This report is a work in progress
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veeru@reading.ac.uk

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1. BACKGROUND

This review is the starting point for a project exploring the potential for livestock to provide opportunities by which poor landless and refugee-affected people can improve their livelihoods. The project is based in Nepal and Bangladesh, countries where a large number of people live below the poverty line. It will be carrying out an assessment of aspirations and constraints of landless people and an evaluation of the impact of a small number of projects that have been implemented to help landless people. This review examined literature on planning and evaluation of development and research projects to try to discover what might be the best approaches for the project.

Bangladesh

Bangladesh remains one of the poorest and most disaster-prone countries in the world. The UN Human Development Index places it at 144th, while World Bank GNP per Capita statistics suggest a rank of 175th out of 210 (World Bank, 1999a). Approximately 50% of its 126 million population may be categorised as poor, and of these 23% (or about 29 million) are labelled extreme poor. A further 20% are tomorrow’s poor; people who give current trends will soon fall into poverty (Rahman, 1998). Women are disproportionately affected with 95% of female-headed households living in poverty (Lawson-McDowal, 2001). Despite the significant gains in the last decade, social indicators paint a grim picture, with under-five mortality at 104 per 1000, life expectancy of 58 years and the adult literacy rate at 27% and 50% for women and men respectively (World Bank, 1998). The depth and severity of poverty is worse in rural areas with 80% of the poor living there. Rural households headed by women have a higher probability of being among the very poor than households headed by men. Women lack access to health and education and have lower life expectancy than men at birth. Thus gender inequality results in greater poverty of female-headed households. Married household heads are less poor than widowed or divorced household heads.

Many rural people are both poor and landless. In Bangladesh, land pressure has been high for decades, and is increasing with growth of the population, therefore landlessness has been almost a permanent feature of the rural landscape over at least the past 3-4 decades. Traditions of inheritance mean that land is divided among the male children of a family, and landholdings become smaller and smaller over generations. The population is large and land extremely scarce so the opportunities for buying more are very limited. Regular flooding means that families can be temporarily deprived of their land – perhaps for a cropping season – and it can be eroded by floodwater.

Nepal

Nepal has an estimated 53.1% of the population below the international poverty line (UNDP, 1999) and more than 80% of its population living in rural areas and depending on agriculture for their livelihood (Bhandari et al., 1986). Bhandari (1984) reported that 60% of children in Nepal were suffering from protein-calorie malnutrition, and that 10% suffered from third degree malnutrition. At least 20% of children die before reaching the age of five, and the majority of these deaths are due to malnutrition (Bhandari et al., 1986). The situation has not improved with time. In 1999, the Human Development Index was only 0.463 for Nepal compared with 0.918 for United Kingdom and life expectancy at birth was only 57.8 years compared with 77.2 years for UK (UNDP, 1999).

Nepal is one of the most land-poor countries in the world (Khan, 1977). The average size of cultivated landholdings has been estimated at about 0.4 ha (Kiff et al., 1999), and in the hills this is usually scattered over a large area and altitude range. In 1983, there were 1053 persons/km² arable land in the hills of Nepal, compared with 823/km² in rural Bangladesh (UNICEF, 1983). Bhandari (1985) estimated that nearly 46% of the people were landless or near landless. Land is seldom sold and those at the bottom of the social ladder - like the Dalit, who are socially excluded from many livelihood activities, and the Kamaïya, or bonded labourers, find it almost impossible to buy their own land or have secure access to land for cultivation.

In Jhapa and Morang districts of eastern Nepal, there are 98,000 Bhutanese refugees of Nepali origin who have been resident in camps over the last 13 years. It is estimated that 353,000 people in the surrounding communities are directly or indirectly affected by refugee presence (LWF, 1999). It is inevitable that the presence of the refugees should have created changes in the lives of those near the refugee camps. In 1994 it was found that many of the effects had been negative, including loss of employment to local labourers, decline of household income, loss of traditional practices from forest products and social disharmony, and the local poor and landless felt that they were suffering from discrimination (New ERA, 1994).

Some efforts have since been made to balance support to the camps by investment in surrounding communities. However, the poor people in these areas have been faced with new challenges and changing circumstances to which they may be ill equipped to respond. Their old ways of doing agriculture and keeping livestock have been altered by new constraints and opportunities. Pig keeping, for example, has grown in response to the dietary preferences of the refugees, while goat keeping appears to have decreased because of forest degradation and fear for the safety of women grazing goats in the forest.

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1 The extreme poverty line is defined as 40% of the national income poverty line.
2 Rahman (1998) analyses the main poverty gains in Bangladesh in the 1990s.
Landlessness

Landlessness has no generally agreed definition. It has variously been defined as: owning no land; ownership of a very small plot suitable for a vegetable garden but not for field crops; occupying land without tenure; using land that belongs to someone else but with limited rights over produce. In Bangladesh, some 40% of the population live in rural areas and own less than 0.2ha of land. Within this very large group are the “extreme poor”, owning <0.1 ha and accounting for over 20% of all rural households (Rahman, 1998).

However, the situation is complex as many landless households may be sharecrop tenants and will not necessarily be among the poorest households in any one community. It is generally accepted that landless households have access only to homestead (bari) land which they or may not own. Again given the recent growth in non-farm rural employment these households are not always categorised as poor (Mandal and Asaduzzaman, 2000). Landlessness alone is not therefore a good indicator of poverty, although those households that are landless and dependent on agricultural wage labour and are female headed are likely to be among the poorest rural households in Bangladesh (World Bank, 1998).

Box 1 Maslow’s hierarchy of needs

Not surprisingly, the rural landless are more likely to suffer from protein and energy deficiency compared with people who have some land. The landless of the plains (Terai) in Nepal were calculated to be 14.7% deficient in daily energy intake compared with a surplus of 15.6% amongst small farmers (Bhandari et al., 1986). Within households, there is also an unequal distribution of resources. Women do the majority of the farm work, but it is traditional in Nepal to feed the men first, followed by the children. The women have what is left, and are likely to be the major sufferers of any food shortage (Dahal, 1987). It was concluded by Bhandari et al. (1986) that the rural poor in Nepal were those of landless and near-landless households in the Terai, the near-landless households in the hills, and the lower castes in both geographic regions. These were the people who consumed less energy than the recommended daily intake and had at least one malnourished child in their households.

The landless poor are those who, in addition to limited land access, also have limited opportunities for earning a living by other means. They may be uneducated and unable to access the skilled labour market, or lack the social capital to access finances to start a business. Their lives are precarious. On Maslow’s (1943) hierarchy of needs (Box 1) they often lack the ability to satisfy even the fundamental physiological and safety needs.

Livestock

There is already evidence to suggest that livestock are an important source of livelihood for the landless (Sreeramulu, 2001, Naidoo, 2001). As livestock do not always require ownership of land they may be one way for the landless to satisfy immediate cash and food needs. They also provide diversity and hence greater security in livelihood options and, because they gain value over time, may provide a route into owning other types of assets. At the same time they constitute a risky asset because they can become ill and die. A number of projects for the landless have included a livestock option; many of them have been very small and short lived; many have not had clear objectives; many have not been evaluated. There is a limited amount of concrete information to guide future efforts. This project aims to explore the constraints and aspirations of landless people and, using selected case studies, to assess the degree to which projects involving livestock have been able to meet their needs.

Livestock appear to have formed an important part of the adaptation of refugee-affected poor people to new circumstances, and there may be important lessons in the way that they have adapted their systems. At the same time, very little advice or technical help has been provided to assist with adaptation to non-traditional livestock production systems. Lessons learned from the communities and from the small number of existing projects that have tried to work with them, could be of value both to future projects in this area and to other countries facing a large temporary refugee population.
Existing projects

Early attempts by the government to improve the livelihoods of the rural poor in Nepal were unsuccessful (Hamal et al., 1987). A land reform programme undertaken by His Majesty’s Government in the 1960s did not significantly change the distribution of land, or the size of landholdings. It also failed to increase the accessibility of credit to the landless and near landless. The Integrated Rural Development Programmes of the 1970s often resulted in an overall decrease in agricultural productivity, and employment opportunities that were created were exploited by medium and large farmers at the expense of the landless (Hamal et al., 1987). Money for agricultural research has also not reflected the needs of the very poor and landless (Adhikary, 1987). More recently, government-run land leasehold, livestock exchange and village-level animal health programmes appear to have been more successful in reaching the poor.

NGOs throughout Bangladesh and Nepal have targeted poor and landless households by offering support services in agriculture, fisheries, cottage industries, agro-processing etc. for a number of years. Some of these programmes are internationally renowned, and despite having their critics are generally credited with making major contributions to rural development.

NGOs in Bangladesh and Nepal have pioneered relatively successful mechanisms for the delivery of technical information and training for agricultural and livestock enterprises by poor (often landless) rural households. These are often, but not always, linked to the provision and recovery of credit. These approaches use group-based collateral for credit provision with each member of a small homogenous group receiving credit in turn. If one member fails to repay then the others will be refused a loan. This type of peer pressure is generally believed to guarantee good repayment rates of around 90%. The types of enterprise supported by NGOs are varied but the most common in rural areas are livestock production (beef fattening, diary production, sheep and goat rearing, poultry production), homestead gardening, seasonal loans for crop production and small scale processing or cottage industry type enterprises.

Livestock projects and programmes are common throughout rural Bangladesh and Nepal, but the success and failures associated with these interventions have rarely been documented. At the same time however, it has increasingly become clear that these interventions, while attempting to improve the livelihood opportunities for the poorest members of society, in fact only impact on those households who are willing to take the risks and responsibilities associated with accepting credit.

