

# Competitive Grant Schemes (CGSs)



The Primary Sources of lessons in this document are projects within DFID's Rural Livelihoods Programme (RLP). The evidences for these lessons mainly come from evaluations of the projects carried out by the Rural Livelihoods Evaluation Partnership (RLEP). The evidences in this document are included as key findings. The Thematic Lessons Paper (TLP) series documents are available in many formats based on stakeholder demand for product style identified through a communications needs assessment survey. This document is the 'Master' or full version of TLP, which includes more detailed lessons clustered under key issues and their evidences recorded as key findings. The TLP series also has available a two page policy brief or 'Summary Sheet' both in English and Bengali. All the documents produced under TLP series are accessible at [www.lcgbangladesh.org/rlep](http://www.lcgbangladesh.org/rlep).

Thematic Lessons Papers (TLP) are intended for stakeholders who are involved in policy/programme design and influencing, in order to assist them in making informed decisions in the future.

The TLPs draw together experiences of livelihoods programme in a particular thematic context. This paper focuses on the Competitive Grant Schemes (CGSs) theme. The lessons in this document are grouped under the following key issues:

- Effectiveness
- Efficiency
- Relevance
- Impact
- Sustainability

**8 PROJECTS  
WITHIN  
DFID'S  
RURAL  
LIVELIHOODS  
PROGRAMME  
(RLP)**

1. Fisheries Training and Extension Project- II (FTEP II)
2. Agricultural Services Innovation Reform Project (ASIRP)
3. Research and Extension in Farm Power Issues (REFPI)
4. Poverty Elimination Through Rice Research Assistance (PETRRA)
5. Support For University Fisheries Education and Research (SUFER)
6. Fourth Fisheries Project (FFP)
7. CARE Rural Livelihoods Programme (CARE RLP)
8. Community Based Fisheries Management (CBFM2)

## KEY LESSONS SUMMARY

1. A code of best practice has begun to emerge for CGSs in 'least developed' countries (LDCs). Effectiveness can be improved if projects adhere to this as far as possible, while retaining sufficient flexibility to take local circumstances into account by amending or augmenting this code as necessary.
2. Open, efficient and transparent management is essential for effective operation of a CGS, but it is not inexpensive. However, the normal LDC research funding situation, which is characterised by inefficiency, non-transparency, lack of operational funding and extremely damaging delays in fund disbursement, although less costly, is also much less cost-effective.
3. Poor rural producers are characterised by undercapitalisation and risk aversion, so that the spread of technology among them is likely to be relatively slow. Evaluations conducted during a project's life are therefore likely to understate the benefits, and thus the efficiency, of the intervention. This implies the need for ex-post evaluations (3 to 5 years after project closure) in order to assess efficiency of the intervention accurately.
4. Those among the rural poor who are most likely to be marginalised in interventions are women, so that evaluations need to focus specifically on the gender dimensions of technological change. Otherwise there is a danger that subproject interventions will be at best irrelevant to women's problems, and at worst actually detrimental to their interests.
5. It is a mistake to assume that working with NGOs will *ipso facto* ensure that interventions will be relevant to the most disadvantaged groups in rural society. The Bangladeshi NGOs' principal development tool is micro credit, and research has shown that lack of social capital often excludes the poorest from microcredit groups.
6. CGS Projects have made good progress in assessing impact qualitatively, but more quantitative assessments are required for rigorous estimation of direct impact. The projects must therefore develop impact evaluation plans including socio-economic analysis and gender impact studies, to be backed up in due course by ex-post evaluation.
7. Subproject evaluations should pay more attention to the efficiency criterion. This requires not only quantitative impact assessments to calculate benefits, but also separate accounting for the management costs of running the CGS and the subproject's CGS component.
8. Significant impact in terms of organisational development (such as the adoption of the CGS approach) is least likely when a project is located within a government department, particularly one which has long received significant multi-donor inputs and is directly involved in research implementation. The corollary of this is that organisations which have been deprived of funding and donor support are the most likely to embrace the reforms promoted by project interventions.
9. Indirect impact of the CGSs have been generally very positive, with the creation of a new cadre of researchers and postgraduate students with skills and attitudes conducive to pro-poor research, development-orientation, partnership approaches and multidisciplinary.
10. The best prospects for sustainability arise where the new technology itself generates sufficient funds to both cover cost and yield a profit, and this requires private sector involvement. Projects could usefully boost sustainability prospects by playing an 'honest broker' role, bringing together resource-poor producer groups and a range of potential buyers from the outset.
11. The fact that all four projects had R&D activities over and above, the CGS element illustrates the fact that promotion of this mechanism can only ever be a part of the development of R&D institutions. If such institutions are to be sustainable, there is a need for additional resources to fund (a) core costs (e.g. salaries) (b) a medium- or long-term research agenda; (c) longer term HRD, particularly in the shape of higher degrees, and (d) research infrastructure. However, this source of funding should be separate from CGS to avoid conflicts of interest. Government or donors may support public sector research institutions with core funding but increasingly the private sector will get involved in adaptive research, as has been demonstrated in the vegetable seed sector in Bangladesh.

## What are Competitive Grants Schemes (CGSs)?

Competitive grant schemes have long played a key role in funding scientific Research and Development (R&D) in developed, and even developing countries. However the CGS in LDCs such as Bangladesh is a relatively new phenomenon. Unlike their counterparts elsewhere, they are normally funded by donor-supported projects and programmes. ASIRP, PETRRA, REFPI and SUFER all had CGS components.

A CGS is established by setting aside a sum of money to fund nominated activities ('subprojects'). An independent governing body is established to set policies and priorities and provide general oversight. A management structure is established for day-to-day administration. Procedures for advertising, conducting peer reviews of proposals and awarding grants are set out, and applications and concept notes sought from individuals and/or organisations. Often information sessions and training are initially required to inform potential applicants of the principles of the CGS. Successive rounds of grants are awarded on the basis of merit in the face of open competition. A basic reason for the emergence of this model in LDCs is widespread dissatisfaction with traditional methods of funding research and technology transfer and the failure to draw in new players into the research area, such as the emerging private sector and NGOs. Funding public sector research and extension through block grants has largely failed to link funding and performance, and as a result the output and impact of these systems have been disappointing. Introduction of the CGS model in such a setting represents an attempt to remedy this situation by promoting scientific and technological excellence through fair, open and merit-based competition for funding, in return for which the adequacy and dependability of funding to successful applicants is assured. Furthermore, for donors with a pro-poor development agenda, the CGS model represents an opportunity to set development focussed criteria for the grant applications.

