NABARD-SDC RURAL INNOVATION FUND

EXTERNAL EVALUATION

September 2013

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Executive Summary
External Evaluation of the NABARD-SDC Rural Innovation Fund

This is the report of the September 2013 external evaluation of the Rural Innovation Fund (RIF), which is implemented by the National Bank for Agriculture and Rural Development (NABARD) with financing from the Swiss Agency for Development and Cooperation (SDC).

To the end of August 2013, a total of 546 different projects were sanctioned under the RIF, totalling Rs.62 crore. Most of the projects supported have been successful in terms of achieving the outcomes and impacts that were set out in the memorandum of sanction by which each project was approved. However, even though they may be technically sound, not all projects have a sufficient poverty focus. Some have mainly benefitted people of medium income, although generally in rural areas.

There has been huge variation in the number of people benefited by each project and consequently in the value for money that the projects have represented. Remarkably, some projects have reached thousands of people. Others have total beneficiary numbers in single figures. A significant number of projects do achieve some kind of local viability, but that is seldom followed up by a vision of how to make it fully sustainable.

A few projects (maybe 5-10%) have great potential for scalability and replication across large areas. In general, innovations which bring existing technologies to new (poor) people and new (rural) markets have the most potential. Projects which have concentrated on technological change and/or an invention or near-invention have proved more difficult to scale up. In general, innovations have proved more effective and efficient than inventions.

NABARD should seek to build on its learning from RIF by focusing resources on those small number of theme areas where massive potential for scaling up and replication is identified. This would bring maximum benefit to the poor and maximum success to RIF. The report's key recommendations are that:

- NABARD should establish a central unit within RIF which will concentrate on the promotion of upscaling and replication of projects in a limited number of theme areas which have been shown to have great potential. It is considered likely that there may be 5-6 such themes to be promoted; definitely not more than 10. A particular focus of the unit should be on influencing government policy at all levels.
- Only projects with significant upscaling potential (>1000 beneficiaries) should be supported by RIF.

Other recommendations in the report concern:

- The regularity of Steering Committee meetings.
- Success factors in selecting project partners.
- Increasing the sanctioning authority of regional offices.
- The need for stronger outcome-based project monitoring.
- The importance of a reasonable tenure for RIF staff.

List of Abbreviations, Acronyms etc

BIRD	Bankers Institute of Rural Development
CGM	Chief General Manager
Crore	10,000,000 (Rs. 1 crore = approx. Chf 100,000)
CSR	Corporate Social Responsibility
DDM	District Development Manager
GM	General Manager
GoI	Government of India
HO	Head Office (of NABARD)
IIT	Indian Institute of Technology
Lakh	100,000 (Rs.1 lakh = approx. ChF1000)
LFA	Logical Framework Analysis
MTR	Mid-Term Review
NABARD	National Bank for Agriculture and Rural Development
NIF	National Innovation Foundation
OIC	Office-in-Charge (Head of an RO)
NGO	Non-Government Organisation
PARFI	Pan IIT Alumni Reach for India
PMRC	Project Monitoring and Review Committee
PV	Photovoltaic
RIDF	Rural Infrastructure Development Fund
RIF	Rural Innovation Fund (of NABARD)
RO	Regional Office (of NABARD)
RPF	Rural Promotion Fund (of NABARD)
Rs	Indian Rupees
SDC	Swiss Agency for Development and Cooperation
SMS	Short Message Service
ToR	Terms of Reference
UP	Uttar Pradesh
UPNRM	Umbrella Programme for Natural Resources Management

1. INTRODUCTION AND TERMS OF REFERENCE

1.1 This is the report of the external evaluation of the Rural Innovation Fund, which is implemented by the National Bank for Agriculture and Rural Development (NABARD) with financing from the Swiss Agency for Development and Cooperation (SDC).

1.2 The objectives of the evaluation as set out in the terms of reference (ToR) were to evaluate:

a. the overall performance and contribution of RIF in terms of achieving the objectives, especially the outcomes and impact at the programme level
b. to gather the lessons learnt as well as the good practices in the context of the overall RIF.

1.3 Methodology

1.3.1 The evaluation team comprised Mark Havers (Team Leader), P.V. Ramachandran and V.Mohandoss. The evaluation was carried out over a two week period during September 2013. In addition to an initial examination of key documents and meetings with senior personnel at Head Office (HO), the team visited the following Regional Offices (ROs):

- Lucknow, Uttar Pradesh
- Patna, Bihar
- Chennai, Tamil Nadu
- Ahmedabad, Gujarat

1.3.2 At each office, the team:

- Visited a selection of projects which had been chosen by the RO.
- Participated in an interactive meeting-cum-workshop with a range of project partners and NABARD staff, especially District Development Managers (DDMs).
- Held meetings with the relevant Office-in-Charge (OIC) and other senior staff of the RO.
- Reviewed project documentation.

1.3.3 The team worked hard to make maximum use of the time available. The selected projects aimed to give a fair sample, but time constraints for travel inevitably meant that they tended to be located nearer to the RO cities (with correspondingly better infrastructure) than an average project would be. To some extent, the meetings with other project partners compensated for this potential bias.

1.4 Definition of Innovation

1.4.1 The team were asked to make some comments on the question of what constitutes an innovation. In practice, we found it hard to improve on the definition and discussion provided by Wikipedia:

Innovation *is the application of new solutions that meet new requirements, inarticulate needs, or existing market needs. This is accomplished through more effective products, processes, services, technologies, or ideas that are readily available to markets, governments and society. While something novel is often described as an innovation, in economics, management science and other fields of practice and analysis it is generally considered a process that brings together various novel ideas in a way that they have an impact on society.*

Innovation differs from invention in that innovation refers to the use of a better and, as a result, novel idea or method, whereas invention refers more directly to the creation of the idea or method itself. Innovation differs from improvement in that innovation refers to the notion of doing something different rather than doing the same thing better.

1.4.2 Of particular relevance to the RIF is the idea that innovation is about the better use of an existing idea or method, rather than the creation of that idea or method.

2. SHORT HISTORY OF THE RURAL INNOVATION FUND

2.1 Initial Position and Objectives

2.1.1 The RIF became operational in October 2005 with a fund totalling Rs.139.90 crores which came from two earlier NABARD funds also supported by SDC.

2.1.2 The RIF was established with the objective of supporting innovative, risk friendly unconventional experiments in Farm, Non Farm and Microfinance sectors that would have the potential to promote livelihood opportunities and employment in rural areas on a large scale.

2.2 Early Years of Operation

2.2.1 The RIF took some time to start operations with no loans or grants sanctioned in the first two years. Indeed, by the time of the Mid-Term Review (MTR) in 2008, only Rs.17 crore had been sanctioned to 58 projects, with more than half of that money accounted for by a Rs.10 crore investment in a socially-oriented venture capital fund run by Aavishkar Venture Management Services (see Annex IV for a more detailed discussion of this substantial and apparently successful investment).

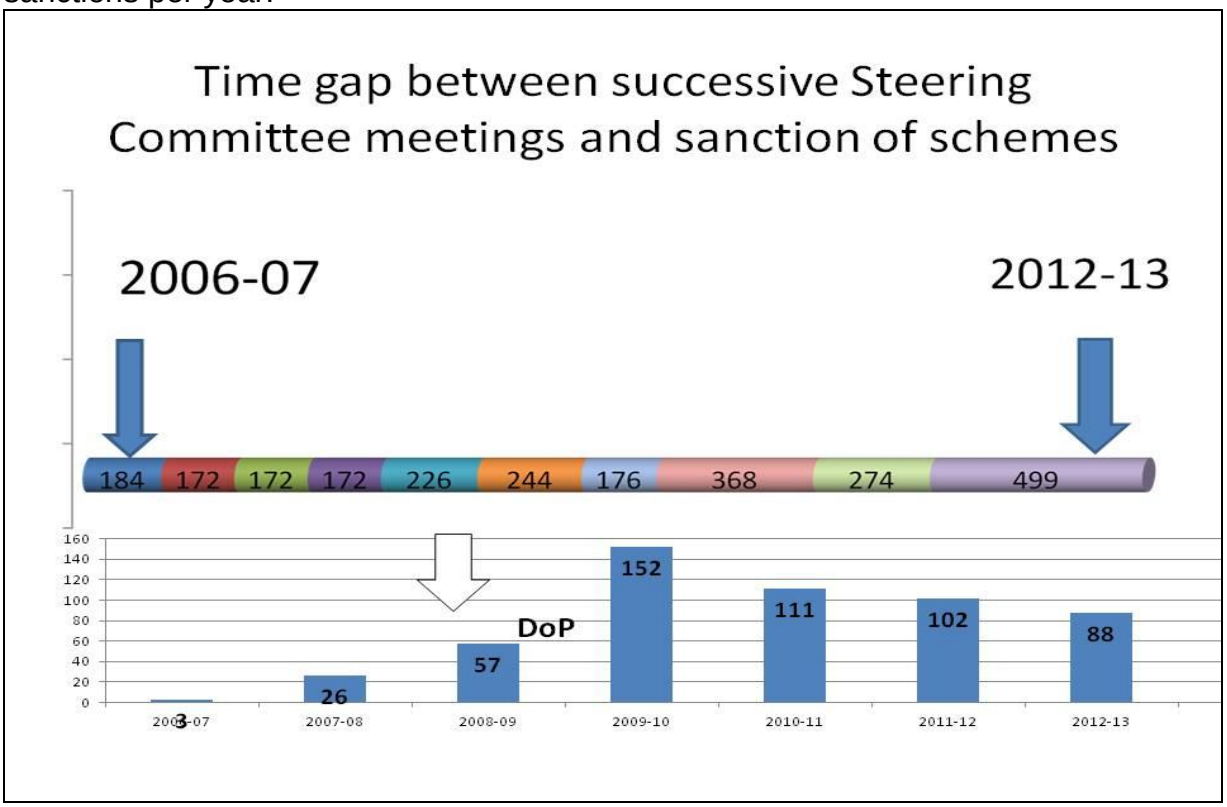
2.2.2 It is worth noting that during this phase, all projects for RIF funding were first scrutinised at the RO level and thereafter at the HO level, before being considered for approval or rejection by an Advisory Committee headed by an Executive Director of NABARD.

2.3 Operation since the MTR

However, after the MTR (and more particularly, after the delegation of sanctioning authority for projects below Rs.10 lakh to the ROs) the rate of project approval and funds disbursement improved significantly. To the end of September 2013, a total of 590 different projects were sanctioned, totalling Rs.66 crore, although the number of new project sanctions per year has in fact subsequently declined since its 2009-10 peak of 155 project sanctions.

2.4 RIF Steering Committee

2.4.1 Overall direction to RIF has been provided by a Steering Committee. It seems that the spurt in sanction of projects till 2009-10 was a result of the regular biannual reviews by the Steering Committee and series of workshops conducted during 2008-10, besides the delegation of power. Workshops have also been conducted during 2011-12 and 2012-13 but the number of projects sanctioned still declined. The following chart shows the increasing time gap between Steering Committee meetings compared to the number of project sanctions per year:



2.4.2 The evaluation team is of the view that had the Steering Committee meetings been conducted regularly as stipulated, the flow of projects might have been larger and the monitoring of project implementation more effective.

Recommendation #1 It is recommended that NABARD should return to holding RIF Steering Committee meetings not less than twice a year.

2.5 Current Position of the Fund

2.5.1 At the time of writing, the RIF has a balance remaining of Rs.51 crore, of which Rs.14 crore has already been committed. This figure has been arrived at as follows (all figures in crore Rs.):

Original corpus	140	
Interest added since inception	42	
TOTAL FUNDS IN	182	
Innovation Disbursements	66	(includes Rs. 14 crore administration costs)
Rural Non-Farm Disbursements	65	(ended 2009)
TOTAL FUNDS OUT	131	
BALANCE REMAINING	51	(182 minus 131)

2.5.2 In addition, Rs.11 crore received from loan repayments has already been credited to NABARD's Rural Promotion Fund (RPF). More repayments from RIF-funded projects during the remaining tenure of the Fund will also accrue to RPF along with funds to be returned by the Aavishkar Fund (estimated by Aavishkar at Rs.20 Crore). As per the memorandum of understanding between NABARD and SDC, RPF can be utilized by NABARD for promotional activities including funding of innovations in future.

2.5.3 Two points can be made here. Firstly, a significant amount of money remains undisbursed, even after the project has run for such a long time. It is suggested that NABARD set a time limit for disbursing the Rs.51 crore balance remaining from the original fund, ideally not later than the end of 2015. Secondly, there appears to be some scope for NABARD to be clearer about the overall financial position of the funds, particularly the amount and timing of funds expected to be coming into the RPF as a result of loan repayments and investment returns from the RIF.

3. ACHIEVEMENTS: BENEFICIARIES/TARGET GROUP

3.1 Key finding: Most RIF projects achieve their planned outputs and the majority are significantly impacting the lives of poor people. However, not all projects have been sufficiently focused on the poor and outcome-based monitoring has not been given sufficient emphasis.

3.2 Impact Assessment

3.2.1 NABARD has not sought to measure the ultimate impact of the RIF projects in a systematic way which would enable the evaluation team to make any rigorously justifiable statement about the achievements of RIF in terms of direct impact on rural poverty, gender equality, the environment etc. However, the team was able to gather substantial anecdotal evidence which suggests that outcomes and impacts have been broadly positive.

3.2.2 The most important source of information available to the evaluation was the project visits which were undertaken. A short structured report of each of these visits is attached at Annex II.

3.2.3 Information gathered during the visits was supplemented by what was learned during the workshops with project partners and DDMs and also by the examination of project documentation in the ROs. Each project is monitored and guided by a local Project Monitoring and Review Committee (PMRC). However, the reports of the PMRCs proved less useful than they should have been because they have not emphasised outcomes and impacts, but rather outputs and expenditure.

3.2.4 Drawing on the various sources of information which were available brings us to the following conclusions:

i. Most projects are successful in terms of achieving the outcomes and impacts that were set out in the memorandum of sanction by which the project was approved.
ii. Even though they may be technically sound, not all projects have a sufficient poverty focus. Some have mainly benefitted people of medium income, although generally in rural areas.
iii. Very few projects have had a focus specifically on women. Women have often been participants and have benefited from projects, though mainly within the existing framework of gender relations at the village level.
iv. There has been huge variation in the number of people benefited by each project and consequently in the value for money that the projects have represented. Remarkably, some projects have reached thousands of people. Others have total beneficiary numbers in single figures.
v. A significant number of projects do achieve some kind of local viability, but that is seldom followed up by a vision of how to make it fully sustainable. See the next chapter for more on this.

3.2.5 A challenge which the RIF has frequently faced is the "handout mentality" to which so much of rural India is prone. Project beneficiaries have quite often expected to be given something for nothing, especially if that something is coming from a government agency or internationally-funded NGO. This problem can be exacerbated if the original funds are known to come from NABARD, which is recognised as a development bank in the public sector despite being a bank. Of late, NABARD has sought to change this perception by introducing loan-based products (with a smaller grant component for capacity-building) e.g. through the Umbrella Programme for Natural Resources Management (UPNRM).

