women and households. This understanding (positive and negative effects) will enhance the quality of information for OVI P1.2. (which, as a proxy for livelihoods impact, is restricted to an improvement in rice provisioning ability).

ii) Linked with (i), through having an understanding of how poor people who have received information and training for a particular technology, have internalised this in their livelihood strategies, to determine ways and opportunities for improving rural services for the poor (i.e., to understand what pro-poor services should look like and how the inputs from extension agencies (GO, NGO and private sector) and research could have sustainable reach to, and be accessible by, the poor.

274. The indications are that PIs do have an understanding of livelihood changes of the target farmers (men and women) of their SP but are not recording them (for example, see paras 40, 54, 55, 143, 150, 179). It should be possible to fill this gap by making social change an explicit section in the SP evaluation report but the reporting should be grounded in what PIs reasonably can be expected to report.

275. *Recommendation 2: Revisions to Sub-project Evaluation Guidelines.* Add one section to Chapter 6 of the SP Evaluation Report Guidelines. This would be Sub-Section 6.3 – Effects of the uptake of the information and training that the SP provided on farmers' livelihood activities. (Purposely the heading keeps to action rather than probing how livelihoods changed. For PIs with a technical background it will be best to encourage them to report what they saw, and/or were told by farmers). A guideline note should be added to prompt PIs also to report on what failed and their understanding of the reasons for this.

276. For the SP Evaluation Guidelines as a whole, the words 'men and women' should be added wherever RPRFs/resource poor farmers are mentioned.

277. ***Outputs 2 and 5 – Evaluation Plan: Ensure that there is female staff capacity in the Evaluation Team****.* The reasoning behind this proposal is provided in Section 4.4. The concern is that there is a risk that views of women farmers may not be obtained in the field evaluation work. Adding female staff capacity to the external consultancy team, and being pro-active in the field to use women to talk with women farmers should reduce this risk.

278. *Recommendation 3: Role of female staff in evaluation work.* Use a female staff to coordinate the collection of information from women. All the participatory meetings at SP sites, organised for the evaluation work, should be assisted, or even led, by women well-well-accustomed to such meetings, possibly female PIs or more outspoken and articulate women farmers.

279. ***Outputs 2 and 5 – Marketing links***. There is at least one example in the SPs of Output 2 where lack of processing facilities and marketing channels jeopardises the sustained adoption (and favourable livelihood impact) of a rice technology.

280. *Recommendation 4:* PETRRA should use its links with the private sector and regional fora for frank discussion of this problem to see if a way to solve the problem can be identified. In addition, the final report for the SP concerned (FAG – SP 28 02) should frankly report on this marketing problem. This is important as there appears to be an opportunity for further development of FAG production so the report must make clear the market constraint so that any interested party would be able to read about the positive and negative aspects of this technology.

281. ***Outputs 2 & 5 and 3 & 6 – Documentation of PETRRA's philosophy and management practices (Working Paper for 4th OPR [Section 8, doc ref 2, pages 105-107])***. For poverty, gender and participation, PETRRA-PMU plans to undertake some concluding studies that will report and analyse PETRRA's experience of having these three elements as explicit requirements for undertaking value-based research as funded by PETRRA's CGS. Section 4 has reported the progress made and standards achieved in respect of the poverty focus, type of participation and gender sensitivity achieved in the SPs. Building on what is proposed above for the Output 2 and Output 5 portfolio (see paras 273-278), it appears that there are opportunities to reconsider the scope of the concluding VBR special studies. The aim is to ensure that the PMU and the specialists working with the PMU capture the rich learning that can be derived from some SPs.

282. *Recommendation 5: Undertake economic analysis and in-depth social studies of a few SPs. Use the findings to support impact evaluation (PETRRA Purpose 1) and to provide insights on the modalities of making VBR operational in the field.* The PMU team should decide upon a suite of 3 or 4 SPs, of which one is SHIP (SP 00 99), that should be the subject of in-depth studies (but tailored for completion in the remaining project term). In the context of the introduction of specific rice technologies (single or multi-factor), these studies should cover economic analysis (cost-benefit analysis; also see Annex 5, row ref 18) and various dimensions of community entry and social change in the livelihoods of the target beneficiaries (RPRFs) and other poor people who may have had contact with the SPs. Longer running SPs would be the best candidates for the in-depth studies.

283. Topics covered should include: the process of community entry and working with poor men and women; what poverty reduction looks like; what livelihood improvement looks like for men, women, households and intra- and inter- household relations; what opportunities are evident (to help build livelihoods); what equity issues are evident etc. Importantly these studies would also assess what technology adoption looks like and what is learnt from this in respect of future participatory research and rural service provision.

284. The existing plans for poverty studies and a gender review should be assessed relative to the above recommendation and adjusted as required. It is assumed that the inputs already planned for social studies (by Professor Bayes) and the IRRI Gender Specialist would be integrated into these VBR-related studies.

285. PMU should then use these studies to refine the definition of best practice for operationalising and managing a VBR-CGS including mechanisms for improving poverty focus, main streaming attention to gender and improving the use of participatory methods.

286. ***Outputs 3 and 6 – Examples of best practice for working with the poor (that feed into VBR-CGS)***. PETRRA has areas of experience on processes for reaching and working

with poor men and women farmers that could be documented as 'models of good practice'. Examples are: a process for achieving the participation of women in regional fora, based on PETRRA's experiences in the NW region; the process of participatory development of communication materials at the grass roots level, based on SP experiences. These models also are relevant to processes of social development.

287. *Recommendation 6: PETRRA should document a small suite of 'good practice' process recommendations.* Importantly these process recommendations would document how pro-poor research can be linked into pro-poor services and planning processes.

288. ***Outputs 3 and 6 – Communication as an integral part of VBR**.* PETRRA's experience indicates that attention to communication in research project design should be added to the suite of key elements of a VBR-CGS. PETRRA's finding that communication is an essential and integral component of research (and is a means for best ensuring that scaling-up can occur) entirely corresponds with published findings.

289. *Recommendation 7: PETRRA's documentation of its VBR-CGS, should include communication as one of the key elements that must be included in research design and monitored during the course of project and sub-project implementation.*

290. ***Outputs 3 and 6 – M&E as part of the VBR-CGS**.* As stated in para 238, PETRRA will use tightly focused stakeholder questionnaires, to overcome a weak aspect of PETRRA's logframe, namely that some OVIs at Output level lack rigour. This is because they specify completion of an activity rather than specifying (i.e., providing a measure of) what the activity was planned to achieve (i.e, what change it should engender that would be evidence of attaining the objective of a specified output). As the management of M&E is part of PETRRA's learning on VBR-CGS management as a whole, the documentation on VBR-CGS for the BRKB, should contain a section on M&E. This should include PETRRA's learning on the importance of robust OVIs for research evaluation.

291. Recommendation 8: PETRRA's M&E documentation (as part of the VBR-CGS) must emphasise and explain how robust 'quality, quantity and time' dimensions in the definition of logframe OVIs (at project and sub-project levels) are a key component for achieving effective M&E.

292. ***Output 4 – Completion of the livelihood and poverty studies and review of the study reports for the Output 4 portfolio**.* As the SPs that focus on livelihoods and poverty studies are already underway, it is realised that their scope and emphasis in large measure is already determined. However, to the extent possible, these studies should critically examine the policy implications of their findings in respect of circumstances that enable and/or impair livelihood improvement of the poor including gender dimensions. Keeping this same focus, there is an opportunity to produce a short synthesis paper, based on the three poverty-related policy dialogues.

293. *Recommendation 9: Ensure that livelihoods-related SPs for Output 4 (SP 24 01 and SP 26 02) have a policy focus and, linked with this, reconsider the communication stakeholders for this work and the policy dialogues and determine what communication materials they require.* A book is the present planned product for SP 24 01. However, there should be a critical reassessment of what communication materials are needed for both SPs in order that they will make the best contribution possible to the attainment of the pro-poor policy-related objectives of Output 4. The proposed synthesis paper of the poverty-related policy dialogues should also target policy-related stakeholders.

294. *Recommendation 10: Revise the criteria for the evaluation of policy studies.* The review criteria for the policy study reports should be revised so that reviewers have to consider the studies' contributions to the central elements of PETRRA's research – poverty reduction, livelihood building and gender issues.

295. ***Output 5 – Uptake promotion research***. The planned main products for this Output are the proceedings of a national seminar (on Output 5) and a book. The research for this Output has developed multi-sectoral partnerships for pro-poor service delivery, representing largely new experiences for the local partners that are involved. It will be very important that the findings and messages from this research are accessible to local stakeholders (those who were partners in the work and others who could learn from it).

296. *Recommendation 11: Make an assessment of the local communication stakeholders of Output 5 and their needs for communication materials*. There should be a critical reassessment of what communication materials are needed in order that Output 5 findings and key messages are accessible to local stakeholders in forms that could be used for wider local replication/application. It is recognised that the book is planned and will go ahead but indications from the OPR-4 were that other materials to meet local stakeholder needs are required and should have priority.

297. ***Output 6 – Rationalising this Output***. The reasons for proposing revisions to Output 6 are explained in Section 3.6. Main changes are that the comparative study of funding methods, proposed in Output 6 OVI-3 should be deleted because of the workload of project exit and the higher priority of other work (see paras 281-282). A revised logframe is proposed (Annex 4) which better reflects the institutional aim relating to the pilot model of the VBR-CGS.

298. *Recommendation 12: PETRRA should consider adopting the logframe revisions concerning Output 6*. A key point regarding this revision is that it explicitly shows what the pilot VBR-CGS is for (i.e., to provide a tried and tested model for VBR-CGS that could support the NARES capacity to undertake (including manage) such a scheme).

299. ***PETRRA as a whole – TEC ownership of PETRRA's Evaluation Report***. During the course of a time bound CGS, the role of a technical support arm, such as the PETRRA-TEC shifts from ensuring transparency in research commissioning to acting as a quality control body for project delivery. Thus, the TEC should have a sense of ownership of the PETRRA Evaluation Report (and be able to defend PETRRA's performance in a similar way to TEC's capability to defend decisions on the project's research portfolio).

300. *Recommendation 13: PETRRA should consider holding a TEC meeting in August 2004 that could perhaps be linked with the final external OPR (OPR-5)*.

301. ***PETRRA as a whole – Project Steering Committee's closure***. Some evidence, by end of project, that the principles exemplified in PETRRA's VBR-CGS have the PSC's policy support should be considered as a closure act of this committee.

302. *Recommendation 14: The Chairperson of the PSC should be requested to consider signing off on an Aide Memoire that briefly reports to the Ministry of Agriculture on the favourable aspects of competitive grant schemes, based on experience of PETRRA's VBR-CGS.*

7. Findings Relevant to the DFID-B Country Assistance Plan

303. The following findings appear to be relevant to DFID-B's operationalising of the Country Assistance Plan:

- PETRRA is able to provide policy relevant 'models of good practice' for the involvement and empowerment of women. These models are derived from project experience on processes that can lead to improving women's participation.
- PETRRA experience of the importance of communication, including the structural complexity of meeting the communication needs of a range of stakeholders and reaching policy actors, appears to be highly relevant to DFID-B's operationalising of the CAP. At a grassroots level, PETRRA has findings on what features of communication need attention when women are the target stakeholder.

- By end of project, PETRRA should have insights into the way in which technology transfer (that takes the form of providing information and training) is internalised into the knowledge bank of poor men and women and then variously used in their livelihood strategies. Importantly PETRRA should have evidence of the different ways that new knowledge (as owned by men and women) assists improvement of livelihoods and why (e.g., what trade-offs do men and women make in the use of new knowledge and how are these mediated by household and individual circumstances). This should be a rich vein of information that could assist DFID-B to understand processes that can prioritise or be inclusive of women and poor women's knowledge priorities.

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9. IRRI – PETRRA. Guidelines for Financial Management. Prepared for PETRRA sub-projects. July 2001. 12 pp. And 24 Appendices.
10. PETTRA Sub-Project Statistics. November 2003. 19 pp. And 4 Appendices.
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    ii) Livelihoods, Income Distribution and Poverty: Insights from Repeat Village Studies
    iii) Poverty Alleviation Through Agriculture and Rural Development
    iv) Changes in Agriculture and Economy in the Flood prone Environment in Bangladesh, 1988 to 2000: Insights from a Repeat Survey of 16 Villages
    v) Changes in Agrarian Relations and Livelihoods in Rural Bangladesh: Insights from Repeat Village Studies
    vi) Recent Changes in Bangladesh Rural Economy: Implications for Rural Development Strategies
    vii) A Rice Production Environment is Which Temporary and Seasonal Flooding Constrain Adoption of Dwarf and Semi-dwarf Modern Varieties
    viii) Poverty Vulnerability and Rice: Thoughts based on Recent Changes in Rural Economy
    ix) Bangladesh Agriculture Towards 2020: Implications for Rice Research and Extension Strategies
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    ii) Rice Research and Poverty Alleviation in Bangladesh. October 2002
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Fourth Output to Purpose Review
30th November to 14th December 2003.

1. Project Title:

Poverty Elimination Through Rice Research Assistance Project (PETRRA). 1999 to 2004.

2. Background

The main purpose of the Poverty Elimination Through Rice Research Assistance (PETRRA) Project is the sustainable increase of the productivity of rice based farming systems for resource poor farmers. This supports the goal of substantially increased rice production and incomes by 2008 and the super-goal of a 50% reduction in rural and urban poverty by 2015.

PETRRA was formally approved by the Government of Bangladesh (GoB) in March 1999 and started operations from 1st April 1999. The project is scheduled to run until 31st August 2004 with DFID funding of £9.5m. The GoB provides an equivalent 20% in staff costs and other inputs. The competitive research fund available for sub-projects is £4.5m with an additional £1.62m allocated to a sub-component on rice seed health. The project is implemented by the International Rice Research Institute (IRRI) through its Bangladesh Country Office and has a Project Management Unit at the Bangladesh Rice Research Institute (BRRI). The Project Manager was recruited in August 1999.

The project finances research through partnerships between IRRI, BRRI, NGOs, Universities, the private sector and other international research organisations, to develop improved rice production technologies appropriate to Bangladesh. Technologies and extension materials appropriate for poor farmers are emphasised.

An Inception Review, involving BRRI and DFID representatives, was held in March 2000. This monitored preliminary start-up activities, and reviewed the project objectives and approach. The Inception Report builds on the Project Memorandum, to describe the project approach in more practical terms and outline progress since the appointment of the Project Manager.

The first annual review (Output to Purpose Review – OPR) was held in September 2000 involving representatives from BRRI, IRRI, DFID, PETRRA project staff and sub-project partners. The 2000 OPR noted that substantial progress had been made against logframe indicators and milestones agreed during the Inception Review. The OPR enabled all partners to discuss project objectives and progress for the first time, revise the logframe based on a shared understanding of PETRRA's objectives, and agree milestones for the next 12 months.

The second OPR was held in September 2001, again involving all partners. The OPR report describes the good progress made by the project against the revised logframe and agreed milestones. Recommendations and modifications to the project outputs and approach were agreed with the PETRRA team.

The Mid-term Review (OPR-3) was held during 29 September to 12 October 2002 involving representatives from BRRI, IRRI, DFID, PETRRA project personnel and sub-project partners. The MTR report mentioned that the project made considerable progress against all five outputs. PETRRA Project prepared a response report on key points and recommendations made by the reviewers and shared with DFID. The PETRRA milestones for the next 12 months were agreed by DFID (reference to

this?)

To date, PETRRA has been implementing 45 sub-projects with 48 partner organisations in 37 districts covering different agro-ecological zones of Bangladesh. It is working with more than 11,000 farmers, of which about 40 per cent are women. The project has piloted a value-based approach to research that is demand-led, poverty focused, gender sensitive, participative, competitive, encourages partnership and supports networks. It has completed four years and has a diverse set of experiences on the ground. It represents considerable learning that should affect the institutions directly engaged and feed into the bigger picture of poverty reduction and agriculture.

3. Overall objectives

The overall objective of the consultancy is to:

- Assess progress towards the PIMS markers set in the Project Memorandum and overall achievement of the project's objectives including revised outputs using DFID's Office Instructions as a guideline (OI Vol. II: I 1).
- To assess progress towards the achievement of the last MTR recommendations, the response of IRRI to the MTR, and follow up actions undertaken. The review needs to consider scheduling of sub-projects and PETRRA overall evaluations; synthesis of evaluation findings and dissemination of PETRRA findings. It will also cover the forward thinking about the PETRRA exit strategy.
- Logframe outputs: To assess progress against outputs of the PETRRA logframe. This will also highlight the general progress towards the achievement of the project purpose and should highlight key gender, poverty, equity and participation concerns.

  The outputs are shown in the box below.

Output 1:	PETRRA's management practices and research findings effectively communicated to relevant organisations and persons involved in agricultural research and extension, and to policy makers;
Output 2:	Key policy constraints to improved rice-dependent livelihoods identified and recommendations presented in key policy fora, by PETRRA's policy research partners;
Output 3:	Improved rice production technologies appropriate to RPRFs identified or developed, and tested in collaboration with the same by PETRRA's sub-project partners;
Output 4:	Improved methods for effective uptake of technologies identified, pilot-tested and recommendations for improved uptake pathways made by PETRRA's sub-project partners and Project Management Unit.
Output 5:	Capacity of rice research system to undertake value-based demand led research sustainably enhanced.
Output 6:	A pilot model of an effective pro-poor competitive rice research management scheme has been established and effectively managed by the PMU

- Document and present key lessons learnt to DFID, IRRI, BRRI and key partners.

4. Methodology

The consultancy is seen as working very closely with the PETRRA PMU and IRRI as manager, and DFID.

The team will receive a briefing from DFID with regard to the TORs for this review and the PETRRA project office and RLEP Team Leader will be responsible for the operational aspects of the review. The itinerary and specific tasks will be finalised on arrival in Bangladesh.

The team members will undertake meetings and field visits as required to undertake their TORs and meet with PMU, sub-project partners, project beneficiaries and other key stakeholders. The team members will, in addition to conducting the review, participate fully in writing a draft report for submission to DFID prior to departure. The team will be composed of two expatriate international consultants and one local consultant working closely with a cross-cutting team responsible for this project and two other DFID funded projects in the cluster namely REFPI and SUFER. All cross cutting consultants are anchored in respective projects such that they report to the project team leader, assist with completion of review objectives but in addition, link with consultants reviewing other cluster projects and lead on the development of findings for their assigned generic theme. Team leaders need to consider this when allocating tasks to team members. See Annex 1 for more details of the 'cluster' and cross-cutting arrangement.

