

Stocktaking of livelihood projects in India

A synthesis paper



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BEST PRACTICES IN INVESTMENT DESIGN

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ACRONYMS

AP	Andhra Pradesh
APDPIP	Andhra Pradesh District Poverty Initiatives Project
APRPRP	Andhra Pradesh Rural Poverty Reduction Project
BPL	Below Poverty Line
BRLP	Bihar Rural Livelihoods Project
CBO	Community based organization
CGDRPP	Chhattisgarh District Rural Poverty Project
CIF	Community Investment Fund
CIG	Common Interest Group
CMSA	Community Managed Sustainable Agriculture
CPLTC	Community Professional Learning and Training Centre
EAF	Economic Activity Federation
GOI	Government of India
ICR	Implementation Completion Report
MBCU	Mandal Level Bulk Collection Unit
M&E	Monitoring and evaluation
MP	Madhya Pradesh
MPDPIP	Madhya Pradesh District Poverty Initiative
NFRE	Non-Farm Rural Economy
NPM	Non-Pesticide Management
NREGS	National Rural Employment Guarantee Scheme
PDS	Public Food Distribution System
PRI	Panchayati Raj Institution
RajDPIP	Rajasthan District Poverty Initiative
SGSY	Swarnajayanti Grameen Swarozgar Yojana
SHG	Self-Help Group
SMEs	Small and Medium Enterprises
TDP	Tribal Development Plan
TN	Tamil Nadu
TNEPRP	Tamil Nadu Empowerment and Poverty Reduction Project
VDC	Village Development Committee
VPRC	Village Poverty Reduction Committee

1 Crore = 10,000,000

1 Lakh = 100,000

Approximate exchange rate 2010 USD 1 = INR 45



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EXECUTIVE SUMMARY

Introduction

The World Bank has supported a series of rural livelihood projects in seven States of India¹ over the last ten years or so. The main principle is that the poor need to be socially and economically mobilized in order to form their own institutions; investment in the creation of this institutional platform is fundamental for sustainable poverty reduction.

The present large-scale and apparent success of the livelihood projects prompted the World Bank to commission a stocktaking study, coordinated by the FAO Investment Centre Division. This study seeks to examine important project outcomes and impacts, find significant innovations and to see what lessons can be learned from this experience in order to help generate the design of future interventions of this nature. This synthesis paper draws on six working papers prepared by FAO consultants, which are summarized in the Annexes.

Major findings of the stocktaking

Overview

Livelihood projects have a considerable history in India, but the scale of projects under study (in particular Andhra Pradesh) and their apparent success, makes stocktaking for future policy on rural poverty particularly relevant. The three completed projects in Andhra Pradesh (AP), Madhya Pradesh (MP) and Rajasthan have had a total investment of USD650 million and involved over 11 million beneficiaries. The extent of international investment financing interventions is unprecedented in South Asia. These projects focus mainly on developing assets of the poor through demand generating livelihood institutions. The magnitude of project contributions is becoming quite significant at District, State and higher levels as well as at project level. Ninety percent of the poor in Andhra Pradesh are now part of self-help groups (SHGs) and the emerging models form an important basis for the recently launched National Rural Livelihoods Mission in India.

Project outcomes

Institutional platform for poverty reduction. The lack of organizational capacity amongst the poor has been identified by the livelihood projects as a key explanation of poverty. The gap in organizational capacity is particularly evident in the lagging states and areas within states where poverty is highest. These livelihood intervention projects have started concentrating and working on the social and economic mobilization of women's self-help groups (SHGs) and common interest groups (CIGs). Complementary investments also consist of assisting SHGs to increase their financial capacity to leverage finance and interact with the state and markets for accessing services for the poor. The study findings validate the investments made in

¹ Andhra Pradesh, Bihar, Chhattisgarh, Madhya Pradesh, Orissa, Rajasthan and Tamil Nadu.

the institutional platforms for poverty reduction. Targeting methods combine below poverty line selection criteria with participatory assessments. Geographic targeting has also been effective in identifying poverty and mobilizing the poor. The livelihood projects have been successful in targeting women, especially through SHGs.

Inclusive financial services. The creation of inclusive financial services to bridge the credit gap for the poor has become a central objective of the rural livelihood projects. Project outcomes in strengthening the financial capital of the poor have been significant at both household and group level in the SHG-based projects. One of the main objectives of the projects has been to link the poor to the formal banking sector. Here there was considerable success in large part due to the extensive investment in creating linkages between more inclusive SHGs and the banks. The mechanism for financial empowerment includes targeting grants to the poor to create assets for income security, reducing dependence on high cost debt, increasing savings and creating access to formal financial services. However, the CIG sub-project grant mechanisms are less effective than the SHG structure in attracting savings and developing access to other financial services.

Productivity enhancement and market access. The livelihood projects recognise that the rural poor rely on multiple income sources and that risk management is central to their livelihood strategies. Agriculture continues to be the dominant livelihood source but non-agricultural enterprise and migration is increasing. The projects aim to increase the assets of the poor and their capacity to access the market by supporting agriculture as well as gradual investment in the non-agricultural sector and in employment. The initiative in Non-Pesticide Management (NPM) under the process of community managed sustainable growth (CMSA) in AP is a good example of risk-sensitive livelihood investment based on social capital. Most of the livelihood investments have financed primary production livelihoods, but the projects are also supporting initiatives in non-farm rural economy (NRFE).

Platforms for reducing vulnerability. Reducing vulnerability through smoothing consumption and enabling investment sensitive to risk is a central objective of the livelihood projects. Livelihood investments draw on scarce resources and often require the poor to accept an element of risk to their existing livelihood strategies. The projects vary considerably in outcome and impacts that they have generated as well as procedures for reducing vulnerability. There is a difference between SHG- and CIG-based projects in that SHGs' capacity to create systematic and sustainable change is more notable, to reduce the vulnerability of the poor. SHGs have proven to be effective service delivery channels because of their federated structure and transparent and predictable systems for establishment, rating their quality and sustainability and capacity to deliver several service functions.

The institutional architecture of the CIG-based projects has not facilitated any significant convergence with government and social security programmes. The institutional investments of the projects were too scattered and the livelihood investments have not been bundled in a way that has produced any system change or created significant opportunities for banks, agro-business companies, etc. on the supply side. The emergence of producer companies would seem to be an opportunity for higher level institutional platforms for CIGs, which need, however, considerable technical and business support.

Emerging impacts

Financial wellbeing and livelihood strategies. The rural livelihood projects have significantly increased the financial capital availability of the poor. There is considerable case study evidence that the poor have more choice in the development of livelihood strategies and that decisions are more informed and less driven by debt and hunger. The poor and poorest households in all projects have acquired assets and many have shifted from wage employment to self-employment, brought fallow land under cultivation and have started actively participating in the land lease market.

Human development and quality of life indicators. There is evidence that projects have had a positive impact on human development indicators, such as food security, health care and school attendance, especially where these are linked to direct federation services.

Mobilization, empowerment and gender. All forms of social capital have increased substantially in the SHG-based projects. The projects have contributed to a gender awareness of entitlements and rights as well as practical means to lay claim on these. The scale of mobilization is significant and gender has been either a central organizing principle of the project or has been successfully mainstreamed and targeted in all projects. Similarly, the inclusion of scheduled tribes and castes was above the state and district averages. This mobilization has resulted in an improved quality of life and a general empowerment of the poor at the collective and household level owing to their organizational capacity.

Systemic impact. Although the CIG projects have reduced poverty and increased incomes at the household level in MP, Rajasthan and to some extent Chhattisgarh, there is little evidence they have facilitated more systematic change. However, the social capital based projects through federated SHGs have been able to negotiate and mediate the terms on which the public and private sector interact with the poor on a completely new scale.

Sustainability of impact and cost effectiveness. It is essential to sustain the benefits of livelihood development efforts beyond the immediate project period. Many of the livelihood projects are still on-going and some have just started. There are therefore considerable methodological challenges to measuring sustainability, but some measures at end of projects can be indicative of longer term sustainability: the viability of new enterprises or modified livelihood activities; broader measures such as project rough cost-effectiveness and economic rates of return. The SHG-based projects have been able to increase coverage and sustain further activities with the federations recycling invested funds, compared to the CIG one-off matching grant approach.

Implications and challenges

Building broad-based institutional platforms for poverty reduction

The projects in AP, Tamil Nadu (TN) and Bihar support the assumption that investing in institutions of the poor, through mobilizing capital around thrift transactions and building the institutions through incremental risk sensitive

savings and investments from the grassroots, has built a good foundation for poverty reduction. The earlier CIG projects studied have had a significant impact on household level poverty but with greater cost and less outreach. Most CIGs are an effective mechanism for mobilizing the very poor around joint economic interests. Study findings suggest that this approach should be used selectively and be targeted at groups of poor for entry into particular value chains. The challenge for future livelihood project design and policy is to establish how best to invest in a broad based institutional platform for poverty reduction that focuses sufficient financial resources and technical assistance on the goal of mobilizing and building the skills of the poor for specific livelihoods.

Increase cross-project learning

There has been a significant amount of cross-project learning. Newer projects like those in TN and Bihar have been able to progress relatively quickly in the creation of an institutional platform and have refined the procedures for targeting and social inclusion by drawing on the experience of AP. These lessons need to be incorporated more broadly into policy discussions about the livelihood projects and their design features. The findings of the stocktaking study therefore support the current proposals to provide comprehensive technical assistance, policy support and capacity building through the National Rural Livelihoods Mission. Platforms and networking systems for quick peer to peer learning will be an important element of support as well.

Developing productive assets and expanding economic inclusion

The livelihood projects have enabled the poor to access finance, build capital assets and access markets; this study has noted broad trends in progress and the impact of these on household level poverty. The livelihood projects need to develop a more systematic approach to production and value chain investments which, despite noticeable gains, need to be mainstreamed further. One challenge will be to develop a supported market led approach which can address regional economic opportunities when projects are implemented at scale, without changing the demand led drive of current livelihood investments.

Invest in monitoring and evaluation (M &E) and impact assessment

The livelihood projects require significant investment in M&E and impact assessment. The quality of the data and the quantity available differed significantly across projects. Improvements should be carried out, according to investments made and as the projects are mainstreamed into state programmes, to refine impact indicators that are consistent at different levels, enabling impact assessment at the household as well as the system level. Much more effort should be made to explore methodologies combining quantitative and qualitative studies. These could be carried out concurrently and could be used by project agencies on a regular basis. It is also necessary to have sound M&E tools in order to assess sustainability of the community institutions and the functioning of the wider institutional platforms; this would be with regard to the long-term ability of community institutions to provide both services to their members as well as their negotiation abilities with other institutions.



INTRODUCTION

India is one of the world's fastest growing economies, however over 44 million rural households live below the poverty line. The recognized challenge is to ensure that growth is inclusive and leads to considerable rural poverty reduction, particularly in the 'lagging states' and amongst marginalized groups, where poverty is most entrenched. The World Bank has in the last decade in collaboration with the Government of India (GOI), implemented a series of rural livelihood projects whose objective is to reduce poverty. These projects build on over 20 years of experimenting and gradual scaling-up of NGO and bilateral and government projects targeting the poor. The livelihood projects, apart from being instruments for development, recognize the central importance of livelihood oriented institutions of the poor. These operate as platforms functioning at various levels assisting the rural poor to place real demands and have an influence on the supply of a range of key services.

The present large-scale and apparent successes of the projects prompted the World Bank to commission a stocktaking study coordinated by the FAO Investment Centre Division. This study examined important impacts of the projects, significant innovations and tried to see what lessons could be learned from the experience with regards to the design of future policy interventions to help reduce poverty. The stocktaking (part of a research effort covering agricultural water management projects and M&E systems in agricultural and rural development projects in India) was initiated at a three-day inception workshop, Delhi 2009. FAO and World Bank staff, project teams, government officials and other development partners participated. This stocktaking took place at the time the World Bank was working on drawing key features from a range of projects, including those supported by other donors such as DFID and IFAD, into support for the National Rural Livelihoods Mission in India, a major new programme in the country².

The stocktaking exercise focuses on identifying impacts and experiences from the World Bank funded livelihood projects in seven states of India, including Andhra Pradesh, Andhra Pradesh District Poverty Initiatives Project (APDPIP) and Andhra Pradesh Rural Poverty Reduction Project (APRPRP³), Bihar Rural Livelihoods Project (BRLP), Chhattisgarh District Rural Poverty Project (CGDRPP), Madhya Pradesh District Poverty Initiative (MPDPIP I and II), Orissa Rural Livelihoods Project (ORLT)⁴, Rajasthan District Poverty Initiative (RajDPIP) and Tamil Nadu Empowerment and Poverty Reduction Project (TNEPRP). Orissa was later eliminated from the study as the project was very new at the time of the study.

² India's National Rural Livelihoods Mission - an Overview (<http://siteresources.worldbank.org/INDIAEXTN/Resources/india-NRLM-overview.pdf>)

³ Full name of projects in Table 1.

⁴ Also called TRIPTI (Targeted Rural Initiatives for Poverty Termination and Infrastructure).

The FAO Investment Centre undertook the main fieldwork of the stocktaking study between December 2009 and April 2010. This synthesis note draws on six working papers resulting from the study (see Annexes 1–6 for summary versions)⁵. These include an impact assessment drawing together the quantitative picture and thematic papers on different aspects of livelihood projects i.e. financial capital, social capital, interventions in the non-farm rural economy, the livestock sector and agriculture. Some updates and data from the projects were provided after the working papers were prepared, up to about the end of 2010. This note presents a synthesis of the key findings from the stocktaking exercise. The consultants' papers were peer reviewed by FAO specialists and the synthesis benefited from a review of an early draft by World Bank team members. The findings of the stocktaking express the views of the FAO team.

⁵ The full versions of the working papers are available on request from FAO Investment Centre, TCIN at Investment-Centre@fao.org.



Chapter 1 - Background

1.1 Rural Livelihood projects in India

In order to ensure that the poor benefit from economic growth as well as both rural and urban opportunities, it is essential to recognize that structural barriers i.e. social, market and institutional, cannot be solved by policy shifts alone. Direct intervention is necessary to create new economic spaces and bring about changes in how markets work locally, where the poor themselves are the main participants. Therefore, the rural livelihood projects have a set of key objectives and related interventions based on common guiding principles. The poor need to be socially and economically mobilized to form their own institutions and investment in the creation of this institutional platform is fundamental for sustainable poverty reduction; this is the main principle of all the livelihood projects. This institutional platform has to be inclusive and accountable to the poor and able to provide a base from which the poor can access financial services, develop organizational capacity, engage government services and markets and build assets for poverty reduction.

The livelihood projects aim to create decentralized institutions for the poor that become a sustainable component of local governance systems. The projects have in common the initial investment in institution building and direct transfer of resources to the local level, where communities have a considerable degree of freedom as to the specific livelihood activities in which they invest. The nature and sequencing of subsequent activities related to finance, access to services and productive capital development differ depending on a number of factors, most important of which are the characteristics of poverty in the context of a particular project, as well as the wider institutional settings.

Table 1 which provides a basic profile of the World Bank supported livelihood projects

shows that the projects differ in their basic characteristics as well as in detailed design features. APRPRP, MPDPIP II and RDPIP are second-phase livelihood projects that already have established structures and working procedures, whilst the others BRLP, CGDRPP, ORLP and TNEPRP are at different stages in their first phase of implementation. The projects also have significant differences in the prioritization, phasing and targeting of activities, especially the what, how and who of project design. Andhra Pradesh, Tamil Nadu and Bihar were similar in design. Madhya Pradesh, Chhattisgarh and Rajasthan also resembled each other in design. But these two groups of states have key design differences between them that determine other aspects of the project design.

A major design element may be whether well-being is achieved through empowerment or asset building. Whilst livelihood projects will aim to do both, there is still a question of sequencing and this decision is important because it will affect the way in which efforts and resources at empowerment are initiated and scaled-up. The empowerment-led model focuses on creation and capacity building of local organizations as a mode of institutional transformation. This has been the design element in APDPIP and APRPRP, but it is building on a long history of women's mobilization and political commitment to SHGs (IFAD and UNDP projects). The MPDPIP design has been to mobilize collective action around common economic interests in order to build assets that augment livelihoods. Although the project recognizes the importance of empowerment, this was not thought to be as feasible in the project context, especially as the SHGs will need to find an income stream to be self-sustaining.

1.2 Challenges for stocktaking

The interventions of the livelihood projects and the findings of the stocktaking study related

Table 1
Summary of livelihoods projects examined under stocktaking¹

State	Projects	Key Dates	Funding	Outreach	Basic community organizations
Andhra Pradesh	District Poverty Initiatives Project (APDPIP) and Rural Poverty Reduction Project (APRPRP)	Start date – November 2000 APRPRP End date – Sep 2011 Extension to 2012	World Bank Funding (Phase 1) USD111 million (INR487.9 crores) World Bank Funding (Phase 2) - USD150 million (INR659.4 crores) Project cost till March 2009 USD462 million (INR2033 crores) Additional World Bank funding till 2012 USD100 million.	Total outreach 10,500,000 households (approx.), under the overall State IKP programme	Self-help groups: 97, 000
Rajasthan	Rajasthan District Poverty Initiatives Project (Raj DPIIP) Second phase approved in 2010.	Start date – Aug. 2000 End date – Dec. 2007	World Bank Funding USD105.48 million (INR463.6 crores) Project cost till Dec. 2007 USD124 million (INR545.6 crores)	Total outreach 247,868 households	Common interest groups first phase 18,000
Madhya Pradesh	District Poverty Initiatives Project (MPDPIP). District Poverty Initiatives Project (MPDPIP - II)	MPDPIP Start date – Jan 2001; End date – June 2008 MPDPIP-II Start date – July 2009 End date – June 2014	World Bank Funding (Phase 1) USD110.1 million (INR484 crores) Project cost till March 2008 USD112.8 million (INR496.4 crores) World Bank Funding (Phase 2) - USD110.1 million (INR484 crores)	Total outreach Phase 1 325,724 households Phase 1 and II 625,700 planned households	Phase 1 - Common interest groups 47,000
Chhattisgarh	District Rural Poverty Project (CGDRPP).	Start date – Mar 2003 End date – March 2010	Planned World Bank Funding – USD112.56 million (INR 495.26 crores)	Total outreach over 150 000 households	Common interest groups 20,600
Tamil Nadu	Tamil Nadu Empowerment and Poverty Reduction Project (TNEPRP)	Start date – Oct. 2005 End date – March 2011 Extension to 2014	World Bank Funding – USD120 million (INR 528 crores) Project cost (estimated) – USD159 million (INR 698.9 crores) Additional financing in 2010 USD154 million to 2014	Total outreach 412,430 households to 2010	New self-help groups: 17,000
Bihar	Bihar Rural Livelihoods Project (BRLP)	Start date – Sept. 2007 End date – Oct. 2012	World Bank Funding – USD63 million (INR 277.2 crores) Project cost (estimated) - USD73 million (INR 321.2 crores)	Total planned outreach– 590,000 households	Planned self-help groups

¹ For brevity and simplicity, this synthesis note refers to the state rather than the project in describing the livelihood project experience. When a state has two projects and the discussion or data refers to only one project, the full project title will be provided.

to particular interventions will be looked at in detail in the following sections. However, the varied portfolio and timing of activities in livelihood projects has some implications for the stocktaking study that should be pointed out by way of background. Most importantly, the fact that the projects are in different stages of implementation and located in different state contexts limits the extent to which the findings can be directly compared.

The project monitoring and evaluation systems vary considerably. They did not allow the

identification of a common narrower set of indicators that enable a statement to be made on poverty reduction that is comparable across the projects. In addition, the extended initial investment in institution building results in outputs that are not easily measurable through quantitative indicators of poverty reduction in the short term. Apart from these limitations, the projects all have an extensive information base that, combined with fieldwork and qualitative analysis, have enabled the stocktaking team to gather findings relevant for future livelihood projects and policies.



Chapter 2 - The findings of the stocktaking

2.1 Overview

Livelihood projects have a considerable history in India but the scale of the projects under study, particularly in Andhra Pradesh and their apparent success makes stocktaking for future policy on rural poverty particularly relevant. As an indication of the scale of these projects, the three completed projects in Andhra Pradesh, Madhya Pradesh and Rajasthan had a total investment of USD650 million and involved over 11 million beneficiary households – over 10 million of them in Andhra Pradesh alone⁶. By 2010 the six⁷ main projects were involved with about 50 000 villages. Village level organizations were formed; many of these were further mobilized into over 1 000 secondary federations.

The sheer scale of international investment financing interventions, combined with a focus on developing assets of the poor through their engagement in demand generating livelihoods institutions, is unprecedented in South Asia. While other large programmes have involved microfinance or social safety nets, the projects here have additionally created productive linkages with the public and private sector and incorporated measures for reduced the vulnerability of the poor.

The financial inclusion in terms of the number of SHG to bank linkages achieved in Andhra Pradesh alone accounted for almost 50 percent of all such linkages in India in 2008/2009, the groups having leveraged USD1.5 billion from commercial banks. This linkage to bank resources constitutes a multiplier of over ten times what the project and government have contributed. On the production side, significant volumes of milk, for example, are collected

by community institutions in Andhra Pradesh and Rajasthan at least at District level. Through project support to sustainable agriculture, farmers have now adopted a package of new low external input practices covering 10 percent of cultivated land in Andhra Pradesh, the largest such initiative in the country.

This findings section looks first at the outcomes of these projects in four key linked areas: inclusive empowered community institutions, inclusive financial services, production and market access, mechanisms for reducing vulnerability. The paper then examines emerging findings on the quantitative impact of these interventions on the poor.

2.2 Project outcomes

The institutional platform for poverty reduction

The lack of organizational capacity amongst the poor has been identified by livelihood projects as a key explanation for poverty. The rural poor must deal with state and market institutions as scattered producers and users of services which makes it difficult for these institutions to deliver targeted and cost effective services. It also makes it more likely for the poor to be exploited and disempowered. This gap in organizational capacity is particularly evident in the lagging states and areas within states where poverty is highest and most entrenched. The livelihood projects have taken social and economic mobilization into self-help groups (SHGs) and common interest groups (CIGs) as an entry point for livelihood interventions. In the SHGs social capital (built through repeated transactions and thrift) is used as a base for empowering the organizational capacity to meet future consumption and investment needs and become clients of the banking system and the micro-finance sector. Subsequent investments

⁶ This figure is for the AP Indira Kranthi Patham (IKP) programme, of which APRPRP is a fundamental part.

⁷ Orissa TRIPTI project has not been included as this was at more initial stages of implementation.

in the institutional architecture of the poor includes federating SHGs to increase their capacity to leverage finance and interact with the state and market for accessing services for the poor (Annex 1).

Targeting and inclusion of the poor. By way of overview, the study findings validate the investment made in the institutional platform for poverty reduction. The gross extent of the projects is significant and the proportion of Below Poverty Line (BPL), scheduled caste and scheduled tribe included in the projects is higher than state averages in all of the projects. Andhra Pradesh is by far the largest project with around 11 million beneficiary households constituting almost 70 percent of all households in the state. Targeting has meant that 90 percent of the poor are members of SHGs. In Tamil Nadu the project targets 412,430 households and has already reached its target. Bihar targets 590,000 poor households and has so far mobilized 140,676 beneficiaries for SHGs since 2007. Chhattisgarh has reached its targeted 150,000 poor households by 2010 through CIG sub-projects and community infrastructure projects. In Madhya Pradesh the project benefited 325,704 households (20.8 percent of the poor in the 14 target districts) under a CIG approach and Phase 2 will target an additional 300,000 as SHG members. Finally, in Rajasthan the project reached 247,868 households organized in CIGs.

The study found that the targeting methods (that combine BPL list-based selection criteria and geographic targeting) checked and refined through participatory assessment systems have been effective in identifying poverty and mobilizing the poor. Although the methods for targeting differ (spatial assessment, participatory identification of poor, etc.) and the institutional architecture varies (SHGs, CIGs) the livelihood projects have achieved the fundamental objective of including the poor. Newer projects have also improved targeting mechanisms, including by drawing on the experience of Andhra Pradesh. In Tamil Nadu, for instance, the methodologies for identifying the poor have been refined, highlighting and

ensuring that the most vulnerable and disabled are included (with a target of 25 percent of total beneficiaries) where a small grant component is intended to reduce vulnerability and enable them to participate in SHGs. In Tamil Nadu, for example, the ultra-poor were well-represented in village poverty reduction committees (VPRCs), partially due to a provision which requires that 30 percent of the committee's membership should be from a Scheduled Caste or Scheduled Tribe. In a state that has had long running SHG development, the project initiated integration of SHGs of the excluded poor and marginal groups into a more inclusive village federation system.

Other specific groups are also targeted. In AP 223,208 Persons with Disabilities (PWDs) are organized into 24 505 exclusive SHGs both in the programme and non-programme mandals in the State and in Tamil Nadu assistance has been provided to 70,000 disabled, in 7,600 disabled SHG groups, providing all national ID cards and many aids and appliances and insurance. Typically scheduled castes and tribes have suffered exclusion in development and the projects have specifically targeted them. For example, in Andhra Pradesh over 200,000 scheduled caste SHGs have been formed. In Bihar the highly marginalized landless Musahari caste, who are heavily dependent on migratory work, has been included. Tribal groups often suffer particular exclusion and difficult access to mainstream development programmes. Andhra Pradesh APRPRP has had a specific tribal development plan (TDP) ensuring especially 'primitive tribal groups' have their own institutions, where additional resources and targeted services, on land tenure, marketing, health and education are strengthened, to reach 731,000 tribal households, organized in 53,000 tribal SHGs.

Gender in livelihood projects. The livelihood projects have taken gender seriously and have been successful in targeting women. The target coverage of only 30 percent of CIGs for women has been exceeded in Chhattisgarh, Rajasthan and Madhya Pradesh. In addition, in Madhya Pradesh 95 percent of Village Development Committee chairpersons (VDC) were women and nearly 80 percent of VDCs had only women

in their development committee. The project data here shows that this inclusion has had a positive impact on empowerment as measured by women's decision-making role within the household, incidence of child marriages, participation of the poor and women in local institutions as well as access to government services. Field visits indicate that CIG based projects have contributed towards a sense of empowerment with more women engaging in social, economic and political spheres from which they had not seen the relevance to their livelihoods or previously been excluded.

However it is in the SHG based projects that the sheer scale and depth of women's involvement has been on an unparalleled level. In Andhra Pradesh, Bihar, Tamil Nadu and Orissa the mobilization process focuses on women, which means that in Andhra Pradesh alone there are ten million women SHG members⁸. Subsequent sections will cover many instances of women's leading roles in SHGs and their federations as managers, playing lead roles in marketing and training other members, roles often overturning their traditional household positions. A number of case studies record how these changes have benefitted individual households' well-being.

Building human capital at the grassroots. Part of this sense of empowerment is attributable to the extensive human and organizational capacity that has been developed by the projects. The capacity building has been concentrating on creating institutional sustainability to enable the poor to manage resources themselves and provide services. This has therefore generated a large scale process of building new human capital. Community members have been trained to become functional specialists in areas such as social mobilization, accounting, book-keeping, agricultural extension, training, bank and insurance liaison. This allows for the sharing of roles and responsibilities amongst leaders for a range of interventions, for example, social mobilization, financial sector linkage, food security and sustainable agriculture. Further

capacity building, for example in milk and agriculture procurement centres described below, is a very important attainment in the local human capital and its relation to livelihood strategies, for example women's managing of quality control (e.g. fat level content in milk) and negotiating market prices.