While much NGO activity in Nepal and Bangladesh has produced positive results for beneficiary households it has also become apparent that NGO projects are characterised by:

- A rather formulaic approach offering a limited number of interventions, determined by the service provider and not necessarily by beneficiary households, based on tried and tested technologies or micro-enterprises (for example, livestock production, vegetable production, aquaculture, seasonal loans for agriculture).
- The use of landlessness (ownership) as an indicator of poverty when the causes are often more complex than this.
- A rigid formula for service delivery driven by quantitative targets (number of micro-credit clients) rather than qualitative ones (i.e. poverty reduction and provision of assistance to those in greatest need).
- An emphasis on credit provision and repayment rather than poverty reduction per se, to ensure a continuing source of funds for the organisation and possibly employment and income for its management, (this may be particularly true for the newer/smaller organisations) Relatively high real interest rates\(^4\) and intense pressure from the lender to repay on time (including performance related incentives for NGO employees which may include dismissal if targets are not met).
- The provision of service to groups, that while often poor and landless, are by no means the poorest members of society (in fact these may be avoided as they are considered to be a credit risk).

A study of approximately 100 organisations carried out as part of this review found development projects for the landless and vulnerable ranging in scope from 15 or 20 beneficiaries to several thousand, and target groups from a single village to many villages in multiple districts. Many were run through NGOs, often very small local initiatives running on annual budgets of a few hundred pounds. Many of the projects have not been evaluated critically, or evaluation has been mainly technical, ignoring long-term social and economic impacts, and in some cases no evaluation has been carried out. Many were run for multiple groups of beneficiaries and the specific needs of the two groups of interest to this project were not examined. Only a few organisations work with the refugee-affected landless in Nepal, and only one appears to provide comprehensive livelihoods support.

\(^3\) For example, the activities of the Grameen Bank

\(^4\) In comparison with commercial bank rates but still substantially lower than the informal (moneylender) sector
**Structure of the review**

The very poor are a particularly vulnerable group. This provides a challenge for development, and an even larger challenge for research, which is inevitably more extractive in nature and may create very limited benefits in the short term and at local levels. Inappropriate research may not only reduce the quality of data but also increase the vulnerability of the very people it is trying to help. The research process and tools need to be sensitive to their circumstances – for instance, the need to earn income every day in jobs that are physically demanding and allow little leisure; inability to read and write; hostility from other social or political groups.

There is little documented experience specifically relating to the two project target groups, but a great deal on working with vulnerable people, particularly the very poor and women, for whom similar considerations apply. This review contains information from published and unpublished literature, and the project’s questionnaire survey of NGOs in Bangladesh and Nepal.

Because so much has been written about working with the poor, and methodology has evolved over time, it was necessary to define the context in which methods were being examined. The review covers two areas:

- **The distinction between methodologies or approaches and methods or tools.** Section 2 discusses the way in which the same tools are borrowed by different methodologies so that they may be used differently and create different outcomes in different contexts, and concludes that it is important to be aware of the distinction so that the results of a study can be viewed in their proper context.

- **The perspective from which poor people and their problems and aspirations are viewed** by those who seek to work with them. It can be argued that over time an essentially technology-driven, reductionist perspective has been overtaken by more people-driven, holistic perspectives. As perspectives have evolved, development approaches and the tools used for research, project planning and evaluation have evolved with them. The fine distinctions are important because a misunderstanding between stakeholders about the underlying perspective from which a problem is being viewed or a solution developed has the potential to create problems when a project is implemented. Perhaps for this reason, participatory approaches place great emphasis on creating an environment that promotes dialogue and understanding. Section 3 discusses some of the perspectives driving development and the implications for project evaluation indicators and evaluation approaches.

The majority of development research and assistance is provided in the form of projects, whether internationally or locally initiated and funded. Work with the poor often takes place within the boundaries and environment of a project. Two important elements affect the way in which projects are designed, implemented and evaluated:

- **Organisational culture.** Section 4 discusses the organisational culture of projects and the way in which this may interact with the organisational culture of parent and host organisations, and the national or community culture from which poor people take their reference. Organisational culture influences project structure and processes and should perhaps be explicitly included in impact assessment.

- **Participation:** A large body of literature reflects the growing interest in and use of participatory approaches and tools. Section 5 discusses who should be involved, when and how, in planning and evaluating projects, and concludes that participatory approaches are essential when working with landless people but practical issues need to be given careful consideration.

A **variety of methods and tools** are available and have been tested for participatory research and project evaluation. Some work best with groups and some with individuals, some are easy to use and good “icebreakers” while others are more challenging to implement, some provide primarily qualitative data while others yield quantitative data. There is a growing body of tools that have been developed and tested for livestock research. Section 6 describes some of those tools that may be suitable for use with the landless and refugee affected and discusses the way in which they could be applied.
2. METHODOLOGY AND METHODS

As a starting point, we define what is meant by the terms “methodology” and “methods”. In common usage they are not always clearly distinguished and it is important to make the distinction.

Methodology refers to the approach that is applied, or the framework within which activities are planned. It is conceptual in nature, relating to the “pair of spectacles” through which the world is viewed. Methodology defines strategy.

Method, on the other hand, defines the tools that are used and the action plan that is made. Method relates to tactics.

It is easy to become confused if these distinctions are not made, because while a set of tools may be associated with a particular methodology, it is increasingly common for different approaches to borrow from a range of toolkits. A set of tools may be applied within more than one methodological framework, but the underlying methodology should define the way in which the tools are used. This will be discussed further in relation to participation and qualitative/quantitative indicators.

The point can be illustrated by reference to participation in research and participation in project planning. (Box 2) Participatory project planning seeks to engage different actors in the planning process, not only acknowledging the viewpoint of different stakeholders but trying to provide ownership of the plan by means of the process used to create it. The tools used in this process might include focus group consultation and village level activities such as mapping, causal diagramming, ranking, scoring and Venn diagrams. The result might be a community development plan to be implemented by members of a village with assistance of an NGO and supporting finance from a donor. The same tools could be used within the framework of a research survey, with participation being limited to the period of the enquiry and the main result being a technical report or a published paper intended to inform the international research and development community. The way that the tools were applied would be driven by the methodology, which would define, for example, the time that was available and appropriate for each activity, the flexibility with which tools were changed and adapted during the process, the method of facilitation, the way in which the results were analysed and interpreted.

### Box 2 Comparing methodologies

<table>
<thead>
<tr>
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<th>PARTICIPATORY RESEARCH SURVEY</th>
<th>PARTICIPATORY PROJECT PLANNING</th>
</tr>
</thead>
<tbody>
<tr>
<td>Local knowledge</td>
<td>Very important</td>
<td>Very important</td>
</tr>
<tr>
<td>Participation of local people</td>
<td>Active participants in data collection &amp; immediate analysis, little or no participation in development of models, summaries &amp; general conclusions</td>
<td>Active participants in planning and implementation of project</td>
</tr>
<tr>
<td>Tools</td>
<td>Maps, Focus group discussions, Seasonal calendars, Ranking and scoring, Causal diagrams</td>
<td>Community takes control of results &amp; uses them to design local development programme, which may be facilitated with outside assistance. If outside assistance is provided, planning &amp; evaluation results given to donor.</td>
</tr>
<tr>
<td>Results shared with</td>
<td>Community &amp; researchers discuss immediate findings. Development agencies provided with summaries, models &amp; general conclusions to help in project design process.</td>
<td>Community takes control of results &amp; uses them to design local development programme, which may be facilitated with outside assistance. If outside assistance is provided, planning &amp; evaluation results given to donor.</td>
</tr>
<tr>
<td>Result</td>
<td>Better understanding of how to design projects</td>
<td>Local development project</td>
</tr>
</tbody>
</table>

If methodology is not clearly understood this can create inconsistency in methods and misunderstandings about objectives and intentions.

A further point about approaches is that they can be both characterised by general descriptors (e.g. quantitative or qualitative) and also, in some cases, described in detail and given names (e.g. Rapid Rural Appraisal). This review looks at both characteristics and names. The first time that an approach is mentioned by name it is highlighted by a **BOLD, CAPITALISED FONT.**
3. PERSPECTIVES ON DEVELOPMENT

Over the past 30-40 years there has been a shift in perspective from focus on rural people to specific focus on the poorest groups. At the same time, and possibly as a result, the perspective on the best way to achieve change has evolved. Here we briefly discuss three aspects.

Reductionist or holistic

A reductionist approach identifies a constraint, describes it and breaks it down into small components that can be investigated separately, often with on-station and laboratory experiments. Basic science requires this approach, and some development projects take it because they are constrained by finance. There are distinct advantages to a reductionist approach: it creates a task that can be defined and measured, and this is immensely helpful and comforting to those planning and funding it, carrying it out, and interested in the outcome.

A holistic approach tries to see not only the individual components but also the links between them and the way that each component fits into the whole. Farming systems research developed with the realisation that farms in developing countries are not made up of distinct and separate enterprises but enterprises that are highly interdependent, with resources from one flowing into another. Resource flow modelling, resource mapping and integrated rural development projects all stem from a holistic perspective.

Technology-centred or people-centred

Technology-centred perspectives look at the technical problem of biology or engineering and try to “fix” it with an improved technology, without explicitly considering the people who will have to use it. People-centred perspectives, by contrast, define problems from the perspectives of the people who face them or the institutions in which they are situated. “Appropriate technology” evolved when it was discovered that technically excellent technologies were not being adopted by poor people because they could not afford them, or they way in which they needed to be used did not fit traditional farm management (i.e. the objectives and priorities of poor farming households may not have been fully understood by development workers).