The consultant team leader will be expected to collaborate with team leaders from other simultaneous reviews under the new 'cluster' arrangement to present key generic lessons learnt across the three projects to a wider audience through a Key Findings Forum.

The members of the team are listed below:

Lead PETRRA consultant

1. Margaret Quin (Team Leader) – Institutional and livelihoods research programme development and management.

Cross-cutting consultant (anchored in PETRRA)

Consultants maintain a core responsibility to completion of the scope of work for PETTRA as directed by the Lead Consultant and compare and contrast generic issues across projects.

2. Benedetta Musillo (International Consultant). Social development, poverty and gender assessment.
3. Kamal Kar (International Consultant). Participatory livelihoods development, impact assessment, technology transfer, training and extension.
4. Zaruhul Alam (National Consultant). Institutional development and organizational change and policy influencing

Cross-cutting consultant (anchored in SUFER and REFPI).

Consultants maintain a core responsibility to completion of the scope of work for other projects as directed by respective Lead Consultants and compare and contrast relevant generic issues with PETRRA project's experiences.

5. Alan Brooks (Team Leader - RLEP). Project management and implementation and evaluation of "pro-poor growth assessment in commercial aquaculture" project outcome. Additionally, provide SUFER link to Benedetta Musillo on social development, poverty and gender assessment.

6. Enamul Huda (National Consultant). Socio-economic development, poverty and equity focussed research.
7. Kazi Ali Toufique (National Consultant). Village level livelihoods research, technology transfer, training and extension by public sector institutions.

DFID-B Staff

Additional DFID-B staff will attend the OPR presentation and may join the review team for some or all of the fieldwork. These additional team members include:

- Martin Leach, Senior Rural Livelihoods Adviser.
- Tim Robertson, Natural Resources & Environment Adviser (livelihoods, natural resources and environment).
- Duncan King, Rural Livelihoods Programme Adviser.
- Eric Hanley, Senior Social Development Adviser
- Amita Dey, Social Development Adviser (poverty, equity and gender issues)
- Najir Ahmed Khan, Programme Support Officer (and PETRRA Project Officer)

5. Scope of work

The consultants will review project documentation (point 10), and work with staff from the IRRI, BRRI, MOA, DFID, PETRRA Project Team, Sub-project partners and liaise with other key agencies to address core elements of progress on logframe outputs and last OPR recommendations as well as the following specific tasks relating to the objectives:

Value based approach for effective research

- Review progress on value based approach of PETRRA to research in the context of an international centre, in-country principle partner and most active partners. The key elements of the value based approach are demand-led, poverty focus, gender sensitivity, environmental awareness, participation, partnerships for effectiveness, networking. It operates within a research-development continuum with impact on livelihoods as a prime focus. What lessons may feed back to IRRI, BRRI and other partners and DFID approach. Assessment should include the quality of stakeholders analyses, and how adequately diverse needs at the community level are understood.
- Review the approach and output to date in capacity building to achieve the above. What change in individual researchers and back into institutions? In an institutional context this needs to be set against the realities of large institutions that may have a broader mandate.
- PETRRA has linked together technology development, uptake methods and pathways and policy dialogue. Technology development has been located within a broader context. Are promising innovations coming up and has the link to uptake partners from the beginning been effective in the technology development process. What lessons are learned from this?
- Monitoring and impact assessment. Assess the nature of qualitative M&E, as a tool for providing information on poverty impacts. To what extent is data disaggregated in a way that will enable effective assessment of impacts on different socio-economic groups, religious groups, women, ecological areas etc. How effective is the project in understanding impact?

Sub-project Results of PETRRA

- The Seed Health Improvement sub-project is the largest of PETRRA sub-

project (22% of total budget) and is the only project of five years duration. It commenced in April 1999. The review team will look at the achievements of this sub-project in terms of technology developed, poverty focus, gender equity and partnerships and preliminary scaling up of technologies.

- Report on the uptake of technologies by all sub-projects with reference to the improved uptake pathways recommended by the project. How much focus on resource poor farmers? To what extent does the project understand constraints to poor farmer's uptake?
- Participation and learning. Assess the demand-driven process for participatory research. Assess the quality of participation; to what extent have farmers taken on new skills and knowledge in the process of the research? How appropriate have extension materials been?

Communication

- Through the process of PETRRA an approach to communication has emerged as a very important. PETRRA has developed a communication action plan that enables its learning to reach a range of audiences. To what extent is the project likely to achieve the purpose stated in the logframe of its communication strategy? Comment on the effectiveness of mechanisms for feedback? What lessons are learned from this for future projects?
- Review PETRRA Rice Knowledge Bank and its usefulness for disseminating modern rice knowledge to different stakeholders including farmers through different intermediaries and the knowledge network in the focal areas.

Exit Strategies

- Review the range of exit plans for PETRRA (including evaluation plans for the project itself) that embrace sustainability of approach.
- PETRRA – IRRI is piloting a value based approach and has developed a capacity (though small at this stage) that may serve as a resource for other initiatives in county and even regionally. It is important in the context of agriculture research in Bangladesh that this capacity is not lost. A question of ways forward for sustainability needs to be explored.
- Specific concerns: (1) the likely completion of all funded activities, including evaluation and communication of research results, (2) expectations about the sustainability of new activities undertaken by the partners, (3) expectations about the sustainability of new relationships between the partners, (4) provisions for the continued availability of the knowledge generated by the project.

Specific issues focusing on:-

1. **Gender**: Comment on project progress towards stakeholder understanding of gender issues and mainstreaming. Have partner organizations and BRRI received gender training? Has the project developed a gender strategy and action plan? To what extent have the new technologies impacted on the livelihoods of women?
2. **Impact**: Has the project led to better productivity and livelihood status? How far has the project followed up on OPR recommendations to improve monitoring by a more systematic approach, and particularly to bring in field level components for validation. How far does the M&E assess relative stakeholder benefits, particularly to women and girls; and appropriateness of interventions of gender and livelihoods?
3. **Institutional:** How far have social issues such as gender, participation, poverty,

and equity been taken on board by BRRI; and by partner organisations. Has BRRI succeeded in influencing policy and practise in adopting value based approaches?

6. Expected Outcomes and Deliverables

Before departure the team will present their findings to project and DoF, partners and DFIDB Advisers. The date and presentation venue will be arranged and coordinated by the PETRRA project and RLEP Team Leaders.

After the team presentation the Team Leader will work with Team Leaders from reviews of SUFER and REFPI to pull together common trends, highlight generic issues, contrast and compare approaches and provide composite key findings from three simultaneous reviews. This will be presented to a wider audience coordinated by RLEP through a key findings forum scheduled for December 14th 2003. A key output from the forum will be 'thematic key issues papers' to be prepared in draft by the project team leaders

A draft copy of the report (summary not more than 5 pages), thematic key issues papers and DFID OPR format tables, prepared in MS Word will be left with RLEP before departure and a final copy sent to RLEP and DFID within 14 days of arrival back home.

7. Competencies and Expertise Required

Consultants will be appointed with the following competencies.

- Good understanding of the natural resources sector (preferably the agriculture sector) and development issues in Bangladesh;
- Strong institutional and organisational development skills and knowledge of governance issues in Bangladesh.
- Experience of working with government agencies in Bangladesh
- Experience of DFID's policy and commitment to poverty reduction;
- Understanding of change management and organisational, institutional process in development agencies. Actual working experience in institutional management and reform particularly in Bangladesh is preferred.
- Understanding of gender, equity, poverty issues in Bangladesh
- Good understanding and familiarity of using the sustainable livelihoods approach especially village level livelihoods research.
- Excellent drafting, communication skills and team working will be required

8. Conduct of Work

The consultants will facilitate the process of the review and the preparation of the report. They will work from the IRRI Bangladesh office and RLEP/BETS office in Gulshan 1[1], which will provide logistical and administrative support and facilitation as and when required.

[1] House No. 10, Road No. 135, Gulshan-1, Dhaka-1212, Bangladesh. Telephone Numbers :(88-02) 9889923-24. BETS is one of the local members of the ITAD RLP M&E consortium.

The PETRRA Project Manager will be responsible for allocating responsibility to project staff for different aspects of the review and liaising with DFID advisers as appropriate and other key agencies.

9. Inputs and timing

The in-country review will take place from November 30th to December 11th, 2003, extended to 14th December 2003 for team leaders.

The total input will consist of 15 days (18 days for team leaders), indicatively broken down into:

1 days preparation (reading briefing materials)
12 days in-country (15 days for team leaders)
2 days report writing

10. Briefing Information

1. DFID Project Memorandum for PETRRA 1999
2. PETRRA Project Strategy, Policy Framework, Gender and Environment Strategies and Synthesis Stakeholder Analysis
3. Inception Report March 2000
4. OPR 2000
5. OPR 2001
6. Report for Midterm Review by PETRRA (September 2002)
7. Midterm Report 2002 with PETRRA-IRRI Response (November 2002 and January 2003)
8. Report to OPR for 2003 (to be submitted within November 15, 2003)
9. A Review of Communication Strategies in the DFID Bangladesh Rural Livelihoods Programme (draft). RLEP 2003.
10. A Review of Monitoring and Evaluation Systems in the DFID Bangladesh Rural Livelihoods Programme (draft) RLEP 2003.

Annex 1
DFID Rural Livelihoods Evaluation Partnership (RLEP): Cluster 2 review teams

Project and Lead Consultant	Core elements of review – Project purpose	Cross cutting – Participatory Research issues	Cross cutting – Social development issues
PETRRA **Margaret Quin**	**Progress towards achieving project purpose? Development of NGO/Universities (public and private sector) partnerships and networks. Institutional development and organisational change, including policy influencing, public sector reform especially toward addressing poverty and equity issues through research and improved production technologies. Sustainability of changes promoted. Overall project performance against formal indicators. Completion of OPR/EOP forms. Fisheries and agriculture sectors.** **National:** **Zaruhul Alam anchored in PETTRA:**	**Village level livelihoods research, pro-poor focused training and extension implemented directly and indirectly by public sector institutions. Value based demand led research. Quality of technology transfer and teaching. Participatory livelihoods impact assessments. Communication strategies, dissemination techniques and pathways** **International: Kamal Kar** **Anchored in PETRRA** **National: Kazi Ali Toufique** **Anchored in SUFER**	**Social issues in access to services; gender mainstreaming (feed into gender thematic review) Poverty and equity focussed research. To what extent have gender, participation, poverty issues been adequately taken onboard by implementing and partner institutions (link to organisational change in the core element of the review)** **International: Benedetta Musillo** **Anchored in PETRRA** **National: Enamul Huda** **Anchored in REFPI**
SUFER **Mark Langworthy** plus Alan Brooks			
REFPI **Don Brown**			

Notes:
1. Alan Brooks will have partial involvement as review consultant for SUFER.

Poverty Elimination through Rice Research Assistance Project

Schedule for Output to Purpose Review, 29 November to 14 December 2003

Date	Time	Location	Activity	Events Suggested	Persons – PETRRA and Sub-projects etc	Key Review Persons
Sat 29th			Team Arrival (time with RLEP)			
Sun 30th	8:00 to 10:00	DFID Office	Debriefing with DFID and RLEP		RLEP and DFID	MQ, B, KK, ZA
	10:00 to 12:00	IRRI Dhaka Office	PETRRA PMU (discussion on expectations etc)		PMU Team	All
	Afternoon	IRRI Dhaka Office	About PETRRA Discussion in milestones; Achievements (New Technologies, Uptake Methods and Pathways, Policy etc)	Will include presentation overview on PETRRA	PMU Team	All
Mon 1st	9:00 to 10:00	BRRI	Meet DG BRRI	This is a courtesy call that will be followed up with more detailed discussion	NPM	MQ, B, KK, ZA
	11:30- 1:00	IRRI Dhaka Office	Communication	– Presentation of Strategy – Sharing Progress in events, activities, – Effectiveness of feed-back, lessons for future projects	AS, NPM, Mamunul	
	2:00 - 3:00		General Discussion		PMU	
	3:00 +		Open			

Date	Time	Location	Activity	Events Suggested	Persons – PETRRA and Sub-projects etc	Key Review Persons
Tue 2nd	7:30 14:00 Evening	Field Trip to Bogra	Field Trip to Bogra and then NW Focal Area Field Visit for maximum interaction with farmers (in process some overview of SHIP will be needed) (documents can be made available to be held at IRRI Dhaka office from access by review members) Rest at RDRS Guest House	– Overview of SHIP – Sharing progress with partners – Field visit (maximum time)	Tahir Miah and RDA (Zacharia), Salahuddin, NPM, Bazlur	MQ, B, KK
Wed 3rd	Morning 2:00	RDRS	Meeting with NW Focal Area Return to Dhaka	– Share concept of focal area as part of uptake; – Decentralized research and extension as part of value base	NW Focal Area Members, PMU Members	
Thu 4th	9:30 to 12:30 2:00 to 4:00	IRRI Dhaka Office	Uptake Methods and Pathways Gender	– Seed Networks – Women led Extension – BRRI and Technology Verification – Private Sector and Herbicides – Mobile Pump – KB – Documentation	PIs, AS, SN, BR, NPM PIs, AS, SN, NPM	MQ, B, KK, ZA MQ, B, KK, ZA
Fri 5th			Team Time (No meetings)			
Sat 6th	11:00		General Discussion (Otherwise time is open for report writing or scheduled visits)	Any questions arising?	NPM	MQ

Date	Time	Location	Activity	Events Suggested	Persons – PETRRA and Sub-projects etc	Key Review Persons
Sun 7th	9:30 – 11:00	IRRI Dhaka Office	Financial Management of PETRRA		Jamila with Finance, MAG, NPM	MQ, ZA
	1:00		Lunch			
	2:00	CPD Office	CPD on Policy Dialogue (this will be followed up with Mahabub when he reaches Bangladesh)	– Presenting documents produced, sharing feedback on policy dialogues, sharing communication materials	Uttam, Tapash, NPM	MQ, Alam
Mon 8th	10:30 -11:30	DG Conference Room	PETRRA Model Management Procedures	– PETRRA and BRRI and beyond – Main discussion will be on management procedures but inclusive of values	PMU, Dr Hamid, Dr Gomosta	MQ, Alam
	11:30-1:15	BRRI PETRRA Meeting Room	PIs BRRI	– SP discussion from GOB institution perspective	AS to facilitate	MQ, Alam
	1:15+	BRRI Cafateria	Lunch			
	2:00-	SHIP Office	Seed Health (Laboratory)	SHIP Laboratory contribution	Dr Tahir, Conrad	MQ, Alam
Tue 9th	9:30-1:00	IRRI Dhaka Office	Capacity for Values inclusive of Stakeholder Analysis Process (Impact on individuals -> institutions (large) Institutional in terms of sustaining values within the institutions and mainstreaming within it; BRRI and other agencies commitment towards sustaining values and influencing policy	– Concept Sharing – Sharing Progress – Sharing with major (selected partners) (one off and group)	AS, SN, BR, MAG, TKB and PIs and PPS	MQ, B, KK, ZA

Date	Time	Location	Activity	Events Suggested	Persons – PETRRA and Sub-projects etc	Key Review Persons
Tue 9th continued	2:00 3:30	BARC IRRI Dhaka Office	Meet BARC Chairman (confirmed) Exit PETRRA (first discussion) Schedule of events for completion; access to learning; evaluation for SPs, and PETRRA; impact	PETRRA & National Research System – Sharing the progress, strategies and plans for M&E and products	NPM and Dr Hamid PMU (AS, MAG, TKB, NPM, SB)	MQ, ZA MQ, B, KK, ZA
Wed 10th	11:00 to 12:30 12:30 5:30-8:00	BRRI PETRRA Office BRRI PETRRA Office	SHIP Sub project (technology, poverty focus, gender,partnerships, scaling up) Lunch Mahabub and discussion on PETRRA and IRRI; and exit discussion	 – IRRI response to PETRRA, beyond PETRRA and IRRI etc	AS, SHIP (Tahir, Tom Mew and Mahabub) NPM, AS, Dr Hamid, MAG, and Mahabub	MQ MQ, B, KK, ZA
Thu 11th	Morning 4:00	 IRRI Dhaka Office	Open Review Team Feedback		 PMU, Dr Hamid , DFID (Najir, Tim, Duncan; RLEP)	 MQ , B, KK ZA
Fri 12th						
Sat 13th						
Sun 14th	9:00- 1:00		Shared learning (PETRRA, SUFER, REFPI)		About 90 to 100 70 persons	

Field Visit for two OPR-4 team members[1] to North East Bangladesh
December 6-8, 2003

Date	Time	Location	Activity	Events Suggested	Person PETRRA and Sub-projects etc	Key Review Person
Sat 6th	Leave within 7:30	Moulvibazar Region	Field Visit to NE Region	– FARMSEED; – Rice-Duck; –	PIs, SN and BR and partners	KK, BM
Sun 7th			Field Visit	– FAG; – Women led SP – SHIP (BRAC)		
Mon 8th	12:00	Return to Dhaka	Discussion Morning	Opportunity for further discussion on technologies, uptake and values of participation, poverty and gender focus	Group of farmers and PIs and PMU	

[1] / Kamal Kar and Bernadetta Musillo undertook this field trip. The trip enabled them to interact more with sub-projects for discussion on values, technology developed and dissemination.

PETRRA Logframe (Updated on August 21, 2003)

Narrative Summary	**Objectively Verifiable Indicators (OVIs)**	**Means of Verification [and by whom]**	**Important Goal-related Assumptions**
Super Goal: **Poverty in rural and urban areas substantially eliminated**	Proportion of the rural and urban population respectively living below poverty line (2122 Kcal/capita/day) declines from 45.4% and 48.5% in 1995/6 to 22.5% and 24% by 2015	DOLSYS data base, Poverty study 1999-2000. DFID/ International community poverty study, 2015 Analysis will be done by DFID. Baseline information will be provided by PETRRA. Village revisit study could be repeated.	
GOAL Rice production and incomes increased nationally	G.1: *Annual* growth rate of rice production is above that of growth rates of the population *in 2008/2009 compared to 1999-2000.* G.2 Income of resource-poor rice farmers (including small and marginal farmers) increased at least *25% in real terms between 1999/2000 and 2008/09.* G.3 Employment opportunities for landless labourers, in rural areas as a whole, increased *in 2000-2009* at a rate above that for the period *1990-2000.* (Note: Target needs to be fixed from GOB policy statement, especially PRSP).	BBS Yearbooks of Agricultural Statistics, 2000/01 and 2009/10 This analysis will make use of baseline data provided by PETRRA funded DOLYSYS study, the Pathways from Poverty Study, the WB/GoB Household Expenditure Survey, and the Mitra Associates Baseline Survey. Ditto Analysis will be done by DFID. Baseline information will be provided by PETRRA. Village revisit study could be repeated in 2009/10.	Government and donors continue positive support on agricultural policies. Increased agricultural productivity is an essential ingredient to national economic growth and thus overall poverty reduction. But by itself it is not sufficient for rapid reductions in poverty. Agricultural research and service targeted to the poor are also needed. Rice output increases will be sufficient to reduce prices in real terms. Participation in WTO does not change the terms of trade for rice producers.

