



Research and Extension in Farm Power Issues Project (REFPI)

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Bangladesh Agricultural University)

**End of Project Review Report
30th November to 12th 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.

The Rural Livelihoods Evaluation Partnership is represented by a consortium of three international (ITAD, Social Development Direct and Tango) and two national companies (BETS and Socio Consult) led by the UK based ITAD (Information Training and Development).



Acronyms

ATDP	Assistance for Technology Development Programme
BAURES	Bangladesh Agricultural University Research System
BAU	Bangladesh Agricultural University
BRTC	Bureau of Research Testing and Consultancy
DFID B	Department For International Development Bangladesh
DFPM	Department of Farm Power Machinery (FAET/BAU)
EoP	End of Project
FAET	Faculty of Agricultural Engineering and Technology
GKF	Grameen Krishi Foundation (<i>a local NGO</i>)
GoB	Government of Bangladesh
IDE	International Development Enterprises
ITDG	Intermediate Technology Development Group
MUS	Mouchas Unnayan Samity (<i>organization of development of honey; a local NGO in Modhupur</i>)
NGO	Non Government Organization
PAC	Project Advisory Committee
PCM	Project Cycle Management
PETARRA	Poverty Elimination Through Rice Research Assistance
PBKS	Palli Badhu Kallyan Sangstha (<i>a women led local NGO in Gaibandha</i>)
RDRS	Rangpur Dinajpur Rural Services (<i>a national NGO in the NW Bangladesh</i>)
RD&E	Research Development and Extension
RLEP	Rural Livelihoods Evaluation Partnership
REFPI	Research and Extension in Farm Power Issues
SDC	Swiss Development Cooperation

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Executive Summary

- I. This Report is of the End of Project review carried out, by a two-member team, of the Research and Extension in Farm Power Issues (REFPI) project, which was implemented from April 2000 until December 2003.
- II. The Review found that REFPI has been an excellent project, in its implementation, that has succeeded through a combination of good flexible management together with partnership and interest from a wide stakeholder group to identify, test, adapt and adopt appropriate technologies that are relevant for the improvement of livelihoods in Bangladesh.
- III. However a disappointment of REFPI is that, despite the best efforts of the management staff, it has not succeeded in having a significant long-term impact at the policy level and there is a danger that the significant initiatives that have been started will not be sustainable.

Logframe

- IV. The REFPI project took many years to design and eventually be approved; and as a result the logframe was changed significantly both from the early design to approval stage and then subsequently after the first and second years of the project. This was a good use of the logical framework approach and has allowed the project to develop along with the emerging development (and DFID) agenda.
- V. REFPI was changed from a technological led project to one that was focused on key areas such as social development, gender, livelihoods and alleviation of poverty. Although the initial objectives were probably achievable the modified logframe was also largely achieved and found to be more appropriate to both Bangladesh and DFID's needs.

Achievement of Objectives

- VI. All the outputs were achieved to some degree, and thereby farm power research and extension needs: -
 - O1 – for small farms systems were identified
 - O2 – to address identified farm power needs were established
 - O3 – partnerships were established between relevant research institutions, extension and service providers
 - O4 – capacity of the BAU on research and extension was enhanced
 - O5 – there was some success in presenting issues to relevant professional organizations and policy makers
- VII. REFPI has been apparently successful at the purpose level in 'strengthening capacity of GOB/NGO/private sector to carry out appropriate research and extension in farm power issues for the rural poor'; although there is a need for more quantitative data to verify this statement.
- VIII. REFPI was also successful in demonstrating that well managed competitive research facilities are appropriate and in particular has shown the importance, in this regard of:
 - Good project planning (e.g. use of log-frames)
 - Significant role of an advisory committee and external evaluators
 - Maintaining a degree of anonymity (on decisions)
 - Informed and flexible management

- Efficient monitoring of financial aspects
- Regular monitoring of impact
- Regular feedback and response (action research)
- Having good sources for relevant ideas (e.g. NGOs' livelihoods assessments)

IX. The REFPI project took a significant time from concept to implementation and during this time the strategic background of both the Bangladeshi government and of DFID has changed. This resulted in a major overhaul of the original plan and a revised logframe was included in the first year that included the newly introduced sustainable livelihoods approach. Thus the project was impacted by 4 major reviews:

- A desk review before the start of the project
- An Inception review in June 2000
- A first OPR in May 2001
- A second OPR in May 2002

The project was extended at no extra cost to the end of December 2003.

A major consequence of these reviews was that the projects were driven to focus on sustainable livelihoods approaches, including gender and poverty.

Sustainability

X. The project finished at end December 2003 but there are indicators that the project will have some continuing impact on the issues addressed

The Review Mission concludes that REFPI has been successful.

1. Background

1. The Research and Extension in Farm Power Issues (REFPI) project of the Department for Internal Development (DFID) was lead by the Department of Farm Power Machinerics of Bangladesh Agricultural University (BAU). The project goal was “Improving livelihoods of the rural poor through increased access to and efficiency and effectiveness to farm power in small farm system in Bangladesh”. While the purpose of the project was to strengthen the capacity of GoB, NGO and Private sectors to carry out appropriate research and extension in farm power issues for rural poor.

2. The Department of Farm Power Machinery (DFPM) under the Faculty of Agricultural Engineering and Technology (FAET) of BAU played the role of Coordinator of the project. Implementation of the project started in April 2000 following three important steps: setting research criteria, calling of concept notes, finalize proposals through a selection process involving both REFPI management and external evaluators. During its lifetime the project has engaged in more than 40 research contracts that are implemented through different GO, NGOs and private sectors. Review of the Research commissioning process was organized in April 2001 just a month before the OPR-1.

3. The OPR-2 has put forward recommendations for the improvement at management level and capacity building of BAU. Management issues were emphasized on the review of roles and responsibility of the REFPI staff, emphasis on women’s priority issues and development of goal level indicators. Development of impact monitoring approach as part of the PCM, organize workshops to assess cross cutting issues (*gender, poverty and equity, environment*), write and circulate “story of REFPI” and participation of REFPI in the OPR of SUFER and PETRRA was given due importance. Under communication and uptake it was recommended to review and revise existing program of NGOs, conduct survey on agricultural manufacturers and food processing industries to develop a database and partnership database. The last recommendation was on the BAU to procure outstanding equipment, support in curriculum development and support to BRTC in capacity building.

4. The progress review and sharing workshop in 2002 focused on the improvement of livelihoods of the rural poor people. Emphasis was given on the gender issues and uptake demand led farm equipments including food processing.

5. Impact Assessment in August 2003 has focused on some important aspects including participation of farmers, GO, NGO and Private sectors. It did not mention M&E of the project and raised question on the uptake of the research outcome after completion of the project.

6. Experience sharing workshop also spoke about the benefit of the sub-projects and again sustainability issues came up and suggested to form a REFPI Partner’s Forum.

1.1. Objectives of the EoP Review

7. 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)
- Assess recommendations and progress made since the last implementation review September 2002
- Determine level of achievement of each project component as stated in the logical framework and how this has impacted on the goal of the project.
- Document and present key lessons learned to DFID, BAU and key partners

1.2. Methodology

8. A Two-member Review team formed by both an international and national consultant conducted the REFPI end of project review following the Terms of Reference (ToR in annex-1), using the schedule given in Annex-2. The review steps were;

- Briefing from DFID and RLEP
- Review necessary documents related to project and available guideline of DFID, B (annex-3)
- Meeting with BAU teachers and Team leaders of sub-projects
- Visit of selected sub-projects related mill owners, NGOs and farmers
- Meeting with PAC members
- Wrap up meeting DFID

1.3. Visits and Discussions

9. The review team visited a number of sub-projects and discussed with the Team Leaders, staff members of different organizations and stakeholders (Annex-2 & 4); including a meeting with staff of DFPM, BAU at REFPI.

10. Two food processing industries (MUS and PBKS), three rice mills (supported by RDRS) and pulse mills using dryer, seed processing center of the NGOs were visited. The owners explained the process of involvement with REFPI, partnership, capacity building, and uptake of equipment and technologies including contribution towards livelihoods of the rural poor.

11. Meeting with PAC members focused on the raising of the issue at policy level. They expressed both their success in their work but also some difficulties in convincing key persons at a policy level. Some members mentioned that the policy makers would like to see some visible impact of the project.

2. Observations from Review

2.1. Progress of REFPI

12. REFPI has made significant progress to address the outputs as mentioned in the Logframe. Some important achievements are:

- Strengthen capacity of BAU in general and DFPM in specific,
- Capacity building of local manufacturers,
- Dissemination of farm equipments at farmer's level
- Addressing the key recommendations that had been made in the OPR-2

13. The BAU successfully established a suitable environment for the promotion of participation at institution level. Attitudinal changes have been made among the teachers involved directly or indirectly with the sub-projects that recognized the relevance of the participation of all stakeholders. Research at BAU has become more field based rather than laboratory centered. Equipment provided by REFPI to the DFPM created an opportunity for more practical learning; and students preparing their thesis under REFPI came to recognise the importance of participation in research.

14. NGOs who had previously been mostly involved with credit program, came to recognize the scope and relevance of working in the agricultural sector. Most of the local NGOs had previously surprisingly little exposure to agricultural activities and they have little technical

knowledge on agricultural equipment. REFPI has created an environment for the NGOs to work in close cooperation with BAU researchers and manufacturers.

15. Manufacturers previously engaged with the activities such as the production of construction materials (e.g. window grills), repairing of bikes and spare parts of auto rickshaws have seen the relevance and financial returns through becoming interested to work on agricultural equipments. REFPI opened avenues for the manufacturers to develop skills in agricultural equipment production and marketing.

16. In summary REFPI has contributed greatly for the promotion of participation and partnership between the GO-NGO and private sectors and dissemination of agricultural equipment at farmer's level.

2.2. Use of Competitive Grant Scheme

17. REFPI has demonstrated that a competitive research commissioning process is very relevant for national level research programmes. A call for Project Concept Notes (PCNs) was made through newspapers. The screening stage of the PCN put particular emphasis on socio-economics, gender and environment, three important aspects for improved livelihoods. The use of external evaluators, who were assigned to assess the PCN, helped provide valuable input into the development of appropriate projects and for the management to be unbiased. In total 42 sub-projects were commissioned under seven themes.

18. The project has developed, piloted and promoted a relevant approach for efficient and effective use of the available farm power resources through appropriate research and extension activities under partnership between GO-NGO and private sectors.

19. Monitoring was done through quarterly report, field visits and feed back to the sub-projects. Communications within and among the sub-projects were made by organising 3 workshops. Extension and learning was disseminated through posters, leaflets, electronic media (CD) and using TV channels.

20. Establishment of an independent Project Advisory Committee (PAC) with representatives from GO-NGO and private sectors greatly contributed to the implementation of the project.

2.3. Effectiveness of the research sub-projects

21. REFPI has contributed in the promotion of participation of different stakeholders including end users including farmers. Research of the BAU conducted in the field involving farmers and focusing the needs, which was previously laboratory centered. The project has greatly influenced teaching methodology and research approaches of BAU.