Problems encountered in designing development projects fall into two basic categories – “bounded” and “unbounded”. Bounded problems are those that can be defined and described in a straightforward way, can be treated in isolation, and take a limited time and a fairly predictable effort to solve. A reductionist perspective can often deal effectively with these problems, using either a technology-centred or a people-centred approach depending on the nature of the problem.

The problems faced by vulnerable people, are often unbounded or “messy” problems (Ackoff, 1993). These have undefined boundaries, multiple causes or causes that are strongly entangled with their context, can be hard to describe, have uncertain implications and involve relationships as much as facts.

Box 3 suggests combinations of perspectives that may be successful given certain types of problem. Recent development literature and projects designed for international funding tend to use holistic, people-centred approaches, of which PRA/PLA is probably the best known. However, development practice illustrates a range of perspectives, and organisations claiming to use PRA do not always apply it correctly or effectively.

The background and training of the project designers inevitably has an impact on perspective, with research scientists tending to be more technology-centred and social scientists and field-based development workers more people-centred. Perspective can be affected by access to resources – with fewer resources available it may be necessary to be reductionist. Many of the projects identified during the survey appeared to be designed from a reductionist and technology driven perspective – a vaccination campaign in chickens, or a training course in buffalo management.

<table>
<thead>
<tr>
<th>Box 3. Development perspective matrix</th>
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<tbody>
<tr>
<td></td>
</tr>
<tr>
<td>Reductionist</td>
</tr>
<tr>
<td>Bounded problem</td>
</tr>
<tr>
<td>needing simple technological</td>
</tr>
<tr>
<td>solution e.g. poor cold chain</td>
</tr>
<tr>
<td>develop heat-stable vaccine</td>
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<tr>
<td></td>
</tr>
<tr>
<td>PEOPLE-CENTRED</td>
</tr>
<tr>
<td>Bounded problem</td>
</tr>
<tr>
<td>needing people-based solution e.g.</td>
</tr>
<tr>
<td>lack of childcare service</td>
</tr>
<tr>
<td>reduces attendance of women at work</td>
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<tr>
<td></td>
</tr>
<tr>
<td>Holistic</td>
</tr>
<tr>
<td>Bounded problems</td>
</tr>
<tr>
<td>which are linked e.g. want economies</td>
</tr>
<tr>
<td>of scale from livestock but concerned</td>
</tr>
<tr>
<td>about ecological problem of manure</td>
</tr>
<tr>
<td>improved pig housing plus biogas</td>
</tr>
<tr>
<td>plant</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>PEOPLE-CENTRED</td>
</tr>
<tr>
<td>Unbounded problem</td>
</tr>
<tr>
<td>e.g. want to improve animal health</td>
</tr>
<tr>
<td>service delivery to the poor</td>
</tr>
<tr>
<td>community animal health worker</td>
</tr>
<tr>
<td>training, legal reform, institutional</td>
</tr>
<tr>
<td>reform etc</td>
</tr>
</tbody>
</table>

When working with the very poor, even apparently bounded problems often have unbounded aspects – often related to access and control of a resource. For example, developing a vaccine is a bounded problem, but ensuring that it reaches poor farmers, when they need it and in good condition, at a price they can afford to pay, includes many unbounded issues because it involves many human and organisational relationships. Dealing with unbounded problems always requires a holistic, people-centred perspective.
Problem based or capability based

Another shift in perspective has emerged in recent years, from a focus on problems to a focus on capabilities. Participatory project planning, whether large and formal (e.g. ZOPP) or community based (e.g. PRA) starts by defining problems and then looks for solutions.

An alternative perspective focuses on the resources and capabilities of the poor and what can be done with them to improve livelihoods. Ashrod and Patkar (2001) describe an approach called Appreciative Enquiry which focuses on the potential for change found within poor communities, begins with defining visions and then plans how to achieve them. The Sustainable Rural Livelihoods literature (e.g. Carney 1998) starts by defining five “capitals” or types of natural resource available to people (human, physical, natural, social and financial), although it then becomes more problem focussed by concentrating on vulnerability. Business management literature also offers insights: the Resources-Based Approach (described by e.g. Grant, 1998; Prahalad and Hamel, 1994) to strategy formulation begins by looking at resources available to an organisation and the way it combines them to create “distinctive capabilities”, from which it has competitive advantage in achieving objectives.

The main reason for focussing on potential rather than problems is that it creates from the start an environment for empowerment, without which no project with the poor will be sustainable.

Implications of development perspective for project design and evaluation

With a shift in perspective from reductionist to holistic • projects tend to become broader-based

• indicators for evaluation need to be more holistic, including social and environmental perspectives, and usually include both qualitative and quantitative indicators

With a shift from technology-centered to people-centered

• participatory design and evaluation become more prevalent (discussed in section 5)
• project design needs to be flexible and responsive to changes in needs (discussed in section 4)
• there may be a need for both measurable indicators and those which can be described but not measured, and also for both qualitative and quantitative measures. (discussed in section 3)

With a shift from problem-based to capability-based

• project design needs to start from a positive perspective, emphasising aspirations, resources and capabilities – sustainable livelihoods or appreciative enquiry may be useful methodological frameworks.

Development perspectives and projects for the landless poor

The very poor often face unbounded problems, needing to be approached from a holistic and people-centred perspective. We must take such a perspective in the activities of the project, but at the same time be aware that the projects we evaluate may have come from other perspectives. Unbounded problems do not present easy solutions and this project has too short a duration for any ideas that it may generate to bear fruit within the project lifetime. Continuing links with NGOs will be essential to promote upscaling.
4. ORGANISATIONAL CULTURE AND PROJECT DESIGN

Multiple cultures

Development aid is mostly delivered using projects and programmes. A project has defined boundaries, objectives, time span and budget, and is implemented in order to make changes to an existing situation (Gittinger 1992, Maylor, 1996). Projects are implemented by teams of people and, like any other human social group, a project has a “culture” – set of values, beliefs and behaviours that defines “how we do things around here”. Typically in a project the prevailing culture will be that defined by Handy (1985) as “task” – egalitarian, efficient, focussed on delivering outputs on time and under budget.

The task culture of a project may be modified by the culture of the project’s parent and host organisation(s). There are differences between projects run by NGOs and those of international development agencies in the balance of importance given to efficiency and human relations. Projects funded by international donors have characteristically had stricter requirements for efficiency of resource use, quantitative accountability and formal procedure than those funded through charitable organisations, which lay greater stress on relations with primary beneficiaries. A project hosted by a civil service organisation works within the cultural environment of that organisation – typically, a “bureaucratic” environment in which formal procedure and maintaining stability are important.

It has been suggested (e.g. by Hofstede, 1996) that national cultures strongly affect organisational cultures and what works well in one country may less effective in another. Much of the written theory and taught practice of project management has come from a few developed economies, notably the USA, where the national culture encourages individual initiative, achievement and efficiency. It is possible, however, that in other countries where projects are implemented, the national culture may have a different emphasis, for example, the maintenance of social networks and existing hierarchies.

If the different cultural forces that have shaped a project are taken into account when its performance is evaluated, then the lessons learned may be more valuable since they can be applied to future projects in a context-sensitive way.

In spite of other cultural forces, the task culture is still evident in the majority of rural development projects, and this influences their design, and the way that they are implemented. Two issues directly affected by the task culture, and important in project management, are the ability to define clear project objectives and the ability of projects to respond to changes in the external environment and the needs of the their beneficiaries.

Clarity of objectives

If the task culture is oriented towards achievement, this suggests that clear project objectives will be necessary to plan a project and its budget, to motivate the team and monitor progress. Clear objectives are developed most easily from bounded problems, with well-defined boundaries and straightforward solutions derived from step by step logic. The logical framework, one of the most widely used tools for project planning and management, places great emphasis on a logical, linear relationship between activities, outputs and purpose, with clearly stated indicators.

To some extent this could be said to be a reductionist approach – it attempts to break problems and solutions into components of manageable size, suitable for a defined time frame and budget. If the complete project plan is defined at the start and only minor deviations are permitted, this is known as a “blueprint” approach.

Pure “blueprints” are seldom seen in rural development, being more suited to engineering, but Chambers (1997) makes the interesting point that “blueprint thinking” has cultural implications – it focuses on things and measurement rather than people. Following this logic, even when a project plan is not strictly a blueprint, if the parent organisation uses blueprint thinking, this will affect the way in which the project is monitored and evaluated.

A logical approach to project design and management is of great value when problems can be broken down and defined, since it indicates areas of importance for intervention and also makes it possible to define when a problem has been solved. However, it has already been suggested that the problems faced by vulnerable people are often unbounded, that is, they have multiple causes or causes that are hard to identify, involve relationships as much as facts, and do not have immediately obvious solutions.

This poses a problem for the logical framework approach and other tools used in formal planning, even if they are applied in a participatory way. Objectives for solving unbounded problems are not easy to define, the link between objectives and activities is not always evident, and it may be hard to evaluate the extent and effect of a change initiated by the project. This kind of problem is more susceptible to an approach that allows exploration, unstructured decision models and holistic approaches. It can also be a project manager’s nightmare.

8
International donors and NGOs have recognised the competing demands arising from the wish to have clearly defined, “manageable” projects while at the same time solving the complex problems of the poor, and have tried to respond by modifying project design. One approach has been the development of large programmes - integrated rural development programmes and their successors – which use concurrent, related projects to tackle a range of problems at the same time – still essentially a reductionist approach.

An alternative response has been the development of the “LEARNING PROCESS” or “process” approach to allow objectives and activities to evolve over time as needs change. The project plan is made in detail for the short term and in general terms for the long term. It is reviewed at intervals and may be changed in the light of previous outcomes or new knowledge.