Capacity building and the federation structure. The institutional mechanisms to manage various project interventions (previously done by external agencies) are now often run through village-based sub-committees and monitored and supported by federated structures of the institutional platform; this is particularly in relation to the SHG based projects. The emerging model of federation development and the correlated roles is shown in Table 2. In Andhra Pradesh close to a million or so SHGs are organized into 38,334 Village Organizations, in 1,099 Mandal Samakyas (Mandal Federations) and 22 Zilla Samakyas (tertiary District federation). The sections below will provide some further examples of how the community institutional platform operates in the finance sector and in supporting investment and consumption interventions.

Even in CIG based projects such as Madhya Pradesh first phase, where CIGs were federated into 2,650 Village Development Committees (VDCs), the VDCs are beginning to coordinate wider development needs, as well as promoting microfinance activities. The institutional platforms developed by the project have created opportunities for self-management even outside the federated structure. In fact there were even cases such in Chhattisgarh (with only initial village level organizations) where several CIGs came together to demand services. In one case they used their ability to demand as a group, as well as using their accounting and organizational skills, to assess the costs and benefits of electrification and provide matching funds. This led to a successful proposal when the government then provided electricity to the village. However, here the amount of such federation activities has not been so high. The networks of producers and groups

⁸ It should be noted that in Andhra Pradesh the number of SHGs and beneficiaries covers the overall SHG movement under the State programme IKP, which incorporates the World Bank projects.

Table 2
The emerging federation model based on Andhra Pradesh

Level	Membership	Main roles and responsibilities
District Federation or Zilla Samakhya (ZS)	300,000-500,000	Conducts market interface, maintain MIS/IT systems, insurance call centres
Sub-district or Mandal Samakhya (MS)	4,000-6,000 on average	Support to VOs, builds linkages with government departments, auditing of groups, microfinance function, milk chilling centres
Village Organization (VOs)	150-200 on average	Strengthening of SHGs, arrange lines of credit to SHGs, social action and support activists, village development relations
Self-Help Groups (SHGs)	10-15 per SHG	Thrift and credit, participatory monitoring, poverty reduction plans, household investment plans

has also provided an opportunity for the development of higher level institutions to address production, value adding and marketing for specific demand-driven and interest-based needs, which will be discussed later. In Madhya Pradesh 18 producer companies have emerged and are providing a range of technical and marketing services to their commodity based CIG members. In Tamil Nadu 97 Economic Activity Federations (EAF) have evolved based on priority livelihood needs identified among SHG members. Again the sheer coverage of federation activities in Andhra Pradesh has meant considerable new livelihood opportunities for a very large number of members. Several hundreds of mandal level federations run milk and agricultural procurement and marketing centres. These networks have enabled land leasing at state level and aided further development of sustainable agriculture.

In order to ensure a more sustainable and locally driven growth of human and social capital, the livelihood projects in Andhra Pradesh and Tamil Nadu have started local centres that engage community professionals for mobilizing training, instead of using external agencies. Although the fieldwork found that this system is still developing (in particular in its auditing systems), it has been efficiently mapping professionals to demand and consequently filling capacity gaps. The growing list of services that these community professionals supply has positive implications

for the sustainability of capacity building as well as for the costs of supporting livelihood interventions, which is important for further development (see more later).

Federating and pro-poor systemic change.

Community based institutions have started to build partnerships with mainstream institutions on the supply side (banks, insurance companies etc.) to co-produce goods and services. This has promoted access to services such as insurance, pensions and loans for the poor, as well as rendered access more transparent and efficient because community institutions have started to participate in governance and accountability systems. As we shall see, intensive investment in the creation of an institutional platform can generate significant opportunities on the supply side (e.g. agri-business companies and cooperatives) and these are able to create systemic impacts and changes that benefit the poor. The indications from comparing the livelihood projects are that this objective is best achieved through institutional mechanisms that start with social capital (SHGs) rather than taking economic capital (CIGs) as an entry point. The projects in Tamil Nadu and Bihar are in earlier phases but have already started building a number of linkages to the private and public sector to access services for the poor. The CIGs examined in the stocktaking study, especially in Madhya Pradesh, have had positive impacts in increasing incomes but are less flexible and narrower in range in the services they provide and thus less resilient to shocks and risks.

Developing inclusive financial services

The creation of inclusive financial services to bridge the credit gap for the poor has become the central objective of the livelihood projects. The credit deficit of the poor leads to high cost indebtedness that ties-up labour and capital on exploitative terms and contributes to chronic poverty. The objective of the livelihoods projects is to build basic financial assets and management capacity of the rural poor, build up links to external financial capital and create an inclusive financial sector in order to enable the poor to smooth consumption and manage risk as well as create assets and enhance incomes. In order to ensure this, the process of generating financial capital includes assistance to the poor, where small and incremental steps are taken that typically start with thrift based approaches in order to address basic risks and vulnerabilities, especially with SHG based projects. Subsequent inter-lending from their own funds helps to support consumption and establish a credit record in order to eventually access revolving funds from the project and leverage commercial bank loans. The ultimate objective of the livelihoods projects is to support the poor to access the full range of potential financial services including savings, credit and insurance from the commercial sector. As we shall see, the leveraging of regular external resources provides a highly cost efficient way of mobilizing financial capital for the poor on a very large scale.

The livelihood projects use three main mechanisms to extend financial capital assistance:

- (i) Community investment funds (CIF), which are provided to SHGs and their federations and used as revolving loans that help to establish the credit worthiness of the SHG and create their own capital fund to further leverage resources from the mainstream financial sector. The CIF is also provided to SHG federations at the mandal level in order to provide finance to village level federations for on-lending to SHGs and run community enterprises such as nutrition centres and marketing milk cooling units.

- (ii) Sub-project grants provided to CIGs to help create productive assets: in CIGs the group dynamics revolve around common livelihood interests and CIGs are expected to match these grants with some of their own finance through labour or cash.
- (iii) Safety net finance for the poorest and most vulnerable through small grants to enable them to meet basic needs and facilitate their entry into SHGs. Due to the leveraging capacity of the first process, this is now being adopted across the projects (Annex 2).

Access to finance. The outcomes of project investment in financial capital have been significant at both the household and the group level in the SHG based projects. In terms of context Andhra Pradesh and Tamil Nadu have a combined average mobilization of 87 percent of the poor into financial inclusion networks whereas for other lagging states the average is 26 percent of the poor. The total financial assets created are considerable. In Andhra Pradesh which covers by far the largest proportion the total financial invested assets are worth USD5.5 billion! Most of these are resources leveraged from the commercial banks as loans to SHGs (cumulatively USD4.2 billion by 2009), an over ten-fold build-up over the resources built up locally and with World Bank funding⁹. The programme also mobilized USD131 million government Swarnajayanti Grameen Swarozgar Yojana (SGSY) funds and USD196 million state loan repayment incentives (Pavala Vaddi).

The communities' own investments in turn are also of very large scale: SHGs had savings of USD583.8 million in 2009 and savings of USD623 per SHG. The total amount of SHGs' own funds (including interest repayments and other non-bank accessed funds) was USD1,010 million in 2009 and the total per SHG was USD1,077¹⁰. The APDPIP alone managed to facilitate a 159 percent increase in overall household savings between 2002 and 2006. At

⁹ Data from presentation by SERP CEO V Kumar November 2009.

¹⁰ Figures varied depending on the exact date of recording, but the overall scale is consistent.

the household level the average amount that can be borrowed (adding together internal savings, group corpus and bank linkage) was USD301 in 2009. The project in Tamil Nadu has a similar model for financial inclusion and although the project has only been operational for under four years, the 19,377 SHGs are able to lend on average USD135 per SHG member and as already noted above, dependence on informal moneylenders has decreased significantly. In project areas 79 percent of households reported that SHGs and VPRCs are the main source of credit compared to 51 percent in non-project villages. All three mechanisms have been effective in reducing the credit deficit and the vulnerability of the poor to informal money lenders. In Andhra Pradesh the ratio of informal credit to total credit decreased from 64 percent to 43 percent in the first four project years – much more than in control villages. Similarly in Tamil Nadu the reliance on informal credit fell from 44 percent to 17 percent in the first two years of the project.

The federation structure, financial product innovations and linking to the commercial banking sector. The lessons on financial service development from the livelihood projects in Andhra Pradesh and Tamil Nadu are being gradually incorporated into the design of livelihood projects in other states. Apart from the importance of connecting thrift and social capital to create incremental and risk sensitive build-up of an entity, there are several other key features of the institutional architecture that explain its large expansion and versatility. One is that each tier of the SHG federation performs functions that follow the principle of subsidiaries enabling multiple services to be provided and at the same time creating a system for M&E. With the very large networks of SHGs and their federations and their service orientation, capacity building support and accountability towards members has meant a very large scale demand mechanism is put in place. These projects have piloted and scaled-up several product and service innovations more on the supply side by making SHG federations a single window for the delivery of credit linked to livelihood services.

Examples of product innovations include food security lines and loans for mortgaged lands, whilst examples of service innovations include a helpdesk for SHGs at the bank branch and branchless banking for social security payments. Also 5,178 village organizations have become banking correspondents for commercial banks. These correspondents have reached out to 5.6 million clients with the use of new information technology covering USD100 million of transactions. These innovations have enabled the service providers to overcome barriers to financial inclusion of the poor based on poor economies of scale and high transaction costs. It has also provided the opportunity to set up credit lines specific to the needs of a very large number of poor. In Andhra Pradesh under the Food Security Credit system village federations assist SHGs to assess members' food needs and then buy good quality food in bulk to sell to members at a lower price. By September 2010 this scheme had been accessed by 459,000 members.

One of the main objectives of the livelihood projects has been to link the poor to the formal banking sector with considerable success, partly due to extensive investment in creating linkages between the SHGs and banks. The project in Andhra Pradesh worked closely with NABARD, banks and the government to enable the supply side response. The sharing of project MIS and the placing of bank *mitras* within branches was effective in enabling the banks to assess risk, track credit and lessen transaction costs. Building on the 20-year history of the NABARD Bank-linkage programme, the development of increasingly refined rating systems and a standardized protocol for forming and functioning of SHGs and federations has contributed towards high confidence in SHGs as client organizations of banks, even while these are not formal organizations. For example, in Andhra Pradesh repayment sub-committees monitor SHG performance whilst the *pavala vaddi* scheme encourages repayment by reimbursing the interest amount to SHGs after loan repayment and so lowering the effective interest rate

to 3 percent. On the demand side, product development has made the formal banking sector not only more accessible but also more responsive to the financial needs of the poor. In 2009 in Andhra Pradesh, where the systems of financial inclusion have had the most investment, SHGs accounted for nearly ten percent of the total rural credit business of banks in the state and 32 percent of SHGs had linkages to commercial banks.

Financial access in CIG projects. The mechanism for financial empowerment in Madhya Pradesh, Rajasthan and Chhattisgarh is to obtain grants for the poor in order to create assets for income security, reduce dependence on high cost debt, increase savings and create access to formal financial services. The CIG mechanism of sub-project grants was found to be effective in increasing household incomes and was able to build up savings from contributions to *apna kosh* (village funds) within the Village Development Committee; in the MPDPIP the CIGs contributed almost USD8.3 million to *apna kosh* funds. However the CIG and sub-project grant mechanism are less effective than the SHG structure in attracting savings and developing access to other financial services. The main reason for poorer performance in this area is due to failure to establish effective CIG linkages to banks and the fact that social capital was not initially built around thrift and mandatory savings. CIG federations were more focused on market linkages than on financial service delivery. In Madhya Pradesh for example, despite the significant contribution of CIGs to the *apna kosh* fund, only 30 to 40 percent of the VDCs functioned well enough to experience 95 percent repayment rates and only 40 to 50 percent of members regularly deposited savings in the VDC. There is limited project information on financial services development because of the difference in project orientation. Other indicators of financial empowerment, such as increased incomes, increased consumption and reduced debt are generally positive, especially for Madhya Pradesh and Rajasthan (see later).

Productivity enhancement and market access

The livelihood projects recognize that the rural poor rely on multiple income sources and that risk management is central to the livelihood strategies of the poor. Agriculture is still the dominant livelihood source but non-agricultural enterprise and migration is increasing albeit in a low productivity cycle that has not reduced poverty. The livelihood projects aim to increase the assets of the poor and their capacity to access markets by supporting agriculture as well as gradual investment in the non-agricultural sector and in employment. The assessment is that demand for value added in agriculture has increased and that small producers could benefit substantially from agriculture and related sectors if they aggregate, produce, create institutions for quality control and invest in productivity enhancement. Asset creation has to be incremental and demand driven, recognizing that risk management is an organizing principle for the poor and central to poverty reduction that is sustainable. In addition, livelihood interventions need to support the non-agricultural workforce that has grown steadily but is largely disorganized and unable to negotiate terms and opportunities (Annex 3).

Intervention models for livelihood support.

The livelihood projects take two main institutional approaches to providing finance and livelihood support services like input supply, technology, information and market linkages. As described above, the SHG model uses thrift and revolving loans to provide risk sensitive finance for demand driven consumption and investment choices. Initially, when SHGs are formed a major proportion of internal lending and initial loans from the revolving funds are for basic consumption purposes. After a few cycles of lending most of the loans, which also tend to increase in size, are also increasingly used for enhancing existing livelihoods i.e. mainly dairy, minor agricultural activities and small trading. In projects where the SHGs are the main community institutions, specialized sub-committees are created at the village and mandal level, each of which is responsible for

managing a particular business line to render non-financial services to their clients. In Andhra Pradesh 4 200 villages are involved in milk collection through mandal level bulk collection units (BMCUs) and 1,440 villages are active in collective agriculture product procurement. Economic Activity Federations (EAF) of which 97 have been formed in Tamil Nadu, provide non-financial services to support livelihood activities of community level institutions. Thirty eight percent of EAFs are dairy related, but others focus on garment and brick making, vegetable cultivation, coir rope manufacture, etc. (Annex 4).

In projects that have CIGs as the primary community institution the risk of economic investment is offset by an initial grant to a group that is organized around a particular economic activity. Most CIGs in Madhya Pradesh and Chhattisgarh were agriculture related (tube wells, minor irrigation, high yielding varieties) and livestock (dairy, goats and pigs) and over 30 percent non-farm enterprises. In the more arid State of Rajasthan the proportion of livestock CIGs was higher being close to 50 percent. In Madhya Pradesh Producer Companies (16 in agriculture and two in livestock) have been established to support the market access of CIGs and enable them to negotiate with suppliers and buyers.

Increasing productivity of livelihoods. The ease of measuring process and outcome of production oriented livelihood interventions is largely linked to the design of the project. Assessment of production based CIGs sub-projects is commonly done project ex-ante and ex-post economic and financial analyses. Projects based on the CIG and sub-projects grant model, such as those in Madhya Pradesh and Rajasthan, showed a rapid increase in both income and assets closely attributable to a production intervention. Incomes in Madhya Pradesh, for example, increased by 65 percent for CIG households, 34 percent for non-CIG households in project villages and 25 percent for non-CIG households in

comparison villages¹¹. The rapid increase of household incomes in Rajasthan by 78 percent between 2001 and 2007 is also attributed to the purchase by CIGs of mainly livestock assets. In the non-farm sector, the stocktaking study also found that collective enterprises managed by CIGs, such as in artisanal production, generate higher rates of return than non-farm investments based on loans and self-employment. The data suggests generally that CIGs in practically all sectors have contributed substantially towards increased incomes¹² as the impact section below will explore further.

In Andhra Pradesh, Tamil Nadu and Bihar loans and savings groups at the community level have been the mechanism for livelihood interventions. The loans start small, providing working capital to support livelihood activities before being used to invest in diversified and intensified production. Livelihood investments have been supported by projects through a range of non-financial services that lower the risk of investment as access to social safety nets, technical support and improved market access are provided through a single membership based institutional platform. The livelihood investments have been further enhanced by addressing critical infrastructure gaps in convergence with government programmes (see below) promoting wholesale trade in commodities produced and consumed by the poor and developing franchises and partnerships with the private sector. The outcomes have been significant; as an indication of scale, in Andhra Pradesh the first project realized price increases of 30 percent and in the second project 1662 Village Organizations sold 65 different commodities at higher than market rates through collective marketing activities. Individual SHG members have drawn on several billion dollars from commercial banks alone for livelihood investments. In Andhra Pradesh community institutions have started to command a significant market share e.g. 30 percent of the

¹¹ The increased wellbeing of non-CIG households in comparison villages has been explained as a spill over of benefits from the project, and from community infrastructure development.

¹² It is easier, as is commonly done under financial analysis, to assess a link directly between a CIG 'livelihood' sub-project and incomes.

state's milk production, 10 percent of the paddy procured for the Public Distribution Scheme and 20 percent of the milk purchased by private dairies and cooperatives.

The initiative in Non-Pesticide Management (NPM) under a process of community managed sustainable agriculture (CMSA) in Andhra Pradesh is a good example of risk sensitive livelihood investments based on leveraged social capital. The main objective of the NPM initiative is to reduce farmer production costs by using fewer pesticides and so restore long-term soil productivity. The benefits for human and animal health are an additional advantage of NPM. The NPM initiative draws on farmer knowledge and financial and technical support from a range of programmes to develop alternative methods of plant protection, soil health and fertility improvement. The project facilitated the innovations process through NGOs, while the federated SHG structure has enabled the programme to be scaled-up by project trained community professionals and farmer-to-farmer disseminations.

By the end of 2009 the initiative covered 450,000 farmers in over 4,024 villages and 800,000 ha or around ten percent of cultivated land in the state (and is rapidly spreading). It has contributed to a reduction in production costs of up to USD223 per ha enabling a marked increase in agricultural incomes, as well as creating a shift from dependence on money-lenders. Specific support through CMSA models adapted to the poorest of the poor and small plots of land has also linked in land lease to landless labourers. The project is also facilitating convergence with the NREGS Rainfed Sustainable Agriculture in 21 Districts. In Bihar a similar model for sustainable rice intensification and sustainable wheat intensification has quickly been adopted by 25,000 farmers on 1 200 ha.

Organizing producers and linking them with markets. As already noted above, SHG Federations, producer companies and the Economic Activity Federations (EAFs) of Tamil Nadu, have been able to make appropriate sub-

sector interventions to link primary producers to the market. These institutions have facilitated the large-scale aggregation of new producers into business collectives consequently enabling bulk purchasing and developing private sector linkages for market access. The relative advantages of these institutional mechanisms in different sectors and contexts were considered during the study.

In the livestock sector the dairy industry is operated through the three tier structure so in Andhra Pradesh the VO owns and operates the milk collection centre, the Mahila Samakhya owns and operates the BMCU and the Zilla Samakhya facilitates the sale and purchases inputs in bulk; in this case mainly to the AP Dairy Cooperative Federation. The extensive network of producers meant considerable expansion into the market. Training on how to run milk procurement centres at the village level and bulk milk cooling units (BMCU) at the mandal level has enabled SHGs and their federations to take over 199 BMCUs covering 4 200 procurement centres with 150,000 milk producers. The federations were able to provide technical staff, make use of under-utilized facilities, encourage coordination, create greater transparency in the collection process and ultimately negotiate a better price for the milk producers. With up to 270,000 litres collected per day 771,000 MT was produced in 2010 valued at USD37 million. In Madhya Pradesh higher level grouping was considered more difficult to roll out because dairy CIGs are scattered and so producers are more difficult to organize. However in one successful case in Sagar District a producer company was formed from a federating process starting with dairy CIGs creating cluster level groups that are represented in the producer company. The producer company has purchased a BMCU with project funds and procures milk from 50 villages, which is sold to two private dairies and a cooperative.

In terms of agriculture marketing, 15 commodity based producer companies were set up in Madhya Pradesh with 40,000 paid-up shareholders, with a USD4.4 million turnover per year. The large extent of interventions has

allowed wide-scale linkages with state seed corporations and price premiums e.g. soya. In Andhra Pradesh federations have been active in the marketing and input purchase for paddy, maize, non-timber forest products and more than 60 commodities, on a much larger and significant scale. The necessary infrastructure for marketing and dairy, has been set up, at each of the over 800 mandal level procurement centres which are supporting 280,000 farmers handling 650,000 MT of produce worth around USD135 million. In both states economies of scale have meant reduced transaction times and lower transport costs. In Andhra Pradesh there was particular employment of women, tribes and the poor and quality control processes amongst farmers.

The study found that both models have been effective in increasing prices and contributing to the formal organized sector of dairy cooperatives and private dairies. However it was found that the integrated three tier structure in Andhra Pradesh has ensured long-term sustainability of institutional capacity as the various tiers at village and mandal level developed business and management skills whilst associating with public, private and cooperative dairy partners. In addition, should the need for finances arise, the SHG model can count on their own savings whereas the producer company has to solicit funds from the open market at higher interest rates or depend on a grant. Although producer companies have increased incomes from grant funded investments for particular commodities they do not constitute an institutional source for more general business development. The advantage of SHG federations for livelihood support (in particular in Andhra Pradesh) is their capacity to group services together to enable the poor to overcome obstacles with regards to livelihood investments.

Diversification and the non-farm rural economy. Most of the livelihood investments have been made in primary production livelihoods but the projects are also supporting initiatives in the non-farm rural economy (NFRE). The projects provide loans and grants for investment in the NFRE as well as youth

job training and placement. The project data does not enable a comprehensive or comparable overview of the impact of NFRE investment. However, the study can comment on the advantages and challenges of broad processes and outcomes based on the reports available and the field trips undertaken. Most investment in the NFRE has been demand driven capitalization of existing activities mainly in retail and trade oriented towards local markets, where under the CIG model usually 30 to 40 percent of activities are non-farm related, for small-scale traders and shops, production and value addition to local raw materials (from bricks to coir rope) and small-scale services i.e. tailoring, mechanics and hairdressers (Annex 5).

The activities usually have low entry costs, generate a high internal rate of return and are the primary livelihood source of the household. However the study found that for the majority of rural households NFREs provide a marginal livelihood and although they prevent destitution they may not be sufficient to lift households above the poverty line in the absence of other handlers in the rural economy. The challenge for NFRE livelihoods is that in order to progress further support is needed towards increasing production, ensuring quality and consistency in products, increasing market share and accessing non-local markets. Both grant and loan driven investments have not received enough guidance in business development or market access to become capitalized or turn into significant employment generating enterprises.

The demand driven approach to the NFRE taken so far has clear benefits (risk sensitive, building on local skills etc.) but the projects' assumption that finance and credit are the limiting factors for NFRE development were often found not to be valid. The lack of utilities, information and infrastructure were found to be just as important and a broader value chain perspective able to identify drivers of economic change and markets for potential growth is necessary. This perspective might also be able to identify where there are opportunities for SMEs and employment creation. This is a challenge recognized by project management

and progress has been made in developing non-financial support structures. In Tamil Nadu for example, the project has developed a more strategic approach towards investment support covering resource mapping, market assessment and support with business development.

Creating employment opportunities.

Tamil Nadu, Andhra Pradesh and Bihar have specific skills upgrading and job training programmes directed mainly towards rural youth. They have had considerable success in creating employment despite the fact that the majority have not been in support of business development more broadly. A concerted effort was made to strengthen poor rural households' access to emerging job opportunities in fast growing urban industries that have rising standards of employee requirements. These projects provide both placement support in partnership with private sector organizations and employers as well as training. In Andhra Pradesh again this has taken place on large scale and is becoming institutionalized at State level.¹³ The project has also conducted skill training and placement programmes especially for the younger generation from exceedingly poverty stricken and poor backgrounds. Considerable support was also provided to strengthen employer relations and assist the rural youth to deal with urban living. The programme has now become a state level Employment Generation and Marketing Mission with a range of services supporting both trainees and companies seeking employees. By 2010 employment placements had been made for 225,000 trained young people in various trade areas such as the clothing industry, communication and construction. This has led to increased incomes (up to USD1,000 annually) as well as a reduction in distress migration; clearly this has lessened the vulnerability of the poor. Access of the very poor to formal sector employment represents progress towards their negotiating power as well as an increase in income.

The project data analyses the various institutional models for supporting livelihood interventions. However, despite various case studies it was more difficult to assess the impact of livelihood interventions at the household level in terms of income and household production related livelihood strategies. Further examination is necessary to perceive how particular livelihood interventions e.g. the livestock, agricultural or service sector, have impacted household incomes and changed the livelihood strategies of the household in terms of consumption and investment decisions, as elaborated by the impact section below. This would also enable clearer identification of the most appropriate point of investment in value chains as well as the various types of human capacity development and training that would assist the poor in developing wide-ranging and sustainable livelihood strategies.

Platforms for reduced vulnerability

Reducing vulnerability through smoothing consumption and enabling investment sensitive to risk is a central objective of livelihood projects. The poor are vulnerable (to shocks, illness, accident, disaster and seasons). They also have limited access to insurance or formal safety net mechanisms. Public sector programmes with a mandate to reduce vulnerability are often poorly targeted or have limited resources. Livelihood investments (from either savings, loans or over time) draw on scarce resources and often require the poor to accept an element of risk to their existing livelihood strategies. The livelihood projects' main objective is risk reduction as this is a fundamental precursor to investment. The process has been described as one of 'ratcheting-up' above the poverty line by creating safety nets for consumption, below which the poor will not fall. Apart from the interventions described in the previous sections, specific mechanisms to reduce vulnerability include developing insurance services for the poor, converging with government programmes, linking the poor to public sector social safety nets and leveraging technology to provide more transparent and efficient access to these

¹³ Through the Employment Generation and Marketing Mission (EGMM), a society set up by the Department of Rural Development of the Andhra Pradesh (AP) Government (<http://egmm.cgg.gov.in/>).

services. The objective of livelihood projects is to create general change to reduce the marginalization and vulnerability of the poor. The outcome has been positive with interventions benefiting from the extensive associated networks.

SHGs as central points for reduced vulnerability. The projects vary considerably in procedures for reducing vulnerability and in the tangible outcomes and impacts that they have generated. The difference between the SHG and CIG based projects is most notable in their capacity to create total and sustainable change that reduces the vulnerability of the poor. Confidence from both the public and private sector has grown towards the capacity of SHGs to manage, implement and monitor diverse programmes. SHGs are very effective service delivery channels because of their united structure and transparent and predictable systems for establishment, rating and core functions. In Andhra Pradesh SHGs have become central points for insurance services and pension funds, consequently enabling improved access of the poor to these services. By 2010 5.2 million landless labourers and 3.9 million spouses of SHG women were accessing government insurance schemes. Access of the poor to insurance products has also increased because these have become more tailored (for example micro-insurance for landless agricultural labourers) and quick to process (claims are now settled within 2-3 weeks rather than 4-6 months). The fact that the projects have invested in insurance mitras and developed a web portal for all insurance transactions is also significant in increasing availability. This is also applicable for pensions. MIS data from 2009 indicates that 4,200,000 women have been registered under the state co-contributory pension scheme and that over 370,000 pensioners have started receiving monthly INR 500 pensions. It was also noted that the Food Security Credit line provided low cost purchase for food-insecure households.

Joint partnerships. In Andhra Pradesh the federated SHG structure has been able to introduce a wide range of programmes

focusing on different facets of poverty i.e. entitlements such as public food distribution system (PDS), social security insurance, pensions etc. (see above), health and nutrition and enhancing capabilities (training and education). The projects have also created livelihood opportunities (institutional finance, seed marketing, etc.) and contributed to developing a productive infrastructure. Extensive convergence has taken place with the National Rural Employment Guarantee Scheme (NREGS) for minimum wage employment and the SGSY scheme for resources for self-employment. These partnerships have created employment and safety nets for the rural poor and for several million households over the last three years. These institutional platforms created by the projects have helped target the large resources of government schemes to SHG members' productive investments in land and water resources. Secure tenure over land is a key asset to reducing vulnerability. The SHG networks have once again provided a key platform for extending and improving services through the Land Access Programme in connection with the revenue department and resolved 385,000 land dispute cases as well as creating access to land covering 191,000 ha. There was also an initiative of direct land purchase up to 2009 for 4,500 landless women from very poor scheduled and tribal households.