22. Development of partnership approach also opened avenues for the GO-NGO and private sectors to work together. Partnership has made the research and extension activities cost and time effective. Introduction of appropriate farm power and food processing equipment has resulted in an increased involvement of women in the agricultural activities. Although these partnerships would benefit from some form of subsidy, further skill development training, and technical advice; it is hoped that some of the existing partnerships will continue because of mutual interest.

23. REFPI has provided some momentum to the extension and dissemination of agricultural equipment, as farmers have observed through the REFPI projects the benefit of equipment. However further research is necessary to development more equipment; and the small

manufacturers may be reluctant in producing agricultural equipment if they don't get technical and capital support.

2.4. Gender issues

24. REFPI included gender focused projects, which emphasized how the use of small farm equipment and involvement in food processing opened opportunities to enhance the income of rural poor women. Most of the women as the group members of the NGO have some social and financial capital. They have access to the micro credit Programme that enables them to go for small income generating activities. REFPI has successfully generated interest among the women on the use of equipment and thus helped women to develop their skills and open avenues for others to contribute to the agriculture sector.

25. The projects involving food processing have shown that women's involvement in these enterprises created new job opportunity in the rural areas. Establishment of enterprises in the rural area by the women entrepreneur created hope for the poor women and reduced women's migration to the city looking for jobs.

26. REFPI could have done more to analyze the impact of the apparent benefits to women from the projects and in particular the socio-economic significance of the improvement of women's status.

2.5. Participation and Partnership

27. Participation was seen as very relevant to the planning and designing of the project, and emphasis was placed on participation at all levels including the rural farmers in identifying the needs for farm equipments that contribute to livelihoods. Participation of manufacturers and researchers for the equipment and technology development helped to bring the groups closer to each other and focused on the need of the farmers. The representation of GO, NGOs and private sectors in the formation of Project Advisory Committee (PAC) also contributed both to project uptake and to influencing at policy level.

28. REFPI has involved 14 Government organizations and institutions, 42 NGOs and 12 private organizations/enterprises in the sub-projects. Where there is a mutual benefit it is hoped that the partnerships may continue but in many cases there may not be an incentive to continue. This concern was expressed in the last experience-sharing workshop (October 22-23, 2003) where the participants stressed the need for a REFPI partner's forum headed by DFPM of BAU.

2.6. Impact on BAU/ FAET

29. Output-4 of the logframe was for 'enhanced BAU capacity to carry out effective teaching, research and extension on farm power issues affecting the rural poor'. REFPI provided extensive training support on different aspects of teaching methodology, research and extension. Thirteen teachers from five departments were directly involved with the research projects. In addition, 192 teachers or individuals received long-term courses (including Ph D) and short-term training/ courses both inside and outside Bangladesh. Study tour and visit abroad opened another opportunity for the project people to keep informed about international situation.

30. A separate review was carried out in November 2003 to look at 'the impact on teaching and research approaches in Bangladesh Agricultural University (BAU)', which demonstrated that REFPI has indeed had a significant impact on key areas of the operation of the BAU and the BAU is now in a position to upgrade the curriculum and teaching methodology.

2.7. Impact on policy issues

31. The project has had limited success on influencing key decision makers at the policy level. This is partly due to the timescale of the project, but it is now recognized by the project management team that a clearly stated communication strategy including measures for influencing on policy should have been established near the beginning of the project. REFPI has responded well to the recommendations made in the 2002 OPR and has produced clearly written and illustrated information material. It also has some clear messages to be delivered including at the policy level. It is recommended that DFID gives support to the idea of holding further meetings and possibly a workshop that would engage policy makers.

32. It is important to note that GoB has very little influence in the mechanization sector since the liberalization of imports took place in 1989 and the hands off policy is probably best. Therefore project influence is likely to be minimal at this level. Perhaps the project, the members of PAC and indeed the BAU could have opened a channel for dialogue to improve institutional approach to RD&E in farm power especially targeting the poor and women. As with communications this ought to be made clearer in project documentation at the beginning of the project.

33. The REFPI team Leader, Project Director and other key PAC members were actively involved in the formulation of ARI/BKPF concept which potentially could have a major impact on research funding in Bangladesh.

2.8. Sustainability

34. The project finishes at end December 2003 but there are indicators that the project will have some continuing impact on the issues addressed. These include:

- The participation of GO, NGO and private sectors is gaining momentum that should contribute to the promotion of agricultural equipment among the farmers
- There is a growing interest with large and small workshop owners in producing agricultural equipment leading to an increasing available supply of equipment for poor and marginal farmers
- A raised interest of small and marginal farmers to buy equipment either individually or collectively to rent out and ensure additional income for them
- There is a significant interest amongst the users of the improved equipment; it is particularly significant as to how this can reduce the drudgery of the poor and particularly women.
- Linkages between research organizations and NGO/ Private entrepreneur will encourage for more demand led and farmers friendly equipment
- Linkages between private enterprises and banks/ money lending organization will facilitate required funds for enterprises.
- NGO's have recognized the opportunity for more diversified work beyond credit and are interested in contributing to the agriculture sector; there is an indication of a link up between the present NGO credit program with agriculture equipment producers and users
- Fruit growers have been encouraged to enhance production and achieve increase returns through marketing.

3. Findings and lessons learned

35. A summary is given below of the key findings and lessons learned from the REFPI project:

Key findings	No.	Lessons Learned
1. Commissioning Process <ul style="list-style-type: none"> • Prioritisation of topics • Role of PAC; and use of external evaluators 	1	Stakeholder participation (inclusive of community level) has resulted in relevant outcomes focused on real needs of the poor
	2	Do not rely on a one-off problem identification event; needs several levels of institutional engagement and allow for continuous feedback and improvement e.g. three different institutions carried out Farm Power Needs Assessment (FPNA) and NGO, university and private sector were represented on the Project Advisory Committee (PAC)
	3	Encourages the selection process (and management) to become independent, transparent and rational. Up to 12 external evaluators reviewed proposal, names of evaluators and proposal reviewed was kept confidential.
	4	Stimulates awareness and interest across different types of organisations. PAC and external evaluators representing many institutions were exposed to the researchable issues and problems surrounding them by participating in the process.
	5	There is limited capacity for 'external evaluation' (EE) in Bangladesh; thus a need for capacity building; this has been happening through the experience of REFPI. Researchers making proposals learned from the reviewers, comments and observations.
	6	It is important to keep the 'anonymity' of the evaluators. This encourages openness, avoids unnecessary conflict and promotes the lesson learning process for researchers/proposers described in Pt # 5 above.
	7	The PAC composition is extremely important because it can protect the project management from negative external influence.
	8	Considerable value was added to sub-projects where critically reviewed during the course of the project; in the absence of significant EE's then this had to be done by the project management. Quarterly funding linked to progress monitoring became the main tool for managing the RD&E projects. Value added against the higher cost needs to be considered. Once a good relationship with the service provider had been established progress monitoring costs would decline.
2. Application process {concept notes-->full proposals}	9	Capacity building in project planning (inc. log frame) is critical, achievable (although more is still needed) and welcomed by organisations. REFPI included training on use of logframe so that researchers may use the 'logframe approach' to plan and monitor progress of their own projects.

- 10 Use of logframe approach delivers efficient managed projects and relevant outputs; experience shows it is best to start with the basic cause and effect and introduce logframe methodology at a later stage. This only really works well if the partners have a good understanding of logframes and language skills. Use of logframe in Bengali language may have worked better.
- 11 Informed and flexible management (that keeps in touch with lessons and new priorities) produces more relevant outcomes. PAC was much more informed and flexible compared to the typical Steering Committee approach chaired usually by the Secretary to the Ministry.
- 12 Need to minimise administrative burden; whilst maintaining accountability. Maintaining the balance was most challenge. Initial training and robust management backed by PAC, reduced negotiation time and transaction costs during sub-project contract negotiation process. Getting the contract negotiation stage right is vital, not only for successful sub-project implementation but minimizes the administrative burden at a later stage.
- **Rationale and scale {15-->40 projects; and power----> rural}**
 - 13 An extensive network improves potential dissemination of new technologies and ideas contributing to greater likelihood of sustainability. But, this can lead to a loss of focus and increased call on the resource base. Communication with the projects progressively become more problematic. Detailed continuous assessment of changing consequences when scaling-up projects managed through this scheme is very important even if the a high cost is to be borne.
- 3. Monitoring > procedures and > impact**
 - 14 Need a comprehensive balanced approach including internal and external auditing, impact monitoring and quarterly field visits. The external auditing became an important management tool for REFPI. However this can be expensive at Tk 15,000 per sub-project but the amount saved through improved transparency and accountability is unknown. Similarly, use of external consultants for impact monitoring, although expensive, proved to be very valuable and essential enabling the projects and REFPI to improve overall impact monitoring process and drive down costs over time.
 - 15 FEEDBACK IS CRITICAL; with responsive management (action research); both technical and financial. All monitoring results were fed back and shared with projects in an open manner. A series of workshops helped sub-project managers share experiences and ideas
 - 16 Capacity building required initially at local level. Training was essential for sub-project implementers inter-alia; accounting, book-keeping, PRA, technical issues. Most NGOs do not have requisite skills to implement project programmes effectively.
 - 17 Sub-project level information* is key for good communications of project relevance (needed to qualify 'hearsay')
 - Note * that the sub-projects on REFPI did not routinely collect information on interest from others or on impact*
 - 18 Project level impact assessment (including field visits by PM) is relevant to identify successes and failures**
 - Note ** that 5 projects in REFPI were stopped due to poor performance*

- 19 A four category rating system (unsatisfactory through to highly satisfactory) using wide ranging criteria was useful in identifying and understanding important lessons and processes i.e. what factors led to 'highly satisfactory' or 'unsatisfactory'? Full documentation of this linked to a communication strategy is very important for future planning and programming.
- 20 3 years is too short to enable lessons learned from a project such as REFPI to be incorporated back into the project
- 21 OPR's provide a good means for refocusing a project
- 4. Sub-project deliverables (outputs)**
- 22 For technology testing improvements and user-led adoption to work it is critical that the partnership between universities and service providers works well (*symbiotic*) important to keep flexible and keep aware of opportunities, support a risk-taking attitude. It is important to keep flexible and aware of opportunities and be supportive of a risk-taking attitude.
- 23 Impact measurement (economics) innovators and researchers are generally not interested in economics or business opportunities. There is a need to also include entrepreneurial NGOs and private sector agents to take on this role. To facilitate uptake, project (research) management needs to initiate impact studies (e.g. socio-economic studies and in some cases rigorous economic testing)
- 24 Awareness, communications and capacity communications needs encouragement from the Project Management. A communication strategy should be initiated at the beginning of the project; this will need to be updated within the first 2 years. Publicity (through newspapers, television, workshop and promotional material) is effective {and was carried out well in REFPI} however, important to identify the knowledge brokers/opinion leaders; {little emphasis placed on this in REFPI}. Training in communications is often essential at local level to provide capacity for adoption
- 25 REFPI could not rely on the traditional Government extension services for dissemination of new technologies. An alternative approach through Proshika was developed but was less effective as expected due to lack of management and technical skills within the organisation.
- 5. Social Development**
- **Participation**
- 26 Significant training on participatory approaches at all levels (university down to farmers) is good; some exposure to PRA is essential
- 27 Important to focus on the relevant information coming out of PRA; rather than too much concentration on the use of different 'tools'. Beginners tend to implement in a very mechanistic manner not fully understanding how the information is to be used and how to select appropriate tools. Selection of service providers with experience in participatory appraisal and monitoring approaches will result in expeditious and improved implementation.
- 28 It is possible and very relevant to achieve an attitudinal change of those engaged at the field level; but this takes time and is for most, unrealistic within a 3 year project. Attitudinal changes within the university may take longer. Use of PRA tools may not be sustained.
- 29 Participatory approaches are very important to help clarify research needs at farmer/community level and give a sense

of ownership* enabling stakeholders to understand better potential benefits and increase likelihood of the intervention being sustained.