Narrative Summary	**Objectively Verifiable Indicators (OVIs)**	**Means of Verification [and by whom]**	**Important Goal-related Assumptions**
PURPOSE 1. Productivity of rice based farming systems for resource poor farmers (RPFs) sustainably increased.	[Direct local impact] P.1.1 The majority of participants in more than 50% of sub-projects achieve increased rice productivity, at a rate which is greater than population growth rate by EoP (see Goal) P.1.2 At least 50% sub-projects' participating RPRFs (Male/Female) increased rice provisioning ability of at least one month by the end of the project.	Sub-project progress reports, participatory evaluation and end-of-project evaluations. These will include attention to wider livelihoods impacts. Ditto	In addition to PETRRA interventions, there are some other factors contributing to the reduction of poverty in Bangladesh. Government continues to give high priority to rice production and ensures appropriate policy framework remains in place. Sufficient availability of farm inputs, including seed of improved varieties.
2. Government, and non-government extension services have made use of research findings from PETRRA sub-projects	[Indirect local impact] P.2.1 At least 3 government organisations (DAE, BARD &RDA) and 8 NGOs used PETRRA research findings during the project period. P.2.2 At least 7 PETRRA sub-projects findings utilized by the government and non-government organisations by the EOP	KAP surveys commissioned by PETRRA Publicly available reports on the extension activities of the identified organizations Ditto	Increased rice productivity will generate increased household incomes and employment GO/NGO extension services effectively disseminate new technologies to resource poor farmers. Incentive prices for farmers ensured.
3. Other agricultural research funding bodies in Bangladesh have adopted key elements of a pro-poor demand led competitive rice research system as used by PETRRA	[Indirect national impact] P.3.1 At least two funding bodies adopted key elements of a pro-poor demand led competitive rice research system of PETRRA by the EOP.	KAP surveys commissioned by PETRRA PETRRA records of contacts with these bodies Evaluation *report* of the PETRRA communications strategy	The macro-economic and political situation does not deteriorate. Donors are willing to fund agricultural research bodies.

Narrative Summary	Objectively Verifiable Indicators (OVIs)	Means of Verification [and by whom]	Important Goal-related Assumptions
OUTPUT 1 PETRRA's management practices and research findings effectively communicated to relevant organisations and persons involved in agricultural research and extension, and to policy makers	**1.1** All the enlisted stakeholders received PETRRA Bangla and English News Letters and PETRRA reports made available in its Website during the project period. **1.2** All identified improved technologists and dissemination methods packed and communicated among the relevant stakeholders and accessible on the knowledge bank website by the end of the project. **1.3** One special issues of "Krishi Katha" and other special issues of NGO partners published during the project period. **1.4** Most important stakeholders have clear understanding of PETRRA management practices and research findings by the end of the project. **1.5** Increased information request and number of person's access to website.	Distribution list of newsletter, visit PETRRA website web log. CD on updated knowledge bank and translated Bangla version, PETRRA records, correspondence letter, proceedings of workshops Published documents KAP Study report and communications strategy Documents on technology package, dissemination methods and receivers list.	Targeted organisations have the resources to apply PETRRA findings Dissemination networks that were established by PETRRA maintain their active membership levels, after PETRRA inputs diminish.

Narrative Summary	**Objectively Verifiable Indicators (OVIs)**	**Means of Verification [and by whom]**	**Important Goal-related Assumptions**
OUTPUT 2 Improved rice production technologies appropriate to RPRFs identified or developed, and tested in collaboration with the same by PETRRA's sub-project partners and Project Management Unit.	2.1 At least 7 key constraints identified by RPRFs that limit improved rice production of the regions of Bangladesh by 2001. 2.2 Both resource poor men and women farmers are involved in identification or development and testing and assessment of technologies during the project period. 2.3 All technologies tested and promoted during the project period are environmentally friendly, as judged against the PETRRA Environment Strategy 2.4 Developed technologies demonstrate improved cost-effectiveness in terms of labour and other inputs by EOP. 2.5 In the majority of sub-projects there are more than 50% of participating RPRFs (and a similar number of neighbour farmers) who have tested the improved technology by EOP and who plan to repeat its use thereafter	Stakeholder analysis report of PETRRA Project Quarterly reports by sub-projects, special studies, and project evaluation Environmental audit, screening in the initial TEC assessment report and workshop proceedings, environmental statement brief by relevant sub-projects and PMU. Sub-project completion reports and participatory evaluation commissioned by PMU in PY5. Evaluations of all sub-projects facilitated by PMU in PYs 4 and 5	Key constraints are solvable efficiently within project time frame. Participation is effective. Resource-poor farm households willing and able to participate with researchers.

Narrative Summary	**Objectively Verifiable Indicators (OVIs)**	**Means of Verification [and by whom]**	**Important Goal-related Assumptions**
OUTPUT 3 Capacity of research partners to undertake value-based demand led research sustainably enhanced.	3.1 At least 25% PETRRA partners adopt key elements of a research management system (i.e PETRRA output 5) which promotes demand led research with a focus on RPRF households by PY5 3.2 Key partners are proactive in creating and maintaining linkages with relevant organisations committed to work with RPRFs by PY5 3.3 >70% of management and key staff of agencies participating in, and trained through, the PETRRA project, demonstrate positive impact on their knowledge, attitudes and work practices by PY5	Review of PETRRA partners research commissioning and management systems, undertaken by OPR team in PY5 MOUs or other instruments of commitment available, and verified by OPR team in PY5 Survey questionnaire and semi-structured interviews conducted by independent consultant in PY5.	Key partners willing and able to form linkages Linkages provide mutual benefits to all partners Availability of confident external facilitators and participatory research facilities meet the demand
OUTPUT 4 Key policy constraints to improved rice-dependent livelihoods identified and recommendations presented in key policy fora, by PETRRA's policy research partners	4.1 Each completed policy paper/study document meets quality criteria established by PMU 4.2 At least 6 policy briefs produced on seed, research-extension, non-farm, WTO, biotechnology, poverty and agricultural, mechanisation, gender, and ecosystem-based technology developed by EOP. 4.3 PETRRA policy findings on poverty and agriculture reflected in PRSP during the project period. 4.4 Policy research findings presented to appropriate policy making fora by PY4, key recommendations assessed as relevant and practical by fora participants.	Assessment document prepared by PMU and Policy Cell, Policy Documents and Briefs PRSP Document Minutes of fora prepared by PMU, including use of assessment/ evaluation questionnaire completed by participants	Improved policies for rice production implemented by Government and/or other organisations. Key policy research institutes willing and able to participate in the programmes.

Narrative Summary	**Objectively Verifiable Indicators (OVIs)**	**Means of Verification [and by whom]**	**Important Goal-related Assumptions**
OUTPUT5 Improved methods for effective uptake of technologies identified, pilot-tested and recommendations for improved uptake pathways made by PETRRA's sub-project partners and Project Management Unit. .	5.1 More than 50% of uptake sub-projects are able to show increased adoption rates by RPRFs (Male & Female) both participating and neighbouring when using new uptake methods, when compared to existing uptake methods. 5.2 More than 50% of Uptake sub-project partners are applying, uptake pathway recommendations by PY5 5.3 Validated and documented recommendations presented to a National and Regional Uptake Seminar by end of PY5, and assessed by majority of seminar participants as being relevant, practical, efficient and cost-effective. 5.4 Updated version of Knowledge Bank incorporating PETRRA learning by the end of the project. 5.5 Two focal area network and uptake forum piloted and critiqued by its members and their respective institutions by PY5	Sub-project progress report End of project evaluations of all sub-projects Project documentation and proceedings of workshops Paper(s) presented to Seminar Minutes of Seminar proceedings, including use of evaluation questionnaire to assess participant response CD on update version of knowledge bank Focal area network and uptake forum proceedings	DAE and other extension providers willing to collaborate. Other dissemination organisations and researchers willing and able to enter into partnerships and implement proposed improvements.

Narrative Summary	Objectively Verifiable Indicators (OVIs)	Means of Verification [and by whom]	Important Goal-related Assumptions
OUTPUT 6 A pilot model of an effective pro-poor competitive rice research management scheme has been established and effectively managed by the PMU	6.1 The following processes are designed, implemented, improved and documented: (a) Establishment of Project Steering Committee and Technical Committee, (b) Stakeholder analysis and research issues identification, (c) Research selection process, (d) Monitoring and evaluation of research implementation and findings, (e) Capacity building for value-based approach (f) Network and partnership development, (g) External communications of research findings and model (h) Poverty, participation, gender and Environmental impact relating to all above approaches. 6.2 The above processes produce Outputs 2 to 5 as scheduled with 95% fund allocation of the project research budget within PY4. 6.3 The strengths and weaknesses for effectiveness in the project identification, funding, and management procedures are documented for lessons learned for future research fund models. These are compared with other research funding mechanisms (e.g World Fish, HARP, IRRI Country Programs) already existing within Bangladesh or in nearby countries. Effective in terms of transparency, complexity, timeliness, cost, partnerships etc.	PSC and TEC minutes Stakeholder analysis reports Procedures manual, with dated updates PETRRA annual and financial reports Workshop with structured comparisons by representatives of the compared organisations informed by report by independent third party in 2004. Lessons learned will be prepared by PMU for discussion in workshop.	Donors allow adequate time for testing and evaluating competitive research commissioning system.

Proposed revisions to PETRRA logframe (28 December 2003)

Narrative Summary	**Objectively Verifiable Indicators (OVIs)**	**Means of Verification [and by whom]**	**Important Goal-related Assumptions**
Super Goal: **Poverty in rural and urban areas substantially eliminated**	Proportion of the rural and urban population respectively living below poverty line (2122 Kcal/capita/day) declines from 45.4% and 48.5% in 1995/6 to 22.5% and 24% by 2015	DOLSYS data base, Poverty study 1999-2000. DFID/ International community poverty study, 2015 Analysis will be done by DFID. Baseline information will be provided by PETRRA. Village revisit study could be repeated.	
GOAL Rice production and incomes increased nationally	G.1: *Annual* growth rate of rice production is above that of growth rates of the population *in 2008/2009 compared to 1999-2000.* G.2 Income of resource-poor rice farmers (including small and marginal farmers) increased at least *25% in real terms between 1999/2000 and 2008/09.* G.3 Employment opportunities for landless labourers, in rural areas as a whole, increased *in 2000-2009* at a rate above that for the period *1990-2000.* (Note: Target needs to be fixed from GOB policy statement, especially PRSP).	BBS Yearbooks of Agricultural Statistics, 2000/01 and 2009/10 This analysis will make use of baseline data provided by PETRRA funded DOLYSYS study, the Pathways from Poverty Study, the WB/GoB Household Expenditure Survey, and the Mitra Associates Baseline Survey. Ditto Analysis will be done by DFID. Baseline information will be provided by PETRRA. Village revisit study could be repeated in 2009/10.	Government and donors continue positive support on agricultural policies. Increased agricultural productivity is an essential ingredient to national economic growth and thus overall poverty reduction. But by itself it is not sufficient for rapid reductions in poverty. Agricultural research and service targeted to the poor are also needed. Rice output increases will be sufficient to reduce prices in real terms. Participation in WTO does not change the terms of trade for rice producers.

Narrative Summary	**Objectively Verifiable Indicators (OVIs)**	**Means of Verification [and by whom]**	**Important Goal-related Assumptions**
PURPOSE	[Direct local impact]		
1. Productivity of rice based farming systems for resource poor farmers (RPFs) sustainably increased.	P.1.1 The majority of participants in more than 50% of sub-projects achieve increased rice productivity, at a rate which is greater than population growth rate by EoP (see Goal)	Sub-project progress reports, participatory evaluation and end-of-project evaluations. These will include attention to wider livelihoods impacts.	In addition to PETRRA interventions, there are some other factors contributing to the reduction of poverty in Bangladesh.
	P.1.2 At least 50% sub-projects' participating RPRFs (Male/Female) increased rice provisioning ability of at least one month by the end of the project.	Ditto	Government continues to give high priority to rice production and ensures appropriate policy framework remains in place.
	[Indirect local impact]		Sufficient availability of farm inputs, including seed of improved varieties.
2. Government, and non-government extension services have made use of research findings from PETRRA sub-projects	P.2.1 At least 3 government organisations (DAE, BARD &RDA) and 8 NGOs used PETRRA research findings during the project period.	KAP surveys commissioned by PETRRA Publicly available reports on the extension activities of the identified organizations	Increased rice productivity will generate increased household incomes and employment
	P.2.2 At least 7 PETRRA sub-projects findings utilized by the government and non-government organisations by the EOP	Ditto	GO/NGO extension services effectively disseminate new technologies to resource poor farmers.
	[Indirect national impact]		Incentive prices for farmers ensured.
3. Other agricultural research funding bodies in Bangladesh have adopted key elements of a pro-poor demand led competitive rice research system as used by PETRRA	P.3.1 At least two funding bodies adopted key elements of a pro-poor demand led competitive rice research system of PETRRA by the EOP.	KAP surveys commissioned by PETRRA PETRRA records of contacts with these bodies Evaluation *report* of the PETRRA communications strategy	The macro-economic and political situation does not deteriorate. Donors are willing to fund agricultural research bodies.

Narrative Summary	**Objectively Verifiable Indicators (OVIs)**	**Means of Verification [and by whom]**	**Important Goal-related Assumptions**
OUTPUT 1 PETRRA's management practices and research findings effectively communicated to relevant organisations and persons involved in agricultural research and extension, and to policy makers	**1.1** All the enlisted stakeholders received PETRRA Bangla and English News Letters and PETRRA reports made available in its Website during the project period. **1.2** All identified improved technologists and dissemination methods packed and communicated among the relevant stakeholders and accessible on the knowledge bank website by the end of the project. **1.3** One special issues of "Krishi Katha" and other special issues of NGO partners published during the project period. **1.4** Through access to Bangladesh Rice Knowledge Base, m~~M~~ost important stakeholders have clear understanding of PETRRA management practices and research findings by the end of the project. **1.5** Increased information request and number of person's access to website.	Distribution list of newsletter, visit PETRRA website web log. CD on updated knowledge bank and translated Bangla version, PETRRA records, correspondence letter, proceedings of workshops Published documents KAP Study report and communications strategy Documents on technology package, dissemination methods and receivers list.	Targeted organisations have the resources to apply PETRRA findings Dissemination networks that were established by PETRRA maintain their active membership levels, after PETRRA inputs diminish.

Narrative Summary	**Objectively Verifiable Indicators (OVIs)**	**Means of Verification [and by whom]**	**Important Goal-related Assumptions**
OUTPUT 2 Improved rice production technologies appropriate to RPRFs identified or developed, and tested in collaboration with the same by PETRRA's sub-project partners and Project Management Unit.	2.1 At least 7 key constraints identified by RPRFs that limit improved rice production of the regions of Bangladesh by 2001. 2.2 Both resource poor men and women farmers are involved in identification or development and testing and assessment of technologies during the project period. 2.3 All technologies tested and promoted during the project period are environmentally friendly, as judged against the PETRRA Environment Strategy 2.4 Developed technologies demonstrate improved cost-effectiveness in terms of labour and other inputs by EOP. 2.5 In the majority of sub-projects there are more than 50% of participating RPRFs (and a similar number of neighbour farmers) who have tested the improved technology by EOP and who plan to repeat its use thereafter	Stakeholder analysis report of PETRRA Project Quarterly reports by sub-projects, special studies, and project evaluation Environmental audit, screening in the initial TEC assessment report and workshop proceedings, environmental statement brief by relevant sub-projects and PMU. Sub-project completion reports and participatory evaluation commissioned by PMU in PY5. Evaluations of all sub-projects facilitated by PMU in PYs 4 and 5	Key constraints are solvable efficiently within project time frame. Participation is effective. Resource-poor farm households willing and able to participate with researchers.

Narrative Summary	Objectively Verifiable Indicators (OVIs)	Means of Verification [and by whom]	Important Goal-related Assumptions
OUTPUT 3 Capacity of research partners to undertake value-based demand led research sustainably enhanced.	3.1 At least 25% PETRRA partners adopt key elements of a research management system (i.e PETRRA output 5) which promotes demand led research with a focus on RPRF households by PY5 3.2 Key partners are proactive in creating and maintaining linkages with relevant organisations committed to work with RPRFs by PY5 3.3 >70% of management and key staff of agencies participating in, and trained through, the PETRRA project, demonstrate positive impact on their knowledge, attitudes and work practices by PY5 3.4 A pilot model of an effective pro-poor competitive rice research management scheme established and effectively managed by the PMU, and documented including project identification, funding, and management procedures 3.5 By end of project, key lessons learned for realising VBR documented and made available to key PETRRA stakeholders OPR-4 note: OVIs 3.4 and 3.5are taken in part from Output 6, OVI6.3	Review of PETRRA partners research commissioning and management systems, undertaken by OPR team in PY5 MOUs or other instruments of commitment available, and verified by OPR team in PY5 Survey questionnaire and semi-structured interviews conducted by independent consultant in PY5. Minutes of TEC and PSC meetings Stakeholder analysis reports PMU documentation of the CGS and 'how to' for application of VBR in the Bangladesh Rice knowledge Base (BRKB)	Key partners willing and able to form linkages Linkages provide mutual benefits to all partners Availability of confident external facilitators and participatory research facilities meet the demand Organisations are able to make institutional arrangements that support the operation of competitive grant scheme management system

Narrative Summary	**Objectively Verifiable Indicators (OVIs)**	**Means of Verification [and by whom]**	**Important Goal-related Assumptions**
OUTPUT 4 Key policy constraints to improved rice-dependent livelihoods identified and recommendations presented in key policy fora, by PETRRA's policy research partners	4.1 Each completed policy paper/study document meets quality criteria established by PMU 4.2 At least 6 policy briefs produced on seed, research-extension, non-farm, WTO, biotechnology, poverty and agricultural, mechanisation, gender, and ecosystem-based technology developed by EOP. 4.3 PETRRA policy findings on poverty and agriculture reflected in PRSP during the project period. 4.4 Policy research findings presented to appropriate policy making fora by PY4, key recommendations assessed as relevant and practical by fora participants.	Assessment document prepared by PMU and Policy Cell, Policy Documents and Briefs PRSP Document Minutes of fora prepared by PMU, including use of assessment/ evaluation questionnaire completed by participants	Improved policies for rice production implemented by Government and/or other organisations. Key policy research institutes willing and able to participate in the programmes.