In Andhra Pradesh other key safety nets and social services have been enhanced. The purchase of rice and other food commodities in bulk from the public distribution system (PDS) has been another initiative that has directly reduced the vulnerability of the poor in convergence with the public sector. It has supported over half a million households in achieving food security and saving USD48 annually on transaction costs alone. Convergence with public health and nutrition services has also taken place in 5,088 villages, with health training to federation officers and regular health days for members and the public. This initiative has contributed to regular health savings among 283,000 members, specifically for health emergencies. With trained and specialized health community resource

personnel piloted in 1,100 nutrition-cum-day care centres for mothers, no low birth weight babies were born and no maternal deaths recorded among the 5,600 by enrolled SHG members. As observed earlier, both the Andhra Pradesh and Tamil Nadu projects had special initiatives in the formation for SHG of the disabled, traditionally a very vulnerable group, providing them with equipment for mobility and identification papers. This helps provide formal recognition needed for entitlements from national programmes.

In Tamil Nadu the project focused primarily on reducing vulnerability through the Village Poverty Reduction Committee (VPRC) whose main task is to mobilize marginalized households concentrating on the disabled and the extremely poor. The existing Panchayat Level Federations (PLF) were not considered representative of the poorest and are only able to provide finance to the poor when they have been reconstituted with SHGs of the poorest in collaboration with the VPRCs. This process concentrates on vulnerability and creates a sustainable mechanism for liaising with local institutions of governance. The project is still under implementation but has already created links to several government programmes, for example the Community Professional Learning and Training Centre (CPLTC) has started to create links with NREGs for training in social auditing and create access to the Kalaingar Insurance Scheme. The early phase of the project does not enable the study to evaluate these initiatives at reducing vulnerability, but the emerging evidence supported by field visits indicates that the project has drawn successfully on the experience of Andhra Pradesh and created an institutional platform that will be able to provide pro-poor services in collaboration with the public and private sector.

CIGs and reduced vulnerability. The projects in Madhya Pradesh and Rajasthan have different mechanisms that contribute to reducing vulnerability and converging with government programmes. The project impact on poverty and reduced vulnerability is tangible (see later sections). However the development

of a broader platform for poverty reduction in convergence with the private and public sector remains a challenge. In these projects one of the main mechanisms for reduced vulnerability is insurance to protect the livelihood assets of CIG members. In Madhya Pradesh 12 percent of households and in Rajasthan 36 percent of households had livestock insurance; this is high compared to the Indian average. Access to other types of insurance was not extensively developed by the projects and field visits found that there had not been enough capacity building to support more general insurance applications.

The institutional architecture of the CIG based projects has not facilitated any significant convergence with government social security programmes. The projects have not had a concerted drive to leverage community social capital into an institutional platform able to provide multiple services. The institutional investments of the project were too scattered and the livelihood investments have not been bundled in a way that has produced any systemic change or created significant opportunities for banks, agro-business companies etc. on the supply side. The projects have created links with the public sector for certain services (training, running of PDS shops, technical services etc.) however the connections are incidental and specific to particular project interventions. Fieldwork case studies also found that CIGs are often kinship based institutions and therefore do not provide significant change towards a more inclusive platform for social security. In Madhya Pradesh connections have been made with the Gram Sabha through VDCs representing CIGs for sub-project planning. This has also had an influence on Gram Sabha attendance by the poor (24 percent of the poor attend in CIG villages compared to 12 percent in non-CIG villages). This does represent a change to reduce both marginalization and vulnerability of the poor. Subsequent phases in Madhya Pradesh and Rajasthan have adopted a broader approach to livelihoods development, integrating the SHG model, implementation of which is now underway.

Innovations in service delivery. The greater effectiveness of the social capital based projects in creating systemic change is partly because their institutional platform allows for a number of opportunities for innovation in service delivery. Capacity building, training and the federated structure for scaling-up and M&E has contributed towards the product innovations and last-mile service delivery that has enabled the poor to access services. Community institutions in Andhra Pradesh have created a database in order to channel funds from line departments which has improved the efficiency of particular services. Andhra Pradesh is a forerunner in innovation owing to its extended and intense experience of social mobilization. The newer SHG projects have drawn on this networking experience and have made rapid advances in the creation of networks and mechanisms to reduce the vulnerability of the poor. The project in Bihar which started in 2007, has already bundled micro-credit with food nutrition, swapped high cost debts and created help-desks in banks for micro-credit planning. Overall, the study found that although the projects in Madhya Pradesh, Rajasthan and Chhattisgarh were effectively targeting the poor and able to support market access, they were unable to increase much access of many poorer people to services and resources necessary for reduced vulnerability.

2.3 Emerging impacts of livelihood investments

Large-scale livelihood projects have had an extensive range of impacts on many poor people on the ground. Numerous studies have examined the changes to the livelihoods of the poor through economic, social, sector and gender analysis. The challenge has been to quantify the impact. It is hard to make a comparison of impact on poverty without reporting on numbers in the context of that particular project. Many facts have to be considered and taken into account i.e. portfolio of activities, project phases and contexts of livelihood projects. The outcomes of this project have been described in the sections above.

This section describes the main impacts on financial well-being, livelihood strategies, human development and empowerment of the poor, mainly at the household level¹⁴ (Annex 6).

Impact on financial wellbeing

The livelihood projects have significantly increased the financial capital available of the poor. The united institutional platform in Andhra Pradesh has had an influence on unprecedented amounts of credit and other financial sector services for the poor, based on the track record and efforts of each SHG. By 2009 Andhra Pradesh households had generated internal collective funds of USD800 million as well as a further USD4 billion amounting to about USD420 financial resources per household.¹⁵ Turnover was created from the original project loans, revolved and internal loans, bank loans, SGSY subsidies, personal savings and other savings. This turnover and the amount available per SHG indicate stronger financial wellbeing, self-management and investment capacity. The impact assessment of APDPIP reports an absolute increase in household income of 115 percent for project villages (from USD483 to USD1,041) for project villages and 64 percent for non-project villages.¹⁶ Preliminary results from the second phase impact assessment (March 2010) indicates a reduction during the last five years in the percentage of households below the poverty line of 11 percent by project participants and 3 percent of non-project participants.

The main objective of the project in Madhya Pradesh has been to invest directly in sustainable livelihoods through grants and this has had a notable effect on increasing incomes. The mid-term data of the MPDPIP indicates that net household income increased by INR 1,200 per household for projects

¹⁴ This section draws mainly on data from the projects that have had impact assessments and Andhra Pradesh dominates the data because it is by far the largest project. The impact assessment and detailed thematic papers contain some further impact data. However, the unevenness of the data in this section reflects the inconsistent way in which data is collected in the project MIS and impact studies

¹⁵ Project paper for proposed Additional Financing APRPRP, November 2009.

¹⁶ This data is based on ICR. Detailed examination of the data on income, consumption and savings during the stocktaking study suggests that there are some methodological issues in the impact assessment not uncommon for large livelihoods projects.

groups and declined by INR 365 for non-project households. Although comparison groups experienced a decline in incomes in eight out of 14 districts in project groups there was a decline in only two out of 14 districts. This is an encouraging outcome taking into consideration the 2002-2003 drought. The end-term report in 2006 showed increased incomes of 65 percent for CIG households; 34 percent for non-CIG households in project villages and 24 percent for non-project villages. The increased incomes, according to the project staff, for non-CIG households in project villages were due to a spillover of project benefits (e.g. marketing and infrastructure). The greatest increase by sector in mean incomes came from animal husbandry (an increase of 158 percent) and agriculture (66 percent). There was also an increase in consumption and expenditure mainly on food, education and shelter (see section below) whereas the percentage of household savings increased from 13 percent at baseline to 46 percent at the end of project. The internal rates of return of most sub-projects in both APDPIP and MPDPIP were between 50 to 100 percent.

The poor in APDPIP and MPDPIP have experienced an increase in the ownership of both movable and immovable property. An ex-post economic analysis conducted in 2006 to 2007 indicated that 88 percent of the assets created under the MPDPIP were still functional. In Rajasthan productive assets also increased as expected for project households. APDPIP tripled the value of assets at the household level during the six-year project. Most of this investment was in land leasing, livestock and house construction. The average household asset value for project beneficiaries, according to the ICR, increased from USD746 (INR 32 808) in mid-2000 to USD2,001 (INR 88,061) in December 2006 (both at current prices), recording an annual growth of 31 percent, although there was also a considerable increase in non-project households.

Impact on livelihood strategies

There is considerable case study evidence that the poor have more choice in the development of livelihood strategies and that decisions are more informed and less driven by debt and

hunger. The poor and poorest households in all projects have acquired assets and many have shifted from wage employment to self-employment, brought fallow land under cultivation and have actively started participating in the land lease market. There has been a reduction in distress migration and increased asset ownership has enabled the poor to diversify their livelihood sources. Support for initiatives in the non-farm rural economy has assisted diversification and skill upgrading and job placements have helped a great number of young people to find employment in the formal sector. The safety net of grants in some projects and social capital based networks in others has provided the poor with a margin in which they can make risk sensitive investments in livelihood improvements. The creation of backward and forward connections in key sectors have moved profits further down the value chain and increased incomes at the household level.

Although there is considerable case study evidence (confirmed in the fieldwork undertaken by the study) of these various livelihood changes, the stocktaking exercise was unable to build a comprehensive quantitative picture of the scale and scope of these changes. This was also the case for Andhra Pradesh despite the fact that it has the most complete database. Many of the outcome figures have already been presented (numbers of SHGs, financial capital availability, convergence with government programmes, job placement). These seem to have contributed to considerable impacts on household incomes as shown above. The impact on human development indicators and empowerment, as shown below, can also be largely quantified. Although the above-mentioned discussions indicate that land leasing has increased, collective marketing has brought down costs and the value of household assets has tripled during the period of the APDPIP project, it is difficult to provide a unified measure of changes in livelihood patterns. This is particularly difficult as many of the initiatives address sub-groups of a very large number of beneficiaries. Although growth for Madhya Pradesh in particular sectors has also been quantified there is little quantitative information

on changes in livelihood strategies at the household level. However an increase in wage incomes of 23 percent and decrease in migration by 15 percent suggest that the livelihood options available to poor people have increased.¹⁷

Impact on human development and quality of life indicators

The projects have had a positive impact on human development such as food security, health care and school attendance. Some of these impacts have been as a result of direct project targeting and others have arisen indirectly as a result of improved incomes. According to the APDPIP impact assessment in Andhra Pradesh the percentage of households reporting food insecurity came down from 34 percent to 7 percent between 2002 and 2006 with over half a million households achieving food security. This was due mainly to direct targeting of food insecurity through the rice credit line that reduced the cost and transaction costs of food for the poor. Health indicators have also seen a marked improvement in Andhra Pradesh between 2004 and 2006 with a 10 percent increase in breast feeding, a 24 percent increase in the number receiving medical treatment and a 23 percent increase in the number of people attending private hospitals. Project households spent three times more on education than non-project households and the drop-out rate of girls from residential schools decreased from 14.8 percent in 2001 to 4.3 percent in 2006. Data on human development from the MPDPIP shows that there was an increase in spending on education (56 percent), food (30 percent) and house maintenance (27 percent) by CIG households.

Impact on mobilization, empowerment and gender

The level of mobilization of the poor and their inclusion in community organizations has already

been noted. All forms of social capital have increased substantially in the SHG based projects including solidarity and collective action for more dignified livelihoods. The projects have helped create a greater awareness of entitlements and rights as well assisting with practical means to obtain these. The scale of the mobilization, as already outlined, is significant and gender has been either a central organizing principle of the project or has been successfully mainstreamed and focused on in all projects. The inclusion of scheduled tribes and castes was also around or above the state and district averages, where they are often excluded in programmes. Several activities have often specifically targeted these groups. There has been a general empowerment of the poor at the collective and household level through their capacity to organize as well as an improved quality of life which is described above. The collective empowerment of women has already been noted and there have been numerous instances of women changing roles on an individual level, as managers, as activists and leaders, farmer trainers and controlling the marketing process. At the household level it is evident that the decision-making power of women has increased in matters related to family planning, investment and education; there is also an increased respect for very poor women. Community based institutions are also addressing specific gender focused issues. In Andhra Pradesh 332 community managed family counselling centres have resolved 15,901 cases of violence and injustice to women.

The project participants have also become empowered in local governance systems. The projects lack a unified approach to Panchayati Raj partly because the role of Panchayati Raj institutions varies from state to state. In some projects like Andhra Pradesh SHGs do not work closely with the Panchays although project participants are made aware of their rights and entitlements. In Tamil Nadu and Madhya Pradesh, the project works closely with the Gram Sabha and has a clearer and more explicit aim, especially in Tamil Nadu, focusing on increasing access and influence of the poor on local governance. In all cases the projects have helped increase the participation of the poor

¹⁷ There are many reasons why it is hard to comprehend the livelihood strategy changes. The end-line report for instance, finds that the proportion of income from migration to total income dropped from 36 percent to 21 percent for CIG households, marginally increased for non-CIG households from 25 percent to 29 percent and decreased for comparison households from 33 percent to 30 percent. During the same period income from remittances went up by 23 percent for CIG households, 10 percent for non-CIG households and 13 percent for comparison households. Although there is some indication that the livelihoods of CIG households have improved it is difficult to draw clear conclusions from this data.

and women. In Madhya Pradesh 24 percent of CIG households attend the Gram Sabha regularly compared to 12 percent of comparison households and in Tamil Nadu 74 percent of households in project villages participate in Gram Sabha meetings whereas during the APDPIP 96 percent of women attended Gram Sabhas. A considerable number of SHG leaders have become Gram Sabha leaders.

Systemic impact

Although the CIG projects have reduced poverty and increased incomes at the household level in Madhya Pradesh and Rajasthan and even to some degree in the new state of Chhattisgarh, there is little evidence they have facilitated wider change systemic change in support agencies. On the other hand, the social capital based projects have been able to negotiate through federated SHGs and mediate the terms on which the public and private sector interact with the poor on a completely new scale. The capacity to have a systemic impact is closely tied to the intense and bundled investment in local institutions (capacity building, technology, credit, insurance etc. as explored above) and the synergy created between investment and consumption functions. Another important facet has been the aim of eventual complete coverage ('saturation') in each village and mandal, to create a change in the communities and institutional environment, and monitor how external agencies respond to them. The impact of this systemic change is evident in connection with government programmes and social safety nets, increased access to insurance and the commercial banking sector and increased agricultural market share of community based institutions. This change encourages further opportunities and innovations linked to health, education and land tenure. All of these interventions also help support those who are more vulnerable.

2.4 Sustainability of impact and cost effectiveness

Sustaining the benefits of livelihood development efforts beyond the immediate project period is of course critical. Many of

the livelihoods projects are still on-going, some have just started and few have been in place for any period of time, so on the ground analysis of actual sustainability of outcomes and impacts cannot easily be quantified. Few household post-project studies have been carried out after two to three years post-project. Household impacts can also be expected to be increasingly affected by a range of external factors after an intervention. There are therefore considerable methodological challenges to measuring sustainability, but at the end of the project some measures can be indicative of longer term sustainability such as the viability of new enterprises or modified livelihoods activities, what basic household factors reducing vulnerability have been put in place, capacity and institutional elements which assist in sustaining or expanding efforts and broader measures such as project rough cost-effectiveness and economic rates of return.

Household sustainability

We have seen above how livelihood strategies have changed to a considerable degree helping to reduce migration, increase productivity, women's management of household finances, youth employment, reduced dependencies of moneylenders and access to life insurance. These often reflect fundamental capacity and asset changes at the household level which are likely to assist families to cope with a range of 'external' economic and environmental shocks. These basic capacities are particularly striking under the SHGs model. On the other hand, examples of internal rates of return of 50 to 200 percent for enterprises have been reported. This is particularly true for dairy and some non-farm rural enterprise activities. Direct and substantial increases in incomes are also essential in order to gradually improve and radically transform livelihoods.

Support from the communities' own institutions

We have also seen how institutional changes under the projects have been developed providing essential elements with regards to supporting sustainability from small groups to secondary levels of institutions, financial and business

management capacities, as well as technical skills of a very large number of community institutions. The internal rates of return of most group interest based sub-projects under Madhya Pradesh and Andhra Pradesh were between 50 and 100 percent (data from ICRs). These provide a strong incentive for sustaining groups' activities and provide continuing dividends to members. These institutions are backed up by the buildup of savings and corpus funds, forming essential cushions for both members and the organizations. This also encourages them to sustain their efforts, maintain assets and even diversify their strategies. This is applicable to all projects, but the extent and level of sophistication has reached exceptional levels under the SHG federation model, particularly in Andhra Pradesh, where there is deliberate recycling and further leveraging of financial capital. In Andhra Pradesh and Tamil Nadu the leveraging through commercial banks supported by a SHG rating system on group functioning and strength incorporating measures of financial self-sufficiency, forms an inherent mechanism of sustainability.

Building linkages for the future

Another significant function for supporting sustainability accountable to their members, are the extensive links made with other public social services through the widespread SHG federation networks (on pensions, insurance, and other safety nets). With the network practically covering the whole State of AP, a 'saturation effect' provides an opportunity for uniting long-term public support to poor households, despite possible political and wider global changes. Both federations and producer companies have established business links with the private sector under the SHG and CIG models, with sound investment relationships. These business relationships are still facilitated through Project intervention and will need more time and maturity before they become sustainable according to analysis of livestock and non-farm rural enterprise support.

Continuation of efforts

In addition to elements of sustainability discussed above, efficiency is critical for state and national institutions in order to sustain and

expand project efforts. Unfortunately, it is more difficult to get a clear idea of the efficiency of ongoing projects. Completed projects such as the Madhya Pradesh overall project economic rate of return (ERR) was estimated at 42 percent, which provides good justification for investment efforts. The returns to group sub-projects in other livelihood projects are a good indication for similar overall level results elsewhere. On a very preliminary level and with a great deal of caution a comparison can be made on the basis of crude cost effectiveness in terms of cost per beneficiary. The Andhra Pradesh projects (APDPIP and APRPRP) have performed well on cost at USD44 per household over a period of six years (2003 to 2009). The cost per household as of March 2009 is roughly INR 2 412 per household (USD55) including the subsidy of the state government for interest reimbursement. The cost per household is still under INR 3 500 taking into account the budgets planned up to 2011. This is significantly lower than the cost of the other livelihood projects and one of the reasons that it has been possible to scale-up the project across Andhra Pradesh. The cost per household in Tamil Nadu is INR 19 970 (around USD430). This comparatively high cost has to be considered in the context of the exclusive focus on the extremely poor in Tamil Nadu. The cost per beneficiary household in Madhya Pradesh was INR 11,970 and in Rajasthan it was INR 22,000.

However, this analysis must be considered preliminary at this stage as comparisons do not take into account a range of factors, such as grant elements of capacity building, connections with other programmes and the duration that resulting community institutions are sustained. All additional costs of reaching out to the poorest and most vulnerable must be factored in through grants as well as additional targeted and often individualised capacity building and special services.¹⁸ The very low cost per beneficiary in Andhra Pradesh is significant and large amounts of further resources leveraged under that project must also be factored in.

¹⁸ Some of these elements have been also taken up in Andhra Pradesh APRPRP under a strategy to target and support the remaining rural poorest of the poor in the State.

As noted above, a further major strategy developed in Andhra Pradesh and Tamil Nadu and adopted in more recent projects is the development of cadres of community professionals (CPs or community resource persons in Andhra Pradesh). There are over 20,000 of them in Andhra Pradesh and 10,000 in TN; these are institutionalized under federations or learning centres. In Andhra Pradesh there are a further 180,000 facilitators and over one million trained group leaders. The CPs and their federations form an 'indigenous' low cost and locally accountable capacity building force which provides a considerable degree of sustainability and capacity to improve livelihood development efforts. In Tamil Nadu they have also been closely involved in the development and continuous review of all the projects' operational procedures.



Chapter 3 - Implications and challenges

This section draws together some preliminary implications of the stocktaking study and considers the challenges that these present for future policy and project design in rural livelihood projects. As previously reviewed, the scope and size of these projects is significant in terms of financial investments made and variety of implementation methods used within a common framework. The livelihoods approach is also very wide-ranging covering poverty, economic, social, political and institutional aspects. The task of 'taking stock' and building a coherent quantitative picture of the process and impact of the different projects has been operationally challenging. The outcomes and impact of the livelihood projects presented in this synthesis provide a basis for learning the following lessons.

3.1 Building broad-based institutional platforms for poverty reduction

The projects in Andhra Pradesh, Tamil Nadu and Bihar strongly indicate that investing in institutions of the poor, through the mobilization of social and financial capital and strengthening their transaction capacity with a range of services, has built a good foundation for poverty and risk reduction. The projects have performed well with regards to cost effectiveness and outreach. Andhra Pradesh has made special progress for ten years with its continual development and expansion process. This therefore suggests that the institutions created are becoming sustainable and significant players on a state-wide scale. The earlier CIG projects studied had a significant impact on household level poverty but with a greater cost and less extension. The

key finding is that mobilization based on larger scale federated social capital base provides a more inclusive and sustainable platform for poverty reduction because it provides a basis for joining a number of services and resources for the poor from the public and private sectors (co-production). The study findings suggest that the CIG approach should thus be used selectively and targeted at groups of poor for entry into particular value chains as CIGs seem to have been a fairly effective mechanism for direct mobilization of the very poor around joint specific economic interests. The establishment of CIGs is costly and specific technical support is needed throughout; these factors, combined with its relatively less inclusive approach (there is a strong element of self-selection) do not make it an operation that can be copied at larger scales and developed easily.

The challenge for future livelihood project design and policy is to establish how to effectively invest in a wide-ranging institutional platform for poverty reduction that is capable of supplying sufficient financial resources and technical assistance for mobilizing and building the skills of the poor. The broad based institutional platform needs to concentrate on combining SHG based approaches in collaboration with the public and private sector. This is necessary in order to unlock constraints on the supply side and increase benefits to the poor in various sectors from gains in last mile service delivery – making sure services provide outreach even to those who usually have least access. The investments in GOI poverty reduction programmes is likely to increase and the rural institutional platform can facilitate convergence in terms of programme content, sequencing and institutional arrangements

for implementation and monitoring. The experience of livelihood projects so far has demonstrated that an institutional platform self-managed by the poor can contribute to systemic and sustainable impacts.

3.2 Increase cross-project learning

The findings have shown that there has been a significant amount of cross-project learning. According to experience gained from Andhra Pradesh newer projects, like those in Tamil Nadu and Bihar, have made reasonable progress towards the creation of an institutional platform and have successfully improved the procedures for targeting and social inclusion. The progress of the project in Andhra Pradesh has frequently been associated with the relatively long history of social mobilization and institution building. Progress in the widely differing political and economic situations of Tamil Nadu and Bihar, shows that it is also possible to learn from experience, experimentation and good project design into new contexts. A major task now is to further strengthen the cross-project learning systems and put them into practice. Although innovations can ease the learning curve for poverty eradication much can also be learned from struggling initiatives as well as cases of slower progress. This is especially the case when expanding further initiatives in new states.

These lessons need to be more broadly incorporated into policy discussions concerning livelihood projects and their design features. The following are some of the issues on which cross project learning would be useful: (i) what are the additional costs of reaching the very poor and disabled and what are the implications for replication and mainstreaming; (ii) how to maintain accountability and transparency with the increasing size and portfolio of SHGs; (iii) how to build linkages to Panchayati Raj Institutions in order to further the interests of the poor whilst strengthening local governance; (iv) how to maintain and build on the social capital created by CIGs in those projects that are now developing SHGs; and (v) how higher

level economic groups emerging out of SHGs and federations will maintain accountability and include all members, as the better resourced and traditionally active participants (i.e. males in the household and elites) may start to play bigger roles.

The findings of the stocktaking study support the current proposals to provide comprehensive technical assistance through a national mission for rural livelihoods. The progress made in poverty reduction through livelihood projects has been due to bottom-up project reforms. The timely implementation of a national mission for rural livelihoods capable of engaging in policy and process reforms, and able to offer comprehensive technical assistance to state governments as well as encourage capacity building, market and bank linkages is essential if this is to prove successful. The increasing progress made in integration and coordination must be repeated and scaled-up with efficient and well planned support. A national mission must develop the capacity to monitor and evaluate programme progresses on several levels, facilitate cross-project learning and help create the capacity for achieving output-based management. In order to gain centralized and comprehensive support it will be necessary to change the project based approach of monitoring disbursements and physical and financial targets to a more outcome based mode of triggers for resource allocations. The national mission for rural livelihoods should also identify core elements of the work started in Andhra Pradesh that allow SHGs and their federations to develop as approved service providers and set up support systems for their further advancement.

3.3 Developing productive assets and expanding economic inclusion

The livelihood projects have helped the poor to gain access to finance, build capital assets and access markets. This study has observed broad trends in progress and the impact of these on household level poverty. Despite noticeable gains the livelihood projects

need to introduce a more widely used and efficient approach to production and value chain investments. One proposal would be to develop a supportive market led approach without changing the current demand driven livelihood investments. The economic rates of return for a large proportion of household level activities remain relatively low despite good examples of group collective marketing, sustainable agriculture growth and producer companies which are emerging owing to a lack of backward and forward connections, limited integration of productivity improvement, poor infrastructure and the lack of business advisory services. Many of the investments made, particularly in the non-farm rural economy, were demand driven investments in retail and trade based livelihood activities that generate little employment and still support livelihoods just above the poverty line. In order to extend more intensive, specialised livelihood support to a very large number of community group members, additional effort and resources are necessary. This is especially the case in light of the mostly small and medium sized farming and enterprise opportunities that will be available for the rural poor.

These projects have had considerable success, especially in Tamil Nadu and Andhra Pradesh, in facilitating the economic inclusion of the poor into formal sector employment. The motivation behind these project components has been the fact that one job per poor household can bring the whole family out of poverty and formal sector employment brings in higher and more stable income. They have achieved considerable progress and effectiveness due to increasingly sophisticated job matching, specialised skill training and post-placement support. There was an initial intensive and often individual perseverance to find workable and accessible methods as well as liaising with private sector contacts. Further work on economic inclusion will soon be necessary on a more strategic rural development level combined with the support for productive and value addition, referred to above.

Some of the challenges to extend and systematize these important initiatives and

lessons for economic inclusion are rooted in the fragmented nature of the public and private agencies that can support income and employment generation of the rural poor. Some important areas to be addressed are emerging. With higher-level influence, livelihood projects should look at how key sub-sectors, relevant to the rural poor in different areas, are identified and prioritized on local development agendas, and how they can trigger inclusive growth and employment. There is also a need to promote and build up connections with both public and private partners, without losing grassroots accountability. One example is in the area of sustainable agricultural extension. This may require support for regional sector studies and processes for participatory local development planning, together with formal extension agencies. Comprehensive mechanisms have also to be in place for supporting federations, producer companies and their members ensuring that they have sustainable internal mechanisms for business management and the capacity to negotiate and manage fair contractual arrangements with outside parties. This is necessary to guarantee their maintenance and strengthen their empowerment in relation to often larger global economic forces.

The Panchayati Raj Institutions (PRIs) have a constitutional role related to this in governance, local economic development and social justice. As previously shown, the livelihood projects have developed varied connections with local government, depending partly on the particular state role that PRIs play in development. Several cases of important integrated activities have taken place. One of the challenges is to maintain the autonomy of the institutional platform of the poor as well as empowering the poor to voice their concerns within the PRI system so that it represents their interests. In this connection, two areas which need to be considered are the institutional setup and representation of federations at village level and the local development planning process to identify and implement key economic services and infrastructure.

