Chapter 5
Using a Participatory Approach to Wealth for Understanding Poverty Dynamics at the Household Level

5.1 Introduction

In this Chapter I investigate whether using a combination of participatory research tools to measure poverty at the household level can provide a deeper insight into certain dimensions of poverty, especially in respect to the underlying causal factors of the phenomenon, which are difficult to detect using conventional statistical methods. In addition, I evaluate whether these qualitative methods can be used in gaining a more comprehensive understanding of the conventional quantitatively assessed poverty indicators. Wealth rankings, historical wealth rankings and case studies are the participatory research tools used in my study. I have adapted a livelihoods framework to present key qualitative findings.

5.2 Background

The concept of poverty is now recognized to be one that is complex and multidimensional. While conventional poverty measurements focused on income and consumption expenditure, it is now widely accepted that these only cover certain dimensions of poverty. Poverty is also considered a dynamic phenomenon, with some people remaining in a state of chronic poverty over time, while others experience a more transient state and move in and out of poverty. Therefore today's poor do not necessarily remain tomorrow's poor (Brock, 1999; Chaudhuri, 2003; World Bank, 2001).

To study the more dynamic nature of poverty, underlying processes and factors that drive people into poverty, keep them in a state of poverty, or help them to move out of poverty must be understood. It may not be possible however to measure these underlying factors using conventional quantitative statistical methods. Moreover, poverty defined as a complex social and relational phenomenon cannot be fully understood at the household-level by means of quantitative indicators (Fuenfgeld *et al.*, 2004). A qualitative participatory research methodology on the other hand can provide valuable insights when investigating the underlying causes and processes of poverty especially at the household-level. A sustainable livelihoods framework is a useful tool to provide a better understanding of the complex ‘driving’ forces and process behind the poverty concept. Consequently it has gained wide acceptance in the field of development as an important method of understanding factors that influence poor people’s lives and well-being (Carney, 1998; DFID, 2001b). The sustainable livelihoods framework has been further developed to focus on specific dimensions of poverty. For example the Framework for the Assessment of Life Chances is one that incorporates the analysis of political factors that influence poverty (Mayer, 2003).

5.3 Methodology

To investigate the dynamic and multidimensional nature of poverty, three participatory methods were adopted under my study. This included wealth rankings, historical wealth rankings and case studies.

Wealth rankings undertaken by local people can be used to study the variations in the poverty levels in a community. Wealth rankings are not only useful to determine what criteria communities use to measure wealth, and what their definitions and indicators of wealth are, but also to learn about the socioeconomic stratifications that exist within a community (Reitbergen-McCraken and Narayan, 1998; Simanowitz, 1998; Ellis and Freeman, 2004). Empirical studies have proved wealth rankings to be highly accurate in identifying the poorest groups in a community (Simanowitz and Nkuna, 1998; White and Pettit, 2004). While a wealth ranking exercise can give a snapshot view of relative poverty levels within a community in the current context, historical wealth rankings can also provide valuable insights into the dynamics and processes of poverty that take place over time (Scoones, 1988).

Case studies undertaken by carrying out in-depth semi-structured interviews at the intra-household level is another valuable method of gaining an insight into what factors enhance or impede poverty related mobility taking the different dimensions of poverty into consideration (Chambers, 1992; Reitbergen-McCraken and Narayan, 1998; Silverman, 1999; Fuenfgeld *et al.*, 2004,).

5.3.1 Conducting wealth ranking exercises

In each village three different groups were selected to participate in the wealth ranking to get a wide range of perspectives. Each group generally comprised three to five individuals. One group comprised men from the village, the second group was women and the third group was generally a mixed group of both men and women. These key informants were selected with the assistance of the community research members. They were usually residents in the village for over 10 years, familiar with all the households in the village and having a good knowledge of their different backgrounds. The main reasons for the ranking exercise being repeated was to cross-check and triangulate the results and determine whether there were any large discrepancies or differences in opinion, as well as differences in wealth criteria.

Each group was given a set of cards with the names of the head of the household and a household number (an overall household list was developed for each village though mapping exercises). For example, in the Gurupokuna village in Kalametiya there were 99 cards (i.e., 99 households). First the participants were requested to place the cards into two categories – households known to them and those that were unknown. The participants were only expected to rank households they were familiar with. At least two individuals in the group needed to be familiar with a household. They were asked to discuss the criteria they would use to measure a person's wealth. Although the criteria that emerged during each wealth ranking exercise varied slightly, overall a common set of criteria emerged and this took into consideration livelihoods, assets, ownership of house/land/boats, type of income (stable or unstable), composition of the household (number of dependents, female-headed households) and status of the house they were living in (completed large houses, small mud huts, electricity and piped water). Then the participants were requested to divide the cards into different groups based on the wealth of each household. Households perceived to be at a similar wealth status would fall into a common wealth group. The number of wealth groups the households should be divided into was not pre-determined, and instead was decided by the key informants as the exercise unfolded. Households were divided into four wealth categories – 'rich', 'average', 'poor' and 'very poor' by the group and a series of criteria given for placing households in a particular wealth group. For example, according to the participants, households that belonged to the lowest wealth category ('very poor') often included lagoon fishers (as opposed to sea fishers), fishers who worked on small boats as hired help, and those engaged in labour work as a primary livelihood. Their income levels were very low (described as often not adequate to meet their daily needs) and they did not have stable employment. Some were unemployed. Many had got into bad debt. Many were food insecure and often went without meals. The category included female-headed households, the elderly and families with a large number of dependents or young children. These households usually owned few or no assets and lived in extremely basic, small houses often out of wattle and daub that were in poor condition or in small temporary structures. On the other hand, households belonging to the 'rich' wealth category included land-owning paddy farmers, coconut land-owners and multi-day boat owners. These household were generally described as having stable sources of income, and more than one family member employed and contributing to family expenses. The family size was usually small or with few dependents. They generally owned many assets and large, completed houses of brick construction. See Table 5.1 for the complete set of criteria that emerged from the wealth ranking exercises.

The modal average of the three wealth rankings was designated as the wealth category into which each household was placed. The modal average was considered the most appropriate average to use in this case as it indicated the wealth group that a particular household was given most consistently by the participants. If for some reason a particular household was categorized into three different wealth groups, then with the assistance of the local researchers, the household was ranked once more and the modal average taken from the four wealth ranking exercises. This only occurred in 7% of the total sample from the 6 villages. If there were households that the participants were not familiar with then a separate wealth ranking was undertaken for these households with individuals who were familiar with them and once again the modal average taken to designate the wealth category. It must be noted that the wealth ranking exercise was also a useful manner in which to find out information regarding families that were not resident in the village anymore. In Gurupokuna for example of the 99 households, 10 were actually no longer resident in the village, and these households were therefore not included in the investigation.

Table 5.1[21]- Summary of wealth ranking criteria that emerged from the wealth ranking exercises held in Rekawa and Kalametiya

Criteria	Rich (WR 1)	Average (WR 2)	Poor (WR 3)	Very Poor (WR 4)
Livelihood activities	• Multi-day sea boats owners • Paddy land owners • Coconut land owners • Farming (e.g. large scale vegetable cultivation) • Government sector employees • Money lenders • *Mudalalis* (businessmen) • Large scale fish traders • Large scale farming of cattle	• Sea fishers who own one-day sea boats (18 - 32 foot) • Lagoon fishers who own traditional boats for lagoon (*oruwa*) • Sea Fishers who work as hired help on multi-day sea boats • Fish traders • Own paddy land • Own coconut land • Government sector employees (in local government offices, armed forces etc) • Private institution employees (hotels, garment factories) • Own small retail stores • Own three-wheelers • *Madel* fishery owners	• Sea fishers who work as hired help on one-day boats • Lagoon fishers (who own their own *oruwa*). • Fish traders • *Chena* (slash and burn) cultivation • Coir rope industry • Coconut palm weaving industry • Labour (manual work in factories, paddy fields, plots of land, etc) • Own very small retail stores	• Lagoon fishers (using caste nets), • Lagoon fishers who do not own their own *oruwa* (go as hired help) • Sea fishers who own their own traditional crafts (*oru*) • Sea fishers who work as hired help on sea *oru* • Labour (paddy fields, plots of land, etc) • Labour (in factories) • Coir rope industry
Composition / size of household	• Size of family small • Children are no longer dependants. Children are married • Number of dependents low • Have relations with foreigners e.g. married to foreigners	• Size of family small. • Children (not of school age) • Children of school-going age but can afford/manage expenses	• Size of family large • More than one family in the same house • Older unmarried children • School going children • Elderly family members • Family members that are chronically ill • Family members that are alcoholics	• Size of family large • Large number of children • Female-headed households • Elderly family members • Family members that are chronically ill • Family members that are alcoholics

[21] For convenience, I have broadly divided the criteria into the following categories – livelihoods, assets, composition of household and 'other' remarks.

Criteria	Rich (WR 1)	Average (WR 2)	Poor (WR 3)	Very Poor (WR 4)
Assets	• Large completed houses that have brick walls and tiled roofs. • Own permanent houses • Electricity and water supply • Own large plots of land • Own about 5-6 acres of paddy land • Own multi-day boats • Own one-day boats • Own tractors • Own vehicles • Own shops • Own household items such as television sets and radios • Have sold land/properties to foreign investors	• Own their own plot of land and house • A permanent house of good standard (brick walls, tiled roofs) • Electricity and water supply • Own one-day sea boats (28 – 32 feet) • Own tractors • Own three-wheelers • Own cattle	• Small house of lower standard than average e.g. brick walls but no tiled roofs and instead thatched roofs • No electricity and water supply • An incomplete house • Own small traditional boats (oruwa) • Household assets are minimal	• Mud huts with thatched roofs • Extremely basic small houses in very poor condition. • Do not own a permanent house • Living in a house that does not belong to them • No electricity and water supply • No household assets
Other Remarks	• Good educational level • Finances well managed. Decisions taken in a planned manner.	• Good educational background	• Low educational level • Finances not always well managed	• Low level of education • Finances not well managed.