*Note: * meaning acceptance of responsibility and interest; rather than financial ownership*

- **Gender and equity**

30 A special gender bias (positive discrimination) leads to achieving more gender focus. Emphasis on women-friendly design (of equipment e.g. electric driven threshers) provides a good 'entry-point' for gender issues. REFPI had difficulties in engaging partners in specific gender related activities as ideas were lacking and skills limited. More effort in targeting and awareness provision to service providers is required.

31 Gender training was found to be achievable through workshops and also through NGOs; needs to be done at different levels

32 Gender issues involve not just women; it is a household matter (i.e. men, women and children)

33 Greater emphasis (on gender) required at university level to break down barriers*

*Note: * there were problems in recruiting suitable proportion of women in the project management itself; although this was recognised and addressed, finding appropriately trained women proved very difficult.*

34 The project would have benefited from a clearly stated 'gender strategy' incorporated into project design.

35 Improved appropriate technology, plus the possibility of ownership by women (mechanisation of labour-intensive tasks); facilitates the role of women in household income; this leads to female empowerment. Increased labour loads for women with no attributable benefit (others take the benefit) can result from gender focused initiatives. The mechanisation of labour intensive tasks ensures better health and frees up time for other work, at least.

- **Poverty and livelihoods**

36 The agro-industrial sector (storage, processing and marketing) can be significant to the development of the rural economy; need socio-economic studies to quantify this*

*Note: * there are studies covering this area including 'hands not land' and work by Prof. Satter of the BAU; but would benefit from a summarised livelihoods impact assessment cross-referenced to other relevant studies*

37 Appropriate technology (e.g. mechanisation/food processing) improves:

- Yields through timeliness at critical periods e.g. at harvesting & planting;

- Quality e.g. through higher germination rates of seed (through improved drying techniques); ability to harvest and dry in the rainy season;

- Processing (e.g. PBKS adding value at the household level);

- Marketing; receiving a higher price (through quality controlled packaging; cut-out the middle man, branding etc.);

- Agricultural service providers (e.g. develop locally manufactured machinery).

A thorough assessment of women's livelihood changes for women friendly/biased intervention technologies is essential.

- 38 Important to include pro-poor assessment (in the Concept Notes etc.); this raised awareness of researchers to focus on who will benefit or lose from outcomes
- 49 Proved difficult to disseminate lessons learned on improved health/labour standards and promote sustainable technologies; need to find some incentives for is to happen particularly for employers of power tool operators who only consider economic benefit not employee well-being.
- 6. Environment**
- 40 There was only a small scale positive impact (almost no negative impacts)
 +ve improved health measures were introduced (use of ear-plugs and masks on power-tillers);
 +ve use of thresher reduces amount of rotting crops in wet season;
 +ve turning of rice husks into briquettes is more energy efficient;
 -ve increase of use of diesel leads to small increase in pollution (CO₂).
- 7. Capacity building (on social development)**
- 41 Capacity building initiatives (e.g. direct training in participatory planning, M+E, livelihood impact assessment technology use; emphasis on pro-poor targeting and cross learning events at all levels can influence stakeholder attitudes and research approaches. There is a need to continue to place emphasis on these aspects of the development agenda. The 'brush-stroke' approach of short projects rarely promote sustained practices.
- 42 The project has a significant impact by raising awareness at a senior level; in particular through the PAC; which has influenced the thinking of senior management
- 8. Partnership**
- 43 Working together is always better than working on one's own
- 45 Partnerships enable different stakeholders agendas {GO's, NGO's, CSO's, private industry, farmers and other end users) to be shared, understood and addressed
- 46 Trust is important and can be helped if partnerships are formed between organisations where personal relationships already exist.
- 47 You need shared incentives and complementary strengths for partnerships to thrive with added potential scale-up/out; REFPI demonstrated that this is often present (thus a win-win situation (e.g. i) ITDG and a workshop owner joined hands to build capacity of local artisans; ii) scientist of BAU formed a partnership with NGO where the former developed the food processing technology for pineapple and jackfruit and the latter provided infrastructure, market and management of the processing.
- 48 There is initially a reluctance {mostly from the scientists) for partnerships in RD&E; that Project management needs to overcome (some insistence and stimulation is required)*
*Note * that NGO's who had previously worked on health-education and credit are now interested in working with farmers*
- 49 In some cases smaller NGO had little technical knowledge and were easily manipulated by scientists. Larger NGO Team Leaders did not engage with scientists in a partnering manner (participatory planning and decision making, critically reviewing one another's work). Instead they tended to merely distribute funds to the university scientists. The

project management has to take on a very proactive role in bringing partners together for mutual benefit.

50 Partnerships can significantly reduce cost of RD&E (i.e. collaborative research - participatory technology development) although, initial transaction costs appear high and demotivating (finding appropriate partners is time consuming).

51 A data-base of actors* in a sub-sector facilitates appropriate partnerships and networking; there is a need for quality control in compiling the list; need to beware of second-hand information

*Note * this was not fully achieved in REFPI*

9. Sustainability

53 Drawing from key lessons mentioned:

- i) Key lessons need to be identified and communicated at all levels of the project; and throughout the duration of the project; i.e. a communications strategy is required from the beginning
- ii) Impact needs to be quantified where possible; i.e. evidence based research.
- iii) Socio-economic and robust economic testing is necessary for scale-up/out – often the incentive for the non-scientific partner.
- iv) Partnerships more likely to sustain promotion of a technology / innovation but they need careful early vetting and close management.
- v) Thorough early capacity building for requisite skills and close monitoring important; expensive but trade-off is development of sound partnering arrangements and early win-win for partners cements the partnership arrangement.
- vi) Competitive research funding is very relevant for national research schemes but sustainability will depend upon reducing present high management costs (trend is that it should decline over time), high level backing and a long period of commitment, probably at least 10 years.

4. Overall Conclusion

36. REFPI has proven to be an excellent project that has succeeded through a combination of good flexible management together with partnership and interest from a wide stakeholder group to identify, test, adapt and adopt appropriate technologies that are relevant for the improvement of livelihoods in Bangladesh. The disappointment of REFPI is that, despite the best efforts of the management staff, it has not succeeded in having a significant long-term impact at the policy level and there is a danger that the significant initiatives that have been started will not be sustainable.

37. REFPI was also successful in demonstrating that well managed competitive research facilities are appropriate and in particular has shown the importance of:

- Good project planning (e.g. use of log-frames)
- Significant role of an advisory committee and external evaluators
- Maintaining a degree of anonymity (on decisions)
- Informed and flexible management
- Efficient monitoring of financial aspects
- Regular monitoring of impact
- Regular feedback and response (action research)
- Having good sources for relevant ideas (e.g. NGOs' livelihoods assessments etc.)

38. The combination of senior local managers supported by limited international expertise also proved successful and has led to a significant '*strengthened capacity of GoB/NGO/private sector capacity to carry out appropriate research and extension in farm power issues for rural poor*'. {*The purpose statement of the project*}. Although this is qualitatively shown there is a need for further evidence and the project would have benefited from an improved monitoring and evaluation system that allowed for more quantifiable evidence to be gathered, including in particular the socio-economic impacts of the successful research projects¹; i.e. there was a need for more of an evidence basis to the research project.

39. The Review Mission concludes that REFPI has been successful.

¹ Studies commissioned by the project (e.g. Cate Turton *et al* and E.Huda) reviewed socio-economic and broad livelihood impacts for some of the sub-projects but the challenge remains for projects to include as an inherent process monitoring system to assess the broader non-technical impacts on poor people's livelihood.

Annex-1 Terms of Reference for the End of Project Review

1. Project

Research and Extension in Farm Power Issues Project (REFPI) 2000 - 2003

2. Background

Farm Power (whether from human, animal or mechanical sources) for crop production, processing, water pumping and transport is a critically important factor in increasing agricultural production in Bangladesh.

The Research and Extension into Farm Power Issues (REFPI) project, lead by the Department of Farm Power and Machinery (DFPM), Bangladesh Agriculture University (BAU) has the goal of improving 'livelihoods of the poorest through increased effectiveness of farm power in small farm systems in Bangladesh'. The project will strengthen national capacity to carry out appropriate research and extension in farm power issues for the rural poor. The project started in April 2000 and DFID B is providing a total of £1.62m from technical co-operation funds over a period of three years. Key outputs of the project are to:

- Identify farm power research and extension needs for small farm systems.
- Establish an effective research and extension system to address these identified needs.
- Support the development of effective partnerships with and between relevant institutions on farm power research, extension and service provision.
- Enhance BAU capacity to carry out effective teaching, research and extension on farm power issues affecting the rural poor.
- Develop a strategy to raise awareness of farm power issues amongst relevant professional organisations and policy makers.

The project has consistently made good progress against these objectives. The project, designed before the first White Paper, has reoriented around sustainable livelihoods principles whilst seeking to maintain initial technical strengths.

A series of needs assessments and associated special studies were undertaken to inform research commissioning. A competitive research and extension facility has been established by the project that included training for applicants. To date, a broad range of issues have been commissioned across 40 sub-projects involving a variety of partnerships in implementation. A monitoring system to assess both sub-project progress and early impacts has been established. Capacity building within DPFM, and wider in BAU, has focused on non-engineering subjects. It would appear to be influencing the curriculum, teaching agenda and research approaches.

At the time of the second OPR conducted in May 2002 it was reported that, "*the project has sustained the rate progress established in its first year and is **on track to achieve (partially to completely) all five of its outputs. Early indications would suggest the project purpose is likely to be at least partially achieved***". During the final year and project extension through to December 2003, the consultants recommended that areas

to strengthen were M&E (livelihood impact monitoring) and gender based outcomes and the project management need to consider exit strategies with specific emphasis on network development, promotion of private sector linkages, sustainable capacity building and continuation of livelihoods approaches within DPFM, uptake and communication strategies. A publication 'Story of REFPI' was recommended to the project management. This review represents the final assessment of the REFPI project to capture that 'story' for wider lesson learning on "strengthening the capacity of GoB/NGO/private sector to carry out appropriate research and extension in farm power issues for rural poor" (project purpose).