## Key Issue 1 Effectiveness

This is a measure of whether the expected results or effects have been obtained and the intended objectives achieved. It can be assessed by answering questions such as: “Could more effects have been obtained by organising the implementation differently?” or “Which are the most successful operators or measures?”

### Key lesson for 'better practice'

CGSs have been around in developing countries long enough to permit the emergence of a code of good practice. The CGSs studied here have augmented this code and in so doing have made their interventions more effective, by linking research firmly into pro-poor development. They have done this by (a) basing the research agenda on national policies, particularly those articulated in the PRSP; (b) requiring or emphasising stakeholder participation; (c) placing strong emphasis on a partnership approach that is rooted in complementarity of comparative advantage (skills, experience, mandate), and (d) strongly emphasising interdisciplinarity, with particular emphasis to bringing technical and social scientists together to ensure that technologies are problem-based.

### Lessons Learnt

- A CGS needs autonomous or semi-autonomous status with an independent, pluralistic technical committee that represents the entire spectrum of stakeholders and no majority of any one.
- Prospects for effectiveness are maximised when the CGS supports priority areas for R&D that are clearly derived from national policy priorities. Linkages to the Poverty Reduction Strategy Paper (PRSP) are particularly important in projects that focus on livelihoods of the rural poor.
- Much past research, particularly at universities, could be characterised as 'research for its own sake'. Effectiveness has been greatly improved by clearly linking research to the wider processes of economic development, particularly pro-poor development.
- Development of a set of rules that encouraged the widest possible participation, rather than limiting involvement to a project's host organisation, is extremely important. This has the effect of bringing a wider range of skills and attitudes to the subprojects, while simultaneously widening the horizons of participants.
- Some CGSs required evidence of stakeholder participation (including the intended beneficiaries, especially women beneficiaries) at the outset. This has made an important contribution to ensuring that grant-funded activities are relevant to the target group.
- A partnership approach brings in organisations from outside of the host institution, particularly NGOs and the private sector, thus creating interdisciplinarity, increasing the number and type of stakeholders, and broadening the range of skills and knowledge available to the subprojects. This in turn enhanced prospects for developmental impact and sustainability. Partnerships can only be successful if based on complementarity of comparative advantage. It is essential to avoid creating 'marriages of convenience' which end in divorce upon project completion.
- Widespread advertising of the existence of CGSs, their aims and objectives, the conditions for application and the rules governing awards, is essential for encouraging interest from a wide range of potential applicants. It is important to extend this principle to projects where there are an international component and to avoid assuming that any one international agency is pre-eminent in the field in question.
- Procedures for peer review must be clear and transparent and must facilitate professional, anonymous, constructive and independent assessments consonant with minimising the time required to complete the process. Peer review can be problematic in an LDC like Bangladesh, given the small size of the professional pool from which the reviewers must be drawn. Cost permitting, some of the reviewers should be recruited internationally. There is also a need to draw in reviewers from different disciplines and from the demand side.
- When project management was characterised by integrity, independence and accountability, effectiveness greatly is enhanced. Among other things it ensures that funds are released on schedule against satisfactory monitoring reports. In this respect the CGSs compare very favourably to the public sector norm of late fund release normally towards the end of the financial year which not only blunts the effectiveness of the research, but also means that funds when they arrive must be spent with undue haste to avoid claw-back. If good management seems expensive, it should be compared to the cost of bad management.
- Monitoring of financial performance is essential, but not more so than impact monitoring, preferably quantitatively based, which is often lacking or inadequate. Importantly, financial and impact monitoring are of a different level and will require different approaches and expertise.
- There must be a level playing field for all competitors. This does not mean the same conditions should apply to all. Applicants from public sector institutions, such as government research stations and universities, are essentially subsidised in that overhead costs are covered by their organisations. NGOs, on the other hand, have to cover these costs from earnings. The rules should allow applications from organisations in the latter position to charge a reasonable level of overheads.

## Key Findings

CGSs have been around in developing countries long enough for a code of best practice to have begun to emerge with respect to organisational features. These are summarised here in the italicised paragraph headings.