5.3.2 Conducting historical wealth ranking exercises[22]

As poverty is not a static phenomenon, to capture some of the dynamics of poverty and changes that take place over time, historical wealth ranking exercises were also undertaken in Rekawa and Kalametiya. The historical wealth ranks were useful in pointing to an increase or decrease in poverty within a given community. One or two key informants were used for each of the wealth ranking exercises. As in the case of the previous wealth rankings, key informants were selected on the basis of them being knowledgeable about the households in the sample. To ensure that there was no gender bias, both male and female informants were used. Once again key informants were chosen with the assistance of the community research team. A total of three wealth rankings were carried out in each of the six villages, but this time only including the 35 household sample in each village. Each household was given an overall rank for the present and 10 years ago, based on the modal average from the three exercises. The key informants discussed wealth criteria similar to that in Annex 5.1. Households that had moved either up or down wealth strata over the past 10 years were identified and a general discussion held about what events or factors had caused these movements. Households that had remained in the 'poorest' group or a 'better-off' group during this time and not shown any significant mobility in terms of poverty were also noted. Overall, key informants were requested to identify households that belonged to the following four 'wealth' mobility categories in terms of poverty: poor (both in the past and present); earlier poor, now better off; better off (both in the past and present) and earlier better off, now poor. This was to help highlight some of the underlying causes of transient and chronic poverty.

Overall, certain issues emerged while undertaking the wealth ranking exercises that should be noted here.

- When wealth rankings were conducted initially in focus group discussions, there were instances when some of the participants felt uncomfortable grouping some of the households in the village into different wealth categories and discussing their reasoning openly. This was especially evident when the number of individuals participating in the wealth ranking increased. Since 'wealth' is a fairly sensitive topic, the participants felt more at ease undertaking these exercises on a one-to-one basis.

[22] Some of the information in the section is presented in Senaratna Sellamuttu S (2004).

The methodology was therefore soon adapted to ensure that only a maximum of about 3 individuals participated in the wealth rankings, while during the historical wealth ranking exercises only one or two key-informants were used for each exercise, and this gave the participants the opportunity to express their opinions more freely.

- When the historical wealth rankings were undertaken, on some occasions it was difficult to get consensus on a household's mobility in terms of poverty over time and therefore difficult to place households in the four 'artificial' categories that were created for the study. Since mobility in relation to poverty is very fluid, it was difficult to determine sometimes into which category a household should be placed, since it was a relative measurement, not an absolute measurement of poverty that was used. For example, a household that was considered poor at present but better-off in the past by one key informant may actually show criteria indicating that the household was not only poor at present but also relatively poor in the past, when its overall ranking in the village was taken into consideration. Moreover, since the key informant had to recall the relative wealth of a household from 10 years previously the accuracy of the results could vary. These issues were addressed by undertaking 3 historical wealth ranking exercises per village, and taking into consideration the consensus opinion. Additional cross-checking was done with the help of the community researchers, who also had background knowledge on the households.

- As mentioned under Section 3.9.1.2 the composition of a household usually varies with time. Historical wealth rankings therefore bring in an added complexity of attempting to compare households at different time periods when the individuals making up the household would have fallen into different age categories and their outlook and responsibilities in life may not be comparable to the present day scenario. While I was conscious of this potential problem, I attempted to assess whether these were some of the major contributing factors that caused a household to move into a different wealth category over the years by discussing issues such as changes in household composition and so on with the key informants. Moreover by undertaking 3 historical wealth rankings for each household and taking the consensus opinion into consideration, I tried to get an idea of the different factors that have influenced poverty mobility over time.

- It is important to note that while wealth ranking is a useful tool to stratify a community in terms of criteria such as livelihood activities, crude income levels, physical assets, living conditions, family size and composition, it does not give an indication of the personal well-being and other psychological factors that affect the community, household and the individual in terms of poverty processes, and therefore can be used only as a relative measure of certain dimensions of poverty (see Chapter 7 for more on measuring personal security and well-being).

5.3.3 Undertaking Qualitative Case Studies [23]

To gain a better understanding of the underlying processes and causes of poverty a more qualitative, semi-structured, open-ended questionnaire was developed to undertake in-depth interviews. The set of qualitative questions was based on two conceptual frameworks – the framework for the Assessment of Life Chances (Mayer, 2003) and the Sustainable Livelihoods framework (DFID, 2001b) and included questions that covered the following five dimensions - ecological, economical, social, cultural and political.

Under the ecological dimension, the set of qualitative questions covered topics such as the utilization and access to different natural resources in the area, whether these resources had decreased in extent or abundance over time and if so, what impact this had on their poverty level, how had they adapted to these changes in resource availability both at the individual and group level, and whether this had lead to any type of livelihood diversification at the individual and household levels.

For the economic dimension, information on the cost of living and how people were coping with the general increase in expenses at the household level, income generating activities engaged in and how and why these had changed over time were recorded.

With respect to the social and cultural dimensions, information was gathered on the family history and relationship structures within the family, neighbourhood and community. At the family level the nature of relationships both good and bad were

[23] Some information in the section is presented in Senaratna Sellamuttu S (2004).

discussed; for example, who helps the family when facing hard times? How do they help? The respondents' perceptions of poverty and their mobility with respect to their own case history and experiences were also noted. Household members were questioned on their main goals and aspirations in life. Social networks in terms of neighbourhood relations and community level institutional structures were also covered. Individual opinions on the various divisions that existed within the community in terms of ethnic group, religion, caste, political affiliations and poverty levels were obtained.

In terms of the political dimension, discriminations based on political affiliations and levels of poverty were covered as well as how they had been affected at the individual and family level during the political instability that existed in the area in the late 1980s.

The questionnaire which was developed in September 2003 (over a year and a half after commencing my field work), took into consideration the specific circumstances found at the study site through data already collected and personal observations made during the course of my PhD fieldwork. In-depth interviews were undertaken with a purposive sample of 16 households that were selected following the historical wealth ranking exercises from the Kalametiya[24] site (four households from each of the four-mentioned wealth mobility categories as described in Section 5.3.2). The 16 households were selected taking into consideration the overall results obtained from the historical wealth ranking exercises, the initial wealth rankings as well as discussions held with the field research assistants (who were known to the households). In addition, background information already available on each household from other parts of the data collection was also taken into consideration when the final selection of households was made. An effort was made to carry out an in-depth interview with at least two members of each household, taking into consideration variations in responses based on gender and age. For example, the mother, father and a teenage son or daughter may have been interviewed in one household. The interviews were recorded with the permission of the respondents.

[24] This set of in-depth interviews was conducted under the CBPM study which focused on the Kalametiya site.

5.4 Results

5.4.1 Wealth ranking consistency in Rekawa and Kalametiya:

To determine the consistency of the three wealth rankings[25] undertaken in each village, the results were divided into three categories:

- Category 1 - obtaining the same wealth rank in all three exercises
- Category 2 - obtaining the same wealth rank in two exercises and one different ranking
- Category 3 – obtaining three different rankings in the 3 exercises

The most consistent wealth ranking results would be if all the households fell into the first category. The least consistent would be if the households fell into the third category. The variation between groups would account for differences in perception among participants of the wealth ranking exercise in terms of what ‘wealth’ includes and their knowledge of the individual households.

The pattern observed in Rekawa and Kalametiya was very similar, with the highest percentage of houses being placed in the second category (see Figure 5.1 and 5.2). The ranking consistency was highest in the Wewegoda and Tuduwa villages in Kalametiya, where the lowest percentage of households were recorded in the third category, together with a fairly high percentage of households falling into the first category. This could be attributed to the active involvement of the local field researchers who were from these villages in the wealth ranking exercises. Overall, as mentioned above the highest percentage of households fell into the second group and accounted for 58 % of the households in the 6 villages, while 35% overall fell into the first group and 7% fell into the third group.

[25] The wealth rankings undertaken in Jan/Feb 2002 involving all households in the 6 villages under investigation were used in this exercise.