2. Objective of the EoP Review

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).
- Assess recommendations and progress made since the last implementation review September 2002.
- Determine level of achievement of each project component as stated in the logical framework and how this has impacted on the goal of the project.
- Document and present key lessons learnt to DFID, BAU and key partners.

3. Methodology

The consultancy is seen as working very closely with the project team, and as this is an end of project review greatest emphasis must be placed on determining the overall performance according to tasks set in the project documents and periodic review recommendations and, to highlight key lessons learnt for not only the implementing organisations but also a wider audience. Implications of these key lessons learnt for future implementation of the DFID Country Assistance Plan (CAP) should be highlighted.

This, along with the tasks below, will contribute to the EoP report, in a format to be decided by the Review Team Leader, covering the issues indicated in this TOR, as well as completion of the standard DFID OPR form. Even though this an End of Project review the OPR tables must be completed before the official closure of the project, at which time the Project Completion Report (PCR) forms will be completed by the RLEP Team Leader.

The team will receive a briefing from DFID and RLEP with regard to the TORs for this review. The REFPI project office and RLEP Team Leader will be responsible for the operational aspects of the review. The itinerary 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 project, Bangladesh Agriculture University, 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 one expatriate international consultant 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 SUFER and PETTRA². 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 REFPI consultant

1. Don Brown (Team Leader) – Institutional and livelihoods research programme development and management.

Cross-cutting consultant (anchored in REFPI)

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

2. Enamul Huda (National Consultant). Socio-economic development, poverty and equity focused research.

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

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 REFPI project's experiences.

3. Alan Brooks (Team Leader - RLEP). Project management and implementation and evaluation of "pro-poor growth assessment in commercial aquaculture" project outcome. Additionally, provide link to Benedetta Musillo on social development, poverty and gender assessment.
4. Kazi Ali Toufique (National Consultant). Village level livelihoods research, technology transfer, training and extension by public sector institutions. Kamal Kar (International Consultant). Participatory livelihoods development, impact assessment, technology transfer, training and extension.
5. Benedetta Musillo (International Consultant). Social development, poverty and gender assessment.
6. Kamal Kar (International Consultant). Participatory livelihoods development, impact assessment, technology transfer, training and extension.
7. Md Zaruhal Alam (National Consultant). Institutional development and organizational change and policy influencing.

² Support to the University Fisheries Extension and Research Project and Poverty Elimination Through Rice Research Assistance Project.

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 REFPI Project Officer)

5. Scope of work

- i. Assess the progress the project has made towards the goal and purpose as described in the logframe using the OVIs.
- ii. Review of the research commissioning process, transparency, support and feedback to the proposers, length of the selection process, role of the Project Advisory Committee versus the project management.
- iii. Effectiveness of the 40 plus research projects. How did these correspond to the needs of the marginal farmers and the rural poor? How has gender been targeted?
- iv. Cutting across all project components evaluate whether appropriate gender sensitive plans, implementation and monitoring arrangements have been followed. For example, measurement of how acquired skills have changed the status of women at the household level, or how women's participation in an activity has affected the way in which they benefit from the outcome.
- v. Quality of partnerships between BAU, GoB, NGO and private sector in the sub projects. Comment on the usefulness, sustainability of the partnerships and evidence of broader attitudinal changes between institutions.
- vi. Impact of REFPI on policy issues including GoB policy towards farm power, research methodology. How has REFPI influenced the research agenda and methodology?
- vii. Impact of the REFPI project on the BAU, in particular the Faculty and the Department. Has this resulted in sustainable changes in curriculum, teaching methodologies, quality of research by teachers and students, have the opportunities for staff to work with other organisations been increased?
- viii. The methods, networks and uptake pathways that the project has developed or used to promote technology and knowledge dissemination to target groups³ and comment on methods explored to promote sustainability.

6. Expected Outcomes and Deliverables

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

³ Using indicators against logframe output 3 and milestones M4, M16.

After the team presentation the Team Leader will work with Team Leaders from reviews of SUFER and PETRRA 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 14th December 2003.

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 rural service delivery processes for agriculture (preferably the agricultural engineering sector) and development issues in Bangladesh;
- Knowledge of competitive research and extension processes particularly experience in organizational change management structures within universities to accommodate new approaches embracing the research extension continuum.
- Experience of working with government agencies in Bangladesh particularly universities and DFID is preferable.
 - Broad and specific understanding of gender, equity, poverty issues in Bangladesh.
 - Good understanding and familiarity of using the sustainable livelihoods approach.
 - Excellent report 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 REFPI office in the Department of Farm Power and Machinery (DFPM), Bangladesh Agriculture University (BAU) and RLEP/BETS office in Gulshan 1⁴, which will provide logistical and administrative support and facilitation as and when required.

The Review and RLEP Team Leaders will be responsible for allocating responsibility and coordinating different aspects of the review in liaison with REFPI project team and DFID advisers.

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

⁴ BETS Gulshan address: House No. 10, Road No. 135, Gulshan-1, Dhaka-1212, Bangladesh.
Telephone: (88-02) 9861531-2. RLEP Team Leader, Alan Brooks. Ext. 128. Mob. 018-225366.

10. Briefing Information

1. REFPI Project Memorandum. April 1999.
2. REFPI Status Report 2002. REFPI May 2002
3. OPR Report May 2002.
4. Final Evaluations guidelines and preparation tasks. John Meyer. May 2003
5. Proposal for conducting impact assessment. E Huda and S Partha June 2003
6. Proposal impact survey by Huda/Partha June 2003
7. Sub-project fact sheets. May 2003 (60 projects)
8. "*Women and Girls First*". DFID Bangladesh Country Assistance Plan 2003 – 2006.
9. DFIDB Gender Strategy. March 2000
10. A Review of Communication Strategies in the DFID Bangladesh Rural Livelihoods Programme. RLEP 2003.
11. A review of Monitoring and Evaluation Systems in the DFID Bangladesh Rural Livelihoods Programme. RLEP 2003.

ToR - 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
<p>PETTRA Margaret Quin</p>	<p>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 OP/REOP forms. Fisheries and agriculture sectors.</p>	<p>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</p> <p>International: Kamal Kar Anchored in PETTRA</p>	<p>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)</p> <p>International: Benedetta Musillo Anchored in PETTRA</p>
<p>SUFFER Mark Langworthy plus Alan Brooks</p>	<p>National: Zarubul Alam anchored in PETTRA:</p>	<p>National: Kazi Ali Toufique Anchored in SUFFER</p>	<p>National: Enamul Huda Anchored in REFPI</p>
<p>REFPI Don Brown</p>			

Notes:
Alan Brooks will have partial involvement as review consultant for SUFFER

Annex-2 Visit schedule of the REFPI EoP Review Team

Date & day	Programme	Persons met
30/11/03 Sunday	<ul style="list-style-type: none"> ➤ Briefing meeting with DFID B ➤ Team planning meeting ➤ Travel to BAU, Mymensingh ➤ Discussion with REFPI staff 	Martin Leigh, Duncan King, Nazir Ahmed Khan of DFID, other team members of C-2 6 REFPI staff
01/12/03 Monday	<ul style="list-style-type: none"> ➤ Meeting with staff of DFPM & VC of BAU ➤ Discussion with REFPI management ➤ Reading project materials 	9 teachers of DFPM and REFPI management staff, VC of BAU
02/12/03 Tuesday	<ul style="list-style-type: none"> ➤ Visit MUS at Modhupur on way to Rangpur ➤ Visit PBKS at Gaibandha ➤ Reach & stay at NBI of RDRS at Rangpur 	EDs and other staff of MUS & PBKS
03/12/03 Wednesday	<ul style="list-style-type: none"> ➤ Dinajpur- Rice Wheat Center ➤ Thakurgaon-visit RDRS project site ➤ Nilphamari- visit Proshika ➤ Return to RDRS Rangpur 	Director WRC, Rice mill owner, RDRS & Proshika staff
04/12/03 Thursday	<ul style="list-style-type: none"> ➤ Discussion with RDRS staff ➤ Visit RDRS project in Rangpur ➤ Visit GKF project in Rangpur 	5 RDRS and 4 GKF staff, Mill owner
05/12/03 Friday	<ul style="list-style-type: none"> ➤ Back to Dhaka ➤ Meeting with other C-2 team members 	
06/12/03 Saturday	<ul style="list-style-type: none"> ➤ Review documents and writing report 	
07/12/03 Sunday	<ul style="list-style-type: none"> ➤ Meeting with ITDG at Dhaka ➤ DFID-meeting with 3 team leaders ➤ Travel to Mymensingh ➤ Discussion and report writing 	Veena Khaleque, ED Abdur Rob Shamim Hasan
08/12/03 Monday	<ul style="list-style-type: none"> ➤ Mymensingh- IDE presentation (10:30) ➤ Followed by discussion with DFPM staff ➤ Discussion and report writing 	Syed Tamjidur Rahman ACD Md. Bakul Islam
09/12/03 Tuesday	<ul style="list-style-type: none"> ➤ Discussion and report writing 	
10/12/03 Wednesday	<ul style="list-style-type: none"> ➤ Travel back to Dhaka by REFPI Vehicle ➤ Meeting with other missions and DFID advisors ➤ PAC meeting in the afternoon followed by dinner at hotel 	13 PAC members + Gerard, Prof. Sarker, Prof. Ziauddin
11/12/03 Thursday	<ul style="list-style-type: none"> ➤ Morning: wrap up meeting at DFID (10:00 AM, Martin, Duncan, Nazir) ➤ 12:00 DFID meeting for all projects (not for review mission) 	Duncan, Martin, Nazir
12/12/03 Friday	<ul style="list-style-type: none"> ➤ Preparation of final report and presentation 	
13/12/03 Saturday	<ul style="list-style-type: none"> ➤ Preparation of final report and presentation 	
14/12/03 Sunday	<ul style="list-style-type: none"> ➤ RLEP sharing workshop at Asia Pacific Hotel 	