- ***Independent and competent governance.*** All of the projects established independent technical advisory committees with representation from a wide range of stakeholders. However ASIRP fell short of best practice on two counts: first some of its Partnership Initiative Funds (PIFs) had government majorities on the board, and second these funds were located within the Department of Agricultural Extension (DAE), which was also an applicant for funding. Perhaps it was difficult to avoid such arrangements, given that the Project's institutional home was a government department, and not, therefore, autonomous. By contrast, the other three projects were located within agencies that were either autonomous (universities) or semi-autonomous (Bangladesh Rice Research Institute).
- ***Links to national priorities.*** Since they are government-approved, all projects address national priority policy areas indeed it would be difficult to argue that rice, fish, farm power and agricultural extension were not areas of high priority in Bangladesh. However, at the level of sectoral policies, the ASIRP final review did raise some issues concerning the degree to which the project's approach to CGSs reflected the priorities of the New Agricultural Extension Policy (NAEP), particularly with respect to the NAEP policies of (a) promoting demand-led extension services, (b) working with groups of all kinds, (c) integrating and co-ordinating extension support to farmers. However these apparent project failings tended in fact to reflect the failure of the host department adequately to implement its own policies.
- ***Linking research to wider development objectives.*** Much of the research that has traditionally taken place in LDC institutions is little more than research for its own sake. The four projects have strongly embraced the alternative view that research must be firmly rooted in development objectives. ASIRP's CGSs, by nature of the Project's position on the technology development-scaling up spectrum, naturally linked the two, but the other three adopted a pro-active stance in making this linkage. PETRRA did this very specifically through its Value Based Research (VBR) approach, which, inter alia, aimed 'to develop an institutional mode for conducting research that is well geared to contributing to the development of pro-poor rural policies and services'. PETRRA also sponsored the emergence in the North Western Region of an NWR Focal Agencies Forum, a coalition of GO, NGO and other partners which 'recognised the value of a structured arrangement for information exchange and planning'. By involving the private sector in projects and by building partnerships between researchers and technology users, PETRRA, REFPI and SUFER's CGSs enhanced prospects that research products would (a) be designed to address practical problems and opportunities and (b) be put to developmental use upon completion.
- ***Encouraging wide participation and interdisciplinarity.*** The Project Management Units (PMUs) of all four projects made strenuous efforts to encourage wide participation, encouraging and encouraged a multidisciplinary approach in all cases. Projects encouraged proposals for technical research to bring in social scientists as part of their efforts to promote development-oriented, interdisciplinary research.
- ***The partnership approach.*** Linked to the above, all four projects also embraced the principle of a partnership approach on the basis of mutually-complementary comparative advantage. Both ASIRP and PETRRA required such an approach, while the other two projects strongly encouraged it. ASIRP's involvement of 166 NGOs represents a remarkable accomplishment, because traditionally Government-NGO relations in Bangladesh had been mutually distrustful. ASIRP also used its CGS to promote tripartite partnerships between national NGOs, local NGOs and the DAE. REFPI was particularly active in involving the private sector a logical response to the fact that farm machinery manufacture is almost exclusively a private sector activity. PETRRA also had a thriving relationship with the private sector, as did SUFER, although in the latter case the evaluations concluded that this involvement, although developing, was substantially below its potential. At the other extreme, there are no formal private sector extension organisations in Bangladesh, and therefore no private sector applicants for ASIRP grants. However, outside the RLP the NGO-led project Katalyst is currently engaging private sector suppliers in its extension processes.
- ***Widespread advertisement.*** All four PMUs were active in advertising their CGSs within Bangladesh, including placing advertisements in the newspapers. There was however an exception to this. PETRRA had a component for international rice research under its CGS, and the Project's Mid Term Review expressed disappointment with respect to the advertising of this. As originally designed, PETRRA was meant to promote partnerships between the International and Bangladesh Rice Research Institutes (IRRI and BRRI respectively), but a switch to a competitive funding approach should have been accompanied by a change in the rules to reflect best practice. The PETRRA team leader was also the IRRI Resident Representative in Bangladesh, and the international component of the CGS was advertised only on IRRI's website. This may have blunted the effectiveness of this Programme component. The review cites the example of the development of hybrid rice and saline-tolerant rice varieties, and points out that rice hybridisation techniques were originally developed, not by IRRI, but by the national agricultural research system in China. Chinese agricultural research institutes have both the expertise to conduct further such research and a strong interest in working internationally. Similarly, universities and research institutes in the southern USA have experience in working on saline-tolerant varieties, and may have been interested in competing with IRRI for work in this field.

- **Peer Review.** All of the projects had procedures for peer review of proposals, including overseas reviewers. Both PETRRA's OPR4 and REFPI's End of Project Review (EPR) were particularly appreciative of this aspect of the Projects' performance. The former was impressed by the Technical Committee's role in the review and selection process from concept notes to final proposals. The REFPI EPR speaks of the 'significant role of the advisory committee and external evaluators' and is impressed by the way the Project maintained a degree of anonymity for reviewers. This last point is important, because the literature warns that maintaining anonymity and independence for peer reviewers is particularly difficult in LDCs, given the small size of the domestic professional pool from which reviewers must be drawn in any given discipline, and the difficulty of finding international reviewers who are sufficiently familiar with the country in question.
- **Financial and administrative review processes.** This topic is not specifically covered in any of the evaluations. However, the fact that (a) none of them expressed reservations on this score and (b) all of them were generally satisfied with administrative and financial processes more generally, suggests that there is no reason for concern on this score.
- **Integrity, independence and quality of management.** Performance of the Project Management Units (PMUs) generally received a good deal of attention in the project reviews, but management aspects of their CGS elements is not specifically addressed except in the REFPI EPR and the PETRRA Mid Term Review (MTR). The former refers to management of the CGS as being 'informed and flexible'. It can in fact reasonably be inferred from the other reviews that a similar judgement could be made for their CGS components. Nowhere were any complaints raised as to the integrity of management.
- **Adherence to the agreed schedule of fund releases.** Only in the case of PETRRA's MTR is this criterion specifically mentioned in the context of IRRRI support, which, it is argued, pre-financed the CGS, thus enabling the Project to provide funds to subprojects in a timely way and avoid delays in research implementation. The need for non-DFID pre-financing may have been a peculiarity of PETRRA, because extensive interviews with grantees under the other three projects appear to have uncovered no complaints about timeliness of fund disbursement and these surely would have surfaced had there been a problem on this account.
- **Monitoring and evaluation.** The various reviews indicate that performance on monitoring grants was very uneven across projects. In the first round of its CGS, ASIRP's grant monitoring was primarily used for financial purposes. It was not until the second round that a structured methodology for monitoring was introduced. As a result some projects were stopped. However the technical assistance (TA) team members responsible for the PIFs lacked technical expertise, nor was this supplied by the DAE. The final OPR of SUFER also expressed dissatisfaction with the monitoring that had taken place, noting that both M&E were more aligned to logframe Objectively Verifiable Indicators (OVIs) than to research quality or to livelihoods-related socio-economics. It was also noted that much of the research work targeted towards poor women groups was still incomplete. Most importantly, where women were targeted for the production technology, there was no analysis to assess changes within the household, community perceptions of gender roles, potential social capital building or exclusion, group dynamics, workloads, direct and indirect benefits, etc. This means that scaling-up could have been recommended without sound justification from a gender perspective. The REFPI and PETRRA evaluations, on the other hand, expressed satisfaction with subproject monitoring. REFPI, in addition to financial monitoring also conducted impact monitoring, but only in qualitative terms. The Project would have benefited from more quantified evidence on the socio-economic impact of the successful subprojects. The last OPR of PETRRA noted that the PMU had monitored procedures and taken action to improve the standards of attainment of VBR in individual subprojects. However this review presents little quantitative evidence of impact. This is unfortunate, since one of PETRRA's key aims was achieve demonstrable change in the livelihoods of the target group, namely resource-poor rice farmers (emphasis added). Greater emphasis on quantifiable indicators to measure impact is needed especially for early intervention groups in projects lasting five years or more. However, significant and more conclusive evidence may only be possible several years after project completion, hence the importance of ex-post evaluations. Projects do need to be careful not to highlight positive livelihood impacts without outlining certain qualifiers e.g. project assistance may be on-going, however small.