Figure 5.1 Wealth ranking consistency in the Rekawa villages

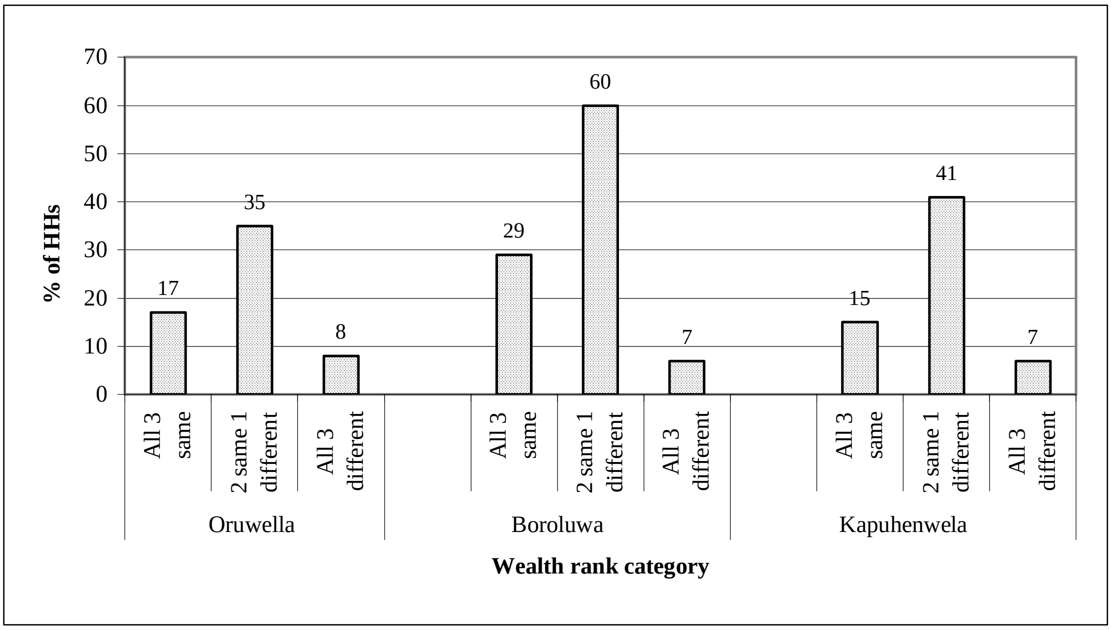
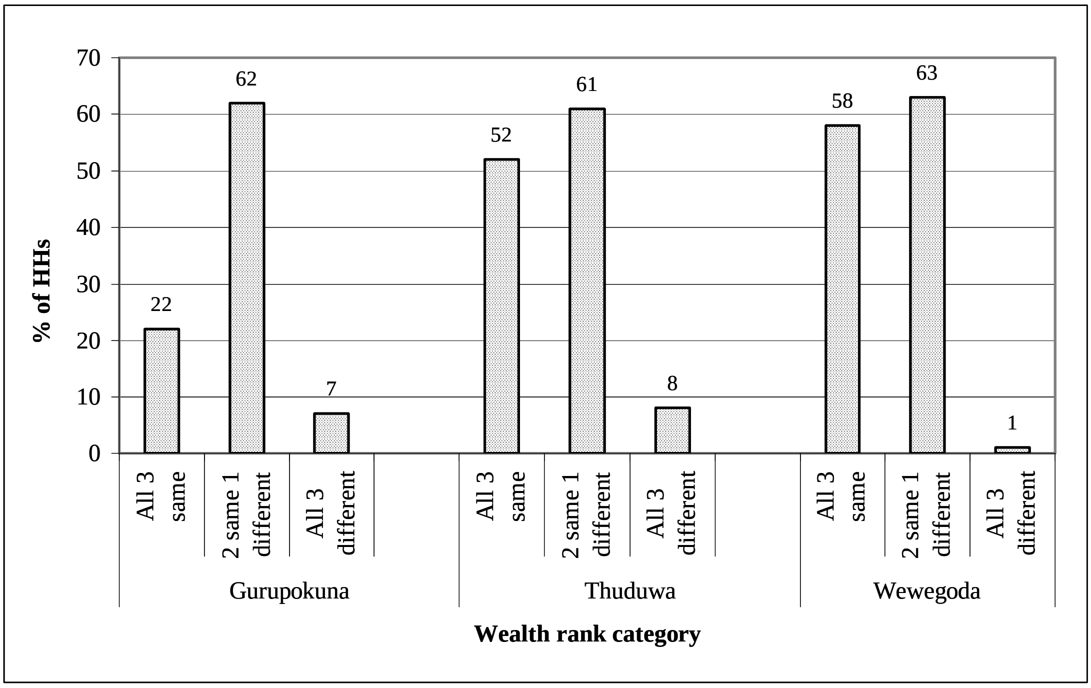


Figure 5.2 Wealth ranking consistency in the Kalametiya villages



In the second category (where two wealth rankings fell into the same group and one was different), the percentage wealth ranking exercises per household where it was 2 neighbouring groups rather than groups further apart is given in Table 5.2.

Table 5.2 The percentage of wealth ranks per household where wealth ranks were placed in neighbouring groups apart

Site	Neighbouring WR groups	Percentage
Rekawa	1 group apart	91.3 %
	2 groups apart	8.7 %
Kalametiya	1 group apart	95.2 %
	2 groups apart	4.8 %

The above showed that a vast majority was neighbouring (one category apart) and in all 6 villages at least 90% were one category apart. The difference in ranking (one category apart) would be due to the difference in their perception of wealth between the different groups of respondents. Therefore the boundaries and borderline between the categories would be slightly different.

The within-village consistency of ranking was also statistically tested using a non-parametric test (Spearman's rank correlation coefficient) that measured the degrees of association between the three individual rankings of the same household. Table 5.3 presents the correlations between the rankings made by the three groups within the same village and shows that the correlations in all cases (except for Kapuhenwela) are fairly strong (.582 - .799) and highly significant, suggesting that the different groups were rankings households in a similar way and with similar distributions between the categories. In the case of Kapuhenwela, the correlation coefficients ranged between .382 - .578. This is possibly due to the fact the households in the Kapuhenwela village are more dispersed than in the case of the other villages and therefore perhaps the key respondents' knowledge on each of the households was less and this may have caused the somewhat weaker correlation. This indicates that for wealth ranking exercises to be more successful, the key respondents should have a good knowledge of each of the households being ranked under the exercise.

As the correlation coefficients between men's (Group 1) and women's (Group 2) as well as the mixed group (Group 3) were fairly consistent in each village, it was apparent that there were no significant gender differences in relation to the perception of wealth and in the classification of households into wealth categories.

Table 5.3 Correlations between the rankings of the same households within each village

	Group 1 & 2	Group 1 & 3	Group 2 & 3
Oruwella			
Spearman's rank correlation coefficient	0.786	0.660	0.765
Sig (2-tailed)	0.000	0.000	0.000
N	48	47	50
Boraluwagoda			
Spearman's rank correlation coefficient	0.613	0.716	0.618
Sig (2-tailed)	0.000	0.000	0.000
N	80	82	72
Kapuhenwela			
Spearman's rank correlation coefficient	0.382	0.578	0.446
Sig (2-tailed)	0.002	0.000	0.000
N	63	63	63
Gurupokuna			
Spearman's rank correlation coefficient	0.699	0.711	0.642
Sig (2-tailed)	0.000	0.000	0.000
N	94	93	94
Wewegoda			
Spearman's rank correlation coefficient	0.654	0.649	0.611
Sig (2-tailed)	0.000	0.000	0.000
N	109	114	112
Tuduwa			
Spearman's rank correlation coefficient	0.799	0.621	0.582
Sig (2-tailed)	0.000	0.000	0.000
N	107	108	111

5.4.2 The distribution of wealth rankings in Rekawa and Kalametiya

When the modal household wealth rank is plotted for each of the six villages the lowest percentage of households fell into rank 1 (the most wealthy group). The percentage of households that fell into the other three ranks varied between the three villages, although an approximate Normal distribution pattern appeared to emerge in all the cases (see Figure 5.3 and Figure 5.4).

Figure 5.3 Distribution of wealth rankings in the Rekawa villages

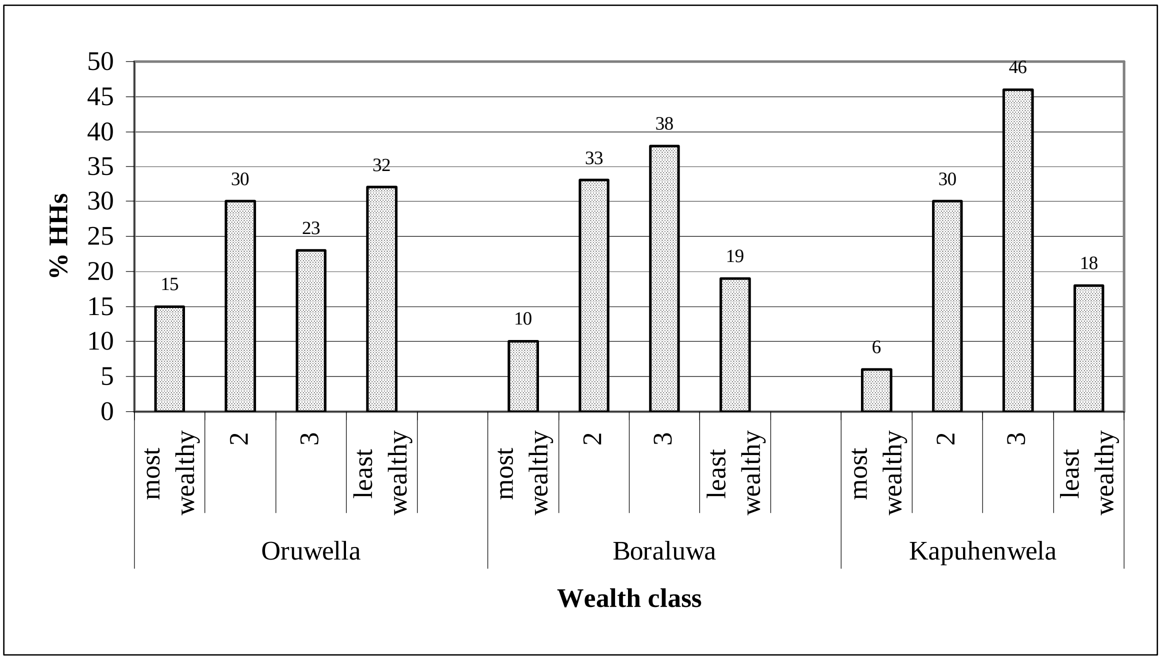


Figure 5.4 Distribution of wealth rankings in the Kalametiya villages

When a multinomial analysis was carried with wealth rank as the dependent variable and site as the independent variable the results were non-significant ($p = 0.652$ $df = 3$), which indicated that overall the same kind of spread of wealth rankings were observed in both sites i.e. households in the villages are spread along the same kind of scale from most wealthy to least wealthy. This is clearly observed in Figure 5.3 and 5.4.