4. ACHIEVEMENTS: PARTNER INSTITUTIONS

4.1 Key finding: Nearly all partners/champions are sincere and motivated but only a few have the three key factors (technology, working with poor people, business acumen) to be really successful. Lack of business acumen is a particular weakness.

4.2 Selection of Partners

4.2.1 The evaluation team had the opportunity to interact with a large number of RIF partners, some at the project locations and others at the workshops held in each RO. NABARD has done a good job of attracting partners from an interesting variety of institutional backgrounds. These partners include:

- NGOs (the major partners)
- Universities
- Private individuals
- Producer societies
- Corporates

- Venture capital fund

4.2.2 In each case (but not always) there has tended to be an individual "champion" for the project from within the partner organisation, someone who is personally strongly committed to the innovation. Interestingly, there is almost no evidence of abuse of RIF by partners. Some have made mistakes and others have failed. This is natural and unavoidable. But the team were not made aware of any dishonest use of funds.

4.3 Partner Success Factors

4.3.1 In looking for factors which were common to successful projects, the team came to the view that the implementing partner needed to have the following:

i. Technology: either a technology that is already technically proven or a high level of technological skill.
ii. Organising: the capacity to work with and organise the rural poor.
iii. Business: the business acumen, skills and vision to be clear how the innovation will work as a scalable business and then to make it happen.

4.3.2 RIF experience has shown that only a small number of partners can deliver in all three areas. The most common weakness is that an NGO (the largest category of partner) will have the necessary technology and will know how to work with the rural poor but will fall some way short of the business requirement. This is generally due to absence of the necessary skills and experience but can also lie in a philosophical resistance to all things of and by the market.

Recommendation #2 RIF's project appraisal framework should include an assessment of how the prospective partner stands up in terms of the three partner success factors. This should not just be a part of the normal scoring system. If all three factors are not successfully addressed, then the project should be rejected. Of course, it is not essential that the partner has the skill themselves. They may choose to bring it in from another organisation.

4.3.3 On rare occasions, it is possible that an individual or NGO may lack business acumen but have a project with the potential to deliver long-run cost-effective solutions to the rural poor through third party replication or handholding. Such a situation would need very careful appraisal but could be considered.

5. ACHIEVEMENTS: NABARD

5.1 Key finding: Although the number of new projects per year is declining, NABARD has achieved a significant increase in the total number of projects supported. Delegation of sanctioning to ROs (below Rs.10 lakh) was an important step. As an organisation, NABARD has made significant progress in embracing innovation but can still go further.

5.2 As can be seen from the previous chapters, NABARD has achieved a significant amount during the life of the RIF. A large number of projects of great variety have been supported and the majority have achieved a level of success.

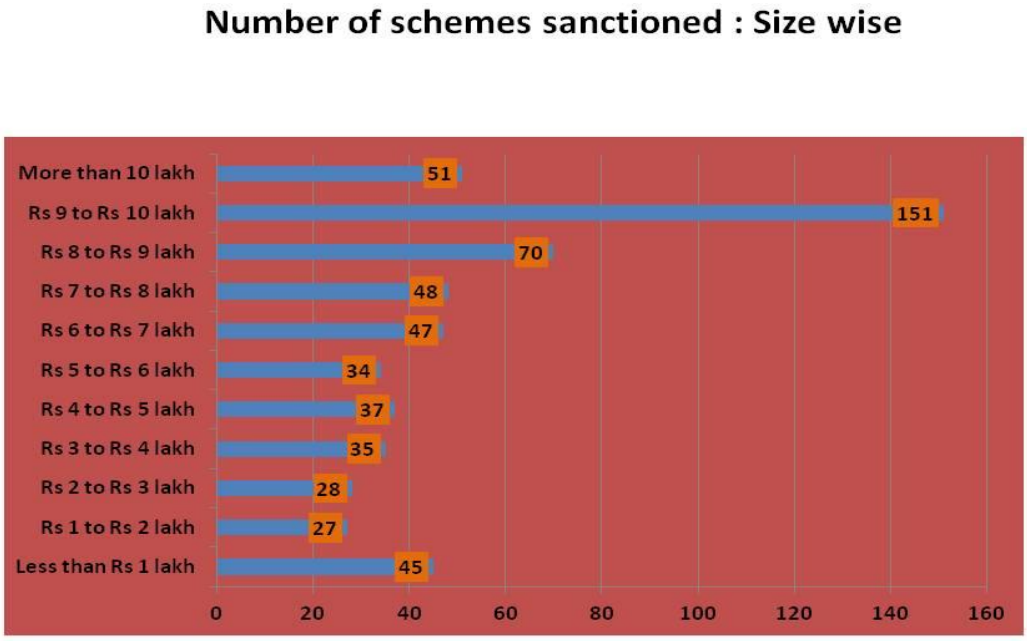
5.3 Implementing RIF has also given NABARD the opportunity to develop its own skills, processes and culture. SDC's approach to funding NABARD in general and RIF in particular has been highly valued by NABARD management. They feel that it has given them the freedom to grow and develop RIF in line with experience, rather than sticking to a rigid pre-determined agenda. As one senior manager put it*, "RIF has been an opportunity for NABARD to learn by doing."* As a result, those changes that have been achieved are now firmly embedded in the organisation.

5.4 Changes in process

5.4.1 For example, the delegation of sanctioning authority to the ROs was a decision made by NABARD shortly before the MTR. It has had a very significant impact in terms of:

- increasing the number of projects supported;
- increasing the motivation and commitment of the DDMs;
- increasing the confidence of the ROs to appraise and supervise their own projects;
- generally making the RIF more innovative.

5.4.2 Inevitably, there have been some unexpected (but with hindsight, perhaps inevitable) outcomes such as the "bunching" of project budgets just below the Rs.10 lakh level which was set as the limit of RO sanctioning authority. Indeed, about 30% of projects have been sanctioned in the Rs.9 to 10 lakh range, as shown in this table:



5.4.3 Discussions with the RIF teams in the ROs confirmed that to quicken the process of sanction, the projects above the Rs.10 lakh limit were modified either to have more promoter's contribution or to cut down non-essentials. However, it is the evaluation team's view that this experience should not be considered a major problem, but an opportunity to review the RO sanction limit. Indeed, the ROs have shown that they can be trusted to manage RIF projects carefully.

Recommendation #3 It is recommended that the level at which the ROs have sanctioning authority of RIF projects be increased from Rs.10 lakh to Rs.20 lakh.

5.5 Logical Framework Analysis

A significant improvement in the appraisal/monitoring process was the introduction of Logical Framework Analysis (LFA) as a project appraisal and monitoring tool. The aim of this was to take RIF beyond it's previous emphasis on outputs (Was the money spent? Were the machines made?) to a new emphasis on outcomes and impacts (What happened as a result? Were lives improved?). The introduction of LFA is no easy task, but NABARD have worked hard to bring it in to the project appraisal process. They now need to go further and make it the cornerstone of their project monitoring as well.

5.6 Monitoring and Lesson Learning

5.6.1 It needs to be said that there is some scope for a general upgrading in RIF's project monitoring and evaluation. Starting with making full use of the LFA but also giving much greater emphasis to regular reporting which is:

- Systematic i.e. guided by a standard procedure across the whole organisation and grounded firmly in LFA;
- Summative i.e. draws together lessons from more than one project; and
- Reflective i.e. looks back on how things were done and thinks about how they could be done better in the future.

5.6.2 RIF would then be much better positioned for internal lesson learning and dissemination.

5.7 Outcome-based Monitoring

5.7.1 A specific weakness has been identified in the way that PMRCs monitor the projects at the local level. At the same time as sanctioning authority was delegated to the ROs, each PMRC was entrusted with the responsibility of ensuring that the LFA is regularly updated and discussed in the meetings and if any corrections in the implementation strategy were warranted, to recommend the modifications. It was also envisaged that the PMRC will forward the LFA along with their recommendations to the RO for review at the project's end.

5.7.2 Unfortunately, a look at the implementation of the projects visited by the evaluation team indicates that monitoring of the projects under RIF is done only with reference to the physical activity and financial achievements as reflected in the minutes of the PMRC. None of the ROs had records of any monitoring of the outcomes using the LFA. It was also observed that PMRC minutes are not even periodically reviewed at the sanctioning authority level and there is no system for recording the planned or achieved project outcomes.

5.7.3 Not only are the efforts put in devising the outcome-based monitoring system not being put to use, but it has deprived NABARD of the opportunity to learn from the results on outcome parameters and take possible steps mid-term so that projects could achieve the outcomes envisaged. It is reasonable to believe that the sub-optimum performance of some projects could have been avoided had the system of periodic review of such parameters been attempted.

Recommendation #4 It is therefore recommended that NABARD should look at the reasons for not following the outcome based monitoring system and take immediate steps to restore it in respect of all ongoing projects as well as new projects. Use of LFA throughout the project lifecycle (not just at the planning and appraisal stage) is an important part of this.

5.7.4 Such an increased emphasis on project monitoring will also have wider benefits, particularly in terms of helping NABARD to indentify at an early stage those few projects with high potential for scaling-up. See Chapter 9 and Recommendation #6.

5.8 Changes in organisation culture

It is the opinion of many senior NABARD staff that the RIF has not only become more innovative itself, but it has helped other parts of the bank to become more innovative, moving from traditional risk-free development banking towards a more flexible and imaginative approach. Specific mention was given to the Business Initiatives Department, the Farm Innovation Fund, UPNRM and to NABARD's activities in microfinance.

5.9 Different Levels of Commitment to RIF in Different ROs

Of course, one result of delegating authority to the ROs is that differences of policy and attitude between offices may develop. For example, the team went to some lengths to explore why some states had much higher rates of RIF project approval than others. After much examination of the numbers, no correlation (positive or negative) could be identified between the size or economic status of a state and the level of its RIF activity. For example, the figures show that Bihar, Andhra Pradesh, Kerala and Tamil Nadu have sanctioned more than 40 projects each while Uttar Pradesh, Uttarakhand, Gujarat, Orissa and Haryana are some of the larger states which have sanctioned less than 20 projects. In the end, it was concluded that the most important factor was the attitude to RIF of RO staff, particularly at the senior level. This is something that NABARD senior management might care to examine more closely if they consider it to be a problem.

5.10 Staff Rotation

5.10.1 A challenge for successful implementation of RIF is a reasonable tenure for the top managers (CGMs and GMs) at the corporate level. During the operation of RIF, while the first CGM continued for three years, the next one held the job for only about 18 months and thereafter there were changes almost every six months. Similarly about GMs - the first GM was there for almost for four years but his successors were in post for periods ranging from just six months to a year.

5.10.2 Another issue may be the level of expertise available within the ROs. The staff manning the RIF cells in the ROs are subject to frequent internal transfers. Taking people from roles where they have developed skills and replacing them with staff who must learn everything afresh inevitably has a negative impact.

5.10.3 The team is highlighting this situation in the context of the MTR's recommendations that RIF Teams should have a reasonable tenure - at HO and RO. An initiative like RIF needs a lot of learning on the job (even by committing mistakes) and such frequent changes work against it. Frequent changes especially at the highest levels also gives a negative signal down the line about the importance being accorded to the implementation of a project.

Recommendation #5 It is recommended that NABARD make renewed efforts to keep RIF staff (at all levels of seniority) in post for a reasonable period of time (i.e. a minimum of three years) so as to enable them to develop and use the necessary skills and expertise.

5.10.4 It is particularly important that this recommendation is accepted, if NABARD also accept Recommendation #3 concerning increased delegation to ROs. It would be risky to increase delegation without taking corresponding steps to keep RO RIF staff in place for an appropriate period of time.

5.11 Overview

Overall however, RIF has had a significant and positive impact on the capacity of NABARD to support innovation right across its activities. After some early misconceptions, nobody within NABARD still thinks of RIF as the bank's charitable arm or indeed as simply the place for projects that merit attention but cannot be funded from other sources. It has become much more than that, it is now the focal point for innovation within the bank.

6. ACHIEVEMENTS: DISSEMINATION AND REPLICATION

6.1 Key finding: A few projects (maybe 5-10%) have great potential for scalability and replication across large areas. Efforts at dissemination need to be significantly strengthened.

6.2 Dissemination and replication are two areas where there is considerable scope for the RIF to make further progress. Since the MTR, NABARD has (perhaps understandably) concentrated its efforts on funding more projects and getting them implemented. As we have already discussed, this has been broadly successful. However, focus now needs to be given to:

- Lessons that have been and are being learned from the innovation projects.
- Replication and upscaling of the projects.

6.3 Dissemination

6.3.1 In terms of dissemination, there are a number of stages which need to be gone through:

i. Harvesting: during which experiences are gathered.
ii. Analysis: going through the experiences gathered in order to draw out lessons and principles.
iii. Documentation: development of reports, manuals, websites, films etc which can be used by other organisations.
iv. Dissemination: proactive sharing of the documentation with other interested organisations.

6.3.2 NABARD is already producing some documentation about RIF. Examples include *"Rural Innovations 2012*" and the *"Rural Innovation Fund – Success Stories"* which is currently in draft form and will shortly be published. These publications provide excellent public relations for NABARD and RIF and can serve to stimulate initial ideas and thinking among other innovators, whether NABARD clients or elsewhere. What they do not do, however, is give

these other people any sense of how to go about these innovations. What are the key success factors and constraints? What resources do you need? How do you identify a suitable location? A detailed operations manual may not be realistic, but it should certainly be possible to develop guides or reports which outline key principles along with some level of practical advice and guidance.

6.3.3 NABARD should also be giving more emphasis to using its RIF experience and knowledge to influence government at national, state and local levels. This would include trying to influence policy as well as helping government to find ways of making financial support available to innovation in general and to the innovations that RIF has helped develop. See paragraph 9.3.6 and Recommendation #6.

6.4 Replication

6.4.1 RIF also faces significant challenges in terms of replication. While there have been a number of recurring themes across the project portfolio (eg. solar photovoltaics, water purification) these have mainly happened because different people have seen the same possibilities in different states at the same time. They have not been part of a systematic attempt by NABARD to replicate and upscale. Indeed, there is a view held by some within NABARD that *"We should demonstrate, but the market should replicate*". Theoretically, there may be some justice in this view, but the current reality is that more proactive steps may be needed, especially with the banks. Chapter 9 proposes a response to this challenge.

6.4.2 Last but not least, it should be said that some replication has taken place by other organisations without any particular promotional input from NABARD. For example, the Government of Bihar has started copying both the semi-permanent bamboo bridge and the floating tiny hydel power plant which RIF had supported in that state, a very positive outcome. On the other hand, the partner agency responsible for the development of the (productivity- and health-improving) stainless steel buffing machine in Tamil Nadu had very mixed feelings about the big city entrepreneurs who had come and looked at her machine and then gone away and copied it themselves.

7. MID-TERM REVIEW: PROGRESS AGAINST ITS RECOMMENDATIONS

7.1 Key finding: Although not all recommendations were followed, the MTR had a positive impact on RIF, serving as a catalyst for real change.

