



## Assessing the impact of conservation and development on rural livelihoods: Using a modified Basic Necessities Survey (BNS) in experimental and control communities.

We know that protected areas, though vital, are not large enough to conserve most large bodied, wide ranging wildlife and the ecosystem services that humans depend upon.

For the last decade we have begun to work in much larger ecologically meaningful landscapes that surround protected areas. In these landscapes economic considerations and human livelihoods are primary considerations. Given this we have increasingly understood the importance of incorporating local livelihood concerns in our conservation toolkit as a means of conserving wildlife in wildplaces, and to ensure that when the benefits of biodiversity and ecosystem services are primarily global, the international community rather than local people should bear the brunt of the costs of conservation.

To assess whether actions to conserve biodiversity or actions to alleviate poverty influence local families livelihoods either positively or negatively we need to be able to:

- a) measure trends in local livelihoods over time, and
- b) attribute conservation or development actions to changes in the status of local livelihoods (i.e., demonstrate with reasonable certainty that these actions cause livelihoods to be better or worse).

For the former (i.e., to assess the level of local livelihoods now and over time) we suggest using a slight modification of the methods developed by Rich Davies called the Basic Necessities Survey (<http://www.mande.co.uk>). For the latter (i.e., to demonstrate that conservation or development actions either raise or lower local livelihoods) we undertake Basic Necessities Surveys in both communities where conservation or development activities are occurring, and in a second set of comparable communities (i.e., those with the same wealth, ethnic makeup, size, access to natural resource and proximity to markets) where no conservation or development activities are in place (i.e., we conduct a quasi-experimental study using the second communities as a control).

### ***Defining poverty***

The United Nations defines poverty broadly as "the lack of basic necessities." Given this, one approach to poverty assessment would be to poll people on whether or not they possessed the requisite basic necessities. Unlike income approaches to poverty assessment (i.e., living on less than US\$1/day or US\$2/day) there is no a priori or global definition of what are basic necessities. In fact the threshold for what is a basic necessity is most likely to vary by location and over time within the same location (i.e., I may feel that a kitchen knife is a basic necessity, but my wife who does not cook does not. Or my son may feel that a mobile phone is a basic necessity, but my father does not.)

### ***The Basic Necessities Survey: a simple but robust tool for measuring poverty***

Rick Davies (<http://www.mande.co.uk>), an independent monitoring and evaluation expert working for ActionAid in 1998, improved on methods first developed in the late 1980s in the UK by Mack and Lansley (1985) by developing a participatory approach to listing and ranking basic necessities. His Basic Necessities Survey (BNS) is a wonderfully quick and relatively inexpensive way (~US\$3-4/household) to measure and analyze household level poverty and to track changes in poverty levels over time. Basic necessities are locally defined as assets or services that 50% or more of local people surveyed agree "are basic necessities that everyone in the community should have and nobody should have to go without". Using this locally determined measure of poverty any family that fails to own or have access to all items within this basket of basic necessities is considered, from a local perspective, to be below the poverty line.

WCS has built on the BNS approach in two ways.

First, we ask each family to report the dollar value of all owned assets in the BNS assets and services list. In this way we can not only generate a locally relevant assessment of who is at or below the poverty, we can document the relative and absolute wealth of people who own all basic necessities and thus are at or above the locally assessed poverty line.

Second, we add to the local list of goods and services, questions of particular interest to us or our donors (i.e., employed by the logging company, eat bushmeat every day, harvest brazil nuts, health insurance).

## ***Conducting a modified Basic Necessities Survey***

The Modified Basic Necessities Survey is completed in three steps: 1] building a list of goods and services that may or may not be considered basic necessities, 2] surveying local households, and 3] analyzing the data collected.

### **Step 1: Preparing a locally determined list of assets and services considered basic necessities**

In the community you plan on surveying or a similar community you need to ask a group of people of mixed age, gender, and wealth (the latter can be assessed based on the standard of the construction of their house) to participate in a focus group.