3.4 Invest in M&E and impact assessment

The livelihood projects require significant investment in M&E and Impact Assessment. The quality of the data and the quantity available differed significantly across projects. Impact indicators that are consistent on different levels need to be improved considering the amount of investment made and as projects mainstream into state programmes. These must enable an assessment of impact at the household as well as at the systems level. The results for quantitative assessment were found to be difficult to interpret in several instances. This is not surprising as projects have multiple interventions and overlapping project phases. Assessment in Andhra Pradesh of project results was a complex task owing to saturation coverage and integration with the state programme.

Qualitative studies often tend to focus on success stories rather than combining sound economic analysis with livelihood studies across a typical range of cases. More precision is necessary in order to identify the course of livelihood changes and examine strengths and weaknesses of different interventions. Efforts should also be made with regards to methods that combine quantitative and qualitative studies. Large base-line and end of project surveys, with extensive questionnaires, create large amounts of data that raise a lot of questions about cause and effect. The qualitative studies lack clarity with regards to significance and attribution of project results in different contexts. It is more important to work on the quality of data available¹⁹ perhaps rather than increase the quantity. Combinations would overcome some of the previous limitations for example by using carefully sampled panel households to thoroughly examine and compare different types of project and programme support and how they operate at household level (i.e. not exclusively project focused). It would also provide deeper insights into meaningful livelihood attainment

progress and transformation of livelihoods strategies at household level. As previously mentioned, understanding pathways could be partly based on a simplified classification of household livelihood strategies, based on criteria of core assets and security with regards to access to services, and examining changes to a few indicators closely associated with project interventions, within the livelihoods classes.

It is also necessary to have sound M&E tools to assess sustainability of the community institutions and the functioning of the wider institutional platforms, with regards to their long-term ability to provide services to their members and their ability to negotiate with other institutions. Much information is already being collected through increasingly sophisticated and rich data management information systems (MIS) and projects have developed a range of accountability monitoring systems able to track key processes. Challenges are in balancing focus on management of relevant information rather than data overload and combining data collection with community capacity to manage information and appreciate its utility in the longer term. It is also useful to identify and report information which reflects institutional relationships especially for economic inclusion. Measuring institutional relationships should include widely applicable standards for service delivery by public and private support agencies. With regards to future policy it will be necessary to provide robust measurements, combining assessment of changes in livelihood strategies of households and how these are significantly related to state and local level progress towards establishing sound institutional platforms and supportive environment.

¹⁹ Existing data collection systems and data such as censuses and sector surveys should be instructive. However the periodicity and sampling structure are often inaccurate or on too large a scale for data to be used for assessing project level attributions.

Key references

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<http://go.worldbank.org/Z37LNY7OC0>

Andhra Pradesh

Andhra Pradesh District Poverty Initiatives Project (APDPIP, P045049).

<http://web.worldbank.org/external/projects/main?pagePK=64283627&piPK=73230&theSitePK=40941&menuPK=228424&Projectid=P045049>

Rural Poverty Reduction Project (APRPRP, P071272).

<http://web.worldbank.org/external/projects/main?pagePK=64283627&piPK=73230&theSitePK=40941&menuPK=228424&Projectid=P071272>

APRPRP Additional Financing (P104724).

<http://web.worldbank.org/external/projects/main?pagePK=64283627&piPK=73230&theSitePK=40941&menuPK=228424&Projectid=P104724>

Society for Elimination of Rural Poverty (SERP), implementing agency for State of Andhra Pradesh IKP programme which covers APDPIP/APRPRP.

<http://www.serp.ap.gov.in/SHG/index.jsp>

Rajasthan

Rajasthan District Poverty Initiatives Project (Raj DPIP, P010505).

<http://web.worldbank.org/external/projects/main?pagePK=64283627&piPK=73230&theSitePK=40941&menuPK=228424&Projectid=P010505>

Project website.

<http://www.dpipraj.gov.in/index.htm>

Madhya Pradesh

Madhya Pradesh District Poverty Initiatives Project (MPDPIP, P059242).

<http://web.worldbank.org/external/projects/main?pagePK=64283627&piPK=73230&theSitePK=40941&menuPK=228424&Projectid=P059242>

Madhya Pradesh District Poverty Initiatives Project (MPDPIP – II, P102331).

<http://web.worldbank.org/external/projects/main?pagePK=64283627&piPK=73230&theSitePK=40941&menuPK=228424&Projectid=P102331>

Project website.

<http://www.dpipmp.mp.gov.in/english/index.htm>

¹ The detailed reports are available from FAO Investment Centre.

Chhattisgarh

Chhattisgarh District Rural Poverty Project (CGDRPP, P076467).

<http://web.worldbank.org/external/projects/main?pagePK=64283627&piPK=73230&theSitePK=40941&menuPK=228424&Projectid=P076467>

Project website.

<http://www.cgrurallivelihood.org/>

Tamil Nadu

Tamil Nadu Empowerment and Poverty Reduction Project (TNEPRP, P079708).

<http://web.worldbank.org/external/projects/main?pagePK=64283627&piPK=73230&theSitePK=40941&menuPK=228424&Projectid=P079708>

TNEPRP Additional Financing (P107668).

<http://web.worldbank.org/external/projects/main?pagePK=64283627&piPK=73230&theSitePK=40941&menuPK=228424&Projectid=P107668>

Project website.

www.vazhndhukaattuvom.org

and TN Rural Department website:

http://www.tnrd.gov.in/schemes/ext_worldbank.html

Bihar

Bihar Rural Livelihoods Project (BRLP, P090764).

<http://web.worldbank.org/external/projects/main?pagePK=64283627&piPK=73230&theSitePK=40941&menuPK=228424&Projectid=P090764>

Project website.

<http://www.brlp.in/>



ANNEX 1

Social capital

Institutional development and social capital of the poor in livelihoods projects

by IFMR-CMF

Introduction

Social scientists have struggled to find a monolithic, universally-applicable definition of social capital. Sociologist Pierre Bourdieu defines social capital as the “aggregate of the actual or potential resources which are linked to the possession of a durable network of more or less institutionalized relationships of mutual acquaintance and recognition.”¹ Nahapiet and Ghoshal, borrowing on Bourdieu’s work, define social capital as “the sum of actual and potential resources embedded within, available through and derived from the network of relationships possessed by an individual or social unit. Social capital thus comprises the network and the assets that may be mobilized through that network.” Nahapiet and Ghoshal proceed to argue that “organizations as institutional settings are able to develop high levels of social capital.”²

The definitions of social capital noted above emphasize the importance of developing strong relationships between individuals, links that could be harnessed to access resources and services. This study looks at the development of social capital in World Bank funded livelihood projects in four Indian states: Andhra Pradesh, Tamil Nadu, Madhya Pradesh and Chhattisgarh. The livelihood interventions were funded by the World Bank but implemented by local governments. Both the World Bank and local governments believe that it is essential to develop effective and sustainable institutions for building and maintaining social relationships. The World Bank viewed institutions in the context of their livelihood interventions as organizations owned and managed by target beneficiaries that would combine their skills and resources.

This qualitative study of livelihood interventions analyses whether institutions defined as organizations owned and managed by the poor, improved inclusion efforts and service delivery to the poor. The research team focused more on outcomes at group (self-help group/ common interest group) level as well as village, block and district levels instead of focusing on household level impacts.

Methodology

The study team visited all four states and interacted with the project officers at the state and district level. In Andhra Pradesh and Tamil Nadu, the study team engaged in discussions with SHG members and representatives of their federations. In Madhya Pradesh and Chhattisgarh, the study team spoke with the members of common interest groups, village development committees and representatives of producer companies.

¹ Pierre Bourdieu. “Forms of Capital.” In J. Richardson (Ed.) *Handbook of Theory and Research for the Sociology of Education* (New York, Greenwood) 248.

² Janine Nahapiet and Ghoshal, Sumantra, “Social Capital, Intellectual Capital and the Organizational Advantage,” *Academy of Management Review*, 22 (Spring 1998): 243.

The study relies mainly on the study team's interactions and observations during field visits, several reports provided by the World Bank and MIS Data, and project reports provided by implementing governments. The implementation completion reports contain information about the implementation and the impact of World Bank funded interventions. The project annual reports provide detailed updates on the status of projects with regard to their scale of operation and how the projects were implemented

In order to gauge the effectiveness of institutions at increasing inclusion, the research team first looked into whether the interventions targeted the ultra-poor, women and other marginalized communities. Secondly, the team examined whether institutions had structural features or rules that facilitated representation of these groups. The team looked at indicative representative structures that had guaranteed successful inclusion. If an institution's rules required that the ultra-poor be represented, researchers took this to be indicative of the institution's inclusiveness. To analyse the success of institutions in targeting marginalized communities, researchers used Management Information Systems data provided by the project teams. Researchers were able to find statistics from data concerning the number of extremely poor households affected by these interventions i.e. the number of women reached by the intervention etc. The team used project annual reports and interviews conducted with beneficiaries and the project facilitation team when analysing the structural aspects of institutions that were conducive to inclusion.

The researchers looked at a number of different indicators in order to understand how institutions were able to improve access to services. They also sought to establish institutional links between local organizations to create new and more effective delivery channels. They relied on project reports and interviews with federation members and staff to determine how institutional connections were formed and the degree to which skills were developed. The researchers also addressed the question of whether higher staff skill levels and greater institutional associations resulted in increased access to services; they relied on MIS data to quantify the scale of operations and number of services provided to beneficiaries.

In order to assess sustainability, researchers looked for structural features of institutions that would allow for knowledge to be retained internally and examined whether the interventions included programmes or organizations focused on training local people in skills that would help them run and manage local institutions. The research team also looked at the financial structure of different institutions to see whether they would be able to become financially sustainable over the long term. For example, researchers asked "do institutions rely solely on external sources for funding or have they built internal sources of finance that would eventually reduce their dependence on external sources of funding?"

Findings

Inclusion

Self-help groups were generally more successful than other institutions at reaching women. Despite the fact that self-help groups and common interest groups successfully included the very poor, self-help groups and federated structures institutionalized norms that increased and maintained inclusion.

Women. Self-help groups (SHGs) were more successful than other institutions at including women. SHGs are female-only institutions which were created for the explicit purpose of empowerment. In contrast, common interest groups (CIGs) and producer companies (PCs) intervened directly in

economic activities such as agriculture, which tend to be dominated by men. The implementing partners made an effort to include women in the CIG model by focusing on traditionally female-led economic activities. This is one reason why female participation remained relatively high in states that adopted the common interest group model. For example, women comprised 37 percent of the CIG membership in Madhya Pradesh³ and approximately 26 percent of the membership in Chhattisgarh.⁴ Producer companies were generally less successful at facilitating female participation as they focused more on male-led agricultural activities such as soybean production and seed processing.

Ultra-Poor⁵. The implementing partners in all the states, apart from Chhattisgarh, identified the poorest members of beneficiary communities through participatory rural appraisal and wealth rankings. Both the SHG and CIG group models attempted to include the very poor. In all study states, the poor constituted a significant percentage of target beneficiaries.

Although the first step is to aim towards the inclusion of marginalized groups this alone does not necessarily guarantee access to services. An ultra-poor beneficiary may gain access to one service because he or she was initially sought out and involved in this intervention, but could still be excluded from many other services available to other beneficiaries. At the beginning of most interventions an outside party i.e. project team from the state government, decides which beneficiaries receive services. However, after the initial phase local institutions play a larger role in deciding how and to whom services are distributed. If the very poor and other marginalized people are not represented in local institutions they could be excluded from crucial services. It is therefore important that the very poor contribute and have a say in these institutions that provide services, if there is to be complete involvement.

The village poverty reduction committees (VPRCs) in Tamil Nadu serve as an example of an institutional setup ensuring participation of the poor. The very poor were well represented in village poverty reduction committees in Tamil Nadu. This was partially because of a provision which required that 30 percent of the committee's membership should be from a Scheduled Caste (SC) or Scheduled Tribe (ST). The Secretary or Treasurer of the committee must also be a very poor individual. Researchers observed that greater representation in local institutions may enhance access of the poor to various services. Illupur in Tamil Nadu is one village where the poor were well-represented on both the village poverty reduction committee and the panchayat level federation. The president of the village poverty reduction committee and the treasurer of the panchayat level federation were both very poor. In this village, approximately 10 percent of beneficiaries were very poor, but this group received 17 percent of the panchayat level federation loans.

Representation in decision making institutions may have ensured that the ultra-poor received loans proportional to their population size. In Andhra Pradesh, village organizations insist that membership should include at least two members from every self-help group; a provision which ensures that the very poor have access to the organizations' services. A key difference between village organizations in Andhra Pradesh and VPRCs in Tamil Nadu is that the latter requires that the very poor are represented in the organization's leadership, whereas village organizations have no such requirements. Based on field observations, researchers judge representation to be an important component of inclusion efforts⁶. Clearly, this obligation that requires representation of the very poor in institutional leadership could be an effective mechanism enabling their access to a wide range of services.

³ MPDPIP Status Report. June 2001.

⁴ Aide-Mémoire. Mid-Term Review and Implementation Support Mission. CGDRPP.

⁵ Sometimes termed the Poorest of the Poor

⁶ Stocktaking coordinator's note: A poorest of the poor strategy has been recently developed in Andhra Pradesh.

Despite the fact that common interest group interventions were successfully directed at the very poor, they failed to create institutions that serve this population in the long run. Unfortunately, instead of focusing on building long-term institutions the interventions were designed to provide a one-time grant based service.

Contribution of institutions to enhanced service delivery

Service delivery or the ability to provide new and existing services in an efficient manner requires effective institutions – in particular institutions that employ people with higher level skills. The problem that the poor face in accessing services is twofold: service providers such as government agencies are understaffed and not equipped to provide quality services while other organizations with highly skilled employees offer high quality services that are too expensive. The World Bank funded projects aimed to improve service delivery by investing in local institutions through increased financial support and by developing human capital. Most interventions sought to build stronger institutions by using skilled professionals at the local level.

Andhra Pradesh. In Andhra Pradesh, the government adopted a model of progressive institutional building, starting at the local level with self-help groups and village organizations before creating more advanced institutions at the federated structure level. Project facilitation teams trained village organization and self-help groups in basic skills such as bookkeeping and general accounting and bank linkage protocols. The teams also selected individuals who had mastered these financial skills, called community professionals, to train others in their community. Developing local human resources talent allowed self-help groups and village organizations to function effectively with reduced dependence on the project facilitation team. The presence of locally trained financial professionals encouraged members of high level institutions to focus on sectors outside financial services. Federated institutions played a large role in creating institutional connections owing to their highly skilled leadership and newly found concentration on key sectors. These institutional links facilitated the provision of new and high quality services.

Specialized bodies in the area of dairy farming were created within existing institutions which focused exclusively on improving dairy services. These specialized bodies, called sub-committees, recruited dairy industry experts to run dairy businesses. The project facilitation team also trained the sub-committee members in skills related to managing dairy businesses. This combination of financial capital and specialized knowledge at both the village and mandal level led to the creation of a new dairy service channel. In the Machareddy mandal of Nizamabad district, the dairy sub-committee aided by the project facilitation team took over an unused bulk milk cooling unit. Bulk milk cooling units collect milk produced by dairy farmers, before selling it to district cooperatives. In order to ensure that farmers receive a better price for their milk, the mandal level sub-committee established a sub-committee at the village level responsible for collecting bulk quantities of milk. They were consequently able to establish a new service channel for villagers due to the fact that the sub-committee members who ran the bulk milk cooling units possessed the appropriate skills to run a dairy business effectively.

A number of other interventions in Andhra Pradesh created new delivery channels by developing human capital and by establishing new institutional connections between organizations. In the case of collective marketing, specialized training in procurement to enable small, marginal farmers and Non Timber Forest Produce (NTFP) collectors to obtain better prices for their produce, led to the creation of an efficient service channel. Procurement sub-committees, divisions within village organizations, were trained in procurement skills enabling them to engage successfully in collective marketing. Farmers from many villages now sell their produce to village organizations instead of the local market and other traders. This shift demonstrates that skill training has led to better price

awareness for farmers. During the financial year of 2008 to 2009 collective marketing was carried out by 1 662 village organizations in 65 commodities.

The main reason for success in creating new service channels is the monitoring mechanisms that were built into the structure of institutions. The multiple layers of alliances such as village organizations, mandal samakya and zilla samakya create a hierarchical monitoring system which improves service delivery for all organizations. Higher level institutions are able to directly monitor the activities of lower level institutions, increasing transparency and efficiency.

Madhya Pradesh. Programme administrators in Madhya Pradesh focused far less on developing institutions that would be able to train beneficiaries in the necessary skills required to enhance service delivery. Implementing partners designed common interest groups as a way for beneficiaries to access a one-time grant-based service and not as a long-term service delivery mechanism. In Emelya village in Raisen district, five beneficiaries joined a common interest group in order to access grant money for a tube well. After receiving the tube well, they worked together for shared access to water. Implementing partners also attempted to create united structures for common interest groups known as village development committees. However, there was no regular attempt to make use of these institutions to provide other services.

Implementing partners started producer companies in order to secure better price margins for farmers who were also members of common interest groups. Producer companies in Madhya Pradesh were more effective at providing services to farmers even though they were started later than other institutions. Soybean farmers in Raisen district interviewed by the study team revealed that they were able to access better quality seeds because of their membership in producer companies. They were also able to save on transportation costs as producer companies buy produce at the village level. The producer company model differs from the self-help group federation model in one key respect i.e. skills training. Producer companies are owned by member farmers but managed by skilled professionals who are recruited from outside the farmer group. Despite the fact that producer companies did not focus on building managerial skills, they were still successful at delivering services to beneficiaries. Producer company board members felt that the model ensured better quality seeds and prices for farmers.

Chhattisgarh. In Chhattisgarh, as in Madhya Pradesh, common interest groups provided a one-time grant based service. CIGs were federated only in a handful of villages across the state. In Dhamthari village, about 15 common interest groups formed the Mahanadhi Samardhan Ajeevika Samiti Federation in 2007 in order to address the villagers' most important need: electricity. Beneficiaries benefited from the existing social relationships in the federation by asking for electricity to be supplied to their village; this was backed by financial capital provided by the World Bank funded project. The federation was then finally able to successfully secure government funds for electrification. Such institutional setups could have facilitated access to much needed services for beneficiaries. However, poor planning and implementation prevented the formation of federated institutions.

Tamil Nadu. Tamil Nadu created a local institution, the Community Professional Learning and Training Centre (CPLTC), which supplied skilled local trainers to village level organizations. This institutional setup allowed village level organizations to train their members more rapidly, resulting in efficiency gains for these organizations. More efficient access to high quality trainers could help villagers access finance because community professionals trained villagers in the protocol of developing bank linkages. In the Thiruvavur district of Tamil Nadu for example, the intervention brought 25 people from several SHGs together to form a training centre. The project facilitation

team then identified three people with managerial skills from the SHGs to work as centre staff. The centres developed a database of community village poverty reduction committee and SHG members skilled in financial operations. At the time of this research team's visit, these community financial specialists were in the process of training nearly 34 village poverty reduction committees. Skills built in the earlier phases of the intervention were leveraged to train beneficiaries in the later phases through this newly established institution. Once financial skills were built, self-help groups were united into panchayat level federations and the village poverty reduction committee handed over the financial operations to the panchayat level federations. This arrangement enabled the village poverty reduction committee to focus on monitoring financial service delivery and may create space for the provision of other services.

Sustainability of institutions

To evaluate whether institutions would be able to maintain their human capital in the long term, researchers looked for mechanisms that would allow institutions to retain human resources capabilities. World Bank funded projects in Andhra Pradesh and Tamil Nadu focused mainly on training beneficiaries in managerial and technical skills. Skills training led to greater specialization within institutions and the creation of professionals who were well versed in key industries at the local level. For example, the Machareddy Mandal Samakya in Andhra Pradesh provided selected farmers with specialized training in non-pesticide management so that they would be able to train others in the same techniques. These farmers are now key resource people for others in their community who hope to learn better agricultural practices.

Financial independence is perhaps the most critical component of institutional sustainability because a reliable income stream protects an organization against external funding shocks and ensures continued service delivery. Although none of the projects were completely financially sustainable, researchers examined the income generation potential of various institutions to estimate their long-term prospects. Study teams observed that federated self-help group institutions and producer companies have managed to pay part of their operating expenses through their activities. For example, self-help groups and their federations lend internally at differential interest rates to generate income. Producer companies by virtue of their business model generate profits, which they use to finance operating costs and reduce dependence on external funding sources. In Andhra Pradesh, skill development at the local level and increased monitoring has helped improve the financial performance of project supported institutions. Study teams observed that repayment sub-committees of village organizations have helped guarantee higher repayments among self-help group members.⁷

Conclusions

The World Bank funded livelihood projects aimed at building inclusive institutions that would provide quality services to the poor. The SHG model was more successful on the whole at assisting women and the most marginalized members of the community. Tamil Nadu, was able to create structures and rules that established inclusion of the poorest.

The SHG interventions created multi-tiered institutions which served as effective delivery mechanisms for a wide range of services. Andhra Pradesh is the only state so far that has created institutions offering multiple services to the poor. The state was able to develop effective service delivery mechanisms because the federated structure established monitoring mechanisms and facilitated skill building at multiple levels. Most other institutions remain focused on only one

⁷ For more information on financial sustainability, please see Centre for Micro Finance's thematic study on financial capital.

service. Tamil Nadu has achieved some success in the area of financial services but the state has yet to use institutions as platforms for the delivery of other services. Interventions in Madhya Pradesh and Chhattisgarh failed to convince existing structures to create multiple service delivery channels.

Although SHGs and PCs are moving towards financial sustainability, only self-help groups have been able to develop institutions that cultivate talent at the local level. The training of community professionals in Andhra Pradesh and institutions such as the CPLTC in Tamil Nadu has helped develop retaining skills within communities. Interventions focusing on building inclusive and federated institutions were generally more successful at reaching beneficiaries. Skills improvement at the local level is also a key factor in building effective institutions.



ANNEX 2

Financial capital

Financial capital development of the poor in livelihoods projects

by IFMR-CMF

Introduction

Access to finance at affordable interest rates is considered one of the key elements in bridging the inequalities in societies and has remained a key challenge all over the world, and in particular the South Asian and African countries. Financial inclusion is necessary to improve and achieve social integration. Countries around the world have come up with different policies in order to achieve financial inclusion. The Government of India and the Reserve Bank of India (RBI) have taken various steps over the years to promote financial inclusion, starting with the nationalization of banks between 1969 and 1980 and up to the recent introduction of 'No Frills' accounts. However, data indicates that a significant percentage of the population still do not use banking facilities; only 54 people out of 100 held a savings bank¹ account with a financial institution in 2007.

This gap in access to formal institutions has led to a huge dependence on informal sources for credit at high interest rates. In India, the group based savings and lending model has attempted to bridge this gap over the last 20 years, mainly in the southern regions of Andhra Pradesh (AP), Tamil Nadu (TN), Kerala and Karnataka. About 41 lakh (4.1 million) Self-help Groups (SHGs) were formed in 2009, out of which 55 percent are in the southern region. Apart from these, schemes such as Swarnajayanti Grameen Swarozgar Yojana (SGSY) have focused on providing financial capital to the poorest through partial grants and loans aimed at boosting economic activities. There is an urgent need to provide financial services at affordable rates for the poor and very poor; linking local groups and community institutions to banks is considered to be the key to providing such services on a long-term basis.

The study looks at the financial capital buildup in three states, namely Andhra Pradesh, Madhya Pradesh and Tamil Nadu. On examining the financial capital buildup, the team considered all sources of capital: member and village level contributions to the project, internal savings² by members of Self-help Groups (SHGs) and Common Interest Groups (CIGs), externally provided revolving funds and subsidies³ and enabled external bank linkages. Rajasthan, Chhattisgarh, Orissa and Bihar were not included in the study. Rajasthan and Chhattisgarh had development models similar to Madhya Pradesh, whereas the Orissa and Bihar projects are still in their early stages, following the SHG approach. The study examines the following questions:

- What was the financial capital buildup of poor households and their institutions?
- How is financial capital sustained?
- Institutional mechanisms for financial capital development

¹ Report on Currency and Finance, (2006-2008), Reserve Bank of India.

² At the macro level a distinction between internal savings capital formation via regular savings and through interest payments to the federated structures might not be possible.

³ Where data is available, this will include direct interest rate subsidies as well as indirect subsidies through government, especially the provision of infrastructure.

- How cost-effective are financial capital interventions?
- What has the contribution of financial capital been and what impact has it had on projects for the poor?

Methodology

The study relies mainly on available documented information such as MIS reports, annual reports and other process documentation; and extracts conclusions from project impact reports on financial capital. In a few sections where there is limited data, anecdotal experience from field visits was used. This report is based on a mix of quantitative, qualitative and field interview information available to the study team. In Andhra Pradesh and Tamil Nadu, the study team visited SHGs, federations at village and mandal level, infrastructures built at village, mandal and block level for livelihood activities. In Madhya Pradesh, the study team visited some CIGs, producer companies and farmer federations. The study team interacted with the office bearers and members of such institutions and facilitators of livelihood activities at the village, block and district level. The study team also met with the project staff at the state and district level in all three states.

Findings

Overview of financial capital development

In Andhra Pradesh, the project design primarily revolves around building sustainable institutions that will have the capacity to function as financial intermediaries and efficient service delivery channels, as well as employment generation interventions and other government development schemes. These intermediaries require a large financial capital to run sustainably over a longer term. Tamil Nadu also has a very similar design element, but with an exclusive focus on the poorest and disabled. It also administered sizeable grants directly to individual beneficiaries and economic activity federations to enable employment of the poorest and disabled. Madhya Pradesh focused on organizing the poor through common livelihood activities and supported the buildup of assets and infrastructure through grants. Although the concept of thrift and credit was introduced, it was not the primary focus of the project.

Banking links have increased drastically over the years for AP project SHGs. AP leads the country in the SHG bank linkage programme: 50 percent of all bank loans for SHGs in the country are from AP⁴. The total borrowing from banks in 2009 to 2010 was INR 6 501 crores (USD1 478 million) to a total of 413 625 SHGs, an average of INR 157 180 (USD3 572) per SHG. The financing to groups has increased drastically from INR 22 322 (USD507) per group in 2001 to 2002 to INR 157 180 (USD3 572) per group in 2009 to 2010. However, out of the total 949 066 SHGs reached (as of March 2010) only 44 percent of the SHGs benefitted from bank linked loans, although this is generally increasing rapidly. Data over the last three years reveal that around 40 to 50 percent of the groups have used loans from the bank each year. It is not clear if this is due to low credit demand by SHG members (possibly part due to economic crisis), inability of the groups to prove credit worthiness or other reasons.

Since October 2009 the average amount available per household is INR 13 250 (USD301) which is impressive⁵. The project is consequently capable of lending at least INR 13 250 (USD301) to each of

⁴ This is from MIS and we will look into NABARD data.

⁵ The State of the Sector Report 2009, reports average loan disbursed per SHG as INR 74 000 (USD1 681). If the average size of a group is taken to be 12, this comes to INR 6 167 (USD140) per member.

the project households if the institutions can manage their expenses from the interest returned on lending group amounts and savings. SHG members initially borrow anywhere between INR 2 000 to INR 5 000 on average. The fact that they were able to improve their position to one where the self-owned financial intermediary institution could (potentially) lend such a large amount to each member is an impressive achievement.

Apart from the basic financial services of credit and savings, AP has also been implementing a large-scale pension cum insurance scheme for rural households. This provides social security to household members over 60 years of age. As of March 2010 INR 17.85 crores (USD4.05 million) has been distributed to 3.57 lakh (0.357 million) pensioners every month amounting to INR 500 per household per month. Social security for the poor is critical as they cannot continue being engaged in livelihood activities when they are old and pension products can help them survive at old age.