Narrative Summary	**Objectively Verifiable Indicators (OVIs)**	**Means of Verification [and by whom]**	**Important Goal-related Assumptions**
OUTPUT5 Improved methods for effective uptake of technologies identified, pilot-tested and recommendations for improved uptake pathways made by PETRRA's sub-project partners and Project Management Unit. .	5.1 More than 50% of uptake sub-projects are able to show increased adoption rates by RPRFs (Male & Female) both participating and neighbouring when using new uptake methods, when compared to existing uptake methods. 5.2 More than 50% of Uptake sub-project partners are applying, uptake pathway recommendations by PY5 5.3 Validated and documented recommendations presented to a National and Regional Uptake Seminar by end of PY5, and assessed by majority of seminar participants as being relevant, practical, efficient and cost-effective. 5.4 Updated version of Knowledge Bank incorporating PETRRA learning by the end of the project. 5.5 Two focal area network and uptake forum piloted and critiqued by its members and their respective institutions by PY5	Sub-project progress report End of project evaluations of all sub-projects Project documentation and proceedings of workshops Paper(s) presented to Seminar Minutes of Seminar proceedings, including use of evaluation questionnaire to assess participant response CD on update version of knowledge bank Focal area network and uptake forum proceedings	DAE and other extension providers willing to collaborate. Other dissemination organisations and researchers willing and able to enter into partnerships and implement proposed improvements.

Narrative Summary	Objectively Verifiable Indicators (OVIs)	Means of Verification [and by whom]	Important Goal-related Assumptions
~~OUTPUT 6~~ ~~A pilot model of an effective pro-poor competitive rice research management scheme has been established and effectively managed by the PMU~~ OPR-4 note: Treated as one of the OVIs for measuring achievement of Output 3	OPR4 note: OVIs 6.1 & 6.2 are activities and should be moved to the activities section of the PETRRA logframe (not seen) 6.1 ~~The following processes are designed, implemented, improved and documented:~~ ~~(a)Establishment of Project Steering Committee and Technical Committee,~~ ~~(b)Stakeholder analysis and research issues identification,~~ ~~(c)Research selection process,~~ ~~(d)Monitoring and evaluation of research implementation and findings,~~ ~~(e)Capacity building for value based approach~~ ~~(f)Network and partnership development,~~ ~~(g)External communications of research findings and model~~ ~~(h)Poverty, participation, gender and Environmental impact relating to all above approaches.~~ OPR-4 note: OVI6.1 is an Activity ~~6.2The above processes produce Outputs 2 to 5 as scheduled with 95% fund allocation of the project research budget within PY4.~~ OPR4 note: OVI6.2 is an Activity ~~6.3~~The strengths and weaknesses for effectiveness in the ~~project identification, funding, and management procedures are documented for lessons learned for future research fund models~~. These are compared with other research funding mechanisms (e.g World Fish, HARP, IRRI Country Programs) already existing within Bangladesh or in nearby countries. Effective in terms of transparency, complexity, timeliness, cost, partnerships etc.	OPR-4 notes: MoVs 1 & 2 can be moved to Output 3 as they are all part of the record of capacity building for the VBR-CGS ~~PSC and TEC minutes~~ ~~Stakeholder analysis reports~~ MoV3 equates with the plan to document the CGS and the application of VBR in the BRKB (see Output 3 MoV 6) ~~Procedures manual, with dated updates~~ ~~PETRRA annual and financial reports~~ ~~Workshop with structured comparisons by representatives of the compared organisations informed by report by independent third party in 2004. Lessons learned will be prepared by PMU for discussion in workshop.~~	Donors allow adequate time for testing and evaluating competitive research commissioning system.

Narrative Summary	Objectively Verifiable Indicators (OVIs)	Means of Verification [and by whom]	Important Goal-related Assumptions
	OPR-4 note: OPR4 has recommended that the comparison of PETRRA's VBR-CGS with other research funding mechanisms is lower priority than other EOP assignemnts and therefore should be undertaken only if time permits (and this appears unlikely given the workload for project exit). If OPR-4 recommendation is accepted, OVI6.3 would no longer apply.		

Milestones arising from 2002 OPR (columns 1-5). OPR-4 review team findings and recommendation (columns 6-8)

This annex table extends over 9 pages. Key abbreviations are: CGS = Competitive Grant Scheme; VBR = Value-Based Research; PMU – Programme Management Unit

Para or added	MTR recommendation	By whom	By When	Status as of Dec 2003	Row ref	OPR Team Findings	PETRRA follow up
	Monitoring and Evaluation:						
56	Revise the Purpose Level statement and OVIs in the PETRRA logframe.	PETRRA PMU with IRRI Los Banos, DFID and M&E Consultant DFID and IRRI Los Banos approval required	February 2003	A revised Logframe has been prepared through discussion with DFID, IRRI Los Banos and PETRRA PMU members in a meeting organised in February 2003. The meeting was facilitated by Dr Rick Davis, PETRRA M&E Consultant. This includes a revised purpose statement, as there has been confusion in interpretation. The revised logframe has been submitted to DFID for approval in August 2003.	1	The logframe revisions at purpose level are highly satisfactory. They have provided PETRRA with OVIs to measure changes in livelihoods (impact) and institutional behaviour change (outcomes towards impact). With respect to OVI P3.1 it would be valid to consider BRRI as a funding body. There is evidence that BRRI has already internalised some of the guiding principles of VBR. By August 2004, BRRI may explicitly state that they will utilise any opportunities offered to enable them to operate a VBR-CGS within their own financial procedures. In view of the above, for P3.1 the MoV 'Minutes of BRRI Board meetings' should be added.	PMU to make small update to PETRRA logframe.
55	The Project must develop an evaluation plan to measure achievement of its purpose, as proposed in its revised logframe. Other analyses and comparisons may be incorporated into the plan to complement the core	PMU with M&E Consultant	March 2003 (first draft)	The project developed an evaluation plan through a Gantt chart to measure achievement of its purpose and outputs considering March 2005 as the closing time of the project. But as the project is going to be closed by August 2004, evaluation plan needs to be adjusted accordingly. An overall guideline on monitoring and evaluation has been prepared with the help	2	We reviewed PETRRA's internal monitoring procedures and evaluation plans. PETRRA-PMU is now proceeding with the plans' implementation and should therefore be able to report the extent of attainment of the Output and Purpose level OVIs by EOP.	

Para or added	MTR recommendation	By whom	By When	Status as of Dec 2003	Row ref	OPR Team Findings	PETRRA follow up
	hypothesis being tested (i.e. did the outputs lead to the outcomes as predicted) and provide information for pending decisions about the future of agricultural research funding.			of Dr Rick Davies, PETRRA M&E Consultant. Detailed evaluation plan on how to evaluate all the purpose and output indicators of PETRRA logframe will be finalised with Dr Rick Davies in November 2003.		Pressure of time and some information gaps may restrict the extent to which PETRRA can report on livelihood changes beyond rice provisioning (for further details see Main Report, Sections 4 & 6.2.3, Recomms 2, 3, 5 and 6).	PMU to respond to specified OPR-4 recommenda-tions (refer Main Report).
	Sub-project Monitoring and Evaluation: Develop mechanisms for effective monitoring of SPs, including regular field visits and a structured monitoring checklist	PMU	March 2003	A mechanism of quarterly progress monitoring of sub-projects through quarterly progress report including frequent field visits has been established. A checklist for field visit has also been prepared.	3	The Quarterly Monitoring Activities have been implemented as stated. Gender related questions have also been included.	
	Discuss with TEC their potential contribution to M&E	Team Leader with TEC	April 2003	With the busy schedule of TEC members their interest has always been expressed in field visits. During 20-24 August 2003 an intensive field visit followed by a workshop with the participation of PETRRA TEC members, PIs and PETRRA PMU members organised in Northwest, Southwest and Barisal regions. Draft evaluation report guidelines prepared for the 13 sub-projects circulated among the TEC members for their comments.	4	The justification for not including TEC members is accepted. However, we see a role for TEC in PETRRA's EoP evaluation work. We suggest that TEC should critically assess the findings, especially at purpose level, and confirm (or otherwise) the extent of attainment of planned objectives. Importantly, PETRRA-PMU should be pro-active in enabling TEC to have some sense of ownership of the overall evaluation (also see Main Report, Section 6.2.3, Recommendation 13).	PMU to respond to OPR team suggestion for TEC's involvement in PETRRA's evaluation.
	PMU has to decide who will conduct SP evaluations.	PMU with M&E consultant	To be com-pleted for all SPs within June 2003	PMU has already decided that sub-project evaluation will be the main responsibility of PIs. PIs will organise an evaluation team. PETRRA will provide only technical support to conduct evaluation.	5	Acceptable. No further comment (also see Main Report, Section 5.1).	

Para or added	MTR recommendation	By whom	By When	Status as of Dec 2003	Row ref	OPR Team Findings	PETRRA follow up
	SPs should be evaluated by thematic research portfolio, and appropriate outcome indicators should be selected for these.			For the convenience of evaluation, SPs are grouped into eight different categories considering its homogeneity of objectives.	6	Acceptable. We also support the in-depth evaluation studies of a sample of projects (for details see Main Report, Section 6.2.3, Recommendation 5).	
	PETRRA should ensure SPs have vigorous methods in place to measure spread of technologies and identify what may impede or encourage that spread	PMU		Some of the sub-projects are documenting how many neighbouring farmers are adopting the technologies. Boundaries for this need to be discussed.	7	With respect to technology uptake, there maybe opportunities for some local studies in some SP sites of longer term SPs that could add to our understanding of technology adoption and livelihood benefits including intra-household equity. For further details see Main Report, Section 6.2.3, Recomm 5).	PMU to consider the suggestion and take action if feasible by EOP.
	***Uptake Pathways and Methods**:*						
51	The PMU should facilitate future links with other organisations and projects responsible for delivering new technologies to farmers, in accordance with the recommendations of the Alex and Halim report. (PETRRA to prepare draft report on Uptake Pathways and Methods output and document progress and steps still needed; this will enable clarity for reviewers as includes methods, focal area concept and now to include Knowledge Bank.)	PMU	On-going	Forum discussion held on 8 and 10 December 2002; reviewed all uptake methods as being proposed and planned by new-sub-projects. On 5 and 6 April 2003 again all sub-projects in two groups in two different days presented methods they articulated and being tested in PowerPoint presentation. Comparison with one other method was emphasised in the workshop. From last three years in the Northwest and Northeast region network development activities are on going. Significant shift in terms of initiative has been taken place in the Northwest. Regional forum has taken leadership in taking forward regional agenda that is sustainable and complementary to both farmers and concerned agencies. NW Focal area at this movement is designing a place for scaling up of a few PETRRA technologies with its	8	There has been considerable progress since the MTR (OPR-3) on linkage activities and these activities were underway prior to the MTR. Based on discussions with PMU staff; PI presentations on their SPs; field visits to SPs and a meeting with the NW regional forum, the review team, is satisfied that PETRRA has linked with a range of uptake agencies, covering GOs, NGOs and the private sector. The review team had some concerns about link up with DAE at a senior level to ensure there is no unnecessary duplication/ overlap with DAE's plans for decentralised	Useful for PETRRA to keep in touch with further developments of the DAE Information Centres.

Para or added	MTR recommendation	By whom	By When	Status as of Dec 2003	Row ref	OPR Team Findings	PETRRA follow up
				members. In the NE a four day special event of Farmer Exchange visit in regional sub-projects took place where at the end of four day programme a workshop took place with all Focal Area members and all concerned PIs. In both the NE & NW a Knowledge Information Study (KIS) is being conducted in collaboration with NRSP R8083. Preliminary results for this has already been showed in both areas with the Focal area members. In October 2003, three regional visits followed by workshop took place in Barisal, Northwest and Southwest region. It impressed to conduct the same in other areas for capturing lessons, sharing and improving quality of on going research. In the SW region scaling up activities of tested PETRRA technologies has been started since Aman 2003 season.		Information Centres (at Upazila level). In this regard, PETRRA-PMU advised that they have met with DAE-ASIRP, exchanged experiences and agreed that whilst there are areas of common interest, there is not unnecessary duplication. PETRRA and DAE are working at differing but complementary levels. There is 'space' for them (and other institutions engaged in information provision) to co-exist. The pluralism in information channels is not counter-productive. Arguably, a concept of a monopoly/single organisation for agricultural information service provision cannot meet the diverse needs of rural poor men and women.	
	Uptake Methods for all sub-projects documented (there are some 17 uptake SPs).	Partners with PMU	July 2003 (all drafts completed)	During 22 October to 05 November 03, Dr Paul Van Male will start working with for supporting the documentation of uptake methods for all the uptake sub-projects. He will have follow up visits.	9	Progress thus far has been checked and found satisfactory. However, the Main Report Section 4 and Section 6.2.3, Recommendation 11 must also be considered.	PMU to respond to specified OPR-4 recommenda-tions
	Communication Stakeholders informed of innovations of PETRRA through Newsletters (Bangla and English) and Website. Sub-project level research findings appropriately packaged for communication and distributed to relevant stakeholders.	Steps for Development and PMU with SP Partners	On-going	1st English Newsletter released by the MoA in Oct 2003 at Communication Fair hosted by BRRI. The 2nd English and 1st Bangladesh Newsletter were also released by MoA during IRRI BOT meeting and the Fair held at Hotel Sheraton in Sept 2003. PETRRA website also inaugurated in the IRRI BOT meeting. Action plan with logframe is being developed with Steps. Two English and one Bengla Newsletter	10	Communication is a specific part of the OFR-4 ToRs. The OPR-4 findings for the OPR-3 comments and PETRRA's response are therefore included in the main text (see Main Report, Section 3.1).	PMU to respond to specified OPR-4 recommenda tions arising from findings reported in Section 3.1.

Para or added	MTR recommendation	By whom	By When	Status as of Dec 2003	Row ref	OPR Team Findings	PETRRA follow up
				have been published with preliminary research findings for communication.			
	Knowledge Bank pilot tested, adapted and updated with most recent innovations to ensure relevance and accessibility to extension agents (for sustainability of technologies developed under PETRRA the Knowledge Bank of IRRI will be explored as a repository for all information)			Rice Knowledge Bank (RKB) is considered as a hub for rice technologies and innovations. Bangladeshi version of RKB development will be done under PETRRA in collaboration with BRRI and two other national NGOs (RDRS & AAS). Preliminary discussion was held in last year with Dr Mark Bell and a subsequent visit by Dr Zahirul Islam of IRRI. In June 2003 Mr David Shires visited Bangladesh and helped developed a project with major partners. A national committee has been formed and three different concept notes have been developed for BRKB and testing the same in the field.	11	As above (ref 10). See Main Report, Section 3.1.	PMU to respond to specified OPR-4 recommendations arising from findings reported in Section 3.1.
	Competitive Model (Communication and Comparisons)						
	Comparisons between PETRRA approach to research and other models of management with possible indicators: (a) Costs of Project and SPs and how these compare to the benefits; (b) Appropriate balance between administrative support vs size of project vs impact; (c) How competitive the funds are, and how quality of competition affects research outcomes; (d) How effective NGOs and the private sector at delivering	PMU and M&E Consultant	May (first draft)	Preliminary outline for comparison has been prepared. Details study may not be feasible. Strength and weakness of PETRRA approach compared to other models of management will be done.	12	There is no doubt that the MTR (OPR-3) had sound grounds for finding that the CGS, as operated within PETRRA, had not achieved the level of open competition that should be a feature of a well formulated CGS. However, there were reasons for this situation that applied prior to the PETTRA-CGS becoming operational and the time at which PMU entered into a CGS call cycle. The implementing agency with whom DFID had contracted PETRRA was the IARC which has a global mandate for rice research (IRRI) while BRRI, the main national partner, has a similar tightly focused rice-	No specific action required

Para or added	MTR recommendation	By whom	By When	Status as of Dec 2003	Row ref	OPR Team Findings	PETRRA follow up
						mandate for Bangladesh. Thus, a narrow focus on rice was to be expected, and indeed is envisaged in the technical detail of the PETRRA PEC. Hence, the restricted competitive scope of PETRRA's CGS was built in at the pre-commissioning design stage. On the plus side, in spite of this flaw, there has been significant international and national organisational learning through the PETRRA CGS. For further comment, see Main Report, Section 3.3.	
	Piloting a decentralised model Several alternatives were suggested by the MTR Team. These were then discussed at IRRI Los Banos. Given the remaining time in PETRRA it was decided to focus resources on impact as such a piloting would not have sufficient time to derive meaningful learning. With villages in which preparatory discussions were being held villages to be presented with options of technologies from existing SPs.			Time frame of PETRRA did not permit piloting decentralised research model. Together with the farmers of nine villages of three districts a scaling up programme has been commissioned in partnership with DAE Upazila Agriculture Officer Bagerhat; Shushilan in Kaliganj, Satkhira and in Batiagthata, Khulna. Technologies that have relevance in that ecosystem and came out as promising from different PETRRA sub-projects are included for it. Concerned Research partners of these technology sub-projects are involved in the process as collaborator.	13	The proposal for a decentralised model possibly was over-ambitious, as GO and NGO experience in Bangladesh of systems for competitive grant awards was very limited. Given the stage that PETRRA has now reached, and its pending end date (Aug 2004), a decentralised model could only be considered as part of any future non-PETRRA CGS initiative. However, PETRRA's experience would be relevant to any such new initiative e.g., use of regional fora (see Main Report, Section 3.1).	