## Key Issue 2 Efficiency

Efficiency is assessed by asking whether more positive effects could have been obtained with the same budget or whether other interventions have obtained the same effects at a lower cost.

### Key lesson for 'better practice'

The CGS model offers considerable efficiency gains over the traditional 'block funding' approach. Efficiency could be further enhanced if a mechanism could be found that more closely links funding to pro-poor outcomes. The presently-used 'push' approach to the CGS fails to link funding of the research with actual delivery of the proposed benefits, thus possibly compromising efficiency. 'Pull' models could greatly increase efficiency, but are unsuited to LDC research organisations, since they are high risk: potential applicants, like poor farmers, are undercapitalised and risk-averse. Since both the 'push' and the 'pull' models pose problems, strenuous efforts are needed to explore ways of combining them so as to bring together the advantages of both while minimising their disadvantages.

## Lessons Learnt

- Project evaluations should pay more attention to the efficiency criterion instead of over-concentrating on effectiveness. However, since OPRs, MTRs and EPRs cannot produce primary data, the projects themselves have to sponsor more research into the efficiency of their operations.
- Where a project uses the CGS as part of a suite of interventions, separate accounts should be kept of the management costs of this component, and these should be analysed to identify areas in which efficiency gains can be made. Without this it will not be possible to either improve efficiency or to assess empirically the value added of the CGS model.
- Cost per beneficiary is a useful measure in itself, but it does not assess the efficiency of the CG approach, as low cost per beneficiary could be associated by equally low, or even lower, returns.
- Rigorous assessment of the efficiency of the CGS model will not be possible until sufficient quantitative data have been generated to calculate the relevant indicators Cost-Benefit Ratio (CBR), Net Present Value (NPV) and Internal Rate of Return (IRR). Impact monitoring has much to contribute towards this goal, even during project life.
- Calculation of benefits for pro-poor interventions is especially difficult since the benefit stream is likely to be relatively slow in building up because poor producers are undercapitalised and risk-averse. Thus with pro-poor interventions ex-post evaluations are particularly necessary in order to avoid benefit-underestimation.

## Key Findings

- The various evaluations contain a good deal of information on the effectiveness criterion, but little on efficiency.
- One component of efficiency is management cost as a percentage of total budget. PETRRA's fourth OPR notes that a commonly accepted target for a CGS should be that management costs should be about 15% of the total, declining to 12% after five years and then to around 10% once the scheme had become well-established. However the same Review noted that it was not possible to separate out CGS management costs from the cost of managing other PETRRA activities, in which capacity building is both relatively large and management-intensive. Overall, management costs for PETRRA were 26% of the total.
- Efficiency is, however, about much more than just management costs. Its quantification requires cost benefit analysis, which in turn entails calculating a stream of costs and benefits, both of which are discounted over time. These are then compared in order to derive the necessary efficiency indicators (CBR, NPV, IRR). PETRRA's fourth OPR notes that PETRRA had a suite of projects 'that are performing well, indicating a favourable internal rate of return for PETRRA as a whole'. However no supporting evidence is presented, and there is no indication that the relevant discounted cost and benefit streams had been calculated, so it is difficult to substantiate this assertion from the available evidence.
- The ASIRP EOP review presented efficiency calculations based on a series of evaluations which ASIRP had itself commissioned into the workings of its three PIFs. These CGSs were compared with respect to cost per beneficiary, and it was found that the Upazila PIF performed best, at Tk.165/beneficiary. The figures for the District and National PIFs were Tk. 2,698 and Tk.1,112 respectively. However these calculations could not be used to support the view that the UPIF is more efficient than the other two Funds, as the benefits had not been calculated in the ASIRP-funded evaluations. Indeed lack of impact evaluation is a criticism levelled at several CGSs by their respective reviewers.
- An important issue with efficiency indicators is that, while the cost calculations are quite straightforward, the calculations of benefits especially in the case of projects whose benefits are defined in terms of their impact on the livelihoods of the poor and disadvantaged present some quite formidable challenges. A major difficulty arises from the fact that benefit stream of a successful pro-poor intervention is likely to be relatively slow in building up, as dissemination of innovations is constrained by two defining characteristics of poor producers: undercapitalisation and risk aversion. Thus any benefits could continue to grow long after project completion. Yet, evaluations are conducted while the project is still in operation, when most costs have been incurred, but the benefit stream is still building up.
- The funding mechanisms used by the four projects described here is the familiar 'push' approach, where funding is granted 'up front' and the researcher is then expected to deliver as promised in the research proposal. This fails to link funding of the research with actual delivery (as opposed to planned delivery) of the proposed benefits to the poor. Under 'pull' models, no money is disbursed initially, but a substantial payment is made on successful delivery of the desired outcomes. Clearly this would greatly increase efficiency, as no (non-management) costs would be incurred without a guarantee of very significant offsetting benefits. However pull models are unsuited to LDCs because (a) they require substantial investment up front, and organisations cannot finance them, and (b) they are high risk, because unless deliverables are judged successful, there is no return on the investment.
- 'Push-pull' models represent a compromise, whereby some money is delivered up-front, some is allocated against agreed intermediary milestones, and the bulk is paid against successful delivery of pro-poor outcomes. The problem with models with any pull element is that their success depends critically on evaluation results, and evaluation of pro-poor results meant to affect very large numbers of livelihoods is difficult enough without the added pressure that would come from payment against results. This is an issue that demands further investigation.

**Key Issue** 3 **Relevance**

This criterion assesses the appropriateness of the explicit objectives of an intervention against the socio-economic problems it was meant to solve.

