

Tool to Estimate Patients' Costs

**Guidelines for interpretation of results generated by questionnaire**

Table of contents

1.	Direct costs to patient before and during diagnosis	2
2.	Patient and Health System Delays	2
3.	Indirect costs before & during diagnosis	3
4.	Direct costs of patients during treatment	3
5.	Indirect costs during treatment	4
6.	Total costs of TB patients	5
7.	Productivity	5
8.	Coping costs	5
9.	Guardian costs	6
10.	Total healthcare costs (including HIV)	7
11.	Willingness and ability to pay	7
12.	Income and Affordability of health- and TB care	8
13.	Health Insurance	9
14.	Gender / social costs of TB	9
15.	Socioeconomic questions	10
	Annex 1 : Income Indicator Usage and Income Data	12

## 1. Direct costs to patient before and during diagnosis

### Measured indicator:

- direct costs before and during TB diagnosis
- the type of provider that was consulted
- the health seeking behavior of the patient

### Questions:

- **Where did you go first?** *Check all that apply, includes current clinic*
- **Have you visited a traditional healer?**
- **How much did you spend for each of these visits?**

Information on the type of provider is useful for identification of the main consulted providers outside the public health sphere and can guide planning in respect to public private co-operations (PPM).

## 2. Patient and Health System Delays

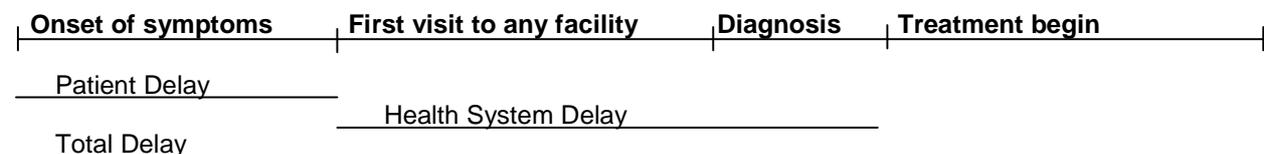
### Measured indicator:

- patient delay (time gap between onset of symptoms and first visit at any health facility)
- health system delay (time gap between first visit to facility and beginning of treatment)
- total delay (patient + health system delays)
- the type of provider consulted before patient reached program facility
- health seeking behavior of patient

### Questions:

- **What symptoms did you experience that led you to seek treatment for your current illness?**  
**How long did you experience these symptoms before you went to seek treatment?**
- **Where did you go first?** *Check all that apply, includes current clinic*
- **Have you visited a traditional healer?**

These delays do not only increase the infectivity of a patient and lead to more serious illness by the time the patient presents him/herself, but also represent a time span in which additional costs are incurred. By addressing barriers and reasons for delay to timely diagnosis and treatment by the NTP, costs to TB patients, particularly among the poor, can be effectively reduced. For example, if the survey finds that patient delay is long, the NTP may choose to invest more in information and communication strategies to inform people about availability of health services and symptoms of TB. If on the other hand, the health system shows to be a delaying factor, the NTP will need to address issues such as decentralization of services, human resources, patient flow etc.



### 3. Indirect Cost Before & During Diagnosis

**Measured indicator:**

- Indirect costs before and during TB diagnosis

**Questions:**

- Have you ever stopped working/going to school/doing housework due to TB?
- What was your estimated personal take home earning per month BEFORE the TB illness?
- If you employed someone to do the housework for your household, how much would you have to pay him/her per day? While you are sick / While you are healthy

The indirect costs are calculated by multiplying the time that the patient did not work with the average individual take home earning BEFORE TB or household replacement costs (see section on Income) .