Para or added	MTR recommendation	By whom	By When	Status as of Dec 2003	Row ref	OPR Team Findings	PETRRA follow up
	Capacity Building: Review capacity building to date for 'demand led research' and determine extent and nature of capacity building requirements still needed and who to do what (in-house and resourced)	PMU	April 2003	Capacity building at this moment is targeted around capturing lessons and evaluation of sub-project activities; development of communication materials is also an area for capacity building. For most of the sub-projects documentation of technical report, completion report and preparation of scientific papers will be organised with national expatriate input.	14	In connection with operation of the CGS and implementation of VBR, PETRRA has undertaken capacity building at a range of levels. PETRRA-PMU does now have its own organisational learning on how to internalise key guiding principles for realisation of VBR in commissioned research. For details of specific aspects of this, see Main Report, Sections 3.3, 4 and 5.1.	Will be covered in PETRRA-PMU response to specific OPR-4 recommendations.
	Gender			The plan to recruit a gender specialist was dropped because a suitable person was not identified. Instead opted for capacity building in SPs. A special impact study on gender issue will be conducted that will feed into the evaluation of the achievements of PETRRA's outputs and purpose in 2004.	15	After discussion, PETRRA-PMU clarified that the proposed impact study would be more like a case study of how gender was mainstreamed. Based on discussions with the IRRI Gender Specialist, some key requirements are given in the Main Report Sections 4.4.	No action. Will be covered in PETRRA-PMU response to specific OPR-4 recommen-dations.
	Poverty Focus o Provide supporting dialogue on poverty and agriculture for PRSP	PETRRA through DOLSYS and Household Processes SP	April 2003	Dialogue completed in April 2003 at BARC (Led by DOLSYS and Poverty Pathway sub-projects). Included meeting with farmers on study.	16	Findings are covered in the Main Report, Sections 3.4.2, 4.2.2 and 6.2.3, Recommendations 9 and 10.	All points in Main Report that link with this sub-section will be covered in PETRRA-PMU response to specific OPR-4 recommendations.
	o Audit all SPs with poverty focus study as per uptake SPs	PMU (identified persons)	August 2003	Prof Bayes identified to lead the study in close cooperation with Socioconsult. Planning meetings completed but fieldwork yet to be undertaken. Prof Bayes has conducted focus interviews with SP farmer partners and developed impact stories for communication that illustrate poverty focus.		The proposed studies must be structurally well linked with the 'proxy' indicator for livelihood improvement (logframe OVI P1.2). For further details see	

Para or added	MTR recommendation	By whom	By When	Status as of Dec 2003	Row ref	OPR Team Findings	PETRRA follow up
						Main Report Sections 4.2.2 and 6.2.3 Recommendation 5.	
	Environment o Prepare fact sheets for environment impact for all SPs concerned with technology development	PMU with SP partners	August 2003	A brief statement for environment impact for all SPs concerned with technology development will be prepared. Schedule and process to be prepared. Is included in final year of project	17	Environment will be part of the EoP evaluation work of SPs and PETRRA as a whole.	No action. OPR-4, review team are satisfied with PETRRA's plans.
	Economic Analysis for all new technologies	PMU with identified expertise	August 2003	SPs are completing economic analysis but this needs to be collated to project level. Case study stories have been prepared for a number of SPs by Prof Bayes.	18	Prof Bayes work will commence in Jan 2004. It would be preferable for CBA to focus on a few longer duration projects to provide sound information in terms of rice productivity. CBA may not capture other aspects of possible livelihood improvement such as equity. This is discussed in the Main Report, Sections 3.2.4, 4.2.6 and 6.2.3 Recommendation 5.	Will be covered in PETRRA-PMU response to specific OPR-4 recommen-dations.
	Impact A major emphasis will be given to impact in the next 18 months of the project o As indicated in Communication above develop statement of potential tech-nologies from all SPs o Show a clear link to uptake partners with potential technologies o Develop link	PMU with partners	August 2003 and on-going	Incorporated under Communications Action Plan	19	The PETRRA logframe has 3 purpose narratives (objectives). It therefore was essential to clarify, early in the OPR-4 review process, which of the OVIs at purpose level are measures of developmental impact (livelihood benefit) and which define institutional behavioural change (i.e., progress towards impact). This clarification enabled theOPR-4 team and PETRRA-PMU to have constructive dialogue on the evaluation of	Will be covered in PETRRA-PMU response to specific OPR-4 recommen-dations.

Para or added	MTR recommendation	By whom	By When	Status as of Dec 2003	Row ref	OPR Team Findings	PETRRA follow up
	nationally for recommended new technologies with NTCC					impact and how best to deliver PETRRA's findings (i.e., specific products and their media forms) in order that uptake could continue after PETRRA ends and lead to wider impact in the medium term (also see Main Report, Section 5.2.	
	PETRRA exit/future:						
	Clarify SP completion strategy with development of plan of action for capturing learning etc Discussion on timeframe for adequate learning on PETRRA model Discussion on alternative models and possible future scenarios for PETRRA	PMU with DFID and IRRI	February 2003 and then schedule to be developed	Initial informal discussions with DFID in Feb 2003; this was followed up in discussion in June with three subsequent letters concerning request for extension through to March 2005. However, DFID indicated officially in September 2003 that no extension to be granted. Director General IRRI has directed Project Manager to prepare exit strategy accordingly. A revised exit plan, based on August 31, 2004, has been prepared by PETRRA PMU.	20	The PETRRA exit strategy was covered by the OPR4 team (see Main Report, Section 6. During the course of the review, the OPR-4 team was able to review PETRRA's learning, from several viewpoints – PMU; TEC and PSC; sub-projects both in the field and in round-table discussions. The various findings are reported in the Main Report Sections 4, 5.1 and 6.2.	Will be covered in PETRRA-PMU response to specific OPR-4 recommen-dations.

ANNEX 6

Progress towards impact – Findings during OPR-4 field trips on Rice Provisioning Ability and other related information

Stakeholder met	Locations	Project type/ description	Feedback related to rice provisioning ability	Extent of RPA change	Additional livelihood information
Practising farmers (men and women) of SHIP implemented by BRRI and RDA	Maria village of Bagura district	Seed Health Improvement Programme (including post-harvest management)	As a result of introduction of this technology and it's adoption by the farmers, (1) per Bigha yield has increased by at least1-2 monds per bigha in case of Aman and by 2-3 monds in Boro rice (in both cases for HYV-BR varieties) (2) Seed rate of per bigha reduced from earlier 7-8 kg to 2-2.5 kg	Depending on the land holding size and other factors, availability of rice at home of resource farmers has increased by 15-40 days.	1.Savings on seed per bigha (1-2 seedlings per hill) 2.Higher yield ensures longer food security and enhanced income from sale of quality seed. 3. Reduction in number of days of labour sale for purchase of rice. 4. Price of quality seed is always more than ordinary seed at least by Tk2-3/kg 4. Improved social status of the early adopters. 5. Often seed is sold (booked) even before the harvest in advance. 6. Availability of small cash in the hands of housewives and women from sale of quality seed from home.
Practising farmers (men and women) of FAG rice implemented by HEED-Bangladesh.	Madhavpur village of Madhabput union no.8, Kamalgunj Upo Zila of Moulavi Bazar district	Introduction and popularisation of FAG to resource poor farmers	From increased income from the sale of FAG rice varieties, the participating farmers were enabled to purchase their requirement of crude edible rice for the year	Large areas of crop land under T.Aman is shifting under FAG rice as more and more farmers are adopting this cultivation for better price.	
Participating farm women. NGO, Jagrata Mahila Samity	Haria and adjoining villages of Hobigunj district.	Women led group extension method for rice technology	Increased by 2-5 monds (40 kg) per Kani	BR-28 and BR-29 is getting more and more popular and are spreading to adjoining villages through women farmers. Very poor are also keen to grow BR-28 and 29. They request for seedlings, wheel hoe, pump sets for irrigation etc. "We hire threshing machines and very poor thresh manually".	Increased income from sale of seed, and seedlings of improved vars. Land less poor purchase seedlings directly from the women who raise seedlings. Poor cannot afford to grow seedlings as they have no land of their own and they do share cropping. Livelihood improved: women purchase chicken, ducks, cattle, goats from the extra income. They no longer wear torn clothes.

ANNEX 6

Stakeholder met	Locations	Project type/ description	Feedback related to rice provisioning ability	Extent of RPA change	Additional livelihood information
Participating farmers organized by AAS	Ponargaon village, Union Satiajuri, Upo Zila, Chunarghat District. Hobigunj.	1.LCC, 2.FAG Aromatic rice, 3.(PIPNM) Soil health and fertiliser application	Distinctly healthy crop demonstration on farmers field. Expecting much higher yield than usual under PIPNM. Variety demonstration of FAG rice BRRI Dhan –34 and other local varieties.	T. Aman crop yet to be harvested	Farmers very happy to receive new varieties and technology. Seed, fertiliser and pesticides supplied by AAS free of cost. Seeds and LCC was provided by the AAS.
Rice Duck farmers organized by MAC Bangladesh	Sirajnagar village, Kalapur union, Srimangal Thana, Moulavibazar district.	Rice Duck farming (Zingdang)	Distinctly healthy crop (T.Aman-BR11) as compared to others where no ducks were raised. Expecting higher yield than usual	Ducks are yet to start laying. Some farmers have lost ducks which died due to poisoning from insecticides spread by other farmers on adjoining rice fields.	Cost of rice cultivation reduced considerably by introduction of ducks in rice fields. Savings from roughly 15 decimals of land include: Cost of Urea-8-10kg =Tk 60 Cost of two weeding X 3 labour = Tk 300 Cost of insecticides =Tk 50 Hiring charges of sprayer = Tk 20 Roughly total saving of Tk380 - 450 from 15-18 decimals of land. Additionally there was income from the sale of male ducks @ Tk 50 per duck (3-4 months old). However the farmers had to feed the ducklings with paddy and other farm produce.
Participating farmers Sirajnagar village	Sirajnagar village of Kalapur union, Srimangal Thana, Moulavibazar district	“Farm Seed” Introduction of BR-28 and 29 rice varieties	Distinct increase in yield and extended rice provisioning. (See analysis of farmers).	Depending on the land holding availability of rice increased by at least 1-3 months.	Resource poor and very poor farmers have also been benefited from the introduction of HYV seed varieties. Very poor made cumulative gains of rice from increased yields of Aush, Aman and Boro. As a result some very poor families could reduce total annual house hold rice shortage by 5-6 months. In other words h/h food shortage lasts for only a month or so.

SP brief description; stakeholders met and location	General SP information and other related information	Extent of RPA change or similar	Additional LH information
NE focal areas: AAS and HEED led sub-projects			
Production and Marketing of Fine, Aromatic Glutinous Rice (FAG) through farmer's participation in NE (SP 28 02) Group of 40 women (8 directly involved in FAG). Location: Madhobpur	Production: 4/5 new HYV introduced which have higher value (1kg of aromatic= 4kg of normal rice). FAG rice requires lower use of fertiliser (from 18kg urea to 12kg/ha) and water (irrigation constraints in the area). Usage: The rice is only used for sale (and is culturally accepted as rice for religious celebrations). Aromatic rice was previously purchased, now it is produced (change in cropping pattern and land use) for sale. If milling and marketing links are ensured, villagers prepared to expand FAG variety to all plot. More varieties should be introduced and tested. Processing: Lack of milling facilities that would allow production expansion. Marketing capacity: limited at present to fairs and religious festivity (Eid, Durga Puja) and to HEED purchasing the production Some exchange occurs between FAG and normal rice (ratio 1:2). Local markets are not offering good price and people are not selling the rice at lower price. Nutrition: No direct nutritional impact. But additional income achieved. FAG has 2-4% more protein value than normal rice (potential for export/children/cereals marketing) Training: Women received on the plot training (man also in a school) and on post harvesting storage and dry testing. They now storage seeds in plastic bags and under roof (before gunny bag), also use some local methods with cloths dampened with kerosene as pest control. Training was given by a man. Possibly happier (not great concern) if it was a woman.	Income used 1) to purchase/increase rice consumption, 2) allow education for children, 3) buy clothes (also input for articraft). [Hindu tribal groups. Women's equal role in contributing to agriculture and LH activities. Women involved in all field activities except ploughing and fertiliser distribution.]	All village women part of HEED groups. One crop, and additional articraft income sources (looming, shawl and shari production) with good market linkages also to export market thanks to HEED (Shaktuli?) DAE do go to their village but no programme addressed to women. Women asked for more training in rice production and any other scientific knowledge that can improve their livelihood. They see a role for a greater exchange of knowledge between scientists and farmers. FAG is accepted by farmers, culturally important, environmentally friendly and income enhancing It requires 4-5 years for new varieties to be tested. IRRI, DFID and HEED (board decision) should ensure continuity of this pilot phase) HEED will continue to work with these communities because part of their on going (25 years) work.

SP brief description; stakeholders met and location	General SP information and other related information	Extent of RPA change or similar	Additional LH information
	Production and processing: More variety could be tested in this area. Technology for small scale, manually operated and owned by groups of farmers milling exists in Vietnam, IRRI is trying to import in the country. Heed also involved BAU and BRRI to developed appropriate milling technology (but limited hope and ling time required). PI has increased its technical knowledge in processing and marketing (40% humidity level required for appropriate milling and rice need to rest with husk for international consumer's concerns) thank to IRRI scientific support. Marketing: Rice quality has to be improved according to consumer taste (testing session are to be held in spring). HEED has already identified the marketing chain require for packaging and export, following the Business Development Service model for SMEs. Follow up: PS and Swiss (baby feed) companies interested in FAG but need the production to reach a greater level (and need product milled with husk). Fairs, newsletters and other communication tools have been able to spread news about the introduction of this technology in the national and international context		The PI is a very committed and knowledgeable man and has made sure that all phases of production, training, processing and marketing are taken into account. However, beyond the QR he has not documented his learning and linkages between all these phases. The need and requirement for special milling was not known to the PI at the beginning of the project (and nobody realised it) and so it was not budgeted in the CN. Now this has become the greatest constraints to expansion of potentially good production. However, the shift of all crops into this FAG might have negative repercussion on food security if the market chain fails

Local Names of FAG grown in the area and their yield

SL No.	Name of FAG variety	Yield per Kare (30 decimal)	Average market price (Tk/kg)	Other information
1	Chinigura	9-10	48-50	
2	BR-34	12-13	48-50	
3	Khasra (highly aromatic)	10	50	
4	Parbatjira (non aromatic small grain)	7-8	35-40	
5	Kataribhog	10-11	40	
6	Samudrafena	8-10	40	
Local	Kalo Biroin	10-12	12-14	'We don't grow these varieties as there is no good price in the market' (comment applies to all locals)
Local	Kathali Biroin	Do	Do	
Local	Poush Biroin	Do	Do	
Local	Pak Biroin	Do	Do	
Local	Lathi Biroin	Do	Do	
Local	Jathi Biroin	Do	Do	
Local	Madhu Biroin	Do	Do	
Local	Sada Biroin	Do	Do	

Practising farmers (men and women) of SHIP (SP 00 99), Maria village of Bagura district

Notes from group interview A. Farmer's analysis of year wise increase of newly introduced rice varieties

Year and season	BR-28	Relative score (number of 'hits' [O])	BR-29	Relative score (number of 'hits' [O])
Boro 2001-2	**15monds per care. This was our first experience with this variety. Better price (Tk 14-15 /kg)**	**O**	**15 monds per care. Price is slightly lower than BR-28 (Tk 12-13 /kg)**	**OO**
Aush 2002		**OO**		
Boro 2002-3	**20 monds per care. We learned the husbandry practices better in the second season.**	**OOOO**	**25 monds per care**	**OOO**
Aush 2003		**OO**		

Notes from group interview A. Farmers' comments at Maria village (SHIP, SP 99 00):

- We have more faith and confidence on the seed grown on our own land and we no longer are interested on out side seed supply. This year Union office supplied free seed and no one went there to receive seeds, as they have no faith.
- Skills we have learnt are: Separating seed from other seed varieties, Drying them separately on mat and with care, Checking the extent of drying by cutting seeds teeth.
- We understand proper storage with Neem leaves, naphthalene etc.

Notes from group interviews B and C:

Topics	Observations/farmer feedback	Issues
Institutional	Diffusion of the seed health technology: Training in seed technology given by RDA staff to UP Chairman and 12 wards members. They go to villages to train farmers (not sure about capacity of wards members to pass on technology, despite this one is a simple one). The video on seed health is also shown in villagers. Reach – 900 farm households, 1000 plots in Sardar. Only one harvest in the entire union, results were very good 10% more. Some cleaned seeds are already been sold in the market, which are better quality from 10 Tk normal to 15Tk	What will happen if there is no PETRRA. They will need some institutional support or coordinating support from RDA to replicate or expand the programme to other unions. (but not considered to use women who have already been trained as potential technical back up for expansion) DAE role? – Block supervisor advises on variety but not on seed (Extension Dept not able to implement this technique because they wanted to test it first, result is slow service provision for new technology)

Topics	Observations/farmer feedback	Issues
Technical	'Seed' plots marked out by yellow flags appear to be increasing, which will widen use of 'true-to-type breeding.	
Participatory	Six men and five women PRA and transect walk (in house, storage, etc). Seed health was not participatory. Initial resistance to collaborate with RDA and provide rice seed. RDA had to purchase the rice to convince the farmers to collaborate. After two months RDA brought back selected 250g of clean rice seeds and asked to plant it and the farmers did it. Seedlings (women [W]): all uniform and all healthy; (men [M]) had some complaints about the cleanliness. In fact, two locations of seed beds (in the field-M and in the household-W). Crop: first boro then amon, very visible for uniformity; other farmers came and want buy directly from the field and provide advance booking. Very impressed. Seed cleaning done on several varieties but very consistent gains on one variety (BR-11) out of 4 in boro because is the most 'filling nutrition one' and (BR-6) out of 4 in Amon, Impact: yields 2/3 higher per mound, 5-6 kg for 33 decimal to 2.5 kg for decimal of seeds; attract people from other areas (for the fair and for admiring the field). (W) – yield is higher and they felt proud. Very time consuming to clean it the first time but now we don't do it anymore. We store in proper way and before planting, 'clean' [remove floaters] using saline water. Food availability increased producing 15-35/40 days additional availability rice supply. The rice supplies are used to delay the need to go an look for work.) To purchase food rice, quality seeds were sold at higher price and had greater returns than rice food grain sale. They are discovering the economic value of selling seeds, compared to other forms of income source).	Farmers asked support to improve seed quality of maize (buy hybrid maize seed 180Kg and sell crop for 70tk/kg) The underpinning science has been adopted, but farmers have rationalised the original one and want now to adapt the technology to their needs (new crops) Potential for micro enterprise (private sector) development in (seed production and) sale to neighbouring local markets.
Gender	Process: non-participatory selection of technology and of participants/users. Change in work of women in production: women now select seed for rice production and express opinion on use of land, produce plants for preservation. Learning: cleaning of seed, cleaning of weeds, drying and preservation, capacity building of women now transfer their knowledge to other village women Impact: increased yield/production, improve food security (additional daily meal, annual food security), additional income source from seed sale by women in the village	
Communication	ToT from RDA to government officials and UP wards to grassroots by posters, stickers, video and farmer to farmer.	