7.2 NABARD has provided a detailed commentary on the actions it took following the MTR and the current status of progress against the MTR's recommendations. This is attached as Annex III.

7.3 In summary, the following has been achieved:

- Significant upscaling of activity in terms of both project numbers and amount disbursed.

- Some very successful projects.
- Change of attitude within NABARD to innovation in projects.
- NABARD itself has become more innovative.
- Increase in NABARD's project appraisal capacity, including use of LFA.

7.4 On the other hand, there continue to be particular weaknesses in respect of:

- Focusing on the selection and promotion of projects which can be scaled-up and/or replicated.
- Project monitoring and using the LFA as a monitoring tool.
- Identifying and supporting action research projects.
- Building relationships with banks and other partners such as the National Innovation Foundation (NIF).

8. ACHIEVEMENTS: OVERVIEW OF SUCCESS FACTORS IN RIF PROJECTS

8.1 Key finding: Innovations which bring existing technologies to new (poor) people and new (rural) markets have the most potential. Projects which have concentrated on technological change and/or an invention (often involving development of a prototype machine) have proved more difficult to scale up and to reach a large number of people.

8.2 The Partner is More Important than the Project

8.2.1 As discussed in Chapter 4, the key success factors for a successful project partner are that it needs to have:

- Technology: either a technology that is already technically proven or a high level of technological skill.
- Organising: the capacity to work with and organise the rural poor.
- Business: the business acumen, skills and vision to be clear how the innovation will work as a scalable business and then to make it happen.

8.2.2 If the partner has that, then RIF is maximising the chances of success. Experience shows that these factors are actually more important than the details of the project activity itself, because an effective partner will be able to adjust the design of the project in the light of experience, whereas a good project cannot change the nature of a weak implementing partner.

8.3 Innovations are Better than Inventions

8.3.1 Nonetheless, drawing from our observations of the various projects, the team feels confident in saying that innovations which bring existing technologies to new (poor) people and new (rural) markets have the most potential. What the partners in these projects are generally saying is something like:

"We have identified a proven technology which is available to middle class urban people. We are going to develop a new delivery system and business model to enable us to make it relevant for poor rural people."

8.3.2 On the other hand, projects which have concentrated on technological change and invention or near-invention (often involving development of a prototype machine) have proved more difficult to scale up and to reach a large number of people. The partners in these projects tend to say something like:

"I am going to invent a new machine which will enable people to do XYZ much better than they have been able to do it before."

8.3.3 Although there are a small number of exceptions, this latter type of project should be accorded low priority.

8.3.4 Going back to the definitions with which we started: innovations are better than inventions.

9. LOOKING TO THE FUTURE

9.1 Key finding: NABARD should seek to build on its learning from RIF by focusing resources on a small number of areas where massive potential for scaling up and replication is identified. This would bring maximum benefit to the poor and maximum success to RIF.

9.2 The Critical Importance of Scaling Up

The most important future challenge for the RIF is to ensure maximum scaling-up and replication of those project areas which have genuinely shown the potential to reach thousands of rural poor people on a financially sustainable basis. Typically, these projects are using an existing technology to deliver a service which is highly valued by rural people and for which they are willing to pay a price which is cost-covering. At the same time, the project partner is doing all it can to keep costs down, particularly by having a carefully designed delivery system.

9.3 The evaluation team believe that the following are examples of these areas:

9.3.1 Skills Training for Rural Youth: Skills training in India is often characterised by questionable relevance, limited access for the rural poor and low levels of success in getting employment after the training. Pan IIT Alumni Reach for India (PARFI) are developing a substantial track record in delivering skills training which guarantees a job at the end of the course and which is funded to a significant extent by the trainees themselves, through a loan which is repaid from their subsequent wages. This innovative project is described in more detail in Annex V and also has a visit report in Annex II.

9.3.2 Solar Photovoltaics: a number of partners in different states are already achieving great success with this. For example, ASSEFA has 2000 clients with solar lanterns in an area that has no mains electricity. The lantern owners pay to have them charged each day at a local charging station, itself a micro-business run by a poor woman.

9.3.3 SMS Messaging: In many areas, low income farmers have almost no access to reliable and timely information concerning such matters as market prices, weather information or input availability. Several partners are addressing this through SMS messaging. For example, Grameen Soochana Kendra currently has 2000 farmers each paying Rs.5 per month for a daily texting service. They believe that they will be financially viable when they increase their subscriber base to 5000.

9.3.4 Water Purification: Healthy You Foundation is one of various partners who are improving the health of poor rural people by selling them purified water at low cost. Working from a small purification plant (funded by RIF) based in a local hospital, they have a team of rickshaw pullers who deliver recyclable 20 litre containers every second day for a charge of Rs.5 per delivery. By giving the customers initial free trials, they have been able to show them the economic and health benefits of clean water (eg. no working days lost through sickness). Over time, people become willing to pay for the service.

9.3.5 These are four examples of interventions which the RIF experience clearly shows to have massive potential for improving the lives of the rural poor on a financially sustainable basis. However, NABARD currently has no focal point for promoting replication and upscaling either within or outside the organisation.

Recommendation #6 It is recommended that NABARD establish a central unit within RIF which will concentrate on the promotion of upscaling and replication of projects in a limited number of theme areas which have been shown to have great potential. It is considered likely that there may be 5-6 such themes to be promoted; definitely not more than 10. The approach of the unit should be facilitative rather than directive and it will require staffing of a high calibre. In order to reflect its importance and great potential, the unit should have a full-time head with a designation not lower than GM.

9.3.6 Key activities of this unit might include:

i. Acting as the centre of expertise and upscaling within RIF.
ii. Promote activities for the champions of relevant projects to learn from each other eg. study visits to each others projects, web fora.
iii. Formal desk research and lesson gathering, with a dual emphasis on both developing “How to…” guides and measuring outcomes and impact.
iv. Taking steps to ensure systematic and reliable project monitoring at all levels.
v. Mentoring, particularly regarding marketing and legal matters.

vi. Influencing and building links with government in order to ensure a conducive policy environment at both state and national level.
vii. Building partnerships with complementary organisations such as the National Innovation Foundation and Aavishkar Venture Management Services.
viii. Linking with commercial banks to encourage lending to business propositions that have been tested and proven by RIF.
ix. Linking with corporates, particularly where they may be able to promote rapid upscaling through effective marketing.
x. Identifying geographical areas where these innovations should have potential and seeking out suitable partners there.

9.3.7 It is by establishing a unit such as this, that NABARD will make the biggest difference to the lives of the rural poor while also reversing the recent slowdown in sanctioning of RIF projects. NABARD should certainly not be concerned if this themed approach results in geographical concentration of RIF projects, with some states having many RIF projects and some hardly any. This is a natural outcome which need not cause concern.

9.4 Only Support Projects with Significant Potential for Scaling Up

The flip side of this proposal is that NABARD may wish to reduce the amount of support it makes available to all the other innovations which do not come under the identified themes. In any case, only high potential projects should be considered.

Recommendation #7 It is recommended that from now on, only projects with significant upscaling potential (>1000 beneficiaries) should be supported by RIF.

9.5 Footnote: Working with the Corporate Sector

9.5.1 One recent development which is relevant to NABARD should be mentioned. A recent change in company law in India requires all large corporates to give 2% of their profit to Corporate Social Responsibility (CSR) activities. One partner estimated that this will make an additional ChF3 billion available to the sector. Thus far, the corporates are spending this money in a rather sporadic and unsystematic manner.

9.5.2 There is an opportunity for NABARD to secure additional funding for its RIF work by using its credibility in the market to in some way act as an intermediary between those corporates (especially commercial banks) who do not have their own charitable trust and the many reliable partners with whom NABARD now has good linkages.

ANNEX I - TERMS OF REFERENCE

External Evaluation of the NABARD-SDC Rural Innovation Fund

Background and Overview

RIF (Rural Innovation Fund) was created through the merger of the two erstwhile SDC financed funds viz. the NABARD Rural Promotion Corpus Fund (RPCF) and Credit and Financial Services Fund (CFSF). The RIF is covered by a memorandum of understanding entered into between SDC and NABARD (National Bank for Agriculture and Rural Development). The focus of RIF is on rural poor and the Fund originally had three components a. Funding of rural innovations and RIF theme based proposals b. Ongoing promotional activities of NABARD funded under the former Funds of RPCF and CFSF and c. Follow-up, documentation and dissemination of best practices/ lessons learnt. However, currently the focus is almost exclusively on (a) above, especially in supporting innovations with scaling up potential in farm, non-farm and micro finance sector in rural areas, with the objective of promoting livelihood opportunities and creation and facilitating access to financial and business promotion services for the poor. The key guiding principles for the operation of RIF stipulate that the activities supported should be innovative, experimental and demonstrative in nature leading to replicability and commercial viability. The activities funded could involve development of new products, processes, prototypes, technology, patenting and extension support and appropriate action research and studies contributing to better understanding of issues of rural development.

The Fund has been operational since October, 2005. While the process of evolving a system of scouting and evaluation of proposals (inter alia, including designing of the application format and evaluation matrix for appraisal of projects; sensitization and capacity building workshops on innovations, State level workshops for NGOs, research organisations etc; workshops on evaluation and management of innovations and systems and procedures for funding innovations; model scrutiny formats for speedy preprocessing of proposals; evolving incentive mechanisms for NABARD staff for promotion of innovations etc.) consumed more than a year and actual flow of funds for selected projects under RIF indeed started only in early 2007. Initially it was envisaged that the fund will have a life of 5 years, extendable by two more years.

A Steering Committee led by Chairman, NABARD and in which SDC is represented (two members), is vested with the responsibility of providing strategic guidance and overall steering of RIF, with focus on effectiveness and efficiency issues. Among others, the Steering Committee decides on overall annual RIF budget and approves yearly plan of operations. The Committee normally meets twice a year. The operational responsibility for implementation of RIF rests solely with NABARD. This includes sourcing, appraisal and sanction of individual project proposals in accordance with the overall key norms and criteria laid down by the Steering Committee. The head office of NABARD has delegated several key responsibilities associated with the

operationalisation of the RIF to their Regional Offices located in different States.

Mid Term Review

The RIF underwent a mid-term external review during the year 2008, to ascertain performance of the Fund so far and to suggest modifications to achieve the objectives envisaged more effectively and efficiently. The objective of the mid-term review (MTR) was to evaluate the performance largely under component 1, which involved the assessment of effectiveness of the systems and procedures followed by NABARD for searching, selecting, funding and monitoring innovative projects and to suggest ways and means by which RIF could attract a larger number of quality proposals across the country, so that the funded initiatives could make a measurable and scalable impact on the larger community. The report of the mid-term review was submitted in January, 2009.

Major findings of the mid-term review are as follows:

a. The proposals received under RIF should be subject to realistic appraisal.
b. Commercialisation and innovation should be viewed as complementary to each other.
c. Potentially viable action research projects which have impact on livelihoods of the poor should be promoted in different zones.
d. The focus should be on selection and promotion of projects which could be upscaled and replicated and eventually find funders and market as well as policy attention.
e. NABARD should outsource much of project identification work to specialized institutions for greater impact creation, while NABARD itself should play a more strategic and steering role and get involved more in documentation of products and processes, policy advocacy etc.
f. Result based monitoring systems and review processes should be promoted.
g. Ways and means of providing the missing marketing arrangements should be explored, in collaboration with implementation agencies.
h. Collaboration should be sought with commercial banks and cooperatives to meet the required credit needs.
i. A registry of innovations should be maintained.
j. NABARD should network with relevant CSIR and ICAR institutions, state agricultural universities, Indian Institutes of Technologies, NGOs etc. not only in identifying the innovation, but also in consortium funding.
k. A dialogue should be reopened with National Innovation Fund to explore possibility of sharing tasks.
l. NABARD officers should be trained appropriately in promoting RIF programme.
m. RIF cell in each Regional Office should be manned by a team of trained, committed and motivated personnel.
n. NABARD should build the capacity of District Development Managers, together with right orientation so that they could play a proactive role in RIF implementation.

o. RIF project may be extended by two more years so that mid course corrections could be applied effectively.

Status of RIF as of end of 2012

The last meeting of the Steering Committee was held in August, 2012. VISKR represented SDC at the meeting. One of the major innovations supported during the year 2011-12 was the constitution of NABARD National awards to acknowledge and honor the rural innovators. There were 1600 applications from individuals and institutions competing for the award at the national level. The leading national newspaper Times of India Group and globally acknowledged validators Ernst and Young were associated with this process.

As per information available, the total number of projects sanctioned until the end of March, 2012 stood at 481, which also represents an addition of 106 projects during the year 2011-12. This translates into a total financial commitment of Rs. 57 crores. In terms of actual releases made, this amounts to Rs. 43 crores. The administrative expenditure during the last financial year was at a modest Rs. 75 lakhs. The Steering Committee approved fresh commitments to the tune of Rs. 25 crores during the year 2012-13.

Based on the recommendations of the Steering Committee and with the concurrence of SDC head office, the duration of the operation of the Rural Innovation Fund stands extended up to 2014. SDC has expressed its desire to dissociate from activities of the Fund earlier than its conclusion (viz Sept 2013) owing to the transformation of the Swiss Cooperation activities in India from classical development cooperation into Global Cooperation on Climate Change. This has been agreed to by all concerned. The Steering Committee also endorsed the proposal for an external evaluation of RIF in the first quarter of 2013.

Overall Objective

The objective of the exercise is to evaluate

c. the overall performance and contribution of RIF in terms of achieving the objectives, especially the outcomes and impact at the programme level
d. to gather the lessons learnt as well as the good practices in the context of the overall RIF.

Mandate of assessment

a. Take stock of the overall achievements (accountability aspects) in terms of outreach, viability and sustainability of changes and outcomes/impact, especially at level of target groups and beneficiary institutions..
b. Is RIF is now close to achieving the overall objectives envisaged, especially when the results so far are viewed at impact and outcome level?
c. The assessment/ evaluation should be based on the set of evaluation criteria prescribed by OECD viz. results, relevance, effectiveness and sustainability
d. The mid term review in 2009 came up with several useful recommendations for effective and efficient implementation of the RIF programme. Have these been implemented effectively and with what results?
e. What lessons and good practices have been harvested, analysed, documented and disseminated and with what results (outcomes). Depending upon the findings, the review may define the agenda/ pathway for knowledge management work in future for RIF/NABARD.

It is crucial that the RIF team of NABARD benefits from the review, in terms of learnings and motivation (learning aspects). Impact could be assessed by covering a few randomly pre-selected cases (institutions or firms or households).