In Madhya Pradesh, the first step in financial capital development was mandatory contribution by CIG members to their chosen sub-project (five percent of the total sub-project cost) and to the community (ten percent to the village fund – Apna Kosh). Beneficiaries originally had to contribute 15 percent up front. This changed one to two years into project implementation – five percent of the contribution was deposited by CIGs into their account after 45 percent of the sub-project cost was given and ten percent of the contribution was deposited before the release of the additional 50 percent of sub-project grant.

Tamil Nadu has a similar model to Andhra Pradesh but the project is fairly new (three and half years at the time of study). In Tamil Nadu, the basic institution that promotes financial services is the Village level Poverty Reduction Committee (VPRC) that brought the existing, functional SHGs under its fold and, created new SHGs from the poorest households who were not already included in SHGs. Newly formed SHGs are given seed money of INR 20 000 (USD454) from the project to start with. The groups are then connected to the banks to access revolving funds, direct loans and loans for economic activities. The panchayat level federations (PLF) are federations of SHGs and have existed even before the project started. After one to two years of the project, PLFs are being reconstituted with representation from all SHGs including the newly formed poorest member SHGs. They are given the Amutha Surabhi fund of INR 10 lakh (USD22 727) each that is in turn given to SHG members. The Amutha Surabhi fund is further leveraged by the PLFs to access bulk loans from the banks.

Institutional aspects of financial capital development

Institutions played a key role in the development of financial capital for the poor in all the states, but especially in Andhra Pradesh. SHGs and more importantly federations were thought of as service delivery channels there, starting with financial services like thrift and credit. These then grew into local financial institutions that had their own weight and importance and connected to banks for lending. The SHGs united at village level as Village Organizations (VO) and the VOs were federated at block level as Mandal Samakhya (MS) and district level as Zilla Samakhya (ZS). Apart from internal lending these organizations have been used for value addition of livelihood activities i.e. the MS funds community professionals on projects such as non-pesticide management (NPM) to train farmers.

The State of the Sector report (2009) suggests that the project has a total of 35 525 primary SHG federations (VOs) which form 35 percent of all primary SHG federations in India. Similarly, the project has 1 009 secondary SHG federations which is 32 percent of all secondary SHG federations (Mandal Samakhya) and 22 tertiary federations (Zilla Samakhya) which is 42 percent of all tertiary federations in India. The project has therefore created a large number of local institutions whose primary work is to deliver financial services to the poor and very poor.

The federated CIGs in Madhya Pradesh are mainly for the purpose of creating market links as well as the delivery of financial services. MP currently has 15 agriculture based Producer Companies (PCs) and one each for poultry and dairy with 47 789 shareholders⁶. It was assumed that PCs would be in a better position to bargain with market members owing to their role as aggregators compared with individual CIGs or VDCs. This is because they can offer economies of scale, better access to market information and an ability to enter into long-term legal contracts. Each such PC was given INR 700 000 (USD15 909) as a grant to cover administrative expenses for the first year and INR 25 lakhs (USD56 818) as working capital through the SGSY scheme of Rural Development and Panchayat Department. The link between PC and project beneficiaries is at the individual level and not through the CIG or VDC. Some of the VDCs are acting as outlets for Producer Companies.

Institutions both in Tamil Nadu and AP were originally built as financial service delivery channels starting with thrift and credit and only later grew into local financial institutions. However, there is a significant difference between AP and Tamil Nadu in creating federated structures. Tamil Nadu started the Village Level Poverty Reduction Committee (VPRC) which was a body consisting of panchayat president and representatives from all communities. Its primary job was to create SHGs to assist the excluded and very poor and deliver financial services to the SHGs. The existing panchayat level federations (PLF) were not used to deliver financial services as they were not representative of the poorest communities. The PLFs were reconstituted with representation from the poorest SHGs and then supported by the VPRC to function as financial service delivery institutions. This happened only after a period of financial lending and savings and when the new SHGs were formed. Tamil Nadu is in the process of reconstituting the PLFs for the Phase 1 and Phase 2 villages.

On the whole Andhra Pradesh has successfully created institutions capable of delivering financial and non-financial services sustainably, whereas Madhya Pradesh and Tamil Nadu are in the process of redesigning and strengthening their institutional structures.

Sustainability of financial capital, role of social capital

Sustainability of financial capital. Sustained utilization and growth of financial capital is the key to continued financial services for the poor. In Andhra Pradesh, external evaluation between mid-term and the end of Phase 1 revealed the average annual income and expenditure of project SHGs as INR 1 878 and INR 351 respectively and INR 94 and INR 290 for non-project SHGs⁷. However, the percentage of SHGs with surplus income was 13.3 percent for project SHGs and 19.1 percent for non-project SHGs. For VOs, the average annual expenditure was INR 8 067 and the average annual income was INR 19 692 suggesting that the VOs are financially sustainable as their income levels greatly exceed their expenditure. For Mandal Samakhya, the average annual expenditure was INR 319 652 and the average annual income is INR 615 065 – a surplus of INR 295 314 over expenditure. It is also seen that 57 percent of the Mandal Samakhya had a surplus which suggests that more than half of the MS are financially sustainable. On the whole it seems that all three institutions, SHGs, VOs and MSs, are partially sustainable. A significant percentage of SHGs still require the help of the project as well as some VO/MS in order to meet their annual needs although the majority of the MS have become sustainable.

In Tamil Nadu, there is not enough data available on the sustainability of financial capital. However, for TN, anecdotal evidence suggests that each panchayat level federation (PLF) is being given a

⁶ ASA, the organization that facilitated the formation of the Producer Company, stated that only CIG members can become shareholders of PC. A CIG, however, appears to be loosely defined and it is not clear if all 47 789 shareholders are all CIG members.

⁷ It is not clear who constitutes the non-project SHGs since the project was expanded to all villages and covered all SHGs. Probably this represents the SHGs from the comparison villages. However the project was expanded into comparison villages also in 2003-04.

sum of INR 10 lakhs⁸ and, this can be used to fund internal loans as well as serve as equity to get bulk loans from banks. This can potentially create sustenance within federations and SHGs if utilized efficiently. This also applies to MP where there is not enough data on sustainability of financial capital vis-à-vis microfinance activities of CIGs and VDCs (savings, internal lending from corpus and external linkages). On the other hand, anecdotal evidence suggests that financial capital, in the form of a grant which resulted in asset buildup has been retained; over 90 percent of agricultural assets and over 60 percent of livestock assets are said to have been retained by beneficiaries. Phase II of the project is focusing on promoting SHGs from existing women CIG members or women members of CIG households and of BPL households that were not included in Phase 1. This design change (from CIG to SHG) intends to create financial capital that beneficiaries can then leverage in order to expand their enterprises/assets or at least retain them.

The financial and social capital link. Unfortunately financial services for the poor are limited owing to the lack of institutions capable of delivering low cost financial services locally. Consequently, projects like Andhra Pradesh and Tamil Nadu have concentrated on creating sustainable institutions. Secondly, savings and corpus have been built up over a period for these institutions to provide continued financial services. Some of the efforts within institutions that have led to financial sustenance are strongly linked to creation of social capital and are listed below:

- Capacity building of the SHGs especially in terms of accounting and auditing has led to continued build-up of financial services at the local level. This has been carried out by creating community professionals who will train the SHGs on financial management and audit. These community professionals considered to be better qualified within existing institutions travel around to other newly formed VOs and SHGs and train them on book keeping and audit.
- Maintaining high repayment rates through the monitoring of repayment sub-committees of the village organizations. Repayment has also been encouraged through the Pavala Vaddi scheme by reimbursing the interest amount of three percent per annum to SHGs after repayment of loans.
- Overall effective monitoring by parent institutions e.g. Zilla Samakhyas monitor the Mandal Samakhyas. MS looks at the functioning of VOs and VOs in turn monitor the functioning of SHGs. Secondly there was parallel monitoring of the institutions by the project teams which helped fill in gaps in training.

The social capital and financial capital are strongly linked facilitating interventions improved outcomes. Both of these have contributed towards creation and sustenance of institutions in Andhra Pradesh and Tamil Nadu as can be seen from sections 3.2 and 3.3 and the social capital report.

Cost-effectiveness of financial capital interventions

Cost effectiveness is an important factor with regards to improvements and sustainability of the interventions. It is also difficult to separate the cost of financial capital interventions from other costs. Creation of financial capital is a significant component of the project in all three states and the overall cost per household is representative of the cost effectiveness of the financial capital interventions. For the last ten years the average cost per household for AP is anywhere between INR 2 000 and INR 3 000 whereas the cost per household for TN and Madhya Pradesh is roughly estimated anywhere between INR 18 000 to INR 25 000. AP therefore seems to be almost ten times lower in cost compared with TN and MP. MP uses the financial capital as grants to create assets for the poor and TN also uses part of the capital as grants for the disabled and vulnerable. Part of the capital raised for Economic Activity Federations (EAF) in TN is also given as a grant. Consequently the cost per household is directly linked to the design elements of the projects. AP stands out for its cost effectiveness if we were to do a simple comparison of projects. However,

⁸ 1 lakh = 100,000.

cost effectiveness needs to be seen in comparison to impact of the projects. Although Madhya Pradesh was less cost effective it had a greater immediate impact on household income flow and asset built-up compared with other states⁹.

Identifying impacts of financial capital development

It is extremely important to validate the assumptions that the development of financial capital will lead to positive changes in the beneficiary household. Development of financial capital means decreased dependence on moneylenders/informal borrowing, increase in formal access of credit, increased income and consumption and increased assets ownership. In both AP and Tamil Nadu, the SHG based financial capital has resulted in decreased dependence on moneylenders. In Tamil Nadu, the financial capital created has also resulted in increased income of households in the project villages compared with the non-project villages. In Madhya Pradesh, this financial capital has led to increased household income and assets. According to data available on AP it is not clear whether financial capital directly has led to increased income/assets. In Tamil Nadu income at household level has increased significantly for project villages compared with non-project villages.

Nevertheless, the ratio of informal credit in AP to total household credit decreased from 64 percent to 43 percent in project villages between 2002 and 2006. In the non-project villages the ratio of informal credit decreased only by 4 percent (from 68 percent to 64 percent). This indicates that access to credit through internal lending (SHGs) and external bank linkages has reduced dependence on moneylenders. Available data on AP provides an unclear picture of the project's impact on household income. The ICR suggests an increase in annual income of 115 percent (INR 21 252 to INR 45 792) in project villages against 64 percent (INR 24 992 to INR 40 980) in non-project villages¹⁰. However, the externally evaluated panel data between baseline and end line (2002 to 2006) suggests an increase in income of 40 percent (INR 21 946 to INR 30 784) in project villages against the 125 percent (INR 12 823 to INR 28 909) increase in non-project villages, however these general results need to be interpreted with some caution and warrant further examination¹¹.

In Madhya Pradesh, the end-line report does indicate that financial capital investment (grant to sub-projects) led to direct increases in household income, particularly through animal husbandry activities and substantial increase in irrigated land¹². However, it is difficult to distinguish the impact of financial capital investment in CIGs/VDCs and that of investment in PCs¹³. Anecdotal evidence suggests that shareholders of PCs benefit from good quality of inputs and reduced inputs costs (8 to 10 percent decrease).

In Tamil Nadu baseline data suggests that 44 percent of households confirmed that their largest source of loans came from moneylenders. This percentage decreased drastically in two years to 17 percent during mid-term for project households and remained at 44 percent¹⁴ for non-project households. 79 percent of the households in project areas cited SHG, VPRC and bank as the major source of funding whereas it was only 51 percent in non-project villages. It appears that in a span of two years, the project has considerably reduced dependence on informal credit. Similarly, mid-term

9 As can be seen in the impact report.

10 Data source is based on external evaluation report, which could not be confirmed.

11 Baseline data for survey households in project and non-project suggests that household income varied from the start. Households in project villages had an annual income of INR 21 946 and non-project households had an income of INR 12 823 suggesting that the non-project areas are poorer to start with. The number of survey households in project and non-project areas was 600 and 120 respectively.

12 Asset build-up is otherwise marginal or shows a declining trend (fell less for CIG households compared with non-CIG and non-project households).

13 The baseline was done in 2001. Mid-term evaluation was in 2003 and first PC was formed in 2004. Therefore a mid-term to end-line evaluation (2006) could have indicated the direction of impact. However, there is not enough data on this – we do not know how many of the surveyed CIG households in end-line have transacted with Producer Companies or are shareholders of Producer Companies.

14 Baseline report not available - the study team needed to check if the control was 44 percent at baseline.

evaluation indicates an increase of 56 percent in annual household income (at constant prices) in project villages compared with an increase of 28 percent in non-project villages.

Conclusions

The focus on building up financial capital was primarily based on the design elements of the programme. Andhra Pradesh and Tamil Nadu concentrated more on building up financial capital than Madhya Pradesh. Andhra Pradesh and Tamil Nadu benefitted more from building local financial institutions that could sustainably deliver over a longer term whereas Madhya Pradesh gained from benefitted grants to the poor helping build their assets and income on a shorter term.

Andhra Pradesh has made significant achievements in building up financial capital over the last ten years; they have built up large savings, and associations and leveraged the two in order to create and improve their banking linkages. The total savings and corpus stood at INR 2 569 crores (USD583.8 million) and INR 4 446 crores (USD1 010 million) in October 2009¹⁵. This results in a savings of INR 27 408 (USD623) per SHG and associations of INR 47 431 (USD1 077) per SHG. The beneficiaries have succeeded in upgrading their potential thanks to their links to banks. The community owned financial intermediary institutions could therefore (potentially) lend an average of INR 13 250 per member every year. Tamil Nadu has followed a similar approach to Andhra Pradesh and started making serious efforts in building up their savings and bank linkages by transferring corpus funds into panchayat level federations (PLF). The PLFs have just started to leverage these associations in order improve their banking linkages. Madhya Pradesh through Apna Kosh saved INR 23.16 crores (USD5.01 million) coming from the beneficiaries. This works out at INR 1 539 per beneficiary household and was used for internal lending. Madhya Pradesh achieved less than Andhra Pradesh with regards to financial capital buildup possibly due to the fact that the state concentrated less on this area.

Institution building was considered essential in ensuring financial service delivery in Andhra Pradesh and Tamil Nadu. Both of these states have made significant achievements in building primary SHG federations that act as financial intermediaries and effective service delivery channels for livelihood interventions and government schemes. The number of primary federations in AP is 35 525 and forms 35 percent of all primary SHG federations in India. Andhra Pradesh has also built effective secondary and tertiary institutions. Madhya Pradesh had very little focus on building institutions and in the latter half of the project started 16 producer companies that assisted nearly 47 789 shareholders.

Sustenance of financial capital depends on the ability of institutions to offset their expenses from income and raise more capital. Although Tamil Nadu is relatively new and with insufficient data, Andhra Pradesh shows that institutions are partially sustainable and have the potential to become fully sustainable in the future. In the past Madhya Pradesh did not concentrate much on sustenance of institutions but has just started to focus on institutional creation and sustenance by realigning their design to one more in line with the SHG federation model.

There is little direct evidence for the positive impact of financial capital on poverty reduction indicators such as income and assets. In Andhra Pradesh, the financial capital build up has definitely resulted in decreased dependence on moneylenders and increased access to formal credit. However, it is less clear from available data whether or not it led to improvement in other financial wellbeing indicators such as income and assets. Although Madhya Pradesh did not focus much on financial capital the project had a strong influence on asset and income increase. This is also partly

¹⁵ MIS data – October 2009.

because it is easier to measure the direct link between supporting a specific economic activity and its expected financial outcomes. Tamil Nadu shows a positive effect on income improvement as well as decreased dependence on informal credit. Available data suggests that financial capital led to increasing financial access to the poor and poorest.

Financial capital is strongly connected to social capital and the development of social capital is necessary in order to increase financial capital in states such as Andhra Pradesh and Tamil Nadu. Andhra Pradesh is distinctive with regards to financial capital build up and has helped expand financial access to the poor and very poor over a longer period than other projects. Tamil Nadu is still in its early phases but has started initiating efforts to build financial capital. Madhya Pradesh built very little financial capital and very few institutions over the past ten years.



ANNEX 3

Agriculture based livelihoods

Community managed approaches to sustain agriculture based livelihoods – Learning from livelihoods projects in India

by Dr G.V. Ramananeyulu and C. Krishna Soujanya

Introduction

Agriculture is the main source of livelihood for two-thirds of the population in India. The profound changes in Indian agriculture since the 1960s have had cascading effects on India's agrarian economy and society. Although various initiatives for agricultural development have resulted in increased crop productivity and higher food production, the high dependency on external inputs has resulted in higher costs of cultivation leading to indebtedness and locked in sales with traders. This has reduced agriculture viability which has been further worsened by unfavourable market prices, decreasing subsidies, lack of access to credit and other support systems.

The majority of smallholder farmers have various disadvantages and are at risk in terms of their socio-economic background in the Indian context, with insufficient access to agricultural support systems and State services. This crisis in agriculture has also led to the collapse of village economies, causing growing unemployment or underemployment of agriculture workers, despite the contributions of important programmes like the National Rural Employment Guarantee Scheme (NREGS).

This crisis is evident in Indian agriculture in the form of growing rural and urban poverty. Any initiative tackling rural poverty and livelihoods invariably has to deal with this crisis. Various livelihood initiatives supported by the World Bank and attached to Rural Development Departments have taken a livelihood approach to farming dealing with issues across the value chain in many states. These initiatives, focusing on strengthening the institutions of the poor by encouraging demand and access to services so as to strengthen their means of living, have learnt from locally available best models and have increased in size. These models which are suitable for small and marginal farmers have made noticeable progress in a short space of time. These achievements have three elements in common from which there is much to be learnt. In the first place, all made use of locally adapted resource conserving technologies. Secondly, coordinated action by groups or communities was carried out at local level. Thirdly, supportive external (or non-local) government and/or non-governmental institutions worked in partnership with farmers. Existing support systems, research extension or subsidy regimes are not very favourable for promotion of such models. Many modifications to some of these support systems may be necessary in order to create a favourable environment for the adoption of these models to sustain farming and farming based livelihoods.

Methodology

The study was concentrated on the three states of Andhra Pradesh, Madhya Pradesh and Bihar. These States were selected in order to represent North India, Central India and another from South India, to cover a range of agro-ecological conditions. The World Bank funded rural livelihood projects in these states i.e. AP Rural Poverty Reduction Project (APRPRP), Madhya Pradesh District Poverty Initiatives Project (MPDPIP) and Bihar Rural Livelihoods Projects (BRLP) were chosen for the study. The methodology adopted for the purpose was:

- Review of proposals, reports, evaluation studies, independent assessments etc.
- Consultations with the task leaders and implementing agencies to identify the interventions and study area relevant to the study theme.
- Interaction with the participating farmers, community based organizations, supporting technical organizations and officials in the Project Implementing Agencies.
- Limited field visits (using a checklist for focused group discussions) to validate the findings from secondary sources of information and to capture replicable success stories in the form of case studies.

Ecologically and economically sustainable production

The livelihoods projects have responded with important agriculture production initiatives to reduce input burdens, and develop sustainable agriculture methodologies where farmers play a central role in the development process. These were developed to help with increasing input costs, degradation of productive lands and increased sense of farmers' helplessness in the face of multiple constraints.

Community managed sustainable agriculture in Andhra Pradesh

Andhra Pradesh Rural Poverty Reduction Project (APRPRP). The APRPRP is implemented through Society for Elimination of Rural Poverty (SERP), a society under the state Rural Development Department, under the umbrella of the state Indira Kranthi Patham (IKP) programme. In APRPRP areas, households have very low physical and human capital which limits their ability for gainful self-employment. At the same time agriculture is the main source of livelihood though there were very few non-agricultural livelihood opportunities (see box on individual household loans). The resulting seasonality of available employment as well as the likelihood of periodic droughts, not only makes investment risky but also meant that the wage labour has become more constrained. This has led to much hidden unemployment and distress migration which further undermined livelihood opportunities. Agricultural income has exposed the weather risks caused by limited access to irrigation, in particular periodic droughts, which affected both landowners and users of common property resources and wage earners (Galab and Reddy, 2010).

Composition of loans taken by SHG members in AP

- 23.81% of loan for agriculture activities
- 5.03% for agriculture allied activities
- 12.69% for non-agriculture activities

(based on data available with IKP, 2009)

Genesis and details of the intervention

Between 2004 to 2005 when the poor in Andhra Pradesh experienced a period of serious livelihood disasters, the Society for Elimination of Rural Poverty (SERP) identified increasing costs of cultivation due to heavy dependency on external inputs as one of the main reasons for the growing indebtedness. A study was carried out under the livelihood initiative of the Government of AP working with Federations of Women Self-help Groups, and initiating a pilot development of Non-Pesticide Management (NPM) in collaboration with a consortium of Civil Society Organizations in 2005 to 2006 (Ramanjaneyulu et al 2008, Vijay Kumar et.al 2009). This was based on the experiences of villages like Pudukula and Enabavi in AP.

- A Farmer Field School approach originally designed and promoted by FAO was suitably modified and established to train farmers (both women and men) regularly on the NPM and other ecological farming practices.
- The programme is implemented using experienced farmers as 'Community Resource Persons' (both women and men) and the Federations of Women Self Groups at the Mandal level (Block level) managed the entire programme. The programme was supported by experienced local NGOs and Centre for Sustainable Agriculture as the central agency for technical support and project management until 2007 to 2008.
- The initial success with NPM. SERP spread across the country to identify best practices from successful ecological farming models. Ecological/Natural Farming Master farmers like Sri. Bhaskar Save, Sri. Subash Palekar, Sri. Nammalwar have provided inspiration and necessary support to promote 'Polycrop' models, Organic soil management practices, soil and water conservation and In situ water harvesting practices.
- By 2007 to 2008 the programme spread to more than 7.0 lakh acres across the state, largely through the support of NGOs. It became evident during this period that there are many advantages in using resource conserving, regenerative and sustainable agriculture practices, especially where these are largely based on local resources, and developed by farmers using their own skills and knowledge to adapt them to their own situations. In 2007 to 2008 a state level Project Management Unit was set up to take over the role of providing overall technical support and project management.
- As the scope of the intervention expanded it was called 'Community Managed Sustainable Agriculture' (CMSA). CMSA represents a model of agriculture which is largely based on farmers' resources, knowledge and skills and the institutional systems for learning are managed by the Community.

The role of institutions for the poor and their representatives. One of the main objectives of this initiative was to establish a community managed learning and management system to build more accountability and ownership in the system.

- (a) **VO sub-committee.** At the village level, a practising farmer is identified as a Village Activist responsible for organizing and documenting FFS. The Village Organization (VO) is the federation of the all women SHG groups in the village and a sub-committee in the VO monitors the progress every month. Five such villages are grouped into a cluster and are supported by a Cluster Activist.
- (b) **MMS sub-committee.** At the Mandal level (AP equivalent of blocks) the clusters are reviewed on a monthly basis by the Mandal Mahila Samakya (MMS) sub-committee. MMS identifies the villages where the agriculture programme could be implemented according to the response from members from villages which could be grouped as a cluster. MMS sub-committee can also enter into an agreement with any Resource NGO for providing technical support.
- (c) **Zilla Samakya sub-Committee.** At the district level, the programme is reviewed on a monthly basis by the Zilla Samakya Sub-Committee. The District Project Manager (DPM, of SERP) provides the required administrative support in monitoring and documenting. Zilla Samakya Sub-Committee identifies Mandals where the programme would be implemented.
- (d) **Community Resource Persons (CRPs).** Successfully practising farmers are selected as Community Resource Persons who help in supporting and promoting sustainable agriculture practices.
- (e) **Non-Governmental Organizations.** Initially when the programme was started NGOs played the important role of providing hand holding support both at grassroots and state level to the women's SHGs for the period of three years between 2005 to 2006 and 2007 to 2008. SHGs have taken over the project implementation and community resource persons (CRPs) have taken over the capacity building roles following a process of gradual role change.

The funds for the programme are released to the MMS and CRPs, and Village and Cluster Activists are paid by the MMS. Each participating farmer pays a registration fee of INR 30 per year to be deposited with the VO.

Implementation strategy

The implementation process uses several important methods to ensure close community participation and learning and management involvement:

Village immersion. The villages are identified according to expression of interest of the VO (Village Organization) members in the MMS (Mandal Mahila Samakya) sub-committee meeting. A village immersion programme is organized where CRPs (Community Resource Persons), Cluster Activist and DPMs (District Project Manager) discuss the agricultural situation and share learning from CMSA from other villages. The programme identifies interested farmers and organizes them into FFS (Farmers Field School) groups. During the processes of immersion village Resource Mapping is also carried out to identify locally available resources, cropping systems and local knowledge etc.

Farmer Field Schools form the basic unit of learning. Each Farmer Field School is a relatively homogenous group of farmers and the FFS meets every week in one of the members' field to learn, discuss and take decisions regarding actions to be taken managing their crops. Both village activists and cluster activists will organize these field schools. Sometimes Community Resource Persons may also join.

ICTs for information sharing and reviewing. Video Conferences to review progress are held every fortnight. The cluster activists, MMS and ZS leaders, District Project Managers attend and share information. Mobile phones are also used to disseminate important alerts and suggestions and TV channels were used to share information regularly on production practices. There are key sub-interventions as well which assist farmers to gain greater role in the production process.

Community seed banks. In the identified villages, the seed requirements (both in terms of varieties and quantities) are mapped and breeder seed are procured for all the crops; farmers are trained to produce and use their seed. In crops like paddy, groundnut where seed requirement is high, few farmers are identified at the village level to produce seed and make it available to other farmers at a price.

Custom hiring centres. Ploughing, sowing, and weeding equipment etc. are made available at the Village Organization on a custom hiring basis enabling access to this equipment for small and marginal farmers.

NPM shops. These promote micro enterprises which can supply ecological farming inputs. NPM shops are promoted through Poorest of the Poor (PoP) families. All NPM shop owners are trained on the preparation of botanical extracts and loans are facilitated from MMS to establish NPM shops. 1 944 NPM shops have so far been established across the project implementation area. The income from NPM shops ranges from INR 1 500 during the peak season to INR 500 in the lean season.

The Community Seed Banks, Custom Hiring Centres for Implements and NPM shops work as a network to share surpluses with others when needed.

Reaching out to the poorest

Agriculture related interventions often tend to work naturally and better with farmers who own land and have more resources as well as time and who are less afraid to take risks. Two initiatives were

developed based on knowledge from the CMSA. These initiatives concentrated on how to improve household food security of the poorest of the poor who form 34.7 percent of the SHG groups promoted by SERP and to concentrate rainfed areas which form 58 percent of the cultivated land in the state.

- (a) **Strategy to support Poorest of the Poor (PoP)**¹. The State has developed a strategy to focus primarily on the poorest of the poor who have very few assets and form the lowest rung of the poverty ladder. SERP assisted PoP to adopt CMSA in at least 0.5 acre of land. Land leasing is made easy for the landless. In this 0.5 acre land, SRI Paddy cultivation is taken up in 0.25 acres and a seven tier polycrop model (ranging from tuber crops to fruit crops, vegetables, pulses, cereals etc.) In the remaining 0.25 acres (popularly called as 36 x 36 m model). During 2009 and 2010, 251 models each of 0.5 acres (0.25 acre of multiple vegetables and 0.25 acre of SRI Paddy) were established under PoP strategy which gave an income ranging from INR 15 000 to 40 000 based on the cropping pattern and time of sowing. This model provides food and income all year round. For the last two years data shows that a net income up to INR 50 000 in a year is possible along with improved household food and nutritional security. See Case study box below.
- (b) **Rainfed Sustainable Agriculture (RFSA) in conjunction with Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGS)**. In order to benefit possible interaction between generating employment, sustainable land improvement and drawing on existing government resources, as well as comprehensive soil and moisture conservation works to improve the land, PoP were initiated combined with the MGNREGS from 2009 to 2010. In the first year it covered 3.19 lakh acres of 1.46 lakh SC/ST farmers from 2009 to 2010. The works include farm ponds, conservative furrows, trenches, compost pits and vegetable mini kits and fruit plants. The total amount to be spent in one acre of land is INR 40 000. Total expenditure for the year 2010 to 2011 is INR 1 630 crores covering 10 lakh acres in 22 districts. So far technical sanctions are accorded for INR 804 crores and administrative sanctions are accorded for INR 645 crores and RFSA works are grounded in 3 034 villages out of 3 332 villages. The final results are still awaited.