Annex-3 List of Documents reviewed

Sl. No.	Published	Title of documents	Author
1.	1996	New Agricultural Extension Policy (NAEP)	MoA
2.	Jul-98	Project Memorandum, DFID	DFID
3.	Mar-00	Mission Report, March 2000	Gerard Hendriksen
4.	Jul-00	Monitoring and Evaluation framework, July 2000	David Barton
5.	Sep-00	Farm Power need Assessment, FPNA	Kahmar Kunja, BAU
6.	Oct-00	Farm Power Need Assessment in Greater Faridpur	ITDG-Bangladesh
7.	Oct-00	Inception report, October 2000	Gerard Hendriksen
8.	Dec-00	Farm Power Need Assessment (FPNA) in Kurigram and Lalmonirhat districts	RDRS-Bangladesh
9.	Mar-01	Farm and Rural labour in Bangladesh A Review, March-01	Dr. MA Mannan, BIDS
10.	Apr-01	Review of the REFPI Research commissioning Process April, 2001	Marriet Matsuert
11.	May-01	Output to Purpose Review, May 2001	Sulton/ Willins
12.	Aug-01	Summary of FPNA report- Hamid	Dr. M. A. Hamid
13.	Nov-01	Guidance on the EPRMEP- David Gibbon	David Gibbon
14.	Mar-02	Research on Farm Power Issues Review 8 Projects	Anjan Datta and Harun-ur-Rashid
15.	May-02	Status report, May 2002	
16.	May-2	Output to Purpose Review, May 2002	Bilqis Amin Hoque Paula Barrett, Leigh Stubblefield
17.	May-02	Gender and Equipment study	Gender resource center, Dhaka
18.	Sep-02	Progress review and sharing workshop, Sep. 2002	Humayun Kabir
19.	Mar-03	Supporting poor people's Access- Cate Turton	Cate Turton, Rita Afser
20.	May-03	Survey of Agricultural Engineering graduates, BAU (1970-2000)	Mohibur Rahman Dr. Abdus Sattar
21.	Sep-03	Impact Assessment Report, Sep. 2003	Enamul Huda Partha Hefaz Sheikh
22.	Oct-03	RD&E Project Evaluation sheet	REFPI
23.	Oct-03	Experience sharing workshop proceedings, BCDM, Rajendrapur	Enamul Huda Gopal Chowhan
24.	Nov-03	Impact Assessment report at BAU, Nov. 2003 (Draft)	Diana Ray
25.	Nov -03	Review of Communication strategies in the DFID,B Rural Livelihoods Programme	Abigail Mulhall Anish Barua
26.	Nov-03	Review of Monitoring and Evaluation system in the DFID,B Rural Livelihoods Programme	John Meyer
27.	Dec-03	End of Project Report, REFPI (Draft)	REFPI

Annex-4 Persons met during field visit

Date	Place	Person met
Nov. 30, 2003	DFID, B	King, Duncan Roy Leach, Martin Khan, Nazir Ahmed
Dec. 01, 2003	BAU Mymensingh	Akhteruzzaman, M. Professor, DFPM, BAU, Mymensingh Alam, Md. Monjurul, Dr. Professor, DFPM, BAU, Mymensingh Alam, Murshed, Dr. Professor, DFPM, BAU, Mymensingh Hendriksen, Gerard, Technical Advisor, REFPI Hussain, Md. Daulat, Dr. Professor & Dean of FAET, BAU, Mymensingh Huq, Md. Mominul, DFPM, BAU, Mymensingh Islam, M. Aminul, Dr., Professor & Vice Chancellor, BAU, Mymensingh Saha, Chayan Kumer, Lecturer, DFPM, BAU, Mymensingh Sarker, Rafiqul Islam, Dr. Project Coordinator, REFPI & Professor, DFPM, BAU, Satter, Abdus, Dr. DFPM, BAU, Mymensingh DFPM, BAU, Mymensingh Selim, Md. Jahirul Islam, Senior Research Officer, REFPI Ziauddin, A. T. M., Dr. Professor & Research Coordinator, DFPM & Research Coordinator, REFPI
Dec. 02	MUS, Modhupur	Hossain, Abul Executive Director, MUS, Modhupur, Tangail (REFPI, PP-28) Singh, Bappy MD, Presenter Food Industries Limited, Modhupur, Tangail (PP-028)
	PBKS Gaibandha	Sarder, Rashidul Hoque, Founder member & advisor, PBKS (REFPI, PP-343) Talukder, Monowara Executive Director, PBKS (REFPI, PP-343)
Dec. 03	Dinajpur	Rashid, Haruur, Director Wheat Research Center (team leader REFPI, PP-91)
	Thakurgaon	Haque, Hamidul, Executive Director, PGSP, Thakurgaon (REFPI, PP-290) Karim, KM Rabiul, Manager Agri. Engg. (REFPI PP-239), RDRS Khaleque, Abdul, Owner, Osman Husking Mill, Thakurgaon (REFPI, PP-304) Salahuddin, AKM Project manager REFPI (PP-304), RDRS
Dec. 04	Nilphamari RDRS Rangpur	Kamal, Ruhullah Khan, Area Coordinator, PROSHIKA, Nilphamari (PP-290) Hena, Hasna, team leader (REFPI, PP-239), RDRS Neogi, MG, Senior Project Manager, RDRS, Rangpur Rahman, Siddiqur, Owner, SR Dal Mill (REFPI, PP-304) Samsuzzaman, Syed, Dr. Director, AEES, RDRS, Rangpur
	GKF Rangpur	Nabi, Rezaun, Executive Engineer, GKF (Project manager, REFPI PP-301)
Dec. 07	ITDG Dhaka	Hasan, Shamim, Team Leader PP-130, ITDG Khaleque, Veena, Country Director, ITDG Rob, Abdur TL, PP-128, ITDG
Dec. 08	IDE at BAU	Islam, Md. Bakul, PC, WATSAN Partnership Project, IDE Rahman, Syed Tamjidur, Acting Country Director, IDE
Dec. 09	REFPI, BAU	Farouk, S. M. Dr. Chairperson REFPI & Ex-Vice Chancellor BAU
Dec. 10	PAC meeting at Dhaka	Ali, Mohammad, Consultant, BMEDP Banu, Laila Jasmin, Ms. Bhuiyan, Nurul Islam, Dr. DG, BRRRI Farouk, S. M. Dr. Chairperson REFPI & Ex-Vice Chancellor BAU Khan, Nazir Ahmed DFID B Khaleque Veena Ms. Executive Director, ITDG Matin, M. A. Joint Director, RDA, Bogra Majed, M. A. Dr. Member Director, BARC Moniruzzaman, AKM Dr. Mufakkhar, M. Director, Planning & Development, UGC Talukder, M. S. U. Dr. Professor, DFPM, BAU Zaman, Asaduz Dr. Executive Director, DIADP
Dec. 11	DFID B	King, Duncan Roy Leach, Martin Khan, Nazir Ahmed

Annex-5 REFPI Project by types and involvement of GO, NGO, Private sectors

PP #	Type of project	Involvement of GO/ NGO/ Private sector		
		GO/ Inst.	NGO	Private sector
027	Equipment-Study	BARI-BAU	RASDO	
028	Fruit processing (Ph-2)	DFTR, BAU	MUS	
035	Equipment-Sugarcane	BSRI	GUP	
039	Equipment-Irrigation (Tribal)		UPACOL	NCS
042	Study- Soil fertility	BINA		
073	Equipment-ODT (Ph-2)	DFPM-BAU, BRRRI	SOVA, DS	
084	Extension package	DAEE-BAU	Proshika	
091	Equipment- Women focus	BARI	GRAMAUS, BSS	
125	Equipment- Irrigation pump (Ph-2)	DIWM-BAU	IDE-B	
126	Equipment-Deep set TP (Ph-2)	NGO Bureau, DAE-Horticulture	IDE, TMSS, BRAC, GRAMAUS, CARITAS, PSUS, BSUS	SPEW
128	Skill dev.-Private Enterprise (Ph-2)		ITDG, SPP, MRDP	MEW
128A	Agriculture Directory		ITDG	
130	Equipment-PT, CDT, ODT, SFD, Wdr., Wnr., Insect sprayer- 7	BRRRI, BARI	ITDG	
131	Equipment- SFD	DFPM, DAE-BAU	ITDG, JNDP,	REW, MEW,
131-2	Equipment- SFD	DFPM-BAU, DAE		
132	Study-Livelihoods of poor	DFPM, MMC, DAE	Agrapathik, GBK	
133	Equipment- Power Tiller, R-W Reaper, Power Thresher	DFPM (BAU), BARI, DAE	Agrapathik	
205	Equipment-Furrow opening	WRI, BADC, BAU	HADS	
210	Equipment- Solar drier	DFPM-BAU	Padakhep, Anando	JFPPPL
214	Food processing-Cassava	DFTRI-BAU	SUSS	
217	Equipment-RW Reaper	BRRRI, DAE	CIRAD	
239	Equipment- Women focus		RDRS, OVA	
245	Equipment-Irrigation pump	DFPM-DIWM, BAU	EDAS	
246	Equipment- Dryer, Thresher	BARD		CCK
260	Equipment- Reaper	DFPM-BAU	CIRUP, GRAMAUS	REW, NEW
267	Health Education-PT operator	BRRRI, CBMS, B	CDI,	
276	Equipment- Power Thresher		GBSS, CARITAS	
290	Extension-Farm machinery	BRRRI, BARI, BAU, BSRI	Proshika + CDS, PGSP, Partner, PASA, Zagoroni, SPS, BSAKS, GRAMAUS	
301	Equipment- Irrigation	BRR, BARI	GKF, IDE	
304	Equipment-Dryer	BRRRI, DFPM	RDRS	Alim Engg.
324	Food processing-Sweet Potato	BINA	BSKS,	Ruma, Panch Trara, Lovely confectionaries, Noodles Factory

PP #	Type of project	Involvement of GO/ NGO/ Private sector		
		GO/ Inst.	NGO	Private sector
326	Study- Pesticide effect	CBMC,B	TDA,	UPCS, Syngenta
330	Spices Production- Women	BCSIR	BBSKS	
341	Food processing	BCSIR	FHD	
343	Food processing		PBKS, ITDG, BASC	REW
345	Fruit Processing	FTRI-BAU	JU	
348	Equipment- RH Briquette	DFPM-BAU, BIT		UEWEW
351	Health – Skin disease	NIPSOM	ORNOB	
363	Health- Hearing problem	DFPM-BAU, MMC		
370	Study- Women focused equipment		GDRC	
380	Study- Market assessment		IDE	
381	Fish drying & marketing	DFPM-BAU		JFP
TOTAL:	40+2	14	35 +	12

Annex-6 REFPI Project visited

Project Number	Title of the project	Person met & discussed
BAU	Teachers of FAET, BAU	Nine teachers of FAET including the REFPI management staff
PP- 028	Jackfruit and Pineapple processing programme in Modhupur Upazila, MUS	1. Md. Abul Hossain, ED, MUS 2. Bappy Singh, MD Presenter Food Processing Limited
PP-91	Adaptation of appropriate farm tools and small equipment for rural women	1. Harunur Rashid, Director Wheat Research Center
PP-128	Enhance performance of service enterprise in delivering better services to the farm families in Dinajpur region	1. Veena Khaleque, ED, ITDG 2. Abdur Rob, TL
PP-128A	Agriculture Directory	1. Veena Khaleque, ED, ITDG 2. Abdur Rob, TL
PP-130	Local level adaptation, testing & dissemination of appropriate farm power machinery	1. Shamim Hasan, TL, ITDG
PP-239	Gender targeted adaptation and promotion of farm tools and equipment through social awareness raising and skill training	1. KM Rabiul Karim, RDRS 2. Hasna Hena, RDRS 3. MG Neogi, RDRS 4. Dr. Syed Samsuzaman, RDRS
PP-290	Extension on demand led farm machinery	1. Hamidul Haque, ED, PGSP 2. Ruhullah Khan Kamal, Proshika
PP-301	Use of low cost farm machinery	1. Rezaun Nabi, GKF
PP-304	Community based integrated technology investigation for drying of paddy in wet season	1. AKM Salahuddin, PM, RDRS 2. A. Khaleque, Rice mill owner
PP-343	Women's Entrepreneurship development through small scale food processing in Tulshighat, Gaibandha	1. Ms. Monowara Talukder, ED PBKS 2. Talukder, Founder PBKS
PP-380	Sub-sector analysis and market assessment on Agriculture machinery, tool and equipment sub-sector (Jessore, Bogra, Dinajpur)- <i>Review team attended in the presentation of assessment at BAU on 08/12/03</i>	1. Syed Tamjidur Rahman, Acting CD, IDE 2. Md. Bakul Islam, PC, IDE

**Annex 7: DFID Project Progress Report
Type of Report: Output to Purpose Review⁵**

PART A.