The World Bank (1999b), DFID (1995) and Bevan (2000) note the need for flexibility in project design, since circumstances may change between design and execution, and suggest that process projects are appropriate. In contrast to the blueprint approach, a process approach comes from a more people-driven perspective and allows for diversity and judgement.

It is rarely possible to start from base zero when planning a project, or to radically alter its objectives during implementation, but flexibility in implementation and refinement of objectives may be possible.

Mintzberg and Waters (1998) define process strategies as being partly deliberate (planned on the basis of objectives) and partly emergent (opportunistic, in reaction to prevailing circumstances). The overall rules of the game may be planned carefully, even centrally, but the interpretation of the rules is left to local actors.

The evolution towards process approaches has been reflected in development of indicators for evaluation. Evaluation assesses effectiveness and efficiency, and may be carried out because:

- members of an organisation or participants in a project want to know how well it is performing
- managers of public funds who use them to fund a project want to be sure that the funds are being used for the purpose supplied
- those who provide money or resources to it in the hope of improving their livelihoods want to see whether their investment is making a profit
- the public wants to see that public money is being spent effectively and efficiently

If the task culture is primarily one of efficiency, then it follows that indicators will be designed to monitor efficiency in quantitative terms. Phrases such as “if you can measure it, you can manage it” indicate that the performance of the project will be focussed on measurable technical and economic indicators. This certainly creates clarity, but Ashley (2000) points out the aspirations of vulnerable people often include the extent to which an intervention fits with what they already do, rather than its income generating possibilities in isolation. “Fit” is rather harder to manage than income, although rates of adoption are a good indicator of success.

With the increasing use of holistic perspectives, evaluation has expanded to cover a wider range of issues, including some of the social and cultural issues that are much harder to measure objectively. Bevan (2000) found “five possibly contradictory functions… external accountability; internal project management; policy advocacy; PR purposes; for finding out what is really going on.” She also found that “twelve types of indicator were identified in project logframes: quantitative targets set; unquantified improvements; event targets; participatory targets/indicators; social capital targets; milestone targets; physical indicators; proxy measures; indicators where numbers were not specified but could in principle be; indicators not so easily quantified (qualitative?); indicators requiring judgement (qualitative?); indicators describing activities…. [information] can be ‘objective’ (e.g. states of beneficiaries) or ‘subjective’ (what beneficiaries think, feel, want etc.).” A holistic, people-driven perspective may be essential in defining problems, but if not carefully managed it can create additional costs and management burden for project teams.

Ashley (2000) points out that negative impacts, such as damage to crops, “are often of major importance to people, particularly the poor, and can in fact be minimised. But outsiders often focus on maximising benefits (such as income) rather than minimising costs…. A project or enterprise may affect a few people directly but can affect the asset base of many more “She also mentions the importance of new activities resulting from a project having a “fit” with, or not conflicting with, other activities (enabling people to continue doing beneficial things that they already do as well as new ones connected with the project).

Many of the NGO projects investigated for this review were very small and locally funded. In contrast with projects funded by international donors, these local...
projects tended to have simple technical indicators at output level, although the mission of the organisation was often ambitious, with economic, social and sometimes political objectives. Often no formal or documented evaluation of projects had been carried out.

Experience and common sense suggest that evaluation should encompass a range of indicators, and that not all of them need be quantitative or even directly measurable. However, they must be limited in number and carefully chosen in view of the resources needed to collect the necessary data.

**Qualitative and quantitative indicators**

“Qualitative” or “quantitative” can refer to data or an approach. Quantitative data are made up mainly of continuous numbers (e.g. milk yield, age) and categories (e.g. small, medium, large; score 1, 2, 3), and can easily be analysed using statistics, and presented as charts and graphs. Qualitative data contain more words (e.g. descriptions) and pictures (maps), and can also include although categories (e.g. ethnic group)

Quantitative approaches stem from the wish to measure an effect or test a hypothesis, using objective and preferably numeric measures. Qualitative approaches stem from a spirit of enquiry, are essentially exploratory, and allow for perceptions and attitudes. A quantitative approach to research looks at the world through the lens of the researcher, while a qualitative approach sees the world through the eyes of the research subject.

Qualitative research lends itself to participatory approaches, but may not necessarily be participatory – conventional anthropological research has often been extractive. Quantitative research has traditionally been applied in non-participatory ways, but increasingly is being done in a more participatory manner – there is a school of veterinary epidemiology coming to be called “participatory epidemiology” that uses participatory methods to collect numerical data illuminated by perceptions and attitudes (described e.g. by Catley, 1999). It is increasingly being recognised that qualitative and quantitative approaches can borrow from each other and even be combined within a study. However, it is necessarily to be catholic in one’s reading. Some of the best descriptions of data analysis and interpretation for standard methods of appraisal such as CBA and partial budgets were first described many years ago (e.g. Gittinger, 1992; Ministry of Overseas Development; 1977). Even some more recent references hardly refer to data collection methods or seem to assume that questionnaire surveys will be used. Yet it is possible to obtain quite good quantitative estimates using qualitative tools and participatory approaches.

For the present review, the most pertinent issue is the definition of qualitative and quantitative indicators. For example, Ashley (2000) points out the difficulty of quantifying livelihoods changes: “In no instance was it possible to say that X livelihoods had changed by Y amount (other than in terms of how many people earned how much income). Not only was it very difficult to quantify change in, for example, access to assets… but often the impact of the project was in terms of ‘fit’ rather than change. In many cases the project ‘contributes to’ or ‘puts pressure on’ household strategies such as drought coping or risk minimisation.” However, it should be possible to comment on changes in social, physical and human capital (in addition to financial capital) even if precise figures cannot we ascribed to the impact of a project. Recent work is exploring the scope for summarising and analysing qualitative indicators where numeric or quasi-numeric values (e.g. ranks) can be assigned to them, and also for generalising from data collected by PRA methods for wider populations. (Abeyasekera, 2000)

**Flexibility of response**

Unbounded problems and a changing economic environment suggest a need for projects to be flexible in their objectives and tactics. The culture of a “learning organisation” (Senge, 1992, Schein, 1992), with trust, openness, regulations only where essential, continual evaluation of performance and willingness to take reasonable risks and learn from mistakes, would be highly appropriate. Referring to chaos theory (Gleick, 1988), which shows that change is continuous, Chambers (1997) suggests that “diversity, complexity, creativity and adaptability will be greatest at the local level with an appropriate minimum of regulation to enable individuals to know what the rules are and what is happening so that they can collaborate creatively.”

A task culture has the potential to be highly flexible in its response. It tends to foster a “hands on” attitude in the project team, where people will change jobs and responsibilities according to the needs of the project. If the project has a process design, this should contribute to its flexibility to listen and respond to changing local needs. Many projects do demonstrate attributes of learning organisations.

However, it must be recognised that the external aid environment is highly competitive and not particularly transparent. There is a difference between the flexible, task culture of projects and the more rigid, bureaucratic cultures of the organisations that fund them. If a critical evaluation has the potential to result in withdrawal of funds then the tendency will be for project staff to highlight positive results rather than being honestly critical of what has been done, and to focus on indicators that can be easily measured where conclusions will be accepted without argument. Process projects require a strong commitment on the part of the donor and harmonisation between technical and administrative divisions - while technical issues lend themselves well to planning in stages, budgets are often set three to five years at a time. Chambers makes the point that blueprint approaches often “dominate the early stages of projects when construction is a dominant activity; and their norms and ways of
working then set patterns which persist into the later project stages…. even though the goals and activities have shifted to people”. This would hardly be surprising given the difficulty of changing organisational culture.

Even when an attempt is made to apply a process approach, the evaluation that stimulates change is often made by people who are outsiders both to the project and its beneficiaries. At most they may manage to consult with target groups – they can never engage fully with them because of lack of time. Therefore, flexibility of response may be limited by the ability to find out what it required. This is discussed in more detail in section 5.

Even with the best intentions, projects are still a blunt instrument with which to engineer the subtle and evolving changes of the kind best suited to vulnerable people. A project dealing with vulnerable people must provide flexibility in objectives setting and implementation. A process approach is the best way currently known to tackle this, but can be hard to achieve in practice if support from parent and host organisations is lacking.

Organisational culture and projects for the landless poor

Projects for the landless in Bangladesh and Nepal fall into a continuum between two extremes:

- Projects where current Anglophone thinking on project management for development has been applied. They are likely to use a process approach, have a complex set of M&E indicators, and be funded by international donors.
- Small projects with a simple design and objectives that are primarily technical and quantitative. These are likely to be locally funded and run by small local NGOs.

It may be valuable to include projects at each end of the continuum for evaluation, since each will have lessons for a different donor stakeholder. While larger internationally funded projects have larger target groups, their implementors also have access to more advice on project design and implementation. The small local NGOs may be a neglected group in terms of project management advice, but also have understanding of national and local cultures.

When evaluating projects it will be important to link the impact of the project and its design. Where a project has attempted to use a process approach we should explore the advantages and limitations of the approach with beneficiaries and project staff. However, we need to be realistic about what to expect, since project management theory is always in advance of general practice. Small locally funded projects may only have technical objectives, but since the mission statement of most NGOs includes social and economic objectives, it will be important to try to make assessments of changes in social capital, human capital (if training and learning was involved), and perhaps physical capital (improvements in housing or equipment). We must acknowledge the multiplicity of national and local cultures that may be involved in designing and running projects and be sensitive in the application of project management theory to local NGOs.

We are working in two countries but attempting to draw some regional conclusions where appropriate. A blueprint approach would be simpler to harmonise field activities but would severely restrict our ability to establish dialogue, explore unexpected situations and develop methods. It will be helpful, although more complicated to co-ordinate, to use a process approach.

