



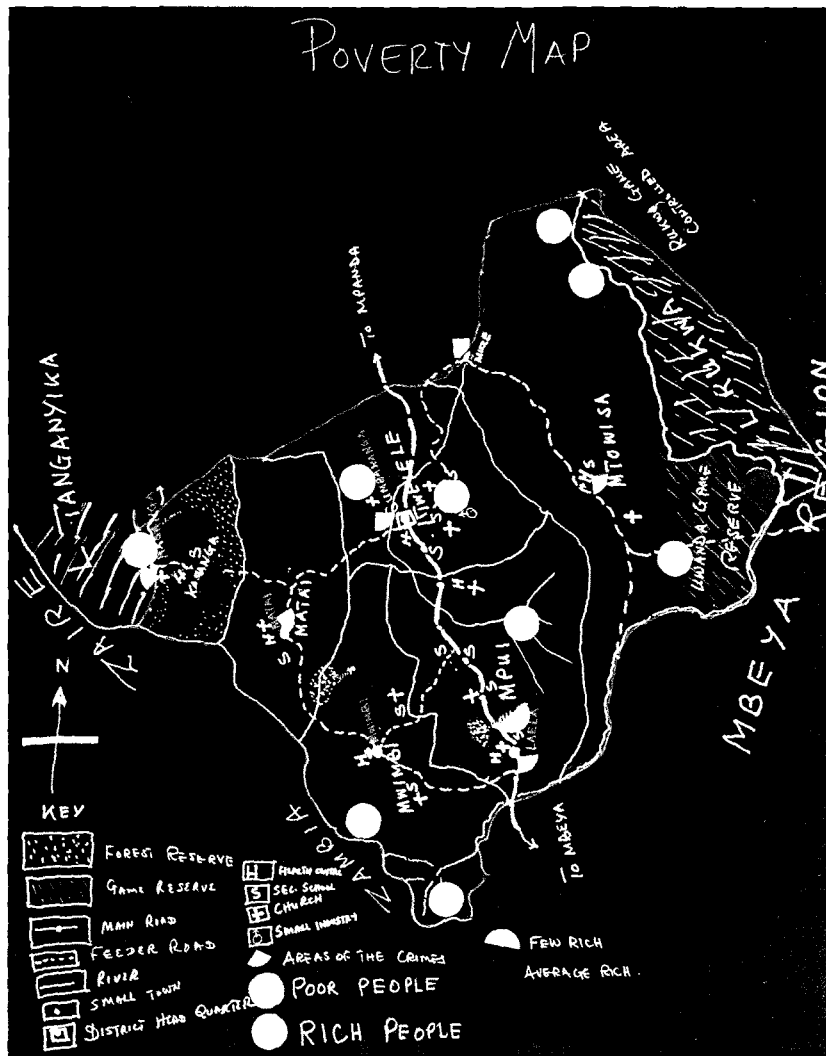
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Voices of the Poor

Poverty and Social Capital in Tanzania



Deepa Narayan

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DEVELOPMENT STUDIES AND MONOGRAPHS SERIES 20

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Poverty and Social Capital in Tanzania

Deepa Narayan

*The World Bank
Washington, D.C.*

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Cover: This poverty map was drawn by a group of district officials in the Sumbawanga District in Tanzania as part of the Participatory Poverty Assessment. District workshops were held to get district officials' perspectives on poverty in their area and to give them the feedback provided by poor people.

Deepa Narayan is senior social scientist in the Environment Department at the World Bank.

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Foreword

Poverty is a complex and multidimensional phenomenon. While it has long been recognized that poverty is more than can be defined by income and expenditure data, progress in going beyond purely economic indicators has been stymied by a lack of measurement tools. This study is a major step forward in the development of such tools in two ways.

First, it reveals the power and utility of participatory methods for policy research. It demonstrates practices and processes that can tap the knowledge the poor have about their own reality. By comparing and contrasting findings from participatory methods with findings from more conventional household consumption and expenditure surveys, the study identifies poverty indicators used by local people at the village level. It also shows how using these measures leads to different conclusions about the causes and nature of poverty and reveals the policy and institutional choices that can best address the problems. In addition the study focuses attention on the different "realities" of male- and female-headed households and shows how development policies must take gender differences into account if they are to be effective.

Second, the study demystifies the concept of social capital at the local level. Social capital and social organization have long been recognized by sociologists and anthropologists as critical building blocks of community and society. This study provides quantifiable evidence that village-level social capital—membership in groups with particular characteristics—significantly affects household welfare. In one telling statistic the study finds that a one standard increase in village-level social capital increases household income per person by 20 to 30 percent. By comparison, a one standard deviation in schooling—nearly three additional years of education per person—increases incomes by only 4.8 percent. Clearly, this finding is critical to formulating decentralization policies designed to provide basic services to the poor and engage in management of local resources.

Voices of the Poor suggests that, in the global challenge to eradicate poverty, the poor are the true "poverty experts." All of us, inside and outside the World Bank, would be wise to listen to their voices and benefit from their experience and their wisdom.

*Ismail Serageldin
Vice President
Environmentally and Socially
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Abstract

In 1995 the Government of Tanzania, the University of Dar es Salaam, and the World Bank conducted a Participatory Poverty Assessment (PPA) involving more than 6,000 people in 87 villages across Tanzania. Specific areas on which data were gathered included such indicators as how the poor view poverty, perceptions of inflation and other trends over time, the effects of liberalization on the rural poor, access to and use of formal and informal credit and savings institutions, the role of social capital in household welfare, and the relationship between poverty and the natural environment.

The PPA employed methods and tools designed to facilitate "listening to the poor." Three basic types of data collection methods were used: participatory tools (such as community mapping, group discussions, and Venn diagrams); key informant interviews; and household survey instruments. Different sampling techniques were employed for the various data collection methods used.

The issue of gender was of central importance to the PPA, and significant differences between the perspectives and actions of men and women were documented. Particular attention was paid to the priorities and coping strategies of female-headed and male-headed households.

Among the PPA's findings: the importance of agricultural inputs, simple technology, and the inability of the poor to take advantage of markets. The PPA also revealed the inflation

in prices in rural areas, the widespread need for rural credit, and people's desire to save. Further, the study found that while many face hardship as a result of cutbacks in government subsidies due to liberalization policies, few advocate returning to subsidies and other practices of the past. Rather, they seek expanded opportunities to improve their livelihoods (through access to transportation to move their goods to market, for instance).

Perhaps the most striking finding of the PPA was the contribution of village-level social capital to household incomes. A one standard deviation increase in social capital at the village-level was found to increase household expenditures per person by at least 20 to 30 percent. By comparison, a standard deviation in schooling of nearly three years per person increased income by less than 5 percent.

The logistics of mounting a PPA are by no means simple, but one can be organized more quickly and produce results faster than a traditional survey based on questionnaires. For this reason, the PPA technique may be very useful for interim monitoring of poverty between major surveys.

In the case of Tanzania the aggregate results of the two approaches were very similar. At the same time, the PPA generated more subtle and more detailed findings in a number of areas, and its policy conclusions are therefore more discriminating, and in some cases different, for example on questions of social capital, gender, seasonality, and access to water.

Acknowledgments

The Participatory Poverty Assessment (PPA) study was conducted by the Government of Tanzania, the University of Dar es Salaam, and the World Bank, with financial assistance from the British Overseas Development Agency and the World Bank. The study was designed and led by Deepa Narayan. The study team was managed in Tanzania by H. R. K. Amani, University of Dar es Salaam. ODA's financial support was administered by Peter Llewellyn, British Council.

Guidance was provided by several officials from the Government of Tanzania and the World Bank: Messrs. Kipokola, Kigoda, and Zayuma, and staff of the Planning Commission; Rose Lugembe of the Department of Statistics, the Ministry of Agriculture; and Luisa Ferriera, Alberto Agbonyitor, James Coats, and Emmanuel Malangalila from the World Bank. Valuable comments on the draft were received from Ronald Brigish (Tanzania Resident Mission), Albert Agbonyitor, James Adams, and Caroline Robb, World Bank.

Tanzania PPA Team

We wish to thank the members of the Tanzania PPA team who conducted interviews, facilitated discussions, and recorded data from more than 6,000 residents of 87 villages throughout Tanzania. The thoroughness and seriousness with which they undertook the field work made this volume possible. Without

their dedication there could have been no Participatory Poverty Assessment in Tanzania.

The team was composed of Tanzanian social scientists from the University of Dar es Salaam, government departments, and research institutes. Field workers were drawn from all walks of life and were largely recruited through a newspaper advertisement and word of mouth. This volume draws primarily on the content analysis and field notes of the 29 field workers who generated more than 100 notebooks of village-level data. A second source of information was a set of draft regional reports written by the team supervisors, as well as approximately 1,500 household questionnaires.

The members of the regional PPA teams were:

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Along with the members of the PPA Team operating in Tanzania, a number of people played invaluable roles during various phases of the research project. The training of the team members was conducted by Miranda Munro, Mungutti Kitui Kitua, and H. R. K. Amani. Formatting of data forms was guided by Lucy Goodhart. Data entry of survey results was carried out by Gemini in Nairobi. Sushenjit Bandopadhyay was responsible for the quality of quantitative data and for statistical analysis; econometric analysis was overseen by Lant Pritchett, Deon Filmer, and Jonathan Isham; and Katie Youdel conducted the content analysis. Ted L. Howard was editor of the final report, and Andrea Brunholzl was the copy-editor. Gaudencio Dizon desktopped the volume.

The most important acknowledgment, of course, is due to the thousands of people in the villages of Tanzania who took the time to speak with the PPA team, and who opened their lives to outsiders in the hope that their experience and information would reach the policymakers who have the power to make decisions that affect the well-being of the rural poor.

Acronyms and Abbreviations

CCM	<i>Chama cha Mapinduzi</i> (Party of the Revolution)	NGO	nongovernmental organization
CRDB	Cooperative and Rural Development Bank	ODA	Overseas Development Association
GDP	gross domestic product	PPA	Participatory Poverty Assessment
GNP	gross national product	PRA	Participatory Rapid Appraisal
GWP	Global Water Partnership	SARAR	self-esteem, associative strength, resourcefulness, action planning, and responsibility
HRD	Human Resources Development Survey	SCPS	Social Capital and Poverty Survey
NBC	National Bank of Commerce	TFA	Tanzania Fertilizer Authority

Poverty, Social Capital, and Survey Methodology

Poverty is a complex and multi-dimensional phenomenon. In order to intervene successfully in the cycle of poverty in which hundreds of millions of people around the world are trapped, sensible policies must be based on an understanding of its nature and determinants.

Traditionally, economists have used “poverty lines” derived from household consumption and expenditure surveys to measure poverty. While providing a useful yardstick, poverty lines also involve a number of assumptions and simplifications that may obscure the true nature of the problem. Other ways of measuring poverty, including measures devised by the poor themselves, lead to different concepts and, accordingly, to different policy conclusions.

Open-ended inquiry into poverty issues and the lives of the poor reveals many insights and findings not captured by traditional household surveys. It is now also understood that in addition to human, physical and natural capital, social capital—the quantity and quality of associational life and related norms—is an essential factor in determining the prosperity or poverty of a community.

Accordingly, the World Bank in recent years has begun to employ participatory methods of research and data collection to elicit new information for understanding poverty as it is ex-

perienced by the poor. This report describes the approach, the substantive results, and the implications of the Participatory Poverty Assessment (PPA) conducted in Tanzania in 1995.

Background to the Tanzania Participatory Poverty Assessment

The East African nation of Tanzania is one of the poorest countries. According to the most recent *World Development Report* (1997), Tanzania has the third lowest GNP per capita in the world—\$120. This official figure, however, may significantly understate national income and expenditure. It has been estimated that a minimum of 30 percent of total GDP takes place in the “second economy.” This activity includes production and sale of goods and services from the informal sector and barter transactions which are not captured by accounting and taxation systems, rent-seeking activities, and illicit activities such as traffic in exports and narcotics. Inclusion of this kind of income-earning activity would raise official estimates by between 40 and 50 percent (Maliyamkono and Bagachwa 1990, World Bank 1994).

About half of the population is estimated to be living at very low levels of welfare. As of 1991 about half of the rural population was living in poverty, with 42 percent of all rural

Tanzanians living in households classified as hard-core poor (Ferreira 1994). The average per person consumption expenditure in 1993-94 in rural areas was 50 cents a day (Ferreira and Griffin 1995).

Poverty in Tanzania is mainly a rural phenomenon: rural households account for 92 percent of the poor. People whose main source of income is their farm are five times more likely to be poor than those who receive a wage from the public or private sector. For the past decade Tanzania has pursued a program of liberalization to reform the regime of state controls which, together with a series of external shocks, had led to economic stagnation and a sharp deterioration of living conditions between the 1970s and early 1980s (World Bank 1996).

In 1995, the Government of Tanzania, the University of Dar es Salaam, and the World Bank conducted a Participatory Poverty Assessment (PPA), funded by the British Overseas Development Agency (ODA) and the World Bank. The study involved more than 6,000 people in 87 villages across Tanzania. The study utilized three basic types of data collection: participatory methods, key informant interviews, and household survey instruments. The household survey had a dual focus—a Social Capital and Poverty Survey and a household module devoted primarily to measuring household consumption and expenditures. The PPA was carried out as a primary input to the World Bank's Poverty Assessment for Tanzania (World Bank 1996), along with the Human Resource Development Survey (Ferreira and Griffin 1995).

Because the PPA methodology is relatively new and still gaining acceptance, the Tanzania PPA included a strong methodological element designed to explore two issues. First, the study endeavored to determine the extent to which a PPA complements conventional expenditure and consumption surveys. In other words, to what extent does a PPA obtain information and provide insights that go beyond what can be discerned from national household expenditure surveys? Second, the study used statistical

analysis to explore the relationship between social capital and poverty. For these reasons, the study went beyond the lengths needed to simply inform the poverty debate in Tanzania. It raised and answered new questions altogether. To communicate these issues and the power of participatory research methods, a film—"The Poverty Experts"—was made of the PPA process. This film is available from the World Bank's Social Development Department.

The Tanzanian PPA had four key building blocks:

- The view that the poor are the real poverty experts since they experience poverty daily. When given the opportunity, the poor can provide both data and subjective insight into the causes, nature, and extent of poverty, and the range of solutions.
- The use of open-ended participatory methods to tap the knowledge and expertise of the poor about their lives and perceptions.
- The involvement of a range of stakeholders, especially policymakers, to build ownership and commitment to using the study's results. Stakeholders defined issues, discussed methodology, and were involved throughout the study process.
- The desire to better understand the role of social capital.

Identifying Issues

To narrow the focus of the study and to ensure that its focus had policy relevance, senior government officials, NGOs, World Bank staff working in Tanzania, and selected donors were interviewed at the outset and asked "What do you want to know that you don't already know about poverty in Tanzania?" Over a period of time, the responses to this basic question converged around five broad themes which were subsequently used to define the Terms of Reference (TOR) for the PPA. These were:

Indicators of poverty. What are the indicators of poverty from the perspective of the poor? What causes poverty? Based on local definitions of

poverty, who are the poor? What do they do for their livelihood? How do they survive? Are there any gender or regional differences associated with the extent or degree of poverty? What are the poor's perceptions of changes in poverty and inequality over the past ten years, the past four years? What are their hopes for the future?

Effects of liberalization. What are the effects of liberalization (especially of trade) on the agricultural sector and on the devaluation of the shilling in rural areas? Is there price inflation in rural areas? How do the poor perceive the changes resulting from liberalization policies? How much do they know about the changes in the country? Are they better off than before liberalization? Are there gender differences—both in perceptions about and in the impact of liberalization?

Credit and savings. What is the prevalence of informal and formal savings and credit institutions? How are they used and by whom? What are the preferred attributes of savings and credit institutions? What is the need for such institutions in the rural areas? Are there any gender differences?

Social capital. What is the role of culture in poverty? What are the groups, associations, and networks functioning at the village level? What is the nature of these groups, what role do they play in people's lives? What is the role of these social organizations in coping with economic hardship? What does trust mean at the local level? Have levels of trust in groups and in formal and informal leadership increased or decreased. Why? What are the gender differences?

Natural environment. What is the role of the natural environment in the coping strategies of the poor? How do the poor perceive environmental degradation, including decline in soil fertility and lack of available firewood? What actions do the poor take to protect the environment? Are there any gender differences?

Study Framework

The PPA explored the role of social capital as a determinant of household welfare alongside other determinants, such as human capital, physical capital, natural capital, and access to markets. Social capital can be defined as the web of groups, associations, networks, and norms of trust at the community level that form the social underpinnings of poverty and prosperity (Putnam 1993).

The social capital question was tested using econometric methods which required collecting some quantifiable data. In-depth data gathered through open-ended processes provided the context for interpreting these findings. Chapter 6 discusses social capital in Tanzania.

Study Methodology

Unlike econometric studies, there are at present no hard and fast rules on how to conduct a PPA beyond the maxim of "Do the study in a way that maximizes learning and ownership at all levels, including policymakers." Within this context, the Tanzania study was carried out with two rules in mind: first, from the range of data collection tools available, choose the most appropriate to answer the specific questions raised by policymakers; and second, choose sampling techniques that have credibility in the eyes of the decisionmakers.

Mounting a PPA is by no means simple, but it can be organized more quickly and produce results sooner than a traditional survey based on questionnaires. For this reason, the PPA technique often proves useful for the interim monitoring of poverty, between major surveys. It was reassuring that—at least in the case of Tanzania—the aggregate results of the two approaches were very similar. But at the same time, the PPA generated more subtle and more detailed findings in a number of areas, and its policy conclusions were therefore more discriminating, and in some cases different (for example, on questions of gender, seasonality, and access to water).

Village Sampling

Many intensive participatory and anthropological studies are dismissed because they are either conducted in just one village or in a handful of villages. To establish credibility and ensure that the study was broadly representative of rural areas as a whole, we selected 100 villages spread throughout the country. These villages were part of the National Master Sample framework established earlier by the government's Planning Commission. All national-level studies conducted in Tanzania are done in these villages to allow researchers to generalize their sample to the nation's rural areas as a whole, and also to ensure that findings from one survey can be compared and contrasted with data from other studies.

Before the PPA team entered a village, the community was informed in advance. This insured availability of village leaders and also enabled the team to meet with community members during its two-day stay. To ensure that group discussions were not dominated by the more powerful community members, the team supervisor met with local elites while the research team fanned out through the community.

To maximize use of existing data bases, the 15 households selected in each village for the household survey were the same as those randomly selected for the national agricultural survey. The final sample included 87 of the 100 selected villages because some of the villages were unreachable due to washed out bridges, particularly in Mtwara, Lindi, and Morogoro. In addition, some villages in Kagera had been taken over by refugees and were dropped from the study. Due to a communication problem, the household expenditure module of the household survey was administered only in 53 of the 87 villages.

Data Collection Tools

No single data collection tool can obtain the range of information needed in a study of this kind. To ensure the reliability and consistency of information gathered by researchers during

their two-day stays in each of the 87 villages, certain redundancies were built into the data collection methods. Three basic types of data collection were used: participatory tools; key informant interviews; and household survey instruments. Some of these tools were created specifically for Tanzania to address issues of concern to policymakers. Different sampling techniques were employed for the various data collection methods used.

Participatory Data Collection Tools

Two participatory methods were used in the PPA. SARAR (Self-esteem, Associative Strength, Resourcefulness, Action Planning, and Responsibility) primarily uses visuals as stimuli to generate discussion and involvement. Participatory Rapid Appraisal (PRA) makes use of a family of methods relying on open-ended dialogue and community-level analysis. The various participatory tools (below) were administered in discussion groups of men and women usually segregated by gender to conform to local culture and also to ensure that women felt the freedom to speak freely. More detailed descriptions of most of these activities can be found in the World Bank's *Participatory Development Toolkit* (1995) and in *Resource Kit for Participation and Social Assessment* (1997).

Mapping. Groups were asked to draw a map of their community on the ground, marking the key features of the village and drawing in households which were labeled according to wealth status later in the process. If it was raining, the activity was conducted indoors using markers on poster paper.

Poverty characteristics and wealth ranking. Once trust was established between the study team and the village group, people were asked to identify the characteristics of five different wealth groups, from the very rich to the very poor. Once consensus was reached on defining characteristics, the groups used colored stickers classifying households into these categories.

Seasonal analysis. The lives of poor people dependent on agriculture change with the rhythm of the seasons. People were asked to draw a matrix on the ground, with the months on the horizontal axis and activities or resources on the vertical axis. The discussion focused on how people coped across years and during the periods of greatest stress in their lives.

Trend and price analysis. Groups plotted changes they had noticed in their lives (in such terms as availability of services and food costs) during two time periods: 10 years ago (marking the beginning of the liberalization process) and in 1991 (marking the liberalization of basic food commodities). Prices of commodities considered important were also collected.

Venn diagrams. People were asked to work together in a group to draw a large circle on the ground representing the whole community. Circles of various sizes representing village-level groups and institutions were then drawn. Size of the circle indicated importance and overlapping circles indicated overlapping membership. Lines between groups indicated interaction between them. Discussion focused on the membership, structure, functioning, and relationships between village groups.

Problem identification. To avoid introducing sectoral bias, a set of 22 drawings was developed by local artists depicting a variety of problems and issues. Blank paper was made available so people could draw pictures of problems not depicted. Through a voting exercise using stones, people ranked the five most important problems affecting their lives. The issues were then discussed in depth. In some villages, this activity was taken further. Groups were given Polaroid cameras to produce photographs depicting the most important problems they faced.

Story with a gap. This activity consisted of two pictures, one showing a poor, unproductive farm and the other a prosperous farm. Using the pictures, people discussed the situation of their

own farms. The discussion then moved on to how to turn a poorly functioning farm into one that works well. A set of pictures was drawn to represent the crops and ecology of different agro-ecological zones.

Gender analysis. A local artist drew three large pictures of a man, a woman, and a couple. These were spread on the ground along a horizontal axis. People were then handed more than 30 smaller pictures of different objects including land, a house, household items, babies, and young children. The group was asked to arrange these pictures under the man, woman, or couple to indicate who owned which possessions during marriage. Once the discussion was complete, people were asked what happened to property distribution during divorce or separation, and finally, what happened to the division of property if the husband died.

Key Informant Interviews

Much of the information obtained through groups was also asked of key informants. These were generally village officials, including cell leaders, and others such as school teachers who were residents in the community. In each village discussions were held with two or three key informants. Any information that did not tally was further cross-checked. This provided a valuable means for cross-checking information and engaging officials while group discussions were being held by other members of the study team.

Household Surveys

A two-part household questionnaire was developed. The first part—the Social Capital and Poverty Survey—focused on social capital issues, agriculture, savings and credit, environmental issues, and three measures of poverty (wealth ranking by cell leaders, self-ranking, and an index of assets in the household). The second part consisted of a household expenditure and consumption module of the 1993 Human Resources Development (HRD) survey

(Ferreira and Griffin 1995). Some questions on demographic background and distance-to-markets were included.

District-level Workshops

In Tanzania, district level officials implement many of the programs affecting the lives of the poor. Each team held a one-day workshop at the district level. The workshop was used to brief district officials about the nature of the study, to explore their attitudes and knowledge about poverty, to learn the reach of their programs, and to feedback preliminary findings from the field. After introductions were made in small groups, officials drew maps of the district, discussed poverty characteristics, and then located areas of poverty on the map, as well as where government services were provided. The local agricultural picture was also probed in depth using the Story with a Gap technique.

PPA Process

The PPA field work was conducted by six teams whose members received intensive training for three weeks in a range of data collection tools. The teams were drawn from the University of Dar es Salaam, other research institutes, and government ministries, as well as from respondents to a newspaper advertisement. Training stressed behavior and the attitudes underlying successful use of participatory tools. Each team was headed by a senior social scientist, half of whom were men and half women. Teams consisted of five junior field workers (about half of

whom held bachelor's degrees) and included both men and women. The work was supervised by a World Bank sociologist.

Data Analysis

All data gathered through participatory methods were subject to systematic content analysis. Statistics were obtained at the end of content analysis, where appropriate, through a step-by-step aggregation of village data to reveal the national pattern. This process took three months.

The quality of household survey data was checked by the field teams soon after return from the villages. The data then were entered into a computer by Genesis, a private firm in Nairobi. Data were cleaned and checked for accuracy. Statistical analysis also consisted of a step-by-step process, starting with frequencies, cross tabs, index construction, and, finally, model testing.

Report Writing

Both data sets were combined and reports written from field notes in Washington, D.C. As noted earlier, the PPA was initially designed simply as a contribution to the Tanzania Poverty Assessment report produced in 1996. Hence, data were analyzed and information integrated into the main report with no plans for a stand-alone PPA report. However, because of the richness of the data collected, the present document was developed to inform the ongoing conceptual and methodological debate about poverty and its determinants.

What Is Poverty?

The one with nothing has everything taken from him, while the one with something has more given to him.

— Oldadai, Arusha

Poverty can be conceptualized and measured in different ways. The conventional economic approach focuses on the quantifiable poverty line based solely on consumption and expenditure patterns (World Bank 1991a, 1992, 1993b). While the poverty line is an important measure of poverty in a country over time, poverty goes beyond income levels. It includes access to health care and education, respect, status, isolation within a community, and feelings of powerlessness and hopelessness. Poverty is multidimensional, and many of its dimensions are often hidden (Ravallion 1992, 1996, Moser 1996, Sen 1990).

This chapter reports PPA findings showing how village people in Tanzania view poverty, what characteristics they use to categorize the poor, what major challenges the poor say they experience, and what they envision for their future.

The 1993 Human Resources Development survey found that income distribution was quite uneven in Tanzania: the average adult equivalent expenditure of the richest quintile was more than six times greater than that of the poorest quintile. The inequality between rural and urban areas was also considerable: while on average rural Tanzanians spent the equivalent of \$193, their counterparts living in Dar es Salaam spent on average \$587.

Access to safe drinking water has been on the decline since 1976. Rural households spent an average of 3.1 hours a day collecting water, with the brunt of the work borne by women. Infant mortality is high: for every thousand children born in Tanzania, 90 will die before

their first birthday. While rural literacy has increased (from 59 percent in 1983 to 73 percent in 1993), declining school enrollment rates imply that literacy gains may slacken or be lost (World Bank 1996, Ferreira 1994).

To complement the poverty line data collected in the HRD survey, the PPA focused on gathering information on poverty as defined by local people. In a country where land is plentiful, yet poverty is primarily rural, the other factors contributing to poverty must be understood.