### 4. Direct Costs of Patients During Treatment

**Measured indicator:**

- Direct costs during TB treatment
- Total direct costs due to TB
- Costs of hospitalization for TB patient

**Questions:**

- How often do you travel to the health facility / hospital for taking your TB drugs?
- Where do you take your TB drugs?
- From your home to the facility, how much does it cost if you take transport?
- If you go to a facility, how much do you spend on food on that day
- Do you have to pay administration fees when picking up your TB drugs?
- Do you have any accommodation costs when picking up your TB drugs?
- Did you ever have to go to the health facility in addition to your regular visits for follow up tests since the beginning of treatment? *If No, go to question xy*
- If yes, did you have to pay any additional costs any time during the entire period?
- If so, what kind of costs and how much? If yes, how many times?
- Have you been hospitalized since you began your TB treatment?
- What do you estimate were the total costs of hospitalization?
- Do you buy any supplements for your diet because of the TB illness, for example vitamins, energy drinks, soft drinks, fruits or medicines?
- How much did you spend on these items in the last month approximately?

The type of DOT, the treatment regimen (daily or three times weekly) and hospitalization may significantly affect direct (travel, food, fees) and indirect costs (time) to patients during treatment. The results of these questions should be therefore analyzed together with the results on direct costs before treatment by the NTP.

### 5. Indirect Costs During Treatment

**Measured indicator:**

- Indirect costs during TB treatment

**Questions:**

- Have you been hospitalized at the beginning of your TB treatment?
- If yes, how many days in total did you stay at the hospital?
- Have you ever stopped working/going to school/doing housework due to TB?
- If yes, for how long?
- Does someone stay home specifically to take care of you? for how long?

- Did they quit their income-earning job to stay home and care for you?
- Did you have to change jobs when you became ill with TB?

The time span in which the patient wasn't able to work is compared with the date of diagnosis and date of starting treatment. This determines the time span before treatment and during treatment during which the patient could not work.

- If you employed someone to do the housework for your household, how much would you have to pay him/her per day? While you are sick / While you are healthy?

This question measures the opportunity cost of a patient who is not paid for his/her work because of his/her work in the household. The aim of this question is not to assess whether or not the household now employs someone additional to do the housework since the onset of TB.

- How long does it take you to get there (one way)
- How often do you travel to the health facility / hospital for taking your TB drugs?
- How long does one of these visits take on average, including time on the road
- How long does one of these follow-up visits take on average, including time on the road, waiting time and tests
- If yes, how many times did he/she go with you?
- how many days in total did you stay at the hospital?
- How many days did he/she stay with you (sleep there)?
- Did any other family/friend visit you while in hospital?
- If yes, how many people visited you?
- How many times did they visit you?
- How long were the visits including traveling time?

Add the time spent on health facility DOT to the time spent on medicine collection and to the time spent on follow-up test visits and multiply this with the average personal take home earning that the patient earns NOW.

## 6. Total Costs of TB Patients

### Measured indicator:

- Total direct costs of TB patients (prediagnostic, diagnostic, treatment)
- Total indirect costs of TB patients (prediagnostic, diagnostic, treatment)
- Total costs of TB patients (indirect + direct before diagnosis, during diagnosis, during treatment)
- Cost of TB on welfare of the household (willingness to pay)
- Cost of TB including pain and suffering (willingness to pay)

### Total costs are the sum of:

- Direct costs before and during diagnosis
- Direct costs during treatment
- Indirect costs before and during diagnosis
- Indirect costs during treatment

Each subject is measured separately and the analysis of the data needs to put this information together again to obtain a full picture and relate the total costs then to income and food expenditure. See section on Income for details.

## 7. Productivity

Productivity means the ability of a person to work. When a person is healthy, he/she works for example 8 hours a day, and when he/she falls ill, he/she can only work 3 hours per day. This is a difference in productivity.

### **Measured Indicator:**

- % reduction of productivity due to TB

### **Questions:**

- **How many hours have you worked on average per week BEFORE you became ill with TB?**
- **How many hours do you work on average NOW per week?**
- **Is the change related to the TB illness?**
- **Is someone doing the work that you used to do?**
- **Is the reason for Not Working related to TB or any other illness?**
- **Have you ever stopped working/going to school/doing housework due to TB?**
- **If yes, for how long?**

## 8. Coping Costs

Coping costs of a household are costs to meet daily requirements despite extra expenditures or loss of income. These include the sale of assets, taking up debt, saving on food or other items (this is measured by the difference in food consumption before TB and during the treatment), taking a child out of school to care for the patient or taking up another job.