OPR-4 field findings on SHIP (SP 00 99)

This SP was not demand-led but an 'imposed' transfer of technology and the kick start was bumpy and money passed as an incentive. However the technology (select seed) was good. The technology gathered its own momentum and people followed the work (despite being tedious) and were able to produce the same quality of seeds as the original testing one. Panicle selection in well managed small plots is an added advantage (true-to-type variety maintenance). Farmers have empowered themselves and make their decisions to suite their circumstances. Based on village discussions it appears that seed health management has helped resource poor provide to improve rice production and food security in three years and bettered livelihoods. It built human capital and in so doing has had its local impact.

Missed opportunity: DAE extension service was not involved despite this project/activity would fit with its mandate and DAE capacity has not been built.

Other mechanisms exist to spread technology and other institutional processes and/or agents (trained women, video, TMSS, private initiative) and these are being used in neighbouring unions. But should have a supportive technical backstopping system. DAE can figure in this and others. Sustainability of the expansion is not yet well organised.

Paragraphs from all sections x.x.6 (points to consider in final project period, Jan-August 2004)

Section 3.x.6	Para-graph	Paragraphs from main report ***Section 3 – Outputs 1-6***
Output 1 *Commu-nication*	28	Development of the e-based BRKB can provide a sustainable reservoir for PETRRA's research products and their various media forms. Nevertheless the BRKB needs a national home for durable longer term supply of the CD and e-file storage back up.
	29	Similarly, there must be a budget for production of BRKD CD's in quantities that provide for longer term supplies after project exit. CDs are very convenient for those without reliable internet access and so demand should continue well beyond project exit.
	30	PETRRA should consider sub-sets of the BRKB dedicated to certain highly pro-poor products and communication materials that have a strong national context.
	31	PETRRA experience of the importance of communication, including the structural complexity of meeting the communication needs of a range of stakeholders and reaching policy actors, appears to be highly relevant to DFID-B's operationalising of the CAP.
	32	Similarly PETRRA's experience indicates that attention to communication in research project design should be added to the suite of key elements of a VBR-CGS that has a central focus on contributing to poverty reduction.
Output 2 *Rice technolo-gies*	56	In brief the main points for follow up, taken forward to Section 6, are economic analyses focused on a small suite of SPs (see para 52); capturing social learning and undertaking social analysis with the involvement of SP research teams (see paras 40, 54 and 55); taking action for linkage and input of SHIP products into other seed-based SPs (see para 53); understanding and internalising the evidence that there is in SHIP and possibly other SPs of how transfer of a technology in integrated into farmers' knowledge, and farm and livelihood management systems (see para 49).
Output 5 *Uptake promo-tion research*	74	It was apparent that PIs closely identify with the work of their various SPs and hence, it is likely that some of the organisations involved in Output 5 SPs will internalise the learning on pro-poor services and this should be an asset to future pro-poor service provision.
	75	Arrangements are in place to report the findings on uptake promotion research in the form of a book and at a national symposium. It may also be necessary to consider other communication materials that would be accessible to service providers. The book may not meet this requirement but the materials for the national symposium could be planned to cover this perceived gap.
Output 4 *Policy research & dialogues*	93	It will be important for PETRRA to ensure that the three policy dialogues on poverty and issues around building livelihoods of poor men and women are well documented. Production of a short well focused synthesis paper, targeted on policy-relevant stakeholders, should be considered.
	94	The review criteria for the policy study reports should be revised so that reviewers consider the studies contribution to central elements of PETRRA's research – poverty reduction, livelihood building and gender issues.
Output 3 *Capacity building for VBR-CGS*	118	NARES have developed favourable institutional attitudes and national capacity at a range of levels has been built for VBR, based on LPs experiences of PETRRA's VBR-CGS.
	119	There are some particular areas of experience that are relevant to any future similar scheme, e.g., a process for achieving the participation of women in regional fora, based on PETRRA's experiences in the NW region; the process of participatory development of communication materials at the grass roots level.
	120	PETRRA's learning on VBR is valuable. During the course of PETRRA's implementation this has been fed back into the CGS management system (also see Sections 3.6 and 5.1). It is important that this learning is documented but care must be given to deciding priority areas and ensuring that these areas are covered before project exit. This point links up with points made in Sections 3.2.6, 3.3.6 and 3.6.6.
Output 6 *Pilot model for VBR-CGS manage-ment*	131	OPR-4 strongly recommends a rationalisation of Output 6, mainly because PETRRA has moved on since the time of its formulation. It is preferable now to integrate Output 6 into Outputs 1 and 3.
	132	OPR-4 endorses PMU's plan to include documentation relating to the management of a VBR-CGS, which PETRRA exemplifies, in the BRKB.
	133	Linked with the recommendations in paras 131-132, there must be careful priority setting and scheduling of studies that link with the institutional outcomes and livelihoods impact of undertaking VBR.

Paragraphs from all sections x.x.6 (points to consider in final project period, Jan-August 2004)

Section 4.x.6	Para-graph	Paragraphs from main report ***Section 4 – Cross cutting elements***
Poverty	159	The involvement of NGOs in agricultural research by itself is not a guarantee for ensuring inclusion and participation of poor men and women (i.e., partnerships are not a proxy for reaching the poor). Therefore, in projects with major technical content, the key elements of VBR (demand-led, poverty focus, participation and gender) must be effectively included and operationalised in SP design, implementation, monitoring and evaluation. It is very important that concluding documentation on PETRRA's CGS (Section 8, doc ref. 2, page 105) sets out clear guidelines on how these elements (and the various facets of them) are factored into the operation of the CGS and the monitoring system for its component SPs.
	160	For the stage that PETRRA has now reached, with all SPs scheduled to end in June 2004, it is important that plans for SP closures include documentation of livelihood changes beyond the evidence of adoption of specific technologies. In this regard, the scope of the social study (planned of work of Professor Bayes) was not clear. However, if this study is the 'assessment study of poverty focus of SPs' (Section 8, doc ref. 2, page 106), the points made above on livelihood change analysis should be taken into account in this study.
	161	In addition, the following recommendations require follow up during the remaining project term: (a) strengthening women's participation in the SP evaluation work; (b) evaluation of the efficacy of SP communication materials in order to best ensure wider reach to men and women RPRFs and also to poorer (landless) households;
	162	There is at least one example in the SPs of Output 2 where lack of processing facilities and marketing channels jeopardises the sustained adoption (and favourable livelihood impact) of a rice technology. PETRRA should use its links with the private sector and regional fora for frank discussion of this problem to see if a way to solve the problem can be identified.
Partici-pation	182	It is noted that PETRRA plans to document the project's experiences and lessons learnt on participation (Section 8, doc ref.2, page 107). It is suggested this should be undertaken through a more detailed investigative study of a selected small suite of projects. This could be linked with the study of livelihood change associated with technology adoption (also see paras 152 and 178).
Gender	207	With specific reference to Section2.1 of the Evaluation plan (Section 8, doc ref. 3), it is recommended that a female staff is used to coordinate the collection of information from women. In conditions of short discussions, poor women are often unable to articulate their views and needs. All the participatory meetings organised to collect information related to the evaluation work should be assisted, or even led, by well-accustomed women, possibly female PIs or more outspoken and articulate women farmers, to ensure that women's learning experiences are appropriately considered.
	208	The PMU might want to consider the inclusion of gender issues (the positive and negative changes that technologies have had on women's life and on their learning experience) in the livelihood/social study (see para 160). This could add to (or perhaps replace) the planned gender review. The IRRI Gender Specialist should oversee the preparation of the questions and take part in the analysis of the results.
Institu-tions	229	The PETRRA concept is seen as valuable at a senior level in NARES and has been able to establish partnerships and meso-level collaborative fora that are relevant to an agenda of poverty reduction. At least one collaborative forum has built on the PETRRA experience and has positioned itself to continue pro-poor institutional arrangements.
	230	Some evidence, by end of project, that the principles exemplified in PETRRA's VBR-CGS have the PSC's policy support should be considered as a closure act of this committee.

Paragraphs from all sections x.x.6 (points to consider in final project period, Jan-August 2004)

Section 5.1.6	Para-graph	Paragraphs from main report ***Section 5 – Evaluation and impact***
Evalua-tion	244	Additional support at the field level might be required and this could be linked with the recommendation of strengthening women's participation in the SP evaluation work. Without this affirmative action, women's views may not be well captured (this links with Section 4.2, paras 157 and 161).
	245	Sections 3.2 and 4 have stressed the importance of documenting livelihood changes beyond the evidence of adoption of specific technologies. Although the Output 2 SP Evaluation Report format is regarded as finalised, an amendment that could be considered is to specify 'men and women' where ever RPRFs/resource poor farmers are mentioned. In this way, those preparing reports will constantly be prompted to think about two types of end-users rather than one (which could slip into consideration only of male end users).
	246	Even though there are reporting guidelines, PIs may not report what failed/did not work. The Evaluation should document 'unsuccessful' stories because there will be learning in these (see Section 4.2.5, para 157).
	249	Ways to enable TEC members to have some sense of ownership of the overall evaluation should be considered, e.g., holding a TEC meeting in August 2004 that could perhaps be linked with the final external OPR (OPR-5).
	250	PETRRA's learning on VBR-CGS management, which will be part of the documentation for the BRKB, should include a section on the need to have robust 'quality, quantity and time dimensions' in the definition of logframe OVIs (at project and sub-project levels), as a key component for achieving effective M&E.

DFID PROJECT
PROGRESS REPORT Monitoring ID :

Type of Report: Output to Purpose Review

PART A.

Country:	Bangladesh	**Project:**	Poverty Elimination Through Rice Research Assistance (PETRRA)
Project Officer		**Start Date:**	*September 1999*
		End Date:	*August 2004*
Date of Visit:	29/11/03 – 15/12/03	**MIS Code:**	*139.500-027*
Date of Report:	22/12/03	**Risk Category:**	*Low*

Project Budget	**Spend in period under review**	**Cumulative spend (up to end June 2003)**	**Forecast for current financial year (April 2003 – March 2004)**
GBP (£) 9.5 million		£5,747,177	£2,734,941

Goal Statement	**OVIs (revised logical framework, as of 21 August 2003)**
Rice production and incomes increased ntonally	G1: *Annual* growth rate of rice production is above that of growth rates of the population *in 2008/2009 compared to 1999-2000.* G.2 Income of resource-poor rice farmers (including small and marginal farmers) increased at least *25% in real terms between 1999/2000 and 2008/09.* G.3 Employment opportunities for landless labourers, in rural areas as a whole, increased *in 2000-2009* at a rate above that for the period *1990-2000.*
Purpose Statement	**OVIs**
1. Productivity of rice based farming systems for resource poor farmers (RPFs) sustainably increased. 2. Government, and non-government extension services have made use of research findings from PETRRA sub-projects 3. Other agricultural research funding bodies in Bangladesh have adopted key elements of a pro-poor demand led competitive rice research system as used by PETRRA	P1.1 The majority of participants in more than 50% of sub-projects achieve increased rice productivity, at a rate which is greater than population growth rate by EoP (see Goal) P1.2 At least 50% sub-projects' participating RPRFs (Male/Female) increased rice provisioning ability of at least one month by the end of the project. P2.1 At least 3 government organisations (DAE, BARD &RDA) and 8 NGOs used PETRRA research findings during the project period. P2.2 At least 7 PETRRA sub-projects findings utilized by the government and non-government organisations by the EOP P3.1 At least two funding bodies adopted key elements of a pro-poor demand led competitive rice research system of PETRRA by the EOP.

Outputs	OVIs	Progress Score and Comments
Output 1: PETRRA's management practices and research findings effectively communicated to relevant organisations and persons involved in agricultural research and extension, and to policy maker	1.1 All the enlisted stakeholders received PETRRA Bangla and English News Letters and PETRRA reports made available in its website during the project period. 1.2 All identified improved technologists and dissemination methods packed and communicated among the relevant stakeholders and accessible on the knowledge bank website by the end of the project. 1.3 One special issues of "Krishi Katha" and other special issues of NGO partners published during the project period. 1.4 Most important stakeholders have clear understanding of PETRRA management practices and research findings by the end of the project. 1.5 Increased information request and number of person's access to website	PETRRA has engaged in communication with a range of stakeholders and actors in GO, NGO and private sectors at macro-, meso- and grass roots policy levels. Examples are holding two Communication Fairs (Sept 2002 and Sept 2003); development and wide distribution of Newsletters in English and Bangla, use of existing media outlets and networks for news releases and as channels for feeding relevant information to a near-grass roots level. Importantly, communication activities have occurred with men and women farmers in a local context through SPs commissioned for Outputs 2 and 5 and nationally through policy dialogues (SPs commissioned for Output 4). Regional near grass-roots and meso-level communication is achieved through meetings of Focal Area Committees (FACs) in the NW and NE regions. A PETRRA web site was launched in September 2003 and, working towards project closure, plans are in hand to build upon the IRRI Knowledge Base (IKB) to produce the BRKB. In addition to what the IKB can provide, the BRKB aims to be a comprehensive information reservoir for PETRRA's research products, communication materials and the guiding principles and operational modalities of the VBR-CGS. It is planned that the BRKB will be widely distributed (on CD) in Bangladesh and PETRRA plans to find a national home for it so that it will be available after project exit. Some NGOs have already expressed interest in providing this service. OVIs 1-3 are activities but the Evaluation Plan will go further than what is specified in these OVIs to determine what the various stakeholders gained from the communication materials that are specified in the OVIs. These findings will contribute to the evaluation of OVI-4 The Evaluation Plan that will be implemented in Q1 2004 will determine the extent of attainment of OVI 4 with stakeholders in Bngladesh.. For OVI 5, the web log should be able to provide information on trends in national and international use of the website. SCORE = 2 RECOMMENDATIONS directed on this OUTPUT: 4, 9

Outputs	OVIs	Progress Score and Comments
Output 2: Improved rice production technologies appropriate to RPRFs identified or developed, and tested in collaboration with the same by PETRRA's sub-project partners and Project Management Unit	2.1 At least 7 key constraints identified by RPRFs that limit improved rice production of the regions of Bangladesh by 2001. 2.2 Both resource poor men and women farmers are involved in identification or development and testing and assessment of technologies during the project period. 2.3 All technologies tested and promoted during the project period are environmentally friendly, as judged against the PETRRA Environment Strategy 2.4 Developed technologies demonstrate improved cost-effectiveness in terms of labour and other inputs by EOP. 2.5 In the majority of sub-projects there are more than 50% of participating RPRFs (and a similar number of neighbour farmers) who have tested the improved technology by EOP and who plan to repeat its use thereafter	The portfolio of Output 2 comprises 22 SPs including the non-competitively awarded sub-project, the Seed Health Improvement sub-Project, SHIP. SHIP was commissioned in 1999. The rest of the portfolio was commissioned through competitive calls of which 3 SPs were contract effective in 2000, 7 in 2001 and 11 in 2002. All SPs are scheduled to end in June 2004. BRRI is the lead organisation for the majority of Output 2 SPs but all SPs work in partnership with other organisations (NGOs and in some cases the private sector). Indications are that several of the sub-projects are performing well resulting in livelihood benefits for participating farmers. The Evaluation work will provide details. OVI 1 was accomplished through stakeholder consultation in 3 regions – NW, NE and the southern coastal regions. OVI 2 does not quantify 'farmers'. However, in terms of the OVIs as worded, the field visits of the OPR-4 team to a limited number of sub-projects as well as meetings with PIs, indicated that OVI 2 is being achieved. The OPR-4 team examined the PETRRA Environment Strategy. The portfolio of Output 2 appears to be environmentally friendly such that the OVI 3 will be achieved. As worded, OVI 4 requires that all technologies of Output 2 sub-projects should satisfy the specifications of the OVI. The Evaluation Plan aims to make a comprehensive assessment of SP performance on this OVI and OPR-4 has recommended that cost benefit analysis must be carried for 3 or 4 of the longer duration SPs. Evidence from the field indicates that SHIP will have high gross and net margins and a satisfactory IRR. OVI 5 will definitely be achieved for longer duration projects but achieving it for 'the majority' of sub-projects may be problematic. Nevertheless, indications are that the achievements in the longer duration sub-projects will more than meet the OVI's specifications. One gap in the research for this Output, is that of capturing social learning around the process of technology transfer. Filling this gap is recommended in order to: i) Add depth to the understanding of the ways in which the SPs of Outputs 2 have made an impact on the livelihoods of poor men and women and households. This understanding (positive and negative effects) will enhance the quality of information for OVI P1.2. (which, as a proxy for livelihoods impact, is restricted to an improvement in rice provisioning ability). ii) Linked with (i), determine ways and opportunities for improving rural services for the poor (i.e., to understand what pro-poor services should look like and how the inputs from extension agencies (GO, NGO and private sector) and research could have sustainable reach to, and be accessible by, the poor. SCORE = 2 RECOMMENDATIONS directed on this OUTPUT: 1, 2, 3

Outputs	OVIs	Progress Score and Comments
Output 3: Capacity of research partners to undertake value-based demand led research sustainably enhanced.	3.1 At least 25% PETRRA partners adopt key elements of a research management system (i.e., PETRRA Output 6) which promotes demand led research with a focus on RPRF households by PY5 3.2 Key partners are proactive in creating and maintaining linkages with relevant organisations committed to work with RPRFs by PY5 3.3 >70% of management and key staff of agencies participating in, and trained through, the PETRRA project, demonstrate positive impact on their knowledge, attitudes and work practices by PY5	PETRRA has built up a cadre of LPs, at a range of levels, which have an understanding, in their own institutional context, of the advantages of VBR and an improved capacity to undertake it. The extent to which the GO and NGO PIs of SPs articulated their experiences of VBR was impressive. Much of this was positive, indicating engagement with the elements of VBR and the rationale for them. Areas of concern were not expressed as aspects that were rejected but rather as areas where they saw the need for further advisory support. Importantly they had engaged not only with VBR's key elements (demand-led, participation, gender etc) but also with the management tools for the accountability of SP performance (e.g., compilation and use of a logframe; the need for M&E). The strategic decision to work in three regions well out of the Dhaka environs has helped some LPs, especially BRRI scientists, to break away from research work norms. The physical distance to test sites combined with the dialogue and networking facilitated through the regional fora (Focal Area Committees in the NW and NE) have helped to strengthen new alliances and reduce slippage back into more well entrenched working relationships. The coalition that has developed in the NW region – 'NWR Focal Agencies Forum' – indicates that partners have recognised the value of a structured arrangement for information exchange and planning. The NW forum includes GOs, NGOs, the private sector and the local Farmer Federations under the umbrella of the NGO, RDRS. Such a coalition should sustain PETRRA's VBR concept and working model beyond the project's life. The PETRRA concept is seen as valuable at a senior level in NARES (e.g., BRRI and BARC). A KAP survey will be undertaken as part of the Evaluation work but OPR-4 indications are that the OVIs have been achieved as specified. SCORE = 2 RECOMMENDATIONS directed on this OUTPUT: 3 (VBR aspects)