Methodology

Three participatory data collection methods were combined to assess the extent and nature

of poverty in Tanzania's villages. In each village mixed groups of men and women were first asked to participate in a community mapping exercise. This activity initiated interaction and began to establish trust. As noted in the previous chapter, community mapping involves people in drawing maps of the basic infrastructure, landmarks, and households in the community. Once the mapping process was complete, people then engaged in a discussion of poverty and its characteristics, clarifying for the PPA team local definitions for the five wealth groups: very rich, rich, average, poor, and very poor. After agreeing on the key identifying features of each category, participants were asked to rank themselves and the 15 households that composed the household interview sample. Although the initial tendency was to rank everyone as poor, people quickly became more discriminating in their categorization. Consensus was usually reached in the final ranking of households. Having completed the ranking exercise, discussion then turned to a discussion of the causes of poverty. When time permitted, two or three villagers identified in the mapping process as being poor were interviewed in-depth.

Local Terminology and Proverbs

Local terms used for different categories of wealth and well-known proverbs about poverty were revealing of popular beliefs and attitudes.

Very Rich

The terms used to describe the very rich were surprisingly positive, with a few connoting a degree of envy. Literal translations of these terms include: those who are very able, those who can breathe freely, those who are lions, those who are stuffed, and those who set the prices.

Rich

The terms for a "rich man" were less colorful: a little bit rich, a rich person, a person who has risen a bit.

Average

The terms used to describe a person of average wealth translated into someone who is ordinary: ordinary folks, ordinary life, and ordinary farmers.

Poor

Local terms generally revealed great sympathy toward the poor: hardworking, toiling, those who sleep tired, one who has to sell his labor, and a cursed person—whatever he does, he loses.

Very Poor

The most negative and ambivalent local terms were used to characterize the very poor: those who are poor by choice, someone who cannot even depend on himself, a really low person, a stupid fool, people who rely on others, someone who is poor but invited it upon himself, people who rely on luck and others, someone who is completely disabled or physically handicapped, and someone whom to employ is a threat.

Poverty-related proverbs generally revealed a strong work ethic, coupled with an attitude of shame and discouragement:

Someone who discourages work, encourages poverty. (Bunazi, Kagera)

You have to work hard so in the end you will become rich. (Bunazi, Kagera)

If you want very good things, try to work very hard. (Mititi, Rukwa)

Poverty provides a very bad name to the family. (Kazilamihunda, Kigoma)

A poor person cannot take anything which is attractive. If he takes it, he will be called a thief. Because he has nothing, nobody expects him to have good things. (Mititi, Rukwa)

The one with nothing has everything taken from him, while the one with something has more given to him. (Oldadai, Arusha)

The person who is poor when she wakes up in the morning has nothing to do, unless she goes to a rich person who can make her day start moving. (Bunazi, Kagera)

Poverty Characteristics

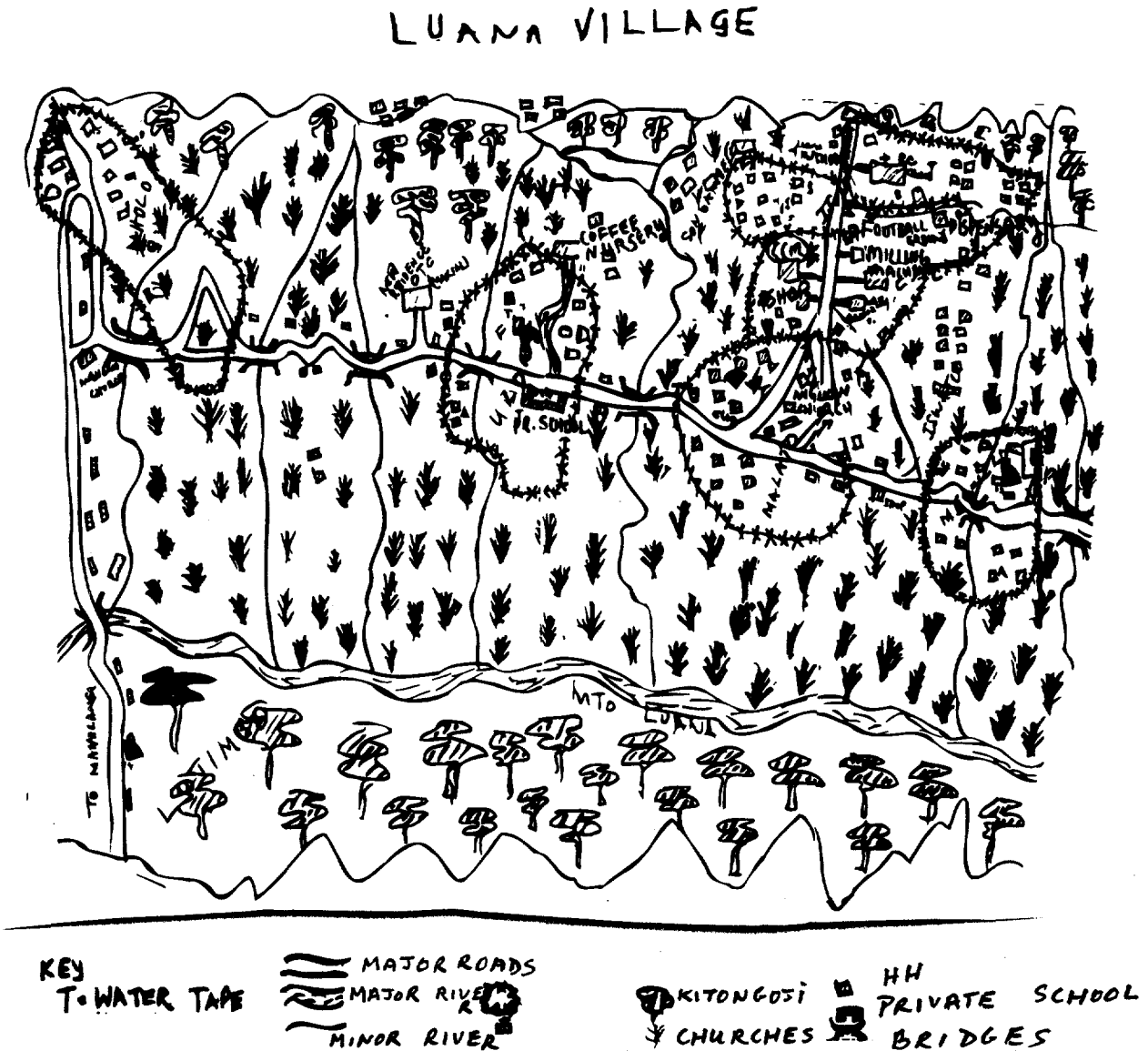
The distinguishing characteristics of poverty were location-specific with clear regional (agro-ecological) differences. Consistent with the economic definition of the poverty line, the characteristics reflected many consumption categories and people's capacity to spend. In addition, they reflected social reality and peo-

ple's subjective psychological experiences (tables 2.1 and 2.2).

Land as a Measure of Prosperity

In every region, land ownership was nearly always the first characteristic mentioned in defining categories of wealth. This despite the fact that land is still plentiful in Tanzania. The

Figure 2.1 Community map of Luana Village, Iringa



Source: Mapping process facilitated by David Charles.

Table 2.1 Characteristics of poverty and wealth, Dodoma region

<i>Wealth category</i>	<i>Description</i>
Very rich	More than 40 cows More than 80 bags of food (sorghum) Has 3-4 wives House made of brick and galvanized iron Owns a donkey, bicycle cart Can own a shop
Rich	Owns 5-10 cows Enough food for a whole year Can afford school fee in private school Fairly good house
Average	No livestock Enough food, but not so good Cannot afford private hospital services Can cultivate land or has salaried employment House of mud walls, iron roof
Poor	Not enough food, skips meals Depends on piece work Many children Uses second-hand clothing Broken-down house
Very poor	Mostly old, disabled Lives by begging Women who have no children Mentally unfit, no home

PPA study found that landlessness among the poor and very poor was increasing in areas with high agricultural potential, particularly where villages are close to urban centers, have good road access to markets or where there are large farming estates (such as sisal in Tanga).

In Arusha and Kilimanjaro regions the poor said: "We have land but nothing to work it with. All I have is a small hoe. You have to bend your back to work with a small hoe and after two hours you are tired." "The land is exhausted from overcultivation. Ten years ago, I got eight bags per acre; today I get two bags." "I cannot afford fertilizer or hybrid seeds, and I do not qualify for credit. Without fertilizer, the land does not produce even enough to feed the family." "I sold my land and now I have

Table 2.2 Characteristics of poverty and wealth, Kilimanjaro region

<i>Wealth category</i>	<i>Description</i>
Very rich	Owns more than 10 acres Uses fertilizer and improved maize seeds Owns tractor Owns milling machine, large business Children go to best secondary schools Rich and responsible, children well behaved
Rich	Owns 4-8 acres, 2 dairy cattle, 10 goats, small shops Children attend private school Family is not happy, irresponsible
Average	Owns 2-3 acres Problem buying inputs Must sell labor Occasionally owns oxen plough Children attend school up to standard VII but secondary school is unaffordable
Poor	Owns less than 1 acre of land Uses hand hoe, first works for others, or waits until others have finished ploughing so is late in ploughing and planting Cannot afford inputs, poor harvest (3 tins from 3 acres) No cattle Children cannot complete primary school Eats once or twice a day if lucky
Very poor	No land or very small plot of land Does not plant Depends on relatives "The house has 7 doors" (broken walls so they can exit from anywhere)

nothing. I can never buy my land back because the prices go up every year."

In villages of pastoralists or settled pastoralists (Dodoma, Sindiga, Tabora, Shinyanga, Kagera, and in areas of Arusha), cattle ownership was deemed the most important sign of wealth. Yet even in these regions where herd size was considered important, people compared the size of the herd with the size of the farms and success in farming. In Mwanza, access to motor boats and fishing nets was a significant sign of prosperity. Growing

of cash crops was also used as a defining characteristic of the very rich and rich in many areas.

Agricultural Inputs

The 1991 liberalization of basic food commodities eliminated many subsidized inputs supplied by cooperatives. Farmers now must pay full prices for inputs on open markets. This has had a strong impact on farming practices. The ability to purchase needed inputs—such as hybrid seeds, fertilizers, and insecticides—for food and cash crops is so important to prosperity in rural Tanzania that it has become central to definitions of poverty and wealth across the entire country.

While both the HRD and PPA studies revealed the importance of spending on food, housing, health, education, and clothing, the HRD survey—which focused only on household consumption—did not note spending on farming inputs as a distinguishing characteristic among the wealth categories. By contrast, the PPA found that lack of access to agricultural inputs was reported as an essential contributing factor to poverty. The poor did not, by and large, recommend a return to subsidized inputs as the solution to this problem. Rather, they focused on overcoming constraints that put them at a disadvantage to the rich.

In areas with high agricultural potential like Kilimanjaro, the PPA found that people used land, farming implements, and the ability to purchase fertilizer as key to defining wealth categories (table 2.2). In the coffee-growing area of Arusha, an average person was described “as someone who does not have the sprayer for coffee agrochemicals nor coffee drying wires, and who sells coffee in small amounts six times a year because he needs the money immediately to solve other problems. The very rich let the coffee accumulate and sell once a year at good prices. The rich also get better crops than we do, but they sell every six months. The poor on the other hand put agrochemicals on coffee twice instead of seven

times per year because they can’t afford them. They must sell whenever they can.” The importance of cash crops in Kagera and Rukwa regions is demonstrated by table 2.3.

Quantity and Quality of Food Consumed

Throughout Tanzania, wealth was associated with the ability to eat and drink as much as one desired. Poverty was associated with skipping meals, reducing meals to one or two a day, involuntarily changing diet, sending children to neighbors’ homes to eat, and poor performance in school (hunger making poor children unable to pay attention). Sugar, kerosene, and cooking oil were considered luxury goods as “rare as gold” for the poor. The very poor were described as lucky to eat at all, totally dependent on the goodwill of others for food.

Access to Health and Education Services

Changes in government policy effected how people associated access to health and education with levels of wealth (table 2.4). For the poor, hospital care and a complete school education were perceived to be out of reach.

Power and Dependence

Wealth was associated with respect, power, and leadership in all regions. In Arusha, for example, people reported that “the very rich are very respected. Even their speeches are given the highest priority in the village. The same with the rich—they can win any election in the community.” The rich were seen as powerful because they had the power to set the prices for goods they purchased. This evoked both awe and resentment: “The rich buy goods from the poor at low prices after the harvest and later sell them when prices are high.” “The rich become rich by buying cattle during times of hunger.” The rich were also seen as powerful because they could hire labor to work for them and always had surpluses which they could invest to make more money.

Table 2.3 Importance of cash crops and crop yields by wealth category, Kagera and Rukwa regions

<i>Wealth category</i>	<i>Kagera</i>	<i>Rukwa</i>
Very rich	Has shop, business Farms 7-9 acres Cash crops, coffee, and plantains Permanent house, car Very healthy	More than 100 cows Has investments
Rich	Farms 4-7 acres Cash crop, coffee Permanent house with metal roof, bicycle Good health	50 cows 50 bags of maize per harvest
Average	Farms 2 acres Mostly food crops Thatched house Has bicycle	5 cows 10-20 bags per harvest Good clothing
Poor	Farms 0.5 acre No hoe, doesn't farm Eats once a day Sells his labor to rich for food Often sick	1 bag per harvest Works as casual laborer Sells firewood Has to buy food May eat up seeds
Very poor	Powerless Depends on others to survive Does not have hoe No land	Cannot cultivate Disabled Begs, depends on others Steals, has nothing

The poor were seen as dependent on others which brought shame to the family because they could not take care of their needs. One poor person told the team: "I am not poor because I can still look after myself and my family."

Physical Disability

Physical disability was commonly associated with the very poor. The physically disabled were considered a burden. Their survival depended on the gifts and kindness of community members, both kin and non-kin.

Gender Differences

There was only one consistent gender difference in the various descriptions of poverty: women seemed to set their sights lower than men in defining categories of wealth. In one rather startling example, women in a village

described someone with 80 cows as very rich, while men used the figure of 3,000 cows to describe the threshold of being very rich.

Female-headed Households

Findings regarding female-headed households differed significantly between the PPA and the earlier HRD survey. The PPA found that female-headed households in rural areas were substantially worse off at every level of wealth compared with male-headed households (table 2.5). The HRD survey found no differences between them (table 2.6). In the HRD survey, when the urban population was added, the findings actually reversed themselves, and female-headed households emerged as better off than male-headed households at every level.

The difference in findings was sharpest for the very poor category. The PPA found that the number of female-headed households in

Table 2.4 Importance of health and education services by wealth category, Tanga region

Wealth category	Description
Very rich	Big person with position in community Hires laborers and supervisors Children attend private secondary schools Has better toilets Can afford private hospitals
Rich	Healthy children, eat, sleep, and dress well Can afford school fees and uniform Children attend secondary school
Average	Cannot afford secondary school, sometimes can afford technical schools No good food Cannot eat consistently May die of diarrhea, dysentery, and vomiting
Poor	Food and clothing are a problem Children do not complete primary school Cannot afford health care fees
Very poor	Has nothing Eats cassava boiled in water without salt Often sick

the very poorest category was more than double that of male-headed households. Why the difference? Is one study more accurate than the other?

Explaining the discrepancy highlights the importance of interweaving findings from these two different survey approaches. The HRD survey revealed that rural female-headed households had fewer permanent assets: male-headed households owned 6.08 acres of land and had 4.7 years of education; female-headed households possessed 3.74 acres and 2.45 years of education. Evidence from both the HRD

Table 2.5 PPA national wealth ranking (percentages)

Wealth	Male	Female	Total
Very rich	1	0	1
Rich	10	4	8
Average	43	27	40
Poor	32	40	34
Very poor	14	29	17
Total	100	100	100

Table 2.6 Gender differences in findings between PPA and HRD studies (percentages)

	PPA		HRD	
	Male	Female	Male	Female
Non-poor	52	29	49	45
Poor	32	40	33	37
Very poor	14	29	18	18

study and the PPA study seems to indicate that female heads of households tend to engage in petty hawking, trading, and "piece work" more than their male counterparts. While lacking in assets, these additional income-generating activities may account for their equality in spending in the HRD study.

As already noted, the PPA study went beyond consumption and expenditure to capture social concepts in defining poverty. During the poverty discussions, both men and women said that female-headed households tended to have less land and livestock and so depended greatly on their piece work and hawking activities. This lack of capital assets and lack of children (who were left with the husband) produced social isolation which made them more vulnerable and powerless to change their situation. For a fuller discussion of gender-related findings from the PPA see chapter 4.

Distribution of Poverty

Despite the local and regional differences in poverty descriptions, the overall estimate for rural poverty in Tanzania was strikingly similar between the PPA data (50.3 percent) and a poverty line (based on the head count index with the poverty line set at 114,187 shillings) derived from the HRD survey (49.7 percent).

Gini Coefficient and Perceptions of Poverty

A gini coefficient is a useful statistic (ranging between 0 and 1, with higher values indicating more inequality) that captures the distribution of a good or asset across a population. According to the HRD survey, the gini coefficient for

Table 2.7 Well-being ratings by wealth compared over time
(percentages)

	Compared with 10 years ago			Compared with 4 years ago		
	Very poor	Very rich	Total	Very poor	Very rich	Total
Better off	50	37	47	35	63	35
Same	10	0	14	12	0	16
Worse off	40	63	39	53	37	49
Total	100	100	100	100	100	100

land for rural households was 0.46 and had remained quite stable for the past decade. The gini coefficient for livestock was higher (0.85) a figure remaining fairly stable over the past decade—indicating greater inequality in distribution of livestock among households. The gini coefficient for income was 0.35, a decline from 0.60 in 1991. However, the study concluded that “it is not clear whether this decline corresponds to the beginning of a new path, to a short-run change, or to a statistical and measurement error. . . . [It] requires more points of observation and secondary data” (p.10).

While the gini coefficient is useful, it also has its limitations. Livestock and land ownership, for example, are relatively easy to track and quantify. Income levels in rural areas are more difficult to measure. As a result, people’s perceptions, as revealed in the PPA, provide important insight into the dynamics of local poverty. They may also provide a useful tool for monitoring poverty between large household surveys.

How People Perceive Prosperity

As part of the PPA, a household survey was conducted to collect data on people’s subjective judgments on poverty trends. People were asked to rate whether they were better or worse off than they were ten years ago and four years ago. With the exception of the very rich, the majority felt they were better off than 10 years ago, “when the shops were empty” at the beginning of the liberalization of the economy (table 2.8).

The percentages reversed, however, when people compared themselves to four years ago

when further liberalization of marketing of commodities (wheat, rice, and maize) occurred. Since 1991, annual inflation had never been below 21 percent, with a high of 36 percent in 1994. Important differences in perception appeared by wealth level. For example, more than half of the very poor felt worse off and more than half of the very rich felt better off (table 2.7).

Village-level Prosperity and Inequality

In the PPA people were asked to rate overall levels of prosperity and inequality in their villages (table 2.8). Overall 37 percent felt there was greater prosperity in the villages and 48 percent felt that this was accompanied by greater inequality. These perceptions did not differ significantly by wealth category.

Causes of Poverty

In every village small groups of people discussed the causes of poverty (box 2.1). These

Table 2.8 People’s perceptions of changes in village prosperity and inequality
(percentages)

Prosperity	
Less	45
Same	16
More	37
Inequality	
Less	39
Same	12
More	48

Box 2.1 Sliding into poverty: the story of Ndesheyo Esau, Maroroni Village, Arumeru District

"I came to this village in 1958 with my late husband and two children. After coming here I had three more children. We came here to farm and raise cattle and life was good. In the early 1970s I could harvest up to 20 bags of maize from one acre. The soil was very fertile and we did not have to apply any fertilizer. We had 40 cows and 400 goats. The government provided a dip free and so the animals were free of disease. But in the late 1970s the government had problems because of the war with Uganda, the free dips were closed, the animals got diseased and died. None of us were educated about what to do in case of disease. By 1983, I was left with 5 cattle and 12 goats.

In 1984 there was a drought which affected the cattle and there was hunger. To get food and because the pasture was dry, we sold the rest of the cattle and goats, and at that time I got eight bags of maize from

an acre. Now I am caught in a circle. By 1990, the soil became tired, we had no money to buy fertilizer, only a small hoe, no cattle, so to get food, the family started piece work. For example when my son works the whole day weeding someone's farm he gets one tin of maize. We discovered that most of our time is spent on other people's farms just for exchange of food for two to three days. We try to expand our own farm, but because we need food immediately we are pushed again to work for others.

The only rich people are those who take their riches and invest them in a business. The traders are doing well. They are not at the mercy of the rain. One man started by buying beans in bulk and selling it in Dar es Salaam and bringing back other goods to the village. He has large farms now and hires labor to farm for him."

discussions underwent content analysis to determine categories of response. Those categories of group responses were then collapsed and frequencies were obtained (table 2.9). The results share some similarities with the HRD study which singles out family size, education, land availability, market integration through growing cash crops, and proximity to all-weather roads as key determinants. Results differ as well.

Farm Productivity

A remarkable 47 percent of all responses about the causes of poverty were related to being able to farm productively. Distant or poorly functioning markets, price fluctuations, "exhausted land," and drought or floods all received mention. Only 8 percent reported landlessness, and among those responses four issues stood out: women not inheriting land (chapter 4), men inheriting small plots of land, recent migrants not having land, and the poor selling their land.

Reflecting the community-defined poverty characteristics, most frequently cited were the high cost or unavailability of fertilizer, insecticides, seeds, farming implements, and modern technology (box 2.2). "With no agrochemicals, we hardly get any yields. Next year what do

we start with? We have to travel far to look for food, come back to farm for a few days, and then go again to look for food." From Kilimanjaro in the north to Mtwara and Lindi in the south, the small handled hoe emerged as the symbol of being caught in the poverty trap: "All we can afford is the small handled hoe made in China. It costs 2,000 shillings. It breaks our back and it breaks within one season, both the wood and the metal part."

Health

Poor health was seen as a quick way to descend into poverty. People said medicine was generally not available in the local clinics, and seeking health care in private clinics and hospitals was viewed as expensive. "If someone is sick, taking him to the hospital 25 km away is very expensive. You can spend 10,000 to 20,000 shillings. You have a choice either to take the person to the hospital, spend all of your money and let your family members starve, or let the sick person stay at home and just buy medicines which you know about and hope will work." As the elderly lose their physical strength, they cannot farm. Thus, even when healthy, the elderly often slide into poverty. The issue of malnourished and sick orphans

Table 2.9 Causes of poverty as perceived by village groups

	Percentage	Frequency
Farming		
Lack of farm inputs	9	49
Lack of farm implements	8	45
Lack of credit	2	13
Markets not working, distant	7	37
Drought/flood	8	47
Infertile land	5	26
Lack of land	8	43
Sub-total	47	260
Health		
Poor health services	3	15
Disease/disability	9	53
Elderly, malnourished orphans	3	17
Sub-total	15	85
Social problems		
Laziness, selfishness	6	34
Alcohol abuse	6	31
Witchcraft	1	6
Sub-total	13	71
Lack of education/education services	6	32
Large families	4	24
Bad government policies—cost sharing	4	21
Devaluation of shilling	2	13
Born into a poor family	3	17
Livestock care problems	2	13
Water	1	7
Other	3	21
Total (groups)	100	564

came out particularly in Kagera which has been severely hit by AIDS and refugees.

Social Problems

Two intertwined social problems most frequently mentioned were drinking and laziness. Drunkenness was seen as causing poverty. During the height of the farming season, when fields have to be prepared, men were said to spend time drinking, leaving women to do the work. Because of the reduced manpower, few acres could be planted and harvested. The poor were said to drink to forget their problems. The ready availability of alcohol exacerbates the problem: poor women brew local beer at the peak of the harvest to make money and to buy food, because either they had no harvest or

their harvest was so poor that the food produced was not sufficient to meet the family's immediate needs.

Education

The HRD survey established the economic returns to a family from just one additional year of schooling. But despite the fact that the poor recognize the value of education and make much effort to send their children to school, the PPA found that lack of education was not seen by them as an important cause of poverty.

Other Problems

Among the other problems mentioned less frequently were witchcraft, AIDS, poor extension support, God's will, war, prostitution, polygamy, deforestation, bride price, poor houses, lack of family planning contraceptives, and theft.

Vision for the Future

When people give up hope and are trapped in despair, social and economic development become even more difficult. In the household interviews dealing with village-level institutions, people were asked about their vision for the future. Once again the difference between the rich and poor was striking. The majority of the very rich and rich expected to do even better in the future, the majority of the poor and very poor expected to be worse off (table 2.10). Overall, 51 percent expected to be worse off in the future. Given that inflation in prices of basic commodities and farming inputs seems to have hurt the poor the most, it is perhaps remarkable that approximately one-third faced the future with optimism.

Policy Implications

- The poor do not advocate a return to government subsidies. However, they cannot afford to buy farming inputs at current prices without access to credit and other

Box 2.2 Distant markets, poor roads, and poverty

Kazilamihunda, Kigoma: "Poverty is caused by lack of cash crops which fetch a high price in the market. We started to cultivate cotton in 1979, but now sometimes there are not even private traders to buy cotton. We have cotton ready by August and sometimes we cannot sell it until December. Sometimes it just sits and rots."

Marangu, Kilimanjaro: "During the rainy season the roads are impassable. We can't get fertilizer, we have to travel far. There are some private traders who come to sell fertilizer at the nearest town, but they don't bring enough for the whole area. The rich farmers manage to buy it all and the poor remain helpless. Improved seeds are also not available. We used to produce six bags of maize per hectare; now we get only one bag."

Ahakishaka, Kagera: "The village has experienced a large influx of refugees from Rwanda and with them has come food assistance. There is no perma-

nent market and the influx of food for refugees has lowered the price of maize because the Rwandans do not eat maize. So we are forced to sell to private traders at 3,000 shillings for 100 kg of maize rather than 10,000 before the food assistance surplus."

Tsamasi, Arusha: "The road which leads out of the village is very bad and there is no transport to Babati (district headquarters, 23 km away). So it is very frustrating to try and get our produce to the market. The rich provide tractor transportation, but they charge 500 shillings for a 100 kg bag of maize. I am forced to sell at a low price when I know if I could just get it to town I would get a fair price. During the 1993-94 harvest one bag of maize sold at 3,600 shillings in the village and 6,000 in town. A tin of beans went for 1,000 shillings in the village and 2,500 in town. We get many private traders here for the low prices and the poor have to sell to them. The worst is that sometimes these traders buy on credit."

non-farm income-earning opportunities. The markets are working in rural areas, but imperfectly, and improvements are needed—particularly in roads and low-cost transport—to help the poor take advantage of them.

- Improvements in and dissemination of basic farming technologies will benefit the poor disproportionately.
- Poor health and lack of access to effective health care facilities exact a high cost on the poor and have a direct affect on the well-being of individuals and families.
- When social problems appear nationally as the third most frequently mentioned cause

of rural poverty by rural people themselves, a social crisis is brewing. Once the social fabric of a society is ruptured, economic development cannot proceed.

- Female-headed households in rural areas are poorer than male-headed households and yet may be more productive in all their income-generating endeavors.