**Key lesson for 'better practice'**

In a market-oriented production system the relevant person in demand-drive is not the producer but the consumer. In rapidly-commercialising agricultural and aquacultural systems, market research is essential to ensure that the 'demand-led' approach means market-led. Market research will identify opportunities, while participatory project interventions can then assist poor producers to exploit them. Such an 'opportunities based' approach is more likely to generate sustainable livelihood opportunities than a 'problem-based' approach to poverty reduction. This means that relevance to the client base (the rural poor) should not be limited to identifying problems they presently face, but be driven by (a) the identification of opportunities which they can exploit followed by (b) assistance for them to exploit these opportunities, accompanied by (c) brokerage of mutually-beneficial arrangements between poor producers and the private sector.

**Lessons Learnt**

- It is a necessary, but not sufficient, condition for relevance that proposed beneficiaries be consulted at the outset of a CGS application. Further contact with a representative panel of this group should be maintained through participatory monitoring throughout the life of the subproject in order to receive feedback and ensure that relevance is maintained.
- One of the most important contributions that a CGS (or any other intervention) can make to pro-poor rural development is to conduct market research to identify opportunities, conduct participatory appraisals to assess the constraints poor producers would face in trying to seize these opportunities, and then assist them to overcome these constraints.
- Gender focus is an extremely important facet of relevance. It is not sufficient to make grants to projects that address 'women's issues'. When commissioning evaluations of their subprojects, CGS management must fully take into account such factors as the gender division of labour, women's relatively heavy workloads and time constraints, gender-asymmetrical access to information and markets, and intra-household gender inequality in access to resources. Scaling up without this could lead at best to activities that are irrelevant to women and at worst to activities that are detrimental to their livelihoods.
- When requiring a partnership approach to working with the poorest and most disadvantaged groups, project design must take into account the institutional norms of the partners which are technically qualified to conduct subprojects. If these are not attuned to working directly with the poorest, time and resources will have to be allocated to addressing this situation.
- It is not always necessary for projects to work directly with the rural poor in order to be of direct relevance to their livelihoods. In a situation where poor people are increasingly reliant on the market for their food supplies (as in Bangladesh with growing landlessness), projects which lower the cost of food production through, for example, developing more fertiliser-responsive or disease-resistant or shorter-duration varieties, improving the flow of relevant information to the farmer, reducing the transaction costs to getting inputs to the farmer and food to the market can make a huge contribution to urban, as well as rural, poverty reduction by lowering the price of food or increasing the nutritional quality (for instance the controversial Vitamin A enhancement of new rice varieties).

**Key Findings**

- Their log frames indicate that all four projects were required to address the socio-economic problem of rural poverty, while taking environmental sustainability issues into account.
- Relevance implies consultation with the proposed beneficiaries, and this principle was most explicitly articulated in PETRRA and REFPI, whose competitive process specifically required that the proposed research must be demand-led. However experience from many developing countries indicates that, while beneficiaries may be consulted at the design phase of a project, their involvement often ends once the grant is secured. It is not entirely clear from the evaluations how rigorously the principle of client involvement was applied beyond the conceptual stage.
- The PETRRA MTR made an important connection between demand drive and relevance that is often overlooked, namely the fact that in a market oriented production system, the person whose demand counts most is not the producer, but the consumer. This calls for an 'opportunity based' approach, rather than 'problem-based' approach that characterises so many projects that are 'demand-driven'. The producers' problems are important, of course, but only insofar as they relate to their ability to produce the right product at the right time in the right condition and in the right quantity 'right' in the sense that the customer is always right! Over-emphasis on the farmers' demand will obscure this basic fact and reduce the relevance of interventions. It is not clear from the evaluations how far this way of thinking impinged on PETRRA or the other projects.
- The above consideration apart, and with one exception, the reviews took a very positive view of the relevance of the projects' interventions in terms of addressing the rural poverty issue. The REFPI review notes that at the screening stage of Project Concept Notes put particular emphasis on socio-economics, gender and environment.

- REFPI played a very useful catalytic role in bringing together researchers, equipment manufacturers and equipment users as a means of improving the relevance of technology design and development to the ultimate client base. In PETRRA's VBR, one of the fundamentals was subprojects had to be 'demand-led, poverty focused, gender sensitive, and environmentally aware'.
- The four projects took a pro-active role in ensuring that women were included in their target group, thus increasing their relevance to some of the most disadvantaged people in rural society. Projects included gender-focussed subprojects in their portfolios, while REFPI took account of the gender division of labour by supporting the development of equipment for tasks of particular interest to rural women, such as simple food processing tools. All of ASIRP's projects worked with women farmers to some extent. SUFER worked with and through NGOs which pay particular attention to women's needs.
- The exception mentioned earlier was ASIRP, whose grantees (both government and NGO) tended to work with pre-existing groups, and these excluded the poorest clients (marginal and landless farmers). The DAE has never tended to work with the poorest farmers, preferring instead to work with farmers who have some capital and therefore the ability to invest and take risk. Recent evaluations of the NGO sector in Bangladesh make a similar judgement about their client base: the most important tool used by the NGOs is micro credit, and in such schemes 'credit worthiness' tends to mean possession of social capital. The poorest have little or no social capital and therefore tend to be excluded from micro credit schemes. Thus the actuality of ASIRP's CGSs were in sharp contrast with its goal of working with 'all categories of farmers, especially landless, marginal'.
- Despite the above observation, it would be easy to be over-judgemental of ASIRP management on this score. First, the requirement that the Project place particular emphasis on working poor and landless farmers is extremely onerous, given the facts of undercapitalisation and risk aversion mentioned earlier. This was not a requirement for any of the other three projects. Second, in the nature of things, the Project had to work with partners who had experience and comparative advantage in agricultural extension, and the fact was that such partners do not work with the hard core rural poor. Third, the other reviews seem to have missed out on the previous point, and assumed that because these other projects worked through NGOs they were ipso facto working with the poorest. This makes ASIRP's performance look poor by comparison, perhaps unjustifiably so.
- The point about ASIRP's not working directly with the hard core rural poor does not necessarily imply that its work was irrelevant to their livelihoods. Both the urban poor and (given growing landlessness) an increasing proportion of the rural poor in Bangladesh depend on the market for food. Interventions that lower production costs encourage the not-so-small farmer to increase supply, and this translates ultimately into lower food prices. Indeed the poorer a family the more does it benefit from falling food prices, because the proportion of income spent on food tends to be positively correlated with level of poverty. It is worth noting that the real price of rice and wheat have been in long-term decline in Bangladesh precisely because increases in cereal supply have outstripped population growth. This is not necessarily attributable to ASIRP, of course, but it does demonstrate the argument that interventions can be of crucial relevance to the poor even if they do not work directly with poor people. This, indeed, was one of the justifications for PETRRA.