A multinomial regression analysis was also undertaken independently for each of the sites – Rekawa and Kalametiya, with wealth rank as the dependent variable and village as the independent variable, and there were no significant results (for Rekawa $p=0.206$, $df=6$ and for Kalametiya $p=0.357$, $df=9$), which confirms that previous result, i.e., households in each of the villages were spread in a similar manner between the different wealth ranks with no statistically significant differences to be observed.

5.4.3 Comparing wealth rank against some conventional poverty indicators

As illustrated in Table 5.1, a comprehensive wealth ranking exercise can present valuable information on a household's demography, asset ownership and livelihood aspects that influence a household's poverty levels. In the following section I explore the relationship between a households' wealth rank and some conventional poverty indicators to determine whether wealth rank could be used as a composite variable in its own right. Data collected from household surveys undertaken in the study site on these various aspects (see Chapter 3 Section 3.4.5, 3.4.8 and 3.4.9) was used in this validation exercise.

5.4.3.1 Relationship between wealth rank and demographic variables

Demographic variables that were mentioned during the PRA exercises as contributing to the wealth rank of a household were age, household size, number of income earners in the household, dependency ratio, female-headed households and caste. However, when separate univariate multinomial regression analyses were undertaken with these as the independent variables and wealth rank as the dependent variable, none of the independent variables tested were statistically significant. Spearman's rank correlation tests were also carried out and showed non-significant results. Multiple regression analyses with all these independent variables incorporated into the model also gave non-significant results. No simple linear relationship existed between these variables and wealth rank. However this is perhaps not surprising. For example, it is most likely that a household comprising of elderly individuals does not constitute of a large household size – both variables that are associated with poorer households. Instead, a more complex relationship might exist - where a certain combination of these variables would result in a household being either poorer or better-off. These results are further validated through the findings of the case studies thereby indicating that the livelihoods framework was useful in highlighting these complex inter-relationships between various social factors.

5.4.3.2 Relationship between wealth rank and type of housing

The ownership of land and their own house did not show a significant correlation with wealth rank, possibly due to most families in the study site owning their own house and land, irrelevant to being poorer or better-off. However, the number of rooms in the house showed a significant correlation (the number of rooms increases with wealth). In addition, factors such as the type of roof, water source and lighting all showed significant correlations with wealth. The number of cadjan (thatched roofs), incidents of obtaining water from a common well or stand post and the primary source of lighting being from kerosene oil are observed more in the poorer households, while tiled roofs, piped water and electricity are seen more in wealthier households (see Table 5.4).

Table 5.4 Correlation of wealth rank and type of house, water source and lighting source (where a lower wealth rank is assigned to better-off households)

Wealth Rank	No. rooms	Roof	Water source	Lighting source
Spearman's Correlation Coefficient	- 0.513	+ 0.266	+ 0.403	+ 0.432
Sig. (2-tailed)	0.000	0.000	0.000	0.000
N	200	201	201	201

5.4.3.3 Relationship between wealth rank and asset-related variables

At the household level, as expected, wealth rank shows a significant correlation with the ownership of non-productive assets such as gold jewellery, TVs, telephones, motorbikes, three wheelers and vans (i.e., the ownership of these assets increases with wealth). Interestingly, wealth rank did not appear to be correlated to owning assets such a radio, which could be as a result of most households in the community possessing such items regardless of their wealth rank (see Table 5.5).

Table 5.5 Correlation between wealth rank of a household and asset related variables (where lower wealth rank is assigned to better-off households)

Wealth Rank	Gold Jewellery	TV	Telephone	Three wheeler	Motorbike	Van
Spearman's Correlation Coefficient	- 0.211	- 0.422	- 0.373	- 0.157	- 0.207	- 0.204
Sig. (2-tailed)	0.002	0.000	0.000	0.026	0.003	0.004
N	205	201	201	201	201	201

5.4.3.4 Relationship between wealth ranking and well-being related variables

When a Spearman's rank correlation test was carried out, as expected wealth rank was significantly correlated to total income at the household level. Wealth rank is also correlated with being a recipient of a government welfare programme (i.e., Samurdhi), such that poorer households are more likely to be welfare recipients (see Table 5.6).

Table 5.6 Correlation of wealth rank and income related variables (where a lower wealth rank is assigned to better-off households)

Wealth Rank	Total income	Welfare recipient
Spearman's Correlation Coefficient	- 0.334	+ 0.311
Significance (2-tailed)	0.000	0.000
N	186	197

5.4.3.5 Relationship between wealth rank and livelihoods related variables

To investigate the relationship between wealth rank and different livelihood activities I broadly divided households in my sample into three main livelihood categories.

- Fishing (this included sea fishing, lagoon fishing and fish trading).
- Natural Resource Uses (this included paddy farming, chena cultivation, home gardening, cattle farming, poultry farming, casual labour work, shell mining, coral mining, lime kiln operation, coconut leaf weaving, coir rope industry, brick making and carpentry).

- Other (this included employment with the private and government sectors, having one's own business, working abroad, being dependent on one's children/family and those retired).

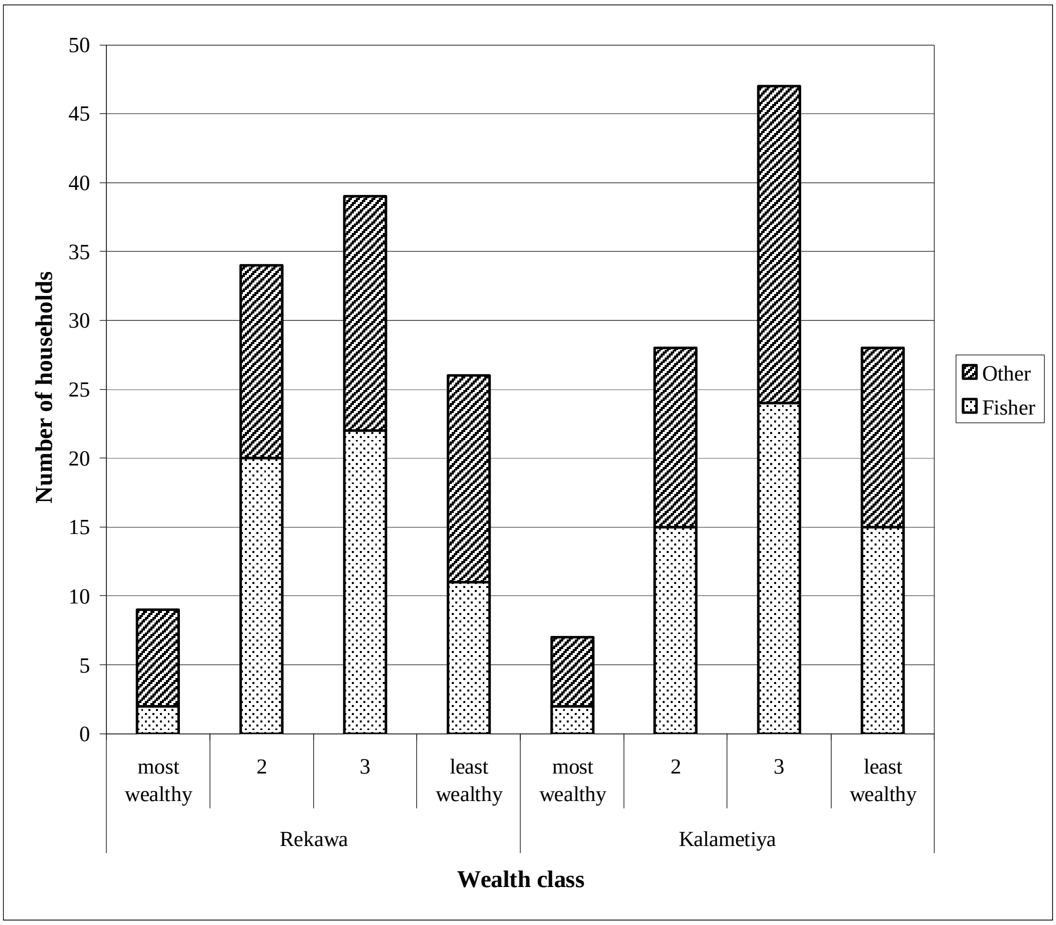
Since this study is focusing on livelihoods dependent on natural resource uses, the categorization focused on these livelihoods and those not dependent on natural resources were considered a control group and called 'other'. Moreover since fishing is the major livelihood activity in the area (see Chapter 4, Section 4.5.1) it was considered a separate category even though it was also a natural resource use related activity.

It was not possible to classify a household into a single livelihood category as about 41% of my sample households engage in more than one livelihood activity (as discussed in Chapter 4 Section 4.5.1). The livelihood categories above therefore indicate the different livelihood activities that contribute towards a household's overall income. This value was given as a proportion between 0 and 1. For example a household that engaged in fishing (which contributed 60% of household income) and coral mining (which contributed 40% of the household's income) would be categorized under two livelihood categories 'Fishing' (0.6) and 'Natural Resource Use' (0.4). Likewise a household that was engaged in paddy farming (which contributed 70% of the household income) and poultry farming (which contributed 30% of the household income) would be categorized under one livelihood category 'Natural resource use' (1.0) as both livelihood activities fall under this livelihood category.

Based on this particular categorization of livelihoods, the null hypothesis in this case was that there should not be a significant relationship between wealth rank and type of livelihood, as households in each livelihood category should be spread across the wealth categories (although not equally spread. i.e., not an equal number of individuals in each wealth group). When a multinomial regression analysis was undertaken with wealth rank as the dependent variable and each livelihood category (fishing, NR use and 'other') in turn as the independent variables, it appeared that none of the livelihood categories showed a significant relationship with wealth rank.