Methodology / Evaluation Process

While the detailed methodology will be adopted by the external evaluation team, the following first suggestions are made. Given the large size of the programme portfolio and the diversity and size of the institutional landscape in which RIF/NABARD has attempted to initiate scalable and viable changes, systematic preparatory work before the start of the mission, in the form of a Desk Portfolio Review, will be an important requirement. It is envisaged that all the preparatory actions at the level of the RIF team, NABARD will have to be concluded before the actual start of work of the full fledged team. It is expected that the Team Leader to be identified in advance will also make early communication/ contact with RIF team and already start working with the latter (RIF team) on various key aspects of the evaluation processes, including the short-listing/ prioritization of the projects to be visited/ looked at in-depth.

a. Introduction of the team to the key organizations concerned and RIF.
b. Introduction to the terms of Reference.
c. NABARD identifies facilitators/ contact points who support the evaluation team.
d. The team decides on the roles and responsibilities of its members.
e. All necessary documentation on RIF is made available to the team by NABARD for detailed study and analysis of the portfolio and that all the systems and procedures in place.
f. Briefing of the Evaluation Team at NABARD with participation of SDC representative.
g. The team members agree on key indicators, questions, hypotheses etc.
h. Visit to selected projects and interaction with the stakeholders concerned (innovators, science and technology institutions, other organisations implementing innovation support etc.).
i. Visit to selected regional offices of NABARD and interactions with field officers.
j. Debriefing at NABARD. Presenting draft findings to the members of the Steering Committee for their feedback.
k. Finalisation and submission of the report
l. The main part of the report should NOT exceed 20 pages.

ANNEX II – PROJECT VISIT REPORTS

A. UTTAR PRADESH

- Lac cultivation, processing and value addition (Bioved)
- Khoya making (Mahila Jagriti Samiti)
- Safe potable drinking water (Healthy You Foundation)
- Low cost sanitary napkins (Development Support Group)

B. BIHAR

- Production and marketing support to farmers (Farms n Farmers)
- Cauliflower seed village (Annadata Farmers Club)
- Quail farming (Prem Youth Foundation)
- Irrigation through pynes and ahars (Lok Swarajya Sangh)

C. TAMIL NADU/PUDUCHERRY

- Ecosan toilets (Humana People to People)
- Rope pumps and drip irrigation (Humana People to People)
- Dairy farming with indigenous microorganism (Eko Venture Trust)
- Mobile information for fisherfolk (MS Swaminathan Research Foundation)
- Vocational training: loan-based model (PANIIT Alumni Reach for India)

D. GUJARAT

- Slub yarn production innovation (Khadi Gramodyog Prayog Samiti)
- High efficiency solar cooker (Khadi Gramodyog Prayog Samiti)
- Laminar air flow system for dairy processing (Vidya Dairy, Anand Agricultural Univ)

A. UTTAR PRADESH (UP)

Name of the Project	Promotion of lac cultivation, processing and value addition through lac based handicrafts and gift items
Name of the Champion	Bioved Institute of Agriculture and Technology, Allahabad
Project Location (village/city/state)	Sitapur, Uttar Pradesh
Total Cost of Project including champion's own contributions (Rs.lakh)	
Year of sanction and duration	2012-13
Funding from RIF	Grant: Rs. 9.45 lakh Loan: Nil

Short Description of the Project (max. 50 words)

Cultivation of host trees – mostly in public land – introduction of the lac producing insect larvae on to the tree stems, harvesting of the lac, processing and production of handicrafts and gift items using the lac and marketing the same through exhibitions, urban retail outlets, etc. are done by members of SHGs – men for cultivation and harvesting of lac and women for producing the handicraft and gift items and marketing (with the help of the champion)

In what way and at what level has the project been successful in terms of financial viability, upscaling and replication? (tick as relevant)

- X Progress towards financial viability
- □ Financial viability at local level
- □ NABARD replication within state
- □ NABARD replication out of state
- □ Commercial replication

Comments: The project is currently on the take off stage and the cultivation of the host trees has commenced only recently. At present the parasitic insects are grown on existing trees (8 men are involved in this process) and the harvested lac is processed at another similar unit promoted by the same champion at Allahabad with RIF support. 7 women members have been trained in making the products with processed lac and a few more are in the process of acquiring the skills from the trained women. The women are paid @ Rs 10 per piece and they earn about Rs 60-70 per day (3-4 hours daily). The estimated earnings from lac harvesting is about Rs 200 per tree when fully grown.

To what extent does the project reach genuinely poor people in large numbers?

The income from the activity to the women members of SHGs can at best be a supplementary source of income due to limitations of market for the product.

Similarly large scale upscaling of the project does not seem to be possible in the near future.

Other Project Strengths

The women in the rural areas are quite good in artistry and can be expected to master the art of making handicrafts items easily and with the help of the champion can reach out to the markets. With sustained efforts in design development and diversification of products combined with investments in market development, more and more women can be expected to supplement their income and insure themselves against falling income from agriculture related vocations.

Other Project Weaknesses

Lac based products are already in the market – though this activity is new to this area – and there exists experienced rural artisans engaged in this activity elsewhere in the country. Sustainability of the activity will, therefore, be based heavily on the artistry of the producers and the capacity to explore more and markets through contemporary designs and product diversity. Both calls for larger investments and efforts.

What lessons could NABARD learn from this project?

While the introduction of an existing activity to the newer areas is rather simpler to achieve, its future sustainability depends on the continued growth of market for such products and the ability of the local artisans to constantly upgrade their skills. Any upscaling strategy for such products will need to focus on design and market development.

Name of Project:
Mechanized form of making khoya (a milk product widely used in sweet-making) in a cluster of 4 villages of Sataon block of Raebareli district with members of Farmers Club as active partners. (Uttar Pradesh)

Name of Partner Org and Champion:

Mahilha Jagriti Samiti, an NGO located at Lankapuri, Indiranagar, Raebareli, Uttar Pradesh. The Champion is Shri Vijay Trivedi, District Coordinator of Mahila Jagriti Samiti

Project Location (village/city/state):

Four villages of the Block Sataon, Rae Bareli District of Uttar Pradesh.

Year of Sanction and Duration:

2009-10 & one year

Total Cost of Project including other contributions(Rs.lakh): 8.58 lakh

Loan from NABARD (Rs.lakh): Nil Grant from NABARD (Rs.lakh): 6.48 lakh

Short Description of the Project

The objective of the project is to prepare khoya through use of boilers instead of traditional way of making the same with chulhas. The total cost of the project (for a time period of 15 months) is Rs.8.58 lakh, of which the promoters' contribution is 25%. The boiler and the accessories have been installed and in working condition. The plant can process 125 litres of milk in a single cycle of 4 hours resulting in max output of 75 kg of khoya in a day of 8 hours. Minimum 100 farmers would provide milk to run the plant two times in a day on regular basis.

In what way and at what level has the project been successful in terms of financial viability, upscaling and replication?

Progress towards financial viability	√	
Financial viability at local level	√	
NABARD replication within state		
NABARD replication out of state		
Commercial replication		

Comments:

As on date the unit is processing 100 litres of milk per day. The unit charges

Rs 3 as service charges per litre of milk. At full capacity utilisation, the average cost including overheads would work out to Rs 2.20 per litre leaving a surplus which ensures viability for the activity.

To what extent does the project reach genuinely poor people in large numbers?

The project at full capacity can serve the processing requirements of 50 dairy households majority of whom belong to poor strata of the society. Besides the women in these households have been spared of the drudgery of working late nights for about 4-5 hours to make khoya using traditional technology , besides exposure to smoke which has created a positive impact on health of rural women

Other Project Strengths

- Productivity of khoya has increased; the steam boiler can process 125 liters of milk in 4 man hours to produce 35 kg of khoya as compared to 21 women hours under the traditional method.
- The quality of khoya has improved as there is no over burning and the product is uniform of quality.
- Agro waste is used for running the boiler replacing wood under the traditional process resulting in improvement in the environment

Other Project Weaknesses

- No observed weakness in the project

What lessons could NABARD learn from this project?

- The innovation in this project is usage of simple boiler technology to preparation of khoya which besides delivering the multiple advantages listed above, is eminently viable activity and can be commercialised. This can be taken up for replication at different locations in the khoya producing zones of the state and elsewhere. A loan cam grant model can be considered for this activity. After successful replication of some units, it can be converted into a bankable proposal, for which model schemes may be prepared by NABARD.

Name of Project:

Access to safe potable drinking water at Shukul Bazar Block in Chatrapathi Shivaji Maharaj district of UP

Name of Partner Org and Champion:

Healthy You Foundation, an NGO operating with its HQ at New Delhi; Shri Bejon Misra, MBA, the Founder Trustee, Health You Foundation is the champion.

Project Location (village/city/state):

Pureshukaan Village of the Block Shukul Bazaar in Chhatrapati Shahuji Maharaj District of Uttar Pradesh

Year of Sanction and Duration:

2012-13 & one year

Total Cost of Project including other contributions(Rs.lakh): 39.48 lakh

Loan from NABARD (Rs.lakh): Nil Grant from NABARD (Rs.lakh): 9.95

Short Description of the Project

The objective of the project is to supply safe potable drinking water to rural households at low cost with special focus on rural poor and to create awareness for usage of the same. The installation of water purifying System with a capacity to treat 2000 LPH of raw water has been completed. Currently the NGO is working with 50 User Groups and supplying water under the brand name “Piyo pilao” to more than 500 families in Shukul Bazaar; the aim is to cover 2000 families by the end of the project period. The water is distributed plastic cans of 20 litres each mounted on rickshaws.

In what way and at what level has the project been successful in terms of financial viability, upscaling and replication?

Progress towards financial viability	√	
Financial viability at local level		
NABARD replication within state		Feasible
NABARD replication out of state		Feasible
Commercial replication		Feasible

Comments:

The total capital cost is estimated to be Rs 10 lakh for a 2000 litre per hour plant established by the champion. Taking into account the operational costs, overhead costs, depreciation and interest and distribution cost (Rs 2 per 20 litre can), the break even price of Rs 7.67 per jar. Around 40% of the poorest of the families are supplied water free of cost while for the rest are charged

between Rs 5 to Rs 20 (including distribution cost) per can of 20 litre depending upon the economic status of the consuming household; the mean value may work out Rs 5-6 only. Thus there is a shortfall to meet the norms of viability. However by creating more awareness among the rural people the NGO can gradually increase the price thereby leading to viability. The project is commercially replicable if grant assistance is available for awareness creation and viability gap funding in the initial years.

To what extent does the project reach genuinely poor people in large numbers?

The project will eventually cater to the safe water requirements of 2000 households i.e. about 10000 rural populations. As already indicated about 40% of the sales cater to the rural poor at no cost. Therefore the project has adequately reached the rural poor.

Other Project Strengths

- Relatively simple UV technology with carbon and sand filtering system with no wastage of water vis-a-vis units using RO technique.
- Project run by a Champion who has more than 27 years in the consumer advocacy as a volunteer in the Consumer movement in India
- Project has created a positive impact on health in the area.
- The project has facilitated and created a mindset change among the villagers in rural Uttar Pradesh on the usefulness of access to safe drinking water and establish a pay and use model which can be replicated across the country.
- As the treated water is supplied in jars, transmission losses are less and need for maintenance of piped distribution system is obviated.
- The project has also enabled entrepreneurship growth amongst the villagers to be part of a service delivery system for purified drinking water.
- Women folk also are spared of the drudgery of fetching potable water from long distances

Other Project Weaknesses

No observed weakness in the project.

What lessons could NABARD learn from this project?

This is a low cost experiment to supply safe drinking water (if not all requirements) of rural households. Government of India under NRDWP, has mandated to supply drinking water to at least 55 % of of the rural population with piped water supply by 2017 for which a cost of Rs 3500 per capita has been provided in the NRWDP budget. Such low cost innovations have to be

supported through viability gap funding, promotional efforts and awareness campaigns. NABARD may like to work closely with the State and Central Governments for part funding such experiments of NGOs / community based organisations.

Name of the Project	Setting up of women SHG linked production and marketing of low cost sanitary napkins
Name of the Champion	Development Support Group India (P) Ltd.
Project Location (village/city/state)	Chinhat Block of Lucknow district (Uttar Pradesh)
Total Cost of Project including champion's own contributions (Rs.lakh)	
Year of sanction and duration	
Funding from RIF	Grant: Rs. 9.90 lakh Loan: Nil

Short Description of the Project (max. 50 words)

Production of low cost sanitary napkins by members of women self help group (10 numbers at present in single shift) and propagation and marketing of the same in nearby villages through retail outlets (24 numbers) by SHGs of women in these villages.

In what way and at what level has the project been successful in terms of financial viability, upscaling and replication? (tick as relevant)

- X Progress towards financial viability
- □ Financial viability at local level
- □ NABARD replication within state
- □ NABARD replication out of state
- □ Commercial replication

Comments: The viability of the product depends on expansion of scale of production (to achieve the economies of scale) and the demand (the niche market is rural women who are new to the product). Currently the cost of production excluding the financial costs, overheads and marketing costs (which are borne by the champion) works out to Rs 15 per pack of 6 napkins and the SHG outlets engaged in marketing receives a margin of Rs 3 per pack. The earning per SHG member engaged in production is below Rs 70 per day and the income from sale per SHG outlet is also not significant with existing scale of production/ marketing. Competitive products are available for about Rs 22 per pack at the low end.

To what extent does the project reach genuinely poor people in large numbers?

The existing players in the market cater to the urban markets where a ready market exists for the product (at around 20% higher price) while the rural market is yet to be developed. The product being one of the key component of hygienic living for the poor women, upscaling the production and deeper penetration to the rural market are highly desirable and SHGs of women are the best media through which it can be achieved.

Other Project Strengths

The concept of usage of sanitary napkins by rural women is an important component of the total sanitation programme of the Government (central and state governments) and hence the cost of market development for the product could be subsidised by the Government (e.g. subsidising the cost of napkins for the end users, subsidising the distribution costs, etc.). It provides employment and income generation opportunities for members of SHGs in production as well as marketing of the produce while ensuring better hygiene for themselves and their peers.

Other Project Weaknesses

The product being a low margin-high volume commodity, the market competition could be quite stiff once the rural market is created for the product and the success of the venture will depend heavily on more efficient production and marketing including introduction of new technologies and market strategies. The earnings at current level of production and marketing are far too unattractive. This is going to be a very great challenge for the SHGs.

What lessons could NABARD learn from this project?

While there exists vast potential for expansion of this activity geographically (a new product for large section of the population), it is essential to identify champions who have the vision to face up to the future challenges by achieving economies of scales and sustain a worthwhile market share. Organising Producers' Organisations for upscaling the production and marketing activities, linking the commercial activities of these units to the CSR units of corporates are among the options which could be explored.

B. BIHAR

Name of the Project	Production and Marketing Support to Farmers
Name of the Champion	Farms n Farmers (FnF) Foundation, Vaishali
Project Location (village/city/state)	Vaishali and Laljganj Blocks of Vaishali District, Bihar
Total Cost of Project including champion's own contributions	Rs 9.50 lakh
Year of sanction and duration	February 2012 – 2 Years
Funding from RIF	Grant: Rs. 2.50 lakh Loan: 7.00 lakh @ 9%p.a. interest

Short Description of the Project (max. 50 words)

The project aims at maximizing returns to the farmers through identification of crops with high demand, dissemination of knowledge about technology and best farm management practices to the farmers, supply of quality inputs and collective marketing. Farmers will be organized into Farmers' Clubs which will eventually be federated into Producer Groups who will carry on the activities initiated by the Champion.