The group will be asked to generate a list of assets (e.g., TV, bicycle, radio, wheelbarrow, machete; NB: assets are also called “goods”) and services (e.g., one days holiday per week, all school age children attending school, walking distance to a health clinic, home visits by a doctor, eating bush rodent every week, clean drinking water) that participants believe are basic necessities (i.e., items every family should have, and none should have to live without). Your list should contain a mixture of about 30-35 assets and services that include:

- (1) Items that people in the study area are likely to agree are basic necessities, and the majority of households own or have access to (e.g. a knife, having three meals a day);
- (2) Items that people in the study area are likely to agree are basic necessities, but only some people own or have access to (e.g. draft animals, access to secondary schools, a toilet);
- (3) Items few people in the study area are likely to agree are basic necessities, but which were are likely to basic necessities for people in towns (e.g. mobile phones, electricity, a television, public transportation); and
- (4) Items no one in the study area is likely to agree are basic necessities today, but which might become basic necessities in the future (e.g. health insurance, having a holiday).

The list should deliberately include items no one would consider necessities, to encourage the people you interview to consider their answers rather than just marking all items as basic necessities. Do not include items that are difficult to record with a Yes or No answer (e.g., our family is healthy, or teachers are well trained), or that cannot be reliably observed by different people.

Once you have generated a locally defined list of goods/assets and services you might want to consider adding other items that are of particularly interest to your project or to a donor who is funding your conservation activities (e.g., being employed by the tour operator, income from selling palm thatch, improved seeds, training in conservation farming, etc.).

### ***Step 2: Gathering BNS+ data***

Surveys are designed to randomly sample households (random selection Box) within both project and control villages/communities (Box 2). Gathering BNS+ data for sample households is very simple.

Survey teams need to select households and obtain consent (see Box 3 FPIC guidelines) to visit the household at a convenient time, and conduct a BNS+ survey with either the male or female head of household. If both are willing and

available to be interviewed the survey team should use a coin toss to select whom to interview (i.e., heads for women, tails for men).

#### **Box 2: The Importance of Using Control Households**

Demonstrating whether and how conservation actions influence the welfare, livelihood security and subsistence practices of local people is difficult for several reasons.

First, rarely do we have the opportunity to assess the welfare of families before conservation actions are started. So we are left with post facto assessments. The primary problem with these is that merely showing that local people around parks and reserves are often poor and marginalized from national society says little about the role of conservation in their poverty and marginalization. Rather, the status of these people may simply reflect the fact that conservation is often undertaken in the most remote regions within countries where resources may be less abundant or productive, and where households rarely have access to markets and are the last to be provided with government or NGO sponsored social services.

Second, as the welfare of families is not static but rather can oscillate between improving or declining over time, longitudinal studies are needed to detect trends and avoid concluding erroneously that welfare increased or decreased based on a single sample.

And finally, the welfare of households that traditionally have claims on natural resources need to be compared concurrently with the welfare of “control” households that do not. Without this we are unable to assess whether changes in the welfare of families over time result from conservation actions, or from other exogenous factors, such as a change in currency or commodity values, that likely affect the welfare of all households. Control households should reflect the same range of wealth (proxied by the quality of house construction materials), market access (proxied by village price of a basket of goods), and natural resource access (proxied by travel time to the resource) - all of which can be assessed without interviewing candidate households.

During the interview with the randomly selected male or female head of households you will ask the following two questions about each of the assets and services on the list:

- 1) do you presently own or have access to this item – please answer Yes or No;
- 2) is this item in your view a basic necessities that every family should have and no family should have to do without – please answer Yes or No.

For each asset that the family said Yes to owning, you will ask two additional questions:

- 1) how many of this item does the family own, and
- 2) what is the present local sales price for the item (i.e., how much would you have to pay to buy the item).