### **Measured Indicator:**

- % of patients who take out loan
- costs due to interest on loan
- % of patients who sell assets
- Type of assets sold
- % reduction of household income spent on food due to TB
- Extent of reduction in food consumption
- % of patients whose children miss school to finance costs due to TB

### **Questions:**

- **Do any of your children of or below school age work to finance costs due to the TB illness?**
- **Did you borrow money to cover costs due to the TB illness?**
- **Did you borrow any money to cover costs due to the TB illness?**
- **Have you sold any of your property to finance the cost of the TB illness?**
- **If YES: What did you sell?**
- **How much did you earn from the sale of your property?**
- **What is the estimated market value of the property you sold?**
- **How much food does your household consume NOW every month on average?**
- **Has the amount of food consumed per month changed due to the TB illness?**

## 9. Guardian Costs

A guardian is someone who accompanies the patient to the health facility/hospital or other visits because the patient cannot go by himself. Therefore, the guardian incurs also direct and indirect costs; as this is most likely another household member, the cost to the household is much higher if guardian costs are included.

### Measured Indicator:

- Direct costs of guardians
- Indirect costs of guardians
- Total costs of guardians

### Questions:

- **Does any family/friend/DOT supporter accompany you on these visits or go in your place to collect your TB drugs ?**
- **If yes, how many times did he/she go with you?**
- **How much does your friend/family/DOT supporter earn per day?**
  
- **Did any family/friend stay with you while in hospital?**
- **If YES: How many days did he/she stay with you (sleep there)?**
- **Were there any extra costs for your relative/friend for staying at the hospital?**
- **Did any other family/friend visit you while in hospital?**
- **If yes, how many people visited you?**
- **how many times did they visit you?**
- **How long were the visits including traveling time?**
- **How much does your friend/family normally earn per day?**
  
- **Does someone stay home specifically to take care of you?**
- **If YES: for how long?**
- **Did they quit their income-earning job to stay home and care for you?**

These are all guardian costs, which are costs incurred by the family due to the TB illness of one of the family members (or friend). The direct and indirect costs of hospitalization and treatment support for patients and their family can be assessed with these questions. The indirect cost is determined by the length of the visit (in hours) times forgone wage (per day) times the number of visits (assuming that each visit takes place at different days). Forgone wage can be then either calculated per hour or per half day lost.

The cost of transport for families to visit can be taken over from the transport item in the question *What do you estimate were the total costs of hospitalization?* The cost of transport needs to be multiplied by the answer given to question how often family visited. Note that for reasons of feasibility, costs of food for family members during visits to the hospital are not included.

### Total Guardian direct costs:

(number of visits to hospital x cost of transport) +  
(number of accompanied visits for treatment support x cost of visit to treatment supporter) +  
(number of accompanied visits for medicine collection x cost of visit for medicine collection) +  
(number of accompanied visits for follow up tests x cost of visit for follow up test)  
+

### Total Guardian indirect costs:

(Total time investment treatment support in hours / 8 x personal income per day) +  
(number of days stayed in hospital x personal income per day) +  
(number of visits to hospital x length of visit / 8 x personal income per day)

## 10. Additional Healthcare Costs (including due to HIV)

### Measured Indicator:

- additional costs due to other illnesses

### Questions:

- **Do you have any chronic illness for which you are receiving treatment?**
- If yes: **which?**
- If YES: **How much are these additional costs on average per month?**

It is desirable for a better comparison to elicit costs for any other wide-spread illnesses such as malaria, HIV/AIDS, or diarrhea. This allows us later to compare the TB costs to other illnesses costs. Depending on the program practice in the country, it may or may not be possible to ask patients their HIV status. Local privacy policies should be respected. If people are likely to say No when asked whether they are co-infected, although they are, it does not make sense to ask for additional costs. If it is not clear, asking about HIV status directly should be avoided, because patients might not be willing to say that they are infected or receive treatment. It will be difficult to discern costs due to an HIV co-infection or due to other illnesses. Since TB and HIV are closely connected, however, the likelihood that any additional illness is HIV is higher than for other illnesses.