Country:	Bangladesh	Project:	REFPI
Project Officer	Najir Khan	Start Date:	<i>April 2000</i>
Date of Visit:	27 – 29/05/02	End Date:	<i>Dec. 31st 2003 (revised from April 2003)</i>
Date of Report:	12/01/04	MIS Code:	<i>139-500-022</i>
		Risk Category:	

Project Budget	Spend in period under review	Cumulative spend	Forecast for current financial year
£1.62m	N/a end of project reviewing total project time period	£1,610,000 (99% of total budget by end Dec. '02)	N/a project completes at end December 2003
Goal Statement		OVI's	
Increased access to, and efficiency and effectiveness of farm power in small farm systems ² in Bangladesh.		To be identified by DFID-B, in collaboration with the project.	
Purpose Statement		OVI's	
Strengthened capacity of GoB/ NGO/private sector to carry out appropriate research and extension in farm power issues for rural poor ³ .		<p>1- BAU (especially DFPM) and key partners⁴ are attracting/ allocating additional research and extension resources to address priority farm power needs⁵ of rural poor.</p> <p>2- Information is being shared between GOs, NGOs and private sector on farm power issues, and is reflected in their activities.</p> <p>3- Rural poor in project areas have improved access to appropriate farm power information, equipment and services.</p> <p>4- BAU's participation in the policy debate on farm power issues is enhanced.</p>	

⁵ **Review team:** Donald Brown (external consultant from ITAD), Enamul Huda (SocioConsult)

² Small farm systems cover small farm households engaged in production & processing of agricultural & horticultural crops, suppliers of inputs & services, traders, labourers, etc.

³ Rural poor may include marginal and landless farmers, rural traders, artisans and labourers – both men and women.

⁴ Key partners include BAU departments and a selection of GO, NGO and private sector institutions.

Outputs	OVIs	Progress Score and Comments
<p>Output 1</p> <p>Farm power research and extension needs for small farm systems identified.</p>	<p>1- Five field surveys and one institutional survey completed in Year 1.</p> <p>2- 5 priority research and extension themes focusing on the rural poor identified by end of Year 1.</p>	<p>Substantially completed (<i>see 2002 OPR</i>)</p> <p>Score: 1</p> <p>7 research priorities were included in 3 calls for concept notes. Though this indicator is limited to year 1 of the project, needs were continually reviewed and refined.</p> <p>Score: 1</p> <p>Three calls issued. Considered achieved under 2001 OPR.</p>
<p>Output 2</p> <p>Effective research and extension system to address identified farm power needs is established.</p>	<p>1 Calls issued by REFFPI for RD&E proposals that address priority farm power issues affecting rural poor men and women.</p> <p>2- Research commissioning process is established for screening RD&E proposals against agreed criteria by end of month 6.</p> <p>3- At least two PAC meetings held per year, and operate as per agreed TOR.</p>	<p>System established. 40 sub-projects commissioned. Considered achieved under 2001 OPR.</p> <p>REFFPI PAC met at least twice a year. PAC is proactive and participatory and a strong source of guidance and support. The 2002 OPR recommended that REFFPI clarified PAC's role as it shifted towards monitoring and evaluation and longer-term issues of communication, dissemination and sustainability. Although the Inception report clarified that the PAC will not continue after EoP, the 2002 OPR recommended consideration be given as to how BAU would benefit from continued PAC expertise. REFFPI. It remained unclear at the EoP as to how this would be</p>

⁵ These are defined according to the findings of the Farm Power Needs Assessments commissioned by REFFPI.

	<p>4- The research portfolio represents an approximately even balance between projects that address farm power issues affecting men and women, by EoP.</p> <p>5- All RD&E projects are sensitive to possible environmental impacts; health & safety and nutritional impacts; and socio-economic impacts.</p> <p>6- Monitoring and evaluation system for RD&E projects is operational by end of Year 1.</p>	<p>implemented.</p> <p>As reported in the 2002 OPR this balance largely achieved.</p> <p>During CN/proposal screening, the aspects of environment and impacts on the poor were screened, and those with a clear negative impact screened out. It is difficult to make reliable predictions on the impact new technologies may have on the wider environment, health, safety and socio-economic aspects.</p> <p>The majority of partners lack capacity to determine environmental impacts should wide spread dissemination of specific technologies take place. It will be more effective to hire the services of a qualified consultant, especially for those technologies that are likely to become more wide spread such as mechanised threshing and harvesting. Determining nutritional impacts of specific technologies is beyond the scope of REFFPI, though there may be opportunities for exploration within future monitoring case studies of existing sub-projects.</p> <p>There are a number of projects dealing with issues such as soil fertility changes caused by power tiller operations (PP 42), health and safety of operators (PP 267, 363), sprayer operators (PP 326), work environment in rice mills (PP 132, 348) and socio economic impact of mechanisation (PP 27). The project could have done more to pull together the findings across several sub-projects.</p> <p>As reported in earlier OPR's the financial monitoring procedures were successfully implemented. The REFFPI management also has visited many of the ongoing projects over the last year to monitor progress in the field. These visits are an opportunity to determine impact and discuss possible weaknesses in the RD&E projects and ways how to improve. Field visits are summarised in visit reports. REFFPI also engaged national consultants on 2 occasions (November 2001 and in September 2003) to review all the sub-projects.</p>
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<p>Output 3</p> <p>Effective partnerships are operating with and between relevant institutions on farm power research, extension and service provision.</p>	<p>1- Extension materials have been generated and disseminated by sub-projects, and are in use by target partners.</p> <p>2- Database of existing and potential partners has been initiated and circulated.</p> <p>3-Partner institutions are regularly interacting with the project and each other, through joint activities organised by REFPI (eg training events, exchange visits, etc).</p> <p>4- Training has been extended to non-BAU partners and to areas outside Dhaka and Mymensingh.</p>	<p>Score: 2</p> <p>Most projects have printed leaflets, training manuals and posters. Other dissemination material produced includes videos on power tiller operator safety and health. DAE have been involved in poster and leaflet distribution. BTV has also aired programmes.</p> <p>Although REFPI started to collect information of its partners including introductory leaflets, annual and special reports. The staff member responsible for this work left the project and the database has not been completed.</p> <p>As reported in the 2002 OPR the project management has initiated contact and regular meetings/workshops whereby interaction is encouraged between projects that are involved in similar or supplementary activities. Although this has proved difficult to formalise</p> <p>Training and meetings have been held with several organisations outside the BAU</p>
<p>Output 4</p> <p>Enhanced BAU capacity to carry out effective teaching, research and extension on farm power issues affecting the rural poor.</p>	<p>1. Skills in social development, gender, environmental impact assessment, health and safety issues (including nutrition), PCM, participatory methods for needs assessment, research and M&E are available to DFPM.</p>	<p>Score: 2</p> <p>The project has not limited itself to the Department or even the Faculty of Agricultural Engineering and Technology (FAET). It has built relationships with others especially with the Extension Department of the Agricultural Faculty and the Department of Agricultural Economics. This has led to changes in personal attitudes and interest of a number of staff. They are more involved in fieldwork and link with other institutions. The longer-term impact is more difficult to judge.</p> <p>DFPM and FAET recognise the need to incorporate more social science subjects, particularly gender in the undergraduate courses. REFPI has contributed to this</p>

	<p>2- BAU inter-departmental collaboration is enhanced.</p> <p>3- DFPM is attracting additional funds from outside REFFPI for research and extension activities that address priority farm power needs.</p> <p>4- BAU staff are incorporating training provided by REFFPI into own teaching and research.</p> <p>5- BAU post-graduate students are involved in RD&E projects in order to gain on-farm experience.</p>	<p>particularly gender, in the undergraduate courses. REFFPI has contributed to this growing sense for change through its own research agenda and also through the provision of in country and overseas training courses for a number of staff. This includes PRA survey methodologies and more advanced ToT courses on the subject attended by teaching staff from the DFPM, others within the BAU from engineering, extension, veterinary science and economics departments in combined sessions with NGO participants. Some BAU projects are using PRA tools in their field work after attending the PRA courses though they may not fully understand their application or be fully participatory in their project approach (Datta review). Sustaining these achievements will be an issue.</p> <p>Unclear as to how much additional funds has been mobilised.</p> <p>Two DFPM staff attended a 3-week course on participatory monitoring (IIRR) in March 2001. Two staff went to AIT, Bangkok for a range of subjects (engineering to ergonomics, environment and gender issues) in specialised courses. Many issues were new to the participants. Some new subjects have already been incorporated in course curricula by individual teachers. Also the Department has formally introduced and got approval from the Academic Council in 2001 to include extension methodologies as an obligatory subject in the undergraduate courses.</p> <p>The BAU does not have any reliable figures on graduate students from the last 10 years</p>
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	<p>6- BAU reputation as a reliable source of information on farm power is enhanced.</p>	<p>Teachers who have attended REFFPI-funded training have adapted some of the subjects that they have learned into the courses that they are conducting. The logical framework and analysis of the problem tree have been introduced while others have tried PRA survey methods and new teaching methods that they learned in a course arranged by the SUFER project.</p> <p>The profile of the DFPM has increased over the last two years through the training sessions, the study visits to other countries such as Thailand, China, India and Philippines have brought new ideas as have the RD&E contracts requiring collaboration with NGOs and the private sector.</p> <p>The farm machinery divisions of BARI and BRRI are traditionally the first port of call for information on agricultural equipment. BAU receives less attention. There are a number of reasons as both BARI/BRRI have been more involved in fieldwork a larger machinery display. BRRI has also profited from links with the engineering division of IRRI. Plus, a visit to Gazipur only takes a few hours from Dhaka while Mymensingh requires a full day.</p> <p>The DFPM needs to work hard to increase and maintain its reputation as a reliable source of information. REFFPI attracts visitors but this may not continue after the project ends. Individual staff members will certainly be sought by other parties for their sound advice. The improved standing of the DFPM as an engineering institute might have some positive influence on the BAU as a whole but this will be difficult to quantify.</p>
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<p>Output 5</p> <p>A strategy is developed to raise awareness of farm power issues amongst relevant professional organisations and policy makers.</p>	<p>Strategy document, for implementation beyond the life of the project by BAU and other partners.</p>	<p>Score: 3</p> <p>The 2002 OPR pointed out that this output had not received the attention it deserves; and that a problem for the project had been that the DAE was considered initially as the natural partner for the REFPPI project in all the extension work. This had resulted in discussion and high-level contacts with MoA but has not led to any tangible improvements in the field.</p> <p>REFPPI had several projects that aim to work on national policy issues and these are encouraged to use their own network. However, this has had limited impact. The project could have worked to produce evidence based policy briefs on specific findings and on practical application of sustainable livelihoods principles in RD&E approaches.</p> <p>The Government has not played a significant role for many years in the use of various farm power sources, tools and equipment. The role, which sat with BADDC, has been successfully taken over by private companies. Thus REFPPI's scope and capacity to influence national policy is limited. The EoP meeting with the PAC identified several action points that could be taken to initiate further action on policy level issues. Further action is needed on this aspect.</p>
<p>General progress assessment - Project Outputs</p>		<p>Score: 2</p>
<p>Justification</p> <p>The project has largely achieved both Outputs 1 and 2. Output 3 was achieved with the exception of the database of existing and potential partners. Output 4 was largely achieved although there was only limited success in achieving external funding. The integration of gender training and principles of genuine participation into undergraduate courses has been initiated but has yet to be mainstreamed within the BAU. Output 5 has presented a significant challenge, given the limited interest of GoB in farm power issues and lack of policy entry points, and indeed has proven problematical. However, the project has had some success in informing other 'policy' environments and professional groups, especially linkages with the private sector (particularly the non-farm rural economy). The project has also identified potential entry points and develops appropriate materials and networks to promote key REFPPI findings.</p>		

PART B.