If the person you are interviewing does not know the present local price, you should determine this at a later date by asking local shop owners or traders. Items can be listed in a table (see datasheet examples in boxes) and read out to subjects item by item, or can be typed on cards that the subject sorts into two piles – have or have not for question 1 or necessity or not for question 2. To ensure that the order the items in the list of assets and services are presented does not influence people’s answers, it is good practice to create 3 datasheets where each sheet (numbered 1-3) lists the items in a different, random order. To choose which sheet to use for each interview through a 6-side dice and select the datasheet based on the number that faces upward on the dice. Keep throwing the dice until the number is either 1, 2 or 3.

#### **Box 3: Human Subjects Safeguards**

Like the Hippocratic Oath that urges doctors to, at a minimum, do no harm to their patients, it is important that researchers

ensure that they do not directly or indirectly harm the families they are studying.

The study should ensure that:

- participation does not place subjects at risk of physical or social harm
- privacy and confidentiality of each subject is ensured
- subjects are informed about the project in the local language and formally asked whether they consent to participate
- subjects have the right to refuse to participate at any stage in the study
- subjects are not coerced to participate in the study and that any compensation be provided at the community, not the individual level, if at all

### **The importance of trust**

At the beginning of one study over half of the people refused to participate because they thought that the researchers were measuring their height so that they could be fitted for a coffin, and that participating in the study would hasten their deaths. Staying in the villages for longer periods prior to starting data collection and asking the local school teacher to talk about the study with families helped overcome people's apprehension and increased participation in the study.

### **Initial Contacts and Informed Consent**

Before conducting household surveys it is vital that you and your team seek permission to undertake the survey from community leaders and heads-of-household, and try to develop some level of trust with village members. The best way to help community members to feel comfortable with you and your team is to live in the village and participate in village activities for several days prior to starting the surveys. You and your team should work hard to greet and chat with as many people in the community as possible, and always be open and honest about why you are in the village. Unless you spend sufficient time in communities prior to starting surveys you will often fail to get households to participate or to answer your questions honestly.

Once you know which households you would like to survey, visit each one on the list and explain the purpose of the study to the heads of household and explain what their participation in the survey would involve. Be sure to say that participation is voluntary, that none of the information they provide will be shared with other people in the village, and that they will remain anonymous. If the family agrees to participate set a time when you can return to complete the survey. If both heads of household are at home and are willing to be interviewed, immediately undertake the survey at that time. If the family declines to participate, write the reason in your notebook and visit the nearest household and ask if they are willing to participate.

### **Two ways to randomly sample households**

In large cities you can choose households by dividing the city into a grid of 9 or 16 sectors, then randomly selecting which sectors to visit (place 9 or 16 numbered pieces of paper in a bag and without looking pick out the sectors you will visit). When you arrive in the randomly selected sector choose a random cardinal (N, S, E, W; again using pieces of paper in a bag) direction in which to head. As you walk in the random direction (or along the road that is approximately in the random direction) count to the 6<sup>th</sup> house along the road or path in that direction. Toss a coin to decide whether to survey this house or continue for another six houses. In villages where you can count all households, assign each a unique number. Then select households with a random number generator, or place a numbered piece of paper for each household in a bag and pull out the households to be surveyed.

## ***Step 3: Data analysis***

Analysis of these data is very simple:

1. For each item, combine all the data from all households and calculate the percentage of all households who believe the item is a basic necessity (see Table X). This is the weighting for that item. The higher the percentage the greater the community consensus that the item is indeed a basic necessity.
2. Basic Necessities are deemed to be all those items where 50% or more of the households believe that the item is something that everyone should have and which no one should have to go without. Items with a weighting of <50% are not considered basic necessities and are excluded from the next three steps in the analysis.