Total monthly direct cost of healthcare is = (Total Direct cost TB / number of months between first help sought and time of interview) + average monthly costs due to other illnesses

The total monthly healthcare cost can be then compared to household income and personal income.

## 11. Willingness and Ability to Pay

### Measured indicator:

- Cost of TB including pain and suffering

### Question:

- **How much would you be willing to pay for not becoming ill with TB in the first place?**
- **How much did your household spend on FOOD every month on average BEFORE TB?**
- **How much does your household spend on FOOD NOW every month on average?**
- **Are there any additional costs for you because of this other illness besides the costs that you have already mentioned?**
- If YES: **How much are these additional costs on average per month?**

Willingness to pay incorporates the cost of pain and suffering, since people are expected to include them when evaluating how much they would pay to reduce their risk of illness or death. The cost of an illness on welfare of the household can be determined by the value the household would put on avoiding the disease. Willingness to pay is not equal to ability to pay for the poor, because they might be willing but unable and therefore compensating by sacrificing on nutrition and other important items (see Coping costs).

**The question does NOT mean what the patient can afford but - imagining unlimited income – how much he/she would be willing to pay, that is, how much value he/she associates with avoiding the disease. This number has to be then related to the information on personal income to see the differences in ability and willingness to pay.**

## 12. Income and Affordability to TB Treatment and Healthcare

In order to estimate the impact costs have on a patient, we first need to know the amount that a patient can afford to spend on seeking and obtaining services. That is, we need to be able to judge what % of the patient's income is associated with costs of TB. Income is difficult to measure, but necessary for its relation to costs and consumption. Our primary goal is to see what the costs of TB patients are, whether or not they are too high and lastly, whether TB services are affordable for patients.

It is recommended that data income gathered through the survey be compared with findings of standardized measures obtained through household surveys or collected by UNDP, the World Bank, UNICEF, DHS or WHO (see Annex 1 on income indicator usage and income data).

Since income is difficult to measure, it is often preferred to measure consumption as a proxy for income. The best way is to distinguish between food and non-food items. This also lets us calculate the % of food costs of total costs, which also gives an idea about the social welfare of the household.

*In this questionnaire, the question on non-food items is not included, because it takes time to estimate all costs that are incurred in a month on an item-by-item basis and it is heavily dependent on the type of expenditures that residents in a certain country have. If enough time is available, including a question on non-food expenditures with a list of items derived from the last Demographic and Health Survey should be considered.*

### Measured indicator:

- % of household income spent on food
- % of household income spent on TB pre-diagnostic and diagnostic costs
- % of household income spent on TB treatment
- % of household income spent on TB (pre-diagnostic, diagnostic, treatment)
  
- % of per capita income spent on TB pre-diagnostic and diagnostic costs
- % of per capita income spent on TB treatment
- % of per capita income spent on TB (pre-diagnostic, diagnostic, treatment)
  
- % of household income contributed by TB patient
- % reduction of household income due to TB illness of household member
- % reduction of personal income due to TB
  
- % of personal income spent on food

### Questions (in addition to the ones on pre-diagnostic, diagnostic, treatment costs)

- **Do you have any chronic illness for which you are receiving treatment?**
- If yes: **which?**
- **Are there any additional costs for you because of this other illness besides the costs that you have already mentioned?**
- If YES: **How much are these additional costs on average per month?**
- **How many people live in your household?**
- **How many of the household members are paid for working?**
- **Besides yourself, does anyone else of your household receive treatment for TB?**
- **How much do you estimate is the average income of your household per month**
- **What was your estimated personal take home earning per month BEFORE your illness?**
- **What is your estimated personal take home earning per month NOW**
- **How much food did your household consume every month on average BEFORE the TB illness?**
- **How much food does your household consume NOW every month on average?**

### 13. Health Insurance

Insurance is essentially a transfer payment from the past to the future when need arises. Depending on the type of insurance, reimbursements need to be either deducted from patient's cost during treatment or insurance contributions need to be added to patients' costs. It is important to avoid double counting of expenditures for insurance payments and income for insurance reimbursements. Information on insurance coverage and the type of insurance reveals the degree of vulnerability of a patient and his/her family as well as whether they are part of a general social welfare system of private initiative, ie whether the welfare system captures the poor or not. If patients are subject to a reimbursement scheme, the reimbursement might be paid much later; until then, the costs that are to be reimbursed are real direct costs and should be counted as such.