#### Key Issue 4 Impact

This is concerned with the effects of the intervention on direct beneficiaries following the end of their participation. It also looks at indirect consequences affecting others who may be winners or losers, including positive or negative effects on the environment.

#### Key lesson for 'better practice'

The CGS model has had greatest impact in countries where a competitive market exists among providers of R&D services. This is typically absent in LDCs. The projects have made an important contribution to developing such a market in Bangladesh both by improving the competencies of researchers (both to conduct poverty-focussed research and to prosper within a competitive funding environment) and by bringing into the national research system professionals who would not normally consider themselves researchers, but are prepared to think of themselves as part of a team working on the research-development continuum.

#### Lessons Learnt

- Unless projects conduct quantitative impact studies during their period of operation, direct impact will remain difficult to assess. This means that as an integral part of their research work, CGSs must develop a comprehensive impact evaluation plan for subprojects, and these must include socio-economic analysis. In all cases this evaluation plan must include comprehensive gender impact analysis. Due consideration must be given to the time required for the research to develop into user uptake technologies, which means that comprehensive evaluation plans must be flexible and projects open to extended periods beyond the original end of project date.
- Only once a CGS has been operational for a number of years could significant direct impact reasonably be expected. The project mode already limits the time period during which a CGS can be operational, so if a CG element is to be included in a project it should be included from the outset.
- The institutional home of a project has important bearing in terms of prospects for both direct and indirect impact. Organisations which have been deprived of funds for some years often offer the most fertile ground for developing new modus operandi, because the marginal impact of new funding and fresh ideas tends to be highest in such an environment.



- Evidence from the two university projects suggest that attitudes within these organisations have been probably among the most traditional in the country, so that the potential for improvement there was correspondingly large. However, sustaining the momentum of change is difficult to achieve without an overarching organisational reform process in place.
- Impact in terms of indirect consequences of the CGSs have been generally very positive. A new cadre of researchers has been created with skills and attitudes that significantly increase prospects for their work having direct development impact. New partnerships have been created and old barriers between different types of development professionals have been bridged. However this momentum will be lost unless new opportunities or organisations arise in which they can use their new skills to compete for funding.
- Joint research initiatives involving researchers from technology and social science departments can be best achieved by setting a cluster of research awards around a theme so that each researcher may lead on their own grant award but at the same time, the interdisciplinary approach links the research elements together to achieve a common goal
- Within the government system a special threat is posed by the fact of frequent staff transfers, so that where project efforts have succeeded in building up a critical mass, there is a growing danger that this cadre will be dispersed and therefore lose effectiveness.
- The involvement of post-graduate students in the subprojects funded by their grants has been very productive. New and innovative ways of promoting this further should be explored by any future CGS.
- In all cases, but especially with projects which have an 'environmental sustainability' objective, evaluation of grants made under a CGS component must include environmental impact assessment. This should begin at the project concept note stage and continue throughout the life of the subproject. This means that both the peer review process and subproject monitoring procedures should include expertise in this area.

### Key Findings

- To the extent that direct impact is concerned with effects on beneficiaries following the end of their participation, it is clearly going to be difficult to assess this from reviews that were conducted while the projects were still operational.
- In fact the projects have not performed outstandingly in terms of producing evidence of direct impact, one way or the other. In the SUFER case, the final review stated quite bluntly that 'to date the project has not been successful in developing a comprehensive plan to evaluate impact', adding that the 'the research projects do not have socio-economic analysis and impact as an integral part of the research work'.
- Both REFPI's EPR and SUFER's OPR5 noted that the projects were significantly lacking in terms of analysing impact on women participants. Thus the SUFER final review, while commending the Project for including two subprojects that directly addressed gender issues, also stated that 'in all cases, and most importantly where females are targeted for the production technology, there is no additional analysis in place to assess change within the household, perceptions of the community, potential social capital building or exclusion, group dynamics, workloads, direct and indirect benefits.'
- The SUFER reviewers were also concerned that there were cases of failure to disaggregate data along gender lines, and that this could lead to an inability to differentiate between the benefits received by the female, as distinct from the male, members of households. This, they noted, was especially worrying where it is necessary to include males in 'female' groups in order to facilitate interactions beyond the village, as often happens in the case of marketing. 'If this analysis is not undertaken,' the review team very rightly noted, 'then assumptions and forecasting of benefits to women if the technology is scaled-up will be without sound justification.'
- The REFPI reviewers were somewhat less critical on this score, yet they still referred rather pointedly to 'apparent' benefits to women, and to 'the socio-economic significance of the improvement in women's status'. They also opined that, although the evaluations the Project had commissioned had yielded useful impact information in a qualitative sense, there was a need to improve the M&E system so as to allow more quantitative data to be collected 'including in particular the socio-economic impacts of the successful research projects'.
- ASIRP commissioned a number of evaluations of the impact of its PIFs, but again the level of reliable quantitative data that was generated was disappointing. However, it has to be added that in ASIRP's case, the CGSs were introduced quite late in the Project's lifespan, so that the maximum period of award was just one year, implying that the competitive model could not be tested at all rigorously.
- PETRRA's fourth OPR made impressive claims regarding the Project's IRR (and hence impact), but that it did not present the evidence that supported this view. The review did, however, state that subprojects should 'document livelihood changes beyond the evidence of adoption of specific technologies'. This last point seems somewhat at odds with the Review's conclusion that the Project's modus operandi 'has resulted in research that demonstrably is pro-poor and has achieved local impact'. Again it is frustrating that this pro-poor local impact was not quantified.
- In terms of indirect consequences, with the possible exception of ASIRP, the projects' CGSs have created real prospects of lasting impact on their partners in the shape of human capital development through attitudinal change. ASIRP is an exception for two reasons. The first is the short period of time during which its PIFs were operational. The other reason is more fundamental and relates to the organisational milieu within which the Project operated. The DAE has a long history of having a very large number of

donor-funded projects with very significant resources. These have operated both successively and simultaneously, to the point that it might be questioned whether there was added value in yet another in-house project. By contrast, the host organisations of the other three projects had had much less donor input in recent years, so that prospects for their marginal impact tended to be correspondingly high. This is particularly true of REFPI and SUFER, both of which were located within the university system, which has long been starved of research funds.