3. Poverty Scores for individual households are calculated by multiplying the “Have now” score (Y = 1 and N = 0) by the weighting for that item, and summing over all items.
4. The Maximum Possible Score is then calculated for the whole set of basic necessities by summing the value of all weightings for each item in the list that is considered a basic necessity.
5. A Poverty Index is now calculated for each household by dividing their total Poverty Score by the Maximum Possible Score. The index will range from 0% where the family possesses none of the basic necessities and is in extreme poverty, to 100% where the family possesses all basic necessities.
6. Next you will calculate the total value of assets owned by the family to generate a Wealth Index. Remember that this is not all assets owned by the family, nor is it just those assets considered locally to be basic necessities, it is all assets owned by the family that were included in the original focus groups’ list. The Wealth Index allows you to differentiate amongst families at or above the local poverty line (i.e., those that scored 100% on the Poverty Index).

### ***Repeated measures – following trends in poverty level***

One great advantage of using a robust but easy and inexpensive survey tool like BNS is that it allows us to repeat surveys over time and thus better understand poverty trends for individual households and for communities.

When undertaking repeated surveys it is important to:

- a) repeat the focus group to add new items to the list of assets and services if the group feels that that is desirable, and
- b) conduct the analysis first with only the original items and then again with the original and added items.

Recording the geographic location of each household surveyed with a GPS is often the best way in places without street names and house numbers to find each household and conduct repeat surveys.

### **Additional data to help understand the causes of poverty**

As many things influence poverty it is important that we gather data on those factors most often linked to people being poor.

#### ***Household Level***

Though there are a host of factors that can influence household welfare the most commonly used are:

- 1) demographics (i.e., the age and gender of all household residents – that is people who ate and slept in the households during the week previous to the survey);
- 2) maximum years of schooling of the interviewed head of household;
- 3) number of years the household has been resident in the community; and
- 4) the GPS location of the household (this is critical in many places to find the same household during repeated surveys).

#### ***Village Level***

Just as household level factors can influence family welfare, so too can village level factors. These include:

- 1) number of households in the village or community (you need to define what a household is – e.g., people that eat together, or sleep in the same residence or compound);
- 2) market access proxied by travel time to nearest health centre, the nearest shop/market to buy manufactured goods, and the nearest town of 5,000 or more people; and
- 3) travel time to nearest protected area.

#### **Local consumer price index**

If you plan on conducting surveys of the same households repeatedly over time then you need to calculate a consumer price index which is a proxy for inflation. Knowing about inflation is important because --- if over time you observe that the value of household assets is rising, you need to know if it is rising faster in percentage terms than the CPI, if not then families may actually be getting poorer not wealthier. To determine a consumer price index you need to document the village price (i.e., what it would cost to purchase the item in the village) of a standard basket of manufactured goods (e.g., MSG Packet, Washing Powder, Dry noodles, petrol, salt, fish sauce, cigarettes, cooking pot, D cell battery, motorcycle battery, flip-flops). When selecting your standard basket of goods make sure that you specify the brand as different brands may vary in quality and price.

## Acknowledgements

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## References

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<http://www.mande.co.uk/BNS.htm>

**Table 1: Examples of assets and services considered by communities in Cambodia and Vietnam to be basic necessities.**

***Cambodia – source WCS Cambodia***

| <b>Asset/Services</b> | <b>Item</b>   |
|-----------------------|---|
| Asset                 | Agricultural equipment  |
| Asset                 | Bicycle   |
| Asset                 | Car battery or electricity                                    |
| Asset                 | Draught animal  |
| Asset                 | Hammock   |
| Asset                 | Icebox  |
| Asset                 | Jerry Can 30l   |
| Asset                 | Mattress  |
| Asset                 | Mini tractor (iron buffalo)                                   |
| Asset                 | Mobile phone  |
| Asset                 | Mosquito net  |
| Asset                 | Motorbike   |
| Asset                 | Pigs  |
| Asset                 | Radio   |
| Asset                 | Shoes   |
| Asset                 | Tin Roof - & other types of better roof (fibro, tile, cement) |
| Asset                 | Tractor   |
| Asset                 | TV/video/karaoke  |
| Asset                 | Wardrobe  |
| Asset                 | Watch   |
| Asset                 | Water jar   |
| Service               | Able to visit a Wat (temple)                                  |
| Service               | Able to walk to the doctor                                    |
| Service               | Access to credit  |
| Service               | Access to electricity   |
| Service               | All school age kids in school                                 |
| Service               | Distance to main road   |
| Service               | Money to send kids to secondary or high school                |
| Service               | Pay for a party   |
| Service               | Road open all year  |
| Service               | Trader visits every week                                      |
| Service               | Wage labour   |
| Service               | Water in the house  |