Impacts

The CMSA is a comprehensive package bringing together several ecological farming practices. The enabling strength of the Women SHG institutional platform has accelerated the rapid spread of these practices. There have been a range of important impacts to farmers and poor rural households:

- Reduction in costs of cultivation due to NPM are reported by all the farmers. The savings in costs range from INR 3 000 per acre in paddy, red gram to INR 15 000 per acre in chillies.
- A quick survey by SERP in three districts has shown that the number of cases of hospitalisation due to pesticide poisoning has reduced from 242 cases per year to 146 cases per year a 40 percent drop in a year. In the villages which have adopted NPM the drop is 100 percent.
- Villages adopting NPM have not seen pest outbreaks caused due to ecological disturbance or pest resistance unlike the popular argument that pest outbreaks could happen. Farmers could effectively manage rice blast using a fermented solution of asafetida cow dung and urine (<http://www.oryza.com/forums/showthread.php?t=535>) and sucking pests in cotton and chillies using similar methods.
- Increased soil moisture conservation has helped to tide over drought spells for about ten more days where organic soil management practices are adopted. A combined effort to

¹ POP are identified through the process of Participatory Identification of Poor (PIP) which involves several processes like Social Mapping, Resource Mapping, Door to Door interaction, Wealth Ranking, etc. according to the village situation and who are poor and the poorest of the poor among the community.

physically save water in the field by adopting conservation furrows, trenches and farm ponds was initiated.

- Efforts to internalise seed production at community level particularly with crops like paddy and groundnut have shown positive results.
- AP produces and exports most of the chillies in the country. High pesticide residues have often led to the rejection of the exported chillies and products using chillies. The chillies produced in the Guntur district adopting NPM practices were tested for pesticide residues and were found to meet EUROGAP standards.
- During 2009 and 2010 more than 7 638 farmers (including 251 who come under PoP strategy) were supported to establish Intensive Farming System model in 36 x 36 m which produce food all year round with a combination of seasonal and perennial crops. The net incomes from these models ranged from INR 4 000 to 12 000 in addition to meeting the family food needs.
- The CMSA approach enables bundling of various relevant services to farmer families, including credit access on the doorstep. The approach ultimately involves facilitating development of micro-credit plans for sustainable agriculture and linking farmers to commercial banks, especially where marketing needs are concerned. Access to banks for farming reduced as the focus shifted to the poorest of the poor who depended more on the group credit system. CMSA approach also facilitates the farmer's access to high quality inputs through a network of community seed banks and agricultural implements from Custom Hiring Centres run by the Federations of Women Self-help Groups.

Observations on benefits and strengths of the programme

- Eliminating pesticide poisoning is seen as a major benefit for farmers. They clearly recognise and acknowledge that their health has significantly improved and the health costs have come down after the adoption of NPM. Although there is still considerable scope for increasing more awareness on the benefits of appropriate use and correct application of pesticides and fertilizers, the NPM interventions have demonstrated the effectiveness of using local resources and preventive measures.
- The ecological farming practices like NPM, organic soil management, multiple cropping models, SRI etc. have been adopted by the farmers to a considerable extent. The Farmer Field School approaches to building capacity and confidence are very useful in promoting such practices. The risk of failure of such practices is also very low which makes them easy to try and even partial adoption of these practices are of benefit to the farmers.
- Community management with FFS, CRPs, VOs and Mandal federations has built in more ownership on the programme, as explained above under the roles of the institutions of the poor.
- Practices involving heavy earthen works like farm ponds, conservative furrows and trenches need more capacity building for staff and labour involved. As the risk of failure of these models is high, more adaptation to local situations is necessary as well as good capacity building plans for the people involved.
- Convergence of various interventions of IKP such as marketing, dairy along with CMSA will provide additional benefits. IKP are planning this from this year.
- There is a hindrance to convergence with line departments (Department of Agriculture, Department of Animal Husbandry) owing to rigid compartmentalisation of their working. However discussions with agencies have been undertaken to increase integration and connections.
- The Community Resource Person based extension is working well for horizontal expansion of the programme. It will be important to involve some more experienced resource organizations at state and district level to strengthen the programme.

- The programme has been implemented up to now through the Women's Self-help Groups and their Federations. These institutions which are formed for thrift and credit, have shown that they can form an important platform for farming families. They can also then potentially form the springboard whereby farming families can be organized into cooperatives for more focused work along the value chain.
- There have been many impacts of considerable importance to poor rural households in AP summarised as follows:

Economic Benefits	Ecological Benefits
<ul style="list-style-type: none"> • Lower cost of production and substantial state wide savings • Yield maintained or increased • Higher household income • Lower Debt • Higher cropping intensity • Lower risk perception and higher investment in agriculture • Business innovation and new livelihood opportunities 	<ul style="list-style-type: none"> • Better soil health, water conservation • Conservation of agro-biodiversity • Fewer pesticide related health problems • Smaller carbon footprint as a result of reduced use and production of inorganic fertilisers

Other project experiences on land management, agriculture marketing and land tenure

Systems of rice and wheat intensification in Bihar

The majority of the Self Help Group members' households under the Bihar Rural Livelihoods Project (BRLP) are among the poorest and most vulnerable, and take up Paddy in the Kharif and Wheat in the Rabi seasons respectively. Any increase in productivity of these two crops would have a twin impact of increase in their food security and increase in incomes. Therefore BRLP as part of its agriculture interventions focused on the following: training women and men farmers on the system of rice intensification (SRI) and the system of wheat intensification (SWI); resource organisations providing handholding support to the farmers for SRI, SWI, and Participatory Varietal Selection Program (PVSP); scaling up the PVSP to improve the choice in terms of new varieties for the farmers; and assisting community organisations to identify and train Village Resource Persons (VRP) from their villages. VRPs are used for the community based agriculture extension services, hired and monitored by the institutions of the poor.

The SRI intervention was launched in the year 2007 with just 128 farmers. It was scaled up rapidly and by 2009 over 8 000 farmers were involved with SRI, and over 25 000 with SWI, covering over 2 000 ha. Impact studies comparing the productivity of pre SWI/ Non-SWI with that of SWI, for example, show an increase of about 1 MT/ ha. Also while the traditional systems requires about 30-35 kg of seed per acre the SRI method requires just about 2 kg per acre. The cost almost reduces to half in this case, as does the cost of fertilizers. It also resulted in timely availability of good quality product through collective procurement of inputs, change in seed replacement rates, and then further had an impact on food security through increased percent of households with surplus grains, and greater influence of women in the decision making as the technical assistance was focused on them.

Collective marketing in Andhra Pradesh

A collective marketing intervention was launched by SERP with the objective of enabling the small and marginal farmers to obtain the best price for their produce by creating a marketing facility owned and managed by the institutions of the poor (the village organizations) and providing marketing interface to the farmers at their doorstep (within 5km radius). An important component of the intervention was to train the farmers on quality and grading aspects and create a transparent

mechanism of measuring quality so that the farmers are suitably compensated. Even though in some places the village organizations are procuring and selling in the market, in the majority of cases the village organizations could procure on behalf of the state government's marketing federation (MARKFED) at the Minimum Support Prices.

The project selected those village organisations that attained certain maturity indicators and are centrally located in a cluster of 4 to 6 villages having predominantly small and marginal farmers, and having the potential to procure a substantial quantity of agricultural and non-timber forest products. If the village organisation was interested in taking up the intervention then a Procurement Committee was formed within the village organisation to handle all the activities to be carried out as part of the intervention. In addition a Village Advisory Committee was formed. Furthermore, each of the federations i.e. the Village Organization at the Village level, the Mandal Samakhya at the Mandal level and the Zilla Samakhya at the District level has a specific role in the intervention.

Since 2001 the procurement centers in A.P have handled over 100 commodities with a cumulative procurement of about 24.25 lakh tonnes worth INR 1,943 crores impacting about 279,000 households. The projected turnover for Paddy Procurement in Kharif 2010 is 603,000 MT valued at INR 621.09 crores. There has been a complete shift to Village Organization led collective marketing, from the local mandis (markets) and direct buyers at the farm gate, which were the traditional preferred marketing channels, especially in tribal and dry zone areas and crops.

Producer households have had a range of important benefits from a direct livelihoods as well capacity point of view. There has been greater per unit realization for the farmers as the intervention has enabled farmers to get a higher unit price for their produce compared to marketing through Agricultural marketing corporations (AMCs). There has also been reduction in costs, since the farmers can sell the produce at their doorstep, they have been able to save on the transportation cost. In addition to this, there has been a large saving in terms of farmers' time, otherwise spent travelling and negotiating. Capacity of the institutions of the poor has been built, where farmers are much more involved as business managers, part of which is helping to develop a "quality consciousness" for agricultural products among the small and marginal farmers. As women have been spearheading these activities there has also been inclusion of the marginalized into the mainstream economy. These institutions have also been supported by creation of productive infrastructure – stores, weighing, as assets that communities own.

Producer companies in Madhya Pradesh

During the course of these Madhya Pradesh District Poverty Initiatives Project interventions, working with common interest groups (CIGs), natural production clusters emerged in the project area, and producers were organized through various community based business initiatives to reap potentials of agri-business. These clusters have now established themselves as viable business concerns registered as Producers' Company under appropriate legal framework. The office bearers of the Producer Companies and their field staff in the form of community service providers/ agriculture extension workers have anchored the interventions, supported by project staff from cluster level Project Facilitation Teams (PFTs). The PFTs have provided continuous support in terms of: providing information on production clusters and profile of the potential share holders; mapping the available business resources and gaps; imparting knowledge on updated crop production aspects; and coordinating and guiding service providers. By 2010, there were 17 producer companies in the state with about 42,000 share holders, the majority of them being small and marginal farmers. The annual turnover reported for the year 2009-10 was INR 20.15 crores. Infrastructures fund worth INR 3.34 Crores is utilized by producer companies in developing seed processing units, farmer training centres, and purchase of equipments etc. As in AP the benefits are also getting directly to the farmers, in terms of increases in seed replacement rates, reduction in input costs

and improved price premiums (for example, primary producers are gaining INR 400 per quintal from soya beans) and resulting changes in household consumption patterns.

Land purchase and land access in Andhra Pradesh

Land tenure and access to productive land are major issues for the rural poor. It is a major factor in marking who is and who is not poor. One of the original objectives of APRPRP was to see that the poor become owners of productive lands through pilots. Hence the initial focus was on facilitating the landless poor to purchase productive irrigated lands. The Land Purchase activity was implemented in 190 villages of 128 Mandals in the State where demand had come from the poor women for purchase of lands. 4539.24 acres of land was purchased by 5303 landless poor women with a project investment of Rs.2937.45 Lakhs in these 190 villages. 90% of the beneficiaries belonged to vulnerable sections like SCs and STs. The first initiative ended in 2008 with the termination of allocated resources.

To provide support for the many poor especially dalits and tribals who would not have the possibility of purchasing land, a set of strategies were adopted by SERP to strengthen legal support to addressing tenure issues. As security of land tenure more generally is important, and the project set out to support strengthening of land claims and resolve disputes. District Land Rights and Legal Assistance Centers were established in all the districts covering 367 Mandals consisting of: a cadre of paralegals from the community; youth trained in survey as community surveyors; law graduates as Legal Coordinators; and retired revenue officers as Land Managers. The concepts of land centres, para-legal support concept worked very well, and a very large number of land tenure conflicts were resolved for 385,291 poor covering 471,785 acres.

Drawing lessons

Small farmer agriculture is important for the nation's food security and peoples' livelihood security. Small farms can become productive if appropriate technology, institutions and support systems can be built. This calls for a complete paradigm shift in these three areas.

- The learning from scaling up NPM in Andhra Pradesh and SRI/SWI in Bihar shows that ecological farming methods, largely evolved from the non-formal sector do have large potential in reducing costs of cultivation and resource conservation and making small farm agriculture profitable within the current context and productivity.
- In ecological farming, one size fits all kinds of solutions and readymade solutions for every problem do not exist. Each group decides according to successful models on what to adopt based on the local situation. This therefore calls more for a decentralized and participatory technology development and extension model.
- Criteria for selecting practices, like utilising local resources with low ecological impact and using a variety of crops to minimize risk, are principles encouraged. Other important criteria are selection based on low risk of failure.
- These models also show the importance of community managed institutions involving either SHGs and their federations in AP, or Producer Companies in MP, which are concerned with learning, decision making and management of livelihoods.
- Another interesting lesson is about the way support systems are set up. With regards to the CMSA in AP for example only the learning systems and common infrastructures are subsidized. On the other hand in MP the Producer Companies creatively used seed subsidies provided by the State Government, by sharing between the seed producer (production subsidy) and the company (distribution subsidy).

- There is also room for learning from one system to the another. Although the AP production model is based on ecological farming practices like NPM, crop diversification and poly-cropping models, MP producer companies have paid little attention to the ecological concerns (except for Responsible soya initiative) and promoted monoculture soybean which has already been showing problems in other areas of the state.
- One of the important parameters which needs to be considered for sustainability is the extent of use of local resources. In the HAMPCO and Producer Companies in MP half of the turnover comes from seed which is adopted by the members, and half of this comes by selling chemical pesticides and fertilisers. This expenditure by farmers could be minimised if the practices like NPM, organic soil management and SRI/SWI could be disseminated and increasingly adopted where suitable.
- AP experience from CMSA also shows that ecological farming is not just about subsistence farming but as a productive, profitable model which can be a way out of poverty. Investing in sustainable agriculture even at a collective level can contribute to poverty alleviation as well as have a catalytic impact on the village economy.
- Bringing markets closer to the small and marginal farmers not only reduced transaction burden and improved transparency but also paved the way for the inclusion of the marginalized in decision making and consequently building strong institutions of the poor.
- Innovative community managed marketing interventions can be instrumental in social and economic mobilization. They have generated significant economic impact by way of price premiums to the producers and commissions from procurement under government, minimum support prices to the institutions. They have also played a crucial role in gender equality by increasing the participation and leadership of women in the rural market landscape.
- Systematic investments in building social capital, strengthening market information systems, integration with various mainstream trading platforms and quality control will prove beneficial in further development and replication of the community based marketing interventions.
 - In each of the projects in AP, MP and Bihar, the Federations of the Women SHGs, or Producer Companies have played the key role in implementing the interventions.
 - The grassroots staff/resource persons who are from the same villages and are managed by the community, provide direct and influential support to other interested village farmers.
 - Project Management Support units like SERP in AP, MPDPIP in MP and Jeevika in Bihar have played an important role and the technical support organizations (governmental or NGOs) that have been brought on board have also played an important role in supporting the programme.
- Programmes that promote a reduction in farmers' dependence on external inputs, and reduction in state spending on subsidies for fertiliser etc. will improve sustainability of farmers' production system.

Emerging framework arising from the study

The following basic framework for 'Community Managed approaches to sustain agriculture based livelihoods' could be proposed for further development.

- I. Low External input based ecological farming practices/regenerative technologies are well suited for small farmer agriculture and should be further promoted and developed:
 - a. Non-Pesticide Management, Community Seed Banks, Diversified cropping systems and Polycrop systems, conservation furrows/land conservation/farm ponds in Andhra Pradesh
 - b. System of Rice Intensification/System of Wheat Intensification and Participatory Varietal Selection in Bihar
 - c. Still developing and consequently needs investments for R&D.

- II. Community Institutions are needed for ownership and local capacity development:
 - a. Farmer Field Schools for Regular Capacity Building (knowledge and skills of community stakeholders)
 - b. Group Enterprises of poor as forward and backward links, implements and infrastructure management is crucial and needs to be organized and supported (Custom hiring centres for implements, Seed Producers' Company, Processing units etc.)
 - c. Federated Organizations of Poor are strong platforms for economies of scale and increasing access to resources and services, which must form part of the support system.
- III. Need to have long-term institutional arrangements in place with state, private and civil society and other partners, able to sustain, scale-up and further develop mechanisms which provide agriculture support systems. These systems are needed against a backdrop of changing needs, risks and viability. They should cover: Knowledge support, Infrastructure support Recurring and non-recurring support and Newer financial tools - credit, insurance, subsidies.

Improving access to and ownership over resources such as land and water, forming critical assets in reducing vulnerability and ensuring long term productivity of poor farmers, needs to complement other agriculture related interventions. Important elements which have been shown to be important and workable but need concerted institutional support and policy considerations are: Land purchase, legal assistance on land rights, land lease backed up by appropriate policies and wider tenure related policy change.



ANNEX 4

Contribution of livestock

Contribution of livestock sub-projects to pro-poor outcomes – with a focus on dairy

by Mona Damankar and Kaustubh Devale

Introduction

Agriculture in India contributes over 20 percent to GDP and over 33 percent of this is contributed by the livestock sub-sector, with small-scale mixed crop livestock farming being the most common and dominant form of animal husbandry. For the majority of the rural poor in India, livestock are a means of improving their livelihood by generating income and employment, and enhancing household food and nutrition security. Livestock supplement income from crops, especially in rainfed and drought prone areas. It is an important source of disposable cash income from the regular sale of small animals (sheep, goats, and poultry) and/or livestock products such as eggs, meat and milk. Additionally, livestock contribute substantially to crop production by providing draught power on almost 52 percent of the arable land during short growing seasons, and manure (estimated as more than 70 percent of the total fertiliser amount used) – inputs into crop agriculture which poor farmers may not otherwise be able to afford in sufficient quantities¹. For the landless, livestock provide opportunities for leveraging benefits from common property resources, act as a source of fuel (dung cakes) and as a social support network during hard times. For the poor, livestock are an insurance. It is an inflation free and productive investment that can be accumulated in good times and sold in crises to provide for healthcare, education and other basic or survival needs.

With reference to India, most livestock based development programmes in the past have been technology oriented with the aim of improving livestock productivity, for example cattle cross-breeding and/or promotion of food or feed crops for increasing fodder availability. The inputs and services provided in such programmes have often been free or subsidized, and the benefits commonly usurped by the 'not-so-poor'. The assumption was that newer and improved technologies would lead to higher production and productivity. However they did not focus on creating enabling conditions and institutions for those technologies to be widely adopted or adapted and used.

The livestock component in World Bank supported projects on Rural Livelihoods has been designed with a view to reducing poverty and improving the livelihoods of the poorest households by providing technical and financial assistance to help them expand their asset base and livelihood opportunities. The projects have taken into account the different roles livestock play for the poor – from food to income and also social status, a form of savings - and have tried to make sure that the poor have access to basic production inputs such as fodder and water. The target group is the poorest of the poor households² who traditionally and historically may not have been dependent on livestock for their livelihood, and who face several constraints while rearing livestock. These

¹ Resco, L. O., and Steinfeld, H. (1998) 'A food security perspective to livestock and the environment', in A.J. Nell (ed.), *Livestock and the Environment. Proceedings of the International Conference on Livestock and the Environment held in Ede/Wageningen, Netherlands, 16–20 June, 1997*. Wageningen: International Agricultural Centre.
<http://www.fao.org/WAIRDOCS/LEAD/X6130E/X6130E01.htm#ch1.2>

² Those who depend, either wholly or partially, on livestock for their livelihood might not be the poorest of the poor households, and are often difficult to identify and map.

typically include low productive animals, seasonality in production, chronic shortages of feed and fodder, lack of animal healthcare facilities and extension services, disease outbreaks, unavailability of credit, low/un-remunerative prices and unreliable markets. These constraints apply to both large and small farmers, rearing all types of livestock in almost the same way. However, the resultant losses are perceived to be more damaging in the case of dairy animals. Therefore, in order for poor livestock keepers to sustain and gain from livestock related activities, they require timely access to affordable and quality inputs and services. In line with this requirement, the approach of the projects has been towards building grassroots organizations and enabling institutions involving a wide range of stakeholders such as local governments, NGOs, the private sector and state government in the implementation.

Process, methods and scope of the assessment

The team became acquainted with the overall philosophy and implementation approach of the District Poverty Initiative Programme (DPIP) in a preliminary meeting with concerned officials from the World Bank. Three completed/on-going DPIP projects in three states (Andhra Pradesh, Madhya Pradesh, and Rajasthan), where the results of the livestock component were especially visible, were shortlisted for field visits. The FAO Investment Centre provided project documents related to the three states for reference (listed in Annex 1). The team, composed of Ms Mona Dhamankar and Mr Kaustubh Devale, used these documents to prepare their preliminary checklist for interviews in the field.

In Andhra Pradesh and Rajasthan a large share of the DPIP subprojects was dedicated to livestock activities (Table 1). In all three states a high percentage of the resource allocation towards livestock activities was related to dairy cattle and buffalos and associated investments. This is an important finding in itself, but also emphasises the focus of the report on dairy development activities.

Area selection

In all three states, the poorest districts and villages were selected on the basis of weighted socio-economic criteria covering percentage of population below the poverty line, infant mortality rate, hospital beds, female literacy and female school dropout rates, and ratio of SC/ST population to the total population. Since its inception the project in Andhra Pradesh has covered all 1 099 rural mandals of the state, and claims to have reached out to 90 percent of the poorest rural households in a phased manner³. The project in Madhya Pradesh covered 53 development blocks in 14 districts during Phase 1 (2001-2008), whereas DPIP-I in Rajasthan covered 42 blocks in seven of the poorest districts between the years 2000 and 2007; planning for the second phase is underway in both states.

Table 1
DPIP Subprojects by Category (percent)

Category	Andhra Pradesh	Madhya Prades	Rajasthan
Dairy	43	23	43
Sheep and goats	26	23	6
Other livestock	2	23	6
Non-livestock	29	77	51
Total subprojects	36 477	53 078	Approx. 17 500

Source: ICRs.

³ Andhra Pradesh: Phase 1, called APDPIP from 2000-2006 in 316 mandals in 6 districts; Phase 2 – APRPRP – from 2002 to 2009 (with an extension until December 2011) in 548 backward mandals in 16 districts.

Participant selection

Within the areas selected and among the poorest households identified, participants for all interventions including livestock related activities were self-selected. They also made their own choice of species and most opted for cattle and buffalo. The latter could be attributed to the fact that for the rural poor, large animals are a symbol of status and power, and also are used as insurance in times of crises. Secondly the project's commitment to making remunerative market linkages for the milk produced also encouraged participants to opt for large animals. The project teams said that as long as the households were within the overall inclusion criteria they did not interfere in their choice-making processes⁴. From the project side, demand for livestock products (milk, goat meat) and/or presence of a reliable market linkage such as a functioning cooperative was also stated as one of the criteria for promoting livestock interventions.

In all three locations where fieldwork was carried out, the project was either in between phases or at the start of the next phase, with expansion of area covered and a revision of the project implementation approach. Rajasthan was in the process of planning Phase 2 after a gap of three years, whereas MP-DPIP had just started the second phase of the project. The AP-RPRP is in the third phase of the project, led by the same team under a new name with some refinements in the earlier implementation approach. Therefore at the time of the study, all teams were engaged in reflecting upon strategies regarding livestock interventions, and considering redesigning of some of them. The stocktaking exercise was able to draw upon these processes.

Main findings: outcomes of the dairy interventions

Outcomes on households

In all three states, the projects report an increase in the livestock holdings of the beneficiary households, for example in MP it is three percent while AP reports a growth of 31 percent in overall asset value of the beneficiary households, of which livestock is one of the assets along with land, housing, jewellery and other non-farm assets. Overall, for livestock CIGs the economic and financial analysis showed that on average the returns on livestock for households were 25-36 percent, with incremental incomes of about 35 percent over baseline. While some non-farm enterprises had even higher returns, these were less reliable. Internal rates of return for different categories of sub-projects are presented in Table 2. Within state variability of Internal Rates of Return (IRR) for the same type of sub-project is large. The IRRs reported for livestock activities in AP and MP are very similar and average IRRs for dairy activities are high to very high.

According to the producers in all project areas, the biggest advantage of the dairy support activities has been the ability "to sell smaller quantities of milk" i.e. 1-2 litres per day within their own villages

Table 2
Internal Rates of Return (IRR) of Selected DPIP Sub-Projects by Category (percent)

Category	Andhra Pradesh		Madhya Pradesh		Rajasthan	
	Range	Average	Range	Average	Range	Average
Dairy	36-210	103	20-204	80	25-36	n.a.
Other livestock	38-73	48	40-189	52	8-9	n.a.
Non-livestock	25-174	n.a.	7-566	n.a.	4-299	n.a.

Source: ICRs.

⁴ Some NGO-PFTs were reluctant to give buffaloes to landless beneficiaries as they did not have the means to arrange for adequate fodder during the dry season (BAIF-MP). However, their judgement was overruled by the district project teams which distributed buffaloes at the end of the project period.

at remunerative prices. This was irrespective of the form of organization. Previously, smallholders had found it difficult to approach local markets with small quantities, and had had to depend upon cycle vendors. The milk price set by dairies on the basis of quality (fat and 'solids not fat' (SNF) has been the highest they have received so far, and has also forced local vendors to increase their prices. The project in AP has influenced the buyers of milk, both private as well cooperative dairies, to increase the milk price by about 10-15 percent with an additional 10-15 percent for chilled milk. Also, the transparency in milk testing and record keeping in the milk collection centres run by the mahila samakhya, had indirectly resulted in a further increase of 10-15 percent paid to the milk pourers who are members. All of this resulted in a net increase of around 30 percent over the price they were getting before, and a better demand for inputs and services⁵. Additionally infrastructure can play a key part in supporting livestock interventions. Rajasthan DPIP reported an increase of INR 5 per litre as the result of constructing roads between villages, and in another instance a saving on expenses on fodder due to a bridge over a nullah that created access to grazing areas⁶.

Livestock interventions are known to generate secondary employment opportunities such as paid secretaries and testers in the milk producers' organization, transportation, community level healthcare providers, and fodder entrepreneurs. However, there was no specific data available to assess and quantify this as an outcome of livestock development interventions. The multiplier effect has important implications for the possibility of employment for the landless and the very poor, which should not be overlooked in the discussion on how targeting of the poor is done in the livestock context.

The livestock interventions in the project are primarily those of asset transfer based on peoples' needs and desires. However, they overlook the fact that though all poor people want the same assets, they are in different stages of poverty – among the poorest some are struggling for survival while some have livelihood activities at the subsistence level and some others have graduated to the self-employment stage. Livestock intervention falls between subsistence and self-employment levels. In order to provide sustainable benefits, livestock interventions require a certain scale otherwise owing to their labour intensive nature they could also deprive households of earnings from casual labour. For example, a person is required to spend at least one and half hours twice a day, to feed and milk two animals – people prefer to stall feed high value animals, therefore additional time would be required to fetch water and fodder. This might cut the time available for other economic activities. Therefore one suggestion is to design intervention packages based on the level of poverty which in turn is determined by the resource base and needs of the household⁷.

It should be noted that the most appropriate 'intervention' for a household depends on the initial conditions of a household (i.e. its endowments) and the opportunities provided by the surroundings (i.e. opportunity costs of family labour). Returns from labour in a functioning dairy unit are normally higher than local wage rates for unskilled labour. Households tend to have a mixture of labour at their disposal and livestock can make use of labour that cannot take up paid off-farm employment, so households may be quite willing to maintain an activity without specializing in it.