In other words, it was not possible to generalize which wealth rank the household would belong to based on the livelihood category it was placed in. For example, a household that falls into the ‘natural resource use’ livelihood category may be engaged in casual labour that gives a fairly low income or be operating a lime kiln which gives a relatively high income. Even a household that falls into the ‘fishing’ livelihood category may vary, as the household may be a 19.5 foot outboard engine boat owner or an individual who owns only a small traditional canoe or ‘oruwa’ or perhaps even no boat at all and this is clearly illustrated in Figure 5.5. To disaggregate households that fall into one livelihood category in terms of wealth rank would therefore require additional data at the household level.

Figure 5.5 The distribution of the fishing livelihood category in terms of wealth rank



5.4.3.6 Relationship between wealth rank and fisheries livelihoods related variables

To illustrate the above-mentioned point, I investigated in more detail what kinds of significant relationships existed between wealth rank and households belonging to one livelihood category. As fishing is the prominent livelihood activity in the study site, I focused on the sub-sample of fishing households. Of the fishing households about 55%

are engaged in one-day sea fishing using either an oruwa or 19.5 foot mechanized boat; 18% are engaged in lagoon fishing; 12% are engaged in both sea and lagoon fishing; 3% are engaged in sea fishing on multiday boats and 12% engaged in fish trading.

The independent variables that I considered in this analysis were:

- Type of fishing the household engaged in (nominal variable):
    1. Lagoon(using an oruwa)
    2. Sea one-day (using an oruwa)
    3. Lagoon & sea one-day fishing (using an oruwa)
    4. Sea (using a fibre glass boat one day and multiday)
    5. Fish trading
- Did the household own a fishing boat (ordinal variable)
    0. No boat
    1. Own boat
- Type of fishing boat the household owned (ordinal variable)
    1. Oruwa (lagoon)
    2. Oruwa (sea – non mechanized, mechanized and sail)
    3. One day boat (19.5 feet - 30.5 feet with outboard engine)
    4. Multiday boat (inboard engine)
- Did the household own fishing gear (ordinal variable)
    0. No gear
    1. Own gear

I treated type of fishing as categorical and type of boat owned as ranked. In the case of households where more than one individual was engaged in fishing, a cumulative score was given for both the fishing boat and fishing gear variables. For example if there were two individuals engaged in fishing and one owned a sea oruwa and the other a one day boat, then the total score of type of boat would be 2+3 = 5. If both individuals in the same household owned their own gear then the total score for gear would be 1+1 = 2. In the case of households where one individual was engaged in both lagoon and sea fishing and may own two boats (lagoon oruwa and sea oruwa) and gear for both types of fishing, once again a cumulative score would be given for boat as well as gear (boat score = 1+2 = 3; gear score = 1+1=2).

Type of fishing a household engaged in was indicated as a proportion between 0 and 1. If a household was engaged in both lagoon fishing (50% of income) and sea fishing (50% of income) then the household was categorized under two livelihood categories – lagoon fishing (0.5) and sea fishing (one day) (0.5). There may be a household that is engaged in sea fishing for 60% of their income and in farming for the balance of their income and in this case the household will be categorized as sea fishing (0.6).

Carrying out a Spearman's rank correlation test between wealth rank and owning a boat and fishing gear showed a negative correlation as expected, which means that poorer households are less likely to own either a boat or fishing gear (see Table 5.7). A household's overall boat score and gear score also showed a negative correlation with wealth rank once again indicating that poorer households are more likely to engage in only one type of fishing or have only one individual engaged in fishing (resulting in lower boat scores), whereas better-off households are more likely to diversify their livelihood strategies or have more than one individual engaged in fishing (resulting in higher boat scores). This fact was also confirmed in the in-depth interviews undertaken with fisher households.

Table 5.7 Correlations between wealth rank and productive fishing assets (where a lower wealth rank is assigned to better-off households)

Wealth Rank	Boat score	Gear score	Own a boat/s	Own fishing gear
Spearman's Rank Correlation Coefficient	- 0.329	- 0.223	- 0.278	- 0.262
Sig. (2-tailed)	0.001	0.022	0.004	0.007
N	105	106	106	106

In the study site, there did not however appear to be any direct association between wealth rank and the type of fishing the household is engaged in or with the proportion of income provided by the fishing industry and both correlation tests showed non-significant results. This meant that a fisher engaged in sea fishing would not necessarily be better off than a fisher engaged only in lagoon fishing and vice versa. It was clear that what was more relevant is ownership of productive assets, such as whether one owns a boat or not and what type of boat it was and to a lesser degree, whether one owns fishing gear or not. In the PRA wealth ranking exercises too, certain livelihood-related criteria used to categorise households into different wealth groups indicated similar trends – with fishers who owned one-day boats being more likely to be wealthier than fishers who only owned a traditional 'oruwa' as well as boat owners being more likely to be better-off than fishers who were employed as hired help (see Annex 5.1).

5.4.3.7 The Relationship between wealth rank and policy-related variables

To determine whether wealth rank is linked in any way to households getting involved in coastal zone management policy processes such as the Special Area Management or SAM process, Spearman's rank correlation tests were carried out with two variables – SAM involvement and SAM benefit. In the case of SAM involvement, this meant that at least one member of a household was participating in the SAM process. The level of participation could vary from participating in village level meetings in relation to SAM activities, to participating in SAM livelihoods programmes, or being a beneficiary of their outreach programmes such as obtaining a rainwater harvesting tank. SAM benefit on the other hand recorded the household's overall perception of whether they had benefited (or not) from the SAM process.

There was a significant correlation between wealth rank and involvement in the SAM process ($r = .153$, $p < 0.05$). In other words, poorer households are more likely to be involved in the SAM process than wealthier households. While SAM involvement shows a correlation with benefit by SAM ($r=0.553$, $p <0.001$), wealth rank versus benefit by SAM gave a non-significant result (see Table 5.8). This validated the findings in Chapter 4 Section 4.6 that discussed the fact that while poorer households get involved in the SAM process in the hope that they can obtain some tangible benefits, in reality it may not be the poorer households that receive the real benefits (for example, many of those interviewed indicated that beneficiaries of the rainwater harvesting tanks had not been the poorest, most deserving households, but those who were office bearers on the village-level committee). At the household level therefore there is some disillusionment in the SAM process (as indicated in the SAM questionnaire survey). It is clear that while the SAM process has targeted the correct households within the community, it also has to deliver on the expectations of the poorer more vulnerable groups. Therefore further fine-tuning of the management process at the community-level is required to ensure the sustainability of SAM in the long-term.

Table 5.8 Spearman's Correlation between wealth rank and the SAM process (where a lower wealth rank is assigned to better-off households)

Wealth Rank	Involved in SAM process	Benefited from SAM process
Spearman's rank correlation coefficient	+ 0.153	+ 0.054
Sig. (2-tailed)	0.024	NS
N	218	218

A multinomial regression was carried out to determine whether there was a site interaction with SAM involvement (WR = site + SAM involvement + site*SAM involvement). The model gave a non-significant result which indicated that there appeared to be no systematic difference in the two sites in relation to getting involved in the SAM process.

5.4.3.8 The Relationship between wealth rank and Personal Security

The relationship between how people feel and their level of poverty has been illustrated in Table 5.9, where in terms of wealth rank, as expected the proportion of males and females feeling positive increased in the better-off wealth categories. This relationship is further validated when binary logistic regressions between personal well-being and the wealth rank variables are run in Chapter 7 Section 7.4.5.

Table 5.9 The proportion of respondents feeling positive at present (where a lower wealth rank is assigned to better-off households)

Wealth Rank	Males	Females
1	0.62	0.58
2	0.50	0.55
3	0.42	0.41
4	0.27	0.19

5.4.4 Usefulness of wealth rankings

Overall it has been clearly demonstrated that wealth rank is capturing several dimensions of poverty at the household level and significant results were obtained in terms of wealth rank versus the type of housing (for example number of rooms in house, type of roof, sources of water and lighting), ownership of productive assets (such as fishing boats and fishing gear) as well as non-productive assets (such as gold jewellery and TVs), the total income of a household and also being a recipient of the main government welfare scheme. This suggests that wealth rank can be considered a composite explanatory variable that can serve as a proxy for several poverty-associated variables. The wealth ranking exercise also proved to be a very useful method by which a community could be stratified in terms of various socio-economic factors. Therefore the sample of households I used in my analyses was selected using a stratified random approach based on the wealth ranking categories (as well as primary livelihoods) of each of the households. Wealth rank was also useful in validating quantitative survey results obtained on certain coastal zone management policy processes such as the SAM process. It must be noted that for wealth ranking exercises to be successful however, the key respondents should have a good knowledge of each of the households being ranked under the exercise. This was illustrated by stronger correlations (a higher consistency) between wealth rankings undertaken by participants who had a better knowledge of the households in a village.

5.4.4.1 Historical wealth rankings in Rekawa and Kalametiya

The historical wealth rankings in Rekawa and Kalametiya showed that overall households had got wealthier over the last 10 years in both sites (see Table 5.10). A similar pattern was observed in both Rekawa and Kalametiya, with the percentage of households falling into the ‘rich’ and ‘average’ wealth rank categories being higher in the present than in the past, while the percentage of households falling into the ‘poor’ category being much lower in the present than in the past. However, the number of households falling into the poorest wealth category had remained somewhat similar in both the present and the past and in fact, the percentage of households falling into the ‘very poor’ category had increased slightly in both sites at present compared to the past. It was interesting to note that of those households that were considered very poor 10 years ago, 39% of the overall sample, (i.e., 36% in Rekawa and 43% in Kalametiya) were placed in a better-off wealth group at present. This illustrated the transient nature of poverty in the case of these households, while the higher percentage of households remained in the very poor category.