Methodological Implications

- The HRD and PPA studies arrive at similar statistics about overall levels of poverty. But the PPA captures some important gender differences and identifiers that are locally specific and relevant. The PPA approach, which yields data relatively quickly, has great potential as a method of monitoring poverty in conjunction with periodic expenditure and consumption surveys.
- While the income gini coefficient is an important measure of poverty, data problems over time make some of its implications questionable. More subjective measures of well-being create another level of data which can help to

Table 2.10 Vision for the future
(percentages)

Wealth category	Better	Worse	Same
Very rich	57	43	—
Rich	56	33	11
Average	42	49	9
Poor	34	54	12
Very poor	31	60	9
Total	39	51	10

better predict the “social temperature” of a nation.

- Household expenditure data captured in the HRD do not include expenditures on farming inputs. Yet these seem to be clearly different among wealth categories with

great implications for rural livelihoods. A sequencing of methodologies would be beneficial, with less extensive PPAs preceding HRD-type surveys, to ensure all appropriate categories are incorporated in the survey instruments.

CHAPTER 3

Inflation, Price Trends, and Coping Strategies

We are not living. We are just surviving.

— Women's group, Utende, Mtwara

Life is getting tougher and tougher. Prices are going up every new moon.

— A woman, Ulaga Kibaoni, Moragano

Inflation is often assumed to affect rural people less than urban dwellers. This chapter examines the impact of price increases on the lives of rural communities. It also explores coping strategies of the poor in dealing with food and water shortages, and how such strategies differ for women and men.

Tanzania's national consumer price index does not take into account prices of goods in rural areas. To better understand the issue of rural prices and trends, three tools adapted from the PRA family of methods were used. First, groups of people were asked to recount the prices of goods important to them at three points in time (1985, 1991, and 1995). Second, they were asked about situational trends—ranging from levels of rainfall and firewood availability to the status of women and employment opportunities—during the same time periods. Third, in a PRA activity called Seasonal Analysis, a calendar was drawn on the ground on a horizontal axis, with a list of categories of activities or events on the vertical axis. The variation in months was plotted

across rows (figure 3.1). The discussion focused on the ebb and flow of seasonal activities and the stress periods in people's lives. In addition, a household survey was conducted asking a series of open-ended questions to determine how much people knew about changes in government policies and about their sources of information.

Price Analysis

Based on responses gathered from the three exercises, tables plotting prices for basic commodities and services from 1985-95 were developed for each region (tables 3.1-3.4). The tables reveal high inflation rates, regional prices differences, and some gender and regional

Figure 3.1 Seasonal analysis chart

		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
Weather	Hot								••	•••	•••	•••	
	Cold					•••	••••	•••	••				
Maize	Prepare field										•••		
	Ploughing	•••	••••	•••	•••							•••	•••
	Weeding		••••	•••									
	Harvest						••	•••	•••				
Beans and groundnuts	Prepare field										•••		
	Ploughing	•••		•••	•••							•••	••••
	Planting			••	••								
	Harvest	•••	••••				••	••••					
Kahana	Insecticides	•••••	••••	••••	••••	••••							
Livestock diseases		••••	••••	••••									
Labor intensity		••••	••••	••••	•••	••	••	••	••	••	••••	••••	••••
Transport		••••	••••	••••	••••	••••	••••	••••	••••	••••	••••	••••	••••
Chicken pox										•••	•••		
Dysentery		•••	•••	•••	•••								
Market		•••	•••	•••	•••	•••	•••	•••	•••	•••	•••	•••	•••
Water available		•••	••	•••	••							•	••
Diseases		••••	•••	••••	••••	••							••
Drunkenness		•••	•••	•••	•••	•••	••	••	••	••	••	••	••
Hunger		••••	••••	••••	••••	•••	••						••••
Extension agent		•••	•••	•••	•••	•••	•••	•••	•••	•••	•••	•••	•••

Table 3.1 Price trends in Tabora, 1985-95
(in shillings)

Commodity	1985	1991	1995
Paddy (20 kg)	400	800	1,200
Exercise book	.50	10	50-60
Cooking oil (20 kg)	1,000-2,000	5,000	20,000
Soap (one piece)	30	50	100-150
Sweet potatoes (20 kg)	150	300	400
Sugar (kg)	50-100	250	500-1,000
Kerosene (ltr)	18	100	250
Bicycle	15,000	28,000	60,000
Secondary boarding school (per student)	1,500	8,000	15,000

Table 3.2 Price trends in Shinyanga, 1985-95
(in shillings)

Commodity	1985	1991	1995
Phosphate (50 kg bag)	250	1,500	not seen
200 kg cow	15,000	50,000	100,000
Water (20 ltr bucket)	not sold	20	50
Land rental (per acre)	free	1,500-2,000	3,000
Dagaa fish (in bowl)	50	100	150
Laundry soap (one box)	125	250	500
Piece of soap	50	70	100
Soda	70	100	150
Sugar (kg)	300	450	800
Maize flour	300	1,000	1,000
Cooking oil (ltr)	150	200	800
Hospital services	free	900-1,500	2,800

differences in the commodities central in people's lives. For example, the escalation in the price of fertilizer was mentioned most frequently in men's groups and in areas of high agricultural potential. In Mara the price of chemicals for animal dips was mentioned most often.

When asked why prices had gone up, people most frequently cited government policies: "Government economic policy changes are the reason for the increase in prices. Now there is no bureau responsible for controlling prices, so the consumer is no longer protected like ten years ago." The transport situation—poor roads and expensive transportation—was also often cited as causing inflation: "The people who benefit are the rich traders who come here and buy our goods, and sell them later when

Table 3.3 Price trends in Kilimanjaro, 1985-95
(in shillings)

Commodity	1985	1991	1995
Sugar (kg)	50	200	500
Meat (kg)	300	400	800
Kerosene	90	150	170
Beans (kg)	60	100	350
Maize flour	20	40	120
Cooking oil(kg)	100	200	800
Farming items			
Maize seeds (10 kg)	2,000	3,000	6,500
Fertilizer-urea (50 kg)	2,000	3,000	6,200
Farming land (one acre)	4,000	5,000	7,000
Building materials			
Iron sheet	800	1,200	3,500
Cement	700	1,800	6,000
Services			
Secondary school (per student)	free	700 w/uniform	4,400 w/uniform
Malaria treatment	—	—	2,000

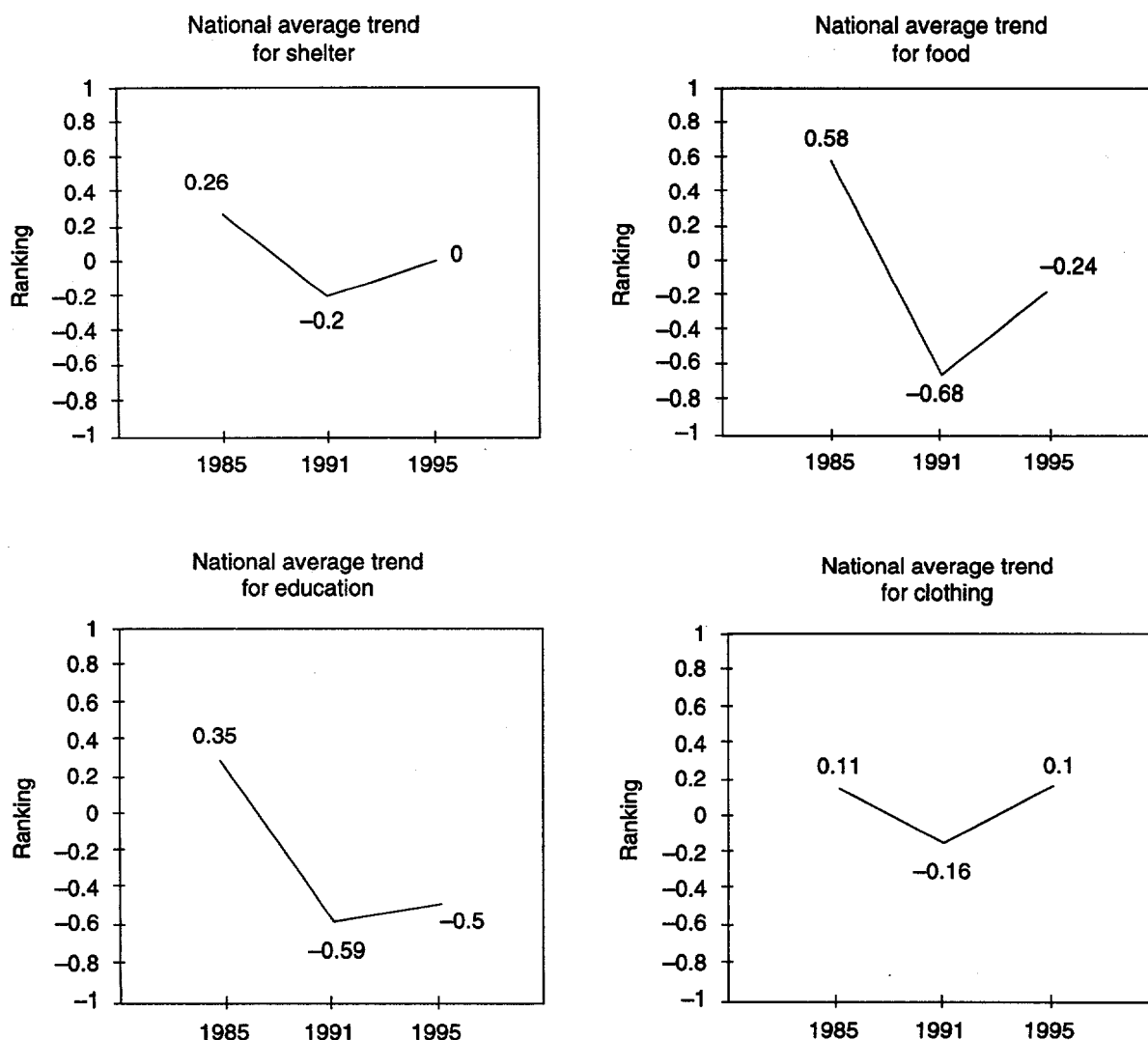
Table 3.4 Price trends in Kigoma, 1985-95
(in shillings)

Commodity	1985	1991	1995
Sugar (kg)	70	150	500
Kerosene (ltr)	15	60	420
Maize (tin)	150	500	1,500
Cooking Oil (ltr)	150	240	900
Beans (tin)	250	500	2,500
Cotton (kg)	40	60	90
Rice (tin)	50	100	300
Sorghum (kg)	5	30	250
Cassava dry (bowl)	1	2	10
Bananas (for beer making)	51	50	1,500
Meat (kg)	50	200	500
Khanga (Tanzanian)	250	1,200	2,800
Khanga (Kenyan)	350	1,500	3,500
Second-hand shirt	70	300	1,000
Second-hand trousers	150	300	1,200
Piece of cloth 1.25m	150	1,500	2,000

there are shortages at high prices, while we remain trapped in our villages."

In Shinyanga a villager reported, "Prices have increased because of devaluation of the shilling, high prices at the source, and increases in the price of consumer goods, while prices of

Figure 3.2 National upward trends reported in villages



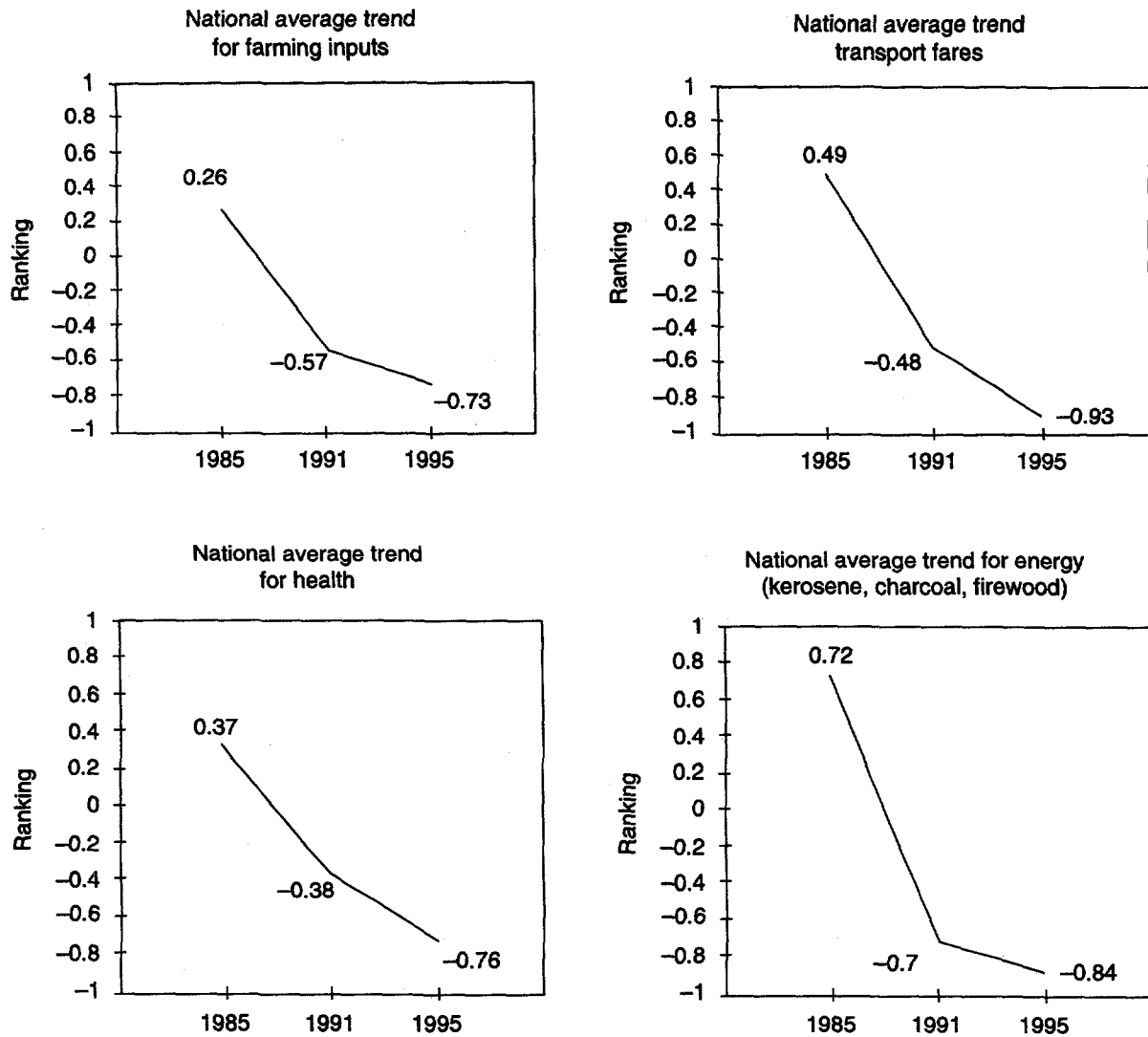
cash crops have remained stagnant." Rises in prices were also linked to higher cattle prices. In the same region, where ethnic groups are known to place a high value on cattle, a community member said, "In 1985 a 200 kg cow cost 15,000 shillings, and today it costs 100,000, so naturally everything else has to cost more." People conceded that inflation also meant higher sales prices for goods that they produced, but as mentioned in chapter 2 the poor felt that they could not take advantage of markets to the extent the rich could due to poor transport and distance to markets.

While people mentioned the removal of subsidies and dismantling of the cooperatives as central issues, their problem-solving strategies focused on improving rural infrastructure to increase competition rather than a return to direct subsidies of inputs.

Welfare Trend Analysis

The trends people reported in their welfare were plotted on a scale ranging from minus 1 to plus 1 (figures 3.2 and 3.3). These trends are based on a national sample covering

Figure 3.3 National downward trends reported in villages



16 regions. In general people had no problem recalling prices and speaking at great length about changes which affected their lives. Although the issues people focused on varied, some were common to most regions:

Positive Trends

The trends for basic household needs, food, shelter, clothing, education, and roads generally appeared to be improving or at least had begun an upward movement.

Take education. In several regions—Singida, Dodoma, Mtwara, Lindi, and Tabora—people reported an increase in the number of primary schools and the number of children attending them. In Mbonde, Mtwara, where a new primary school had been completed recently, a person said, “We now have a new school with teachers who have courage and are qualified and highly motivated. They have many incentives, like donations from students’ parents. So the students work hard. Every year, one child is selected to join secondary school.”

Box 3.1 Transport problems in Choma, Tabora

"In the old days, many roads surrounding our village were in good condition. Central and local government were very much paying attention to them. Based on that, the spirit of self-help was very high and people were contributing whatever they had in building or repairing roads. But nowadays the spirit has withered due to the central and local government failing to do their part.

"Two other problems have also emerged. Buses are no longer available. Instead pickups have taken their place. And because the price of gas has been increased, the drivers now charge whatever fare they want."

Although the overall trends for transportation were negative (see below), improvements in roads were mentioned in a few of the most isolated regions, particularly in Kagera, Mtwara, Coast, and Lindi. The availability and use of second-hand garments (*Mitumba*), including school uniforms for the poor, had eased the burden of clothing.

Negative Trends

People reported trends worse in several areas: transport fares and access to public buses, health, farming inputs, farming implements, and energy requirements (figure 3.3).

Three reasons were most frequently cited for the worsening transportation situation: bus fares had gone up dramatically, the "cooperative spirit" had died, and the government no longer maintained the roads (box 3.1). In Mwanza people reported that a bus ticket costing 300 shillings in 1985, cost 700 shillings in 1991 and 1,200 in 1995. In Mtwara bus fares from Utende to Mtwara had increased from 200 shillings in 1991 to 500 in 1995.

Health was another area of decline. Both men and women pointed to poor health status of individuals and the lack of accessible and affordable health care services. Three kinds of problems were outstanding: lack and high cost of hospitals and dispensaries; lack of medicine in health clinics and the high cost of

medicine when it was available; and widespread disease (particularly diarrhea and malaria) resulting from unclean and standing water (box 3.2).

People's explanations for negative trends in farming inputs and implements were similar to those reported in chapter 2—high costs or unavailability of fertilizer, insecticides, seeds, farming implements, and modern technology, and distant or poorly functioning markets and price fluctuations.

People in most regions reported more difficulty in meeting household energy needs with greater distances to travel for firewood and higher use of charcoal. In Choma, Tabora, one villager said, "Nowadays we have to travel far to get firewood. Land clearing, charcoal making, grazing, and browsing by animals has all resulted in the perishing of our trees and shrubs."

Box 3.2 Declining health status

Mtiti, Rukwa: "Ten years ago medicine was available and services were very good. We had one medical assistant and he had an aide. These services were provided free of charge. Pregnant women and children were treated here. Nowadays there is nothing, there is no medicine. If somebody becomes sick, he has to go to Laela on foot, and if it is a serious case we have to carry him on a stretcher because we have a transport problem. Also we have to pay for the health service, so a person without money just stays at home and dies. Even the witch doctors are after money."

Kasangezi, Kigoma: "Four years ago was the same as 10 years ago, except that medicines like tetracycline, metakelfin, and seprine were available. Today even where there are services, the medicines are rare and if you can get to the clinic on the right day, you are lucky because the medical supplies last only for two days."

Ulagu, Kibaoni, Morogoro: "Today there are more diseases, especially diarrhea, dysentery, and malaria during the rainy season and floods. Now there is AIDS along the Morogoro Highway."

Mwamanongu, Shinyanga: "In 1992 fees increased and bribing started in the hospitals. Today you have to pay 2,500 shillings first before a woman is allowed to enter to give birth. The situation is the hardest for women."

Later chapters detail such other trends as declining status and landlessness among women, particularly after divorce and separation; changes in crop production, including declining soil fertility and moving from cash to food crops (particularly in Shinyanga and Coast due to disease and low yields); difficulty in getting land for farming; and, to a lesser extent, decreasing employment opportunities in government-run enterprises.

Coping Strategies

The large majority of households in rural Tanzania engage in farming, and almost all agriculture is primarily rain fed. The fortunes of the rural poor, therefore, ebb and flow with the weather and the rains, with each season bringing its own stress and demanding distinctive coping strategies.

The most serious health problems occur during the rainy season, when water borne diseases and malaria become common (box 3.3). Everywhere the poor said, "If you are unlucky and fall sick during the clearing and planting season, you will face hunger that year."

Rainy Season Stress

Paradoxically, while farming depends almost entirely on the timing and amount of rainfall, the rainy season is also a period of acute stress for the rural poor (figure 3.4). For example, the seasonal calendar in Tabora shows that the rainy season is from January to June, but this is also a period of low food availability, low cash reserves, high disease outbreak, and high demand for labor on the family farm. If the rains are not good, people's livelihoods are threatened; but when the rains do come, they bring a host of related problems. Village reports developed through the PPA revealed the determination of the poor to do whatever it took to survive (box 3.4).

The onset of the dry season brings a different set of problems. In most areas, water availability became an acute problem during the dry

season even for those who had access to tap water during the rainy season. People coped with this water shortage in a variety of ways: by not bathing and washing; by getting the entire village involved in water fetching, sometimes from distances requiring a two to six hour walk each way; and, for those who had carts, bicycles, or donkeys, fetching and selling water to others for drinking and cooking. In Nyangili, Mwanza, people reported, "Water problems appear from late July to early October. At this time fetching water becomes a task for men because it involves getting up at 3 a.m. and coming back after the noon sun. In this period we use water only for drinking and cooking."

Similar problems were reported in getting firewood. People cope with wood scarcity by cutting down on cooking, by using maize stems and cobs for fuel, and by traveling farther to gather firewood. In Endaswold, Arusha, a person said, "You have to rent a car or tractor to collect wood because you cannot go on foot. Those who have money rent the tractor and those who do not make due with small pieces of wood and maize stock. It is a constant struggle." And in Kasangezi, Kigoma, a villager said, "Firewood is a problem throughout the year. Where we find firewood is about six miles from here. We start the journey at 7:00 in the morning and we will be back with a little firewood at 2:00 in the afternoon. This is our daily work."

Another common seasonal issue was stress in cash availability just before harvest, from August to September: "The problem is not labor availability but ability to pay laborers. Harvest time is also the deadline for paying taxes. So some people do not have the cash to pay the taxes. This results in poor people selling their poultry to pay their taxes" (Oldadai, Arusha).

Access to Water

The HRD survey recognized that the presence of an available water source is a poor measure of whether people actually have access to safe

Box 3.3 Coping strategies for food shortages

In village after village the PPA found that the poor resort to six basic strategies to survive—strategies which also ensure that the poor remain poor:

Piece work: Women, more than men, take on “piece work”—casual work on the farms of the rich in exchange for food and sometimes cash. Searching for such work results in short-term migration out of the villages. Spending time away from home to earn food to survive reduces the ability of the poor to develop their own farms, resulting in poor harvests.

Petty business: Those who have any cash or in-kind reserves turn to petty trading and beer brewing. Those who don’t have such reserves turn to nature—collecting firewood, or when feasible, making charcoal.

Changes in diet: Food substitution becomes common. In Mtwara and Lindi regions in the south peo-

ple dig up wild cassava tubers (*Mingiko*), while in Morogoro, people switch to eating leafy vegetables only.

Fewer meals: Reducing the number of meals is a common coping strategy. In general, the family eats its daily meal in the evening, so that they do not have to go to bed without “lighting a fire.”

Loans from traders: The poor also are forced to take out “food loans” at exploitative rates from traders. A bag of maize or sorghum (100 kg) typically has to be returned as three or four bags after the harvest.

Selling cattle: As stress becomes more acute, people must sell their livestock—unfortunately at a time when trade value is lowest. In Mwanza people indicated that one cow fetches just one bag of maize. In Shinyanga, people reported selling one big cow for two bags of maize.

water. The PPA study provided dramatic evidence to support this hypothesis.

The HRD concluded that only about 22 percent of the poor had access to safe water from protected sources, indoor plumbing, standpipes, and covered wells with hand pumps. The PPA collected information from the same villages, and people were asked about water access. In more than two-thirds of these “covered” villages, they mentioned lack of water as a major problem. Table 3.5 compares data from 13 villages across regions surveyed in both studies. Even though the villages had “improved” sources, people were forced to switch to alternatives in the dry season, usually un-

covered dug well, ponds, streams, and rivers. Seasonality and water quality were the most frequently mentioned problems. As water tables fall in the dry season, people are forced to walk further and switch to unsafe water sources of questionable quality.

Gender Differences

As noted in chapter 2, female-headed households were considerably more vulnerable than their male-headed counterparts. There were a number of factors leading to this situation, principle among them that women hold far fewer assets (land, houses, and livestock) than

Box 3.4 “It is disease that forces us into poverty.” Kweshwpo, Tanga

Oldadai, Arusha: “The main problem is disease in both humans and livestock. For humans malaria is a problem in April to July during the rainy season. The cattle usually get sick during the same period.”

Iloilo, Mbeya: “The main diseases which affect us are malaria and diarrhea during the rainy season. Measles is high during September and October.”

Langino, Ruvuma: “We cannot afford medical services. Sometimes we are able to get contributions

from relatives and friends to take the patient to the hospital or buy the medicines. So now we use herbs. For chest pain *Kitonge*, to cure diarrhea *Ngyelekana*, for eye problems *Lungala*, and other herbs for epilepsy.

Mbonde, Mtwara: “During the dry season, the drinking water problem is worse and we are forced to use the wells and water holes which are a source of abdominal disturbances” (women). “Cholera and malaria erupt and disturb people in May, June, and July. Tuberculosis normally occurs during the dry season” (men).