In what way and at what level has the project been successful in terms of financial viability, upscaling and replication? (tick as relevant)

- X Progress towards financial viability
- □ Financial viability at local level
- □ NABARD replication within state
- □ NABARD replication out of state
- □ Commercial replication

Comments: During the first year of the project, procurement and marketing operations for Wheat (10 farmers) and Litchi (20 farmers) were undertaken. While the value addition was only 6% for wheat farmers (the operation was discontinued due to low value addition), it ranged from 13-18% for Litchi farmers. Farmers were also introduced to SRI (Paddy) cultivation practices (30 farmers) and improved variety of paddy seed distributed to the farmers. SMS services extended to farmers for farm and market advisory services and extension training on other crops like Onion cultivation were organised. The project is now extended to 5 districts of Bihar covering about 5000 farmers.

To what extent does the project reach genuinely poor people in large numbers?

The reach of the project in the first year though limited, has the potential to improve the productivity and income of the farmers through more profitable cropping pattern, better farming techniques, and dissemination of market information apart from collective procurement of inputs and direct marketing

through producer groups. It is for the first time in this region that end-to-end services are being offered to the farmers of various crops under a single umbrella.

Other Project Strengths

The greatest advantage of the project is the profile of the champions – highly educated with sound technical background with strong commitment to work for the poor farmers and their vision of total management of farming through collective action. The activities of the champion ranges from farm extension (including capacity building of farmers) to input supply and from post-harvest management to marketing and finance.

Other Project Weaknesses

While the project is conceptually strong, the implementation strategies lack business orientation and the lack of a perspective plan for business expansion is quite apparent. The scale of operation needs to be scaled up to cover a large number of farmers which in turn calls for strategic management (market expansion, organisational growth and geographical spread of activities) and resources planning (3 Ms – men, materials and money). Already the loan extended under RIF has become due for repayment and a separate loan under the UPNRM project of NABARD has been sanctioned for the project. The champions also received an award funding of Rs 30 lakh through an innovative project competition organised by ISB, Hyderabad. While these funding have helped the avoid a financial crisis for continuance of the project, the strategic planning for business development could hinder the expansion plans of the champion. The main activity undertaken – Litchi marketing – is concentrated on a single market (Bengaluru) while intervention in wheat marketing has been discontinued. No initiatives have been taken for building strong Producer Groups for micro management of the project thereby helping the champions to concentrate on business expansion plans.

What lessons could NABARD learn from this project?

While technological soundness and commitment of the champions are vital for the success of innovation, it is equally important to look for a sound business plan for the project to ensure that it is sustained and scaled up beyond the project intervention period.

Name of the Project	Seed Village – Development of Chakwara and Lodipur villages of Vaishali District as "Seed Villages" for cauliflower cultivation
Name of the Champion	Mr. Sanjeev Kumar, Annadata Krishak Club, Chakwara Village, Vaishali District
Project Location (village/city/state)	Chakwara and Lodipur Villages – Vaishali District-Bihar
Total Cost of Project including champion's own contributions (Rs.lakh)	Rs 8.425 lakh
Year of sanction and duration	2011-12 - 3 Years
Funding from RIF	Grant: Rs. 8.425 lakh Loan: Nil

Short Description of the Project (max. 50 words)

The farmers in Chakwara Village are producing cauliflower seeds in the traditional way. The project aims at improving the quality of seeds produced using quality foundation seeds and modern seed replication methods like netting of the plots and through scientific management of the seed farming and to develop Chakwara and Lodipur Villages as quality seed producers of cauliflower.

In what way and at what level has the project been successful in terms of financial viability, upscaling and replication? (tick as relevant)

- ☐ Progress towards financial viability
- X Financial viability at local level
- ☐ NABARD replication within state
- ☐ NABARD replication out of state
- ☐ Commercial replication

Comments: The project has been under implementation for the last 18 months. Quality seeds procured from IARI/ National Seeds Corporation, etc. have been multiplied first in demonstration plots (2 during year-1 and one more in Year -2) and bulk of the produce from these plots distributed among the seed growers in the village while simultaneously providing them training them (25 farmers) in scientific management of seed production. The improved varieties of seeds produced by farmers in the village are marketed under the common brand name of Annadata Seeds fetching almost double the price for the same.

To what extent does the project reach genuinely poor people in large numbers?

Almost the entire farming community in the village are cauliflower seed growers and a large number of them small farmers. A number of farmers are also engaged in seed trading activity as the locally produced seeds have

wider acceptability. The income from their seed production and marketing are showing substantial increase and the project is likely to realise its objective of doubling of income of the farmers in the near future through quality improvement. Large scale scaling up of the project is, however, doubtful in view of the market size limitations.

Other Project Strengths

The entire project is implemented through the Farmers' Clubs in the villages and the champion is a progressive farmer who has won many awards for farm innovation and productivity. The farmers are traditionally engaged in cauliflower seeds production and hence most suited to take up quality improvement of seeds. All the farmers in Chakwara are members of the Farmers' Club.

Other Project Weaknesses

Increasing competition for supply of quality seeds from organised players is a challenge and the Producers' Group will need to improve productivity and reduce cost of production and marketing to sustain growth. Higher investments in installation of Solar Pumpsets and Drip Irrigation can help bringing down the cost of irrigation (the entire village depend heavily on diesel pumpsets and surface irrigation). The Group will also need to reach out to larger markets within and outside the State to maintain the growth potential.

What lessons could NABARD learn from this project?

The Farmers' Clubs and Producer Groups are increasingly becoming good entrepreneurs with good leadership emanating from amongst them. NABARD could invest in promoting such initiatives across the country. Capacity building of the local leadership to take up entrepreneurial responsibilities can add value to many rural innovations.

Name of Project:
Livelihood intervention through quail farming in three blocks of Vaishali district, Bihar

Name of Partner Org and Champion:

Prem Youth Foundation, Vaishali; the Champion : Sri Rajdev Rai, Secretary, Prem Youth Foundation

Project Location (village/city/state):

Goroul, Rajapakar and Mahua Blocks of Vaisahli District.

Year of Sanction and Duration:

2011-12 & two years

Total Cost of Project including other contributions(Rs.lakh): 9.80 lakh

Loan from NABARD (Rs.lakh): Nil Grant from NABARD (Rs.lakh): 9.80

Short Description of the Project

The objective of the project is to introduce quail farming , a new activity in the district, to small farmers to supplement their income with low investments. The project activities included training of 100 farmers on quail farming, supply of Day Old Chicks (DoCs) to them to establish quail farming units, besides market survey, group formation and documentation. The project has been completed ahead of time. 124 have been trained and were guided in establishing the units. 24 JLGs have been formed to access credit.

In what way and at what level has the project been successful in terms of financial viability, upscaling and replication?

Progress towards financial viability	√
Financial viability at local level	
NABARD replication within state	
NABARD replication out of state	
Commercial replication	

Comments:

The projected economics of the activity and the actual realisations as per field enquiries reveal that the activity is an immensely viable one with a high degree of commercial replicability within the state. There is a huge demand for quail meat and eggs due to its therapeutic value. However certain operational problems were encountered during implementation. It has been envisaged in the proposal that the quail farmers would produce their own DoCs with leased hatchery facility. However the hatchery owners started selling the hatched

chicks themselves seeing the demand and the trainee entrepreneurs were unable to continue with the activity beyond April 2013. The Trust and the Champion have now established their own hatchery by availing loan from NABARD for the Producers Company promoted by them and are reviving the activity in the area.

To what extent does the project reach genuinely poor people in large numbers?

To a limited extent; under the project a total of 100 small farmers have been trained and converted into entrepreneurs in quail farming. Besides, they have been formed into a producers company (Panchamurthy Agri Producer Company Ltd) enabling them in having better bargaining power and attaining scale economics in due course. The quail meat and eggs are available as alternative protein rich food to the rural households in the district.

Other Project Strengths

- The collective bargaining power has been enhanced by formation of a producers company.
- Despite the apparent initial failure of the project activity, the entrepreneurs have up scaled the activity by forming a producers company and availing loan from NABARD for backward (hatchery) and forward linkages (transportation)

Other Project Weaknesses

No observed weakness in the project per se; but based on interactions, we feel that the entrepreneurs atleast few, have not been advised on the sustainability aspects of the activity as they have been found to sell egg laying birds in the market within two months of start of egg laying due to high ruling prices of meat instead of continuing the layer activity upto the culling time thereby losing the benefit income stream for at least 12 months.

What lessons could NABARD learn from this project?

Despite being a viable activity, the activity was not visible during the field visits as reported above. It is felt that such innovative activities need a more rigorous monitoring than normally called for. The PMRC meetings have not recorded the highs and lows of the activity. Pursuit of outcome based monitoring would certainly have enabled to capture the attention of the PMRC members and NABARD to detect the problems in the initial stage itself and introduced remedial measures that could have ensured uninterrupted functioning of the activity at the entrepreneurs level. NABARD may have to ensure this.

Name of Project:

Development of irrigation potential through the renovation of Kolhua Pyne in Pen block of Nalanda district, Bihar

Name of Partner Org and Champion:

Lok Swarajya Sangh, Parwalpur, Nalanda

Project Location (village/city/state):

Pen block of Nalanda district, Bihar

Year of Sanction and Duration:

2009-10 and one year

Total Cost of Project including other contributions(Rs.lakh): 14.98 lakh

Loan from NABARD (Rs.lakh): Nil Grant from NABARD (Rs.lakh): 9.98

Short Description of the Project

The project is for revival of traditional water bodies viz., pynes and ahars which were once major sources of irrigation about a century back and abandoned on abolition of Zamindari system in Bihar. The project renovated 5 km of pyne, besides group formation, capacity building etc. As a result of the renovation 625 acres of land owned by five villages were benefitted. This is a highly location specific innovation applicable to mostly the southern districts of Bihar

In what way and at what level has the project been successful in terms of financial viability, upscaling and replication?

Progress towards financial viability	√	
Financial viability at local level		
NABARD replication within state		Feasible
NABARD replication out of state		
Commercial replication		Feasible

Comments:

At a cost of Rs 15 lakhs, the project has provided irrigation to 625 acres of land translating to a very low cost of Rs 2400 for creating one acre of irrigation potential. The farmers are able to give life saving irrigation to their kharif paddy crop and raise for the first time irrigated wheat crop in the winter. The activity is highly viable. It can be replicated within the state on commercial lines. However it should be borne in mind that the maintenance of such structures needs community involvement for which certain promotional costs have to be borne.

To what extent does the project reach genuinely poor people in large

numbers?

Under the project a total of 500 farm families most of whom are small and marginal famers have been positively benefitted. Besides, enhancement of ground water levels has benefitted another 1000 plus farm families .

Other Project Strengths

- One of the highly local innovations which have tremendous potential to ensure food security and drinking water needs of villages; similar project in Bihar shortlisted as one among the 30 most innovative projects among 1400 entries for NABARD award for rural innovations.
- Project promoted but a committed NGO working in this field with the ability to ensure community participation in the task
- Maintenance fund created by raising contributions in the form of rice and wheat @ one kg per acre of crop
- Fodder crop grown on the bunds meets the feed requirements of animals; as a result animal population has increased and cow dung has substituted wood as energy source.

Other Project Weaknesses

- There is a need for further renovation of about 3km pyne in the area. Despite highly viable nature of the project, the champion has not convinced the beneficiary households towards a loan based system or community contributions for reviving such assets and is expecting grant funds for further renovation.
- The renovated pyne needs maintenance as weeds have grown up but maintenance fund not yet utilised for the same.

What lessons could NABARD learn from this project?

This is a very highly effective and efficient way of reviving irrigation structures at a very low cost. However community involvement is very essential. Government of Bihar has earmarked certain funds for renovation of pynes and ahars to be implemented by their departments. NABARD may like to hold dialogue with the state government to convince the latter on the need for involving good NGOs in this activity. Capacity building efforts can be supported by NABARD. NABARD may also extend UPNRM loans to the NGOs.

C. TAMIL NADU/PUDUCHERRY

Name of Project:

Construction of 50 ecosan toilets in 10 villages in Puducherry

Name of Partner Org and Champion:

Humana People to People India, an NGO located at Puducherry

Project Location (village/city/state):

Karikalalmpakkam and surrounding villages in UT of Puducherry

Year of Sanction and Duration:

2009-10 & one year

Total Cost of Project including other contributions(Rs.lakh): 6.51 lakh

Loan from NABARD (Rs.lakh): Nil Grant from NABARD (Rs.lakh): 6.51

Short Description of the Project

The project is for construction of 50 ecosan toilets in 10 villages of Puducherry. Unlike most conventional sanitation methods, ecological sanitation processes human waste as well as sometimes animal waste, and organic kitchen waste, to recover nutrients, usually for the purpose of growing crops, that would otherwise be discarded. The Ecosan toilet is constructed only above the ground level. It consists of two chambers, which are used in turn for defecation, and an outlet for urine. In this way urine and faeces are kept separately. When the first chamber is filled up with faces, it is closed for 6 months. In the meantime the second chamber is filled up.

In what way and at what level has the project been successful in terms of financial viability, upscaling and replication?

- Progress towards financial viability
- Financial viability at local level
- NABARD replication within state
- NABARD replication out of state
- Commercial replication

Comments:
The project is a social sector project which cannot normally be assessed for viability. The model can be replicable only under grant assistance.

To what extent does the project reach genuinely poor people in large numbers?

Under the project a total of 50 toilets have been constructed in an identical number of households. Being in rural areas and working on small pieces of

lands and as labourers the project has aimed to provide ecologically efficient sanitary toilets to them. A total of about 350 rural populations have been positively benefitted by the experiment. The manure available after decomposition is applied to their fields though it is in smaller quantities.

Other Project Strengths

- Environment friendly sanitary toilets with advantages of obtaining good manure from human wastes
- In situ human waste management system which otherwise require drainage systems by the government which may be consuming and costly

Other Project Weaknesses

- The champion NGO , Humana People to People, has abandoned the project as they do not have any base in Puducherry and there are no projects other than NABARD projects resulting in high administrative costs. Currently an erstwhile employee of the NGO is working with the people and taking care of the constructed toilets
- The cost of ecosan toilets at Rs 13500 appears to be high as compared to the allocation of Rs 3500 per rural household toilet under GoI's Total Sanitation Campaign

What lessons could NABARD learn from this project?

- NGOs with established presence in the project area need to be encouraged
- The cost norms in social sector projects need to be benchmarked to the costs for similar activities under Government of India's programmes to preclude experimenting in high cost innovations

Name of Project:

Installation of rope pumps and combining with drip irrigation in 5 villages of Puducherry

Name of Partner Org and Champion:

Humana People to People India, an NGO located at Puducherry

Project Location (village/city/state):

Karikalalmpakkam and surrounding villages in UT of Puducherry

Year of Sanction and Duration:

2009-10 & one year

Total Cost of Project including other contributions(Rs.lakh): 2.00 lakh

Loan from NABARD (Rs.lakh): Nil Grant from NABARD (Rs.lakh): 2.00

Short Description of the Project

The project is for installation of 15 rope pumps for the use of 5 schools, 5 community wells and 5 drip irrigation in 5 villages of Puducherry. The project objective is to provide safe drinking and handling of water leading to reduction in water borne diseases and to benefit marginal farmers for cultivation using drip irrigation. The NGO had completed the installation of the rope pumps by November 2010.