Obeng (1994) makes a useful definition of four types of project:

- Painting by numbers (closed), where the team knows at the start both what to do and how to do it;
- Making a Movie (semi-open) where the team knows how the project should be run but not what it is to do;
- Going on a Quest (semi-closed) where the team knows what it is to do but not how to do it;
- Lost in the Fog (open), where the team knows neither what to do nor how to do it.

This project will be treated as a quest: the project documents lay down what is to be accomplished, but the method for each component will be designed in stages, using a process approach. After each stage field reports will be shared and there will be consultation about the design of the next stage, and if necessary, training of team members in methods unfamiliar to them.
5. PARTICIPATION

Degrees of participation

It is generally agreed that the participation of a variety of stakeholders is important to plan projects that will be sustainable and to assess their impact in a way that is meaningful and produces results appropriate responses. Within this general agreement in principle lies a huge diversity of meaning.

“Participation”, it is widely acknowledged, describes not one state but a variety of conditions. Pretty (1994) describes seven types of participation: passive participation; participation in information giving; participation by consultation; participation for material incentives; functional participation; interactive participation; and self-mobilisation. DFID (1995) identifies four types: inform; consult; partnership; control. Biggs (1989) describes four modes of participation in agricultural research: contract, consultative, collaborative and collegial. World Bank (1999b) talks of “a continuum along which the poor are progressively empowered... on one end the poor are viewed as beneficiaries... we reach the far end of the continuum when these clients ultimately become the owners and managers of their assets and activities ”; and distinguishes between “listening and consultation” and “collaborative decision making” with the latter requiring shared control.

The mode of participation adopted has implications for ownership of the process and the sustainability of the result, and also for the time and resources required to take part. Consultative participation in planning, for example, acknowledges those consulted as “experts” on their local situation and listens to their suggestions, but limits their control over the eventual plan. It requires some of their time and few other resources. Participation for material incentives pays people for their time or other resources, but may not involve them in decision-making and limits their degree of ownership. These are important considerations. Ownership of a project plan is expected to provide the incentive for people to engage with it, overcome difficulties of implementation and make it successful and sustainable. Balanced against this is the fact that participatory planning and evaluation can be very time-consuming, offering little direct and immediate reward.

Stakeholders are groups that share a common interest. In the development context, they are variously defined, always including those who are intended to benefit from the project (e.g. “farmers”, “the poor”) but also others. For example, the World Bank (1999b) identifies as key stakeholders for its projects: “poor and disadvantaged people who were directly affected”; borrowers; indirectly affected groups; the Bank. Bevan (2000), reviewing direct assistance provision to poor and vulnerable people, identified eight different types of potential partner in the process, each of which was a stakeholder with different interests, goals and power. DFID (1995) distinguishes between “primary” stakeholders (those ultimately affected) and “secondary” stakeholders (intermediaries). Within each broad group are a number of sub-groups, and it is important to define them in such a way that those within the group really do share a common interest. “Farmers” is so broad a definition as to be almost meaningless, but “smallholder farmers who own pigs” may have several interests in common.

It may be appropriate for different stakeholders to participate to different degrees in planning and evaluation. DFID (1995) suggests categorising stakeholders by their importance to a project and their potential influence on its success, and then constructing a “participation matrix” (Box 4) that allows for changing participation of different stakeholders over a project’s life. Participation at early stages, while appearing costly, and slowing down disbursement, may save time later, but “complete participation results in complete inertia”.

**Box 4 Participation matrix**

<table>
<thead>
<tr>
<th>Stakesholder</th>
<th>Planning</th>
<th>Implementation</th>
<th>Monitoring &amp; Evaluation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stakeholders 1</td>
<td>Stakeholders 2 &amp; 3</td>
<td>Stakeholders 4 &amp; 5</td>
<td>Stakeholders 3, 4 &amp; 5</td>
</tr>
<tr>
<td>Stakeholders 1 &amp; 2</td>
<td>Stakeholders 3, 4 &amp; 5</td>
<td></td>
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<tr>
<td>Stakeholders 3, 4 &amp; 5</td>
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<td>Stakeholders 3, 4 &amp; 5</td>
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</tbody>
</table>

Stakeholder analysis must take into account both the importance of stakeholders and their relationships with each other in terms of power and influence. Local political and social circumstances may limit the involvement of some stakeholders, even fairly important ones, in order not to alienate others whose approval or endorsement is necessary to project success, or it may be necessary to involve them in different ways or introduce their participation over time. DFID (1995) points out that an individual stakeholder may be: in control of others; in partnership with others; consulted or informed by others who have more control; or manipulated by others. The degree of control greatly influences feelings of ownership.

When a group of vulnerable people is identified as a key stakeholder, it is not always easy for them to participate in development. They may be excluded from social groups that traditionally take responsibility for planning; they may not have access to the local political processes that provide support for proposals and new ideas. They may even be considered undeserving of assistance. Heffernan and Misturelli (2000) discovered that communities in Kenya divided the poor into two groups: the “deserving”, who had become poor through ill luck, and the “undeserving” who had brought poverty upon themselves through persistent laziness, drunkenness or other forms of unacceptable behaviour.
Participatory approaches

Approaches that have been used for participatory research and participatory project planning include:

- Farming Systems Research-Extension;
- Farmer Participatory Research;
- Participatory Action Research;
- Participatory Rural Appraisal and Participatory Learning and Action;
- Agro-ecosystem Analysis
- Development Education and Leadership Teams in Action;
- Theatre for Development.
- Appreciative Enquiry

All of these share the belief in the value of farmer knowledge. Most of them also believe in the importance of farmer participation in the process. In all cases, the attitude of the researcher or development worker is as important for success as the tools used.

A transition in approaches influenced by changing viewpoints on poverty is described by Cox et al (1998), from income poverty, through basic needs, through capabilities, through sustainable livelihoods or, as an alternative, the capital asset framework described by Vosti and Reardon (1997).

Ashley (2000) found that sharing a livelihoods approach was “as important as, and possibly more effective than, sharing the details of livelihoods analysis. Livelihoods analysis can be very useful in showing how an intervention ‘fits’ with livelihood strategies and how people’s livelihoods are being enhanced or constrained...it is less useful for quantifying changes in livelihood security or sustainability. Aggregation of results is therefore also more difficult.” In her view the value of a livelihoods approach is that “it provides an explicit focus on what matters to poor people; synthesises perspective of different disciplines; broadens the scope of the enquiry”.

Participation in planning

The use of a participatory approach to planning can have multiple objectives. The objective of “ownership” (particularly by intended beneficiaries) is often stated. World Bank (1999b) uses the term “social learning” for the direct learning that takes place in a participatory planning process. Only from this, it is claimed, will the plan be internalised by stakeholders – a plan cannot be developed by outsiders and given to local people to implement since most learning does not come from reading about an external reality. Social learning is followed by “social invention” where stakeholders “invent the new practices and institutional arrangements they are willing to adopt. In the process they individually and collectively develop insight and understanding of the new behaviours required to attain the objectives they set. Having all stakeholders work, learn and invent together reduces the need for the transfer of expert learning from one group of stakeholders to another.”

Box 5. Selecting the mode of participation

A “participatory cost benefit analysis” of the control of CSF is being conducted in Vietnam and is expected to influence policy.

A planning partnership at commune and province levels would be desirable. The success of any policy will ultimately depend on compliance by farmers and traders, finance from Province Peoples Committees and action by Provincial Veterinary Services. However, the government planning model is top-down. Institutional analysis showed that the planning unit carrying out the survey has only an advisory role in making control policy, linked to but functionally separate from the groups that will ultimately craft the policy.

Attempts to make a planning partnership with farmers, animal health workers or provincial services could alienate policymakers, raise expectations at commune level and ask people to contribute a significant amount of time when it is not clear that the result will be a satisfactory outcome for them.

Therefore, the first stage of the study was designed as a consultation. (McLeod et al. 2002)

However, participation of some stakeholders can be hard to achieve because of power and control exerted by others. DFID (1995) lists issues that may affect the success of forming partnerships with primary stakeholders:

- lack of political power or institutional means;
- lack of information; imbalance of power between primary stakeholders;
- time and money costs of participation;
- legitimacy of a particular group’s participation;
- a hierarchical and non-participatory management structure within the implementing agency;
- secondary stakeholders seeking to represent the interests of primary stakeholders yet with a different values system or non-conducive management structure.

World Bank (1999b) suggests piloting to illustrate the effectiveness of participatory planning where previously stakeholders have been used to outside expert approaches. DFID (1995) states an additional objective of “encouraging and helping institutional partners become more participatory and responsive to the other stakeholders, particularly their clients”. This may require institutional culture change and is likely to be a very long-term objective. The importance of institutional culture and structure is stressed by DFID (1995), drawing on an early version of World Bank (1999b).
DFID (1995) notes that participation is likely to be more significant in process projects since planning is iterative, and suggests that the first phase might be support to local institutions through which people can make their opinion known. Indicators for progress in participation will need to be included as well as the more usual output indicators.

**Participation in evaluation**

**Influences on methodology**

The stakeholder most interested in having the evaluation carried out will also have the most influence on the methodology used. For aid projects, the stakeholder most driven to see an “objective” evaluation is usually the aid agency providing the majority of the funding, impelled by a requirement to report its use of money to government(s) and the public. This suggests that the methodology of formal evaluation will be driven by the needs of external stakeholders to whom accountability is important.