Figure 3.4 Seasonal calendar, Tabora

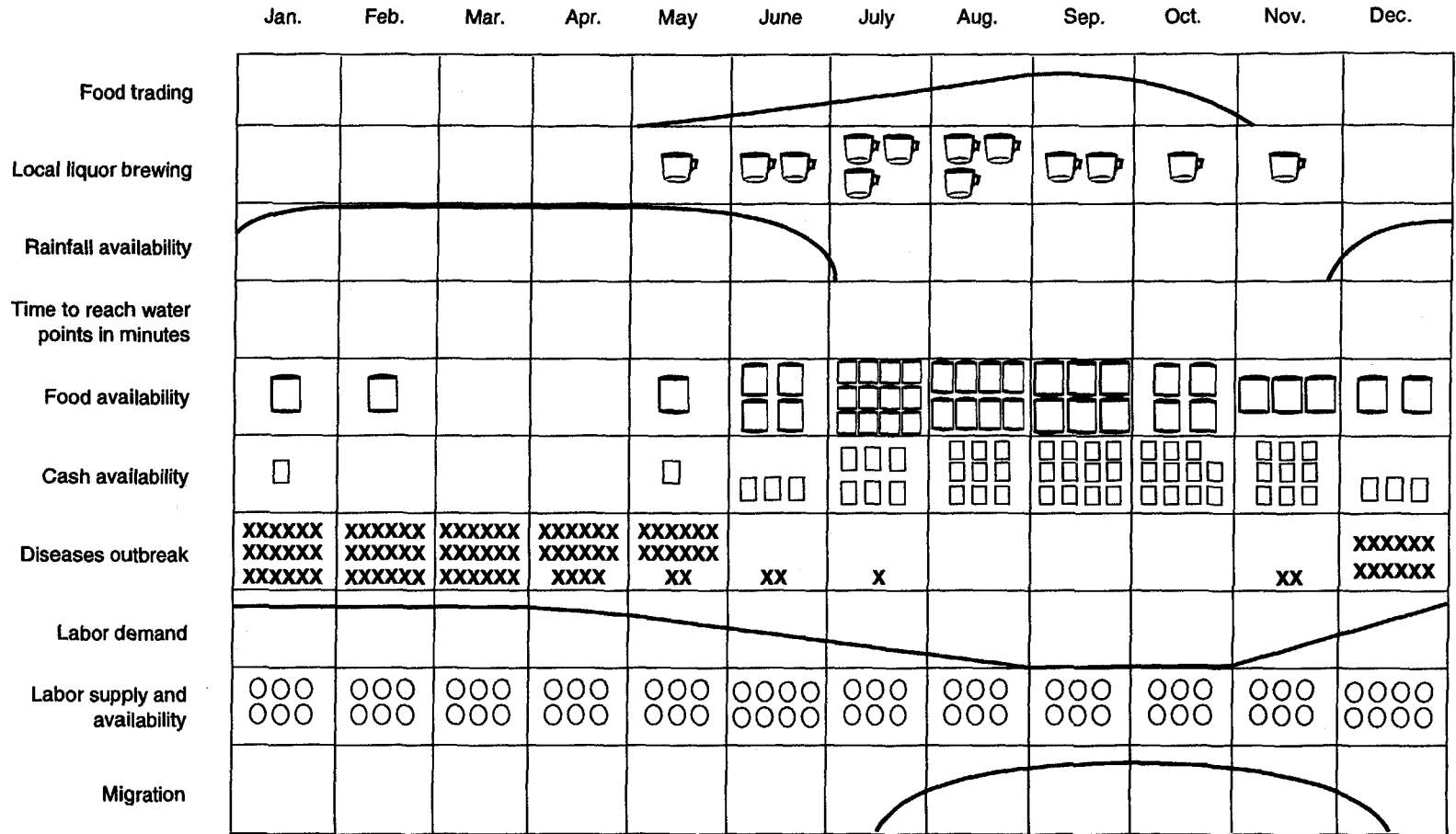


Table 3.5 Measuring "access" to water underestimates the problem
(percentages unless otherwise noted)

Village, region	Mean distance (kilometer)	HRD survey			PPA Sstudy		
		Water source			Water problem		
		Inside house	Stand post	Well with hand pump	Dry season problem	Water problem	Change in source
Mubula, Mbeya	0.3		100		X	X	Dug wells
Karaasi, Kilimanjaro	2.6	19	62	14		X	Use river
Silaloda, Arusha	2.0		4	88	X	X	Use lake
Nuangili, Mwanza	1.0		33	56	X	X	Use hand-dug wells
Disunyala, Coast	0.3		85			X	Tap water
Kasangezi, Kigoma	1.0		82	X	X		Use dug well
Mwashigsti, Shinyanga	2.0		18	59	X	X	Use river-dug wells
Kanga, Morogoro	1.0				X	X	Dig small holes
Korinto, Tanga	1.5	7	64		X		Taps dry

do men (Fong and Bhushan 1996, Mbughuni 1994, Rwebangira 1995).

Caroline Moser (1996) has pointed out: "Although vulnerability is often used as a synonym for poverty, the terms are not the same. Because poverty measures are generally fixed in time, poverty is essentially a static concept. By contrast, vulnerability is more dynamic: 'people move in and out of poverty' (Lipton and Maxwell 1992), and vulnerability better captures the processes of change. In addition, the concept of vulnerability introduces more complex aspects of 'livelihood security' relating to survival, security, and self-respect, as well as people's subjective perceptions of their poverty—what it means to be poor (Chambers 1989)."

A few important gender differences in coping strategies emerged across regions. Women had more detailed information regarding firewood and water collection. While the calendars women created as part of the PPA indicated scarcity of fuel in the dry seasons, men's diagrams often did not. In some regions women indicated they had greater cash availability very briefly right after the harvest, whereas men reported access to cash throughout the year. As a woman in Magata, Kagera, said, "Even when we raise and sell the crops, our husbands take the money. How much they give back to us depends on their mood."

Women also reported a great variety of informal work activities that they undertook to make ends meet. This was less frequently the case with men. See chapter 4 for more on gender differences and vulnerability.

Policy Implications

- Inflation has a direct impact on rural areas. The consumer price index should be based on prices in both rural and urban areas.
- Poor rural roads and lack of transportation affect the poor disproportionately because they do not have the assets to overcome transportation constraints.
- Lack of access to health care services increases the vulnerability of the poor.
- Female-headed households in rural areas have fewer assets and are more vulnerable than male-headed counterparts; they are likely to be more averse to risk and thus less likely to take advantage of market opportunities without a safety net.

Methodological Implications

- Information on prices and inflation that could inform policymaking can be obtained easily in rural areas by talking to the poor.

- Since poverty and vulnerability vary during the year, seasonal analysis quickly reveals policy-relevant information.
- Even an issue as well-studied as access to water can be misinterpreted unless questions probe seasonal differences and go beyond provision of services to issues of how well the system functions and how the water is utilized.
- The complexity and dynamics of poverty become apparent through understanding the coping strategies of the poor.

Gender Perspective: Development for Whom?

Men own everything because when they were born, they just found it like that.

— Kanazi village, Kagera

Significant differences between the perspectives of men and women are well documented. These perspectives are conditioned by cultural and social factors that eventually affect economic well-being. For this reason the differing perspectives of men and women need to be taken into account by policymakers, particularly in an era in which development policies are generally moving toward support of local demand, initiative, and willingness-to-pay.

This chapter highlights three issues. First, it demonstrates the differing priorities poor men and women have as a reflection of their different life experiences. Second, it highlights the importance of participatory research and data collection methodologies in uncovering such gender differences. For example, the primacy of food and water in the lives of women emerges through the use of open-ended data gathering techniques in the PPA but is generally missed in structured economic surveys. Third, it documents the prevalence of tradition and customary law and the role they play in impoverishing women upon separation, divorce, or the death of a spouse.

Gender Differences in Priority Problems

Expert planning is usually done from a sectoral perspective: educators conduct surveys to find the condition of services and willingness to pay for education; health care officials commission research on health, water officials on water. The perspective of the poor, however, is not sectoral in nature. Just as central planners are forced to make choices when resources are limited, those who live in a world of limited resources are forced to make tradeoffs every day to survive. Like planners, they also know that every problem cannot be solved simultaneously.

To avoid introducing a sectoral bias, an activity called Problem Identification was developed for use in the PPA. In this exercise, a set of 21 simple drawings was given to a group of men; an identical set was given to a group of women. Once the pictures were correctly identified, people were asked to discuss them and then through voting select the five most severe problems faced by the village.

The frequency distribution of the number-one problem by gender is presented in table 4.1. The different priorities of men and women are striking, reflecting their different world views and realities in rural Tanzania (Creighton and Omari

Table 4.1 National distribution of number-one problem by gender (percentages)

Problem	Men	Problem	Women
Transportation	28	Food shortage	21
Farming	22	Water	20
Drunkenness (crime, laziness)	15	Health	16
Health	10	Drunkenness (crime, theft)	16
Water	8	Farming	9
Deforestation/fuelwood	7	Transportation	4
Food shortage	6	Deforestation/fuelwood	4
Drought/flood	2	Drought/flood	3
Education	1	Labor (women, children, elderly)	3
Poor housing	1	Education	2
Livestock	0	Livestock	2
Labor (women, children, elderly)	0	Poor housing	0
Total	100	Total	100

1995, Rwebangira 1994, Ferreira 1994, United Republic of Tanzania and UNICEF 1990). For men the top-ranked problems were transportation (28 percent), farming 22 (percent), drunkenness (15 percent), health (10 percent), and water (8 percent). The most important problems mentioned by women were food shortages (21 percent), water (20 percent), health (16 percent), drunkenness (16 percent), and farming (9 percent). From the methodological viewpoint, the most striking lesson learned is that differences between men's and women's views are most pronounced at the highest level of problems. Differences are not nearly so pronounced on what are considered to be secondary problems, as indicated by table 4.2. When the top five problems are aggregated to give an overall ranking, gender differences disappear completely.

These findings highlight the importance of gender disaggregated data and the importance of talking directly to women to ensure that their perspectives and needs are reflected in development planning. This, of course, is eas-

ier said than done. Even in carrying out the PPA, the gender bias against including women was evident at every step. In recruiting research supervisors to act as regional team leaders, we were provided with a long list of men. Only when the study was delayed until qualified women were found did the search intensify; eventually a gender balance was reached. However, despite serious effort, the team included many more male field workers than female. This, in turn, led to more meetings and interviews with groups of men (87) than women (56), despite instructions to meet with both equally. As a consequence, the study's aggregated results from group discussions were biased toward the male perspective until the results were adjusted to compensate for the sample's gender imbalance.

Unlike the men—who cited the *process* of farming as their number-one problem (box 4.1)—women focused on the *consequences* of poor farming—low yields, food shortage, high prices, lack of cash, migration, and hunger (box 4.2).

Table 4.2 National distribution of number-two problem by gender (percentages)

Problem	Men	Problem	Women
Health	20	Health	25
Drunkenness (crime, laziness)	16	Drunkenness	14
Transportation	15	Food shortage	11
Farming	15	Water	10
Food shortage	7	Transportation	9
Water	7	Deforestation/fuelwood	9
Deforestation/fuelwood	7	Labor (women, children, elderly)	8
Livestock	7	Education	6
Education	3	Farming	5
Poor housing	3	Poor housing	3
Drought/flood	0	Drought/flood	0
Labor (women, children, elderly)	0	Livestock	0
Total	100	Total	100

Box 4.1 Giving life to statistics: men's voices

In the PPA men were more likely than women to cite problems of farming, farm inputs, and transportation. Almost everywhere, they also spoke of declining soil fertility. Among the responses by farmers to questions concerning problems they faced were:

Kigombe, Tanga: "The land is tired. In 1985 an acre produced 20 sacks of paddy, but now the same acre produces about 10 bags. In 1985 one could cultivate maize and be sure of harvesting all of it, but now only 1.5 acres are left after monkeys and wild pigs come."

Igombe, Mwanza: "In the past—4 to 10 years ago—we used to harvest 10 sacks of maize. Lately, we get only two sacks."

Kapewa, Rukwa: "Ten years ago we used no fertilizer because the soil was fertile and our yields high. Four years ago we did not use fertilizer even though there was a decline in the soil fertility. Now the fertility and yields are down even more and we still do not use fertilizer because it is not available. Also, the extension agents who gave us good advice have no inputs left."

Collecting Water Is a Woman's Job

Water collection is a woman's job, assisted by children, particularly girls. Men help in collecting water only when the circumstances are particularly harsh (such as when the water collection trip takes 6 to 12 hours) or when water can be purchased from a vendor and collected by cart or donkey. According to the HRD study, women spend six times the amount of time that men do on collecting water.

Water is arguably the most basic need for survival. According to the HRD study, only about 22 percent of the rural population had "access" to safe water from protected sources, indoor plumbing standpipes, and covered wells with hand pumps. Yet even this figure appears to overestimate access because the HRD did not measure and take into account reliability, quality, or seasonality of the source. In more than two-thirds of these supposedly "covered" villages (with 22 percent of the rural population, as noted above), people mentioned

lack of water as a major problem. Even though the villages had improved sources, people were forced to switch to alternatives in the dry season, usually uncovered dug wells, ponds, streams, and rivers. Seasonality and water quality were the most frequently mentioned problems. When tables fell in the dry season, people walked even farther and switched to unsafe water sources of questionable quality.

Studies demonstrate that when distance to the water source is greater than 200 meters, the quantity of water used sharply declines. This issue is seasonal. In most areas, even where

Box 4.2 "How can you face your children day after day, hungry?" Women's voices

Kazilamihunda, Kigoma: "The biggest problem in the village is that most of us cannot feed our children enough, both quantity and quality. This is because of our very low income, as well as laziness and the men spending what little we get on beer drinking rather than on food. There is also a shortage of meat and fish in this area. Because of this problem children are attacked by disease during the infant stage and many die."

Singida, Dodoma: "The problem is hunger caused by drought, laziness, and drunkenness. It is a very serious problem. How can you face your children day after day, hungry? To cope, we go to wealthier villages and do piece work, use drought-resistant varieties, plant fast-maturing crops, sell firewood, and do charcoal making."

Mititi, Rukwa: "Hunger is caused by infertility of land, non-use of fertilizers, unpredictable poor rains, hence poor harvests. The children are the ones who are most affected. The consequences are poor growth in children, stealing crops from people who have food, and selling our labor just to get food to eat."

Sanga, Mwanza: "The prices of goods keep rising day after day. Worst of all the prices of important commodities like cooking oil and sugar keep going up. Sugar now sells for 500 shillings per kilo. We try all kinds of things to get money: we sell local brew, collect firewood, and even grow tomatoes to raise our income."

Kashambya, Kagera: "AIDS has been a killer leaving many orphans. Most of the households in the village are headed by older women. There have been many deaths of parents in the last four years. The family size has grown with orphans."

there were pipe water systems, water sources dried up in the dry season making water collection an all-consuming challenge (box 4.3). In Mtwara, Coast, Tanga, Kilimanjaro, and Arusha lack of water was a severe problem. The last three areas lie in the north with high agricultural potential. During the dry season, water vending emerged as an industry, with men managing the water vending when a mode of transport was involved, and women taking the lead with head loading.

Gender Differences in Attitudes toward Social Problems

A number of social problems were mentioned by both men and women, among the most common: drunkenness and alcohol abuse. Other problems mentioned to a much lesser extent were laziness, crime, and drug abuse. Crime was mentioned both as internal breakdown of discipline and cross-border thefts, particularly in Mara (from Kenya) and Mbeya (from Zambia).

Women mentioned wife-beating to a greater extent than men. Both men and women said

wife-beating was closely related to drunkenness, and both said that sometimes women deserved to be beaten to discipline them for such behavior as rudeness, answering back, and not listening to the husband (box 4.4).

Where Is Education?

Some findings are important by their absence. Investment in primary education and human capital formation is an essential part of any long-term development strategy. Although it is well established that investment in women's education yields high returns—the HRD study concluded that increasing each household member's education by one year has a greater impact than increasing land holding by one acre per adult—in the PPA study investment in education by the poor, while mentioned, was not given the highest priority anywhere.

The rural poor in Tanzania have more immediate survival needs such as food, water, and health. They also are dissatisfied with the rising costs of primary education, the quality of education, the perceived low returns on investment in education, and the impossibility

Box 4.3 "The water problem is very serious." Butandula, Tabora

Oldadai, Arusha: "Women are most affected because they have to lose most of their time searching for water. During the dry season, from August to January when the springs become dry, we have to walk 2 km to Kishimbo to get water. When we reach there, we find that there are so many people lined up for water, it takes six hours to get one bucket of water."

Mtii, Kilimanjaro: "Water is scarce. There is only one stream which becomes dry during the dry season, June to September. The stream is about 1.5 km from here. Searching for water affects women and children, especially school children. When they come back from school they immediately have to leave to look for water rather than do their studies. You cannot build proper mud-brick houses because you need water. People have to buy water at 400 shillings per tank (200 liters)."

Butandula, Tabora: "The water problem is very serious since there are no wells, no taps, no nearby river, and there is drought much of the year. We

(men) use an ox-cart to carry water and some carry water on their heads from 7 to 10 hours away."

Msolwa, Coast: "We dig wells and small water holes to get water and at other times we use a small water pond 5 km away."

Mbonde, Mtwara: "Drinking water comes from local wells and water holes made by the villagers but the water is not safe. We dream of clean tap water. During the dry season the water problem is worse and forces us to drink unclean water. This causes abdominal disturbances. In the rainy season we use rain water and the problem is temporarily lifted."

Mwamonongu, Shinyanga: "There is a river passing through the village, but it is salty and it dries up from November to June. In the dry season, women have to buy water, which is very expensive: one drum of 20 liters goes for 50 shillings. But they have to buy, otherwise there is no place to get water."

Iloilo, Mbeya: "Water is available during the rainy season, but during the dry season our taps dry up. We have to go to the river to fetch water."

Box 4.4 "Once the husband is drunk, he beats the wife." Nsendakamoge, Tabora

Nsendakamoge, Tabora: "Men beating women is an extraordinarily common problem here. Once the husband is drunk, he beats the wife. Women get beaten when the husbands are drunk, and this happens all the time."

Mbula, Mbeya: "The clubs (bars) are open from the morning; men stay there all day boozing, abandoning their farm work."

Nsunsu, Singida: "Alcohol is a problem for everyone. People waste their time drinking rather than farming. A lot of food is used in the process. The village government has finally taken action by restricting the time people are allowed to drink. Those who break the rules have to pay fines."

Utende, Mtwara: "Wife beating is a family problem not to be discussed publicly. Sometimes the cause is that women are rude and arrogant with their husbands who beat them to discipline them. But some men are just oppressive and like to mistreat their wives."

of sending their children on to secondary school.

Why Girls Are Withdrawn from School

According to the HRD survey, the enrollment of girls drops as children move into higher grades at school. In the PPA study, when parents were asked if their children had dropped out of school, the answer was almost always "no." Further exploration revealed a pattern of periodic drop out of school to cope with economic stress rather than a permanent withdrawal. For example, parents pulled children out of school seasonally when there was insufficient food or cash to pay for school-related expenses. This pattern obviously undermines learning and the retention of knowledge.

In this process of pulling children out of school either temporarily or more permanently, girls were likely to be kept home for a variety of reasons (table 4.3). Overall, 20 percent preferred educating boys as they brought in income and were the guardians of the home. Educating girls was not considered as good an investment because they would get married

and leave the home (25 percent), might become pregnant (24 percent) or were viewed as a waste of money since they did not bring in an income (7 percent). Only 16 percent said they had no preference in whether a girl or boy should be withdrawn from school.

Female-headed Households: Doing More with Less

The PPA study found that female-headed households were less well off than their male counterparts at all levels as measured by subjective wealth ranking methods. But this finding was inconsistent with the HRD survey based on consumption and expenditures. Why?

The answer is in the data gathered for the HRD study which established that female-headed households had less land, less livestock, more dependants, and fewer major assets (watches, bicycles, radios). The PPA data confirmed the pattern of these findings—female-headed households appeared to do more with fewer assets through a range of coping strategies (box 4.5 and table 4.4), particularly petty trading. Hence, while their consumption patterns may be on a par with male-headed households, female-headed households remained more vulnerable because they possessed fewer capital assets and experienced social isolation.

Divorce and Women's Property Rights

The PPA findings also provided some insights into the main stress points in women's lives—

Table 4.3 Reasons for preferring to withdraw girls from school

<i>Reason</i>	<i>Percent</i>
Girls will get married	25
Risk of pregnancy for girls	24
No difference	16
Boys bring income	12
Boys are home guardians	8
Girls are a waste of money/no income	7
Other	9

Box 4.5 "We are not living, we are just surviving." Women's group, Utende, Mtwara

Msolwa, Coast: "When there is hunger and food shortages, we do piece work. We go very far—one and one-half hours each way to fetch water; then we try and sell it."

Utende, Mtwara: "If the rain is poor or too heavy, some of us do piece work; others go into the bush searching for *Mingioko*, root tubers like cassava. Five pieces sell for 10 shillings, so in one day we can make 100 shillings and have some left over for food. When we weed farms, we receive 20 shillings for a plot 10 meters by 20 meters after completion. When we cut firewood, we can sell one bundle of 30 pieces for 120 shillings. But now because the school is also doing this business it is difficult for us to find buyers. We also try and make coconut oil to sell. If the coconut oil is well prepared, it will sell for 350 shillings. Some of us collect traditional materials like *Makuti* and sell it to someone who is building or repairing a house. One piece sells for 5 shillings. Still, sometimes the children protest and refuse to go to school because they have not had a meal that day."

dissolution of marriage and widowhood. In principle women in Tanzania have equality before the law. But in practice division of property upon divorce or separation is primarily dictated by customary law and prevailing cultural norms which vary across regions. Often, these customs leave women destitute following divorce.

Table 4.4 Summary statistics on male- and female-headed households, PPA study

<i>Indicators</i>	<i>Male-headed household</i>	<i>Female-headed household</i>
Expenditure per adult (tsh)	230,362	206,208
Expenditure per capita (tsh)	157,896	152,042
Physical assets score	41.4	25.5
Family size	6.8	5
Age of head of household	44	55
Years of schooling	5.5	3.5
Percent literate	74	33
Expenditure on food (tsh)	89,779	84,388
Expenditure on health (tsh)	2,677	1,824
Expenditure on water (tsh)	3	0

Exploring Women's Property Rights

How property is divided after divorce or separation is a culturally sensitive issue in Tanzania, so it was explored through a visual gender analysis activity. A series of pictures was drawn and then adapted to different regions by two local artists. Three large pictures were laid on the ground—a man, a woman, and a couple. A group of men or women was then provided with 25 smaller cards depicting different assets, including children. The task they were given was to place each asset under the picture of the person who owns it while a couple is married. The process generated much discussion and immediate involvement. Once this sorting activity was completed, the group was asked "How are the assets distributed if there is a divorce?"

Ownership during Marriage

During marriage women have rights to use almost everything except those possessions a man identifies as his, either because he bought them or uses them exclusively. For example, in Butundula, Tabora, men said that the radio, bicycle, cattle, and house are owned by the man and cannot be used by others without his permission. The men also claimed spears, arrows, bows, beehives, and children because they had paid the bride price. However, they saw kitchen pots, ornaments, and vegetables as belonging to women because women either made them or were the primary users. A very similar pattern emerged in Mtwara where men are considered exclusive owners of fishing nets and boats (tables 4.5 and 4.6).

During marriage a woman owns her kitchen utensils, gourds, vegetables, necklaces, and bracelets as these are things she uses in her daily activities. In some areas this was specified further. So long as food crops and vegetables were for home consumption the woman had "ownership rights," but when there was a surplus, the men took possession. In other words women did not have the right to decide to sell anything or to keep cash from the sales.

Table 4.5 Ownership and distribution of assets upon separation/divorce, for Singida (Unyamikumbi and Nsunsu villages)

Assets	Who owns what during marriage			Who owns what after divorce		
	Man	Woman	Joint	Man	Woman	Joint
Land	X			X		
Children	X ^a	X ^b	X	X ^a	X ^b	
House	X			X		
Crops			X			X
Donkey/cart	X			X		
Goat/sheep	X			X		
Cow	X	X ^c		X		
Chickens	X			X		
Beehive/honey	X			X		
Radio	X			X		
Bicycle	X			X		
Furniture			X			X ^d
Hand hoe			X	X		
Kitchen utensils			X			X
Panga (knife)	X			X		
Personal clothing	X	X		X	X	
Baskets		X			X	
Decorations		X			X	
Necklaces		X			X	
Bracelets		X			X	
Sugarcane	X			X		
Fruit		X			X	
Vegetables		X			X	

a. Older than 7 years.

b. Younger than 7 years.

c. Owns cows milk.

d. Woman gets a few chairs she brought with her.

Distribution of Property at Divorce

When it comes to ownership of property following divorce, men were generally the winners and women the losers, with some regional differences. The impact on a woman and her degree of destitution was said to vary depending on her age, whether she had children, whether a bride price had been paid, whether the woman was seen to be at fault, her ethnicity, and the temperament of the kin network.

In most areas a woman lost everything in divorce and was said to be "lucky to leave with her clothes." The main reason: the man had paid a bride price and so owned her, the product of her labor, and any children they had produced (tables 4.5 and 4.6). Women some-

times got a portion of that year's crop but usually were asked to leave just with their personal belongings (box 4.6).

In Mtwara and Lindi both men and women reported some joint division of assets. In a few villages in Dodoma women and men reported that sometimes land was divided equally between them. In Nsunsu, Sindiga people said a cow's milk belongs to a woman because she milks the cow, but if the cow dies, the meat belongs to the husband.

Where Divorced Women Go

Leaving their marital home with nothing, few women have the luxury of setting up independent lives and starting over. Many first try to return to their parental home if

Table 4.6 Ownership and distribution of assets upon separation/divorce, for Coast (Disunyala village)

Assets	Who owns what during marriage			Who owns what after divorce		
	Man	Woman	Joint	Man	Woman	Joint
Land	X			X		
Children			X	X		
Huts/houses			X	X		
Arrows/spears	X			X		
Money	X			X		
Cows			X	X		
Donkeys			X	X		
Chickens		X		X		
Fishing nets	X			X		
Bicycles	X			X		
Radio			X	X		
Furniture			X	X		
Personal clothing	X	X		X	X	
Gourds (for water shortages)		X		X		
Cooking utensils/pots		X			X	
Baskets		X			X	
Necklaces		X			X	
Bracelets		X			X	
Coffee			X	X		
Cotton			X	X		
Maize			X	X		
Maize cobs		X		X		
Sugarcane			X	X		
Cassava			X	X		
Fruits			X	X		
Vegetables			X	X		

their parents are willing to have them (box 4.7). Parents give shelter to a daughter only if they perceive that she was clearly not at fault in the divorce. If the parental home is closed to her, a woman may turn to petty trading or prostitution and find temporary shelter wherever she can. In some villages a woman had been given a piece of land by the village administration in which she was born, "so she can settle down and look after her children."

Some women appeared to know that they had legal recourse to ensure fair division of property on divorce. The majority chose to avoid legal action, however, for a variety of reasons—most did not believe that the legal system would benefit them. As one woman

said, "It is tiresome for the legal process to reach conclusion; and there is a possibility that the woman can fail to get her rights. This is because the man can give a lot of money to all the people dealing with legal rights to make sure that the woman fails."

The younger and more educated women in some villages had chosen to fight their battles with the support of women's organizations. In a handful of cases these women received some of the marital property.

Widowhood Also Leads to Destitution

If a woman is widowed, her life prospects immediately change for the worse. Everywhere people said that when a woman is

Box 4.6 "A woman cannot own anything valuable." Bunazi, Kagera

Bunazi, Kagera: "A woman can't own anything valuable. On divorce or separation a woman can take a young child with her until he reaches the age of seven. Then she must return him. The children belong to the father. If she has no children, she gets nothing except what she brought when she got married."

Kapewa, Rukwa: "The man owns everything. He must get three-fourths of the crops because the children stay with him and he must feed them."

Disunyala, Pwani: "A woman is allowed to move out of the house only with baskets, cooking utensils, bracelets, and her clothes. In rare cases the clan may decide she is worthy of assistance and give her half the crop of that year's harvest."

Nsenda Kanoge, Tabora: "All the cows are left with the husband unless they have an older daughter who has gotten married and has brought in bride price. If the daughter was paid four cows, then the mother on divorce will get two cows. The children belong to the father, and if they are young, they go with the mother; the father will come for them at age seven. If the husband is not cruel, he may give her some of the food kept in storage."