Table 5.10 Historical Wealth Rankings in Rekawa and Kalametiya

Site	Wealth Rank	Present % households	Past % households
Rekawa	Rich	18	12
	Average	33	26
	Poor	27	41
	Very poor	22	21
Kalametiya	Rich	14	9
	Average	25	16
	Poor	38	55
	Very poor	23	20

A general discussion held about events or factors that had caused households to move either up or down wealth strata was useful in obtaining some broad explanations for the above poverty trend. According to the participants, a majority of families show upward mobility in terms of poverty (i.e., have become better-off) due to diversifying their livelihood strategies, more than one member in the household being employed and in general, the area being positively affected by development initiatives so that overall there are better infrastructure, electricity, water and sanitation facilities. Downward mobility in terms of poverty according to the participants was usually caused by ill heath, old age and a loss of livelihood and hence income. From findings of the livelihoods survey it is apparent that changes in a household's primary livelihood over the last 10 years (see Chapter 4, Section 4.5.4) can cause both an upward or downward mobility in terms of poverty. For example, due to resource degradation (such as the Kalametiya lagoon, and to a lesser degree the Rekawa lagoon, undergoing hydrological changes that have caused a drop in shrimp and fish catch) or severe climatic conditions such as droughts (that have destroyed crops), households have moved from livelihoods such as lagoon fishing and farming to sea fishing and casual labour (as described in Chapter 4, Section 4.5.4). Depending on what kind of new livelihood strategy the household moves into, their mobility in terms of poverty may move either upwards or downwards. For example, those engaged in sea fishing have often become better-off while those engaged in casual labour have become poorer. Those that do not diversify their livelihoods even when their primary livelihood is under stress often remain in the same wealth strata or become poorer.

5.4.4.2 Usefulness of Historical Wealth Rankings

Historical wealth rankings were a valuable tool in showing the overall trends in poverty over a given time period. It is however difficult to determine through the historical wealth rankings what underlying factors exactly has caused this particular trend. A general discussion held about events or factors that had caused households to move either up or down wealth strata was however useful in pointing to some broad explanations. Upward mobility was often as a result of diversifying livelihoods and more than one individual in the household being employed. Downward mobility may be caused by ill health and old age which would lead to a loss of livelihood. For those dependent on natural resources for their livelihood, resource degradation has resulted in a change in livelihoods which could lead to either upward or downward mobility. The case studies discussed in the next section give a more in-depth understanding of the underlying causal factors resulting in upward or downward mobility in terms of poverty and help validate the result obtained in the historical wealth ranking exercise.

5.4.4.3 A qualitative poverty profile

The key findings from the qualitative case studies are presented under the following dimensions – ecological, economic, social and cultural and political (adapted from the Sustainable Livelihoods Framework and the Assessment Life Chances Framework). Although presented separately, these dimensions are inter-related and cannot be considered in isolation of one another. Overall, the in-depth, semi-structured interviews (undertaken for the case studies) helped gain insights into factors that influence poverty dynamics as well as explore in more detail some key issues and trends that emerged from quantitative data obtained through my household surveys.

5.4.4.3.1 Ecological Dimension

Since a majority of the households in the study site are dependent on natural resource based livelihoods, as expected there was a strong link between environmental changes and poverty processes. In some cases, environmental change triggered negative dynamic processes that exacerbated poverty. For example, in Kalametiya, several lagoon fishermen reported that the lagoon ecology had changed dramatically over the past three decades mainly due to upstream irrigation interventions as well as infrastructure construction at various points in the lagoon (see Chapter 4, Section 4.4.1.2). As a consequence, the lagoon hydrology was severely altered, which was seen as the major reason for a decreasing fish catch and therefore lower income levels as illustrated in the statement below. Overall, environmental changes particularly affected the poor households who often appear to have only one, usually unskilled breadwinner per family.

"The income I obtain from lagoon fishing is much lower today than what it was in the past. I now only make about Rs. 100/= or Rs. 150/= per day. The main reason for this is the decrease in the numbers of fish found in the lagoon. This is most probably a result of the lagoon size shrinking, a thick layer of silt collecting in the lagoon and also due to waterweeds spreading rapidly over the surface of the lagoon. There is no space in the lagoon for fish to breed" (Lagoon fisher, age 49, Tuduwa village).

Similar developments were reported from those engaged in sea fishing, although, in this case, the major contributor to decreasing fish catches was seen in the intensification of sea fishing, which had also led to increasing competition among the sea fishermen. According to the sea fishers, the decrease in catches had particularly impacted those engaged in the coastal fishery using traditional *oruwas* as it was difficult for them to compete with fishers who owned the 19.5 foot mechanised boats that could cover a wider area.

However, the revenues from sea fishing (and to a lesser extent lagoon fishing) have always been seasonally variable, and fishermen had adopted a strategy of livelihood diversification in order to make up for seasonal losses. Among those activities, casual labour work was found to be the most prominent among the poor households. Another strategy that was adopted by several sea fishermen was the intensification of their fishing efforts by diversifying the types of fishing gear used that could target additional fish and crustacean species. Unfortunately some types of fishing gear actually contributed to unsustainable fishing practices, which would eventually result in the further decline of the fisheries. Fishers also cope with the declining catch by investing more time per day in fishing activities than earlier.

"In the past I could go fishing for 2 hours and get a decent catch of fish. Today, I would need to fish the entire day to get the same catch size. The fisheries resources have declined in these coastal waters over the years. Two of my sons are also engaged in fishing now and they have diversified their catch and are now involved in the coastal lobster fishery." (Small-scale Sea Fisher who owns a non-mechanised oruwa, age 48, Gurupokuna Village)

5.4.4.3.2 Economic Dimension

In-depth interviews with households belonging to the four mobility categories revealed some interesting features with respect to their economic situation. For example, with regard to their livelihood activities, households belonging to the poor category (both in the past and present) all had one income earner who was generally engaged in only one primary livelihood activity, although sometimes this individual had diversified to engage in at least two livelihood activities (mainly due to the primary livelihood activity bringing in only a low income). For example in Kalametiya this involved lagoon fishing, sea fishing (as hired help), coir-rope making and casual agricultural labour work. These livelihood activities were considered to be the lowest paying employment opportunities in the area. These livelihoods were also not stable and were dependent on seasonal variations and the status of the natural resources.

For those households belonging to the category of 'poor' but 'better-off' in the past, once again these households were dependent on one primary livelihood and often in this case their income was not adequate to meet their expenses, even in terms of basic requirements such food and clothing. Environmental problems had also caused income levels to decrease over the years such as the drought in the area in 2002 that destroyed cultivations (for example coconut cultivation) and fish catch from the lagoon declining due to hydrological changes. Others in this category had retired due to ill health or old age and therefore had no income of their own and were completely dependent on children.

"In the past I used to engage in both sea and lagoon fishing. Now I am too old to go sea fishing, so I just go and help out sometimes at the fish landing site and am usually

rewarded with a couple of fish for my effort, which I bring home for our consumption. I used to until recently cast a net occasionally in the lagoon during the shrimp season, but since the shrimp resource in the lagoon has declined dramatically, there is no point anymore, as I would often not even catch enough to bring home for one meal." (Retired sea and lagoon fisher, Age 76, Gurupokuna Village).

For households that are currently 'better-off' (but were poor in the past), some of the key characteristics in relation to their livelihood strategies was that these households are engaged in livelihood activities such as sea fishing (for example, owners of one-day mechanized boats), paddy farming (owned their own paddy land) and money-lending, which were all the high income generating activities in the area. There was generally more than one income earner in the household, with older children being employed and also contributing towards the household expenses. In some of the households interviewed it became clear that one factor contributing to the households being better-off at present is due to their children getting a good education and their educational background assisting them to obtain stable employment. Many were employed in technical fields such as computer centers while others worked in local government offices and in the national security forces. Another important characteristic of these households was that all those interviewed spoke of saving money and sound management of their finances so that they could make provisions for the future, as illustrated by the following statement:

"I would like to ensure that I could help my sons build their own houses. I also am very keen to educate my youngest son – he is good in his academic studies so we hope that he will continue his higher education and then get a good job. I do not want him to follow my two elder sons and me and get into sea fishing as a livelihood. I also hope to save some money – so that if my wife and I have any medical problems in the future, then we do not have to be a burden to our children and can look after ourselves." (Sea Fisherman, Age 48, Gurupokuna Village).

In the case of households that are 'better-off' (both in the past and present), in general there is more than one household member that is engaged in a livelihood. Grown-up children are employed. Therefore there is more than one income that contributes towards household expenses. Otherwise the household head has diversified his livelihood strategies and is engaged in more than one livelihood strategy. Households in this category are engaged in livelihood activities such as sea fishing, paddy farming, brick making, and working for private organizations and garment factories, all relatively well-paying income generating activities. In this category too, individuals spoke of sound management of their finances.

"My two sons are employed – one is engaged in sea fishing and the other is involved in labour work associated with paddy farming. My husband is also engaged in sea fishing. My daughter is employed in a garment factory. Because my children also contribute towards household expenses, we managed to save money to build our own house. I also make sure that I use all the money I receive to manage the house wisely, and do not waste anything. My husband also does not spend his money on anything unnecessary such as alcohol…" (Fisherman's wife, Age 40, Gurupokuna Village),

All those interviewed were of the opinion that the cost of living had increased over the last 10 years, with basic necessities such as consumer goods increasing in price over the years. In addition they indicated that the cost of basic amenities such as water and electricity had also increased drastically over the last few years.