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| <b>Asset or Service</b> | <b>Description</b>                             |
|-------------------------|--|
| Asset                   | Water jerry can                                |
| Asset                   | Plastic chair                                  |
| Asset                   | >= 1ha field                                   |
| Asset                   | New clothes at least once a year               |
| Asset                   | Bedsheets                                      |
| Asset                   | Chickens                                       |
| Asset                   | Charcoal stove                                 |
| Asset                   | Kerosene lamp                                  |
| Asset                   | Toilet   |
| Asset                   | Firewood                                       |
| Asset                   | Sewing machine                                 |
| Asset                   | Tin roof                                       |
| Asset                   | Foam mattress                                  |
| Asset                   | Hunting equipment                              |
| Asset                   | Mortar and pestle                              |
| Asset                   | Motorcycle                                     |
| Asset                   | Machete  |
| Asset                   | Watch  |
| Asset                   | Radio  |
| Asset                   | TV   |
| Asset                   | Cooking pot                                    |
| Asset                   | Bicycle  |
| Asset                   | Goats  |
| Service                 | Clean drinking water                           |
| Service                 | Shop for salt, matches and soap in the village |
| Service                 | Improved seeds                                 |
| Service                 | Walking distance to health clinic              |
| Service                 | Kids able to attend primary school             |
| Service                 | Able to eat meat once a month                  |
| Service                 | Eat twice a day                                |
| Service                 | Able to eat bushmeat once a week               |



**Table 2: Example of household level information**

|                                    |                   |           |          |
|------------------------------------|-------------------|-----------|----------|
| Date of interview                  |                   | 7/24/2007 |          |
| Household ID:                      |                   | 34        |          |
| Years resident in present location |                   | 15        |          |
| GPS N                              | 42.387763         | GPS E     | -71.2407 |
| Gender                             | Education (Years) | Age       | Subject  |
| M                                  | 12                | 45        | N        |
| F                                  | 10                | 38        | Y        |
| M                                  | 12                | 18        | N        |
| F                                  | 10                | 15        | N        |
| F                                  | 7                 | 12        | N        |
| F                                  | 4                 | 9         | N        |
|                                    |                   |           |          |
|                                    |                   |           |          |
|                                    |                   |           |          |
|                                    |                   |           |          |
|                                    |                   |           |          |