Outputs	OVIs	Progress Score and Comments
Output 4: Key policy constraints to improved rice-dependent livelihoods identified and recommendations presented in key policy fora, by PETRRA's policy research partners	4.1 Each completed policy paper/study document meets quality criteria established by PMU 4.2 At least 6 policy briefs produced on seed, research-extension, non-farm, WTO, biotechnology, poverty and agricultural, mechanisation, gender, and ecosystem-based technology developed by EOP. 4.3 PETRRA policy findings on poverty and agriculture reflected in PRSP during the project period. 4.4 Policy research findings presented to appropriate policy making fora by PY4, key recommendations assessed as relevant and practical by fora participants.	OVI 1. Six policy studies were implemented for this Output, of which two (SP 11 00 – Flood prone village study revisit and SP 24 01 – Dynamics of livelihood systems in rural Bangladesh) formed part of the DoLSys (Dynamics of Livelihood Systems in Rural Bangladesh) study. Three studies are already completed of which two have been reviewed by independent reviewers using assessment criteria that PETRRA provided. The OPR-4 team were not satisfied with the review criteria for the Output 4 studies and recommends that the review criteria for the policy study reports are revised so that reviewers have to consider the studies' contributions to central elements of PETRRA's research – poverty reduction, livelihood building and gender issues. The livelihoods-related studies for Output 4 (SP 24 01 and SP 26 02) are not yet completed. These studies should critically examine the policy implications of their findings in respect of circumstances that enable and/or impair livelihood improvement of the poor including gender dimensions. OVIs 2 and 4. The Centre for Policy Dialogue (CPD), has taken the lead in organising four policy dialogues, three of which formed part of DolSys while one was part of CPD's programme activities. DolSys arranged two additional dialogues. The CPD managed dialogues resulted in dialogue reports and policy briefs. CPD has records of all participants and a system for tracking feedback over time. CPD also has hosted and provided secretarial support to the PETRRA policy cell (comprising eleven recognised professionals in policy research and advocacy). OVI 3. Some of the findings of PETRRA policy papers and study documents were used by the PRSP Team. Overall, the work for Output 4 indicates a considerable amount of awareness raising at a level that could be a resource for policy-relevant inputs to national policy processes, if called upon. While all these are good achievements, the creation of a favourable environment for the sustainability of the project achievements, within and beyond the project life, depends, among others, on the optimal use of the policy findings at different levels. In this context, there would be a need for more proactive and intensive dialogue and interactions with the policy makers to have in practice 'improved policies for rice production'. However, the OPR-4 team recognises the difficulties and lead times involved in policy changes. SCORE = 3 RECOMMENDATIONS directed on this OUTPUT: 6, 7

Outputs	OVIs	Progress Score and Comments
Output 5: Improved methods for effective uptake of technologies identified, pilot-tested and recommendations for improved uptake pathways made by PETRRA's sub-project partners and Project Management Unit.	5.1 More than 50% of uptake sub-projects are able to show increased adoption rates by RPRFs (Male & Female) both participating and neighbouring when using new uptake methods, when compared to existing uptake methods. 5.2 More than 50% of Uptake sub-project partners are applying, uptake pathway recommendations by PY5 5.3 Validated and documented recommendations presented to a National and Regional Uptake Seminar by end of PY5, and assessed by majority of seminar participants as being relevant, practical, efficient and cost-effective. 5.4 Updated version of Knowledge Bank incorporating PETRRA learning by the end of the project. 5.5 Two focal area network and uptake forum piloted and critiqued by its members and their respective institutions by PY5	The portfolio for Output 5 comprises 19 SPs and three SPs placed in the Output 2 portfolio also contribute. The establishment of FACs in the NW and NE, and linkage with the National Agriculture Extension Programme (NAEP) in the south west form part of this Output. FACs were piloted as decentralised bodies that could improve information flow between GOs, NGOs, private agencies and farmers organisations and assist scaling up of technologies and effective uptake pathways. In addition, an Uptake Forum was established in early 2000. The rationale was that SPs for Output 5 were treating their various assignments mainly as extension (i.e., uptake promotion) while attention to the research dimension, that could deliver new insights on uptake promotion, was weak. The Forum has sought to enable sharing of experiences on uptake promotion amongst relevant SPs as a means for improving SP performance and building linkages and partnerships that should sustain after PETRRA's exit. OVI 1. The Evaluation Plan will determine the level of attainment of OVI 1. Field visits and PI meetings indicate good progress. OVI 2. There is progress towards achieving this OVI. However, the OPR-4 team has recommended that the communication plan for Output 5 should be reconsidered. The concern is to ensure that the Output 5 partners and other potential stakeholders in the Output 5 findings, have communication materials that are readily accessible for them and hence support their use of the Output 5 findings. OVI 3. Plans are made for holding the National Seminar. The recommendation regarding OVI 2 is also relevant to the planned communication activities of the Seminar. OVI 4. Work on the BRKB is planned for the remaining project period. It is an important product and must be given priority. OVI 5 is already achieved for the NW region in the sense that the FAC has already taken steps to sustain as the 'NWR Focal Agencies Forum'. In the NE, There are indications from contact with some NE FAC members that this FAC may not sustain but this finding does not detract from the highly creditable institutional progress that has occurred in the NW focal area. SCORE = 3 RECOMMENDATIONS directed on this OUTPUT: 8, 10

Outputs	OVIs	Progress Score and Comments
Output 6: A pilot model of an effective pro-poor competitive rice research management scheme has been established and effectively managed by the PMU	6.1 The following processes are designed, implemented, improved and documented: (a) Establishment of Project Steering Committee and Technical Committee, (b) Stakeholder analysis and research issues identification, (c) Research selection process, (d) Monitoring and evaluation of research implementation and findings, (e) Capacity building for value-based approach (f) Network and partnership development, (g) External communications of research findings and model (h) Poverty, participation, gender and Environmental impact relating to all above approaches. 6.2 The above processes produce Outputs 2 to 5 as scheduled with 95% fund allocation of the project research budget within PY4. 6.3 The strengths and weaknesses for effectiveness in the project identification, funding, and management procedures are documented for lessons learned for future research fund models. These are compared with other research funding mechanisms (e.g., World Fish, HARP, IRRI Country Programs) already existing within Bangladesh or in nearby countries. Effective in terms of transparency, complexity, timeliness, cost, partnerships etc.	Essentially OVI-1 and OVI-2 of Output 6 are activities (rather than measures of change) and they are already achieved/completed. Even at this stage of the project's term, for OVI-1, point (h) (concerning the key elements of VBR) the management responsibilities will continue to be revisited and further improved. This continuing improvement of VBR is entirely to be expected in the sense that achieving the desired quality in commissioned research needs constant attention, and how this is done continually feeds back into the management system. The PMU plans to include the major procedural documentation of the CGS in the BRKB. This is an important activity for the final project period. PETRRA's VBR-CGS documentation should be valuable to any subsequent CGSs in Bangladesh (and also elsewhere) Given the present levels of documentation of the management procedures of the PMU, and the combined experience of the PMU team, OVI-3 is attainable. However, meeting the indicator's specifications imposes an analysis and reporting burden on the PMU's already very full schedule of work. The value of achieving this OVI, as compared with the importance of completing other end of project work, is questioned. It should not be high priority relative to other work in the final period of the project. Output 6 is a research management function that underpins the attainment of Outputs 1-5 which then links into the attainment of the purpose-level OVIs. Whilst it was useful to specify the need for the PMU in the early years of PETRRA, arguably it now would be preferable to position the functioning of the PMU as one measure of capacity building for undertaking VBR (Output 3). Documentation aspects of the VBR-CGS, as developed and managed by the PMU, can be included in the communication output, Output 1. SCORE = 2 RECOMMENDATIONS directed on this OUTPUT: 5, 11, 12, 13

General progress assessment - Project Outputs	**Score: 2**
Justification	
PETRRA is performing well on Outputs 1, 2, 3 and 6. OPR-4 has some reservations about Outputs 4 and 5. Output 4 is largely achieved as planned but two important studies on livelihoods are not yet completed and it will be important that these achieve a high standard well focused on the objectives of Output 4 and the key livelihoods foci of PETRRA – poverty reduction, livelihoods building, gender equity. Communication plans need to be re-assessed to ensure that they are meeting the national communication context as a top priority. The final phase of work on Output 5 is well planned but one underlying assumption – that a book is the best (and therefore priority) communication product for this area of work – is questioned. The book makes sense in terms of achieving a good compilation of the research undertaken for Output 5, but it should not take priority over producing communication materials that are accessible and useful to the various (multi-sectoral) sservice providers who have engaged in the Output 5 research and who are the most likely stakeholders for scaling up of the findings in the near to medium term. Regarding PETRRA's good performance on Output 1, the development of the Bangladesh Rice Knowledge Base is key to the sustained national access to PETRRA's findings and the possibility for national scaling up (and wider impact). Should there be evidence that PETRRA is encountering problems in completing, it would be in DFID's best interests to ensure that this is completed.	

PART B.

Purpose OVIs	Progress	Comments
P1.1 The majority of participants in more than 50% of sub-projects achieve increased rice productivity, at a rate which is greater than population growth rate by EoP (see Goal) P1.2 At least 50% sub-projects' participating RPRFs (Male/Female) increased rice provisioning ability of at least one month by the end of the project. P2.1 At least 3 government organisations (DAE, BARD &RDA) and 8 NGOs used PETRRA research findings during the project period. P2.2 At least 7 PETRRA sub-projects findings utilized by the government and non-government organisations by the EOP P3.1 At least two funding bodies adopted key elements of a pro-poor demand led competitive rice research system of PETRRA by the EOP.	Re P1.1 and P1.2: Evidence from field visits indicates that sub-projects of the portfolios of outputs 2 and 5 are already having impact on these OVIs. Re P2.1 and P2.2: During the course of the review, it was evident that the use of findings by relevant organisations has taken place. For example, the Rural Development Academy (RDA), Bogra not only recognises the relevance of the technical messages of the seed health sub-project (SHIP) but also favours the manner of community entry that SHIP used and is promoting these principles in its Union and Upazila level management training. At a decentralised level, the DAE has taken up messages from PETRRA's SPs e.g., the technical, input supply and credit aspects of mobile pumps (SP 38 02). Re P3.1: PETRRA has convinced certain organisations (e.g., BRRI, RDRS, RDA) of the advantages of the research management system exemplified by its VBR-CGS. However, achieving official adoption by the end of the remaining term of the project may be problematic simply because organisational revisions take time even when the good sense of a change in institutional procedures is well understood. PETRRA definitely should be able to show good progress towards attainment of Purpose 3, but may not attain it exactly as specified.	The Evaluation Plan, to be implemented in Q1 2004, will provide quantitative data for P1.1 and P1.2 from SP sites and for P2.1, P2.2 and P3.1 through interviews with PETRRA's stakeholder organisations. The second OVI of Purpose 1 (ref P1.2) provides the proxy for measuring livelihoods impact through the extent of change in rice provisioning ability defined as 'at least 50% of SPs participating RPRFs (male/female) (have) increased rice provisioning ability of at least one month by the end of the project'. With this OVI in mind, during field visits, the OPR-4 team framed discussions with men and women farmers in ways that would provide information relevant to this OVI. The findings for men and women's responses to questions relating to OVI P1.2 are provided in Annex 6 of the OPR-4 report. Although these are only a small sample, the findings illustrate that improvements in RPA and other favourable livelihood changes for men and women have occurred in the target sites of the SPs that were visited.

General progress assessment - **Project Purpose**	**Score: 2**
Justification	
The portfolio of sub-projects that form Outputs 2 and 5 are performing well and already these are impacting on Purpose 1. The indications are that Purpose 1 will be achieved. The attention that sub-projects have given to the development of communication materials has exposed target institutions in a very tangible way to PETRRA's research products. The networks associated with sub-projects and cluster of sub-projects, especially the regional fora, have provided an institutional mechanism	

for promoting PETRRA's research products. As a result, there is good progress towards the attainment of Purpose 2.

There is no doubt that having experienced PETRRA, certain organisations (e.g., BRRI, RDRS, RDA) are convinced of the advantages of the research management system exemplified by its VBR-CGS. However, official adoption (with funding revisions) may be problematic simply because organisational revisions take time even when the institutional advantages of the changes are understood. Thus, PETRRA should be able to show good progress towards attainment of Purpose 3, but may not attain it exactly as specified.

Attribution

A well designed Evaluation Plan is in place for implementation during the course of the final project period. This will enable PETRRA to make a robust internal assessment of its performance in terms of the purpose level OVIs.

Purpose to Goal

PETRRA's Goal is ambitious but it is possible for PETRRA to make a contribution to the achievement of these targets provided it meets its planned delivery targets in the final project period. Key priorities are:

(1) To develop the information reservoir (BRKB) and ensure its national availability.
(2) To undertake and document the studies of the wider context of livelihood changes associated with technology transfer. These studies could contribute findings that are highly relevant to scaling up and the potential for PETRRA to contribute to the goal.

DOES LOGFRAME REQUIRE REVISION?

A revision to Output 6 is recommended and a revised logframe demonstrating what is recommended is provided in Annex 8 of the OPR-4 report.

Lessons learned

Poverty focus: Based on limited field visits and discussions with PIs, there is evidence of SPs achieving livelihood impact for the target group (tomorrow's poor) and this is a considerable achievement. Several of the rice technologies that have been transferred are pro-poor in the sense that they largely appear not to be of interest to the rich except through employing poor people that have acquired skills that the rich may like to make use of through hired labour – but with the labour empowered through their skill.

The PMU has made only limited efforts to increase awareness of key stakeholders (particularly PIs and their partners) on the importance of placing technology within a wider context. It is extremely important, in the project's remaining months, that the rich learning (currently held in people's minds) should be captured. This can be used to learn important lessons about the (positive, negative or neutral) impact that PETRRA has had in the livelihoods of their target RPRFs and on those living in their community.

Participation: BRRI scientists, NGOs and other agencies involved in SPs have taken a quantum leap forward in understanding and realising the need for adopting participatory approaches in development and promotion of rice technologies for RPRFs. The scientific community has come close to the farming community in the SP sites, which has remarkably enhanced the process of information exchange and has built up functional linkages with stakeholders at different levels. This is a new and significant development. However, a lot still needs to be improved at the skill learning level in order to further strengthen the concept of farmer participatory research into reality and action. In most cases SPs at different locations transferred technologies. However through farmers' uptake, modified technologies based on strong location specificity, diversity in livelihood circumstances and gender specificity, have emerged. This local adaptation of technologies has not been documented.

Lessons learned

Gender: Men and women are mentioned in the PETRRA logframe at both Purpose (OVI 1.2) and Output (OVIs 2.2 and 5.1) levels, but the concept of gender is not clearly addressed. The PMU has interpreted it in terms of gender equity, or more specifically in terms of equal number of men and women participating in the project. Changes in the monitoring reporting system reflect this understanding and consist of additional questions/indicators to measure changes in the participation of women.

The PMU's commitment towards increasing the number of participating women has translated into significant progress. The project has been able to stimulate stakeholders to consider women's issues (by involving women in participatory activities at different levels) and to see technology as a part of a wider picture where both men and women play important roles. However, the lack of gender related OVIs and MoVs in the PETRRA logframe has limited the opportunity to mainstream gender in the project.

Overall findings are positive indicating that PETRRA's research, and the management system used for undertaking it (i.e., the VBR-CGS) have:

i) Changed the way in which some organisations in NARES and the private sector, including the lead national institute for rice research, have conducted adaptive research;
ii) Created a cadre of local professionals that recognise the advantages and values of this mode of working;
iii) Reached the poor both in and around sub-project sites and had a favourable impact on their livelihoods;
iv) Sensitised some policy-relevant organisations and senior local professionals on policy issues around rice that are relevant to Bangladesh's rural and national economy; and
v) Communicated and publicised aspects of the points above at various levels and across several sectors. This includes effective communication at grass roots level.

Quality of VBR. Whilst SPs have made a start with adherence to and application of the key elements of VBR, there is still considerable scope for further improvement (e.g., reaching poorer groups, improving the quality of participation, mainstreaming gender). But this finding should not detract from what has been achieved. The combination of specifying key requirements (in the research call), providing training and advisory support on VBR during SP implementation, and monitoring SP progress with indicators included for assessing the quality of performance with respect to VBR, has resulted in research that demonstrably is pro-poor and has achieved local impact.

Livelihoods analysis. At the moment for PETRRA this area of understanding is a gap in terms of documentation but PIs, through their field work, are aware of the types of livelihood changes that are occurring for poor men and women. Documenting the dynamics of livelihood changes in Output 2 and 5 SPs, or at least in a sub-set of these SPs, would complement the findings of the Output 4 livelihood studies (see point 3d above) and may add dimensions on livelihood building that the policy-related studies have not captured.

Capacity building. For the majority of local professionals, the VBR-CGS was an entirely new way of working. Its acceptance, and the standards achieved in its field application in only 4.5 years are highly creditable. They represent a considerable step in human capacity building that is relevant to tackling rural poverty in Bangladesh. Importantly, the progress thus far in VBR has also made evident the steps that could be taken to address weak areas e.g., improve gender definitions in the project logframe (OVIs and MoVs); add social science capability to teams so that social analysis is undertaken in tandem with technology transfer; and improve community entry and use of participation in order to reach poorer target groups.

Evaluation and Impact:

Arrangements for project and sub-project evaluation: A well organised and thorough Evaluation Plan has been prepared, structured to the PETRRA logframe and its component SPs. Output 2 PIs are already briefed on what is required from them in respect of reporting on their SP and collecting information relating to the OVIs of Purpose 1 and Output 2 of the PETRRA logframe. PMU responsibilities and the tasks for five external consultants have been defined. Additional support at the field level might be required and this could be linked with strengthening women's participation in the SP evaluation work.