In what way and at what level has the project been successful in terms of financial viability, upscaling and replication?

- Progress towards financial viability
- Financial viability at local level
- NABARD replication within state
- NABARD replication out of state
- Commercial replication

Comments:
The project is a social sector project which cannot normally be assessed for viability; however where ever the system has been introduced for drip irrigation, the activity might turn out to be viable. The model can be replicable in areas with water table upto say 150 feet but may be successful in areas of low power availability and where alternative sources of drinking water is not available.

To what extent does the project reach genuinely poor people in large numbers?

Under the project a total of 15 rope pumps have been installed in the villages. While the utility of the pumps for drip irrigation could not be verified as the NGO has abandoned the project area, It was learnt from the discussions with the villagers that the village is already having a government constructed water tank and water is supplied through this mode to the rural households. However when the cyclone Thane stuck the villages of Puducherry, water could not be supplied for more than a month from the water tank because of complete power cut. During that stress period, the rope pump could supply drinking water to about 200 households in the village. To that extent the project served the emergency needs of the rural households in large numbers

Other Project Strengths

- Simple rope operated pumps which can serve the needs of the rural households
- The cost of installation is Rs 7500 to 9000 per pump which is highly economical as it could serve water for about 200 families
- It can draw water even from ground water available at 100 feet

Other Project Weaknesses

- The champion NGO, Humana People to People, has abandoned the project as they do not have any base in Puducherry and there are no projects other than NABARD projects resulting in high administrative costs. Currently an erstwhile employee of the NGO is working with the people in whose households and taking care of the installed pump sets.
- Although it was gathered that 15 pumps were installed, it was learnt that about 50% of the pump sets are not useful, as they have not been maintained properly in the wake of abandonment of the project by the NGO

What lessons could NABARD learn from this project?

- NGOs with established presence in the project area need to be encouraged
- This project has the ability to provide water facilities to a large number of rural households at a very low cost and could be replicated in areas where regular water sources are not available and underground water is fairly good.

Name of Project:

Multi functional groundnut machine

Name of Partner Org and Champion:

C. Premkumar, a Mechanical Engineering graduate at Puducherry.

Project Location (village/city/state):

Puducherry town.

Year of Sanction and Duration:

2013-14 & one year

Total Cost of Project including other contributions(Rs.lakh): 3.56 lakh

Loan from NABARD (Rs.lakh): Nil Grant from NABARD (Rs.lakh): 3.24

Short Description of the Project

The project is to develop a multi functional groundnut machine which could sow, weed and harvest with flexibility to use three different source of energy. Presently machines are available which do the three functions individually. The innovation is to develop a prototype that would perform all the three functions. The project is under implementation stage and the prototype is being developed on a hired premises. Once developed the champion would prefer to sell the machine at about Rs 1 lakh per unit.

In what way and at what level has the project been successful in terms of financial viability, upscaling and replication?

Progress towards financial viability	
Financial viability at local level	
NABARD replication within state	
NABARD replication out of state	
Commercial replication	

Comments:
The prototype is under development; therefore it is difficult to judge the viability of the project at this stage. If the product becomes successful, then it would be a boon to groundnut growers due to impending labour shortage in the area.

To what extent does the project reach genuinely poor people in large numbers?

The prototype is essentially meant for mechanising the field operations of groundnut crop and therefore by design not focussed on poor.

Other Project Strengths

- Project implemented by dedicated mechanical engineer
- Product to run on three different types of fuel viz., diesel or electricity or biogas with the latter two being environment friendly.

- Product would enhance the productivity of groundnut though efficient sowing, weeding and harvesting.

Other Project Weaknesses

- There is no provision in the project proposal for field testing of the prototype and consequent fine tuning of the product. The champion would have to incur additional expenses on this count.
- The proposed pricing of the machine at Rs 1 lakh appears to be costly for small and marginal farmers and so community ownership may be attempted for which community needs to be mobilised.
- Though not directly relevant for this project, the champion has also developed a mobile biogas unit which can use any waste for gas generation but finding difficulty in marketing the product.

What lessons could NABARD learn from this project?

- Funding for prototype innovations shall be comprehensive to include cost of development of prototype, field testing, fine tuning of the prototype and also marketing the product in the initial stages.

Name of Project:

Sustainable dairy farming using indigenous micro organism in cattle feed in Puducherry

Name of Partner Org and Champion:

Eko Venture Trust and Smt Umarani of Puducherry

Project Location (village/city/state):

Karikalalmpakkam and surrounding villages in UT of Puducherry

Year of Sanction and Duration:

2012-13 & one year plus project scheduled to be completed by January 2014

Total Cost of Project including other contributions(Rs.lakh): 3.45 lakh

Loan from NABARD (Rs.lakh): Nil Grant from NABARD (Rs.lakh): 2.00

Short Description of the Project

The project is for integrated microorganism (IMO) treated concentrates to 300 milch animals owned by 300 farmers. Besides the project envisages awareness creation and capacity building of the 300 women in the preparation of IMO treated feed. Usage of eco friendly IMO as feed and cleanser of cattle and its shed enhances the health of the animal in addition to increase in yield and fat content and reduction in feed cost. The project is under implementation since 6 months as on date of visit.

In what way and at what level has the project been successful in terms of financial viability, upscaling and replication?

Progress towards financial viability	√
Financial viability at local level	
NABARD replication within state	
NABARD replication out of state	
Commercial replication	

Comments:
The project may prove viable as the technology is cheap and simple and can be replicated as also up scaled . a social sector project which cannot normally be assessed for viability.

To what extent does the project reach genuinely poor people in large numbers?

Under the project a total of 300 milch animals will be given IMO treated feed while at the same time ensuring capacity building of the rural women to continue the practice after discontinuance of the project. The women have

already started reaping the benefits of the activity through enhancement in milk yield (from 6 litres per day to 8 litres), higher fat percentage (from 4.2% to 4.8%) resulting in higher price realisation (from Rs 16 a litre to Rs 18. All the women are from poor strata of the rural areas. The technology is relatively simple and can be imparted easily. Therefore the project will immensely benefit a large section of the rural population not only in Tamil Nadu villages but also in other states.

Other Project Strengths

- Simple technology ; easily understandable and adoptable by rural women
- Easy replication possible if capacity building programmes are conducted
- Highly profitable activity

Other Project Weaknesses

- No weaknesses are noticed in the project.

What lessons could NABARD learn from this project?

- Scouting for low cost simple production technologies and supporting them would ensure a larger impact of innovations in rural areas.

Name of Project:

Mobile based dissemination of information to fisher folk

Name of Partner Org and Champion:

M S Swamintahn Research Foundation, Podicherry and Dr Velvizhi

Project Location (village/city/state):

16 villages covering 3 clusters viz., Karaikal Cluster, Nagapattinam Cluster (South of Karaikal) and Nagapattinam Cluster (North of Karaikal) of UT of Puducherry

Year of Sanction and Duration:

2011-12 & one year

Total Cost of Project including other contributions(Rs.lakh): 15.16 lakh

Loan from NABARD (Rs.lakh): Nil Grant from NABARD (Rs.lakh): 5.38

Short Description of the Project

The project is to disseminate three audio advisories through mobile phones in local language related to the fishermen sea safety and livelihood in Karaikal district for 325 days (excluding Sundays and National Holidays) covering contents viz. Ocean State Forecast (weather, wind direction) for 48 hours, sea wave height, potential fishing zone, cyclone and Tsunami alert and warnings, sea safety procedures etc.on the needs of the selected fisher folk. **Use of mobile phones enables reaching out to the fisher folk even in mid sea which is the uniqueness of the project.** The service is available free of cost.

In what way and at what level has the project been successful in terms of financial viability, upscaling and replication?

Progress towards financial viability	√
Financial viability at local level	
NABARD replication within state	
NABARD replication out of state	
Commercial replication	

Comments:
If the user charges are levied, the activity will be viable and sustainable with support for capacity building efforts. The project is replicable in the coastal areas of the country. Commercial replication needs to be assessed in detail as the present experiment is new and appears to being implemented at a high cost.

To what extent does the project reach genuinely poor people in large numbers?

Under the project MSSRF initially covered 130 fishermen for mobile based dissemination of the information. Currently it covers 377 fishermen who are mostly poor. The potential is huge as there are more than 10000 fishermen in Puducherry.

Other Project Strengths

- Project implemented by a reputed organisation
- Simple technology ; easily understandable by fishermen
- Committed champion from the foundation
- Awareness of ocean situation helped the fishermen to decide on the timing of their sea voyage besides using the information for selection of nets, position of boat anchoring and even number of crew.
- Fishermen trained in GPS usage which is crucial to locating potential fishing zones.

Other Project Weaknesses

- The project funding was over by November 2012. In the meanwhile the number of fishermen availing the services has increased. In the absence of adequate funds the Foundation now is sending only one audio message daily as against 3 voice messages disseminated when RIF was available.
- A project cost of Rs 15.16 lakh for 130 fishermen appears to be a high cost experiment

What lessons could NABARD learn from this project?

- Mobile based information dissemination systems are becoming popular these days and the information provider has to incur the costs of such transmission. There is a need that the user community partakes a major part of this cost after an initial free trial period. Such pricing of services is already practiced in states like Bihar and Uttar Pradesh (for crop advisories), which are considered to be poorer states. Therefore while considering such proposals an inbuilt mechanism for community funding to be incorporated in the proposal.
- Cost norms in such projects need to be critically examined while sanctioning such proposals.

Name of Project:

Vocational Training for Youth from very poor families – Loan based Model

Name of Partner Org and Champion:

PANIIT Alumni Reach for India (PARFI)

Project Location (village/city/state):

Rural vocational training centres in different locations across the country. Project sites visited in Tamil Nadu.

Year of Sanction and Duration:

2009-10; three years from 2010-11 to 2012-13

Total Cost of Project including other contributions(Rs.lakh): 612.00 lakh

Loan from NABARD (Rs.lakh): 60.00 Grant from NABARD (Rs.lakh): 60.00
RFA from NABARD (Rs lakh): 356.00

Short Description of the Project

The project is setting up 20 gurukuls in a phased manner over a period of three years, for imparting skill training to school drop outs from BPL families. **The innovation is in the commercial approach to the skill development initiatives by introducing a loan based model and inbuilt mechanism for job placements from day-1 after completion of training.** The project has since completed three years. The foundation has established 17 training centres and MoU for the remaining three have also been signed. The 20 centres are spread over Jharkhand (7), Tamil Nadu (5), Chattisgarh and Rajasthan (2 each) and Bihar, Maharashtra, Orissa and UP (one each).

In what way and at what level has the project been successful in terms of financial viability, upscaling and replication?

Progress towards financial viability	√
Financial viability at local level	√
NABARD replication within state	
NABARD replication out of state	
Commercial replication	

Comments:

The project is an employment generation project for rural poor with a loan based model instead of the usual grants associated with such programmes. The trainees are extended loans of about Rs 7000-7500 to cover the operational cost training at an interest rate of 8.5% and repayable in six monthly instalments. On completion of 45 days training, they are employed in blue collar jobs with a monthly salary and other incentives of about Rs 9000 to Rs 10000. After meeting the cost of food and accommodation which many times are subsidised and payment of Rs 1300 as EMI, the trainees are left with a surplus of Rs 4000 to Rs 4500 on an average. Thus the activity is viable for the trainees.

As for PARFI, there is under recovery of their costs to the extent of Rs 5000 to Rs 6000 per trainee currently and it is borne from funding from the prospective employers, external donors and sometimes state governments like Jharkhand. This can go down with improvement in capacity utilisation but nevertheless will continue to be there and external fund infusion would be required to upscale and replicate the project. The activity needs to be certainly up scaled and replicated since it is unique and creating employment opportunities through a loan based training programme.

To what extent does the project reach genuinely poor people in large numbers?

The gurukuls are to impart employable skills in blue collar jobs to 4800 rural poor with NABARD assistance and continue their activities for further periods. Thus the focus is exclusively on rural poor who are assured of gainful employment after training.

Other Project Strengths

- Industry demand driven choice of vocations
- Involvement of prospective employees during the training process thus imparting latest skill requirements
- Highly committed and qualified promoters of the foundation with the ability to execute, scale up and sustain business models for emancipating the rural poor
- Committed faculty, mostly ex service men who stay in the gurukul 24*7
- Good infrastructure that meets the requirement of the trade
- Government of Jharkhand is willing to sign a MoU with Pan IIT foundation to start gurukuls in all their districts from developmental funds of the state.

Other Project Weaknesses

- Low capacity utilisation in certain vocations like driving
- Location of centres far away from the trainees home places; most of the current batch trainees at Tamil Nadu gurukuls are from Jharkhand; this has resulted in low capacity utilisation in construction related gurukuls of Tamil Nadu as compared to similar centres in Jhakhand
- High dropout rates : attrition rate in the employing company; currently estimated at 40% result in delinquency of loans; a silver lining is it has come down significantly from a very high 75% in the beginning
- The loan is @ soft rate of 8.5%. This is not a commercial rate and not replicable as such without external concessional funds.

What lessons could NABARD learn from this project?

- Locating the gurukuls in user industry locations may not be advisable as the trainees prefer their local training centres.
- The loan given by PARFI is towards meeting the cost of food and consumables during the training programme. The loan liability of each trainee is about Rs 7000 to Rs 8000, a level sanctioned by NABARD. However the actual cost for each trainee including the overheads like power, rent etc., at current level of capacity utilisation is about Rs 13000 per trainee. The shortfall is met through funds from various donors. Thus there is a substantial element of subsidy for the trainees. This does not become a sustainable model unless the loans given to trainees cover all the costs.

- To have a sustainable model, the pattern of education loans to be followed; in such a case the loan extended to the trainees shall be at full cost and commercial rate of interest with an extended repayment period of about 3 years. The deeper implications of the full cost model may be experimented by NABARD with the same foundation in due course.
  Alternatively, Government of India may like to adopt a loan cum grant model for skill development programmes and this would lead to achieving the objectives of GoI, while at the same time ensure the serious involvement of the trainees in such training programmes; NABARD along with the promoters may consider playing a role in this regard.