It is therefore common for evaluation of development projects to be externally imposed, defined and funded. Bevan’s “contradictory functions” are hardly surprising given the pressures on public not-for-profit organisations to demonstrate impact to stakeholders other than their primary beneficiaries. Primary beneficiaries and internal stakeholders may not always see the value of a formal evaluation. It appears that few projects initiate or plan their own evaluation processes, and very few beneficiaries demand evaluation. In the NGO projects reviewed by this project it was generally true to say that very small projects carried out by small local NGOs with money from local sources or their own members had not been formally evaluated. Those funded from outside were usually subjected to evaluation and could produce reports.

Evaluation processes vary enormously in the extent to which different stakeholders participate and those carried out following guidelines of major donors have limited participation from primary beneficiaries – they may be consulted during the mid term and final evaluations, but will have not necessarily been involved in planning the evaluation process. Three reasons for this are evident; there may be others. The first is that the needs of the agency itself must be met in order to have continued funding, and those needs have historically been defined against a background of centralised reporting. The second reason is that, even when the agency is concerned to have a more holistic evaluation carried out (e.g. DFID, 1995), evaluation using primary data, unstructured data and fluid processes is expensive to conduct and analyse. Thirdly, primary beneficiaries are also aware of the economic cost to them of conducting an evaluation and may not be motivated to insist on one unless they are sure that it will add value (provide more funding for something that they desire). The level of participation that is appropriate in evaluation depends partly on what is to be done with the results. If they will not be used to drive change in the implementing agency so that the project changes in the way that beneficiaries need, Goyder at al. (1998) would argue that it might not be appropriate for the indicators to be identified or the evaluation done in a participatory manner. Evaluation is costly, in time at least, for all who take part. Brett (2000) points out that external accountability is driven by exit, voice and loyalty. Where there is limited access to external assistance of any kind the poor may feel unwilling to exit from a poorly designed project, and may also not use voice to change it for fear that it may disappear altogether.

Identification of indicators against which evaluation will be made is one of the most important parts of the process (Goyder et al., 1998; Gujt, 1998). It is difficult to evaluate when no indicators have been defined, but also difficult to identify indicators that are truly meaningful for the beneficiary group and also “measurable”. Evaluation of projects for the poor needs to focus on a range of issues: economic; social; the degree of participation achieved; indicators of improved livelihoods specific to particular socio-economic groups. Monitoring project implementation is much easier than monitoring social processes and impact; monitoring for internal use and for outsiders may conflict.

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Ideally the evaluation process is planned into the project – one of the values of the widespread use of logframes is that their use encourages systematic monitoring and evaluation. Unfortunately, while all major donors require M&E, there is little consistency in the approaches followed. EU projects tend to be over-burdened with formal reporting which has little to do with the needs of the beneficiary and a great deal to do with financial disbursement; DFID research projects have considerably smaller and more manageable reporting requirements; small, member funded projects of local NGOs may have no monitoring requirement at all; almost never is there a requirement to report at regular intervals to the beneficiary, or for monitoring at community level to be carried out systematically. Bevan (2000) points out that “Logframes can be used in a flexible, participatory and process manner but this may not be easy for Non-Governmental Organisations (NGOs) with DFID contracts.”

To quote UNDP (1997b): “…much remains to be accomplished. This is especially true in the critical areas of measuring enablement and empowerment,
both possessing important qualitative dimensions that
do not easily lend themselves to objective
measurement. This link, between the qualitative and
quantitative, is essential…”

Participation and our target groups

Nepal
Nepal has a long history of participation in rural
communities, with farmers working together on the
construction and management of irrigation systems, but
the system of national and local government has
traditionally been hierarchical and elitist. Since the
1960s a number of efforts have been made to develop
decentralisation and participation at local level. In 1962
a “Panchayat” system was established, which was
meant to be an apolitical system of local government
but came to be controlled by traditional elites,
the better off and government employees (Dahal, 1996;

In 1982 the Decentralisation Act required initiation of
national planning activities from the village level, co-
ordinated by village-level elected bodies. A
Decentralisation Support Program was put in place to
try to facilitate this process but met with limited
success. Since 1996 the National Planning Commission
(NPC) and the UNDP have worked together to develop
a Participatory District Development Programme
(PDDP), initially established in 18 districts and now
spreading much more widely. One of the key tasks of
the PDDP is to “institutionalize a participatory planning and monitoring process that would embody
more transparent decision making and co-ordination”
(Agarwal, Britt and Kanel, 1999). This task has been
started but by no means completed - the structure exists
but does not always function democratically or
transparently. Social unrest encouraged by Maoist
groups has greatly complicated the process of change,
especially in remote rural areas.

The aim of the PDDP is that Village Development
Committees (VDCs) should work with community
organisations in “toles” (settlements within a village) to
carry out local-level planning, monitoring and
mobilisation. Within toles, desired development
projects are then identified and prioritised. So far, these
have tended to focus on infrastructure and facilities.
Village Advisory Council Meetings screen the project
lists presented by the toles, prioritise them and use
them to create a Village Development Plan (VDP).
Screening then passes up to the District Development
Committee (DDC), culminating in District Development Plans (DDP), which are sent to the NPC
to influence national policymaking (UNDP, 1997a).
Projects implemented as part of a VDP are often run
through a functional group (FG) comprised of
members of the tole who are also part of the
community organisation that proposed the project.

Community organisations are not only part of the
planning process; they are also involved in
development at the most local level. They existed
before the PDDP and exist in non-PDDP districts but
may be better organised in PDDP districts. A
community organisation may involve all members of a
tole in, for example, a savings and credit programme,
or may be formed a few members – such as a women’s
group. When used for credit, all members are
collectively responsible for the loans given to each.

It appears that plans formulated at tole and village level
have reached national level and may even have been
incorporated into national planning (Agarwal, Britt and
Kanel, 1999); what is not clear is the extent to which
the very poor were involved in the making of those
plans. For instance, community organisations intended
to involve all of the residents have not been successful
in involving women. Those formed only for women
have been more successful in articulating their needs.

Another element of PDDP activities has been the
development of an information system in which data
on infrastructure, demographics, health, education and
market, collected at tole and village level, “trickles up”
to the District Development Committee (DDC) and
eventually to the NPC. Information is then meant to be
summarised and fed back down to village and district
levels for use in local level planning and monitoring.
In reality this has not occurred to any great extent, and
in any case sharing information horizontally at village
and district levels would probably be more useful
(Agarwal, Britt and Kanel, 1999). For information to
used directly by the very poor, it would need to be
presented in forms that they can understand – including
verbal communication – and fora that they can access.

Bangladesh

Local government and participation

There are three tiers of local government in Bangladesh
(Zila or District, Upazila and Union Parishad),
although only one of these, the lowest is elected. The
Union Parishad (UP) has nine Wards with a member
elected from each Ward and a chairperson elected from
the whole Union (several villages). Three places are
reserved for women members, one to cover three
wards. The chairperson represents the Union at the
Upazila level. At District or Zila level central
government effectively controls the administration
through the appointment of a deputy secretary to
manage service provision.

The role and functions of UPs are wide ranging and all
embracing with limited correspondence to the
resources at their disposal. The UP work is financed
through the Annual Development Programme (ADP)
allocated by the Upazila on a set of criteria including
population, geographical area and a notional
assessment of poverty. The small amounts of funding
coming through this grant preclude any serious
investment in infrastructure or service development by
the UPs. Links between UPs and NGOs working in the
Union are generally weak.
The Fifth Five Year Plan\(^5\) emphasises the need for participatory rural development if poverty alleviation objectives are to be met. It recognises the need for local area-based planning based on participatory processes. In particular, it emphasises that:

- UPs must be the focal point of local government for participatory rural development
- Decision-making powers should be devolved to local government bodies which must be made accountable to their electorates
- Gram or village Parishads will complement the UPs and a process of social mobilisation and grass roots consultation should be adopted so that rural people identify and prioritise their needs as the starting point of a bottom-up planning process

Government of Bangladesh is currently in the process of drafting an Interim PRSP. It has identified four sets of integrated policy approaches:

- Policies to expand the scope for pro-poor economic growth for increasing income and employment of the poor
- Integrated policies fostering human development of the poor
- Policies providing social safety nets to the poor against various anticipated and unanticipated income shocks
- Creation of policies favouring and influencing participatory governance and enhance the voice of the poor by strengthening women’s empowerment, creating pro-poor institutions and removing the institutional hurdles that hinder social mobility of the poor

In theory policies are in place, or being developed, that give a voice to poor rural people in Bangladesh. In practice however, patronage prevails and poor households have little voice with UPs dominated by rural elites. Participation of poorer people rarely extends beyond favours granted by influential elected members in return for votes.

**NGO service provision**

NGOs in Bangladesh have pioneered innovative approaches to development. The largest organisations (Grameen Bank, BRAC, Proshika and ASA) all have poverty reduction programmes but are also providing education, health, family planning, water and sanitation services. For example Grameen bank had 2.06 million microcredit clients in 1996, mostly women while BRAC, Proshika and ASA had 1.84, 1.30 and 0.57 million respectively. This puts these organisations on par with the Bangladesh Rural Development Board (BRDB), the government’s own micro-credit agency.

**Using participatory approaches with the landless poor**

When dealing with poor and vulnerable people, participatory approaches must be the most appropriate. There are many from which to choose and we shall probably follow the pattern of all successful practitioners by choosing a framework as a starting point and adapting it dynamically as the project progresses. Focussing on capabilities rather than problems, and taking a broad view such as the one used by sustainable livelihoods, seem to be useful viewpoints.