Kigombe, Tanga: "If the fight has not been so bad, a woman may get a few more things, like a radio and a hoe, especially if the family is well off."

Kasangazi, Kigoma: "In this village men have the bad habit of chasing the women away after the harvest, so they can have a good sale for that year, and then try later to get them back."

widowed, she can stay on as a custodian if her children are young. This was the best case scenario for her. Even then, all property belonged to the children and she had no entitlement. Since the children were understood to have belonged to the father, the father's kin assumed his rights to "guard" the property and often the widow was thrown out or "encouraged to leave." Occasionally if the husband's kin were particularly kind-hearted, they let the widow stay on and cultivate a small plot of land.

Women reported that "If the woman has no children at the time of widowhood she is asked to leave immediately, sometimes blamed for the death, and even labeled a

witch. Relatives ensure that she leaves with nothing but her clothes." If a widowed woman becomes involved with another man while staying at her former husband's home, she is immediately asked to leave the family home. If the children are old at the time of widowhood, they have the power to state that their mother will continue living with them.

Policy Implications

- The priority problems of men and women, even in the same village, are often different because of their distinct roles and responsibilities. As development policies shift to support demand orientation, taking these

Box 4.7 "Even the father hesitates in welcoming her after divorce." Tella, Kilimanjaro

Tella, Kilimanjaro: "It is tragic for a woman, because when she comes back with nothing, even her father hesitates in welcoming her because she cannot inherit anything from the family. A divorced or separated woman will be buried at the church compound, not on her father's farm. In some areas they bury her at the boundary of the farm, as she has no place in the farm. The farm is for the sons."

Msolwa, Pwani: "For a woman it is a problem to start life afresh, because the parents are older and can't control their own lives. Sometimes women engage in businesses like selling food in the open markets, do piece work, or

prostitution. Many lacking education do not know their legal rights and end up moving with drivers of long-haul trucks along the Dar-Malawi or Rwanda roads. They come back when they get pregnant."

Kanga, Morogoro: "The parents will accept her only if she is thrown out and cannot be blamed for bad behavior and has not made a legal case and made more trouble and shame. If this happens the divorced woman will have a hard life. There are very few such women who can cope with life and maintain moral behavior. Many begin to prostitute themselves or beg from their neighbors."

gender differences into account becomes even more critical for success.

- For poor families primary education is not a top priority in the short run. Hence, policies that require financial contributions, even if associated with improvements in quality of education, are likely to prevent poor children from receiving even a primary education. Targeted scholarship programs may be needed.
- Despite the legal framework, women often experience isolation and destitution after divorce or widowhood because of the dominance of culture and traditional law. This is unlikely to change unless women are supported through local women's groups to claim a share of the household's capital assets.

Methodological Implications

- It is critical to gather gender segregated data to identify priorities for any demand-oriented interventions.
- A combination of quantitative and in-depth qualitative data is important in understanding the dynamics of family decision-making which determine how families cope with primary education costs and who stays in school and who drops out.
- How poverty is conceptualized and measured helps determine who is identified as poor and what policy remedies are applied. It is particularly important to capture gender differences in poverty, including those based on head of household in rural areas.

Constraints on Agricultural Productivity

Ten years ago we harvested ten sacks of cassava and eight sacks of maize per acre. Today, because of decline in soil fertility and rain and because we do not use fertilizer or improved seed, some of us get three or four sacks of maize while others harvest nothing.

— Farmer, Hingawali, Lindi

Why are so many Tanzanian farmers poor when land is so plentiful? The PPA study found that while the poor's access to land was an issue, the primary constraint was their inability to purchase agricultural inputs and implements to use the land productively. This constraint separates the country's rich farmers from the poor, making it one of the defining characteristics of poverty in Tanzania. This critical factor was not captured in the HRD survey.

The PPA study also established that the worlds of rich and poor farmers are strikingly different—in particular, the opportunities and challenges they face, even when both groups live in the same village and where the farming potential is conditioned by the same agro-ecological features. Similarly the farming worlds of female- and male-headed households are quite different.

To obtain information about the agricultural sector, the study used a variety of data collection methods and samples. Data concerning differences associated with wealth, gender of heads of households, and agro-ecological zones were drawn primarily from the household survey. While the overall picture that emerged from these diverse processes points in the same direction, the details vary.

More than 80 percent of villages identified the following as the most important constraints: credit, crop destruction due to pests and disease, lack of availability of implements, and price and availability of inputs. Other frequently mentioned constraints were markets, extension serv-

ices, and availability of land. Destruction of crops by wild animals emerged as an issue primarily in Tanga and the Coast region. Theft emerged in Shinyanga, Kagera, and Mara.

Table 5.1 reports constraints on agriculture derived from systematic content analysis of group responses. Since the impact of policy varies by poverty level and gender, the findings are discussed below within these two categories. Differences are highlighted where appropriate.

The World of Poor Farmers

Although there are overlaps between the lives of rich and poor farmers, the poor face many

Table 5.1 What villagers perceive as constraints to agriculture

<i>Constraint</i>	<i>Number of villages that highlighted constraints</i>	<i>Percentage of village that highlighted constraints</i>
Credit	65	89
Pests and disease	64	88
Availability of implements	63	86
Price of inputs	62	85
Availability of inputs	60	82
Drought	55	75
Marketing	50	68
Extension services	46	63
Availability of land	46	63
Price of implements	42	58
Delays in payments	24	33
Wild animals	19	26
Theft	10	14
Weeds	9	12

constraints not faced by the rich: lack of access to land and credit, the inability to afford the high cost of agricultural inputs, and difficulties in transporting their crops to market.

Land Availability

The land issue was explored in different ways. People were asked the reasons why they had migrated into their current village. Overall, 25 percent of the population had moved to their present village in the past 20 years. The most frequent reason cited for migration was land: 34 percent moved to purchase or rent land for farming, and another 14 percent moved to use clan land (table 5.2).

Responses differed by agro-ecological zone. The primary reason for movement into the Coast region was to find employment, while in the southern and western highlands, 50 percent of migration was associated with attempts to find new land. In the northern highlands where people reported the inability to get land as the most important constraint to food production, 23 percent of migration was for a land-related reason.

Of those who moved to rent or purchase land, 50 percent were poor or very poor. The

Table 5.2 Reasons for moving to current village

<i>Reason</i>	<i>Percent</i>
To purchase or rent land	34
To use clan land	14
<i>For employment</i>	11
To start business other than farming	11
Moved by government	9
To be near relatives	6
Refugees	3
Other	12

movements of the rich were primarily employment related. Those in the middle class (the "average") moved for both land and employment-related reasons.

Land Trading

There was no significant difference in reported ease of selling land between the rich (41 percent) and the poor (40 percent). Not surprisingly, there were differences between wealth groups in the ease with which they could purchase land. Overall, 41 percent reported that it was easy to buy land. This was more true for the rich and very rich (50 percent) than it was for the poor and very poor (41 percent).

The strategies the rich and the poor used to acquire land also differed. Among the very poor, 27 percent had no idea how they would acquire land, while the PPA study team encountered not a single case of a rich person who was unclear about this. The land acquisition strategies among the poor were slightly more diverse than they were among the very rich. These included inheritance, renting, being given land by the village government, and a variety of local agricultural processes such as crop-sharing, informal planting rights on land owned but not used by the rich, and opening of the bush.

The very rich reported using two primary strategies for gaining land: clearing the bush for new land (68 percent) and purchasing land (32 percent). The emphasis the very rich placed on clearing the bush was apparently due to their having mechanized equipment. Equip-

Box 5.1 "The good soil is lost." Butandula, Tabora

Butandula, Tabora: "Many people become poor because land exhaustion leads to poor production of both cash and food crops. Ten years ago, the land was fertile because people used only the hand hoe which does not cut deep into the soil and expose the nutrients. Now many people use the plough and cut deep into the soil, and the good soil is lost. There is also a shortage of livestock and so we do not have much manure to increase the fertility of the soil. Ten years ago, a bag of fertilizer was available and cost 550 shillings. Four years ago it cost 2,500 shillings. Today it costs 9,000 shillings."

Ulaya Kibaoni, Morogoro: "Maize production has decreased compared to 10 years ago. This is because of heavy rains which cause floods every time they come. Farmers do not have money for buying fertilizer."

Hingawali, Lindi: "Ten years ago we harvested 10 sacks of cassava and 8 sacks of maize per acre. Today because of decline in soil fertility and rain and because we do not use fertilizer or improved seeds,

some of us get three or four sacks of maize while others harvest nothing."

Silaloda, Arusha: "Land fertility has dropped a lot because of soil erosion. Ten years ago we used to harvest 17 bags of maize per acre. But now we get four bags per acre due to poor soil and unreliable rainfall."

Muleba, Kagera: "Some of our crops fail to grow or grow very badly because of lack of fertilizer, monoculture, drought, and tired soil. This has affected every farmer in the area. Most people don't get satisfactory food. This forces people to depend only on one type of food, bananas. So we are forced to buy food from other places."

Disunyala, Coast: "Ten years ago we grew a lot of cassava and cashew nuts, enough for food consumption and to sell. Today, there is not enough cassava to sell and the cashew nut trees are tired. We have no money to buy chemicals for the trees which are infested by pests."

ment makes clearing much easier than it is for the poor, who, at best, must use a small handled hoe or rent implements from others.

Use and Sources of Agricultural Inputs

As previously noted, the liberalization of agricultural markets began in 1985 and was speeded up in 1991 when the marketing of basic food commodities was liberalized. Prior to this, agricultural cooperatives and other government-managed or -supported corporations were the main sources of support in the agricultural sector. Almost everywhere, people reported declining land fertility (box 5.1).

Use of inputs. Nationally, approximately 20 percent of all Tanzanian farmers used fertilizers, agrochemicals, and improved seeds. Use of these inputs was lowest among the very poor and poor (11 percent) and highest among the very rich (33 percent) (table 5.3).

A number of barriers prevented farmers from using agricultural inputs, but the major one was lack of easy availability. The traditional source of agricultural inputs for Tanzanian farmers was the cooperatives. Now that

the cooperatives are being dismantled, however, they are no longer able to supply inputs at the same level. The private sector has yet to fill this demand so affordable inputs are not widely available. The PPA found important differences in input constraints among wealth categories. In the case of fertilizer, for example, the poor and very poor lack the financial wherewithal to purchase the input, but for the rich, lack of access was the key problem. Lack of availability was perhaps the only constraint felt by everyone. A fairly large number (15 percent) either did not know how to use fertilizer or believed that fertilizers were of no use (table 5.4).

Table 5.3 Use of inputs by wealth category, 1993-94
(by percentages)

	Fertilizer	Improved seeds
Very poor	11	16
Poor	16	13
Average	27	22
Rich	11	28
Very rich	33	—
Total	20	18

Table 5.4 Reasons for not using fertilizers (percentages)

Wealth category	Not easily available	Prices too high	Don't know how to use	No transport	No finance	Input of no use
Very poor	34	12	5	1	31	10
Poor	32	15	4	—	32	9
Average	39	14	4	—	19	14
Rich	45	18	2	4	8	6
Total	36	15	4	1	24	11

Fifty-five percent of all farmers obtained needed inputs within a radius of 3 km of their homes; 20 percent had to travel up to 10 km; 25 percent traveled more than 10 km to obtain inputs. Given the condition of roads in Tanzania and the lack of affordable public transport (except along major highways), these distances posed a major constraint on the ability of the poor to raise farm productivity through inputs.

Over the long run differential access to fertilizer is reflected in soil fertility. Both the rich and the poor linked the decline in soil fertility to declining use of fertilizer. When asked about changes perceived in the quality of farm soil, more than twice as many of the very poor (47 percent) reported large declines in fertility than did the rich (21 percent) (table 5.5). This interpretation is further strengthened when examining the distribution of reasons people gave for improvement in soil fertility. Among the rich, 21 percent linked it to the use of fertilizer, compared with 13 percent of the poor.

Source of inputs. Farmers used a variety of organizations to obtain different types of agricultural inputs (table 5.6). Although the cooperatives appeared as sources of fertilizer,

Table 5.5 Reported decline in soil fertility (percentages)

Wealth category	Declined a lot in 10 years
Very poor	47
Poor	34
Average	27
Rich	21

agrochemicals, and improved seeds for all income groups, primarily the rich received improved seeds from cooperatives. Private trade stores—which were used more by the poor than the rich—supplied more seeds than fertilizer or other agro-chemicals. In general, these stores provided inputs to the poor at high rates of interest. The Tanzania Fertilizer Authority (TFA) provided more fertilizer to the rich than the poor. In some parts of the country, donor-financed projects such as Global 2000 and other donor/NGO-financed activities aimed at small farmers were reaching the poor.

Table 5.6 Source of inputs by wealth category (percentages)

Wealth category	Source of input				
	Cooperative	TFA	Trader	Development	Other
	<i>Fertilizer</i>				
Very poor	1	22	18	59	
Poor	29	20	12	36	3
Average	41	15	18	26	
Rich	19	60	9	12	
Total	33	20	17	30	1
	<i>Agrochemicals</i>				
Very poor	56	17	13	14	
Poor	36	21	16	26	
Average	53	15	16	16	
Rich	28	61	11		
Total	46	21	16	17	
	<i>Improved seeds</i>				
Very poor	42	20	18	20	
Poor	27	23	23	27	
Average	33	24	20	23	
Rich	71	16	4	9	
Total	28	21	35	30	

Table 5.7 Source of credit by wealth category
(percentages)

Wealth category	Family, friends	NBC	Cooperative	Savings and credit societies	Trader/store	Private individuals	NGO	Other
Very poor	61	—	4	—	15	20	—	—
Poor	30	—	41	1	6	7	—	15
Average	22	2	56	1	7	9	2	1
Rich	33	—	67	—	—	—	—	—
Total	27	1	49	1	7	9	1	5

Credit for Agriculture

Almost 90 percent of all villages surveyed in the PPA mentioned lack of credit as a constraint in agriculture. Nationally, 7 percent of all farmers had borrowed money for agriculture in 1991-92 and 8 percent in 1993-94. The main source of agricultural credit for the 1993-94 agricultural season continued to be the cooperatives (49 percent) while the remainder was from private sources, family, friends, rich people, and traders.

There were some important differences in sources of credit among the different wealth categories (table 5.7). The very poor do not participate in any formal lending systems, including cooperatives. They either received credit from family and friends or at high rates from traders, trade stores, and private money lenders. The cooperative was the most important source of credit for better-off farmers.

Since the borrowing rate was so low nationally, people were asked why they did not use credit for agricultural purposes (table 5.8). The

Table 5.8 Reason for not using agricultural credit

Reason	Percentage
Not available	45
Not needed	20
Did not want to go into debt	12
Do not know how to get credit	11
Could not qualify	5
Was not aware of credit	2
Standard rates too high	1
Other	4

primary reason for not borrowing money was due to lack of availability (45 percent). Other reasons included not needing credit (20 percent), not wanting to go into debt (12 percent), lack of know-how about credit (13 percent), and inability to qualify for a loan (5 percent).

Again, there were differences by wealth. The poor were constrained primarily by lack of knowledge and lack of collateral to qualify for credit; the rich either did not need credit or felt it was not available. Overall, 78 percent of all loans reported were under 500 shillings, or less than US\$1.00 (table 5.9).

There were sharp differences among the reasons for borrowing between the rich and the poor (table 5.10). The very poor borrowed only to purchase seasonal inputs, fertilizer, agrochemicals, and seeds (100 percent). By contrast the rich borrowed primarily to hire labor to work on their land (69 percent).

Market Issues

In probing the issue of opening markets—the central feature of the agricultural reform process—the PPA study found that neither the

Table 5.9 Amount of money borrowed

Tanzanian shillings	Percentage
0-500	78
501-1000	1
1001-5000	8
5001-10000	4
10001-50000	8
50001-up	1

Table 5.10 Reason for borrowing
(percentages)

Reason	Very poor	Rich
Purchase seasonal input	100	31
Purchase tools, equipment	—	—
Pay for labor	—	69

poor nor the rich yearn for the state socialism of the past. However, the poor felt that they were at a decided disadvantage in the era of open markets due to their low bargaining power, lack of transport facilities, and inability to obtain credit. As a result, they were unable to exploit the advantages of open markets as the rich could. During the transition between the two economies, the situation of the poor may in fact be worsening. For example, although there has been a slight overall increase in the use of agricultural inputs from 1990-91 and 1993-94, the use of inputs has declined among the poor and increased among the rich.

Crops and marketing channels. Detailed information was collected about the most important crops grown and the marketing channels for each. Nationally, maize was most frequently named as the most important crop (34 percent) followed by coffee (18 percent), and cotton (11 percent). There are important differences by wealth (table 5.11). While 22 percent of the poor feel maize is their most important crop, the rich rank beans and pulses as

Table 5.11 Most important crops grown
(percentages)

Crop	Very poor	Rich	Total
Maize	22	17	34
Coffee	8	6	18
Cotton	13	11	11
Rice	6	8	7
Beans and pulses	12	21	7
Sorghum/millet	12	7	4
Cassava	9	6	4
Cashew	5	13	2
Tobacco	5	5	2
Other root crops	7	4	1
Other	1	2	10

being more important (21 percent). Root crops, cassava and sorghum were more important among the poor than the rich.

Markets. It appears that the rich are better able to take advantage of market conditions, for example in cashew. The rich seemed to have quickly moved out of cotton; people complained that marketing cotton at present was extremely difficult. The different abilities of the rich and the poor to take advantage of present day markets also was reflected in where people sold their crops (table 5.12). The rich—who deal in larger quantities and had greater access to transport facilities—sold primarily to private traders (51 percent). The poor sold primarily through local markets (39 percent), to other farmers (12 percent), to the cooperative (27 percent), and to private traders (15 percent). Group discussions revealed that whereas the rich farmers negotiated and set the prices when selling to traders in large quantities, the poor dealing in small amounts were forced to sell at lower prices. In one region, the rich were described as those who “set the prices” and the poor as “those who are forced to accept the prices set by others.”

All households reported a variety of marketing problems. Among the very poor and poor, given their subsistence farming, the most frequent problem mentioned was that the quality of the crop produced (maize) was too poor to sell. All groups reported the disincentive of low prices (table 5.13).

The constraints felt by the rich were different from other groups, since they were most able

Table 5.12 Where the most important crop was sold
(percentages)

Where sold	Very poor	Rich
Sold at local market	39	26
Another farmer	12	6
Cooperative	27	15
Small-scale processor	1	—
Private trader	15	51
Other	6	2

Table 5.13 Problems in marketing
(percentages)

<i>Problem</i>	<i>Very poor</i>	<i>Poor</i>	<i>Average</i>	<i>Rich</i>
Production insufficient to sell	42	34	32	26
Price too low	29	36	30	26
Transport problem/cost	8	9	15	22
Delay in payments	—	2	—	—
Could not find buyer at right time	—	3	3	8
Price too variable/risky to sell	5	5	5	13
Inefficient marketing	—	1	2	—
Poor crop quality	5	2	3	—
Other	11	8	9	4

to take advantage of markets. The constraints they reported were low crop production, low prices, transport problems, highly fluctuating prices, and inability to connect with buyers at the right time.

Extension Services

Tanzania's agricultural extension service generally is respected and the technical knowledge of its extension workers valued. Several districts have adopted the Ministry of Agriculture-sponsored training and visit (T&V) system.

People did report, however, a general decline in the quality of the service in terms of "corruption," being charged for advice, and a decline in the presence of extension workers. Despite this, most said that if extension workers were available, they would turn to them for advice. In their absence, farmers generally turned to other farmers in the locality, and the poor turned to the village leaders.

People were also asked when they last received a message from an extension worker. Only 17 percent nationally had received an extension message in the previous three months. Another 19 percent had received a message during the past year. Sixty-four percent of the population had either never received an extension message or had not done so for more than a year.

Table 5.14 Last message heard from extension worker
(percentages)

<i>Income</i>	<i>Within past 3 months</i>	<i>3 months to 1 year</i>	<i>1-2 years</i>	<i>2 years</i>	<i>Never heard</i>
Very poor	11	7	6	16	60
Poor	14	20	12	12	42
Average	20	21	16	13	30
Rich	14	18	25	8	35
Total	17	19	14	12	38

The very poor reported the least contact with the extension service. Sixty percent had never received an extension message. The PPA found that the extension service seemed to most often reach the average farmer and, to a lesser extent, the poor and the rich (table 5.14).

Outlook for Future Agricultural Operations

Farmers reported that their outlook for the future was optimistic despite the present period of rapid change and uncertainty. This was true for all wealth groups including the very poor. Forty-five percent expected to either expand or remain working at the same level; 37 percent anticipated reducing or stopping some operations; and 18 percent were uncertain about their future level of activity (table 5.15). Planned expansion areas were largely in food crops; planned reductions were in cash crops, particularly coffee. This was true for all groups except the very rich.

Table 5.15 Outlook for agricultural operations
(percentages)

<i>Outlook</i>	<i>Very poor</i>	<i>Poor</i>	<i>Average</i>	<i>Rich</i>	<i>Total</i>
Remain same	8	12	15	15	14
Start new enterprise	3	2	2	3	3
Expand	36	24	30	31	28
Reduce	12	10	9	9	10
Stop	17	31	20	26	27
Uncertain	24	20	24	15	18

The World of Female-headed Households

Overall, 13 percent of rural households were headed by women. The size of female-headed households tended to be smaller (5.1 people per household) compared with male-headed households (6.8). Female heads of households had significantly less education (2.8 years) than their male counterparts (4.5 years). Among female-headed households, the number of adult years of education in the household (3.8 years) was also lower than in male-headed households (4.5 years).

Sixty-eight percent of female-headed households reported agriculture as their primary activity, as opposed to 76 percent of male-headed households. More women declared themselves as farm wage-laborers or self-employed in a variety of trading and mass production activities. This was reflected in women's reasons for moving out of their own villages. The primary reason for migration among male-headed households was land-related (45 percent), while among female-headed households the primary reason was to seek employment (40 percent) or land (25 percent).

This demographic background should be kept in mind when assessing agricultural data. The data reported here draw upon interviews with women who were heads of households rather than women farmers in all households. The differentiated access to agricultural inputs, markets, and sources of information between female- and male-headed households is striking (table 5.16).

Use of Agricultural Inputs

The use of all inputs was lower among female-headed households. While levels of use remained relatively stable among male-headed households, as prices increased use dropped dramatically among female-headed households. This was especially true for fertilizers and agrochemicals; use of improved seeds remained at its low level throughout the 1990-91 and 1993-94 periods.

Table 5.16 Gender differences in use of agricultural inputs (percentages)

	<i>Female-headed households</i>	<i>Male-headed households</i>
Use of fertilizer (90-91)	10	24
Use of fertilizer (93-94)	3	22
Use of agricultural chemicals (90-91)	14	25
Use of agricultural chemicals (93-94)	6	24
Use of improved seed (90-91)	4	21
Use of improved seed (93-94)	4	19

Source of Inputs

While cooperatives generally remained an important source of inputs in the 1993-94 agricultural season, female-headed households reported much less use of cooperatives and the Tanzania Farmers Association than did their male counterparts. Instead, they were reached by development projects of NGOs and church groups (table 5.17).

Distance to Inputs

The general lack of availability of agricultural inputs affected male and female farmers alike. Women in rural areas, however, were generally much more restricted in their physical mobility. While 27 percent of male-headed households traveled over 10 km to purchase inputs, only 5 percent of female-headed households did so.

Reasons for Not Using Inputs

The primary reason for lack of use of inputs among female-headed households was lack of financial resources (46 percent), compared with 30 percent of male-headed households. This confirms earlier findings that female-headed households had fewer capital assets than male-headed households and were judged by themselves and by community groups as poorer than male-headed households.

Table 5.17 Gender differences in source of input
(percentages)

Category	Tanzania Farmer				
	Cooperative	Assoc.	Trader/store	Development project	Other
Fertilizer					
Female	21	20	22	37	—
Male	29	24	19	28	—
Agricultural chemicals					
Female	18	33	—	48	—
Male	41	26	18	24	1
Improved seeds					
Female	—	35	19	46	—
Male	31	20	26	23	—

Sources of Information

Both men and women were asked about the many changes sweeping the country (table 5.18). A surprising number of people had heard about changes in the political system. However, they were most knowledgeable about changes that directly affected their lives. This included cost-sharing or user fee policies in education and health care.

Both men and women rated radios as their most-used source of information (33 percent). Other sources mentioned were neighbors (18 percent); newspapers (13 percent men, 8 percent women); village leaders (12 percent); groups (9 percent); and trips into town (7 percent men, 3 percent women).

Table 5.18 Gender differences in being informed about political change
(percentages)

Issue	Female	Male
Multipartism	17	23
Trade liberalization	5	7
Cost-sharing for education	22	19
Cost-sharing for health	28	24
Agricultural development	10	8
Increase in bus fare	14	15
Parliament	1	2
Other	3	2

Sources of Farming Advice

Men and women turned to different people with their farming problems (table 5.19). Women were more likely to seek out family members than were men. Men were much more likely to first turn to extension workers for guidance.

While female-headed households had contact with extension workers, it was generally less so than men. Sixty-one percent of women had either never had contact with an extension worker or had no contact for more than two years, while among men the percentage was 46 (table 5.20).

Women also had greater difficulty in buying land or getting credit, although both women and men agreed that the difficulties were because of social and cultural practices rather than law. Both men and women were concerned about environmental degradation and said that "bush clearing" was the single most

Table 5.19 Gender differences in sources of farming advice
(percentages)

Gender	Spouse	Other family member	Farmer in village	Village leader	Trader	Extension worker
Women	2	38	17	13	—	30
Men	5	14	20	8	1	52

Table 5.20 Gender differences in last contact with extension worker (percentages)

<i>Last contact</i>	<i>Female</i>	<i>Male</i>
Within past 3 months	13	17
3 months to 1 year	15	22
1 to 2 years	11	15
More than 2 years	12	11
Never had contact	49	35

destructive practice. More women than men reported overgrazing and monocropping as practices having detrimental effects on the environment.

Policy Implications

- Improved rural infrastructure, particularly rural roads and low-cost public transport, is essential to the effective functioning of markets.

- Poor farmers need access to durable low-cost implements and advice on sound farming practices.
- Despite much dissatisfaction with their performance, the cooperatives still remain the most important source of inputs, particularly for the better off. It is important to encourage competitive private sector provision.
- The farming world of female-headed households is quite distinct from male-headed households. Gender sensitive strategies, such as those used by some NGOs and church groups, are important in reaching households headed by women.

Methodological Implications

- Once again, the findings reveal the critical importance of marrying quantitative approaches with the kinds of open-ended inquiry methods used by anthropologists and participatory practitioners.

CHAPTER 6

Social Capital

The prosperity in our village has increased. Before, the two tribes in our village used to be divided. Now they belong to the same group which brings them together. No two people have the same intelligence or resources, so when people come together they can solve many problems.