"The cost of living has increased. In the past, Rs. 100/= was adequate for us to live on for 3 days. Now, our food expenses alone for one day are about Rs. 100/=." (Sea Fisherman, Age 40, Gurupokuna Village).

The general increase in the cost of living was cited as a factor that made it difficult to move out of poverty. To deal with the rise in costs, a coping strategy commonly adopted by the households that were relatively better off was the distribution of risk by securing an income from more than one household member. Poorer families, however, found it much harder to cope with increasing costs of living. Poor households explained during the interviews that they generally had to change consumption patterns. They often missed a meal or replaced the common rice and curry with less costly, and less nutritious substitutes such as tea and bread. Moreover, they often had to buy goods on credit, or borrow money from a village moneylender (for a more quantitative analysis of coping strategies see Chapter 6).

Another increasingly common measure towards a rising household income, especially among the poorer households was to send a family member, usually women, to work abroad. Typically, young women would go to Middle Eastern countries and work as unskilled labour (such as housemaids and kitchen aids), often under difficult circumstances. The remittances were usually sent home regularly. However, this strategy was not always successful for moving out of poverty, because charge rates for labour migration agencies were high, payment irregularities in the host countries common, and earnings often not invested into productive assets but used for daily consumption. The following example clearly illustrates this recurring scenario in rural areas.

"I went to the middle east as a housemaid in January 2002 as my husband was engaged in lagoon fishing and his income was far from sufficient for us to live. We did not even have a permanent house in Tuduwa and lived under very basic conditions. Unfortunately all the money I had sent to my husband to build our house he had spent on entertaining friends and other unnecessary things, so my hard-earned money had been completely wasted! The house is still incomplete as a result. I get so upset and angry with my husband when I think of how badly he managed the money I sent him." (Wife of Lagoon Fisher, Age 44, Tuduwa Village,)

5.4.4.3.3 Social and Cultural Dimensions

Family Networks and Relations

One characteristic that was common to all those households that were considered to be poor both in the past and at present, was the apparent lack of a family safety net, with the households having very minimal or no relations with their immediate families – i.e., both the male and female in the household, did not receive any assistance from either their siblings or their parents. According to the households interviewed, one of the main reasons for this were that their siblings or parents were equally poor or worse off than they were and therefore did not have the finances to assist them. Another factor was conflict between siblings. The other reason was the geographical location of the family members, for example not living in the same area as the household – living in other villages or distant towns. Therefore distance had created a situation where there was little contact between the family members.

"I cannot financially help my parents as I am so poor myself. My husband died and there is no one to support me. His family lives in another village and we never see them. My family lives in this village but only my elder sister helps me. She sometimes gives my daughter some money for her education and also lends me money. My brother and I do not speak to each other. It is because of his bad influence that my husband became an alcoholic. My younger sister is well-off but she does not help me. She supports my parents and I do not like to ask her for help. " (Female Household Head, Age 37, Wewegoda Village).

In the case of households that are poor but were better-off in the past, although family safety nets were present, these were not as strong as in the case of those who are presently better-off. Alternatively there was strong help from one side of the family but not from the other. Even if there was family assistance, this appeared to be inadequate to move them out of their level of poverty. The households in this category often had to deal with additional expenses due to the ill health of a family member (thereby incurring heavy medical expenses). Another characteristic was that the household members were elderly and therefore unable to engage in work either due to ill health or old age. This in turn meant that they were dependent on their children – but in some cases their children were also relatively poor and therefore could not help them sufficiently to move them out of this poverty level.

"I cannot go fishing any more. My wife and I are old and therefore it is difficult for us to make a living now. We are entirely dependent on our children. It is difficult for them also as they are married and have families of their own. My son's wife did not get along with us and we had a disagreement. As a result my son has stopped financially supporting us. My three daughters support us, but they too have financial problems of their own. We are very unhappy about our current situation as we do not like to be a burden to anyone." (Retired sea and lagoon fisher, Age 76, Gurupokuna Village)

In all the households interviewed that were better-off at present than what they were in the past, the presence of a strong family safety net was a prominent factor. Siblings helped one another financially, or with their labour. In many cases the siblings were relatively well off. But even when the siblings were poor, they helped by devoting their time and labour for various activities such as looking after the children, helping during special occasions or events such as weddings, funerals and almsgivings. Siblings who lived in other villages or distant towns although did not assist on a regular basis, did provide their assistance for special occasions. In the case of more elderly couples, the children helped their parents – providing them with all their financial and material needs.

"My children are all very close and are always helping one another. My daughter lost her husband during the JVP insurgency period. My sons now provide for her and her child. They even built her a house with their own money. My eldest son works in the army and he supports my husband and me and provides us with everything we need. He has built this big house for us, which has electricity and a water connection. We used to live in a small wattle and daub hut with a thatched roof" (Housewife, Age 56, Tuduwa Village)

In the case of households that were considered 'better-off' both in the past and present, family safety nets were present and relatively strong. Where there were grown-up children, they tend to financially help out the parents.

"My husband has four brothers and all four of them help us in many ways. When my husband passed away one year ago, they helped me financially. They even set up a small shop for me to manage from home so that I would have a source of income. My two sons also contribute to the household expenses especially after their father's death. My elder son is continuing with brick making as did my husband and my younger son hires out our small tractor and works in the paddy fields". (Female Household-Head, Age 42, Tuduwa Village).

The impact of substance abuse

Alcoholism was a common substance abuse issue that plagued the households that were considered poor in both the past and present. In this category all the household heads (males) were alcoholics. In the case of a female-headed household that fell into this category, the husband had in fact died of alcoholism. The alcoholism issue was however not discussed immediately during the interviews and instead it slowly emerged during the course of the discussion. There was a sense of social stigma attached to it and the wives were of the opinion that the rest of the village had a negative impression of the household not because they were amongst the poorest in the village, but mainly because their husbands were alcoholics. In general, drinking alcohol is primarily carried out as a means of social recreation amongst the men. After a hard day's work and a good catch of fish, groups of fishermen meet to have a social drink together. However drinking excessively is common and many individuals often turn into alcoholics. Alcoholism becomes a means of escaping the daily hardships these individuals face in terms of their livelihoods, low incomes and relative large families to feed. This becomes a vicious cycle, with the alcoholism causing further breakdown of their family lives and well-being and driving them deeper into poverty. In all the households interviewed, due to the alcoholism problem, a large proportion of their income was used to purchase alcohol, thereby making it virtually impossible for the families to make ends meet and purchase basic requirements such as food and clothing. In addition, they were unable to complete their houses or build larger houses and lived generally in very basic, incomplete structures. Due to alcoholism, there were also social issues, such as conflict and violence within the family, generally targeting the wives but sometimes even the children. Alcoholism appeared to be a key factor in preventing the upward mobility of a household from a certain level of poverty. The households either remained in the same economic strata or sometimes fell to a lower level. Therefore, substance abuses such as alcoholism contributed towards a status of chronic poverty.

"There is no difference in our economic status in the past and now. This is all because my husband is an alcoholic. Most of his income he spends on alcohol. We do not have enough money for our daily expenses. We never get to save any money for the future. Even if I manage our finances carefully, I think we will always be poor as a result of my husband's drinking" (Wife of Sea Fisherman, Age 50, Gurupokuna Village).

In the case of households that were better-off both in the past and present and households that were better-off but had been poor in the past, the absence of alcoholism was a significant factor with all of the households that fell into these categories. There was also a case of an individual giving up alcohol and attributing the fact that he was better-off now partly due to the fact that he had given up alcohol.

"The one weakness I had in the past was that I used to drink alcohol excessively. I stopped this habit not because anyone told me to but because I realized on my own how much money was being wasted as a result of my drinking. Since I stopped, I managed to

save a proportion of my income and have managed my finances better. I am much better-off as a result. I also feel much healthier" (Sea Fisherman, Age 48, Gurupokuna Village)

The influence of Caste

Although not that prominent, there were some caste-related divisions within the village community, with some members of the higher *Goigama* (farming) caste, not making sufficient effort to understand some of the resource use needs of those belonging to the lower *Karawa* (fishing) caste. The in-depth interviews revealed however that since a majority of these coastal communities in this study are from the fishing caste, they dominate these villages and such caste-related conflicts do not generally arise, unlike in the case of some of the other villages surrounding the lagoons that have larger farming communities. In addition a correlation test between the wealth rank and caste variables showed non-significant results confirming that there were no divisions on a wealth rank/caste basis in these villages (see Section 5.4.3.1 in this chapter), which may also contribute towards there being little influence of caste in terms of a household being always poor or in a better-off wealth category. Although both the older and younger respondents interviewed stated that caste was not an important factor in their every-day lives, the older respondents indicated that when arranging marriages for their children, the caste factor was still considered to be important and that they only looked for partners from 'suitable' castes for their children.

"Unlike when we were young, these days in our village the caste system is not considered that important in our daily lives. Those days there was much less interaction between those from different castes. Now we treat everyone the same, it does not matter what caste you belong to. But of course, when it comes to marriage, the caste system plays an important role. We prefer arranging marriages for our children to partners from the same caste as us as well as from a similar social background. This way they will have fewer problems to face in the future and their marriage we feel has a greater chance of success." (Wife of Fisherman, Age 42, Wewegoda Village)

5.4.4.3.4 Political Dimension:

In Sri Lanka's rural south, politics appear to play a major part in everyday life. In the study site in-depth interviews revealed that at the village-level, almost every sector of the community's lives was highly politicized. For instance, some of the village societies were criticized as being highly political and discriminating against individuals due to their party affiliations. Within the study site, there were three political parties that dominate politics in the area. These were: the United National Party (UNP) and the Sri Lanka Freedom Party (SLFP) - the two leading political parties in Sri Lanka, as well as the Janatha Vimukthi Peramuna (JVP - People's Liberation Front). The UNP and SLFP parties can be both considered democratic socialist in orientation. Since Sri Lanka became an Independent State in 1948, these two parties have generally alternated in forming governments, often in coalition with other parties, for example the SLFP forming the People Alliance (PA) and the UNP the United National Front (UNF). The JVP is a Marxist party with a Sinhalese base of support especially in the rural south. They currently form part of the Peoples Alliance (Encarta, 2004).