**Table 3: Example of household Basic Necessities Survey data**

| Asset or Service | Item                                | Have now<br>Yes=1,<br>No=0 | Are Necessities<br>Yes=1,<br>No=0 | How many do you own? | Price in the village for each item | Total value of owned assets |
|------------------|-------------------------------------|----------------------------|-----------------------------------|----------------------|------------------------------------|-----------------------------|
| Asset            | 1 sjo of land per person            | 0                          | 1                                 |                      |                                    | 0                           |
| Asset            | Electric light                      | 1                          | 1                                 | 2                    | 10                                 | 20                          |
| Asset            | Bicycle                             | 1                          | 0                                 | 1                    | 500                                | 500                         |
| Asset            | Concrete rice drying yard           | 1                          | 0                                 | 1                    | 1500                               | 1500                        |
| Asset            | Wooden rice chest                   | 1                          | 1                                 | 1                    | 200                                | 200                         |
| Service          | 3 meals a day                       | 1                          | 1                                 |                      |                                    | 0                           |
| Asset            | Buffalo or cow                      | 0                          | 1                                 |                      |                                    | 0                           |
| Service          | All children studying up to level 2 | 0                          | 1                                 |                      |                                    | 0                           |
| Asset            | Well with well head                 | 0                          | 1                                 |                      |                                    | 0                           |
| Asset            | Stone built house                   | 0                          | 0                                 |                      |                                    | 0                           |
| Asset            | Thick cotton blanket                | 1                          | 1                                 |                      |                                    | 0                           |
| Service          | Doctor visiting the house when sick | 1                          | 1                                 |                      |                                    | 0                           |
| Asset            | Electric fan                        | 0                          | 0                                 |                      |                                    | 0                           |
| Service          | A new set of clothes each year      | 1                          | 1                                 |                      |                                    | 0                           |
| Service          | Livestock vaccination               | 0                          | 0                                 |                      |                                    | 0                           |
| Service          | Meat once a week                    | 0                          | 1                                 |                      |                                    | 0                           |
| Asset            | Pesticide pump                      | 0                          | 0                                 |                      |                                    | 0                           |
| Asset            | Watch                               | 0                          | 0                                 |                      |                                    | 0                           |
| Service          | Access to loans                     | 0                          | 1                                 |                      |                                    | 0                           |
| Asset            | Radio                               | 0                          | 0                                 |                      |                                    | 0                           |
| Asset            | Toilet - built of stone             | 0                          | 1                                 |                      |                                    | 0                           |
| Asset            | Table made of good wood             | 1                          | 1                                 | 1                    | 800                                | 800                         |
| Asset            | Two compartment wooden wardrobe     | 0                          | 0                                 |                      |                                    | 0                           |
| Asset            | TV                                  | 0                          | 0                                 |                      |                                    | 0                           |
| Asset            | Bathroom                            | 0                          | 0                                 |                      |                                    | 0                           |
| Motorbike        | Motorbike                           | 0                          | 0                                 |                      |                                    | 0                           |

**Total assets 3020**

**Table 4: Example of aggregate household data to identify basic necessities**

| Items                               | # who consider necessity | % consider necessity |
|-------------------------------------|--------------------------|----------------------|
| 1 spo of land per person            | 418                      | 99.5%                |
| Electric light                      | 418                      | 99.5%                |
| Bicycle                             | 418                      | 99.5%                |
| Concrete rice drying yard           | 415                      | 98.8%                |
| Wooden rice chest                   | 414                      | 98.6%                |
| 3 meals a day                       | 413                      | 98.3%                |
| Buffalo or cow                      | 412                      | 98.1%                |
| All children studying up to level 2 | 412                      | 98.1%                |
| Well with well head                 | 411                      | 97.9%                |
| Stone built house                   | 410                      | 97.6%                |
| Thick cotton blanket                | 408                      | 97.1%                |
| Doctor visiting the house when sick | 399                      | 95.0%                |
| Electric fan                        | 391                      | 93.1%                |
| A new set of clothes each year      | 388                      | 92.4%                |
| Livestock vaccination               | 386                      | 91.9%                |
| Meat once a week                    | 350                      | 83.3%                |
| Pesticide pump                      | 336                      | 80.0%                |
| Watch                               | 325                      | 77.4%                |
| Access to loans                     | 322                      | 76.7%                |
| Radio                               | 312                      | 74.3%                |
| Toilet - built of stone             | 188                      | 44.8%                |
| Table made of good wood             | 175                      | 41.7%                |
| Two compartment wooden wardrobe     | 135                      | 32.1%                |
| TV                                  | 88                       | 21.0%                |
| Bathroom                            | 78                       | 18.6%                |
| Motorbike                           | 32                       | 7.6%                 |

NB: Items not considered a necessity by at least 50% of subjects are by definition not basic necessities and are marked in yellow