— Village resident, Mararoni, Arusha

Does social capital—the prevalence of norms of “civic-ness” and the vibrancy of horizontal ties in associational life—make a difference in household welfare? After two decades of research in Italy, Harvard University political scientist Robert Putnam concluded that the most important determinant of government performance and regional prosperity was social capital.

Does this hold true in developing countries? Does the contribution remain significant even after controlling for the effects of physical, human, and natural capital? Is the relationship causal, that is, does higher social capital build prosperity, rather than the reverse? And, if social capital is indeed a key determinant in household welfare in developing countries, what are the policy implications?

This chapter looks at social capital in Tanzania, and the magnitude of social capital’s impact on incomes. The chapter also shows some of the ways social capital affects incomes: better public services, greater use of modern agricultural inputs, more community activity, and greater use of credit in agriculture.

Measuring Social Capital

Social capital is the rules, norms, obligations, reciprocity, and trust embedded in social relations, social structures, and society’s institutional arrangements which enable its members to achieve their individual and community objectives.

This broad definition of social capital subsumes both social capital at the micro-institutional level and the rules and regulations

governing economic interactions in the marketplace. Social capital differs from human capital in that it is relational, embedded in social structure, and has public good characteristics. “As an attribute of the social structure in which a person is embedded, social capital is not the private property of any of the persons who benefit from it” (Coleman 1990).

The greatest potential contribution of the concept of social capital is that it adds a social dimension to the development equation of

capital that has been mostly ignored in economic explorations of determinants of poverty and household welfare.

Social Capital at the Community Level

Communities are not simply geographic entities but social entities. The behavior of individuals within a cohesive group is governed by implicit and explicit sets of norms and expectations which build up with repeated interactions. Over time these norms and expectations become part of the pattern and stability represented by informal and formal organizations.

In the past few decades Tanzania has experienced social upheaval (through the nationwide village Ujama program in the 1970s), economic decline, and a drastic structural adjustment program. Against this backdrop of instability, the PPA study sought to define and measure how rural communities assess themselves in terms of trust, unity, and spirit of participation, and how they relate to and assess the function of formal and informal village-level institutions. In other words, the PPA attempted to understand how social capital had

been impacted, and how that may, in turn, have had an impact on household welfare.

Trust, Unity, and the Spirit of Participation

The psychic and transactional costs of interacting with people we trust is lower than the costs of interacting with someone we distrust. Trust and trustworthy behavior are, however, culturally determined. When levels of trust are low among a group, associational activity and collective action are inhibited.

Trust and trustworthiness that increase the chances of exchange among people without written contractual obligations. Instead people rely on expectations of mutual obligation, honesty, reciprocity, mutual respect, and helpfulness. In this environment, if there is a perceived need, cooperative action is more likely to occur than when trust is low among people living in the same village (box 6.1).

Trust over Time

People were asked a series of questions to gauge their levels of trust in various groups

Box 6.1 Trust and trustworthiness

The PPA study teams asked people to describe what trust meant to them. People's responses focused primarily on adjectives describing qualities in an individual's openness and kindness: keeping someone's secret; truthfulness without tricks; talks well with others; does not misuse public utilities; a person whose behavior does not lead him to violate agreements; when two people believe in each other; trust means soul; to respect people; state of being confident with someone; no cheating; an act of helping someone who normally helps you; to be rewarded with respect by another; people who live in peace and help one another; ability to take care of public property; returning other people's property when you have borrowed it and not taking it without permission; having no favorites; faith in others and in oneself; when someone is given something to deliver and they deliver it safely; someone you can turn to for help.

People were also asked to describe a trustworthy person and his or her characteristics. The descriptions

focused most often on measures of relations. Descriptions included the following: a custodian of other people's money; someone who is not a thief and will deliver things safely to someone without interference; someone who loves others as much as they love themselves; the one who respects others and is respected by the village; someone who does not use abusive language, who speaks with others in a good manner and advises them in good directions; someone who helps others with their problems; someone who keeps his or her word; ready to tell the truth even if it endangers someone else's interest; a person who pays back what has been given by others; one who believes in transparency; one whose lifestyle is known; a hard worker; a person with good discipline; someone who you give something and who pays it back; someone who meets obligations; someone who fulfills promises, has a settled mind; one in whom people can be confident that he will not cheat cooperative properties; someone who trusts in god and has love for everyone.

Table 6.1 Are there more or fewer people you can trust now?

<i>Level of trust</i>	<i>Percentage</i>
Fewer	76
Same	9
More	15

starting with the family and moving through tribesmen, village chief, central government, and strangers.

Overall 76 percent said that there were fewer people whom they could trust today than earlier (table 6.1). Forty-three percent attributed this decline to greater economic difficulties, while 35 percent spoke about a decline in values—increasing corruption, greater selfishness, and lack of wisdom. Another 11 percent focused on the increasing lack of youth discipline (table 6.2).

During the past several years there had been a consistent trend toward decline in trust of different groups (table 6.3). As expected, family members were the most trusted and strangers the least trusted. People valued extension workers as important sources of information but gave them a low trust rating because, in some areas, government extension workers had “privatized” their services and provided advice only to those who could pay a fee.

Of all service providers traditional healers were the least trusted (28 percent), followed closely by cooperative officials (23 percent). It is interesting to note that traders are less

Table 6.2 Reasons for declining trust

<i>Reason</i>	<i>Percentage</i>
Life more difficult	25
Greater economic problems	18
Decline in values, corruption	13
People more selfish	11
Youth indiscipline	11
Loss of belief in God	8
Hunger	3
Lack of wisdom	3
Many newcomers	2
Other	6

Table 6.3 Change in trust toward different groups (percentages)

<i>Group</i>	<i>Four years ago</i>		<i>Now</i>	
	<i>Low</i>	<i>High</i>	<i>Low</i>	<i>High</i>
Family	3	66	3	59
Fellow tribesman	1	27	3	20
Cell (ward) leader	—	30	3	25
Village chairman	3	29	5	21
Extension worker	9	22	15	17
Health clinic nurse	3	29	6	23
Traditional leader	19	15	28	10
District officials	6	17	9	12
Central government officials	6	22	10	16
Cooperative officials	11	19	23	9
Traders	8	11	13	7
Strangers	22	11	32	5

trusted now than four years ago, which is largely explained by growing monopolistic practices by traders in remote areas where competition is constrained by poor roads and lack of transport.

Village-level Unity

People were asked to rate the level of unity of their village now compared with four years ago (table 6.4). Overall, 46 percent rated their current level of village unity as high, compared with 71 percent four years ago. The number of villages reporting increased tension and quarrels had more than tripled, from 4 to 14 percent.

The increased tension was also evident from people’s perceptions of declining security and increased crime in the villages. Half of the respondents (51 percent) reported high levels of insecurity and crime in their vil-

Table 6.4 Ratings in unity of the village (percentages)

<i>Unity rating</i>	<i>Four years ago</i>	<i>Now</i>
Extremely united	23	13
United	48	33
Average	25	40
Some quarrels and conflicts	3	12
Great tension/conflicts	1	2

lages. Once again, the primary reasons given were increased economic insecurity and poverty (48 percent), laziness (18 percent), and increased influx of strangers (7 percent). In many areas, however, associational activity involving security guards had increased to combat crime in the absence of government police forces.

The decrease in unity had yet to kill the "spirit of participation" in the villages. Overall, 78 percent rated their villages as average or above average in the spirit of participation on a five-point scale. People were also asked if the village undertook any local development activities collectively. An overwhelming number (89 percent) reported they did. The two most frequent activities were building schools (34 percent) and repairing roads (32 percent).

Associational Activity

Every village had formal and informal organizations, groups, and networks. In Tanzania formal organizations include the village office and chief, the cell or ward leader, the CCM (the political party at the time of the study), UWT (the CCM-affiliated women's organization), schools, health clinics, hospitals, cooperatives, primary societies, shops, churches, mosques, the police, and the marketplace.

Villages also have a range of informal village groups and networks, including: rotating credit societies (Upatu), women's groups, men's groups, youth groups, sports clubs, elder groups, security guards, burial societies, and cultural and dance groups.

Institutional Mapping

A complex picture emerged in the PPA about village-level associational activities and the role they play in people's lives. Data were derived from three sources. The first involved discussions with groups of men and women using Venn diagrams (figure 6.1). In this technique, participants drew circles representing the village's key formal and informal institu-

tions, the size and centrality of the circle indicating the relative importance of the organization, group or institution in people's lives. Overlapping circles indicated interaction with other associational activities. Information about village-level institutions was cross-checked with key informants, primarily the village leaders. Detailed information about membership and characteristics of groups was also obtained through a household survey questionnaire.

Overview of Associations

On average, people belonged to 1.5 groups. Overall, 71 percent of the people interviewed for the household survey belonged to at least one group; the maximum number of group memberships for an individual was seven.

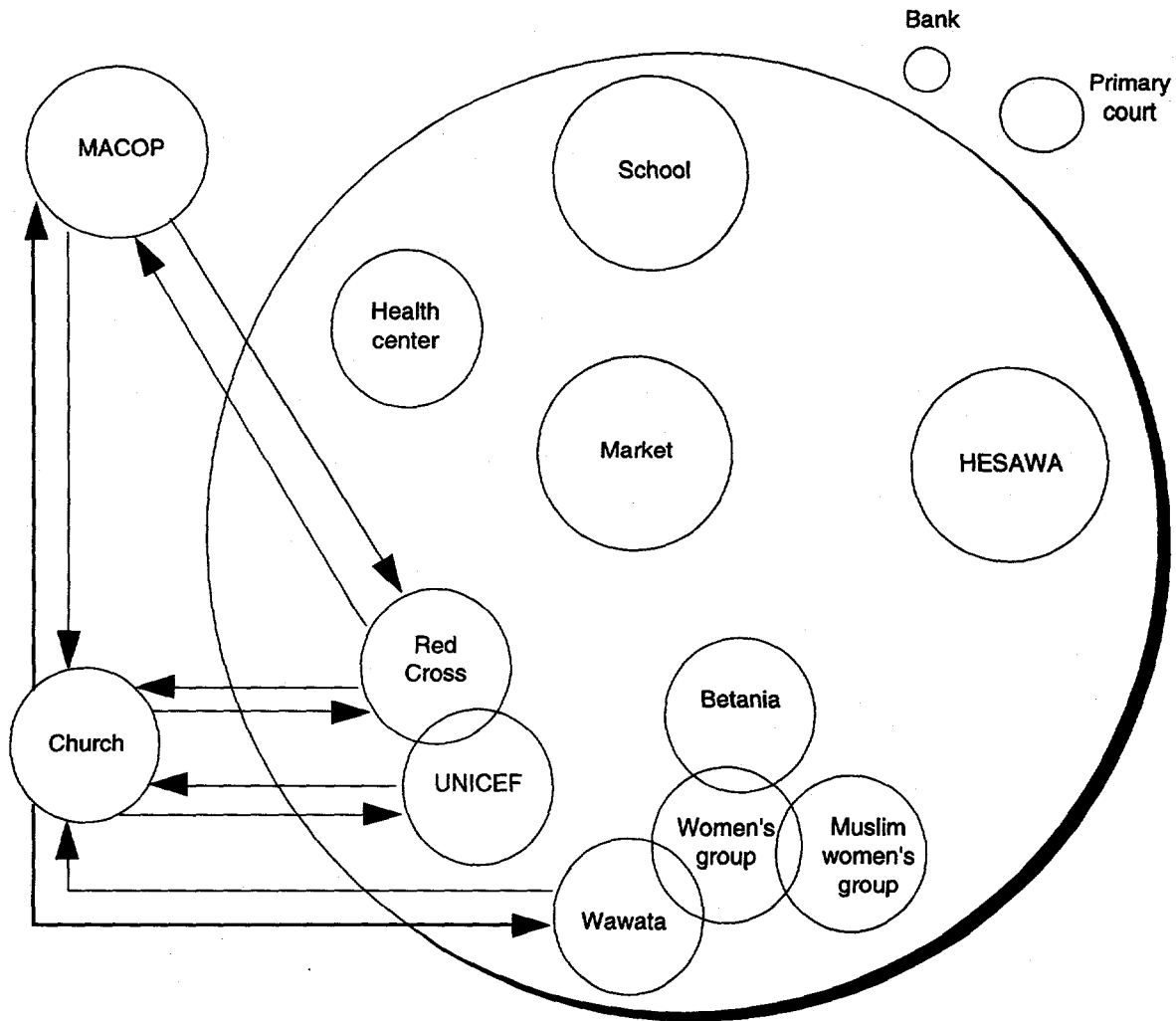
Membership was the most common in the church (21 percent), the CCM (17 percent), burial societies (15 percent), Moslem groups (9 percent), and women's groups (9 percent). Schools and health facilities were conspicuous by their absence (table 6.5).

Fifty-six percent reported that membership had increased in groups. Only 10 percent reported the functioning of groups as poor or very poor, while 64 percent rated group functioning above average. A small percentage perceived groups as receiving assistance

Table 6.5 Membership in informal and formal groups and associations

Group type	Percentage reporting membership
Church	21
CCM (political party)	17
Burial society	15
Muslim group	9
Women's group	9
Farmers' group	8
Youth group	7
Primary society	4
Cooperative	2
Rotating credit societies	2
Dairy/cattle	1
Other	5

Figure 6.1 Venn diagram of Bunazi village, Kagera



Note: Wawata, Roman Catholic Women's Group; Betania, Lutheran Church Women's Group; MACOP, International NGO for Orphans; HESAWA, Danish-assisted Water Program.

from outside the village. The most frequent outside supporters of community activities were NGOs (45 percent), church organizations (19 percent), and the government (19 percent).

Most people (72 percent) reported that there was at least some overlap in membership between groups, indicating increased interaction among people engaged in different activities (table 6.6).

Why Do People Join Groups?

Membership in a group, participation in its activities, contributing resources in-kind, and payment of fees all impose costs on members. In times of increased economic hardship, it would be expected that membership would decline. Yet in Tanzania, membership in at least some groups is increasing, both among the poor and the wealthy. Why?

Table 6.6 Overview of associational activity
(percentages)

Questions	1	2	3	4	5
Has membership declined (1), same (2), increased (3)?	17	27	56	—	—
How are groups functioning, 1 = very poor; 5 = excellent	2	8	24	48	18
Does group receive outside support? NGOs = 1; government = 2; church = 3; foreign donors = 4; federation = 5	45	19	19	5	1
Degree of overlap in membership, 1 = no overlap, 2 = little overlap; 3 = much overlap	28	39	33	—	—

The importance of groups in people's lives was probed in different ways. Six types of groups were most frequently mentioned (table 6.7). If people could join only one group, the frequency distribution was as follows: church, farmers' groups, burial societies, mosques, women's groups, and the political organization CCM. Among female-headed households, the church received the most mention (35 percent), followed by women's organizations (24 percent). Among male-headed households, the church also was most frequently mentioned (24 percent), followed by farming groups (14 percent) and burial societies (15 percent).

Many people (44 percent) joined groups for emotional support, encouragement, a sense of belonging, for consolation during misfortunes, and to feel important. Direct economic support or advantage (including credit and marketing opportunities) was mentioned by 29 percent of the respondents. Thirteen percent joined

Table 6.7 Groups important to people
(percentages)

Group	Most important group in your life at present?	If you could join only one group, which one would it be?
Church	29	24
Burial society	19	14
Mosque	11	8
Farmer's group	8	16
Women's group	5	8
Political organization	10	3

Table 6.8 Why people join groups

Reason	Percentage
Economic support	25
Brings people together, belonging	19
Strengthen religious beliefs	13
Provides consolation	11
Provides encouragement, emotional support	8
To share information, ideas, news	8
Makes one important	6
Provides credit	2
Provides marketing opportunities	2
Other	6

groups for religious support. Another 8 percent mentioned sharing news and gaining access to information (table 6.8).

People reported disadvantages to group membership as well (table 6.9). The most frequent disadvantages mentioned were waste of time (18 percent), poor group skills and management (12 percent), costs and fees (10 percent), delay in profit-sharing (8 percent), and poor information flow (7 percent).

Types of Groups

If you engage yourself in many groups, how are you going to work? One needs to survive . . . But if you don't join a group how can you cope with a difficult life?

— Villager, Tabora

The Venn diagram technique yielded rich insights into history, structure, functioning, and variation among groups over regions. In general, the number of groups reported in a village

Table 6.9 The disadvantages of group membership

Disadvantage	Percentage
Waste of time	18
Poor group management and skills	12
Costs, fees	10
Misuse of funds by leaders	10
Delay in profit-sharing/payments	8
Poor information flow; members not kept informed	7
Other	31

was larger than the average number of groups to which a household belonged. On average, villages reported having seven groups within their community. The region of Kagera, bordering Rwanda, Burundi, and Uganda, had both the village with the least number of groups (two, the church and burial society) and the village with the largest number of groups (20, including several international agencies sponsoring work with refugees and AIDS).

Throughout the country, membership was increasing in church groups, mosque groups, youth groups, and burial societies. Groups whose membership was declining were agricultural cooperatives, informal credit societies, and groups for the elderly. In some areas, membership in the CCM was reported to be declining.

Women's groups were plentiful, but had a mixed record of growth and decline. Those functioning well or associated with the church were reported to have increasing membership while others were declining because of poor leadership and misuse of funds.

Church groups. By definition, churches are open only to Christians. In Tanzania's villages church membership can be as small as 30 people or as large as 300 (box 6.2). The main purpose of the church was reported as: to provide spiritual direction and instruction; to strengthen one's belief in God; to have faith; to pray. While some church groups provided no specific material

Box 6.2 Roman Catholic Church in Utende, Mtwara

The Roman Catholic group has 35 parishioners. Church members work 2 two acres of maize and millet to support church activities. Income from the crops is deposited in the National Bank of Commerce.

All church members can participate in the choir group, which now has 15 members. The choir tends 1.5 acres of millet and maize which earns the group 6,000 shillings a year. Loans are sometimes made to choir members who are experiencing family or health problems.

support to members, most churches did offer assistance to the poor and needy. In Kagera, a region afflicted with AIDS, the church gave orphans basic food and second-hand clothes.

Women's groups. Tanzania has a variety of women's groups. The most prevalent, UWT, was aligned with the official political party prior to the advent of the multiparty system (box 6.3). Another type of women's group focuses on economic activities, including gardening, salt making, small animal raising, tailoring, and other microenterprise activities such as beer brewing, rotating-credit societies, and tree planting. A third type of group focuses on religious, cultural, and social activities, and provides emotional support. These include a variety of church and mosque-related women's groups, burial societies, traditional women's groups, and cultural, dance, and entertainment groups. Some of these, including the burial societies, incorporate economic functions.

Burial societies. Every village shares one group in common: the burial society. Burial societies help people cope emotionally and financially with the "calamity of death." Sometimes church or mosque groups perform the function of burial societies. While there are no fees, all members provide support to perform the burial rites when a member dies. One villager said that "for a relative you pay 100 shillings, and for community members you pay 50 shillings or contribute what you can—goats, cows, firewood, sugar, oil, wrapping cloth." In many places, people reported increasing membership to "cope with the expenses of death."

Burial societies clearly divide labor based on gender. Men dig the graves, collect the cash and sometimes the firewood, and send messages to relatives. They are also responsible for raising contributions if necessary to buy the coffin and other items needed for burial. Women contribute and cook the food (ugali, maize flour, cassava, and millet) and draw the water for the ceremony. Consoling the family takes place ritualistically for three to five days. In Kibondo, Kigoma, people reported that men

Box 6.3 Women's groups

We help any member of the group when they fall into problems; we provide consolation to the one who has a problem.

— UWT women's group, Butandula, Tabora

Women's groups provide a variety of services, including emotional, social, cultural, and economic support activities. Following are some illustrations:

Kisangiro, Arusha: All married women automatically belong to this group when they wed. There is no fee for membership. The leader of the group is selected by the members based on her good behavior since childhood. The main activity is to educate girls not to become pregnant before marriage. The group also prepares and sends food to the "youth warriors" who have the responsibility of preventing raids on the village's cattle. The group is also responsible for building a traditional church and mobilizing special prayers.

Ulaya Kibaoni, Morogoro: This group brings women together to cooperate on securing and keep-

ing their rights vis-a-vis their husbands and the government. The group has a farm which generates 8,000-10,000 shillings a year. This income is used to expand the farm and to help members in need. The group has 35 members and imposes an entry fee of 100 shillings.

Nyakasanda, Kigoma: This group describes itself as "a tree planting group." There is no fee, but everyone has to contribute seeds and animal manure. The group started in 1994 sponsored by KIDEP which gave us seeds; at that time there were 20 members but now there are only 10. The group said it was trying to solve the firewood problem. Currently it gets firewood from the neighboring country, Burundi, 6 km away.

Mindda, Dodoma: This salt-making group restricts its membership to 20 people to keep its logistics simple. Every member pays a small entry fee, and each has specific duties to help manage daily activities around the salt ponds.

"stay with the dead person for five days if the dead person is a man and four days if the dead person is a woman."

Sungusungu or traditional security guards. One of the unexpected discoveries from the PPA was the presence and importance of Sungusungu groups in many areas, particularly Tabora, Sindiga, Dodoma, and Mara (box 6.4). These groups are often linked to youth groups, and, in the absence of effective police forces, they have become an important village institution "to combat crime, theft, and increasing distrust." The groups patrol the villages to reduce theft of crops, livestock, and household belongings. Occasionally the activities extend to stopping witchcraft by chasing away people identified as witch doctors (figure 6.2).

Youth groups. Youth groups were common throughout the country and primarily geared toward young men. The groups sometimes formed part of a larger organization such as a political party, church or mosque groups, traditional cultural groups, or stand alone recreational groups, such as football clubs. While they covered a range of activities, youth groups

were considered training for good citizenship (box 6.5).

Other formal institutions. Links with external organizations were noted, particularly in association with mission hospitals. In Kagera and Kigoma UNICEF-supported activities received

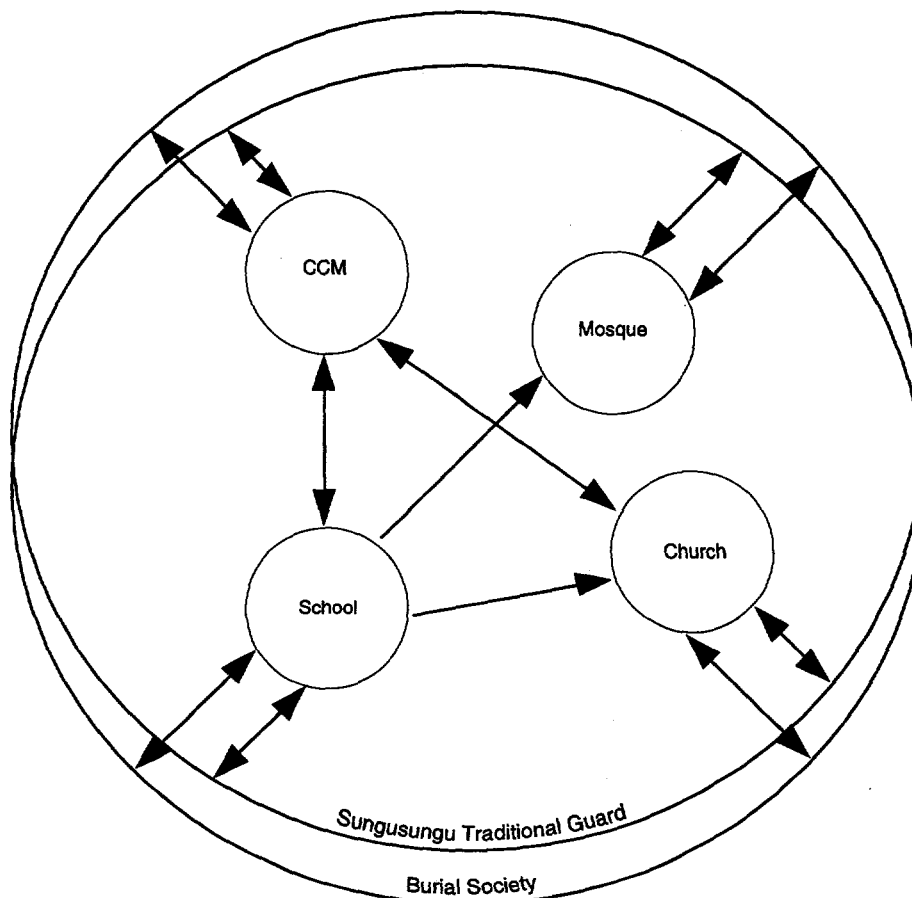
Box 6.4 The evolution of security groups in Butandula, Tabora

All men and women in the village above age 20 are required to join the security group. The young are responsible for security and at night patrol the village to make sure that there people are not loitering around. They are also on guard against witches, whom they chase out of the village if found.

The women take turns preparing food for the guards every evening before the patrols begin. They also assist in tracing and giving reports to the guards on who is a thief and who is a witch.

There are many advantages to the Sungusungu besides security. According to villagers, the security group provides discipline for local youth. As they become involved in security work, they no longer turn to theft, and the death rate goes down. While no one is paid; village leaders sometimes give guards in-kind contributions.

Figure 6.2 Venn diagram of Nsungu, Singida



frequent mention; in Shinyanga, it was Cargil and Oxfam. In the Arusha area small farmers' groups were linked to Global 2000 and FAO-financed projects. Other village-level institutions mentioned were schools, health dispensaries, village courts, markets, hammer mills, wells, and dipping tank groups.

Econometric Analysis

The broad working hypothesis underlying the PPA study was that household welfare is a function of human capital, physical capital, natural capital, access to markets, and social capital.

Household welfare was measured by consumption and expenditure per adult equivalent in the household (Ravallion 1992, 1996, Ferreira and Griffin 1995). Human capital was

measured by the average number of years of schooling for males and females age 20 in the household. Physical capital included household assets and access to markets, which was measured by presence of roads and proximity to markets. Agro-ecological zones were the only measure of natural capital.

Based on the literature, the study assumed that levels of generalized trust and reciprocity preceded the emergence of voluntary groups, although increased participation in groups and associational activity obviously feeds back into higher levels of trust. Through the household survey, people rated their degree of trust in others, ranging from family to strangers, on a five-point scale at two moments in time.

The rich descriptions obtained by the PPA study reveal how trust and associational activ-

Box 6.5 Profiles of Youth Groups

Mararoni, Arusha: "A football club began in 1984 with 18 members; now it has 38. Six men started the club when they asked the village officials for assistance with buying a football. The officials agreed and supervised the club, but it did not do well because it lacked resources. In 1994, the club decided to become independent so as to mobilize resources from members to buy uniforms and balls. The members now make all the decisions and the club is rapidly expanding."

Kamsekwa B, Tabora: "The youth group is very important because it brings all the youth together and informs them of all kinds of activities. It improves

the interaction among the young people in the village. It mobilizes funds from cultural shows, contributions by members, and farming activities."