Target groups for participatory research must be precisely defined or they will be too heterogeneous to work with. “The landless poor” and “the refugee affected”, used in the title of the research project, are too broad to be of any real use. Our first task will be to more closely define our target beneficiaries. The first stratification might be by reasons for landlessness. In Nepal, for example, the Dalit, many of whom have been landless for generations, may have a different perspective from those made newly landless through debt. In Bangladesh, those made temporarily landless by seasonal flooding may face different problems from those who are permanently deprived of land. Within each group, there will be sub groups – for example, it is common for women and men have different as well as shared aspirations and face different constraints.

Reaching the poor directly, for development or research, is not easy. Planning and evaluation of development projects is a political process. Those who are poor, and not part of traditional elites, have never had much “voice” in any planning process, and attempts to involve them more fully may be seen as disruptive to established local social and political systems. In both countries, local authorities, community leaders and NGOs can act as “gatekeepers” to the poor, either facilitating, or limiting, or skewing access to them. We shall need to work with awareness of these influential local stakeholders. Some types of landless people do not have obvious social networks through which to work. They may also be dependent upon “social protection” type activities (food for work etc), which may limit their ability and willingness to participate.

The research process must have value for the target group or they will not feel inclined to participate. The landless poor are likely to be controlled or manipulated by many other stakeholders. A consultation will have limited value if those consulted feel that what they say has little or no chance of changing their lives – and may be used against them. Holistic and participatory methods are time consuming and our target groups will have limited time to give us; time spent with the project may have an immediate opportunity cost.

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\(^5\) Chapter VII of Fifth Five Year Plan ‘Participatory Rural Development and Local Institutions’ Planning Commission, Government of Bangladesh
This section briefly describes PRA/PLA and other tools appropriate for examining the impact of livestock related interventions on landless households in Bangladesh and Nepal. It is by no means comprehensive since it is not feasible to review all tools that could be used for this purpose. The emphasis is therefore on those tools that may be most appropriate for achieving project outputs. Participation does not imply only the collection of qualitative data, as the process of collecting quantitative data can also be participatory (Marsland, 2000).

**Participatory approaches to learning about rural livelihoods**

In the mid 1970s, a burgeoning of development initiatives aiming to benefit directly poor rural people stimulated a search for relatively economical, speedy and accurate methods by which outsiders (planners and implementers of development programmes) might identify the components of rural livelihood systems, and the resource constraints facing those depending on such systems. An initial concern (Chambers, 1979) was to find ways of replacing on the one hand cursory field investigations which were constrained by the time, convenience and preconceptions of those undertaking them (the “expert mission syndrome”), and on the other hand the lengthy investigations offered by economics (via formal surveys aiming at accurate quantification) and by anthropology (via participant observation and extended semi-structured interviews) carried out, normally, with a rather small sample of respondents.

Rapid Rural Appraisal (RRA - a term and concept first used circa 1979 and current for more than a decade) developed a “repertoire of techniques” (Chambers, 1981) which could be used to enable outsiders to interact with rural people, in order to gain an understanding of their livelihood systems and also some insight into their views of the constraints which faced them in undertaking innovations to improve such systems. Prominent among such techniques were maps, transects, calendars, time-lines (as a means of recording oral history), flow charts, venn diagrams. The semi-structured interview (with groups or individuals) was put forward as a key tool for interacting with rural people. This was far from a new technique; it was well established in sociology and anthropology but its promotion was a useful antidote to the questionnaire survey, in which the frame of reference of a study is restricted entirely to that of the author(s) of the questionnaire.

A common use of RRA was in analysis of farming systems and agro-ecosystems (Conway, McCracken & Pretty, 1987; Conway, 1989). Typically a team would work with rural people using semi-structured interviews to gather data that they would analyse in terms of some of the constructs mentioned above. These constructs had the multiple purpose of enabling outside investigators to codify data collected through a variety of (interview and observation) methods, of enabling these data to be presented to planners and policy makers with economy of time, and enabling the information which rural people had shared with outside investigators to be presented “back” to them in a relatively accessible form (albeit one dependent on a degree of literacy since the form was normally that of charts drawn on flip-charts or large sheets of brown paper).

A limitation of RRA is that outsiders in the role of investigator largely control the process. Around 1989 there began to emerge, notably from India, a code of practice, which aimed to move the process more into the control of clients/beneficiaries (Mascerenhas, 1991; Shah et al, 1991). In terms of practice, this involved two main innovations:

1. The development of methods by which a relatively large number of people could take part in constructing the maps, charts and other methods of visualisation round which RRA was built. Thus maps were drawn in large scale on the ground (sometimes with a three-dimensional element). Pebbles or seeds were used for scoring in the cells of matrices drawn in soil or sand. Histograms were made on the ground with sticks of different lengths.

2. The key outsider's role became one of facilitator rather than investigator, enabling a process to take place in which participants gain ownership of the investigation of aspects of their environment and livelihood system. (The term “handing over the stick” was coined to describe the process of relinquishing control - i.e. the stick typically held by someone elucidating a diagram or co-ordinating the construction of a ground-drawn map).

The term PRA (participatory rural appraisal) came into use to distinguish this approach from RRA. More recently the term PLA (participatory learning and action, sometimes interpreted as participatory research and action or participatory learning approach) has been adopted to detach the technique from the rural sector and also to remove the word “appraisal”, emphasising that the process “is not a short cut to information gathering; rather it is a long term process involving sequences of learning and reflection between village people and outsiders” (Braden, 1998). However, research remains an important application of participatory methods, which offer the opportunity to gather high quality research data at community level. It is a challenge to use PRA/PLA methods appropriately for this purpose.

In its ideal form, PRA/PLA is open-ended in terms of topic and agenda, and not severely time-bound in terms of schedule. This does not easily reconcile with the requirements of a project (driven by its logical...
framework, time scales, and budget accounting periods) and also with research, which is essentially extractive, although hoping to learn lessons of relevance to poor people in the wider region. To achieve good PRA/PLA in this context is possible, but presents a number of challenges:

- To achieve participation both in the process itself and also in terms of including marginal groups (women, landless people etc.);
- To use as a means of focusing dialogue rather than determining topics of dialogue;
- To be prepared (therefore) for unexpected outcomes;
- To look beyond the methodologies themselves to the purpose of using them and be prepared to adapt them;
- Balancing the needs of poor landless people with those of research programme managers.

The project is taking on three different tasks in its various phases (identifying landless livestock keepers’ aspirations and constraints, impact assessment of existing interventions, and action research aimed at evaluating and developing technology). This and its three-year time-scale offer an opportunity to make a significant contribution to the use of PLA methodology.

The remainder of this section outlines the approach we envisage taking to these tasks, drawing on the PRA/PLA methodology.

A large number of PRA/PLA tools has been codified. Van Veldhuizen et al (1997) identify almost 100 (although it may be suggested that some of these are techniques for facilitating group interaction, rather than for solid information exchange). A recent survey (Batchelor et al, 2001) of around 100 PRA practitioner organisations (members of the IDS PLA network in Africa, the Caribbean, South and South-East Asia and the Middle East) identified the following as the 10 most widely used methods (not in order):

- Natural resource map;
- Problem tree;
- Photography/video; Seasonal calendar;
- Gender workload calendar; Transect; Activity chart;
- Ranking; Organisation chart/network diagram;
- Drama / role-play.

An inventory such as this is of limited value in that it refers to a particular point in time, while PLA methodologies are constantly being adapted and added to. It does however indicate that the above methods are robust and applicable to a range of topics.

General points for consideration are:

- Many PRA methods work best with groups, yet the very poor do not always operate in cohesive groups. Therefore, each tool will need to be tested carefully, and time will need to be allowed to find people to form a discussion group.
- One important consideration will be the role of participation in research compared to participation in planning for development – it could be argued that research into constraints should be faster and stop sooner than constraint identification as the first step in a development plan, since it cannot immediately or demonstrably lead to a plan for action. Action research forms a small part of the project but only for one group in each country out of the several we shall initially consult.

- Participatory methods require considerable skill from facilitators. A really effective facilitator often uses a “checklist” approach of knowing what needs to be learned or discussed and then choosing and adapting tools dynamically while the work proceeds. However, this causes complications if findings from several sites, in two countries, based on the work of at least two teams, are to be compared. Therefore, it may be necessary to use more of a blueprint approach to each set of PLA activities than we might prefer.

Below is presented a selection of PLA tools that are likely to be used in the project, with notes on how they may be used. As already indicated, it is the intention that the project should be innovative in its use of methodology; thus other tools may be introduced as well as adaptations being made to some of those mentioned.

**Participatory tools**

**Observation and semi-structured interviews**

Often the starting point for any PRA/PLA activity is first hand observation combined with informal questioning (with or without a checklist) which will provide information in the landless livestock keepers context about:

- The types of livestock kept
- Management systems (purchased or own fodder, shared ownership etc.)
- The production objectives of livestock keepers (for example cash or food or whether they contribute to particular forms of expenditure such as education etc.)
- Those members of the household responsible for management, marketing etc. (women, men children) and labour requirements
- The benefits that accrue from livestock keeping (social and economic)
- Production constraints (fodder, diseases, access to services, marketing, prices etc.)
- Quantities and seasonality of production (offtake rates)

A brief walk through the village or settlement provides an opportunity to observe, for example, the status of local grazing areas (communal or otherwise), sources of cut and carried fodder, other livestock producers.

Although these activities produce both quantitative and qualitative information, data collected is not suitable for statistical analysis. Major uses for the project will be for familiarisation of researchers and enumerators with particular emphasis on aspirations and constraints
and the impact of agency interventions. Likewise, livestock keepers can be introduced to the programme of research and be requested to comment on the proposed outputs and activities. The approach may also be useful for assisting in the selection of households, or groups of households to take part in the evaluations of interventions by landless and refugee-affected livestock keepers.