D. GUJARAT

Name of the Project	Development of an innovative mechanism for production of slub yarn on Amber Charkha
Name of the Champion	Khadi Gramodyog Prayog Samiti, Wadaj, Ahmedabad
Project Location (village/city/state)	Ahmedabad, Gujarat
Total Cost of Project including champion's own contributions	Rs 6.80 lakh
Year of sanction and duration	February 2011 – 6 months
Funding from RIF	Grant: Rs. 6.80 lakh Loan: Nil

Short Description of the Project (max. 50 words)

The project aims at improvising the existing Amber Chakha for producing slub yarn for the Khadi Sector. Slub yarn is characterized by irregular and varying thickness of the yarn giving the spun yarn remarkable visual effect. By auto adjustment of the production process, an enormous range of minute variations of yarn can be produced. Slub yarn can form special appearance in the surface of the fabric and can improve the visual appeal of the fabric resulting in better value realization for the product. It is widely used in garments and decorative fabrics. The champion is an organization involved in propagation of Khadi and specializes in Research & Development of Khadi and capacity building of artisans engaged in the sector.

In what way and at what level has the project been successful in terms of financial viability, upscaling and replication? (tick as relevant)

X Progress towards financial viability
 Financial viability at local level
 NABARD replication within state
 NABARD replication out of state
 Commercial replication

Comments: The champion could develop the prototype of the machinery and manufactured 25 such machines for distribution among 9 Amber Charkha Units in Gujarat for demonstration purposes as envisaged under the project.

To what extent does the project reach genuinely poor people in large numbers?

A number of people are engaged in spinning on Amber Charkhas for production of Khadi fabric which symbolised the Gandhian concept of nationalism in India. Over a period of time, with the advancement of handlooms and power looms, the Khadi fabric started losing its appeal due to its rough texture and lack of innovations in appearances and the extent of manual labour involved in spinning the yarn and making the fabric. Attempts to improve the appeal of the Khadi fabric is therefore likely to result in better income for the poorly paid Amber Charkha workers. The labour intensive nature of the Khadi Sector will, however, be a deterrent for large scale expansion of the sector and survives on substantial subsidy support from the Government. Any reduction in the subsidy support from the Government will make the products much costlier than the competitive products.

Other Project Strengths

There exists a number of Khadi Weaving Units under the umbrella of Khadi and Village Industries Commission (a Government of India body) and Khadi and Village Industries Boards (State Government Enterprises) with a good network of Khadi Outlets in major towns across the country. Moreover, the Government offers marketing support by way of subsidy to the extent of 10-30% on such products. Since slub yarn gives remarkable visual appeal as compared to traditional Khadi fabric, the demand for slub yarn based fabric is bound to improve.

Other Project Weaknesses

Khadi Industry itself is on the decline with the advent of handloom and powerlooms in the market and their advantages in terms of production costs and appearances. It is also losing its nationalist appeal. Being highly labour intensive, the workers in the sector are highly impoverished lot and the new generation do not find spinning Khadi as a viable vocation.

What lessons could NABARD learn from this project?

The scalability and replicability of innovation and the number of people likely to be impacted by the innovation should be the prime factor while selecting the innovations for funding support. The champions too should have a clear vision of how the innovation can be scaled up and be viable and be capable of taking them forward after prototypes are developed. A road map and time frame for scale up phase should be considered while funding any innovation.

Name of the Project	Design and Development of High Efficient Solar Cooker
Name of the Champion	Khadi Gramodyog Prayog Samiti, Ahmedabad
Project Location (village/city/state)	Ahmedabad
Total Cost of Project including champion's own contributions (Rs.lakh)	Rs 10.00 lakh
Year of sanction and duration	2012 - 1 Year
Funding from RIF	Grant: Rs. 6.28 lakh Loan: Nil

Short Description of the Project (max. 50 words)

The project aims at developing an innovative more efficient solar cooker having following features:

- Light weight body
- Compact size
- Higher cooking efficiency
- Trolley driven for easy movement, and

to evaluate the performance of the new model and organize awareness and field demonstration programmes.

In what way and at what level has the project been successful in terms of financial viability, upscaling and replication? (tick as relevant)

X Progress towards financial viability
X Financial viability at local level
NABARD replication within state
NABARD replication out of state
Commercial replication

Comments: The champion had developed a new model solar cooker which reduces the cooking time by almost 80%, lighter in weight (10 Kgs instead of 13 Kgs in the existing models) and can be carried on wheels. The new model has larger space for vessels for cooking, 3-4 times higher reflection of sunlight resulting in higher conversion of solar heat.

To what extent does the project reach genuinely poor people in large numbers?

A high proportion of rural population depends on non-renewable and less efficient energy sources like burning of wood, use of kerosene, etc.for cooking food and lighting which are not only destructive environmentally, but are also becoming more scarce and costly. Any alternate fuel which can offer them cost advantage on the one hand and more environment friendly is therefore a

boon for all of them. Since sunlight is available for most part of the year in the country, tapping of solar energy for such purposes is most suited in the Indian context. The new model solar cooker developed by the champion can therefore, be considered as highly desirable and can help a large number of rural households in the country.

Other Project Strengths

The light weight and movable nature of the cooker make it more user friendly in the villages and the cost of the cooker (@ Rs 1850 a piece) is also affordable with Government subsidies making them still cheaper.

Other Project Weaknesses

The major drawback of the solar cooker developed is that it still takes more than 30 minutes for cooking (as against 2 hours 30 minutes in the earlier models). Moreover, since it can be operated only when sun rays fall directly (no storage of energy is envisaged), cooking by using the model has to be confined during bright daylight only and hence might not suit the rural households for all their requirements.

What lessons could NABARD learn from this project?

While the Champion has demonstrated the advantages of the new model, the project did not provide for a blue print for large scale scaling up of production and possible reduction in the manufacturing costs. Moreover, costing of the model is based only on the basis of material costs with all overhead costs including R&D and marketing expenses subsidised. Realistic costing of the innovation needs to be factored in while planning for scaling up and replication. The champion should also have a business strategy for upscaling – either by itself or through outside entrepreneurs – once the prototypes are developed and this should be an integrated part of the project for funding.

Name of the Project	Development of a Mathematic model and its utility in design of Laminar Air Flow system
Name of the Champion	Vidya Dairy, Anand Agricultural University Campus
Project Location (village/city/state)	Anand, Gujarat
Total Cost of Project including champion's own contributions (Rs.lakh)	Rs 12.00 lakh
Year of sanction and duration	2012 - 1 Year
Funding from RIF	Grant: Rs. 8.80 lakh Loan: Nil

Short Description of the Project (max. 50 words)

The project aims at developing a Laminar Air Flow System to sanitise the air flow in the packaging floor area in the dairy industry using multi directional ultra violet emissions and Hepa Filter. This will help in preventing bacterial and other air borne contamination of the products packed thereby improving the quality and shelf life of the products.

In what way and at what level has the project been successful in terms of financial viability, upscaling and replication? (tick as relevant)

- Progress towards financial viability
- Financial viability at local level
- NABARD replication within state
- NABARD replication out of state
- Commercial replication

Comments: The champion has successfully developed an air flow system whereby the bacterial and other contamination in the air flow in the floor area has been reduced to insignificant levels (ambient microbial count in the air reduced from 5-24 to 0-1 and the yeast and mould count from 5-43 to 0.033 over 24 hour period tested). The model has, however, been developed for a small area (10'x10') and will need to demonstrate its effectiveness for a larger area for industrial uses. Moreover, the effect of the new air flow system in the quality of the products packed (reduction in the bacterial content of the end product, improvement in the shelf-life, etc.) will also need to be studied before it can be scaled up by the industry.

To what extent does the project reach genuinely poor people in large numbers?

The direct beneficiaries of the system is the industry – dairy, pharmaceutical, healthcare, agri and food processing, tissue culture, etc. – and indirect benefits to the customers by way of more hygienic and safe products. Since a major share of dairy industry in the country is with the dairy cooperatives, the

dairy farmers stand to gain by way of better prices if the technology is adopted by the industry and results expansion of the market due to longer shelf life of the products

Other Project Strengths

The process though developed for the dairy industry, can be equally relevant to other industries such as pharmaceuticals, hospitals, agri processing/ food processing units. Reduction in contamination of the final products can also open up wider markets where quality standards are quite steep.

Other Project Weaknesses

While the process developed has demonstrated that contamination on account of impurities in the air flow can be contained substantially using the combination of ultra violet radiation and Hepa Filter, its commercial value needs to be assessed in terms of overall quality improvement of the product (measured in terms of the reduction in toxicity of the final product and improvement in shelf life), before it can be scaled up.

What lessons could NABARD learn from this project?

The user industries have the capacity to develop such innovations as a part of their R&D efforts without any external funding if it adds value to their products. NABARD should have prioritised investments in innovations which have direct benefit to the poor for which alternate funding are difficult to access.

ANNEX III
NABARD Report of Actions Taken on Mid-Term Review Recommendations

The major recommendations of the MTR of RIF and the action taken:

MTR Recommendation	NABARD Action – Post MTR	Present Status
5.1. Proposals under RIF should be subject to realistic appraisal. In an ex-ante appraisal, a negative impact, especially on environment should, *a priori*, be rated negatively, unless the project has an objective to make the environment more conducive.	The appraisal of innovative projects is done based on detailed appraisal of the innovator/champion, the concept and the contextual relevance. The marks are awarded based on the evaluation matrix, though forms an important factor in deciding the suitability of the proposal for funding, is not the only deciding factor and the project details are discussed in detail in the inter-departmental expert groups in the Regional Offices and the Advisory Committee at the HO level. It may be mentioned that there has not been a single instance where a project having negative impact on the environment has been funded under RIF. However, care will be taken in future to ensure that the concerns of the MTR are addressed while considering proposals under RIF.	Noted and being followed.
5.2. Commercialization and innovation should be viewed as complementary to each other. If a narrow view is taken, good proposals may get rejected.	Emphasis is now being laid on identifying only those innovations which have the potential to become commercially viable, for funding under RIF. All regional offices have also been advised to shift the emphasis to "viable" innovations while considering funding support. This point was also emphasized in the stakeholders workshops organized at Thiruvananthapuram and Raipur recently. The same will be followed in the regional RIF workshops being planned across the country by NBSC during July-August, 2009.	Emphasis given for viable innovation up scaling through BID and other windows initiated.
5.3. NABARD-RIF should help promote some potentially viable action research projects in different zones that can make larger impact on livelihood opportunities for the poor, climate change and environment protection.	The suggestion of the MTR Team has been noted. It is proposed to organize stakeholders workshops in each State Headquarters where the stakeholders like Research Institutions and NGOs active in action research will be requested to help NABARD Regional Offices to identify action research projects most relevant to the area for being taken up under RIF. Already 2 such workshops were organized in Kerala and Chattisgarh and States like Jharkand and Andamans have evinced keen interest in organizing the same.	Emphasis given, but not many Action Research projects are forthcoming. However, one project sanctioned by HO and one each by Tamil Nadu RO and Jharkhand RO.

5.4. There should be focus on selection and promotion of those projects which can be up scaled, replicated and find funders and market as well as policy attention.	Potential for up scaling and replication is one of the key parameters for deciding the suitability of the projects for funding under RIF at present. The agencies are also encouraged to find financiers for such up scaling. Recently a project for oilseeds processing by Cooperative Producers Federation has been sanctioned with the condition that alternate funding avenues should be in place by the end of the first season of procurement. As far as possible, innovative projects will be introduced in areas where other promotional programmes like Village Development Plan, Watershed Development Programme and WADI are being implemented so as to maximize the impact of interventions.	6 projects already up scaled and few are in pipeline for up scaling.
5.5. NABARD-RIF should outsource much of project identification work to specialized institutions for greater impact creation, while NABARD should play a more strategic role such as over sight, documentation of processes and products, policy advocacy, etc. It should also create a forum of highly competent experts on rural development to identify ideas for innovations, policy analysis and advocacy with an aim to contribute to the improvement of the enabling environment for the creation and sustenance of rural livelihoods. However, in case NABARD-RIF finds the processor of outsourcing to be more time consuming and inefficient, it should depend on its own renewed strength in terms of motivation, orientation, capacity building and support system.	The Steering Committee has not found favour with the suggestion to outsource such activities. The emphasis will be laid on in-house generation of innovative ideas and thereafter seeking suitable agencies to implement such ideas, apart from the existing efforts to get the innovative proposals from the potential champions. The proposed regional workshops to be organized during July-August, 2009 will be used as a platform to bring the message of "internalizing innovations" to supplement "supplies from outside agencies".	-
5.6. NABARD-RIF should strengthen result based monitoring systems and review processes through delegation of task to specialized institutions.	Intensive efforts are on to introduce the concept of "outcome based monitoring" of RIF projects through a log frame analysis. NBSC has been asked to devote enough time to cover the concept of "Outcome based monitoring" while	The concept of "Outcome based monitoring" is being covered while conducting regional workshops/State level workshops. We are now trying to ensure the

	conducting regional workshops. The services of professional students on summer assignments were also used to draw up a framework for outcome based monitoring of over 10 projects in West Bengal, UP, Gujarat, etc. At the end of the Regional Workshops planned during July-August, all Regional Offices will be instructed to take up outcome based monitoring on a continuous basis.	monitoring system is effectively implemented.
5.7. In view of the fact that lack of appropriate marketing arrangements stand in the way of success of many ongoing entrepreneurial initiatives under RIF, NABARD Head Office as well as ROs should find ways and means to provide this missing link, in collaboration with the implementing agencies.	Steering Committee had approved in principle to fund aggregator model for a few innovative marketing initiatives like Fabindia. The issue regarding investing in equity of private companies by NABARD is now under the consideration. As soon as the same is approved by NABARD Board of Directors, these proposals will be considered for sanction.	3 projects have been sanctioned i.e. Suppat Didi Retail chain, under RIF, Marketing of handicrafts of NE Region(ANTS) & Smart Aqua funded under BID as loan model.
5.8. NABARD-RIF should seek the collaboration of commercial banks as well as co-operatives to meet the required credit needs of implementing agencies. This is important especially to enable the implementing agencies in improving their level of production, technology up gradation etc. Besides, a scheme may be designed under the RIF to bailout the credit institutions in case of large number of defaults in the innovative projects. This can provide a comfort level to the banks and may induce them to be favourably inclined to lending to such projects.	A suggestion has been mooted to offer some comfort levels to financing banks to cover their "additional risks" while financing rural artisans, etc. by way of first default guarantee (by NABARD) or by sharing the risk of increased NPA on account of such financing. It is proposed to present these suggestions before a meeting of GMs of priority sector of commercial banks to elicit their views and alternate suggestions, if any. Corporate Planning Department of NABARD has been requested to include this item as one of the agenda items in the next meeting of the GMs of CBs.	NABARD provides finance to up scale viable projects through BID/UPNRM or RNFS budget. The Agencies can establish success and avail bank finance.
5.9. NABARD should build a registry or library of innovations, as suggested by the Steering Committee.	Presently such efforts are being done by "Honey Bee" network (NIF), etc. NIF's proposal to fund such initiatives under RIF through a corpus support was not found favour by the Steering Committee. At the instance of Steering Committee, separate rounds of discussions were also held with NIF, but no progress could be made in this direction. A parallel innovation tracking	Already many projects through "Honey Bee" network (NIF) intervention were funded and NIF likely to submit some more proposals to HO/RO. - Not received NABARD received 1420