Utende, Mtwara: "The group started six months ago with six members—one woman and five men. A membership card costs 200 shillings, and annual fees are 100 shillings. The group started with the purpose of sharing ideas and doing business together. So far we have been engaged in poultry raising and we now have 13 hens. Some of the members are also members of the village mosque group. We are saving every shilling because we have plans to obtain a milling machine."

ity play an important role in people's social, emotional, and economic lives. They reveal that trust, the number of people considered trustworthy, and the nature and importance of particular groups change over time. In other words, like other forms of capital, social capital as measured by associational activity can be created, but it is not permanent. Social capital gains or loses value over time depending on how people use and invest in it.

Since social capital is embedded in the social structure, it was measured primarily at the village level, with much less attention paid to social capital ratings of individual households. A Social Capital Index was developed to capture both the extent and nature of associational activity in a village.

The Data Sets

Does social capital have economic payoffs? To answer that question, the PPA used econometric analysis drawing on two data sets:

- The Social Capital and Poverty Survey (SCPS) segment gathered data on associational activity collected from 87 villages comprising 1,376 households.
- The second data set was derived from the household consumption-expenditure data borrowed from the 1993 HRD survey of a representative sample of 5,000 households in Tanzania.

The HRD study was particularly rich in data about village-level social services and household preferences for such services. The PPA's SCPS was conducted using the same clusters used in the HRD study. Data were entered coded in such a way that exact matching of clusters (villages) was possible from the two data sets.

Within each cluster, 15 households were selected to match the households from an earlier national agriculture survey using random sampling conducted in the same clusters. In addition, up to five non-agricultural households were randomly selected and added to broaden the sample.

The Social Capital Index

The study developed a Social Capital Index inspired in part by Robert Putnam's work in Italy. The Index is an arithmetic average of both the number and characteristics of groups to which a person belongs. The result is more a measure of the nature of groups than purely the extent of associational activity.

The survey queried household respondents about three dimensions of social capital: first, their membership in groups; second, the characteristics of those groups; and third, individual values and attitudes, particularly in light of respondents' level of trust in various groups and their view of social cohesion.

For each group in which individuals reported membership questions were asked about that group's characteristics in several dimensions relevant to its contribution to social capital, including:

- Inclusion of non-kin or non-clan members
- Inclusion of members from different economic groups
- Leadership deriving livelihood from the same activity as members
- Overall functioning of groups
- Extent of membership fees and sanctions
- Degree of participation in decisionmaking
- Membership by birth or other criteria.

Using the data on the frequency of membership and the characteristics of groups, an index of the village associational life (a proxy for social capital) was created. The survey also explored the role of social and civic norms and the degree of trust individuals felt toward social groups such as family, village or tribe, and government authorities at local, district, and national levels.

Other Variables

The key dependent variable was household expenditure per adult equivalent, a proxy for household income. The analysis included among household characteristics the levels of schooling of all adult males and females in the household. Other variables were the total number of household members adjusted for full residency and household servants, gender of the head of the household, self-employment in agriculture, and the distance of the village to the nearest road and market (used as a proxy for market integration).

A household assets index was created by assigning weights to a set of household items (sewing machines 20; bicycle 16; radio 8; table 6; clock, watch, or bed 4; chair 3; lamps 2). The items received half the score if they did not work. Originally a weight of 400 was assigned to motor vehicles, but because very few were observed, they tended to dominate the variation; eventually, it was decided to arbitrarily reassign them the same score as a bicycle. The

results of the econometric analysis are discussed in detail in *Cents and Sociability* from which the rest of this section draws directly (Narayan and Pritchett 1997).

Results

Analysis of the data using regression analysis leads to the following conclusions:

- Social capital is indeed both *capital* (in that it raises incomes) and *social* (in that household outcomes depend on village and not just household social capital).
- The effect of social capital on incomes is impressive: a one standard deviation increase in village social capital increases household expenditures per person (a proxy for income) by at least 20 to 30 percent; by comparison, a one standard deviation in schooling—almost an additional three years per person—increases incomes by only 4.8 percent.
- The impact of social capital is due to village-level effects and not to wealthier households having higher social capital.
- Some of the proximate channels through which social capital affects income: better publicly provided services, greater use of modern agricultural inputs, more community activity, and greater use of credit in agriculture.

The coefficient of the village-level Social Capital Index is empirically large and strongly statistically significant. In other words, households in villages with higher levels of social capital have significantly higher expenditures than households in villages with low levels. But while the association is large and strong, is the relationship causal? That is to say, does higher social capital lead to higher incomes, or vice versa?

To establish the direction of the causality of the relationship, the analysis had to demonstrate three things:

- The effect is social. Higher incomes are attributable to village-level social capital and not to the social capital of particular households.

- Higher social capital causes higher incomes and not the reverse.
- The relationship is not due to the incidental association of both social capital and higher incomes with some other variable.

Is Village- or Household-level Social Capital Critical?

Two compelling strands of evidence establish that the effect is social, and not simply due to the fact that richer households have more leisure time to participate in associational activity.

Table 6.10, column 1 shows the result of regressing household expenditures (a proxy for income) on the social capital of the village (excluding the household's contribution to village-level social capital) and on the household's social capital. Again, the quotient for the village-level social capital is large and statistically significant; for the household's own social capital, however, the quotient is insignificant. In other words, almost all the effect is due to the village-level social capital and almost none to the household's own social capital. This finding is especially compelling because most of the variation in the Social Capital Index occurs across households in the same village and relatively little is due to village variation in social capital.

The second, even more compelling way to demonstrate the social nature of the impact is by testing if the same relationship holds true for different sets of households from the same villages. If the effect is because of the village-level social capital, then other households in the same village should similarly benefit from the village-level social capital.

Because of the sampling framework, it was possible to repeat the same equations using the HRD survey expenditure data on 15 different households and other demographic and village characteristics with the village-level social capital SCPS data. Column 2 of table 6.10 shows the results of regressing household incomes from the HRD survey on social capital from the SCPS using instrumental variables estimation.

The estimated impact is almost exactly the same using HRD incomes as using SCPS data for both incomes and social capital. That is, the village level social capital derived from aggregating the social capital of households interviewed in the SCPS has exactly the same impact on the incomes of other households in a village (surveyed two years previously) as on the incomes of the original set of households. This is like finding that one household's land or asset ownership is important not only for its own sake but for its neighbor's as well. It is hard to overstate the importance of this finding as it implies that at least some significant fraction of association life creates capital that is locally social.

Determining Causality

To tease out the direction of causality, a procedure known as instrumental variable analysis was used. To estimate the impact of shifts in social capital, instrumental variables use the correlation between social capital and another instrument which is not determined by—and does not directly determine—income. This eliminates the difficulty of simultaneous determination of income and social capital and identifies the effect of social capital on income. The drawback to this approach is that one must have valid instruments, and even more important, that the validity of an instrument depends entirely on theoretical arguments about the structure of the model, since the “identification” assumptions cannot be directly tested.

In the PPA study trust was posited as the instrument that was not directly affected by household income and which did not affect income directly, except through social capital. In other words, greater levels of household trust did lead to greater village-level social capital or associational activity of an inclusionary nature. As mentioned before, trust was measured both qualitatively and quantitatively through ratings on a five-point scale of the degree of trust that an individual felt toward different groups in society. The instrument set included: trust in tribesman, trust in cell leader,

Table 6.10 Household expenditures per person and social capital, comparing village- and household-level and using HRD survey data for incomes

Column	1	2	3	4
Source of data	SCPS	Human Resource Development Survey		
Level of data	Household	Cluster	Household	
Type of estimation ^a	OLS	IV	IV ^b (A)	IV (B)
Cluster-level social capital	0.084	0.208	0.193	0.227
	1.10	2.56	2.31	1.71
Household-level social capital ^c	-0.020			
	0.526			
Household size	-0.077	0.019	-0.080	-0.079
	7.61	1.04	10.5	10.3
Average adult schooling ^b	0.019	-0.057	0.021	0.021
	1.43	1.42	2.87	2.79
Female head of household (1=yes)	-0.041	0.345	-0.009	-0.010
	(0.448)	1.19	0.150	0.173
Asset ownership (ln) ^b	0.253	0.245	0.143	0.143
	4.40	3.88	5.26	5.20
Self-employed in agriculture (1=yes)	-0.193	-0.325	-0.068	-0.069
	2.36	1.19	1.69	1.68
Distance to nearest market (cluster) ^b	-0.0036	-0.004	-0.0087	-0.0087
	0.243	1.05	2.21	2.21
Agro-climate zone dummies ^d				
Regression statistics				
Number of observations	846	84	1,505	1,505
Adjusted R-squared	0.215	—	—	—
First stage incremental R ²	—	0.092	0.116	0.061
Instrument test (p-level)	—	0.618	0.783	0.786

a. The t-statistics are based on Huber corrected standard errors that are heteroskedasticity consistent and account for stratified sampling.

b. If any of these variables were missing, then a value was imputed for that household and a missing dummy variable is set equal to one.

c. Cluster level social capital index excludes household's own response.

d. Included in the regressions, but not reported, are dummy variables for each of six agro-climatic zones and the three missing value dummy variables.

trust in village chairman, trust in district officials, and trust in central government.

Table 6.11 shows the independent variable estimates of the social capital impact using cluster-level data based on the following assumption: trust in strangers and trust in government officials are not affected directly by household incomes nor do they affect income directly; rather, greater levels of trust lead to higher village-level social capital. Column 2 of the chart shows that the estimated effect of social capital is strongly statistically significant,

supporting the view that social capital is an exogenous determinant of income.

The second argument against causality moving from income to social capital is the similarity of results whether one uses income from the SCPS data set or the HRD survey. If individuals with higher incomes have greater social capital because they have the luxury to participate in such activity, then one would expect that the results would be stronger when matching household income to household social capital than when linking the social capital

Table 6.11 Household expenditures per person and social capital using SCPS data

Column	1	2	3	4
Source of data	Social Capital and Poverty Survey			
Level of data	Cluster averages		Household	
Estimation method ^a :	OLS	IV (A)	IV ^c (A)	IV (B)
Social capital	0.119	0.496	0.559	0.345
	1.80	2.75	5.37 ^d	.1.29
Household size	-0.011	-0.033	-0.073	-0.075
	0.210	0.424	8.66	6.21
Average adult schooling ^b	-0.030	-0.105	0.0087	0.013
	0.789	1.66	0.512	0.761
Female head of household (1=yes)	-0.439	-0.458	-0.090	-0.070
	0.714	0.566	0.810	0.676
Asset ownership (ln) ^b	0.102	-0.038	0.176	0.207
	1.24	0.297	2.78	3.58
Self-employed in agriculture (1=yes)	-0.99	-0.975	-0.207	-0.203
	2.76	1.92	2.12	2.32
Distance to nearest market (cluster) ^b	-0.023	-0.015	0.0062	0.0018
	1.57	0.801	0.286	0.090
Agro-climatic zones ^d				
Regression statistics				
Number of observations	53	53	846	846
Adjusted R-squared	0.272	—	—	—
First Stage incremental R ²	—	0.119	0.099	0.072
Instrument test (p-level)	—	0.274	0.004	0.345

a. The t-statistics are Huber corrected standard errors that are heteroskedasticity consistent and account for stratified random sampling.

b. If observations for any of these variables for any households were missing a value, a missing value dummy variable is set equal to one (not reported).

c. The instrument sets are a: trust in strangers, tribesman, cell leaders, village chairman (government), district officials, central government; instrument set b excludes strangers.

d. Included in the regressions, but not reported, are dummy variables for each of six agro-climatic zones.

of one set of households to the incomes of another set of households. But this interpretation is not supported by the results in table 6.11.

Village-level Effects

Yet another possible explanation for the strong effect of village-level social capital is that it is a proxy for some other village-level characteristic. Since social capital is a village-level measure, it was not possible to test for village-level effects. However, it was possible to test to see if all good things go together at the village level by observing what happens to the social capital measure after controlling for a whole range of village-level characteristics.

The impact of village-level social capital stays strong even after controlling for village-level variables including level of education in the village, fraction of self-employed in agriculture, agro-ecological zones, and the village's access to markets. Other indicators, including people's perception of the level of unity of the village and their vision for the future, did not explain household incomes nor change the estimated impact of the Social Capital Index.

Why Higher Social Capital Leads to Higher Incomes

What are the proximate determinants through which village social capital impacts house-

hold income? Why is it that households living in villages with higher social capital have higher incomes? The literature suggests four mechanisms.

More Effective Government Services

Putnam suggests that higher levels of associational activity lead to more effective government services. The HRD survey included much information on quality of government-provided schools and health services. The correlation between school quality and village-level social capital was modestly significant. The relationship between village-level social capital and parental participation in school-related activities was significant.

No link was found between quality of health facilities and village-level social capital. This is not surprising given that the key factors affecting health centers are national in scope—such as lack of qualified doctors and drugs—and beyond the control of village communities.

Information Diffusion

People coming together can lead to sharing of information. Households in villages with higher social capital were much more likely to use fertilizer, agrochemical inputs, or improved seeds. Analysis shows that a one standard deviation increase in social capital increases the probability of agrochemical use by 42 percent (6.7 percentage points above the mean of 16), fertilizer use by 38 percent (5 percentage points), and improved seed use by 17 percent (2 percentage points). As with income effects, these results are surprisingly strong.

These positive associations of increased use of agricultural inputs with social capital hold true even after including an individual's contact with an extension worker and his or her own reported land quality.

Management of Common Property

The ability of local groups to cooperate and come to acceptable solutions can play an im-

portant role in overcoming the “tragedy of the commons”—the tendency of individuals to maximize their own individual good at the cost of the collective body (Ostrom 1990). In the SCPS, households were asked if they participated in communal activities aimed at maintaining certain community assets, such as building roads. Villages with higher social capital were more likely to have engaged in community road building. This suggests another link between social capital and higher income levels.

Market Transactions

It has long been recognized that market transactions based on trustworthy partnerships facilitate economic performance. Villages with higher social capital had significantly greater use of agricultural credit. Since only 8 percent of households reported using credit, the one standard deviation effect is to increase credit use by about two-thirds (67 percent).

Conclusion

The nature of village-level organizations influences local development outcomes. However, it has proved difficult both conceptually and in measurement, to include such variables in the calculus of determinants of household welfare or poverty. As a result, household welfare has been measured by physical capital, human capital, and natural capital.

The PPA study in Tanzania shows that the concept of social capital is rich in potential significance for socio-economic development. By using econometric analysis—and even after controlling for household education level and physical assets, and such characteristics as agro-ecological zone, distance to markets, population density, and ratings of unity of the village—the study found that higher village-level social capital is associated with higher levels of individual incomes.

The quantitative effect of social capital is surprisingly large: a one standard deviation increase in village-level social capital predicts a

20 to 30 percent increase in expenditure per person for each household in the village. This impact is as large as tripling either the level of education or stock of non-farming physical assets. While much remains unknown about social capital in different economic and cultural contexts, social capital needs to be included in the household welfare equation in Tanzania.

Policy Implications

- The mere creation of groups by outsiders builds neither trust nor effective social capital. Rather, as both the qualitative and quantitative data show, groups that are embedded in the social context, which evolve based on community-determined needs, that include people from different kin and clan groups, that involve people engaged in different livelihoods, and that function effectively, can help individuals meet objectives that would otherwise be beyond their reach.
- Local-level institutions have remained largely invisible to larger bureaucracies such as national policymaking bodies, sectoral ministries, and international aid organizations. In formulating an action agenda associated with social capital, the first principle should be to map what local institutions already exist and their characteristics.
- The investment of time and resources in building trust and self-organizational capacity of groups and municipalities is linked to successful implementation of

decentralization strategies and is a precondition to sustainable change at the local level. However, the technical orientation of sectoral ministries, coupled with the public goods nature of social capital and the lack of demand orientation in most public sector agencies, results in "mining" existing social capital. This often erodes or destroys what exists because of a lack of understanding and an unwillingness to invest in social capital as a resource with productive returns. Public sector agencies must be educated to recognize that investing in social capital yields positive returns—both to themselves and to their clients.

- There are important gender differences in the kinds of groups men and women form and join. Some groups have mixed membership and some are gender specific. These differences need to be taken into account to ensure that development efforts reach women.

Methodological Implications

- Many social and psychological dimensions often considered too "soft" to be measurable can be measured to increase understanding of social, political, and institutions factors linked to poverty.
- Qualitative data can reveal important patterns through systematic content analysis and aggregation; quantitative econometric techniques are useful teasing out magnitudes of impact and causality.

CHAPTER 7

Credit and Savings

We need funds for fertilizer and implements. We were advised to create joint ventures to get credit, and we did, but we are still waiting in vain. Borrowing from banks or the government is so bureaucratic and almost impossible. We have been filling out forms since 1992, and we are still ignored.

— Farmer, Kasangezi, Kigoma

Mobilizing financial resources is critical to stimulating development among the poor. In Tanzania, formal financial institutions are virtually nonexistent in rural areas. As a result, many people are forced to save in their homes or by investing in cows. Little is known about other types of informal financial institutions, nor about rural people's preferences and attitudes about savings and credit institutions nation-wide. The PPA used open-ended discussions and various participatory processes to discover how the poor view savings, the network of formal and informal credit and savings institutions, and the different perspectives and practices of men and women.

In 1991 the government of Tanzania issued a policy statement on financial sector reform designed to stimulate competition and lessen government interference. In an important reversal of policy, the Banking and Financial Institutions Act became law allowing private banking. Interest rates were liberalized, and banks could set lending rates below an announced maximum and set deposit rates freely. Attempts were made to restructure the National Bank of Commerce (NBC), but with little success. The Cooperative and Rural Development Bank (CRDB) remains financially weak even after its privatization. Currently, more reforms are being pursued to protect depositors of NBC, to stem the losses experienced in the past, and to

foster a more effective system of financial intermediation (World Bank 1996, Ferreira 1994, Bagachwa 1994, United Republic of Tanzania 1994). Against this background of reform of financial institutions the PPA study attempted to explore issues surrounding savings and credit from the perspective of the poor.

The issue of credit was raised through open-ended discussions focusing on priority problems (Priority Problem Identification). Credit questions related to agriculture scenarios were raised using the technique Story With A Gap and mapping of local-level institutions using Venn diagrams.

Several questions related to savings and credit were included in the household ques-

tionnaire. Some were open-ended: "What do you understand by savings?" "What do you do when you have surplus resources?" "Some people feel that saving for bad times or for other needs is important while others feel it is not important. What do you think?" In addition a series of structured questions was asked about saving habits and use and sources of credit.

Savings Institutions

In the villages of Tanzania savings meant putting something aside for emergencies, or for major or special expenses. Although a common assumption is that poor people cannot manage money responsibly, the survey found otherwise. The idea of savings seemed to be widespread and well understood to "help overcome the bad times in a difficult life." Overall, 96 percent said that savings to meet a variety of needs was very important or important in their lives. Sixty percent of the respondents said that they currently saved; 40 percent said they did not because they had no surplus.

The subsistence level at which most rural people live in Tanzania and their investment orientation was also evident in people's responses to the question "If you were to suddenly get 50,000 shillings, what would you do with it? Give three uses in order of importance" (table 7.1).

Overall, 70 percent would invest the money in productive activities or increase their permanent major assets, buy or renovate their house, or place it in savings. Forty percent would invest the money in farm-related activities including buying livestock, 13 percent in trading or other non-farm businesses. Thirteen percent said they would buy food because they frequently experienced hunger.

There were some important differences based on the gender of the head of household. More female-headed households (18 percent versus 12 percent for male) reported they would spend the additional money on food and invest in non-agricultural business and trading activities. This once again reflects the

Table 7.1 The first thing you would do with 50,000 shillings

Category	Percentage
Buy farm inputs, extend farming	22
Use it for nonagricultural business/trade	13
Buy food	13
Build/renovate house	11
Buy livestock	9
Save it	6
Farm tools/equipment	5
Buy/rent land	4
Buy other consumer item	4
Pay school fees	3
Pay medical expenses	1
Other	9

greater vulnerability of female-headed households. Women also favored investing in children's education.

Savings Practices

Rural villages largely lack effective financial services. Evidence of this emerged in a variety of findings including those already reported in chapter 5. When asked "Where do you currently save your surplus resources?" 82 percent reported saving money at home. Investing their money in surplus grain which could be sold when the need arose or after prices had risen was the most common method. The next most frequent method was by buying cattle and other livestock including goats. Cattle were considered "walking banks and goats and sheep liquid cash." Twenty-two percent said they saved money around the house or yard—under the mattress, in a box, under the roof, or buried in the yard (table 7.2).

Although Upatu—informal credit societies—are quite common, they were mentioned by only 1 percent of respondents. This figure obtained from the household sample survey is surprisingly low and does not fit with information obtained through other methods. It is possible that many people think of Upatu more as a credit than a savings group. In fact, in some regions the literal translation is "giving credit in turn." Some respondents said that use

Table 7.2 Where do you currently save?

Category	Percentage
Grain storage	35
Cattle	25
In the house	22
NBC	11
Cooperative Rural Development Bank	2
Savings and credit	1
Post office	1
Upatu	1
Children's education	2

of the system was declining because of decreasing trust.

The most likely reason for the low figure is that 90 percent of the heads of households interviewed were male. Upatu is primarily an investment vehicle for women (see below). The female-headed households interviewed were less able to save than their male counterparts and reported much lower use of all savings institutions, both formal and informal.

Factors Affecting Current Use, Explored through Voting Activity

Use of particular facilities or institutions is affected by a variety of factors, the most important being their presence. But beyond presence, use is affected by an individual's knowledge, and to some degree understanding, of the working of an institution and by individual preference.

Unless much is already known about a particular topic, household survey questionnaires may not be the best way of getting reliable information. Since little reliable information

existed about rural people's preferences and savings habits, and gender differences were likely, a visual activity that involved people voting with stones was developed and used in gender-segregated groups.

The activity explored people's knowledge about savings and credit facilities and which institutional attributes they considered important. A local artist was hired to draw a series of five pictures which were laid out on a horizontal axis in front of a group. They represented a Postal Bank, CRDB, Upatu, NBC, and cows. Pictures of attributes—such as distance from village, interest rate, safety, convenience, and access to service—were placed on a vertical axis to form a matrix. Each individual in the group was given 20 stones to rate the institutions and the attributes.

Village-level Data on Prevalence

Data from group discussions surrounding this activity in 77 villages were collated (table 7.3). The results were quite different from those obtained from the household survey. Saving in cows was most frequently reported (92 percent). Upatu was the next most prevalent (26 percent). Among the formal institutions the prevalence in declining order was Postal Bank, CRDB, and NBC. Given the lack of formal institutions in most villages, a surprisingly large number had heard about different types of banks. The most common source of information was the radio. Overall, 40 to 50 percent of the villages reported no knowledge of the three formal and one informal institution (Upatu).

Table 7.3 Prevalence of savings institutions, national

Knowledge and use	Institutions									
	Postal Bank		CRDB		Upatu		NBC		Cows	
	n	%	n	%	n	%	n	%	n	%
Current use	14	18	7	9	20	26	10	3	71	92
Heard about but don't use	30	39	33	43	16	21	37	48	2	3
No knowledge of institution/practice	33	43	37	48	41	53	30	39	4	5
Total number of villages	77	100	77	100	77	100	77	100	77	100

Table 7.4 Preferred attributes of savings institutions

Attributes	Institutions											
	Postal Bank		CRBD		Upatu		NBC		Cows		Total	
	n	%	n	%	n	%	n	%	n	%	n	%
Distance	123	19	99	21	100	22	158	31	126	8	606	17
Interest	172	27	121	26	46	10	106	20	538	37	983	28
Safety	185	29	112	24	81	18	138	27	206	14	722	20
Convenience	84	13	86	19	114	25	62	12	247	17	593	17
Access to service	80	12	45	10	110	25	54	10	345	24	634	18
Total	644	100	463	100	451	100	518	100	1462	100	3538	100

Preferred Attributes

The most helpful information to planners interested in encouraging domestic savings is knowing which attributes people most want in their savings institutions. Table 7.4 reports the combined attributes rating given by groups of men and women, collated per village. Obviously these ratings could only be made by groups if they had some personal knowledge about the working of an institution. There were no dramatic gender differences, hence these are not reported separately.

People most valued easy access to service (18 percent), convenience (17 percent), and lack of distance (17 percent). There is much overlap in these categories, which together account for 52 percent of attribute preference. Other important criteria were interest rates (28 percent) and safety (20 percent).

Cows were rated the highest in providing the best rate of return on investment (37 percent), but they were rated the lowest on safety (14 percent). Upatu rated the highest when distance, convenience, and access were combined (72 percent), but lowest in terms of interest. By and large, the formal banks were rated the safest at around 25 percent.

Household Data

Questions about attributes or reasons for saving in particular ways were also asked in the household survey (table 7.5). Similar to the ratings from village-level data, 42 percent of the attributes related to ease of access to savings

when needed, convenience, and distance. The ratings on safety were identical to the data from village groups (20 percent). Another dimension of security which appeared to be important was the psychological feeling of safety, captured in the notion of "I can see it." Only 11 percent mentioned receiving interest as an important reason for saving.

Attributes Wanted in New Banks

At the end of the section on financial services in the household survey, people were asked "What qualities should new banks have so that you are likely to use them?" In addition to the attributes already discussed, people focused on the need to remove the entry barriers preventing their access to banks. Three specific recommendations: reduce the minimum balance to 500 shillings (41 percent); decrease the amount of land needed as collateral (18 percent); and greater transparency in management, rules,

Table 7.5 Reasons for saving

Category	Percentage
Access (I can get it out whenever I want)	21
Convenient	16
Safe and secure	18
Gains interest, multiplies	11
I can see it	14
Don't waste time traveling, distance	5
Don't have to travel with money	2
Don't know any other way	4
Other	9
Total	100

Table 7.6 Qualities new banks should have

Category	Percentage
Reduce minimum balance to 500 shillings	41
Community participation in banks	20
Decrease amount of land requested as collateral	18
Other	21

and regulations through greater community participation (20 percent) (table 7.6).

Gender Differences

The PPA study uncovered two levels of gender differences—one at the level of gender of head of household level (through data gathered from the household survey) and the other associated with differences in practice (which emerged from group discussions with men and women in separate groups). Using people's poverty rankings, the household survey revealed that female-headed households are poorer and more vulnerable than male-headed households. Accordingly, they are less able to save (50 percent versus 60 percent of male-headed households), and they have less access to both formal and informal savings groups.

Group discussions with women all over the country revealed that while knowledgeable about attributes one should consider in choosing a savings institution, women had much less

specific knowledge about the formal savings institutions, especially CRDB and NBC. Women often said that they did not personally handle money, but that their husbands took care of it. Women primarily saved money in small livestock, grain, and around the house (box 7.1). Again, with the exception of a few areas, Upatu was primarily a source for women.

Different Forms of Savings

Investment in Cows

Cows are clearly the most common method of savings, mentioned in 92 percent of the villages. The main advantages, mentioned again and again, were that they reproduce, give milk to drink and sell, are convenient and accessible, and they provide manure and skins. The main disadvantage was the insecurity of the investment due to illness, death, or theft (box 7.2).