With respect to politicized village societies, one example that was highlighted by several households interviewed was that of the coastal resources conservation village committee only assisting members who belonged to the same political party as that of the office bearers of the village committee (see Chapter 4, Section 4.6). In-depth discussions suggested that from the original elections, those with political influence have dominated many of the village community organizations. As a result a majority of the households interviewed irrespective of which wealth mobility group they belonged to appeared to be disillusioned with the process.

"We have had to face political discrimination due to our party affiliations. For example we were entitled to receive tiles for our roof but due to our political affiliations we did not receive the tiles. Other households that were not entitled to this received the tiles as they supported the same party. Although we have only a thatched roof, we did not get the tiles" (Sea Fisherman, Age 33, Gurupokuna Village).

It appeared that during this type of political discrimination no attention was paid to the most vulnerable and marginalized groups. Poorer households that were interviewed indicated that they were also discriminated against by those in their own political party as a result of them being poor and not having much influence in the community or not having the means to play a very active role within the village political party system. These sentiments are clearly illustrated by the statements below:

"Since my husband is dead and I am the only bread-winner for the family, I do not have time to attend political meetings or to get involved in political activities in the village. As a result, even though I am entitled to receive toilet facilities and tiles for my roof, I was not given these because I had not actively participated in these political activities." (Female-household Head, Age 37, Wewegoda)

"There is no one to help poor families like ours. Only the better-off more influential people in the village get all the help from the politicians". (Lagoon Fisherman, Age 48, Tuduwa Village).

In general, most of those interviewed irrespective of their wealth mobility category were uncomfortable to discuss their political party affiliations. This area had been badly affected during the second JVP insurgency in the late 1980s with family members of even some of those interviewed gone missing or killed, so it is not surprising that even almost 15 years later there is a sense of foreboding and suspicion when these issues were raised. It was apparent however through the discussions that the JVP had once more gained substantial favour in these areas, with many believing that they were the only party that genuinely represented the needs of the rural poor, while the general perception was that the other major parties were targeting mostly the wealthier, middle class population in the country.

5.4.4.4 Usefulness of the qualitative case studies

Although it was not as easy to compare results between households as with the quantitative survey data, the qualitative case studies provided a wealth of information on the social integration within a household and family safety nets that clearly played a major role in mobility in terms of poverty. Other social issues such as alcoholism, which according to those interviewed was a key inhibiting factor in upward mobility also transpired very strongly during these in-depth discussions. In addition, ill-health and old age were other factors that clearly lead to a negative poverty trend. The interviews also gave a more comprehensive understanding of the range of coping strategies that people adopt at the study site during crises or difficult periods, to try and maintain their economic and social status.

Overall, while each case study is unique and circumstances different, and thereby it is clearly not possible to directly compare data between these examples, what the case studies do demonstrate is that there are a number of factors that influence poverty dynamics and that it is the particular combination of these inter-dependent factors present in each case that result in a household being either more of less vulnerable, which in turn results in a household being in a state of either chronic poverty or in a transient phase of poverty. Some of the key characteristics that emerged for households that typically fell into the four mobility categories are summarized in the Table 5.11.

Table 5.11 Key Findings on Factors that Enhance or Impede Poverty Mobility

For households that are Poor (both in the past and present) factors that prevent upward mobility They engage in the lowest income generating livelihoods in the area; Even if the household diversified livelihood activities, the return is not sustainable to help move out of chronic poverty – this is due to a number of factors such as improper management of finances – key issue that contributes towards this is alcoholism. Also the households lack a family safety net system – no family member helps them and they too are too poor to help other family members. In addition to this, there may be other external factors that impede the sustainability of livelihoods – such as environmental conditions, market forces, etc.	**For households that were Poor in the past but Better-off at Present, factors the enhance upward mobility** In the past they were engaged in the lowest income generating activities in the area; the households diversified their livelihood activities which they managed to sustain over the long-term and also managed their finances well, saving and investing their money wisely; children once they grew up generally found employment - those that received a good education obtained stable employment in government institutions and private organizations; others engaged in natural resource based livelihoods such as sea fishing, and did well as they owned their own boats and gear; there are strong family safety nets and therefore everyone helps either financially or by volunteering their labour; Members within the household are united and there is no history of alcoholism.
For Households that were Better-off in the Past, but are Poor at Present, factors that cause downward mobility In the past they were engaged in livelihoods that had relatively good income levels; although the households managed their finances well and there maybe no history of alcoholism, the household encountered high expenses or incurred high losses due to circumstance beyond their control (for example, ill health); their income levels are inadequate to meet these additional expenses; they are the only income earners in the household with young children (high dependency ratio) or they are elderly and therefore cannot engage in a livelihood at present due to old age or ill health; family safety nets are present but the level of financial assistance obtained not sufficient to help them move to a better economic level.	**For Households that are Better-off now and also in the Past, factors that prevent downward mobility** In the past they were engaged in livelihoods that had relatively good income levels; or had diversified their livelihood strategies and were engaged in several livelihoods simultaneously; there is more than one family member employed (grown-up children all generally find employment) and therefore more than one income contributing towards their household expenditure; family safety nets are also relatively strong; therefore when they encounter negative events such as ill-health or death in the family, although they suffer a temporary set-back they are fairly resilient and are able to maintain their economic status in the longer-term.

5.4.4.5 Discussion

Often policy makers and development agencies tend to think of poor rural communities as being homogeneous entities in terms of poverty. It is clear from the findings in this chapter that at the household level, there are variations in relative poverty and poor people can play an important role in giving us an insight into what factors cause these variations.

From a methodological point of view, the participatory research tools used in my study clearly had both their strengths and weaknesses and these are summarized in Table 5.12.

Table 5.12 A Summary of the strengths and limitations of the participatory tools used to study poverty dynamics at the household-level

Tools/Methods	Strengths	Limitations
Wealth Ranking Exercises	• Get the community's perception of wealth • Shown to be a good proxy to some conventional poverty indicators and can be used as a variable in quantitative analyses • Produces ordinal information and useful to stratify a community in terms of criteria such as livelihood activities, crude income levels, physical assets, education and family size/composition. • Historical wealth ranking exercises can give a preliminary indication of the dynamics of poverty (indicating upward or downward mobility of a household's economic status over a given time period). Useful therefore in pointing to an overall increase or decrease of perceived poverty within a community/village	• As the modal value of each wealth ranking exercise there is a lack of comparability. • Hard to compare between groups as a subjective exercise that uses the participants own perceptions of wealth. • Does not give an indication of the personal well-being and other psychological factors that affect the household and the individual in terms of poverty processes, and therefore can be used only as a relative measure of certain dimensions of poverty. • As wealth is a sensitive topic, and most prefer to discuss this on a one-to-one basis, obtaining this information through a focus group discussion can be disadvantageous. • In historical wealth rankings, the ability for key respondents to recall accurately household data from 10 years ago was debatable. • Each household gets an overall WR assuming that all HH members share the same level of well-being which may not be the case.

Tools/Methods	Strengths	Limitations
Case studies (In-depth semi-structured interviews)	• Provides information on the different dimensions of poverty and the underlying factors that influence poverty at the household-level that may be difficult to obtain from quantitative methods. • Provides in-depth information on the social integration within a household and the personal well-being of each individual within a household and indicates how this links to poverty processes. • Can validate and triangulate results from other methods	• Difficult to compare qualitative results between households unlike in the case of the quantitative survey data.

5.5 Conclusions

This chapter provides a critical reflection on the empirical experience of using a participatory research methodology to measure poverty at the household level. Wealth rankings, historical wealth rankings and case studies are the three participatory methods utilized in my study. Similar to other empirical studies, in my study, while wealth rankings were useful for obtaining the community's perception on poverty and wealth, it also served as a method of stratifying my household sample according to relative wealth groups. Historical wealth ranks provided information on the overall upward and downward mobility of households in terms of their wealth group over a 10 year period and thereby helped illustrate the dynamic nature of poverty and factors that enhance or impede poverty. In addition, I demonstrate that wealth ranking is valuable in gaining a more holistic understanding of quantitatively assessed poverty indicators. A comprehensive wealth ranking exercise for example captures important quantitative data on a household's demography, asset ownership and livelihoods and can thereby prove to be an important explanatory variable in its own right. In this context I show that wealth rank can be considered as a composite variable that can act as a proxy to several poverty-related variables in the analyses I undertake in the following chapters in relation to food security indices and the personal security index (see Chapters 6 and 7 respectively). The other major participatory technique used - case studies can provide a better understanding of certain less tangible dimensions of poverty, which are less amenable to conventional quantitative analysis. For example I illustrate that in-depth, semi-structured interviews, undertaken for the case studies can reveal underlying social, economic and political associations with poverty which would be difficult to detect using standard statistical methods. Moreover the information obtained from the qualitative interviews will undoubtedly help me get a more holistic understanding of some of my quantitative statistical results in the next two chapters on food security and personal well-being and help qualify some of these findings. This chapter therefore helps demonstrate that while these qualitative methods have both their merits and limitations, it is clear that by capitalizing on their strengths and combining their use with more conventional quantitative methods, it would be possible to highlight different dimensions of poverty.