**Participatory maps (social, wealth, resource, service maps)**

Maps are simple visual devices for representing information in a format that should be understandable by all participants in the research (including those that have limited literacy skills). Maps are usually constructed by the informants rather than the researchers and should form the focus of any subsequent discussion. Maps are best drawn on the ground using locally available materials. There are several types commonly used that will be appropriate for researchers working on this project. These include social, service, and resource maps.

**Social maps**

Often used at the beginning of PLA/PRA activities to record households and their social standing as well as key features of the local village landscape. They are a useful icebreaker for field activities. It is possible to mark the locations of landless or refugee-affected livestock owners on the map and to use symbols to represent the species and numbers of livestock owned by these households. Sharing and hire relationships can also be indicated. Social mapping can be combined with wealth ranking if appropriate with wealth information placed on the map if required.

Social maps may be useful for the project to help identify participants for research particularly for outputs 1-3. Again they are a useful way of introducing the research to landless and refugee households but will also be valuable for researchers as a means of understanding household dynamics and livestock related enterprises. Social mapping may help to distinguish between those households that are functionally landless but not necessarily poor and their poorer landless counterparts.

**Service and opportunity maps**

These are a visual representation of the opportunities and services available in the locality and further afield if appropriate. They include the availability and distance of veterinary care facilities, markets, sources of fodder and feed as well as any other services used by landless livestock keepers. As well as providing information on opportunities (e.g. markets) they will also give some indication of constraints (e.g. distances to market and/or veterinary services). Service/opportunity maps will be potentially useful for investigating aspirations and constraints faced by poor, landless and refugee-affected livestock keepers.

**Resource maps**

Resource maps are used to indicate the locations of natural resources used by livestock keepers. The maps can include important topographical features, key grazing resources, fodder trees, watering points and wells etc. Seasonal variation can be included on maps or separate maps produced in different seasons. Resource maps are useful complements to transect walks. Resource maps can be linked with other tools such as preference ranking for particular types of feeds or fodder (see below). Resource maps may be of greater potential use in Nepal, where there is likely to be greater reliance on grazing and forest resources.

**Participatory diagrams (systems analysis and timelines)**

Diagrams are a useful participatory tool for visually summarising, recording and analysing farmers’ information.

**Systems analysis**

Systems diagrams can help researchers and farmers to understand how a particular system operates to include inputs and outputs, opportunities and constraints, and available services (similar to maps). It is also possible to include potential solutions to any constraints encountered. Diagrams are usually drawn by farmers. Beginning with a central circle in which livestock holdings are indicated, from this inputs and outputs markets and services are marked and discussed. Arrows indicate flows of resources between the different parts of the system. Different colours or thickness of lines can be used to mark labour inputs by different family members or different households (in shared ownership systems) and the different ownership rights to livestock products. This technique may be useful as the project investigates aspirations and constraints.

**Timelines**

Timelines illustrate diagramatically past events that the household or community remembers as significant and the changes that have taken place in a household or community over time. In the context of this project it may be useful to investigate a before and after scenario in terms of the presence of NGO and the availability of credit for livestock enterprises for landless people (with existing or former peer groups receiving credit for livestock enterprises). In the Bangladesh context this may be particularly valuable, as many landless household have graduated from small to larger loans and from small livestock enterprises to larger species. It would be of interest to researchers to know how long this process takes, the preconditions for success and the types of livestock enterprises that are appropriate to different groups (for example, female-headed households as opposed to male-headed or the landless-unemployed as opposed to the landless-employed, or those with no start-up capital and those with access to limited savings).
Seasonal calendars
Calendars offer a means of identifying particular seasonally related resource constraints. In crop production, labour bottlenecks and periods of food shortage are important issues revealed by a seasonal calendar. In livestock production variations in availability of forage will be of key importance and can be revealed by a calendar (as in the example below). An important use of the calendar is to trace seasonal changes in gender workload, since a number of tasks may vary with weather as well as with crop season (e.g. gathering straw for fodder).

Box 6. Presentation of data from seasonal calendar

<table>
<thead>
<tr>
<th>Month</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
<th>11</th>
<th>12</th>
</tr>
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<tbody>
<tr>
<td>Forage</td>
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<td>Amlisho</td>
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<td>Arkhungey</td>
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<td>Dhakain</td>
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<tr>
<td>Banma</td>
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<tr>
<td>B. Pati</td>
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<tr>
<td>Chutro</td>
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<td></td>
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<tr>
<td>Dadhilo</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Score</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
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<tr>
<td>Darker colour = more forage</td>
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</tbody>
</table>

Causal diagrams
The causal diagram is in effect the lower half of the problem tree, making it possible to examine in detail the causes and effects of problems and to identify the root causes which effective solutions need to address. The important modification of a scoring procedure enables the relative importance of particular problems and their causes to be analysed (Galpin et al., 2000). The scored causal diagram has been used effectively in Bangladesh in a PLA-based stakeholder consultation aimed at identifying 'researchable constraints' to rice production (PETTRA, 2001). An important feature of the scoring process is that it stimulates participants to think of additional contributory causes, and fairly complex diagrams were constructed in the exercise mentioned. The scored causal diagram is likely to be equally powerful in enabling livestock producers to trace through problems which constrain their expanding their enterprises or attempting to increase productivity.

Preference ranking and scoring (matrix ranking and scoring)
Preference ranking and scoring methods are effective participatory tools for learning about people’s categories, criteria, choices and priorities with respect to livestock production. Ranking lists items of interest (in the project context this may include livestock species or it could be constraints associated with production from a particular species). Following ranking informants are asked to provide reasons for their choice.

Scoring differs as informants are asked to give a particular score to each item before explaining the reasons for their scores. This allows a more sophisticated analysis as the weighting between two scores is easier to measure than between 2 ranks. The advantage of these techniques is that they are participatory methods, which can also be subjected to a formal statistical analysis (usually ANOVA), providing more rigour to any conclusions drawn from the analysis (Abeyasekera, 2000).

Matrix ranking and scoring
Matrices enable a range of different items to be assessed against selected criteria (often determined during initial observation and semi-structured interviews). For example the attributes of different species can be ranked or scored according to farmer preferences. This technique will be particularly useful, in determining which types of livestock are most appropriate to poor-landless or refugee-affected households.

There is potential to use matrix ranking for well-being analysis to investigate the impact of livestock interventions on social, financial, physical, natural and human capital. The starting point would be an informal discussion about impact with peer groups to create a list of criteria. These criteria could then be ranked or scored and data analysed to assess the impact on the five different forms of capital. It will be important for example, to establish whether livestock enterprises have more impact on social rather than financial capital and whether there are knock-effects in terms of access to services employment or other benefits.

Box 7. Matrix scoring of properties of livestock

<table>
<thead>
<tr>
<th>No. of observations</th>
<th>Cow</th>
<th>Goat</th>
<th>Sheep</th>
<th>Donkey</th>
<th>Horse</th>
</tr>
</thead>
<tbody>
<tr>
<td>Income/ savings</td>
<td>130</td>
<td>98</td>
<td>98</td>
<td>82</td>
<td>65</td>
</tr>
<tr>
<td>Manure</td>
<td>8.5</td>
<td>6.5</td>
<td>6.7</td>
<td>6.2</td>
<td>7.6</td>
</tr>
<tr>
<td>Domestic milk</td>
<td>7.3</td>
<td>4.5</td>
<td>4.0</td>
<td>4.0</td>
<td>5.0</td>
</tr>
<tr>
<td>Domestic consumption</td>
<td>7.2</td>
<td>2.3</td>
<td>0.2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Milk sales</td>
<td>4.5</td>
<td>0.4</td>
<td>0.1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Draught</td>
<td>1.3</td>
<td></td>
<td>7.6</td>
<td>9.4</td>
<td></td>
</tr>
<tr>
<td>Transport</td>
<td>0.3</td>
<td>6.6</td>
<td>7.8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Domestic meat</td>
<td>0.1</td>
<td>5.2</td>
<td>5.6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Domestic consumption</td>
<td>0.00</td>
<td>1.7</td>
<td>0.8</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Bennison et al, 1997
Partial budgets and gross margins

These are not participatory techniques *per se* although data can be collected in a participatory manner. An important recent advance is the development of a group of techniques termed participatory farm management (Galpin et al., 2000). These include the scored causal diagram (see above) and the ‘participatory budget’. The participatory budget is based on a grid in which the columns represent time-periods and the rows seasonal activities, inputs and outputs. Entries in each cell of the matrix thus amount to a report on particular features of the production cycle in relation to a given time period (e.g. months). The PB is used for identifying resource-use patterns (including e.g. labour peaks) and critical seasonal points (for e.g. water availability, pests, diseases). In a second chart costs and returns are entered, either those for a particular farm (say that of one of the group of participants constructing the PB), or for an ‘average’ enterprise of a given size. Experience of using this technique in Bangladesh (PETRRA, 2001) was that the second of these options was preferred. This highlighted the importance that members of a group constructing a participatory budget should be homogeneous.

These will be useful tools for the project to investigate the impact of livestock projects in terms of financial capital (income and savings). It is anticipated that participants/informants will benefit from the process of data collection. As the objective is to determine the profitability (contribution to financial capital) of livestock enterprises participants may develop simple accounting and farm management skills during data collection.

Peer groups can be requested to provide information about:

- Size of loans
- Repayment terms
- No of livestock purchased
- Other purchased inputs
- Non-purchased inputs (including labour)
- Products marketed (prices received etc)

This will enable researchers to build up a picture of:

- Rates of return to investment in a range of livestock enterprises
- The real interest rates charges by NGOs
- Some indication of repayment rates (some borrowers must default)
- Impact on income and savings of poor, landless, households
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