Purpose /OVIs	Progress	Comments
<p>1- BAU (especially DFPM) and key partners⁴ are attracting/ allocating additional research and extension resources to address priority farm power needs⁵ of rural poor.</p>	<p>Not achieved within the project but interest has been raised and there are hopeful signs that some funding will be secured.</p>	<p>There is no substantive indication that any additional resources are being attracted or allocated at present. However, there is an increasing recognition by some partners of the possible role DFPM and other BAU departments can play in technology generation and dissemination so there is some scope to achieve this indicator by EoP. The case studies and manufacturers survey (see 2002/3 milestones) provide more evidence of progress towards this indicator.</p>
<p>2- Information is being shared between GOs, NGOs and private sector on farm power issues, and is reflected in their activities.</p>	<p>Indicators under output 3 would demonstrate that good progress is being made and information sharing will increase over the life of the project.</p>	<p>PAC meetings, planned workshops, dissemination materials and case study results/policy briefs etc. have taken place.</p>
<p>3- Rural poor in project areas have improved access to appropriate farm power information, equipment and services.</p>	<p>The data has not been collected to verify this premise</p>	<p>Routine progress monitoring of RD&E projects together with the qualitative case studies provides information on achievement of this indicator</p>
<p>4- BAU's participation in the policy debate on farm power issues is enhanced.</p>	<p>Increased recognition for the need to engage and engagement itself in policy debates.</p>	<p>There is limited scope to influence GoB policy on farm power issues due to the low level of debate and limited number of entry points. There is more scope for engagement in non-farm rural economy issues and the project has developed links with relevant private sector partners and associations.</p>

⁴ Key partners include BAU departments and a selection of GO, NGO and private sector institutions.

⁵ These are defined according to the findings of the Farm Power Needs Assessments commissioned by REFPI.

General progress assessment - Project Purpose	Score: 2
Justification	
The capacity of GoB/ NGO/private sector to carry out appropriate research and extension in farm power issues for rural poor ³ has been strengthened and thus the purpose has been largely achieved.	
Attribution	
The project has informed partners (PAC, BAU, Sub-project partners, through workshops and meetings) on the role of agricultural technology in poverty alleviation and rural development more generally, including rural non-farm employment, and the role of women. Formalised information sharing and improved networking has been promoted by REFFPI however, indication is that a lot more informal processes are also occurring. Direct benefits from training and exposure to international institutions etc. are reflected in research approaches. The calls issued as part of the competitive research process has attracted wider interest by applicants who are now aware of REFFPI objectives. Awareness of the needs of the rural poor, including women, and for appropriate research approaches has increased in BAU and project partners.	
Purpose to Goal	
<i>It is too early to determine the influence of REFFPI in achieving its goal. However, qualitative judgement indicates the Goal is being at least partially achieved. Goal level indicators were not well developed. The networking, information sharing, changes in research and teaching approaches and consideration of 'livelihoods' principles have increased in all partners and changes in behaviour are likely to be sustained since increased exposure to 'real life' context/conditions has influenced individual and organisations to change. This appears to have resulted, on a limited scale, to improvement in the 'supply side' of pro-poor service provision</i>	
Does logframe require revision?	
NO, the OPR was modified in an OPR undertaken in 2002	
Lessons learned	
<ul style="list-style-type: none"> Refining the research commissioning process required a lot of technical support and time and the costs for managing a competitive fund are high Commissioning of more projects than planned facilitated more capacity building and wider range of entry points. Improved monitoring (combined quarterly reporting by the sub-projects and field visits by the Management Team members) improved the quality, management, learning and interaction among the partners 	

³ Rural poor may include marginal and landless farmers, rural traders, artisans and labourers – both men and women.

- Most sub-project NGO partners lacked in engineering/sound technical knowledge and the academia lacked in action/ participatory research knowledge.
- Exposure to international institutions, training and different ways of working have influenced change in personal behavior, research, in teaching and curricula revision initiative at BAU
- The project had limitations for embedding this learning as it runs over three years.
- The projects varied in success. But important findings indicated by most projects
- Three years period for this kind of process development and agriculture based project is not adequate and a no-cost extension is proposed
- Search for alternative extension and dissemination mechanisms is building the capacity of potential organizations. It has potentials for widening the process
- REFPPI faced a difficult challenge to ensure effective communication and uptake pathways are developed to roll-out research findings and outputs; a communication strategy should have been developed at an early stage in the project
- Developing a broad PAC has provided the project with a real strength in terms of expert guidance and decision making
- Most sub-projects have limited capacity to assess the possible gender and environmental impacts of their proposed activities, but gender issues were found to be both very important and were successfully tackled by the project; although a specific emphasis on gender was necessary.

PART C.

Key Issues / Points of information		

Recommendations	Responsibility	Date for completion
1.		
2.		
3.		
4.		

5.

Review team:	Donald Brown; Enamul Huda
People met:	See Annex 4

*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 realized x = too early to judge extent of achievement*

PROJECT COMPLETION REPORT (PCR)

What? *Project Completion Reports (PCRs) provide a useful record of what has been achieved by your project and of key lessons for future application. They are required for all projects costing £500,000 or more.*

Why? *PCRs, like Output-to-Purpose Reviews (OPRs), are part of the sequence of reports which chart project progress, achievement and impact, and so contribute to good Project Cycle Management; and they contain lessons which may well be valuable when designing projects with similar characteristics.*

Who? *You and your colleagues know more about this project than anyone else in DFID. Share your knowledge! Evaluation Department stores all PCRs received on a central database and submits an annual synthesis report to the Projects and Evaluation Committee (PEC). PCRs are also used in evaluation studies. In due course, access to PCRs will be available through PRISM.*

How? *The form attached provides the basic format for PCRs, recording the minimum information required.*

- ✓ *Consult your colleagues and project partners*
- ✓ *Complete the form in full, including the spaces provided for comment*
- ✓ *Use the scoring system outlined below for rating all aspects of performance*
- ✓ *If you wish, attach a supplementary report or supporting papers to provide more detail*
- ✓ *Return the completed form to Evaluation Department*

Guide to Performance Ratings:

- Very Good:** fully achieved, very few or no shortcomings
Satisfactory: largely achieved, despite a few shortcomings
Fair: only partially achieved, benefits and shortcomings finely balanced
Poor: very limited achievement, extensive shortcomings
Failure: not achieved
- Too Early:** too soon to give an adequately reliable rating forecast (*for Goal and Sustainability only, and then only when absolutely necessary*)

Any questions?

- ✓ **Consult Evaluation Department**

PCR Form Version 2.1

PROJECT COMPLETION REPORT

SECTION I: BASIC DATA (to be completed from Project Header Sheet apart from last three rows)

COUNTRY: BANGLADESH	SECTOR (INC. CODE): 31183	MIS CODE(S): 139-500-022
PROJECT/PROGRAMME TITLE: RESEARCH AND EXTENSION IN FARM POWER ISSUES (REFPI)		
MANAGED BY (DFID DEPT/OVERSEAS OFFICE) : DFID-B		
BRIEF DESCRIPTION: STRENGTHEN NATIONAL CAPACITY TO CARRY OUT APPROPRIATE RESEARCH AND EXTENSION IN FARM POWER ISSUES FOR THE RURAL POOR		
POVERTY AIM MARKERS (PAM):	ENABLING ACTIONS	
POVERTY OBJECTIVE MARKERS (POM):	SUSTAINABLE LIVELIHOODS	
POLICY INFORMATION MARKERS (PIMs): PRINCIPAL (P) OR SIGNIFICANT (S)	PRINCIPAL – 12. TRAINING AND SKILLS DEVELOPMENT & 34. KNOWLEDGE AND RESEARCH	
LEVEL APPROVED BY:	HEAD OF OVERSEAS OFFICE	
DATE APPROVED:	NOT AVAILABLE	
COMPLETION DATE ORIGINALLY ENVISAGED:	APRIL 2003 REVISED TO DECEMBER 2003	
DFID FINANCIAL COMMITMENT FINALLY APPROVED (I.E. AFTER ANY AMENDMENTS):	£ 1,623,000	
DFID FINANC'L COMMITMENT ORIGINALLY APPROVED (IF DIFFERENT FROM ABOVE):	£ 1,623,000	
ACTUAL COMPLETION DATE (DD/MM/YYYY) :	31/12/2003	
ACTUAL DFID EXPENDITURE:		
ACTUAL DFID EXPENDITURE AS % OF FINALLY APPROVED COMMITMENT:		

NOW USE THE SPACE BELOW TO EXPLAIN OR COMMENT BRIEFLY ON ANY NOTEWORTHY ASPECT OF THE DATA GIVEN ABOVE (In particular recording and explaining any formal changes in financial, time or other constraints which were made during the course of the project/programme):

SECTION II: PERFORMANCE ASSESSMENT

Rating Guide

Very Good: fully achieved, very few or no shortcomings
Satisfactory: largely achieved, despite a few shortcomings
Fair: only partially achieved, benefits and shortcomings finely balanced

Poor: very limited achievement, extensive shortcomings
Failure: not achieved
Too Early: too soon to give an adequately reliable rating forecast (*Goal and Sustainability only*)