Outcomes in terms of links

The projects have been successful in forging marketing links with the state cooperative system in AP and Rajasthan. These links have been instrumental in mainstreaming existing and newly inducted milk producers into the organized sector. Producers in MP are linked to private dairies. In all three states, the projects recognise the need to maintain productivity in order to sustain the market

5 SERP. Dairying- Livelihood for the ultra poor (mimeographed, no date).

6 Bhargava and Sharma (2004) Mid-term impact of the District Poverty Initiatives Programme, Rajasthan.

7 A discussion of relevant intervention packages appropriate to different households' resource availability and their graduation is probably closely linked to suitability of different livestock. This study could not examine such graduation processes in detail.

links, and therefore have sought to organize the producers. These organizations will eventually be formalised, incorporated as a mechanism to continue realising the benefits of market links. In the case of links with commercial financial institutions, the project in MP experienced difficulties as the groups lacked creditworthiness in the earlier stages of the project. This was compounded by the fact that the CIGs had no experience of savings and credit activities. In AP, the project has made deliberate efforts to link the SHGs and their federations to schemes such as Pavala vaddi (interest more than three percent), and total financial inclusion (TFI) loans of INR 500 000 per SHG.

Rajasthan DPIIP has been successful in leveraging funds from other government programmes, such as the Rajasthan Mission on Livelihood (RMOL), to pay for an Artificial Insemination Centre run by the agriculture NGO BAIF⁸. As a state government project, the using and/or hiring of government infrastructures (MP, AP) and getting trained personnel on secondment has been relatively easy.

Outcomes on institutional capacity

The three states share common development objectives, but differ in the context in which they operate and their approach to organizing communities. In AP and Rajasthan there is a focus on organizing beneficiaries into savings and credit based organizations for dairy based enterprises. MP has a commodity based approach to creating higher level groups or organizations – they have formed livelihood linked self-help groups of households involved in a similar activity. The integrated three tier structure, combining the development of business and management skills in AP has ensured long-term sustainability of institutional capacity in the various tiers and subsets, such as dairy committees at village and mandal level. It also creates links with public, private and cooperative partners.

The projects, as well as providing financial support for asset creation, have also created institutional arrangements for minimising constraints usually faced by smallholder dairy producers. For purchasing good quality animals, the projects have made credit available (AP and Rajasthan) and/or have given grants (MP). They have established market links with the local cooperative system (AP, Rajasthan) as well as private dairies (MP) for marketing, thereby ensuring remunerative prices for the milk. The projects have also promoted fodder cultivation (AP), contracted reputed agencies like BAIF for breed improvement, and created a cadre of paravets (people trained in basic veterinary procedures) to provide primary healthcare services. Infrastructure development e.g. road construction in Rajasthan, has also contributed to better access and better prices. These arrangements are benefiting both project and non-project households in the project areas.

The project is contributing to the formal or organized sector comprising dairy cooperatives, government and private players in the three states. The increase in the marketable surplus of milk in project areas has led to the revival of defunct village dairy cooperative societies and also the introduction of new routes by the cooperative milk unions (Rajasthan and AP). In MP, private dairies have entered the project area. Owing to transparent milk testing facilities and pricing linked to quality (fat and SNF), farmers in the area are now getting a better price for their milk and therefore find the activity more profitable.

The group approach (CIG or SHG) might be suitable for microcredit activities but might not yield good results for livestock rearing activities. On the other hand, due to low surpluses, aggregation of produce is necessary for making marketing efforts worthwhile. The SHG model, where federations have set up dairy enterprises, seems to work in this way. Households obtain credit for livestock through the SHG channel and market their surplus milk through the collection centres run by the Mandal Samakyhas (AP).

⁸ Originally, Bharatiya Agro Industries Foundation (BAIF), now BAIF Development Research Foundation.

There is a marked dependence on paraprofessionals (community level health workers) for service provision. All three states have applied a fairly generic and relatively well known model (based on the Chinese barefoot doctor model) involving the community based organizations (CBOs) in selection and monitoring of the paravets, some of whom have been trained in government schemes. Paravets for service provision, such as preventive healthcare, extension education and low-cost treatment, are key elements in successful inputs supply and service delivery systems. In the absence of adequate government services and unreliable private service providers, the projects have sought to develop a team of local service providers.

Conclusions: examining key questions

Rationale for and approach to livestock development in the livelihoods projects

The World Bank supported poverty reduction projects are aiming at capitalising on the growing demand for livestock and livestock products to alleviate poverty by organizing the poor, who already have a major stake in the sector. This provides economically more viable options for their labour and increasing their incomes. In all three states visited, the majority of the livestock sub-projects focused on large ruminants within one grant (MP) or one or two loan cycles (AP and Rajasthan). The programmes recognise the fact that in order for the poorest of poor households to sustain and increase their income from large animals, they require space and housing for animals, adequate sources of fodder and a reliable market for milk and milk products. They have introduced an insurance component to address risks related to disease outbreaks and thefts.

While there seem to be substantial benefits for a broad group of poor households, the merits of project strategies with regards to targeting livestock interventions could be reviewed in terms of benefit distribution and inclusion of the poorest and most vulnerable households, especially, women and the landless. Firstly, large animals require substantial amounts of space, shelter (in the form of cowsheds), safety and other factors including labour. Poor women and the landless cannot arrange for or afford these easily. Secondly, returns from large animals are relatively uncertain compared to small animals in the absence of remunerative markets. Also, their reproductive cycles are longer and they are difficult to sell within the village. Therefore, even though seen as a buffer during crises, it might not be practically possible to liquidate the asset. As large animals would fetch large amounts, their ownership, disposal and proceeds might be taken over by men in the family resulting in conflict of interest. And finally the risk of death and theft is more critical for large animals in case of higher repayment costs and insurance premiums. The biggest drawback of dairy development is the need to establish a large support infrastructure, both for input provision and milk marketing. This however generates a large number of secondary jobs. Overall, dairy development needs to be much better planned than support to most other livestock activities⁹.

This was not a problem in goat rearing groups, seen mostly in MP and Rajasthan, where the projects have built on the communities' traditional rearing skills and have facilitated market links. These groups expressed satisfaction with the activity as it yielded reasonable income with almost no expenditure. Forest and grazing areas in the neighbourhood provided for ample feed resources at no cost. The same can be said of the poultry producer company in MP which has turned out to be a profitable business enterprise in three districts. While there was relatively little information on graduation processes for small ruminants and poultry, i.e. how they help poor people graduate

⁹ For more details refer to FAO 2010, T. Hemme and J. Otte. Prospects of Smallholder Dairy Development, PPLPI, [web link <http://www.fao.org/docrep/012/i1522e/i1522e00.pdf>].

through increasingly more complex livelihoods activities, their importance to the landless and poorer community groups is known, and therefore needs further exploration¹⁰.

Role of the created secondary level institutions

The implementation approach in all three locations is based on the realisation that the success of development interventions does not depend solely on the quality of technical solutions that interventions introduce. For technical interventions to achieve the desired impact they should be appropriate, and accompanied by an enabling environment. This is evident through the organization structures and institutions created in the course of the project. Poor households have been mobilised to form groups and receive livestock assets of their choice as grants or loans. The state teams have different modalities for disbursing funds and acquiring livestock. They have forged partnerships and links with other government departments and private companies to arrange for inputs and market facilities. However these partnerships are being managed by the project staff and the community based organizations (primary groups and federations) will need more time and maturity before they can play that role.

Critical services needed and provided

Providing healthcare and breeding services at the doorstep of beneficiary households by creating a cadre of community based service providers (paravets) has proved useful for both new and old livestock keepers. However, at present the paravets are being paid for through project funds and there is no concrete plan or obvious model for making them self-reliant. While it is true that unless the beneficiaries realise the value of these services in economic terms they might not be willing to pay for them, this cadre will eventually need to operate as a revenue model, and/or be strongly complemented by other effective extension services on the ground. The associated challenge is retaining the interest and continuity of the paravets. This implies creating demand for their services in order to generate adequate income for the paravets while maintaining a fine balance between the technical limitations of the paravets and support from veterinarians. For now, veterinarians in the project teams at the district level are playing the role of paravets and therefore there is not much effort to develop links with AHD. This could have implications for post-project sustainability of paravet services.

Market and other external links

The projects have forged market links with the state led cooperative dairy federations (APDDCF, RCDF) and in one instance with private dairies (MP). This is a key feature of the support to livestock interventions under the projects. MP has also ventured into helping the producer company to market the milk on their own. The terms and conditions for these links have been negotiated by project staff (PFTs) on behalf of the beneficiary organizations. Therefore, even if there are areas of conflict, the producers are not able to voice their dissent. Secondly, as there are no alternative arrangements, the producers are more reluctant to raise these issues. This observation will be valid until producer organizations grow in experience and maturity and are able to make their own decisions and take risks.

Being state government run, the projects benefited from several development schemes. For example, the interest waiver scheme (pavala vaddi) in AP has been instrumental in making the loan based SHG model a success. On the other hand, links with the state animal husbandry department are relatively weak. In AP, the project has made use of government provisions (APLDA) to train paravets and pay them, but still depend upon their own technical staff for their backstopping. In MP, paravets are being trained by expert NGOs using project funds, whereas in Rajasthan there are links with the cooperative system and NGOs depending on the PFT. However, in neither state has the

¹⁰ Some overview data on small ruminants <http://sapplpp.org/thematicfocus/small-ruminants>.

project made any efforts to create links with the department for healthcare or breeding services. This might prove to be a disadvantage post-project as the beneficiaries will not have developed a relationship with the government veterinarians and will not have faith in the system to approach them for healthcare services.

Evidence of livestock as a pathway out of poverty

The livestock component of the projects has been designed to help the rural poor to capitalise on the growing demand for livestock products. It distributed livestock to people who did not own any and provided inputs and services to improve productivity, and access to remunerative markets to those who already owned livestock. This entailed not only technological solutions but also appropriate institutional configurations to make the technologies work in favour of the rural poor. The latter factor emphasises organizing and building the capacity of small-scale producers to forge partnerships with relevant state and non-state actors. While the approach promises a pathway out of poverty, the project has faced several challenges while scaling up benefits to the poorest of the poor.

Securing the participation and sustaining the interest of the poorest of the poor continuously brings new challenges. For example, data from AP indicate that the project mobilised 8.8 million women into 700 000 SHGs with a focus on the poorest of the poor, such as single women and the disabled. Of these 90 percent belonged to SC and ST categories, which form part of the most disenfranchised segment of the community. However, how many of these continue to rear livestock and exactly how they benefit from livestock related activities is not known.

Livestock in general and especially large ruminants, require constant technological improvements as well as considerable investment in feeding, healthcare and management (such as housing) in order to generate benefits. This need for working capital has been well addressed by the projects with a strong micro credit component (AP, Rajasthan). In MP where a one-off grant based model has been followed, the sustainability of the activity and therefore its benefits might be affected. Nevertheless, in MP, according to the ex-post economic analysis conducted in 2006-2007, around 88 percent of the assets transferred in the project were still functional. With analysis done by specific livelihood grant activity, the could also present results due to livestock assistance. Thus the analysis reported an income increase for project beneficiaries of 16 percent due to dairy activities and 19 percent due to poultry among other activities.

Livestock development requires a proper understanding and ability to manage the production system, the animals, and market the produce. This human capital cannot be developed by one-off training programmes; it requires consistent inputs in the form of well-designed extension services which take seasonal requirements into account. The extension component in the projects is arbitrary in that it has been combined with healthcare and breeding services given by the paravets, with no specific goals for capacity building of the livestock rearers.

While creating access to markets, the projects have linked producers who opted for large animals to existing marketing channels in the form of cooperatives or private dairies and vendors. Market facilities for small ruminants are relatively less developed and are managed locally. Nevertheless, the projects have shown models with different marketing strategies for different livestock species, thereby creating different avenues for generating cash income for the beneficiary households.



ANNEX 5

Non-farm rural enterprises

Contribution of non-farm rural enterprise development to pro-poor outcomes

by Arupjyoti Rai Baruah (lead) and Kanta Singh

Introduction

Rural livelihood in India is a very contextual issue with many variable factors. The ways for a rural household to “make a living” cannot be simply defined by one source. Households generally have multiple sources of livelihood, which may include agriculture, cattle rearing, wage labour, involvement in non-farm rural enterprises¹ (NFRE) etc. This is to a large extent influenced by the fact, that the revenue generated by any of the sources of livelihood is never sufficient to cover the household expenses. This is probably due to the reason that fragmented land holdings result in low agriculture production. Therefore a household with marginal land holdings will not have a sufficient income flow from such small plots of land to meet family expenses. Similarly, households involved in other economic activities are not financially able to invest in that activity and so reach an economy of scale advantage stage. These multiple sources of household income can be attributed to risk diversification of limited resources available to these rural households. Interestingly, if the profiles of those households involved in some non-farm rural enterprises are analysed, it can be seen that a section of these households see it as a complementary income source and not an activity to be solely dependent on. Nevertheless, there are a significant number of households, which are totally dependent on NFRE activities for their survival. Generally speaking, many of these rural households involved in NFRE activities have either skill differentiation or have taken up this activity due to the non-availability of land for agriculture.

Various studies have shown that generally non-farm activities contribute around 25-35 percent of the total household income in rural India². For the last decade, India has been growing at a considerably high rate but it has been observed that there is a disproportionate share of wealth between urban India and rural India. In rural India, non-agriculture industries in the informal sector employ only one half of the workforce that it employs in the urban sector; the figures for rural and urban sector are roughly 11 percent and 22 percent respectively of the total workforce in the country³. The rate of growth of employment in the rural informal sector is significantly lower than that in the urban informal sector.

Even though the economic growth rate is lower in the rural non-farm sector, it can still contribute to overall growth and poverty alleviation. This has become more a necessity than an option. Rural India, which comprises more than 70 percent of the population, has been traditionally dependent on agriculture. However for steadily decreasing agricultural land-holdings in rural areas, agriculture has become less remunerative and therefore households that depend only on agriculture are no longer

¹ The rural non-farm activities can be defined as economic activities which are non-agricultural activities, which include household and micro and small manufacturing, processing, repair, construction, trade and commerce, transport, rental and other services in villages and rural towns undertaken by enterprises varying in size from household own-account enterprises to small production units.

² Source: Rural non-farm employment in India: Macro trends, micro-evidence and policy options- Brajesh Jha, Agricultural Economics Unit, Institute of Economic Growth, Delhi.

³ Source: Ibid.

sustainable. It can be seen that many of the livelihood options such as livestock, fishery, forest based activities and paid employment also ultimately lead to increased pressure on land. Therefore the strategies for poverty alleviation which will not compound the existing problem have to look away from land. Primary livelihood options, which are more land neutral, are non-farm rural enterprises.

The livelihoods approach of the projects recognizes that people have multiple capital assets and endowments, and that the way in which these are used to develop livelihood strategies depends on the institutions and processes that mediate these livelihood strategies.

Methodology

The purpose of conducting the stocktaking exercise was to undertake an assessment of the role of NFRE activities in achieving the project objectives of the World Bank sponsored livelihood projects. The exercise specifically focused on the impact made on a few parameters that contribute towards the project objectives. It examined different mechanisms used in promoting NFRE activities by the different projects assisted by the World Bank. It also looked at, the economic and social impact of these NFRE activities as well as listing the issues and concerns identified.

The design of the stocktaking exercise took into account two factors; the comparison of the quantitative impact of the projects on a few key indicators related to poverty reduction and a more qualitative and deductive analysis of the link between project design aspects related to NFRE and poverty reduction on other issues. The scope of the study focused around the following key questions:

- In what ways has the NFRE component of the livelihood projects helped to reduce poverty?
- How has the NFRE component contributed to better income, empowerment and improved services for the rural poor?
- Have livelihood projects been successful in changing the institutional mechanisms that govern NFRE?
- What capital assets are necessary for NFRE to be able to contribute to poverty reduction?
- What positive and negative impacts have different project design choices had on supporting NFRE as a source of income?
- How sustainable is the progress made in poverty reduction through NFRE?
- Is investment in NFRE a cost effective means of reducing poverty?

The states included in the study were selected according to their approach to livelihood promotion as well as the period of intervention of the approach. Out of the seven states, Orissa was left out because the interventions are in the early stages of implementation; consequently results are yet to be seen. The selection of enterprises for analysis was made in consultation with the respective state project teams through purposive sampling. The main criteria for selecting enterprises were that they were engaged in non-farm activities, and that they had been operating for a substantial period. In addition, to understand the operational effectiveness of various forms of enterprises, a mix of collective and individual enterprises was analysed. Taking into account the logistic issues, the project team usually identified geographical locations where a considerable number of NFREs were present.

Main findings

Overview of NFRE activities in livelihoods projects

Adaptation of approaches to NFRE. There was no evident specific approach to NFRE development in the livelihood project in any of the states studied. It can be assumed that demand for NFRE

activities from the beneficiaries, in all the states studied, are mostly spontaneous. This is the same as any other economic activity such as agriculture related animal husbandry etc. The NFREs that have been supported either through grant or loan are more demand driven. In other words, the economic activities that are being supported are perceived as a need or demand by the beneficiaries themselves and not promoted as a top down approach. The activities that have been supported through the projects are mostly existing ones or created in view of the local requirements. Furthermore, the economic scale of the activities is more or less determined by the beneficiaries, often based on project support (loan or grant amount) limitations. In all the World Bank sponsored projects, either a grant or a loan is provided to the beneficiaries to create or expand the enterprises.

A general observation is that there has been a tendency for the project cost of these enterprises to be determined by the funds availability. In many cases, the authors observed enterprises which were very micro in nature requesting a loan or a grant far exceeding their requirement. In other cases, due to limitations in availability of funds, the project cost for enterprise viability was below the required threshold. Also, positively, in many cases, the expansion of activities took place with the revenue generated through the business.

All the projects have seen some sort of technical capacity building component for the beneficiaries, though the extent and quality of the inputs provided varied. In almost all the states, the project teams organized technical skill building training for the beneficiaries. The authors met beneficiaries who had received training in tailoring, construction work and handicraft skills such as sikki art, madhubani paintings etc. While reviewing the project proposals, all the states emphasised the skill building component. In the case of enterprise management skills, there was considerable increased scope of counselling the beneficiaries on business opportunity selection, its viability and on scaling-up of operations. In Bihar and TN, some efforts of business planning have been noted.

In the case of TN, a more organized approach to NFRE development was observed. The project team conducted local resource mapping to identify resource availability, skill availability, and the inflow-outflow of produce. This helps in preparing individual business plans. The resource mapping has resulted in selecting activities that are more viable in terms of readily available resources and skill sets in the project intervention areas.

To complement the existing livelihood promotion strategies, a sub-sectoral enterprise development approach has been noticed in Bihar and Chhattisgarh. The sub-sectoral approach intervenes in clusters of specific economic activities which are geographically located in one particular area. This approach is in addition to the existing demand driven approach and complements the ongoing NFRE promotion. It is interesting to note that this sub-sectoral approach is focused mostly on traditional handicraft activities. In Bihar, efforts have been made to revive Madhubani paintings, Sujani cluster and Sikki art. In Chhattisgarh, efforts were made to strengthen the Bell metal craft. During interactions with the project teams of different states, it seems that the sub-sectoral approach adopted in the mentioned states is a result of the individual efforts of a few project members and experts. It is worth mentioning that the states using the sub-sectoral approach are traditionally strong in cluster based economic activities.

From reviews of the available secondary data, the number of NFRE activities supported was third in order, following agriculture and farm related and livestock related economic activities. This was the case for most of the states. This is probably due to factors such as concerted efforts in promoting the dairy sector, or the project intervention areas are predominantly agriculture based. An interesting observation during the field study, though hard data was unavailable, was that many of the NFRE activities promoted in MP and Chhattisgarh were already existing business, which were then

supported mostly through financial grants. Compared to the completely new enterprises promoted, the existing business activities were operating better with higher revenue flow and showed potential for scaling-up. This could be due to the fact that existing businesses have experience of business operation and the relevant skill-set.

Capacity building of the poor and very poor, and other target groups in NFRE development. The most important area where the project beneficiaries, mostly poor and ultra-poor, have benefited from the livelihood projects is the financial support made available for starting their enterprises. This financial support has built up their capacity for generating a regular income source for their sustenance. Also, in the case of Bihar and Tamil Nadu, the beneficiaries are being financially included in the formal credit system. This is because of the project design which enables them to have future credits on reasonable terms to run their business. The SHGs promoted through the projects in Bihar and TN fall under the definition of Government defined norms of SHGs and are eligible for loans through Bank-SHG schemes of commercial banks.

Cluster level interventions have also helped the beneficiaries to understand market demands as well as the opportunity to have their own links with them. All the projects, to some extent or other, have assisted the beneficiaries to understand the economics of their subproject through business micro planning, which is required in the subproject approval. Though it is very specific to project requirements, some capacity building in terms of micro business planning has been instilled in the beneficiaries. While interacting with the project staff in all of the states, it was reported that technical capacity building inputs were provided to the beneficiaries. However, from discussions in the field, this seems to be more the case for cluster level interventions, mainly in the dairy sector and a few other exceptional cases. All of the states reviewed have put considerable effort into identifying and training community facilitators and teams to provide capacity building support to the beneficiaries. The project design aim is that these community teams should become independent from project staff in order to ensure that local personnel at village level have the support necessary skills.

Regarding technical inputs for NFRE activities, almost all the states have conducted specific skill upgrading programmes. This training is either stand alone inputs on specific trades or through cluster level interventions. Meeting with beneficiaries in Bihar and Tamil Nadu who had been trained through skill upgrading programmes, it was apparent that they have benefitted considerably from the training. From the point of view of cost effectiveness and outreach, it is apparent that cluster level interventions result in greater benefits. This is due to the fact that the training can be provided to a large group without much resource dilution. At present, it seems most of the training inputs are on an ad-hoc basis and concentrate on achieving targets.

Community institution building in support of NFRE

The role of CIGs, SHGs, and village organizations in relation to transactions for NFREs. All the livelihood projects supported by the World Bank are based on the assumption that the inputs provided will be used sustainably and the enterprises supported given continuous support. Various states have been using different models for livelihood promotion, whether CIG or SHG or strengthening of Village Organizations (VOs) to ensure institution building at community level. In the case of MP and Chhattisgarh, the funding for NFRE is done through CIGs like any other economic activities or sub-projects. In the case of Bihar and TN, the individual enterprises are funded through SHGs and the collective enterprise is funded through the VO directly as an enterprise. In MP and Chhattisgarh, the CIGs contribute a percentage of the grant to the VO (called Apna kosh). In Bihar and TN, the individual/collective enterprise repays the loan received to the VO through the SHG. The VOs/ SHGs have started functioning as institutions in Bihar and TN and have started to provide further loans to the enterprise members.

In Rajasthan, the project required that all the CIGs and their chosen activities were decided in consultation with the local panchayats. The CIG model also helped in bringing people together in a common profit motive. Since most of the members were poor, vulnerable and lived in proximity to each other, they got group identity for some time as they started affiliating with their groups. Community facilitators played an important role in supporting the process of forming groups and developing their sub-projects, getting them approved and then implemented. The most important aspect of the project was the involvement of NGOs in identifying members, forming groups, helping them make their business plan, getting it approved and building their capacity on social development issues. These NGOs were operating locally so they were in a position to provide in-depth information about the group dynamics and conditions prevailing in the villages.

By creating community facilitators, the projects are looking for sustainable long-term business support services for NFREs and other activities. For example, in Tamil Nadu, the project has linked up with civil society organizations which have expertise in entrepreneurship development, to train the community facilitators. These community facilitators are mostly selected from the Village Organizations so as to build the capability of these organizations to provide business development services (BDS) services continuously.

In both the CIG and SHG model of funding for NFREs, there is a system for initial financial capital input to establish or expand enterprises. The SHG model ensures uninterrupted capital flow to the enterprises through loans from the VO. The SHG, in turn, provides capital to the individual or collective enterprises. In the case of CIG funding, all the states have given initial capital for establishing businesses in the form of one-off grants.

From the point of view of the cost of capital, grants to CIGs have an almost zero cost compared to loans to SHGs. Most of the enterprises evaluated in this stocktaking, which are supported through grants, have survived and grown. This is especially true in MP. This could be due to the fact that without the burden of interest or repayment of capital, business revenue generated can be channelled into growth. Theoretically, it also means that enterprises - particularly production related enterprises with a long development period before becoming profitable - should find grants a better option. Grants are, of course, costlier in the long-term from a project perspective.

In case of Tamil Nadu and Bihar, Village Organizations have started generating revenue from interest earned from the loans given to SHG members. With the money received from the regular repayments from SHGs they have shown signs of sustainability and potential for delivering support to the enterprises by providing further loans, particularly for expansion. Normally, the profile of the beneficiaries is such that the normal credit system is reluctant to finance these enterprises.

Development of institutional and market links

Incidence of links with private sector or other institutions for procurement and/or market access to NFRE. In all the states, the NFRE activities promoted have mostly catered to the local market. The scale of investment in the enterprises, or the project cost, is minimal and the production or services offered cater mainly to the local market. For any NFREs to scale up, the volume of production would have to increase; and consistency of the quality of the products or services given has to be maintained. Increased volume of production reduces the unit cost which ensures higher profit margins for the enterprises. The cost cutting could also be achieved through bulk procurement. The question is, whether these small entrepreneurs from rural areas have the capability to increase their market share on their own, or need support in terms of subcontracting, buy-back arrangements, or new market access through developing new connections.

All the livelihood projects in some way or the other acknowledge the need for creating links with the private sector for procurement and market access. Some efforts were seen to be made in TN, where the project staff are providing information and local links on market access. It was observed that the project teams at field level in TN negotiated with local government bodies for obtaining contracts and orders for the enterprises promoted. Notably, in the case of Bihar, in addition to the demand driven approach of enterprise development, a sub-sectoral approach for enterprise development was also being pursued. Where the sub-sectoral approach used in the clusters of Madhubani paintings, Sujani work and incense sticks in Bihar (see table below), the project was able to link up with many buyers. In most of the states, the projects have made concerted efforts to provide marketing platforms for the beneficiaries to display their products. This has been done by supporting participation in fairs and exhibitions, particularly the government sponsored rural fairs called Saras. These links provided much needed support for the producers. In all states, the study noted that although these efforts to gain market access were important, they did not constitute comprehensive plans for support to market access. Such a comprehensive plan seems to be missing in all the states.

Organization of producers into secondary level institutions to provide and access services, and their effectiveness. The projects were designed to take into consideration the formation of federations for the producers. As noted, MP has had success in organizing agricultural producers into producers' companies. However, in NFRE activities this has not been successfully achieved. This could be due to the fact that most of the NFRE enterprises that have been started are very diverse in nature. Similar advantages of collectivization may not arise so easily compared to the agriculture related activities. In the case of Bihar and TN, the efforts are slowly giving results. For example in Bihar, the project in association with AHF (Asian Heritage Foundation) is working towards forming a producer company called "Jiyo" for crafts workers involved in Mithila paintings, Sujani work etc.

Emerging impacts and outcomes

Asset and capacity of enterprise level. In all the states reviewed, the financial support received from the projects by the beneficiaries helped them to acquire fixed assets and the working capital to start up. Fixed assets such as sewing machines, looms, tools and equipment and other items were procured through the loan or the grant they received from the project. In the enterprises interviewed in the study, most of the enterprises that have purchased assets through the project are using these assets in continuing their livelihood and in many cases the enterprises have been able to buy additional fixed assets through revenue generated by the livelihood activity.

Sustainability and growth of enterprises. The NFRE activities across the States studied have shown a variation in the return on investment (RoI). The RoI shown by the economic activities are influenced by the geographical location as well as the type of activity. In order to understand in detail the Returns shown by the enterprises promoted under NFRE, secondary data as well as primary data were referred to.