**Table 5: Example of poverty score data for a household from a BNS**

| Basic Necessities                   | Have now<br>Yes=1,<br>No=0 | Weighting | Poverty score |
|-------------------------------------|----------------------------|-----------|---------------|
| 1 sqm of land per person            | 0                          | 0.995     | 0.000         |
| Electric light                      | 1                          | 0.995     | 0.995         |
| Bicycle                             | 1                          | 0.995     | 0.995         |
| Concrete rice drying yard           | 1                          | 0.988     | 0.988         |
| Wooden rice chest                   | 1                          | 0.986     | 0.986         |
| 3 meals a day                       | 1                          | 0.983     | 0.983         |
| Buffalo or cow                      | 0                          | 0.981     | 0.000         |
| All children studying up to level 2 | 0                          | 0.981     | 0.000         |
| Well with well head                 | 0                          | 0.979     | 0.000         |
| Stone built house                   | 0                          | 0.976     | 0.000         |
| Thick cotton blanket                | 1                          | 0.971     | 0.971         |
| Doctor visiting the house when sick | 1                          | 0.950     | 0.950         |
| Electric fan                        | 0                          | 0.931     | 0.000         |
| A new set of clothes each year      | 1                          | 0.924     | 0.924         |
| Livestock vaccination               | 0                          | 0.919     | 0.000         |
| Meat once a week                    | 0                          | 0.833     | 0.000         |
| Pesticide pump                      | 0                          | 0.800     | 0.000         |
| Watch                               | 0                          | 0.774     | 0.000         |
| Access to loans                     | 0                          | 0.767     | 0.000         |
| Radio                               | 0                          | 0.743     | 0.000         |

Maximum score                                      18        =Sum(D2:D21)

Poverty score                                        7.793

Poverty index                                        43.29%

NB: Maximum score = sum of the weighting of all assets  
and services considered by local families to be necessities

**Table 6: Example of village level data**

|   |           |
|---|-----------|
| Date of interview   | 5/19/2008 |
| Village ID:   | 2         |
| Control village (Y/N)   | No        |
| # households  | 32        |
| # residents   | 191       |
| Travel time to the protected area (hours)                       | 2         |
| Travel time in hours to nearest health clinic (hours)           | 12        |
| Travel time in hours to nearest shop (hours)                    | 0         |
| Travel time in hours to nearest town with >5,000 people (hours_ | 12        |

**Table 7: Example of village price of goods data for a consumer price index**

|                           |                |                 |            |
|---------------------------|----------------|-----------------|------------|
| Date of interview         | 5/19/2008      |                 |            |
| Village ID:               | 2              |                 |            |
|                           |                |                 |            |
| Standard baskets of goods | Brand          | Available (Y/N) | Unit Price |
| Canned sardines           | Safari         |                 |            |
| Canned Mackerel           | Belma          |                 |            |
| Stewed chicken            | ABC            |                 |            |
| Canned peas               | Alibel         |                 |            |
| Kerosene                  | 1 litre        |                 |            |
| White candles             | large          |                 |            |
| Bread                     | artisanal      |                 |            |
| Kitchen soap              | Agro Gabon     |                 |            |
| Sugar                     | 1 kg           |                 |            |
| Instant coffee            | Nescafé (250g) |                 |            |
| Toilet paper              | Perroquet      |                 |            |
| AA batteries              | Vinnic         |                 |            |
| D batteries               | Hellesens      |                 |            |
| Plastic washbasin         | 12-13l         |                 |            |
| Hurricane lamp            | (moyen)        |                 |            |
| Refined vegetable oil     | Mayor (1 l)    |                 |            |
| Radio                     | most expensive |                 |            |
| Frozen chicken legs       | 1 kg           |                 |            |
| Frozen fish               | 1 kg           |                 |            |
| Bottled beer              | REGAB          |                 |            |

### Table 8: Example of household income data

[illegible]