LogFrame Level	Achievement Rating	Comments
<p>GOAL (<i>state below, then provide a rating forecast with commentary</i>):</p> <p>Increased access to, and efficiency and effectiveness of farm power in small farm systems² in Bangladesh.</p>	<p>(forecast only)</p> <p>Too Early</p>	<p>It is too early to determine the influence of REFPI in achieving its goal. However, qualitative judgement indicates the Goal is being at least partially achieved. Goal level indicators were not well developed. The networking, information sharing, changes in research and teaching approaches and consideration of 'livelihoods' principles have increased in all partners and changes in behaviour are likely to be sustained since increased exposure to 'real life' context/conditions has influenced individual and organisations to change. This appears to have resulted, on a limited scale, to improvement in the 'supply side' of pro-poor service provision</p>
<p>PURPOSE (<i>state below, then rate & comment</i>):</p> <p>Strengthened capacity of GoB/ NGO/private sector to carry out appropriate research and extension in farm power issues for rural poor³</p>	<p>Satisfactory</p>	<p>The capacity of GoB/ NGO/private sector to carry out appropriate research and extension in farm power issues for rural poor³ has been 'strengthened' and thus the purpose has been largely achieved. However, the OVI's for this purpose focus more on BAU and partners attracting additional funding (not achieved), participation in policy debate on farm power issues (limited scope) and that the rural poor have improved access to appropriate farm power information, equipment and services (insufficient data). This asks for substantial progress in a 3 year time periods and does not give justice to the significant capacity building process undertaken by the project (40 sub-projects covering wide range of poverty and (in many cases) gender focussed issues implemented through competitive grant schemes by DPFM, NGOs and the private sector.</p>
<p>WHETHER SUSTAINABLE (<i>provide forecast & comment</i>):</p>	<p>Too Early</p>	<p>The project finished at end December 2003 but there are indicators that the project will have some continuing impact on the issues addressed. These include:</p> <ul style="list-style-type: none"> • The participation of GO, NGO and private sectors is gaining momentum which should contribute to the promotion of agricultural equipment among the farmers • There is a growing interest with large and small workshop owners in producing agricultural equipment leading to an increasing available supply of equipment for poor and marginal farmers

² Small farm systems cover small farm households engaged in production & processing of agricultural & horticultural crops, suppliers of inputs & services, traders, labourers, etc.

³ Rural poor may include marginal and landless farmers, rural traders, artisans and labourers – both men and women.

- A raised interest of small and marginal farmers to buy equipment either individually or collectively to rent out and ensure additional income for them
- There is a significant interest amongst the users of the improved equipment; it is particularly significant as to how this can reduce the drudgery of the poor and particularly women.
- Linkages between research organizations and NGO/ Private entrepreneur will encourage for more demand led and farmers friendly equipment
- Linkages between private enterprises and banks/ money lending organization will facilitate required funds for enterprises.

A 'Too early' rating is entered because sustainability of activities is uncertain. The signs are promising but due to the short project period 'sustainability' cannot be accurately determined.

Performance Assessment Section continued.....

LogFrame Level (&c)	Performance Rating	Comments
<p>OUTPUTS (list the <u>main</u> outputs below, rate against <u>each</u>, then give an overall rating) :</p> <p>1 Farm power research and extension needs for small farm systems identified.</p> <p>2 Effective research and extension system to address identified farm power needs is established.</p> <p>3 Effective partnerships are operating with and between relevant institutions on farm power research, extension and service provision.</p> <p>4 Enhanced BAU capacity to carry out effective teaching, research and extension on farm power issues affecting the rural poor.</p>	<p>1 V Good</p> <p>2 V Good</p> <p>3 Satisfactory</p> <p>4 Satisfactory</p>	<p>Output 1. Substantially completed (see 2002 OPR). 7 research priorities were included in 3 calls for concept notes. Though this indicator is limited to year 1 of the project, needs were continually reviewed and refined.</p> <p>Output 2. Research calls issued and system established and considered achieved by 2001 (OPR 2001). A total of 40 sub-projects commissioned. Separate and independent studies report that effective research and extension system to address farm power needs (identified in Output 1) is established. The project successfully implemented project activities through PAC which gave greater participation, ownership and potential sustainability for a similar RD&E system if funding were to become available. Although at EoP it was unclear how this would be implemented.</p> <p>A number of sub-projects deal directly with environmental impacts; health & safety and nutritional impacts; and socio-economic impacts e.g. soil fertility changes caused by power tiller operations (PP 42), health and safety of operators (PP 267, 363), sprayer operators (PP 326), work environment in rice mills (PP 132, 348) and socio economic impact of mechanisation (PP 27).</p> <p>All 6 OVI's successfully achieved although a little more could have been done to assess sub-project socio-economic impact and pulling together the findings across several sub-projects.</p> <p>Output 3. The project management initiated contact and regular meetings/workshops encouraging interaction between projects involved in similar or supplementary activities although this has been difficult to formalize and continue beyond EoP. Most of the sub-projects developed good quality dissemination material (leaflets, manuals, videos etc.). A database of partners and materials was not completed before EoP.</p> <p>Output 4. REFPI built relationships with others especially with the Extension Department of the Agricultural Faculty and the Department of Agricultural Economics. This has led to changes in personal attitudes and interest of a number of staff. They are more involved in fieldwork and link with other institutions. The longer-term impact of this however, is more difficult to judge.</p> <p>A growing sense of change to embrace social development issues for the</p>

<p>5 A strategy is developed to raise awareness of farm power issues amongst relevant professional organisations and policy makers.</p> <p><u>Overall Assessment of Output Delivery :-</u></p>	<p>5 Fair</p> <p>Satisfactory</p>	<p>research agenda has been achieved, largely due to inclusion within the research award and training courses. A permanent change and a sustained fund allocation to the DPFM was difficult to qualify. BAU staffed were involved in training and project programmes but except for improved teaching in some areas (e.g. PRA, social issues in research and extension techniques) overall long term impact difficult to assess.</p> <p>The profile and recognition of DPFM has improved with high quality professional training for staff which has led to much improved research and extension approaches on farm power issues affecting the rural poor. DPFM has achieved a higher level of recognition as a resource centre for good quality information and farm machinery.</p> <p>Although the improved reputation of DPFM may enhance BAU's standing as an academic institution in Bangladesh, progress towards achieving the over-arching output "Enhance BAU capacity" was a little over-ambitious for a three year project targeting mainly one Department.</p> <p>Output 5. Resistance to implementation of intra-governmental linkages was once again evident in REFPI. Discussion and high level contacts with MoA to develop a partnership with DAE were fruitless. Steerage here is largely outside project control. Sub-projects working on national policy was a good step towards developing a strategy to raise farm power issues amongst relevant organisations. However without the backing of established networks and high level involvement and commitment impact was limited. If the PAC had become a formal advisory body on farm power issues at EoP further action on policy issues may be possible.</p>
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Performance Assessment Section continued.....

LogFrame Level (&c)	Performance Rating	Comments						
<p>INPUTS/ACTIVITIES (see footnote*) :</p> <p>(a) Appropriateness (<i>quality</i>) :</p> <p>(b) Sufficiency (<i>quantity</i>) :</p> <p>(c) Efficiency (<i>timeliness &c</i>) :</p> <p>OVERALL ASSESSMENT*:</p>	<p>(a) DFID V Good (b) Partner Satisfactory</p> <p>(a) DFID Satisfactory (b) Partner Satisfactory</p> <p>(a) DFID Satisfactory (b) Partner V Good</p> <p>(a) DFID Satisfactory (b) Partner Satisfactory</p>	<p>Appropriateness: A long approval process led to good use of logframe to embrace DFID's emerging development agenda. DPFM created excellent working environment and advisory unit (i.e. PAC). BAU and DPFM could have done more for its staff to profit from project opportunities. More direct emphasis required in LF activity descriptions.</p> <p>Sufficiency: More activities required to measure social and livelihoods impact through quantifiable indicators. More funds may have resulted in greater impact on implementing institutional changes within BAU. Partner contribution to REFPI and its activities excellent and a significant contributor to success of the project. Partner less successful in developing high level linkages and securing funds for sustaining project initiatives.</p> <p>Efficiency: Long approval process and probably high transaction costs for short project. Higher funding levels targeting BAU over longer period likely to have brought more significant longer term returns. Activities has stated performed with exemplary professionalism, completing all within the given timeframe; especially commendable is that this was done with considerable DPFM autonomy.</p>						
<p>MONITORING AND REVIEW (<i>give an <u>overall rating</u> for the standard of monitoring and output-to-purpose reviewing; then, where available, list the project/programme OPR <u>dates</u> (year) along with the corresponding <u>scores</u> at output and purpose levels</i>) :</p>	<p>Overall Rating: <-- Please Rate --></p> <table border="1" data-bbox="752 730 1312 868"> <thead> <tr> <th>Year</th> <th>Outputs Score</th> <th>Purpose Score</th> </tr> </thead> <tbody> <tr> <td>2002</td> <td>2</td> <td>3</td> </tr> </tbody> </table>	Year	Outputs Score	Purpose Score	2002	2	3	
Year	Outputs Score	Purpose Score						
2002	2	3						

(*) including conditionality aspects where relevant

SECTION III: LESSONS LEARNED

Please summarise below any lessons arising from this project that may help DFID perform better in future (if none please state):

i. Project/Programme Level Lessons

- Development of participatory approaches difficult to achieve in practice until attitudinal changes occur which takes time. Partnering NGOs and private sector) increased levels of stakeholder participation and thus research appropriateness and quality.
- Partnerships with private sector suppliers and workshops lead to more success in technology transfer and sustainability.
- Projects need to develop livelihoods impact indicators and methods as an integral part of project design. Social development indicators need to be better understood early in the project period.
- Each sub-project emphasised technology uptake so that if successful and element of extension was built in rather than reliance totally on government agencies to extend technologies.
- The Project Advisory Committee protects the project management from undue external influence.
- Incorporation of lesson learning back into the project is constrained by project period of only 3 years duration.
- For uptake to be strengthened the project must initiate impact studies that focus on economic testing as well as social impact issues.
- The project would have benefited from early development of communications and gender strategies.

ii. Sector Level or Thematic Lessons

- Management of competitive research is intensive, expensive (30-50% of management costs – but envisaged to decrease in subsequent years) and requires a strong management team.
- Impact at institutional level is not to be expected through small departmental projects.
- Communications, networking and experience sharing workshops remain project (not institutionally) driven.
- The agro-industrial sector (storage, processing and marketing) can be significant to development of rural economy but lesson learned here is that better socio-economic analysis is required to assess this.
- Targeting technologies for women (positive discrimination) leads to achieving significantly more gender focus and enhancement of women's status.
- Partnerships can significantly reduce cost of RD&E but shared agendas must be clear and incentives must be shared for sustainable partnerships to thrive.

iii. General Developmental Lessons

New RD&E approaches embracing competitive research, partnerships, poverty and gender focus can be successfully implemented by a government agency.

This can only likely be sustainable through a longer term institutional reform process which formally accepts and incorporates the REFPI-led demonstrated approaches into its organisational strategic direction.

iv. Finally, do you think there are issues arising from this project or programme which would make further research (e.g. an ex-post evaluation) useful? <-- Please Select -->

If your answer is yes, please give brief reasons below:

PCR FINALISED BY:

PCR APPROVED BY:

DATE (dd/mm/yyyy):