In the case of Madhya Pradesh, the project undertook an economic analysis in the year 2008 to review the results from Phase 1 of the project, to see its effectiveness. The sub-projects related to livelihood activities were categorized into 11 types. The categories related to NFRE were trading, rental services, utility services and processing and value addition. Examples of the businesses, and their internal rates of return (IRR) of the above categories are given below table. These indicate generally healthy and viable businesses of 50-100% IRR:

Category	Business examples	Average IRR	Minimum – maximum IRR
Trading	General store/grocery, Fertilisers, Cosmetics, Grains, Clothes, Shoes, Food items, etc.	94%	13-256%
Rental services	Tent house, threshing m/c, Mixture, Vehicles, Centring, Drills, Tractors etc.	58%	5-157%
Utility services	Band party, Welding, Bicycle repairing, Photocopying, Tourist support, Hotel, STD PCO, Sewing, Hair salons etc.	84%	16-216%
Processing and value addition	Moti Manka, Flour mill, Terracotta, Bamboo, Leather, Incense sticks, Carpentry, Bricks, Pulses and oil mills etc.	96%	18-310%

Conclusions

Contribution to income

Among the economic activities, supported either through grants or loans, NFRE plays an important role, albeit not the major role. From interviews with project staff, a general feeling was that NFRE activities are more sustainable and have better potential to be promoted, compared to many of the others in agriculture, livestock etc. While in project activity terminology NFRE has not been categorized separately, based on the income generation activity lists, it can be assumed that NFRE cover between 20 to 30 percent of all the economic activities under the projects. Generally, the beneficiaries involved in NFRE activities are undertaking this activity as the primary source of livelihood, though there are some exceptions where it is considered as a supplementary income source to their main livelihood. These cases of supplementary income source are mostly in enterprises run by women. At the time of this field study, there was little in terms of concerted intervention plans or strategies for NFREs in the World Bank supported livelihood projects in India. Some areas for focused intervention for NFREs could include targeted loans for NFREs, the establishment of institutions for market access, customised BDS services etc.

Local economic activity

While analysing the various income generation activities which were defined as non-farm, it was clear that the activities are very much based in the local economy and largely established with the local economy in mind. With a rough classification of the non-farm activities, this study showed that trading and service related activities were more common than production related ones. This could be because the beneficiaries themselves select the activities and they are influenced by local demand, demonstration effects and most importantly continuity of existing livelihoods. Furthermore, the project intervention areas are rural in nature and largely agriculture dependent. Therefore, to cater for this large population, the establishment of trading and service related enterprises is an important option. Most of the production related activities are handicrafts or based on traditional skill sets. Generally speaking, it can be concluded that NFREs are being established on the basis of a demand driven approach and opportunities. Moreover, production related activities are scale dependent, where producing at local level is not generally competitive with large-scale production done elsewhere.

The enterprises in the non-farm sector that have been established through project intervention cater predominantly to the local economy. Employment created is mostly self-employment and provides livelihood opportunity for the immediate family of the beneficiaries. There is some evidence, particularly in Chhattisgarh and Tamil Nadu, that a few collective enterprises are creating additional part-time or even full-time employment opportunities. As mentioned previously, most of the present NFREs do not have scope for fast scaling up due to limited market access and fairly low levels of initial investment. It is interesting to note here, that the CIG model, which was implemented in some

of the states, is less suitable for scaling up as the financial access provided was a one-time grant and the facility for future finance flows was not included. The SHG model overcomes this limitation through revolving loan facilities in the Village Organization.

Return on investment

The NFRE enterprises that have been reviewed both through secondary and primary data show a very high RoI/IRR for most of the enterprises. Except for a few cases, all of them are way above the prime lending rate (PLR) of the commercial banks, and therefore viable enterprises. However, as most of the enterprises are trading or service related, the initial investment is considerably low, and therefore even moderate cash flow contributes to a very high RoI. The cash flows coming out of the NFREs are relatively moderate. These two factors of low investment and moderate cash flow lead to the question of growing the enterprises. As most of the NFREs are the primary source of livelihood for the beneficiaries, the cash flow generated from the enterprise is not only for the sustenance of the family but also to expand the business. Even with the infusion of new investment in the enterprises, the potential for scaling up will be difficult in view of the existing local market access.

Financial links

Most of the states either started with or later moved to the SHG model. This was in order to give the beneficiaries access to the existing conventional credit system. This convergence can be seen extensively in Tamil Nadu, where the SHGs were linked with banks even before the project. Notable success can also be seen in Bihar, where many of the SHGs have been linked with banks and have also started taking loans. Project staff have made concerted efforts to link some of the eligible NFRE beneficiaries to the SGSY scheme, particularly in Bihar and Tamil Nadu. Also, applications to KVIB for individual loans have also been submitted in Chhattisgarh. Overall, the convergence with other schemes and facilities is moving in the right direction and further strengthening of the SHGs will help in accessing these schemes and facilities. In the context of NFREs, however, there needs to be a careful consideration of the actual loan conditions and business criteria which are most suitable for different types of enterprises, especially collective ones.



ANNEX 6

Emerging impacts

Impacts of livelihoods projects by institute for financial management and research

by Centre for Microfinance (IFMR-CMF)

Introduction

The stocktaking exercise focuses on identifying the impacts and lessons from the World Bank funded livelihood projects in seven states in India including Andhra Pradesh (APDPIP and APRPRP), Bihar (BRLP), Chhattisgarh (CGDRPP), Madhya Pradesh (MPDPIP I and II), Orissa (ORLP), Rajasthan (RajDPIP), and Tamil Nadu (TNEPRP). Orissa has been dropped from the study as the project is very new.

In general, livelihood is a very broad concept and all the projects supported a wide range of activities that directly or indirectly affect the economic life of the poor. These activities include improving infrastructure, building up assets and access to a wide range of financial services. In India, over the last couple of decades, apart from sector specific programmes, a major thrust of poverty alleviation programmes has been projects for water harvesting structures (infrastructure), the promotion of self-help groups (SHGs) to build up financial capital and the creation of assets through asset transfer schemes and partial grant based programmes such as Swarnajayanti Grameen Swarozgar Yojana (SGSY). It has been proposed that the SGSY be redesigned as the National Rural Livelihood Mission (NRLM). NRLM, when launched, is expected to take the livelihood approach in a programmatic mission mode.

Some common assumptions that underlie these projects are: they have to empower people economically, socially and politically; poor people are the best judges of how their livelihoods can be improved and; resources should flow directly to the people so that they can plan how best to use them. The livelihoods approach of the projects recognizes that people have multiple capital assets and endowments and that the way in which these are used to develop livelihood strategies depends on the institutions and processes that mediate these livelihood strategies. The projects, while recognizing that intensive capacity building of people and local institutions needs to occur in addition to the financing of livelihood activities, introduced training and capacity building modules at different stages as appropriate. Also, while building the governance capacity of the community was an underlying objective, the level of engagement of the existing local government structures (Gram Sabhas and Gram Panchayats) varies from one project to another.

Common to all Livelihood projects is that they address all these aspects of poverty; consequently they all have components intended to:

- Empower the poor by increasing their personal power of action and collective ability to influence decisions and plan for improved livelihood.
- Build up the capital assets of the poor (financial, physical, social, human, natural), recognising that each of these assets should be strengthened to enable sustainable livelihood strategies.
- Increase income generation opportunities for the poor by enabling forward and backward market links in a variety of sectors (agriculture, dairying, eco-tourism etc.).

However, these components were not introduced in the same sequence across the projects.

To achieve these objectives, and because of the belief that decentralization is key to the effective utilization of funds, the projects were implemented through autonomous agencies specially created and registered, or that were setup within existing government departments. While the state governments, through the office of the Chief Minister, continue to engage with the agencies via the governing body, the agencies are headed by officers from the Indian Administrative Service (IAS). Such a structure and leadership appears to have played an important role in influencing the design and evolution of these projects. Because of the degree of engagement with the community, robust feedback structures, and emphasis on determining the community's ability to handle sub-projects, these projects have evolved over time.

Methodology and key data sources

The three main objectives of all World Bank supported livelihood projects are: to empower the poor; to improve incomes; and improve access to services. Arising from this, there are three important questions that this report will attempt to examine:

- Have livelihood projects reduced poverty?
- Have the projects increased the access of the poor to livelihood assets and income streams derived from these assets?
- What has been the contribution of better incomes, empowerment and services to poverty reduction?

The study team visited Andhra Pradesh, Madhya Pradesh, Chhattisgarh and Tamil Nadu. During the visits, the team had discussions with the MIS staff and evaluation teams to understand the methodology of the impact evaluations carried out and collected the baseline, midline and final evaluation reports. In Rajasthan, as the project had ended by 2008, the impact evaluation reports and other process reports uploaded on their website were used. Bihar is a relatively new project and has only completed the baseline stage. The web based reports from their website were used to understand the design and scale of their programme. The specific reports used for each state are listed in the key references.

Impact indicators and findings

Inclusion. All livelihood projects under study have a common objective of targeting the poor and the marginalized (women, SCs and STs). Therefore, it is important to examine the targeting efficiency of these projects vis-à-vis total outreach, proportion of SC/ST population to final beneficiaries, representation of women in institutions that were created, and the poverty level of targeted areas and final beneficiaries (as indicated by baseline data). The Team used data from Census 2001 to illustrate the scale of operations¹ and below poverty line (BPL) data as a proxy for the number of poor and very poor households where separate information is absent. The data presented here confirm that from the perspective of inclusion, the projects disproportionately benefited the marginalized, especially the ST and SC communities. This is true even in cases where the areas targeted by the project did not have the highest ST/SC or BPL populations within the state. A key question that we will attempt to examine later is if this targeting also led to better outcomes for these groups.

Gross outreach. The area of implementation for the projects and the number of target beneficiaries as a percentage of population varies widely. Andhra Pradesh remains the only state where the project has attempted, and appears to have achieved, significant scale-up over a period of about ten years, in every village in the state. As a whole, these projects have targeted/reached approximately 12.1 million households, with Andhra Pradesh contributing an astounding 10.5 million households.

¹ Retrieved from India State (date).

This number of poor beneficiary households is unprecedented in terms of poverty targeted World Bank supported projects in south Asia.

Gender. In the case of Andhra Pradesh, Bihar, Tamil Nadu and Orissa, the projects were designed for and restricted to women. Chhattisgarh, Rajasthan and Madhya Pradesh directly intervened in economic activities, primarily agriculture. This naturally resulted in higher participation by male members of the targeted households. However, the projects set specific targets at the time of appraisal for inclusion of women, and in these cases exceeded the targets. At least 30 percent of CIGs in Madhya Pradesh were supposed to consist of women, and the project exceeded these targets, as seen below.

Across India, SCs and STs represent 25 percent of the population but 45 percent of all BPL families². As stated earlier, all projects have successfully targeted a higher proportion of SC and ST households. This suggests a greater targeting of the poor. However, there is often a lack of data (except in Andhra Pradesh) on the proportion of the poor and very poor within the SC and ST beneficiaries.

Disabled and vulnerable. Only the Andhra Pradesh and Tamil Nadu projects focused on the inclusion of the disabled, and it appears that Tamil Nadu targets a higher proportion of disabled individuals than Andhra Pradesh.

Financial well-being

All the livelihood projects under study attempted to empower beneficiaries economically, through increased incomes or consumption; or reduction in high-cost debt; or increased access to formal financial services; or increased savings. However, the projects did not use the same combination of activities and interventions to achieve these objectives either directly or indirectly.

Andhra Pradesh, Bihar and Tamil Nadu aim to support investment in social and economic activities through the creation of SHGs and federations that would sustainably save and lend money, and simultaneously carry out institution building. Direct livelihood interventions only came after a few years of intensive capacity building. Therefore indebtedness, access to formal financial institutions, savings and insurance are key outcome indicators for the projects in the initial years. After a few years of implementation, other indicators such as income, consumption and asset ownership provide a better picture of the project's long-term, sustained impact on the beneficiaries.

Because Chhattisgarh, Madhya Pradesh and Rajasthan aim to create income security for the poor, and improve the quality, quantity and diversity of income and consumption, the impact indicators for income, expenditure, asset ownership (especially those used for income generating activities) and migration take precedence over indebtedness, access to formal financial institutions, and savings.

Consumption and expenditure. Only AP and MP have information on consumption. Although an increasing trend in consumption has been observed in MPDPIP over five years and APRPRP over two years, the data for APDPIP does not support the conclusion that consumption has increased more in project villages than non-project villages.

In APDPIP between 2004 and 2006 (mid-term to end line) monthly food consumption increased by 14.1 percent in project villages as against 15.6 percent in non-project villages³. For APRPRP the yearly food consumption increased by 18 percent in project villages and 14 percent in non-project villages between 2004 and 2006 (baseline and mid-term).

² Tendulkar Committee 2009.

³ There is no data on consumption between baseline and end line. ICR does not compare households in project and non-project areas – so we only have this to go by

The household expenditure for CIG households in MPDIP went up by 11 percent between baseline and end line, whereas it decreased by two percent for non-CIG households in project villages and nine percent for comparison villages⁴. There was increased spending on education (56 percent), food (30 percent) and house maintenance (27 percent) by CIG households. Non-CIG households and comparison households increased their expenditure on education (21 percent and 11 percent respectively) and food (17 percent and 6 percent respectively). It is interesting to note that expenditure on house maintenance fell by 36 percent for non-CIG households and increased by nine percent for comparison households.

Indebtedness and borrowing. Interpreting data on borrowing is challenging. In general, projects facilitated access to internal loans and loans from project institutions (federations) or banks. Therefore, high interest cost debt will and should get replaced by these loans. As a result, overall indebtedness (informal – moneylenders and other sources) of the household should decline over a period of time. If the project supported creation or scale-up of income generating activities, this may lead to higher borrowing from informal sources, especially when access to formal sources was not facilitated by the project. Therefore, the Team looked at the project's effectiveness in increasing access to formal sources of credit and reducing the informal credit rather than just the overall household indebtedness.

Data over the entire project period for Andhra Pradesh and for two years in Tamil Nadu does indicate that the project has reduced dependence on informal credit and increased access to formal channels. For Madhya Pradesh, it does not appear that the project increased formal access to banks or other companies for loans. In fact, the percentage of CIG households that borrowed from these institutions declined between baseline and end line. The data from MPDPIP on effect of reducing indebtedness is also inconclusive.

Savings. Livelihood projects in AP, Bihar, Orissa and TN began by organizing women into groups that save small amounts of money. While binding constraints for savings vary from one location to another, the fact that all groups were required to open a bank account and required to save regularly should be reflected in increased household savings. Between 2002 and 2006, the overall savings of the households in APDPIP increased from INR 4 195 to INR 10 906 (an increase of 159 percent) for project households and INR 1 981 to INR 8 242 (an increase of 316 percent) for non-project households. In absolute terms, there seems to be no significant difference in the savings pattern of households in project and non-project villages. The very large increase in savings does indicate a better savings habit across all households⁵.

In MP, both at mid-term and end line, the percentage of households that saved money increased. During end line, 46 percent of CIG households (13 percent at baseline) reported saving money compared to 42 percent of non-CIG (15 percent at baseline) and 37 percent of comparison households (19 percent at baseline). Mean savings, at constant prices, also increased: by 183 percent for CIG households (INR 214 to INR 606) and by 33 percent for non-CIG households (INR 577 to INR 766), whereas it decreased by 22 percent for comparison households (INR 1 005 to INR 786).

Household level savings data is not available from the mid-term analysis for Tamil Nadu. Interviews of SHG members during mid-term revealed that members save on average about INR 70 per month. It is interesting to note that total (current) savings are less than INR 1 000 for 55 percent of the households.

⁴ The total expenditure at constant prices increased by 24 percent and 13 percent for CIG and non-CIG households in project villages; and decreased by nine percent for comparison villages.

⁵ Need to check with the project team on the savings question and find if the savings reported by males and females can be summed or not. Right now the numbers for savings and indebtedness is based on sum of male and female reported figures.

Human development indicators

The livelihood projects studied focused either on regions or people within specific regions who have limited access to health, education and basic infrastructure (water and sanitation). While not all projects allocated funding or provided support to address these access issues, it can be argued that positive changes in at least a few of these indicators suggest an improvement of human capital. In addition, food security remains one of the primary goals of any development intervention. Research shows that the poor allocate a larger percentage of their income towards food. It can be expected that food insecure households will attempt to utilize additional income to alleviate this insecurity.

Andhra Pradesh and Bihar are the only projects to support activities that directly targeted food security, increased school attendance of girls, and improved health and access to health infrastructure. It appears that APDPIP/APRPRP has improved awareness and created demand for health and education, and together with the public distribution system scheme has reduced food insecurity significantly. For Tamil Nadu, Rajasthan, and Madhya Pradesh, the effect of the projects on the human development indicators is inconclusive.

Food security. Only in the case of Tamil Nadu, does the project appear to have increased food security – in Rajasthan and Madhya Pradesh, the effects are marginal. In Andhra Pradesh, food security increased both for project villages and non-project villages. In AP, the percentage of households reporting less than two square meals a day in the last 12 months decreased in both project and non-project households. Although there is no data in MP on food security during the end line, the mid-term report for 2003 indicates that project groups (no differentiation between CIG and non-CIG households) had adequate food in eight to nine months of the year in all 14 districts, compared to six to eight months of the year in 2001. In Rajasthan food insecurity has been measured as the percentage of households that retain 100 percent of the agriculture produce for household consumption. In Tamil Nadu the percentage of households reporting two square meals a day or less was 24 percent for project and 32 percent for non-project households at the time of mid-term evaluation. Due to the unavailability of baseline data on food security it is not possible to add further comments about the improvement in food security. However, the absolute level of food insecurity is lower in project villages than non-project villages.

Education. AP has special programmes for improving girls' education and reducing dropout rates for all children. SHGs also campaign for better educational facilities in their villages. The DPIP end-term evaluation indicates that the dropout rate among boys decreased by 12 percent from 19.4 percent to 7.65 percent for project villages, while it decreased by only four percent for non-project villages. Similarly, the dropout rates among girls decreased marginally by five percent from 13 percent to eight percent for project households while it decreased by three percent for non-project villages. The APRPRP mid-term evaluation shows only a marginal decrease of dropout rates for project and non-project villages. This could be because issues like education and health are more often taken up in older SHGs than in newer SHGs. MP lacks data on education including expenditure patterns, number of girls attending school and child labour.

Health. An increase in medical expenses could either indicate a deterioration in health (more households or household members experienced an illness), or an improved access to healthcare and an increased demand for better healthcare systems leading to improved general health. In APDPIP, between 2004 and 2006, there were a few health indicators that showed significant improvement. The percentage of children breastfed increased almost ten percent (from 84 percent to 94 percent) for project villages while it decreased by a one percent (from 92 percent to 91 percent) for non-project villages. The number of people receiving medical treatment when ill has increased significantly by 24 percent (from 32 percent to 56 percent) for project villages and

22 percent (37 percent to 59 percent) for non-project villages. In APRPRP, between baseline and mid-term (2004 to 2006) the number of people receiving treatment in private hospitals increased by 14 percent for households in both project and non-project areas. In Rajasthan, available data is not supportive of positive impacts of the project on health indicators. While 31 percent of all households surveyed are aware of HIV/AIDS around 65 percent of the households reported are able to obtain required health services for illnesses.

Infrastructure. Infrastructure such as access to clean drinking water, roads and toilets has not been a focus of most projects; therefore there is very little information available on this subject. The section below lists some of the efforts of the projects in building infrastructure. In APDPIP, while there is not enough quantitative information on water, roads and sanitation, the end line report suggests that wherever Village Organizations (VOs) have taken up water issues, the quality of drinking water has improved. Although there is an absence of data in MP about access to clean drinking water and sanitation facilities, a significant number of sub-projects (20 percent of all sub-projects funded) involved digging wells. Even if they were for irrigation, it can be expected that access to drinking water would also have improved. Similarly, in Chhattisgarh, we rely on MIS for information on significant improvements in infrastructure. In Tamil Nadu, the mid-term evaluation reveals that almost 100 percent of the households (in project and non-project villages) have access to clean drinking water. The percentage of households using latrines has remained the same between baseline and mid-term (five percent).

Sustainability of impact

The success of projects cannot and should not be defined by the impact created over the project period. It is more important to base it on the project's ability to sustain the impact over a longer term. But, sustainability of impact is difficult to analyse as there could be several other environmental factors that affect it. However, the project's effort in ensuring sustainability of assets and institutions created is a good predictor of sustainability. In AP, the institutions have been well planned in terms of management capacity and finance, and they appear to have the ability to extend financial access on a continuous basis in the future. In MP, Chhattisgarh and Rajasthan, a large percentage of assets created were retained by the households. However, in the case of a few assets such as livestock, the absence of links (backward and forward) as well as continuous handholding has led to the loss of assets. Tamil Nadu and Bihar are relatively new projects and it is difficult to comment on the sustainability of impact.

In AP the sustainability of impact depends mainly on the financial sustainability of the institutions. Financial access at the household level has improved since community institutions and federated structures have built up their own presence and have leveraged their internal loans with loans from banks. Such community institutions are partially financially sustainable and have the potential to become completely sustainable in the future (discussed more in Annex 2).

In the case of Madhya Pradesh, anecdotal evidence⁶ suggests that more than 90 percent of agricultural assets have been retained over a period of time, but only about 60 percent of the livestock have been retained by CIG households. A major reason for non-retention of agricultural assets was stated to be a lack of technical expertise during the initial stage of the project. For example, many beneficiaries opted for a particular brand of pumps known for their quality, but these were found to be unsuitable in areas of frequent power disruption and could not be run viably in

⁶ Conversations with Mr R.K. Tiwari, Guna District Project Manager, and Mr S.D. Khare Raisen District Project Manager, and from meetings with beneficiaries in five project villages.

the absence of generators. In Tamil Nadu, there is not enough information on the sustainability of impact, but like AP, TN's sustainability of impact depends mainly on the sustainability of institutions built by the project. In Rajasthan, ICR mentions that a significant percentage of dairy and livestock CIGs have been linked to the Rajasthan Dairy Cooperative Federation and large professional NGOs such as Srijan and Pradhan.

Summary of indicators and conclusion

The series of large-scale livelihoods projects implemented by different states in India and funded by the World Bank have shown an extensive range of impacts to a large number of poor people on the ground. There are innumerable anecdotes and case studies of transformations in the lives of individuals and households brought about by these projects. This includes the transformation of women's roles and empowerment, brought about especially by SHG and CIG activities. The challenge is the translation of this transformation into change on a large scale, and reliably measuring such change.

State	Indicator	Impact
Andhra Pradesh ¹	Gross outreach and inclusion	Project reaches around 69 percent of all the households in AP: this translates into about 11 100 000 households. The project's main focus on including the poor and poorest has also been achieved to a significant extent.
	Financial well-being	Significant contribution in decreasing the dependence on informal lending sources. Mixed/marginal effect on other indicators such as income, consumption, expenditure and savings
	Human development	Contribution to food security and education of girls marginal. Significant in improving certain health indicators.
	Asset ownership	Significant contribution to improving household assets such as TV and fans. Minimal contribution to livestock and land assets.
	Empowerment	Significant contribution towards participation in local institutions. Bargaining power of women within household has mixed results.
	Safety nets and convergence	Significant contribution in developing safety nets for the poor and also convergence with other schemes
Bihar	Gross outreach and inclusion	Project targets 20 percent of all the households in the 6 districts. Among existing beneficiaries significant number of SC (30 percent) and ST (16.5 percent). 590 000 households are targeted.
Chhattisgarh ²	Gross outreach and inclusion	A marginally higher proportion of ST and SC CIGs compared to the state average. A total of 111 858 families have benefited.
Madhya Pradesh	Gross outreach and inclusion	A higher proportion of ST sub-projects (26 percent) compared to the state average (11 percent). 71 percent of beneficiaries were very poor and poor – 63.7 percent of families identified as very poor and poor in 14 districts reached. In total the project had benefited 325 704 families as of March 2008. A similar additional number is targeted for 2 nd phase.
	Financial well-being	Significant increase in income and consumption. Minimal effects on savings. Effect on indebtedness inconclusive.
	Human development	Marginal effects on food security. Significant number of sub-projects to dig wells and may have resulted in improved access to drinking water. Not enough data on other indicators to conclude positive effects.
	Asset ownership	Significant increase in land ownership and marginal increase in ownership of other assets (TV, bicycle, motorcycle or radio). Decreased ownership of livestock assets across all households.
	Empowerment	More CIG households report Gram Sabha attendance. Lack of data on other indicators.
	Safety nets and convergence	Negligible number of households insured. Marginal decrease in distress migration rates (lower than comparison households but higher than non-CIG households).

State	Indicator	Impact
TN	Gross outreach and inclusion	Exclusive focus on the poorest and disabled. Project overall has covered close to 412 430 households.
	Financial well-being	Significant contribution in decreasing the dependence on informal lending source and improving the income level of households. Lack of information on household savings, consumption and expenditure.
	Human development	Food security is greater in project than non-project villages; however there is no comparison with baseline. Lack of sufficient information on health and education.
	Asset ownership	Lack of information. Increase in the possession of household assets such as bicycles, grinders and cell phones.
	Safety nets and convergence	Significant impact with employment links. Lack of information on others.
Rajasthan	Gross outreach and inclusion	Reach is significantly less than what was envisioned and the target groups were identified by BPL rather than PIP. Compared to MP (37 percent) and Chhattisgarh (26 percent), higher number of women CIG members (39 percent). At the end of the first phase, 247 868 households benefited.
	Financial well-being	Significant improvement in income of households. Increased expenditure on electricity representing better irrigation/electrification. Not enough information on indebtedness and savings.
	Asset ownership	Significant contribution to building of livestock assets and maintenance of land assets compared to non-project villages.
	Safety nets and convergence	The project has been impressive for developing safety nets for the poor and also convergence with other schemes

1 End of project impact report was not available at time of consultant's report.

2 Impact assessment was not available at time of drafting.

A summary of impact indicators is presented below, with a strong emphasis on quantitative data based on surveys with large samples and with controls. In other words, results where the project's contribution can be relatively clearly distinguished. The information is from the end of 2009.

Overall, the design of the projects has had a significant effect on the outcomes. Projects that focused on building financial access and institutions through the SHG model have resulted in reducing the informal credit dependency of the beneficiaries significantly. However, their effect on other financial wellbeing indicators such as income, consumption and savings is inconclusive. While Tamil Nadu has shown an increase in income over the two year project period, Andhra Pradesh, with considerable challenges in measuring results at scale, showed mixed/marginal evidence of improving income, consumption and savings at the household level. On the other hand, Madhya Pradesh and Rajasthan, which had focused on channelling grants to the poorest through common interest groups (CIG), and could also link measurements of outcomes to specific interventions, could show results where there were significant increases in income levels.

There has also been a significant increase in asset holdings in CIG states, compared to marginal or smaller improvement in SHG states. The project in Andhra Pradesh, through SHGs and its federated structures, nevertheless has been able to facilitate safety net initiatives such as the insurance and pension schemes for the poor, on a very large scale, and has also created convergence with other government schemes such as NREGA. The Andhra Pradesh model is also highly cost effective. Clearly, both the SHGs and the CIG models have advantages and it would be difficult to recommend one model over the other, although the elements of broad based institutions and leverage, provide SHG models a strong underpinning for sustainability. Given that there are pros and cons to both, the design elements need to incorporate the advantages of both models. For example, the very poor, who do not have access to any asset can benefit greatly from the CIG model, if well targeted, which can then be sustained through SHG based initiatives such as thrift and savings. However, for the poor, the SHG model on its own can be beneficial and cost effective, and provide for a range of services.

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