#### **Measured Indicator:**

- % of patients covered by any kind of health insurance
- % of costs due to TB reimbursed by health insurance

#### **Questions:**

- **Do you have any kind of private or government health/medical insurance scheme?**
- **If YES: What type?**
- **If YES: Have you received reimbursement for any costs related to the TB illness?**
- **If YES: How much have you received as reimbursement?**

### 14. Gender / social costs of TB

The survey needs to be gender-sensitive, because evidence shows that women take longer to seek care due to stigma and social exclusion, heavier workloads, prioritization of other family members over own well-being, lack of independence, inaccessibility to financial resources and powerlessness in decision-making; they experience longer provider, diagnostic and treatment delays. Women are engaged in more activities that need to be replaced in the household, while girls replace these activities more than boys. In addition, women have higher direct costs than men, because they often need somebody to accompany them, they are less mobile and have less financial resources and women experience greater loss of income probably because of more lost work days.

#### **Measured indicator:**

- % of women who cannot seek care by themselves
- % of women who are financially independent
- % of TB patients whose private or social life was affected by TB
- Type of effect on private or social life
- % of patients where daughters don't attend school regularly due to TB case in family
- % of patients where daughters replaced work due to TB case in family
- Difference in direct costs between men and women
- Difference in indirect costs between men and women
- Difference in patient delays between men and women
- Difference in health system delays between men and women
- Difference in reduction of productivity due to TB between men and women
- Difference in reduction of personal income due to TB between men and women

#### **Questions** (in addition to the ones on direct, indirect, delay, productivity and income)

- **Why did someone accompany you?**
- **Are you financially independent?**
- **Is someone doing the work that you used to do?**
- **Do all of your children of school age attend school regularly?**

- Do any of your children of or below school age work to finance costs due to the TB illness?
- Has the TB illness affected your social or private life in any way?

## 15. Socioeconomic Questions

See also Guidelines on Socioeconomic Indicators

### Measured Indicator:

- % of literate and illiterate patients
- Educational level of patients, head of household, spouse of head of household, primary income earner
- Level of impoverishment of household
- % of patients belonging to lowest income quartile/quintile of country
- % of patients belonging to poorest socioeconomic group
- % of patients belonging to minority (tribe/ethnic group/religion)

**Questions:**

- **What is the highest level of education for ...? Primary income earner? Head of household? Spouse of head of household?**
- **Are you currently formally employed?**
- **How are you usually paid?**
- **What is your main occupation?**
- **How many of the household members are paid for working?**
- **Do you own the house or residence you live in?**
- **Current place of residence?**
- **Do you own....**
- **How many rooms are there in your house?**
- **What type of toilet facility is available?**
- **What is your source of drinking water?**
- **What is your electricity supply?**
- ***What is your tribe / ethnic group / religion?***

Answers to socioeconomic questions can be given points in a scoring system for a total score in order to group respondents in different socioeconomic groups according to their score. It is not easy to devise a good scoring system and it should be avoided to just "invent" one. UNDP has used scoring systems and DHS as well. If a scoring system is used in the latest DHS, this could be taken and adapted to the questionnaire. The UNDP Human Development reports split income data into quintiles. These quintiles should be compared to the data gained through the survey to group patients according to socioeconomic status.

## **Annex 1: Income Indicator Usage and Income Data**

In order to estimate the impact costs have on a patient, we first need to know the amount that a patient can afford to spend on TB. We need to be able to judge what percentage of the patient's income is associated with costs of TB. There are two ways to approach this: either to ask patients through surveys and interviews about their income or consumption expenditures, or to use standardized measures of income, such as average wage rates, GNI per capita, and income levels. These standardized measures are usually obtained through household surveys or data supplied by UNDP, the World Bank<sup>1</sup>, UNICEF<sup>2</sup>, DHS<sup>3</sup> or the WHO<sup>4</sup>. However, these databases do not provide up-to-date income data on all countries.