- Another indirect consequence is that both REFPI and SUFER have had a high degree of success with encouraging university staff to interact both between departments of the same university and between different universities on projects, so as to challenge the traditional single-discipline approach and promote instead a degree of multi-disciplinary thinking. This has been particularly useful in bringing a socio-economic focus to work that was previously entirely technically oriented. Even more importantly, these projects have persuaded academic staff to work in partnership with actors in the development process with whom they had had little or no previous contact. The list includes NGOs, the private sector, and above all, the rural poor.
- The SUFER project faced difficulty in bringing together university researchers from technical and social science departments, as each preferred to be the lead researcher. Project management overcame this by inviting research proposals around a theme, and thus were able to commission inter-disciplinary or 'composite' research on various aspects of a potential opportunity. For example, for research on the potential of mussel culture development, several awards were commissioned to assess potential societal and cultural issues, marketing, gender implications and technical feasibility.
- The PETRRA OPR4 reviewers reported that the current Director-General of BRRI had been strongly influenced by the Project's approach. He reported that this change of attitude had also affected his staff in such terms as: appreciating the value of the competitive principle, stating the aims of their research and proposing how they would deliver on the specifications in the proposal, how to work with other disciplines and other agencies outside of government, and how to broaden their thinking in order to make their research pro-poor and gender-sensitive.
- All of the projects recognised that the CGS model was relatively new in Bangladesh, that past attempts to use it had met with little success, and that capacity would therefore have to be built to make best use of this model. Thus each project set out to varying degrees to work with potential applicants to create the skills and attitudes necessary for a competitive and merit-based funding environment. SUFER in particular, devoted a great deal of attention to this approach, hosting activities such as training workshops on proposal writing and mentoring younger staff in the principles and practice of CGS funding. So too did REFPI, although perhaps to a slightly lesser extent. The projects also put a good deal of effort into creating a professional environment that was conducive to interdisciplinary research and also an even greater departure from the norm in most cases conducive to pro-poor development and scaling up of technologies.
- PETRRA, REFPI and SUFER broke new ground by encouraging the involvement of post-graduate students in the subprojects funded by their grants. This approach has huge potential for indirect impact in that the student brings to the subproject the benefits of youthful enthusiasm, an up-to-date theoretical background and an intense desire to produce results (not least because her or his degree depends on this). The student benefits by being forced to leave the ivory tower atmosphere of classroom and laboratory and enter the real world of practical poverty-oriented technology development and dissemination.
- Assessment of the environmental impact of subprojects is lacking in all of the reviews, generally because this are also missing from the projects' internal evaluations. In the case of ASIRP, one subproject was attuned to this aspect of development, but generally speaking they were not so attuned. The PETRRA MTR raised the issue of inadequate concern for environmental impact, noting that while the Technical Committee (TEC) is asked to consider potential positive and negative environmental impacts of proposed subproject activities, it did not have a mechanism for doing so. Nor did any member of the TEC have specialised expertise in environmental assessment or monitoring. Monitoring of environmental impact is weak; the project does not do it directly and subproject monitoring reports consider the topic only in an anecdotal manner and never require periodic measurement of environmental indicators.' Disappointingly, the ensuing PETRRA's OPR4 did not report on whether or not this issue had been addressed.
- The situation was better in the case of REFPI, where the screening process of concept notes and full proposals addressed this issue and those with a clear negative impact were screened out. However the EPR went on to observe that the majority of REFPI's partners 'lack capacity to determine environmental impacts should wide spread dissemination of specific technologies take place'. The last SUFER OPR reached similar conclusions. Only the REFPI report addressed the issue of the project's overall environmental impact, and their rather encouraging assessment was that although the Project had had only limited positive impact on the environment, it had had almost no negative impact.

#### Key Issue 5 Sustainability

This criterion relates to the prospects for effects lasting into the medium or longer terms. Effects are regarded as sustainable if they continue after the funding granted by the intervention has ceased. They are not sustainable if an activity is unable to generate its own resources, or if it is accompanied by negative effects, particularly on the environment. 'Sustainability' in the context of the four projects not only relates to the long term development and scaling up of a technology (usually with partners) but also to the mainstreaming or institutionalising process of the CGS approach within the host organisations (see the Thematic Lesson Paper Organisational Development and Institutional Reform).

### Key lesson for 'better practice'

The fact that all four projects supported R&D activities over and above the CGS element illustrates the argument that promotion of this mechanism can only ever be a part of the development of R&D institutions. If such institutions are to be sustainable, there is a need for additional resources to fund (a) core costs (e.g. salaries) (b) a medium- or long-term research agenda; (c) longer term HRD, particularly in the shape of higher degrees, and (d) research infrastructure.