Upatu

Nationally, Upatu was the most prevalent method of savings and credit in 26 percent of the villages, with usage most common in the Mtwara, Coast, Tanga, Mara, Mwanza, and Kagera regions. While it was most often used by women, in a few places men participated as

Box 7.1 Women's savings institutions

In addition to Upatu, Tanzania's informal revolving credit societies women keep any savings they have close to home.

Igombe, Mwanza: "We have no information about the bank (CRDB and NBC). We just keep our money in holes and crannies around the house and under our mattress. Most of us have no money. If we do we just walk with it in our pocket. We die with it."

Magata, Kagera: "In most cases, cows belong to the men and none of us women have an account in any bank. We get savings by keeping some of the coffee because we participate in the farming. Then, with the consent of the husband, we can sell it and use the money for family uses. If you wait until after

the harvest and sell when the prices have risen, you can make a good profit."

Nyakasanba, Kigoma: "We put our savings into goats, sorghum, millet, and groundnuts. Women can keep up to three goats and some cereals as well. These investments are good because they are safe, accessible to anyone who wants to do it, and there is no inconvenience."

Igaga, Shinyanga: "I keep my surplus in my house. I buy cattle for savings purposes. We have heard of banks, but there are none in the village. We save in cows, because cows reproduce and we can get milk. We can sell the milk and that helps us in buying small items like salt."

Box 7.2 Cows: high risk, high return

Ikigijo, Shinyanga: "Most people save in cattle and very few save in NBC or the post office because the banks are 20 km away. Security nowadays is nil in cows because of theft, disease, and death. But for the sake of the return on their investment, people buy cows. You may buy one cow for 30,000 shillings and after some time the price has doubled to 60,000. Cows increase through multiplication, they give milk, they provide manure for our farms, they are used as tractors, ox ploughs, they are used in transport, they provide food, beef and cooking oil, they provide skins which can be sold or used as a mattress, and they can be used to marry, to pay bride price."

Kigombe, Tanga: "When an emergency arises, you can sell cows quickly to get money."

Mititi, Rukwa: "The disadvantage of cows is that there are no good pastures and places to wash them."

well. Convenience, access, and familiarity were the positive attributes of Upatu most frequently cited (box 7.3).

Upatu usually involved 10 to 20 members who already knew one another. Beyond that number, people felt it was difficult to trust everyone. Ironically, the trust basis of Upatu was the main reason given by men for not using these informal institutions: "Upatu is based on

Box 7.3 The ebb and flow of Upatu groups

In some areas Upatu groups are viable because no other savings and credit institutions are available to women. In others, Upatu groups are on the decline.

Kweshindo, Tanga: "We once used Upatu as a means of savings, but now we have stopped because of difficult economic conditions. It is not easy to trust someone with your money."

Mararoni, Arusha: "Upatu is convenient but not very safe now. Due to economic hardships someone may easily get tempted and run away with the money."

Nyangili, Mwanza: "In Upatu you get profit. In the bank we are not told how much our savings will grow. In Upatu I put in some money, and each time somebody gets it. When it is my turn I get a lot of money, and I can see it each time."

trust and trustworthiness. If you cannot trust one another, Upatu cannot work. We men begin to quarrel easily."

Formal Credit Societies

In Mwanza, Mara, and Shinyanga people reported the use of formal credit and savings societies, which appeared to charge very high rates of interest. In Shinyanga, a case was reported in which a credit society charged 200 shillings monthly for every 1,000 shillings borrowed.

Savings Banks

In general people had heard about banks; men had more specific information about them than did women. Most people felt that to use a bank for savings, "You have to be rich, have a lot of money and be influential, and be very determined to overcome the bureaucracy and delays. In addition most banks are too far" (box 7.4).

Box 7.4 Barriers to use of savings banks

Kigombe, Tanga: "If I have a surplus of 1,000 shillings and I want to keep 700 shillings in the bank and the bus fare to get there is 600 shillings, I don't see the use of going. So I decided to keep my money at home. Some people say the minimum amount you can keep in NBC is 3,000 shillings. We don't have that, so we keep our money at home."

Kamsekwa B, Tabora: "We don't use banks because they are in town, so one has to travel for the service. The banks are not aimed at delivering services to rural people as most of us cannot afford to maintain the minimum balance. We are also not knowledgeable about how they operate so we fear that our money will be lost."

Mararoni, Arusha: "There are no banks in the village. Most people who keep their money in NBC in another village are rich—mainly the ones who have coffee plantations, shops, or those who work for the government."

Bukwimba, Mwanza: "Transport costs to the bank are 3,000 shillings, that is the problem. If the bank came to our village and gave us credit we would save our money in it."

Box 7.5 Experiences with Postal Banks

Marangu, Kilimanjaro: "You can get your money any time you need it and at any Postal Bank, not only at the one where you initially deposited the money. But they are not very convenient because you have to go a long way to reach them."

Ilulu, Iringa: "It is a lot of inconvenience withdrawing money from the Postal Bank."

Nyangili, Mwanza: "We have no idea, but we heard that when you put your money in, it gets lost. We know nothing about it."

Magata, Kagera: I know a man who kept his money in the Postal Bank in Muleba. One day he had a problem, a very urgent problem, and when he went for his money, they simply told him there is no money and he would have to come back after three days, and that was that. He needed only 2,000 shillings out of 5,800 shillings he kept there."

Postal Banks

Use of Postal Banks was reported in 18 percent of villages (however, only two villages sampled in Sindiga, Tabora, and Dodoma used them). For men, the most important characteristic of Postal Banks was their safety and security; for women, the interest rates. The picture that emerged about the value of Postal Banks was mixed (box 7.5).

Cooperative Rural Development Bank

CRDB was the least used formal institution (9 percent). The most valued attribute of CRDB

Box 7.6 Perceptions of CRDB

Igombe, Mwanza: "The CRDB is the best because the amount of collateral needed is very little compared to NBC. Because NBC delays the provisions of loans, it takes very long to get credit. Obtaining credit at NBC is more bureaucratic and is much easier for those with a lot of money. Also interest rates on loans are higher at NBC compared to CRDB."

Marangu, Kilimanjaro: "CRDB is good because it is safe and has high interest. It is not convenient because you have to go a long way to reach the banks. We have heard that the bank gives out credit but we have not been able to get it because we don't even know the process of obtaining credit."

among women was the interest rate; among men it was safety (24 percent). In several places CRDB was rated more favorably than NBC (box 7.6).

Approximately 13 percent of the villages reported use of NBC for savings and 10 percent for credit. NBC was valued for safety of money and its proximity to at least some of the villages. NBC ranked low in convenience and ease of access to money (box 7.7).

Credit and Credit Institutions

While people expressed the need for credit for a variety of purposes, formal institutions were remarkably absent in rural areas. Approximately 7 percent used credit to support agricultural activities in the 1993-1994 agricultural

Box 7.7 Experiences with NBC

Kasangezi, Kigoma: "NBC officials once came to our village to advertise their business. One old farmer agreed to keep his money with them in 1993. He deposited 25,000 shillings with them because they said that was the minimum amount to qualify for a loan. Then he asked for credit without success. He wrote four letters but to this day he has not received a reply. Others from our village also joined, and no one got credit. So now we do not trust any of the banks. We still feel the banks are safe but they are not for the poor farmers, and the closest one is very far away, 50 km."

Kanazi, Kagera: "Our women's group keeps money at NBC 15 km away so it is not very convenient and the interest rate is low. We do it as a group because the minimum balance is 3,000 shillings and no one woman has that much money. All the money is held by men. The procedure is complicated; you are always told to come back tomorrow or the next week, and there is a very complicated procedure to follow, forms to fill out, and letters to write. NBC is the only bank around here. We believe the bank gives credit, but we have no idea; we wish somebody would tell us."

season; and 80 percent of these loans were under 500 shillings. Approximately 50 percent borrowed from family, friends, and relatives, 30 percent from cooperatives. Banks were mentioned by only 0.5 percent of respondents.

In addition to interviewing people about sources of credit for agricultural activities, people were asked whom they would approach first if they suddenly needed to borrow 2,000 shillings and 50,000 shillings (table 7.6). Responses varied depending upon the amount requested. For 2,000 shillings, most people would turn to family and friends, particular individuals, and finally to traders. Formal institutions were mentioned by 3 percent of the group. Nine percent said they would not be able to access 2,000 shillings from anyone. This group rose to 35 percent when the amount needed was 50,000 shillings. The number of people who could turn to family members for such an amount dropped dramatically and rose a bit for formal institutions.

More Difficult for Women to Get Credit

There were significant gender differences in the responses, pointing once again to the greater vulnerability of female-headed households. Twenty-four percent of female-headed households would not be able to access 2,000 shillings anywhere, whereas only 6 percent of the male-headed households indicated that to be the case. This difference remained but was

Table 7.6 Who would you first approach to borrow 2,000 shillings and 50,000 shillings?

Category	Percentage	
	2,000 shillings	50,000 shillings
Family, relatives, friends	82	32
Private individuals	3	7
Trader	3	10
NBC	1	6
Savings and credit society	1	1
CRBD	.5	4
Cooperative	.5	1
Mission, NGO		4
No source	9	35

Table 7.7 Gender differences in degree of access to credit

Category	Percentage
Easier for women	12
Easier for men	62
About the same	23
Don't know	3

less dramatic for 50,000 shillings, reflecting the general lack of cash surpluses in the rural economy and lack of credit institutions. In group discussions women said, "Loans and credit are for the rich and for men. Most of us do not meet collateral needs. We have no permanent houses and no right of occupancy certificates for the land we own" (Nyangili, Mwanza). When probed, most men and women stated that it was possible for women to have their own bank accounts, but in reality it was more difficult for women than men to borrow money (table 7.7).

Women's groups generally felt that credit facilities were not open to rural women. "Money is an important element in our farming activities because you can fall sick and need to hire labor. If the season comes and you are sick and you have five hectares, you will still remain poor." In many places, women's groups were bitter about promises made but not kept: "We really want to change our agricultural practices, but we need funds for fertilizer and implements. We were advised to create joint ventures to get credit, and we did, but we are still waiting in vain. Borrowing from banks or the government is so bureaucratic and it's almost impossible. We have been filling out forms since 1992, and we are still ignored."

Why People Need Credit

People sometimes got upset about the issue of credit and said, "Do not ask us about credit. How can you ask us about something which you know is impossible to get?" Where women were willing to talk about credit, they said, "We don't know anything about credit because there are no credit facilities for women. If the bank comes to our village, we will be very

happy, but the minimum balance should be 500 shillings. We will use credit for so many things to raise our income, cattle rearing, hotels, restaurants. But we may also need some business training so we do not lose our money." In the absence of credit people indicated that they turned to greater exploitation of the natural environment because it was the only resource that was free. They mentioned charcoal making, firewood, wildfruit, and forest product collection, and in coastal areas, coral collecting.

Many people saw lack of credit as the main reason why they could not lift themselves out of poverty. In Mindola, Dodoma people said, "The government does not care about the small farmer. A small loan could boost farm production. A large number of us remain poor because there is no alternative way of getting farm implements or inputs. To cope we turn to charcoal making." In Mwanza people said, "There are few ploughs in the village. Those without ploughs have to provide labor in kind before they can receive ploughing services from the rich, so they are always late in planting. If there were credit facilities and ploughs were reasonably priced, we could buy and share a few."

Policy Implications

- Other than the Postal Banks, formal rural financial institutions are not much in evidence. Because transactions are small and costs high, formal institutions tend to limit their rural activities to market centers. Nevertheless, rural savings are available to be mobilized and there is a high demand for small-scale credit.

- The attributes most needed in rural financial institutions are safety, low entry requirements in terms of collateral or savings, ease of opening accounts and withdrawing funds, attractive rates of interest, and proximity to users.
- Women have less knowledge about formal savings institutions, hence information campaigns should target them. Customary laws which limit women's control over assets thereby also limit their access to collateral and credit. If it is not possible to lessen the force of customary law in the short term, steps must be taken to improve women's access to credit by other means.
- Efforts should be made to learn from the experience of savings and credit schemes in Tanzania and elsewhere, and to encourage experiments or pilot schemes. Experience in many countries suggests two rules of thumb: it is best to start with mobilizing savings before moving on to the provision of credit, and there should be no subsidized interest rates—any subsidy should be confined to the cost of building local organizational capacity.

Methodological Implications

- Open-ended exploratory methods are particularly important to uncover all the dimensions of a problem and its solutions. Once the issues are better understood, household surveys can be used to obtain data.
- When dealing with sensitive issues, establishing trust and rapport are particularly important. This is easier in free-flowing conversations than when filling out questionnaires.

Conclusion

In assessing the usefulness of Participatory Poverty Assessments, two questions must be asked. First, does the participatory, community-level approach to research about poverty uncover data missed by more conventional survey techniques—data valuable to conceptualization and policymaking? Second, does the concept of “social capital” yield useful insights into the nature and determinants of poverty? This volume argues that the answer to both questions is clearly “yes.”

The results of the PPA in Tanzania, as well as in other countries in which PPAs have been conducted, demonstrate that listening to the “poverty experts”—the poor themselves—can lead to a different understanding of the dynamics of poverty *over time*. In Tanzania, the PPA revealed, for instance, the significant gender dimensions of poverty and the very different perspectives and priorities of poor men and women. Similarly, the importance of agricultural inputs, simple technology, and the inability of the poor to take advantage of markets was revealed. Even in an area about which much is understood—the water challenge faced by the poor—the PPA showed that the magnitude of the challenge, in particular its seasonality, was completely underestimated. The PPA also revealed the inflation in prices in rural areas, the widespread need for rural credit, and people’s desire to save.

The importance of social capital to the quality of life in communities was confirmed by the Social Capital and Poverty Survey, as was the

significant impact that strong and vibrant associational relationships can produce on income. The lesson for policymakers should be clear: when social capital is hidden from view, not only is its effect on the development process unacknowledged, but poverty alleviation programs can actually be damaging when they unknowingly reduce social cohesion or when resources are captured by particular groups. Understanding local-level social capital is particularly important in designing decentralization processes to deliver basic services.

In sum, a Participatory Poverty Assessment can ensure that the voice of the poor is taken into account in developing policy and programs. When their voice is heard, poverty alleviation efforts will have a much greater likelihood of producing the tangible results to which they aspire.

Policy Recommendations

Five broad areas of recommendation to policymakers emerged from the PPA study:

- *Create rural savings and credit institutions*—for farm inputs, implements, and household emergencies
- *Improve rural access*—for input supplies, marketing, credit, extension, health emergencies
- *Target education and health services for the poor*—who often do without these services at present

- *Differentiate by gender*—women do more with less and are invariably worse off than men
- *Rely on and invest in local social capital*—which must be viewed as a productive asset, but at present is deteriorating.

Create Rural Savings and Credit Institutions

Poor farmers in Tanzania are no different from farmers everywhere else in the world—they need credit to buy agricultural inputs and equipment, and to avoid sales of their crops at distress prices. They also need secure and convenient ways of saving their small surpluses. Experience elsewhere suggests it is likely that conventional banks or other formal credit institutions operating on commercial principles will find the costs of these small transactions in dispersed locations simply too high to be of interest. On the other hand, there are many examples of savings and credit schemes which function well in rural areas. Typically these are run by community-based organizations, NGOs, or specialized banks, and focus initially on savings rather than credit. When they do lend, they charge market rates of interest.

To be sustainable, schemes will have to be financially self-supporting, but it will be essential at the outset to provide seed money for capacity building of both village people and sponsoring organizations.

Improve Rural Access

People can only make good use of rural savings and credit institutions if they can obtain inputs and tools, and take their produce to market. In many areas, rural roads have deteriorated, in part because of reduced maintenance efforts by both the state and local residents. Bus and bush taxi fares have risen sharply and now seem beyond many poor peoples' reach. There is no easy solution to this problem. In the long run, rehabilitation and proper maintenance of roads will lower transport costs directly and at the same time encourage competition in transport services. In the short term, renewed efforts can

be made to employ (or contract with) local communities to maintain roads, and to remove any regulatory disincentives which inhibit healthy competition among transport providers.

Target Education and Health Services for the Poor

There is extensive evidence to show the value to society of primary education, particularly for girls. Yet primary education is not a priority for the poor, especially education for girl children; the benefits are simply too remote to count in a time of severe stress. Consequently, even though raising school fees may generate funds for quality improvements while enhancing local accountability, it is also likely to reduce the number of poor children, and especially poor girls, attending school. The solution is not to abandon school fees, but to target fee relief for the poorest families. The PPA found that it is not difficult for a community to agree on who is poor or very poor. Clearly there would be some temptation for manipulation of who would benefit from relief, but this could probably be minimized by transparency and publicity; in any case, the costs to society of large numbers of uneducated girls greatly exceeds any adverse effects of such manipulation.

In contrast to education, demand for health services is high among the poor. But access is severely limited by distance and cost, with adverse consequences for family well-being. An arrangement limiting fees for the same families who benefit from education fee relief might be possible. This would not, however, solve the problems of transportation or inadequate medical supplies at health posts—these have to be addressed separately and urgently.

Differentiate by Gender

The PPA uncovered many examples of what can happen when gender differences are not taken into account: what is “demanded” turns out to be what men want, which is very often

significantly different from what women want. It is also clear that women characteristically do more with less than their male counterparts, and that women's contributions to social capital are especially valuable. This is not to argue for special preferential treatment for women (although that may be warranted in some cases), simply to urge that proper attention be given to men's and women's different needs. Such differentiation will become even more important as government agencies adopt "demand-oriented" approaches, and increasingly gear their programs to "what the clients want."

The study also draws attention to the continuing strong grip of customary law which is often seriously biased against women. Because customary law embodies power relationships which will not be easily relinquished, it cannot be expected to fade away quickly. As a step toward moving beyond the confines dictated by such laws, government might consider partnerships with elements of civil society to take up the challenge of women's rights, in particular the right to a just share of household assets upon the dissolution of a marriage.

Rely on and Invest in Local Social Capital

The study provides powerful support for the idea that social capital is a productive asset, with significant impact on the well-being of households. One implication is that outsiders, whether government, private sector, or NGOs, must pay careful attention to existing local institutions to understand their strengths and weaknesses, avoid destroying what is valuable, or reduce their value through their interventions. The aim should be to strengthen and build on them, recognizing that this will sometimes take more initial time and effort than simply calling for the establishment of a new committee. Another implication is that interventions must include provisions for capacity building including training in group management, including skills such as record-keeping and how to run meetings. Exchange visits to

other villages and a variety of confidence-building measures are also important elements of capacity building.

Outside agencies do not usually see any advantage in such steps, since in the short run it is easier to "mine" a community's existing social capital or ignore it altogether. As part of decentralization strategies, sector agencies (and others involved in rural development) must be educated to recognize the positive returns from investments in social capital, and to ensure that the necessary provisions are included in service delivery costs. These added costs are unlikely to be large; in any case they will usually result in eventual net savings as a result of more effective project implementation and sustainability.

Methodological Implications of the PPA Study

There are several key methodological lessons to be drawn from the Tanzania PPA:

- *PPAs are faster* than traditional surveys, but give similar results at the aggregate level, while producing more nuanced detailed findings.
- *Subjective measures are valid* and useful for taking the "social temperature" and also can be used for hard analysis.
- *PPAs can improve surveys* by revealing flaws in survey methodology and identifying areas needing special focus.

PPAs Are Faster

The logistics of mounting a PPA are by no means simple, but one can be organized more quickly and produce results sooner than a traditional survey based on questionnaires. For this reason, the PPA technique may be useful for interim monitoring of poverty between major surveys. It was reassuring that—at least in the case of Tanzania—the aggregate results of the two approaches were very similar. At the same time, the PPA generated more subtle and more detailed findings in a number of areas, and its policy conclusions are therefore more

discriminating, and in some cases different (for example on questions of gender, seasonality, and access to water).

Subjective Measures Are Valid

People in rural areas, whether rich or poor, are well-informed and have good judgement about the issues that concern them. Their recollections may be a sounder basis for assessing change over time than statistical measures dependent on unreliable data. Participatory techniques engage their active involvement in an inquiry, and by building trust help ensure that responses are thoughtful and accurate. The process of informal discussions using drawings, voting with stones, and participatory community mapping generates information of relevance to national policymakers. In addi-

tion, such techniques initiate the process of change by raising awareness of local problems and possible solutions.

There is no reason why hard analysis (econometric techniques) cannot be applied to soft data (answers to open-ended questions). On the contrary, a great deal can be learned in this way not only about what happens but also about why it happens.

PPAs Can Improve Surveys

PPAs are not a substitute for traditional data collection methods, but they can complement such surveys in numerous ways. One use of PPA-generated data is as a precursor to a larger survey. The PPA can help identify areas requiring special attention and prevent flaws in survey design.

References

- Bagachwa, Mboya. 1994. *Financial Integration and Development in Sub-Saharan Africa: A Study of Formal Financial Institutions in Tanzania*. Report of a study sponsored by the World Bank Research Committee and administered by the Overseas Development Institute. University of Dar es Salaam.
- Booth, David, and others. 1993. *Social, Cultural and Economic Change in Contemporary Tanzania*. Report to Swedish International Development Authority (SIDA), commissioned through Development Studies Unit, Department of Social Anthropology, Stockholm University. Stockholm: SIDA.
- Carvalho, Soniya, and Howard White. 1996. *Combining the Quantitative and Qualitative Approaches to Poverty Measurement and Analysis*. Washington, D.C.: World Bank.
- Chambers, Robert. 1989. "Editorial Introduction: Vulnerability, Coping and Policy." *IDS Bulletin* 20(2): 1-7.
- Coleman, James Samuel. 1990. *Foundations of Social Theory*. Cambridge, Mass.: Harvard University Press.
- Creighton, Colin, and C. K. Omari. 1995. *Gender, Family and Household in Tanzania*. Aldershot, U. K.: Avebury Ashgate Publishing Ltd.
- Ferreira, Luisa. 1994. "Poverty and Inequality during Structural Adjustment in Rural Tanzania." Research Paper Series, Paper 8. World Bank, Washington, D.C.
- Ferreira, M. Luisa, and Charles C. Griffin. 1995. "Tanzania Human Resource Development Survey: Final Report." Population and Human Resources, Eastern Africa Department, World Bank, Washington, D.C.
- Fong, Monica S., and Anjana Bhushan. 1996. "Toolkit on Gender in Agriculture." Gender Toolkit Series 1. Gender Analysis and Policy, Poverty and Social Policy Department, World Bank, Washington, D.C.
- Isham, Jonathan, Deepa Narayan, and Lant Pritchett. 1995. "Does Participation Improve Performance: Establishing Causality with Subjective Data." *World Bank Economic Review* 9 (2): 175-200.
- Lipton, Michael, and Simon Maxwell. 1992. *The New Poverty Agenda: An Overview*. IDS Discussion Paper 306. Sussex, United Kingdom.
- Maliyamkono, T. L., and M. S. D. Bagachwa. 1990. *The Economy in Tanzania*. James Currey: London, United Kingdom.
- Mbughuni, P. M. 1994. "Gender and Poverty Alleviation in Tanzania: Issues from and for Research." University of Dar es Salaam. Dar es Salaam, Tanzania.
- Moser, Caroline O. N. 1996. *Confronting Crisis: A Comparative Study of Household Responses to Poverty and Vulnerability in Four Urban Communities*. Environmentally Sustainable Development Studies and Monograph Series 8. Washington, D.C.: World Bank.
- Narayan, Deepa. 1995. *The Contribution of People's Participation in 121 Rural Water Projects*. ESD Occasional Paper Series 1. Washington, D.C.: World Bank.
- Narayan, Deepa, and Lant Pritchett. 1997. "Cents and Sociability: Household Income and Social Capital in Rural Tanzania." Policy Research Working Paper 1796. Social Development and Development Research Group, Poverty and

- Human Resources, World Bank, Washington, D.C.
- Ostrom, Elinor. 1990. *Governing the Commons: The Evolution of Institutions for Collective Action*. New York: Cambridge University Press.
- Putnam, Robert. 1993. *Making Democracy Work: Civic Traditions in Modern Italy*. Princeton, N.J.: Princeton University Press.
- . 1995. "Bowling Alone: America's Declining Social Capital." *Journal of Democracy* 6(1).
- Ravallion, Martin. 1992. *Poverty Comparison: A Guide to Concepts and Methods*. Living Standards Measurement Study Working Paper 88. Washington, D.C.: World Bank.
- . 1996. "Issues in Measuring and Modeling Poverty." Policy Research Working Paper 1615. Policy Research Department, World Bank, Washington, D.C.
- Rwebangira, M. K. 1995. "The Status of Women and Poverty in Tanzania." Background Report prepared for the Workshop on Socio-Economic Growth and Poverty Alleviation. Arusha, Tanzania.
- Sen, Amartya. 1990. "Gender and Cooperative Conflicts." In Irene Tinker, ed., *Persistent Inequalities*. Oxford: Oxford University Press.
- Shome, Parthasarathi, Carlos J. Moreno, and Kavita Rao. 1996. "Quantitative and Qualitative Methods to Social Science Inquiry." *Economic and Political Weekly* (July 27).
- United Republic of Tanzania. 1994. *An Approach to the Development of Cooperative Banking System through Savings and Credit Cooperative Societies in Tanzania*. Ministry of Agriculture, Cooperative Department. Dar es Salaam.
- . 1995. *Country Report to the Fourth World Conference on Women: Beijing, September 1995*. Part One: Women in Tanzania Mainland. Dar es Salaam.
- United Republic of Tanzania and UNICEF. 1990. *Women and Children in Tanzania: A Situation Analysis*. Dar es Salaam.
- World Bank. 1991a. *Assistance Strategies to Reduce Poverty*. A World Bank Policy Paper. Washington, D.C.
- . 1991b. "Women in Development: The Case of Tanzania." Washington, D.C.
- . 1993a. "Tanzania: A Poverty Profile." Washington, D.C.
- . 1993b. *Implementing the World Bank's Strategy to Reduce Poverty: Progress and Challenges*. Washington, D.C.
- . 1993c. *Poverty Reduction Handbook*. Washington, D.C.
- . 1994. "Tanzania Agriculture Sector Memorandum." Vol. II: Main Report. Agriculture and Environment Operations Division, East Africa Department, Africa Region. Washington, D.C.
- . 1995. *World Development Report 1995: Workers in an Integrating World*. New York: Oxford University Press.
- . 1996. "Tanzania The Challenge of Reforms: Growth, Incomes and Welfare." Vol. 1: Main Report. Country Operations Division, Eastern Africa Department, Africa Region. Washington, D.C.

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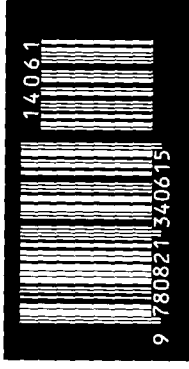
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