For the purpose of developing a tool for NTP managers to estimate patient costs, both approaches face difficulties. The bottom-up approach requires substantial financial and human resources to conduct representative surveys. In the past, researchers have become more and more hesitant to use self-reported income data. Instead, they found data from household surveys more useful and representative.<sup>5</sup> The top-down approach is more practical, but average wage rates and GNI/capita don't provide the NTP with information specifically about the most vulnerable parts of the population targeted by the Tool. Top-down approaches only represent averages and therefore underestimate the financial burden on the poor.<sup>6</sup> A good and often-used alternative is recent data on household incomes obtained through country-level household surveys. Not every country has conducted such surveys, as they are expensive.<sup>7</sup>

Researchers have struggled with these problems and found different solutions. Filmer (2001) determined household assets in India to be sufficiently related to consumption expenditures to serve as a proxy for the latter. Hence, surveys on assets or consumption rather than income may serve the same purpose as surveys on income. Zhang et al (2007) used the indicator 'annual household medical expenditures during the last 12 months' as a proxy for estimating the costs for diagnosis and treatment. Fabricant et al (1999) used housing type, food expenditure and self-estimates as proxies for income levels in Sierra Leone and found that a one-day agricultural wage correlates with the average price of an out-patient visit in some countries and therefore serves as an indicator for affordable treatment.

Another difficult issue, and therefore often-times left out, is the method to estimate loss of income for individuals active in the household, but not in regular employment or waged activities. It is known, that in the short-run, activities are reallocated within the household.<sup>8</sup> In the long-run, however, they will need to be replaced. Drummond (1997) recommends either using the average wage, the cost of replacing the role, or the opportunity cost of production the individual could have contributed to if he/she was employed. These measures however run the risk of overestimation.

---

<sup>1</sup> Gwatkin et al 2007: Socio-economic differences in health, nutrition and population. World Bank. <http://www1.worldbank.org/prem/poverty/health/> World Development Report 2006: Selected development indicators [http://www-wds.worldbank.org/external/default/WDSContentServer/IW3P/IB/2005/09/20/000112742\\_20050920110826/additional/841401968\\_2005082630000823.pdf](http://www-wds.worldbank.org/external/default/WDSContentServer/IW3P/IB/2005/09/20/000112742_20050920110826/additional/841401968_2005082630000823.pdf)

<sup>2</sup> UNICEF Multiple Indicator Cluster Surveys: <http://www.childinfo.org/MICS2/nat/MICSrepz/MICSnatrep.htm>

<sup>3</sup> Demographic and Health Survey DHS: <http://www.measuredhs.com/countries/start.cfm>

<sup>4</sup> WHO/World Health Surveys: [www.who.int/healthinfo/survey/en/index.html](http://www.who.int/healthinfo/survey/en/index.html)

<sup>5</sup> Verbal communication with researchers from McGill and Liverpool School of Tropical Medicine

<sup>6</sup> Russell 1996

<sup>7</sup> It is argued that household surveys don't include the poorest of the poor, because many households in urban slums are not interviewed, and where it is considered to be risky or difficult to identify household entities (UN Research Institute for Social Development 2007)

<sup>8</sup> Drummond 1997

## Income data

In trying to assess the impact of costs on the lowest income quartile or quintile of the population, the question remains which income measure to use. There is an extensive body of literature on measuring poverty which addresses the same question from different angles. There are three basic approaches:

- 1) Real measures:
  - a. **National household budget surveys** – dependent on availability from national statistics office. Whether any surveys have been conducted recently can be seen by searching the International Household Survey Network (IHSN) database<sup>9</sup>.
  - b. **UNDP Human Development reports**<sup>10</sup> (detailed reports on national situations, distinguishing between urban and rural and by districts, giving information on real per capita expenditure in local currency, adjusted to Purchasing Power Parity).
  - c. For Africa, the **Africa Development Indicators 2006**<sup>11</sup> provide recent detailed data.
  - d. World Bank **Povcalnet data** by country on average monthly income, headcount of population living in poverty, Gini index<sup>12</sup> Compare this data with GNI/capita and poverty line of 1 US\$ a day.
  - e. **Living Standards Measurement Studies**<sup>13</sup> by the World Bank provide datasets of household surveys for many countries and guidelines for interpreting this data.
  - f. **Gross national income per capita** for each country by World Bank<sup>14</sup>. If Gini coefficient (from Povcalnet) is low, GNI/capita can be used, don't use it with a high Gini. If % of population living below poverty line is small, GNI/capita can be used, otherwise don't use it.
  - g. **Gross domestic product per capita** for each country by UN Statistics Division on social indicators<sup>15</sup>
  - h. **ILO reports** on wages of unskilled/agricultural labor<sup>16</sup> per country
- 2) Absolute estimates:
  - a. Absolute Poverty line: World Bank measures of absolute poverty: **1 US\$ a day** (31 US\$ per month) at purchasing power parity. This can be compared to GNI/capita and mean monthly income on Povcalnet. If they are similar, GNI/capita can be used. If they are very different, don't use GNI/capita.
  - b. **Basket of goods** (minimum necessities): food vs. non-food items – dependent on availability from national statistics office or also in Human Development Reports
- 3) Relative estimates:
  - a. Relative Poverty lines: These are usually set at **50-70% of median household income**<sup>17</sup>. GNI could be used as baseline as well. If Gini coefficient is low, this measure can be meaningful, not so with a high Gini.<sup>18</sup>

With all of these measures, the most recent and meaningful data should be taken:

### Prioritization:

- 1) Recent (5 years or less old) **national household surveys** specifying income data according to geographical location or income quintiles of the population

<sup>9</sup> <http://www.surveynetwork.org/home/?lv1=activities&lv2=catalog&lv3=surveys>

<sup>10</sup> <http://hdr.undp.org/en/>

<sup>11</sup> Household surveys p103ff [http://siteresources.worldbank.org/INTSTATINAFR/Resources/ADI\\_2006\\_text.pdf](http://siteresources.worldbank.org/INTSTATINAFR/Resources/ADI_2006_text.pdf)

<sup>12</sup> <http://iresearch.worldbank.org/PovcalNet/jsp/index.jsp>

<sup>13</sup> <http://www.worldbank.org/LSMS/>

<sup>14</sup> <http://web.worldbank.org/WBSITE/EXTERNAL/DATASTATISTICS/0,,contentMDK:20535285~menuPK:1390200~pagePK:64133150~piPK:64133175~theSitePK:239419,00.html>

<sup>15</sup> <http://unstats.un.org/unsd/demographic/products/socind/inc-eco.htm>

<sup>16</sup> <http://laborsta.ilo.org/>

<sup>17</sup> Combat Poverty Agency 2006, OECD

<sup>18</sup> Cut off points for high and low Ginis could be (arbitrarily taken) at 20. Low Gini <20; high Gini >20

- 2) For Africa: the **Africa Development Indicators** 2006, for the rest of the world **Human Development Report** data
- 3) If none of the above are recent or available, compare GNI/capita, GDP/capita with World Bank poverty line and relative poverty line (60% of median or average household income), taking into account % of population living below poverty line and Gini coefficient. Make meaningful choice which one to use.
- 4) If available, take unskilled or agricultural wage from ILO database per country.

**Example: Rwanda:**

- 1) IHSN search yields no result.
- 2) Search on National institute of Statistics Rwanda website yields no result.
- 3) Search in Africa Development Indicators 2006 yields no result (country not listed)
- 4) Search on Human Development Report website yields following result: National Report Rwanda 2007
  - o P. 15ff: Reaching the poor, p.19: average income in bottom quintile in 2006: Rwf18,900 /year
  - o P. 20: average income of a poor person has remained virtually unchanged since 2001 at Rwf150 per day against Rwf146 per day in 2001.