### Lessons Learnt

- If a technology is seen by members of its target group as relevant to their socio-economic situation, the motivation to maintain it will exist. Availability of post-project funding will largely determine whether the motivation translates into livelihood improvement.
- The best prospects for sustainability arise where the new technology itself generates sufficient funds to both cover cost and yield a profit. Judging from the reviews, linking interventions to the commercial private sector seems the best way of doing this.
- Projects could usefully boost sustainability prospects by playing an 'honest broker' role, bringing together resource-poor producers and potential buyers. This should be done from the outset, so that producers fully understand market requirements in terms of quality, quantity, timing and price. Producer groups have an important role to play here, particularly in guaranteeing the buyer that the quantities produced will constitute an economic load.
- An important role for the subproject in such a situation would be to nurture a mutually-advantageous relationship which both parties therefore have an interest in sustaining. Special care would have to be taken to bring a number of potential buyers, so as to avoid the creation of a monopoly position detrimental to the interests of the poor producer.
- This is another area in which ex-post studies are essential in this case to identify post-hoc which type of intervention boosts sustainability prospects, and which inhibit them.
- It should be clear from the outset whether a CGS is being introduced as a project implementation mechanism aimed at promoting efficiency, partnerships and targeting (all valid reasons) or as an attempt to bring about a sustainable change in the manner in which national resources are channelled to research. In the latter case (of which there are examples in Bangladesh) the institution building element is as important as the CGS

### Key Findings

- There are two issues here. One is the sustainability of the CGS funding mechanism as a means of financing rural development, which is dealt with later (under Way Forward?) The other is the sustainability of the use of technologies that were introduced under the various subprojects. Unfortunately neither aspect received much attention in the project reviews.
- Both common perceptions and the above definition imply that sustainability hinges on availability of funding. But this may not always be the case. Some technological change is costless e.g. discontinuing a costly yet counter-productive traditional practice. However these are likely to be rare cases, and the reviews did not describe any.
- For partnerships to thrive there should be added potential for scale-up. The reviews of SUFER and REFPI, for example, cite several instances of linkages being made between farmers or fishers and private entrepreneurs. e.g. SUFER sales of solar dried fish through an NGO and a private company; REFPI's links to ITDG, workshop owners, scientists and NGOs to develop food processing technology for pineapple and jackfruit; PETRRA's development of the seed network sustained by NGOs and private organisations.
- However, as in the case of impact, there is as yet insufficient information to support a conclusive statement as to whether sustainability is likely to be achieved. Perhaps it is too early to say. The reviews provide even less information on whether, and if so how, subprojects may have played an 'honest broker' role in bringing buyers and sellers together to agree formal or informal contracts.

## WAY FORWARD?

- The four projects have tested the CGS model in different sectors, different points on the research-scaling up spectrum and within different institutional homes, and a wealth of useful information has been generated in the process. The model has much to offer as part of a broader spectrum of support to R&D for poverty alleviation. The projects have also created a pool of human resources that should be remobilised before it begins to erode.
- Over the shorter term, CGS principles may be further explored within the national agricultural research system, but to fund wider interdisciplinary agricultural research involving a wide range of public and private sector partners, consideration should be given to a foundation (e.g. Bangladesh Krishi Projukti Foundation) which has legal authority, financial rules, full autonomy and managed by reputed and skilled professionals.
- The idea mooted within DFID-B of a multi-donor and GoB supported national agricultural R&D fund has much to commend it. Compared with the projects mode it could: (a) invest in subprojects on the grounds of their potential contribution to poverty reduction, rather than being limited by projects' mandates; (b) avoid the problem of limited time horizons distorting the portfolio

towards quick-payoff research, (c) investigate ways of improving the efficiency of funding particularly 'push-pull' mechanisms; (d) undertake ex-post studies of past R&D efforts.

- Pro-poor CGSs should not be devoted exclusively to helping marginal and landless farmers, since these are not actually the poorest groups in rural areas. Landless labourers and female headed households are normally poorer. Because the poorest households are dependent on the market for food, a very effective way of helping them is by measures that lower food prices. The real price of cereals in Bangladesh has been falling, and improving trends in nutritional indicators reflect this. Thus agricultural development can make a huge contribution to urban, as well as rural, poverty reduction, and should be encouraged inter alia through CGS, even if it means working with farmers who are not among the poorest. Also CGSs can cover food processing and marketing issues that increase value of the produce and make it available to a wider public, including the poor who will also profit from better developed markets.
- Markets are also important as a sustainable source of livelihood-enhancement opportunities for poor producers. Multidisciplinary technical and economic research commissioned under a CGS could identify market opportunities, assess the strengths and weaknesses poor producers would face in trying to seize them, and assist them to capitalise on their strengths while overcoming their weaknesses. Two features of such an approach would be important. First, to create a bridge between farmers and traders in order to guarantee a competitive market for the former and an assured source of quality supply for the latter. Second, to ensure that women, whose market access is often limited by cultural considerations, are fully engaged in the process.
- Ways must be found to reduce the complexity of implementation and reduce costs while maintaining quality. Devolution of responsibility from the researchers by enhancing the role of extension agencies and NGOs working at the field level may be possible through higher initial capacity building.
- Improved links and engagement with national service providers, especially extension agencies, are essential to ensure scale-up of successful technologies. Any 'programme' must improve the performance of service agencies.
- Development-focused research, especially targeting poor women and men, has to become officially recognised and endorsed through government policies, mission statements, departmental mandates and annual work plans.
- Reform of institutional 'rules of the game' and management structures are needed to complement progress made by Ministries providing greater operational independence to research institutions, to enable implementation of CGS building on projects like REFPI, SUFER and PETRRA. Initially a blended research programme combining the CGS with direct commissioning is likely to have most chance of success. Results of a RLEP-sponsored Lessons-Learning workshop revealed that 33 out of 45 (73%) non-GoB respondents favoured 75-100% funding allocated competitively, contrasting with 6 out of 8 (75%) GoB respondents preferring 25% funding through CGS.

## FURTHER READING

**Alston, J., Pardey, P. and Roseboom, J. (1998):** Financing Agricultural Research: International Investment Patterns and Policy Perspectives; World Development 26(6)

**ASIRP (2003):** Partnership Initiative Funds: A Synthesis of Findings.

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**Kremer, M. and Zwane, A. (2001):** Encouraging Technical Progress in Tropical Agriculture; background paper for UNDP Human Development Report 2001

**PETRRA (2004):** Project Completion Report.

**RLEP (2003-2004):** EOP reports of ASIRP, REFPI, PETRRA, SUFER and OPRs of PETRRA and SUFER.

**RLEP (2004):** Rapporteurs' Report of Key Findings Forum of PETRRA and SUFER Project Completion Reviews.

More information on these themes and issues can be found in Project Output to Purpose and End of Project Review documents accessible at [www.lcgbangladesh.org/rlep](http://www.lcgbangladesh.org/rlep).