Lessons learned
Progress towards impact: Purpose 1 (livelihoods impact) – Findings from a small sample of interviews in the field illustrated that improvements in RPA and other favourable livelihood changes for men and women have occurred in the target sites of the SPs. *Purpose 2 (institutional uptake of SP findings)* – Use of findings by relevant organisations has taken place and should continue. *Purpose 3 (institutional adoption of key elements of VBR-CGS)* – Experience of PETRRA's VBR-CGS (through both implementation of SPs and senior level membership of PETRRA's Technical Committee [TEC]) has convinced certain organisations (e.g., BRRI, RDRS, RDA) of the advantages of the research management system exemplified by its VBR-CGS. The *scope and schedule for PETRRA's exit strategy* has five main thrusts: a) Management of SP closure (financial, technical support, etc). b) Implementation of the Evaluation Plan including reporting of findings for individual SPs and PETRRA as a whole (see Section 5). c) Preparation of planned publications (e.g., those for Outputs 4 and 5). d) Documentation of the VBR-CGS including, to the extent possible, analytical studies of lessons learnt in respect of poverty focus, participation and gender. e) Information Reservoir for the totality of PETRRA – Development of the Bangladesh Rice Knowledge Bank (BRKB). Although plans are in place for handling items (c) to (e), each represents a considerable work load. The OPR-4 team cannot readily see how the workload for the final project term can be cut down as all items are important. It can only be stressed that all persons (national and international) with tasks in this period must clearly understand the assignments that they have and must commit to delivering to time. Item (e) – *the BRKB* – is vital for sustaining the use of PETRRA's research findings (of the SP portfolio) and for ensuring that the various dimensions of the management system of the VBR-CGS are available for future use in other similar schemes, if required. A *major gap* concerns capturing social learning around the process of technology transfer. This must be addressed in order to: i) To add depth to the understanding of the ways in which the project, in particular the SPs in the portfolios of Outputs 2 and 5, made an impact on the livelihoods of poor men and women and households. This understanding (positive and negative effects) will enhance the quality of information for OVI P1.2. (which, as a proxy for livelihoods impact, is restricted to an improvement in rice provisioning ability [RPA]). ii) Linked with (i), through the understanding of how poor people who have received information and training for a particular technology, have internalised this in their livelihood strategies, to determine ways and opportunities for improving rural services for the poor.

Scoring system:

1 = likely to be completely achieved
2 = likely to be largely achieved
3 = likely to be partially achieved
4 = only likely to be achieved to a very limited extent
5 = unlikely to be realised
x = too early to judge extent of achievement

Part C

Recommendations	Responsibility	Date for completion – by month end
Output 1 (one recommendation): *Recommendation 1: For the purpose of sustainability, key areas for attention the BRKB are:* • Identify a national home for the BRKB for durable longer term supply of the CD and e-file storage back up. • Ensure that there is a budget provision for production of BRKD CD's in quantities that provide for longer term supplies after project exit. • Consider sub-sets of the BRKB dedicated to certain highly pro-poor products and communication materials that have a strong national context.	PMU	June 2004
Outputs 2 and 5 (three recommendations): *Recommendation 2: Revisions to Sub-project Evaluation Guidelines.* Add one section to Chapter 6 of the SP Evaluation Report Guidelines. This would be Sub-Section 6.3 – Effects of the uptake of the information and training that the SP provided on farmers' livelihood activities. A guideline note should be added to prompt PIs also to report on what failed and their understanding of the reasons for this. For the guidelines as a whole, the words 'men and women' should be added wherever resource poor farmers (RPRFs) are mentioned.	PMU	Jan 2004
Recommendation 3: Role of female staff in evaluation work (see point 6a). Use a female staff to coordinate the collection of information from women. All the participatory meetings at SP sites for collecting information related to evaluation should be assisted, or even led, by women (e.g., female PIs or more outspoken, articulate women farmers).	PMU	Feb 2004
Recommendation 4: PETRRA should use its links with the private sector and regional fora for frank discussion of the marketing problem encountered in SP 28 02 (Fine Aromatic Glutinous Rice). The final report for the SP concerned (FAG – SP 28 02) should report on this marketing problem and the actions taken to try to overcome it.	PMU and PI of SP 28 02	June 2004

Recommendations	Responsibility	Date for completion – by month end
Outputs 2 & 5 and 3 & 6 (one recommendation): *Recommendation 5: Undertake economic analysis and in-depth social studies of a few SPs. Use the* findings *to support impact evaluation (PETRRA Purpose 1) and to provide insights on the modalities of making VBR operational in the field.* The PMU team should decide upon a suite of 3 or 4 SPs, of which one is SHIP (SP 00 99), for in-depth studies (but tailored for completion during the remaining project term). Existing plans for poverty studies and a gender review should be assessed relative to this recommendation and adjusted as required. PMU should then use these studies to refine the definition of best practice for operationalising and managing a VBR-CGS including mechanisms for improving poverty focus, main streaming attention to gender and improving the use of participatory methods.	PMU and external consultant for M&E	August 2004
Outputs 3 and 6 (three recommendations): *Recommendation 6: PETRRA should document a small suite of 'good practice' process recommendations.* Importantly these process recommendations would document how pro-poor research can be linked into pro-poor services and planning processes.	PMU	August 2004
Recommendation 7: PETRRA's documentation of its VBR-CGS, should include communication as one of the key elements that must be included in research design and monitored during the course of project and sub-project implementation.	PMU	August 2004
Recommendation 8: PETRRA's M&E documentation (as part of the VBR-CGS) must emphasise and explain how robust 'quality, quantity and time' dimensions in the definition of logframe OVIs (at project and sub-project levels) are a key component for achieving effective M&E.	PMU and external consultant for M&E	August 2004
Output 4 (two recommendations): *Recommendation 9: Ensure that livelihoods-related SPs for Output 4 (SP 24 01 and SP 26 02) have a policy focus and, linked with this, reconsider the communication stakeholders for this work and determine what communication materials they require.*	PMU and PIs of SP 2401 and 26 02	March 2004
Recommendation 10: Revise the criteria for the evaluation of policy studies. The review criteria for the policy study reports should be revised so that the reviewers have to consider the studies' contributions to poverty reduction, livelihood building and gender issues.	PMU	January 2004
Output 5 (one recommendation): *Recommendation 11: For Output 5, assess local communication stakeholders and their needs for communication materials* to ensure that findings and key messages are accessible to local stakeholders in forms that could be used for wider local replication/application.	PMU and external consultant for Output 5	Februrary 2004
Output 6 (one recommendation): *Recommendation 12: PETRRA should consider adopting the logframe revisions concerning Output 6.* A key point regarding this revision is that it explicitly shows the purpose of the pilot VBR-CGS (i.e., to	PMU	January 2004

Recommendations	Responsibility	Date for completion – by month end
provide a tried and tested model for VBR-CGS that could support the NARES capacity to undertake, including manage, such a scheme).		
PETRRA as a whole (two recommendations): *Recommendation 13: PETRRA should consider holding a TEC meeting in August 2004 that could perhaps be linked with the final external OPR (OPR-5).*	PMU	July 2004
Recommendation 14: The Chairperson of the PSC should be requested to consider signing off on an Aide Memoire that briefly reports to the Ministry of Agriculture on the favourable aspects of competitive grant schemes, based on experience of PETRRA's VBR-CGS.	PMU	July 2004

Review team:	Zahurul Alam; Kamal Kar; Benedetta Musillo; Margaret Quin (external consultants)

Poverty Elimination through Rice Research Assistance (PETRRA)

OPR-4 response to comments received from DFID on the 'Review Team Report for the Fourth Output to Purpose Review' (version submitted on 30 Dec 2003)

1. A clear output from the lesson-learning workshop was that the experiences of managing and implementing a CGS through SUFER, REFPI and PETRRA should be documented and disseminated. This should provide an invaluable insight into the challenges and opportunities of implementing a CGS in Bangladesh that would be of interest to development partners, Donors and government, not only in this country but regionally and internationally. Maybe this should be an explicit outcome from the three projects which could be supported by a seminar (or such like) highlighting the findings towards the end of the life of SUFER/PETRRA.

***Response to comment 1**:*

Agreed(but also see response to comment 2).

One important aspect of the lesson-learning in CGS management is that, looking across the management teams of the three projects, there is a cadre of national senior level staff with considerable CGS experience. Importantly this means that there can be a high level of local advocacy of CGS merits. At the same time, this cadre can also explain, based on experience, the various actions required to ensure that agreed CGS quality standards (the VBR-CGS in PETRRA's case) are realised in commissioned work.

2. The review team could have been more specific about how and where the PETRRA experience surrounding the management and implementation of competitive funds should be disseminated. Specifically, in addition, to government there are a number of donors looking for ways to invest in research. PETRRA should invest some time and resources in assess how best to market its experiences. There are useful lessons from REFPI on how to approach this issue.

***Response to comment 2**:*

As reported in paras 264-270, PETRRA's VBR-CGS will be fully documented in the BRKB for which wide national dissemination is planned. Responsibility for international promotion of the BRKB rests with IRRI and it is highly likely that this institute will make best use of it as it should demonstrate their achievements in poverty reduction through rice research. In para 270 (Recommendation 1), we recommended the development of sub-sets of the BRKB and the VBR-CGS could be one such sub-set. The sub-set proposal was discussed with IRRI senior staff.

We agree that marketing of PETRRA's experience of the VBR-CGS is important, however the robust (evidence-based) reporting of this experience will come together only in July 2004 as it is integral to PETRRA's M&E work. A pertinent point here is that of the three projects, PETRRA was the most explicit in the translation of DFID's policy and priorities into its research guiding principles (the VBR elements). In this way, PETRRA not only has experience of the management of a CGS but also will be able to report how a CGS can be used for translating policy directives into research design and mode of implementation of sub-projects. Linked with this, PETRRA's M&E work will test the extent to which VBR resulted in policy-relevant developmental impact.

It is vital that the M&E work and the associated economic and social analyses (refer paras 281-285) are completed. Thus, in PETRRA's case, the evidence-based documentation of experiences and achievements of the VBR-CGS is an essential precursor to the marketing phase. Given PETRRA's time constraints, marketing will largely have to rely on the way the VBR-CGS is packaged in the BRKB, and its subsequent distribution.

Of course, in more general terms, PETRRA will be promoting VBR-CGS at the various workshops (or similar) that form part of the closure plans for Outputs 2, 4 and 5.

3. The team rightly highlights a number of significant institutional changes that have been promoted by the project. However, it would have useful to have further analysis on what incentives have caused these changes. The team makes a number of references for a potential return to "traditional ways". It would have been useful to document what are the policy lessons (regarding incentives) for the structure of research in Bangladesh. This task may have outside the terms of reference we set. However, this would be a useful addition to the lesson learning to take place prior to the end of the project.

***Response to comment 3**:*

PETRRA should include the topic of incentives in their documentation of the VBR-CGS. However, it should be noted (based on the OPR-4 team findings) that the observed institutional changes were achieved by a mix of incentives and enforcement. In this context, enforcement refers to PETRRA-PMU's strict adherence to the stipulations of the VBR-CGS, as presented in each research call and carried through in the screening and selection process of concept notes and proposals. This point of the need for a CGS management team to have commitment to enforcement links with the comment in Response 1 – i.e., the need for senior level staff with VBR-CGS experience to explain the various actions (some requiring professional discipline and commitment to NARES capacity building in a range of areas) that are integral to achieving good CGS performance.

4. Recommendation 9 request for PETTRA to identify a home for the BRKB. This should have been done already as otherwise the new home/institution will not have enough involvement and ownership of the information.

***Response to comment 4**:*

Agreed. Since receipt of the draft OPR-4 report, PETRRA has advised that the home for the BRKB will be BRRI and that the BRRI DG recognises this. With hindsight, from the OPR-4 team transcripts, it appears that the specific question of the home for the BRKB was not directly asked. We made Recommendation 9 because the lack of a local home for an e-based information reservoir is often found to be the weak link in ensuring access to a project's findings after project exit. The gap in the team's records was taken to be a gap on PETRRA's part. This assumption was incorrect.

5. The team highlights that the project has interpreted the concept of gender as equal numbers of men and women and there has been significant progress towards this and an excellent gender strategy has been produced. However, gender equality means much more than simply equal numbers of men and women. The team should therefore focus on capturing how the project has been able to increase the voice, decision-making and ability of women to have their views heard (and acted on) and be able to define their own development role.

***Response to comment 5**:*

There appears to be some mis-interpretation of the text of Section 4.4. We entirely agree that *'… gender equality means much more than simply equal numbers of men and women'.* The text in Section 4.4 reports and assesses the extent to which PETRRA addressed gender, with the PETRRA gender strategy as the main point of reference (para 184). The several sub-sections of Section 4.4. then assess the progress that PETRRA has made in the implementation of this strategy. In total these sub-sections provide the response to Comment 5.

6. The team seem to imply that institutional changes are very fragile and that there is a potential to return to traditional ways. How successful has 'research' been in making

changes, what are the incentives for change or resistance and how realistically can 'research' programmes address this.

***Response to comment 6**:*

Yes, the institutional changes are very fragile. They have come about because PETRRA provided an opportunity for local professionals of the NARES to obtain research funds, but to do so they had to design and implement research in accordance with the stipulations of PETRRA's VBR-CGS and accept the competitive process of the CGS (refer Section 3.5, paras 104-107 and Section 4.5, para 217). Having overcome this hurdle, both the SP research teams and the members of PETRRA's strategic and technical support arms (PSG, TEC), can see professional advantages in the VBR-CGS mode of research management. The challenge is to find ways to nurture this favourable organisational learning towards integration of VBR-CGS into national research management policy. The DG of BRRI is aware of this challenge and is considering what opportunities there are for the introduction of a value-based competitive procedure into BRRI's management of research budgets. However, the step of institutionalising such a research management change is a big one and it make take time to come about. Liked with this, there is always a risk that other factors may slow down or prevent the change, even though its benefits are well understood (through hands-on experience, in the case of BRRI DG).

One step that could be an asset to the 'nurturing process' would be that donors have a common commitment to the CGS mode of research fund management. Above all else, NARES are always in need of funds. In this way, a common funding policy for research in the donor community acts as an incentive for internalising a research management procedure into a national system.

7. Not very convinced by the review teams' positive comments on the PETTRA communication strategy. The review team has focused on the breath of communication materials produced by the project, and the team is much less specific about the outcomes generated by the production of those materials. One could challenge the team's apparent conclusion that "policy awareness" is sufficient. There are two reasons to challenge such conclusion. Firstly, the nature of the food security challenge in Bangladesh and secondly because the IRRI/BRRI alliance is a powerful lobby in Bangladesh.

***Response to comment 7**:*

A yard stick for the OPR-4 team's positive views is that there are many research projects that have much weaker performance in communication and of these, many put up resistance to thinking about communication on the basis that 'they have not yet completed the research'. Importantly, PETRRA recognised the importance of communication and took action. This applied to both the PMU management team and the SP research teams. As result there are now local professionals at a range of levels and with varying areas of specialisation that are 'converts' to the importance of communication planning as an integral part of research design and research management. Some of the achievements of SP teams are impressive and must be acknowledged because they represent considerable attitudinal change and development of new skills (including giving preference to communication materials for use at grassroots level rather than preparation of more usual products such as research papers [also see para 21]).

Against this positive assessment, as stated in para 24, PETRRA's communication planning would have benefited from a structured analysis of communication stakeholders, their respective communication contexts (KAP) and based on this, the development of a comprehensive plan. It is likely that such an analysis would have resulted in some shift of balance between publicity events and more focused communication work.

Regarding outcomes – yes – tracking is an integral part of a comprehensive communication plan. However, this is a problem area in many projects and communication specialists

advise that well documented examples of how to do this are not available as published reports. For Output 4 (policy research and dialogues), CPD undertake tracking as part of their own internal activities and so tracking of outcomes from the policy dialogues and associated briefs and position papers will occur. Their records will be available for *ex post* impact assessments.

Tracking with respect to communication materials relating to technical SPs is a weak area. However the recommended in-depth social studies for a selection of SPs (refer para 282), will be able to determine how men and women farmers obtained information and assess the implications of the findings with respect to the communication materials that each respective SP developed.

8. Under 3e the student internship is mentioned as sustainable. Perhaps, the costs of the internship are funded by PETRRA and therefore likely that there will be no further internships after the project. BAU does not have its own funding for this purpose.

***Response to comment 8**:*

Student internship is an institutionalised programme of RDRS that used the PETRRA link for initiation. It is not dependent on BAU having funds. Rather, RDRS has invited BAU and BSMAU to participate.

9. There is a need to capture lessons around livelihood changes, how decisions were made to adopt/adapt technologies and how these have changed people's livelihoods as a consequence. This could take the approach used in the Hands not Lands document and it would be worth discussing this with Cate Turton and Kazi Toufique.

***Response to comment 9**:*

Agreed and we repeatedly stressed this point in the OPR-4 report (please refer to paras 27, 54, 55, 56, 160, 181, 182, 206, 245, 282-285).

10. Social analysis of the research impacts is clearly a weak area. The report proposes to encourage the PIs to report on social aspects. Recommendation 8c expects that PIs will report on successes and failures. This is not likely to happen easily as the PIs are usually agriculturalists. Outside social expertise to assist in this area would be useful.

***Response to comment 10**:*

Agreed and we have pointed out that, for any future VBR-CGS, the social science capacity of research teams should be strengthened (refer para 233). Knowing that there are limitations to what PIs can handle in respect of social analysis, we purposely stated that demands on PIs should not be excessive in this area (refer para 274) and we kept to practical attainable recommendations (refer paras 275-274).

11. Recommendation 13 asks for the chair to sign a AM to report to MoA. But already Secretary of MoA is the Chair and therefore should know about the favorable aspects of the PETTRA experience. Who else will read the AM?

***Response to comment 11**:*

In spite of the 'internal loop' there is a value in having a policy-relevant AM on file at the appropriate level in government institutional structures. The recommendation should not be assessed in terms of the person involved but the posts that person holds.

12. *The report points out the workload for the remaining 8 months in the project. This is an issue and would be interesting to see how the Project management wants to address this*.

***Response to comment 12**:*

APPENDIX

The working paper for OPR-4 included a work schedule for the period January 2003 to August 2004 that the OPR-4 team reviewed in some detail. PETRRA-PMU has sequenced events for the final months of the project and has prioritised a suite of products around several key events. In January and February 2004, the PMU team will put in place the work plan for these events. The target is that by mid-February 2004, the inputs required, specific tasks and target product delivery dates will be detailed. PMU will then move forward with plan implementation.

OPR-4 Team Leader
29 January 2004