	mechanism will require considerable manpower with related costs.	applications for Rural Innovation Award. Identification of projects for support/up scaling is being done.
5.10. NABARD Head Office as well as Regional Offices should network with relevant CSIR and ICAR institutes, SAUs, IITs, NGOs etc., which will help not only in identifying innovations, but also for consortium funding in case large outlays are involved.	Efforts have already been initiated in this direction. The issue regarding up scaling innovations in the Food Processing sector through CFTRI has already been taken up and areas have been identified where both the organizations could cooperate with other in commercializing the innovations in this sector. Among the steps agreed to by CFTRI and NABARD are providing exposure training to potential entrepreneurs in technologies developed by CFTRI and identification of areas where CFTRI could help NABARD in developing new technologies. Similar steps are being taken with other central institutions like DFRL, etc. At the regional level, ICAR units in Kerala is already actively involved in identifying innovations in farm activities for being funded under RIF. The stakeholders' workshops being planned in other states will also lay emphasis on such areas of collaboration.	NABARD is a member of TePP/ PRISM (DSIR) programme and a few projects have been funded under joint initiative. NABARD is also a member of an Expert Committee of SEED scheme of Department of Science & Technology and Agriculture Sector Innovation Council, Ministry of Agriculture and Cooperation, GoI.
5.11. NABARD-RIF should reopen the dialogue with National Innovation Fund, Ahmedabad and see if at least some of the tasks such as scouting of innovative proposals and project monitoring could be shared with it.	The response from NIF for a possible collaboration with NABARD has not been encouraging in view of the rejection of their original proposal to fund NIF activities through RIF.	Since done and NIF is agreed to submit proposals to NABARD.
5.12. All officers associated with NABARD-RIF should be trained to get out of their traditional risk averting as well as rigid attitude, which stand in the way of progress of RIF programme.	There have been changes in the incumbency of officers manning RIF Cells in HO and Regional Offices of NABARD due to annual transfers, retirements, etc. Efforts will be made to cover as many new officers as possible in the ensuring regional workshops where exclusive sessions will be earmarked for "Understanding Innovations"	Yearly regional workshops conducted for capacity building of officers. 11 workshops were conducted during the last 4 years
5.13. Team recommends that the RIF Cell in each of the RO should be manned by team of trained personnel to deal with institutional, strategic and financial demands to meet the aspiration of innovations in large	Within the overall availability of manpower and demands of other functional areas within the Regional Offices, the Regional Offices have been requested to ensure that only competent officers are posted to the RIF Cells.	As for as possible the same is being ensured within the availability of staff.

number.		
5.14. Efforts should be made by the NABARD Head Office not only in building up the capacity of DDMs, but also in giving them orientation, incentive and necessary support to spot innovations and help in metamorphosing them into implementable projects. In fact, DDMs have to play a hand holding role in helping the prospective implementing agencies to formulate proposals for funding potentially viable innovative projects. Also with proper orientation and support system, DDMs should be able to implement the RIF projects in a manner that creates the desired positive impact on employment generation poverty reduction and capacity building of the rural poor, especially women.	DDMs are recognized as the most pivotal link in identifying and funding innovations in the rural areas. NBSC has been instructed to ensure that at least 50% of the participants of the proposed regional workshops (5-6 workshops are planned) should be DDMs. Moreover, in-house generation of innovative ideas is proposed to be emphasized during these workshops and suitable incentives will be offered to innovative ideas generated in-house if found suitable for funding under RIF.	ROs review RIF in the Bi monthly Structured meetings of DDMs.
5.15. RIF project period may be extended by two more years, so that NABARD-RIF finds itself in a better position to adopt mid way correction in the strategies followed thus far, while taking care that there is no adverse selection of innovative projects, due to time constraint.	SDC has been requested vide out letter No. DPD.NFS.425/705(M)/2009-10 dated 6 July, 2009 to concur with the proposal to extend the tenure of RIF till September, 2012 as per the decision taken in the last Steering Committee meeting.	RIF tenure is extended till 30th September 2014.

ANNEX IV

NOTE ON RIF INVESTMENT IN AAVISHKAAR INDIA MICRO VENTURE CAPITAL FUND

Aavishkaar India Micro Venture Capital Fund (AIMVCF) - a registered Private Contributory Fund under the India Trusts Act and registered with Security Exchange Board of India in 2002 – sought a contribution of INR 150 million from RIF out of an estimated Fund size of INR 500 million. The objective of the fund is to achieve economic development by encouraging entrepreneurship at the "base of the pyramid" and therefore decided to target enterprises whose start-up funding does not exceed US $ 100000 (approx INR 5 million at that time). The key social return expectation of the Fund is to spur interest among the youth in India to build socially relevant commercial enterprises. Though the Fund could not offer any guaranteed return of the Funds invested, it aimed at a minimum of 10% annualized return to the investees over the life of the project. This was the first micro VCF in the country and the first with a focus on the "bottom of the pyramid" investments and socially relevant and commercially viable enterprises. The fund was to have a tenure of 10 years from the close of subscription and had planned to invest in various sub-sectors as under:

Technology for Development	- 25%
Handicrafts	- 15%
Renewable Energy	- 30%
Miscellaneous	- 30%

The Advisory Committee of RIF in its meeting held in December 2006 considered the proposal and recommended an investment of Rs 50 million and based on its recommendations, Chairman, NABARD approved contribution of INR 50 million in April, 2007. Subsequently, since the Fund could not raise funds to the extent envisaged (the first closing had a commitment of only INR 244 million including NABARD's contribution of INR 50 million), the Managers of the fund again approached NABARD in July, 2008 to consider investing additional INR 100 million to the Fund, to enable to enable it to continue to invest in companies for the 6 year period ending August, 2013. After making as assessment of the performance of the fund till date vis-à-vis its stated objectives, NABARD approved additional investment of INR 50 million in the fund in August, 2008. Thus the total investment by NABARD in the Fund is INR 100 million out of an estimated fund size of INR 500 million. The Fund had its final closing in September, 2008 with a total commitment of INR 594 million.

Performance of the Fund

The actual draw down of the committed funds was based on the actual commitments made to the enterprises + fund expenses and in proportion to the investments committed by different investors and hence no idling of the funds by the Fund was involved. The entire commitment (INR 594 million) has since been drawn down and investments made/ expenses incurred as under:

Invested as Equity in companies	- INR 375.3 million (63%)
Loans to investee companies	- INR 1.3 million (0.23%)

Principal invested in companies where

Exits are achieved - INR 52 million (8.8%)

Fund Expenses(since inception) - INR 140.3 million (23.6%)

Balance (for future operational exp.) - INR 24.9 million

The current investment details are as under:

S.No	*Name of the Company*	*Investment Date*	*Equity[1] INR million*	*Fully Diluted Holding*
1	**Servals Automation**	**Nov 2002**	**0.95**	**33.13%**
2	**Shree Kamdhenu Electronics**	**April 2003**	**1.18**	**16.9%**
3	**Net Systems**	**Mar 2005**	**2.00**	**33.52%**
4	**Vaatsalya Healthcare**	**Aug 2006**	**28.13**	**9.80%**
5	**Vortex Engineering**	**Sept 2006**	**65.50**	**7.47%**
6	**Saraplast**	**Apr 2009**	**24.71**	**17.83%**
7	**Zameen Organics**	**Jan 2009**	**9.95**	**57.4%[3]**
8	**Waterlife India**	**Sept 2009**	**20.00**	**9.75%**
9	**B2R Technologies**	**Feb 2010**	**42.89**	**22.61%**
10	**G.V. Meditech**	**Mar 2010**	**20.00**	**18.18%**
11	**Butterfly Fields**	**Sept 2010**	**50.00**	**40%**
12	**mHealth Ventures**	**Jan 2011**	**25.03**	**17.79%**
13	**Milk Mantra**	**Feb 2011**	**40.00**	**15.6%**
14	**INI Farms**	**Dec 2010**	**45.00**	**15.31%**

Details of Capital Gains/ Losses of companies exited are as under:

S.No	*Name of the Company*	*Corresponding Principal deployed in equity + debt*	*Sale Proceeds (INR)*	*Capital gain/(loss)*	Multiple
Partial Exits					
1	Servals Automation	237,760	4,550,013	4,312,253	19.13
2	Shree Kamadhenu Electronics	624,000	7,382,700	6,758,700	11.82
Full Exits					
3	Naveengram	15,00,090	1,255,020	(245,070)	NA
4	CK Technologies	2,000,000	100	(1,999,900)	NA
5	DAH Delhi	5,048,360	4,880	(5,043,480)	NA
6	Rangsutra	2,185,000	8,193,750	6,008,750	3.75

7	Tide Technocrats	1,222,438	312,410	(909,738)	0.26
8	Craftsbridge	16,950,000	200	(16,949,800)	0.00
9	Swas Healthcare	15,500,000	1,500,000	(14,000,000)	NA
10	DAH Jaipur	7,232,900	10,714,000	3,481,100	1.48
11	Saptrangi Crafts	1,247,500	2,082,000	834,500	1.67
Total		**53,747,688**	**34,740,053**	**(17,752,615)**	**0.66**

While the Fund could gain substantially from 2 partial exits, there has been a net erosion of almost one-third of the investments made in the enterprises exited already. The strategy of the Fund Managers was to exit early from the loss making companies with negative outlook.

Valuation of the Current Portfolio

Amount: INR Millions)

S.No.	Portfolio companies	Disbursed Amount	Realised Value	Unrealised Value	Total Value
1	Servals Automation	1.2	4.5	14.6	19.1
2	Shree Kamdhenu	1.8	7.4	13.9	21.3
3	Net Systems	3.3	-	3.3	0.0
4	Vaatsalya	28.1	-	155.0	155.0
5	Vortex	65.5	-	78.4	78.4
6	Saraplast	24.7	-	94.5	94.5
7	Zameen Organics	10.0	-	-	0.0
8	Waterlife	20.0	-	98.5	98.5
9	B2R Technologies	42.9	-	94.2	94.2
10	GV Meditech	20.0	-	20.0	20.0
11	Butterfly Fields	50.0	-	50.0	50.0
12	INI Farms	45.0	-	107.1	107.1
13	Milk Mantra	40.0	-	45.0	45.0
14	mHealth	26.3	-	40.3	4.03
Total		**429.9**	**34.7**	**814.7**	**849.5**

The unrealized valuation of these companies are based on presumptive valuation as none of them is listed in the Stock Exchange and hence subject to corrections. The Fund Managers are, however, confident that by the end of the tenure of the Fund i.e. by August 2017, these valuations would further improve and the investors could expect a return ranging from 15% - 18% on their investment. However, except for a few enterprises like Vaatsalya (chain of rural hospitals). Waterlife (manufacture, erection and turn-key implementation of clean drinking water to villages), Saraplast, mHealth

(providing health facilities in villages) and INI Farms have not shown great promises commercially as yet and hence the projected returns from investment could be lower at around 10-12% p.a.

It is, however, observed that the Fund had, indeed, instrumental in mentoring a number of socially relevant enterprises and was responsible for introducing the concept of venture capital fund for such projects. Subsequently, other PE Funds have entered this sector. Almost all the projects funded were in fact highly relevant to rural health, sanitation and bringing in technology to rural areas and each of the project was quite innovative. The social returns from the investment, therefore, remain quite high and hence the investment from RIF quite justified.

ANNEX V

NOTE ON PAN IIT ALUMNI REACH FOR INDIA (PARFI)

Pan-IIT Alumni Association under the banner of “Pan IIT Alumni Reach For India”(PARFI) has been able to pilot a project where the unemployed rural youth (often drop outs from the secondary schools in villages) could be identified and made employable by providing them with demand based short tem vocational skills through custom made training (not only the technical skills, but also life skills in community living). The most notable feature of this project is, however, on its focus on self supporting the training expenses through a loan to be repaid through an automatic debit to the bank account mandatorily to be opened by the trainees once they are placed with the corporate, on monthly instalments.

This is an interesting deviation from the traditional 100% grant based vocational training initiatives prevent in the country and has the potential to revolutionise the system of providing employable skills to the unemployed youth with minimum or no subsidy support. The project needs massive upscaling as there is vast employable work force in the country. However, the practice of loans at subsidized interest provided by NABARD (for more details please see Annex II) under the pilot needs to be replaced with a commercially viable bank loan (the Government could subsidise interest on such loans as they do for farm loans of small size). Simultaneously, the promotional expenditure on establishing the Gurukuls (training centres), identifying and mentoring the trainees, their post-training follow-up, etc. incurred by the promoter organisation should be funded through a well designed system of “service charges” on the prospective employers and CSR funding. As the facilitator of the successful pilot project, NABARD could take up the “upgradation” of the project by actively involving the financing banks, the Government and the Corporates (for which NABARD has the best credentials) with the help of PARFI and other like minded organizations.

ANNEX VI – LIST OF NABARD STAFF MET DURING THE EVALUATION

Head Office
Shri Sanjay Desai, CGM, DPD
Shri N.P.Deo, GM, DPD
Shri Shaji Kurup, DGM, DPD
Shri Jayakannan. AGM, DPD
Shri S.M.Sinha, AGM, DPD

Bihar Regional Office
Shri K.V.Rao, CGM
Shri K.R.Bhat, GM
Shri K.P.Chand, GM
Shri Sharad Jha, DGM
Shri P.K.Pandey, AGM
Shri S.K.Sinha, AGM
Smt. Alaka Padhi, DDM, Vaishali
Shri Ashok Kumar, DDM, Nalanda
Shri Sanjiv Kumar, DDM, Jamui
Shri Sheetanshu Shekhar, DDM, Munger

Uttar Pradesh Regional Office
Shri K.K.Gupta, CGM
Dr. T.Vilas Chandran, GM
Shri D.N.Magar, GM
Shri H.M.Purohit, DGM
Shri Nabin Kumar Roy, AGM
Shri Vivek Gupta, DDM, Lalitpur
Shri MohitSayankrit, DDM, Hamirpur and Mahoba
Shri Gaurav Kumar Bhattacharya, AM
Smt. Kalyani, AM
Shri G.V.Sunil Kumar, DDM, Rae Bareilly

BIRD, Lucknow
Shri H.R.Dave, Director

Tamil Nadu Regional Office
Shri R.Sundar, GM
Shri Athirstavel, GM
Smt. Susheela Chintala, DGM
Shri Sreepathi Kalkura, DDM, Pucucherry
Shri Tom K.George, AGM
Shri M.R.Natarajan, DDM, Thoothukudi
Shri R.Inigo Arul Selvan, DDM, Coimbatore
Shri J.M.Pragasam, DDM, Kanya Kumari
Shri Selvan J.Doss, Manager

Gujarat Regional Office
Shri M.K.Mudgal, CGM
Smt. Sarita Arora, GM

Shri Nilay D.Kapoor, DGM
Shri M.Subramanian, DGM
Smt. Anita Mayekar, DDM, Mehsana
Shri Umesh Kumar B. Rathod, DDM, Anand
Smt. Y.Sujatha Anil, AGM
Smt. N. Amudha, Manager
Shri N.L.Nandanwar, Manager