



PROPOSED NEW
MENU OF IMPACT INDICATORS
RECOMMENDED FOR PROJECT
FINAL GOALS

DRAFT
For review by PAD Sector Coordinators

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CARE USA

MENU OF RECOMMENDED IMPACT INDICATORS FOR PROJECT FINAL GOALS

Introduction¹

This document provides a list of indicators that are recommended for measuring the impact of programs and projects. As project designers consider appropriate *final goals* it is recommended that they consider using examples from this menu. Designers are not confined to this list, but would do well to consider these as well established “good practice” indicators.

As we move more towards *programs* (as contrasted with isolated projects) in CARE, we look for indicators that can help us to measure the cumulative impact of a set of multi-sectoral interventions with an Household Livelihood Security (HLS) orientation. The synergistic nature of the HLS approach allows us to show the combined contributions of multiple projects, to see the whole system in which we work. For this reason, impact indicators will often overlap in different sectoral areas. While some projects may have final goals which can be measured by one or more of these indicators, in other cases the level of impact implied by these indicators requires a broader programmatic perspective.

Impact indicators measure lasting changes in the conditions or aspects of the quality of life of populations. The current definition of impact in CARE is “equitable and durable improvements in human wellbeing and social justice.”² Examples include rates of malnutrition, infant mortality, morbidity, fertility, literacy, family savings, freedom of meeting and speech, bio-diversity, safe and healthy refuge against natural elements and violence, and social justice.

Effect Indicators measure changes in the behavior and practices of individuals and family groups and also changes in the coverage and quality of services of public and private institutions, as well as other systemic changes.

The indicators included in this list include some of both types, as it is not always easy to determine which level applies, nor is it always practical for projects to measure at only the impact level. As stated in CI Project Standard #6, projects should set *significant yet achievable and measurable* final goals. Thus project designers will need to consider which of these indicators would be both challenging (to make a significant difference in the lives of the beneficiary population) yet achievable (and measurable during the life of

¹ Modified from introductory text as in *CARE Impact Guidelines* (1999)

² See explanatory description for CI Project Standard #6.

a project). Some of the goal indicators on this list may be appropriate at the higher (and longer-term) *program* level. In which case, projects need to show how their final goals link to and make an obvious contribution to such *program goals*.

HLS is, above all, a programming and management approach or framework that guides the way in which impact is perceived, planned, and promoted. It leads us to do holistic assessments of needs and opportunities, and it allows us to identify leverage points and demonstrate the multiple impacts of project activities as a result of key linkages. Being able to demonstrate this type of multiplier and synergistic effect should enable us to be more effective in meeting the needs of intended beneficiaries, and it is likely to facilitate and enhance donor support.

The selection of appropriate indicators will, of course, depend upon good problem analysis and the articulation of appropriate program and project goals. And in all cases, culture, environment, agro-ecological contexts and other norms of the country /region /ethnic group will need to be taken into account. All indicators should be clear on the target population affected -- to provide perspective on the scale as well as the depth dimensions of impact. Indicators quantified with data from household surveys will need extra budgetary resources, or require obtaining data from reliable secondary sources.

Impact indicators can be derived from normative standards or relative standards based on community criteria. These are not mutually exclusive. Normative indicators allow us to compare one region or village to another. The use of the Millennium Development Indicators provides such normative comparisons, for they are standard indicators used by many international development agencies. This type of information is important for targeting, resource allocation, and for showing how our projects are contributing towards the eradication of poverty and the promotion of global development.

Relative measures, or community-derived criteria, can be very context- or location-specific. These types of indicators are critical for measuring impact from the perspective of individual communities or even within projects, but they may or may not be suitable for cross-project or cross-regional comparisons, depending on contextual differences.

Both types of indicators are critical for impact evaluation but are often used for different purposes. Most of the indicators listed here can be used for both purposes; some of the indicators are more relative (location-specific), and will be designated accordingly.

Whenever possible data should be disaggregated by gender, ethnicity, social class, age, or other factors which investigate the impact on the most vulnerable strata of society.

It is recommended that those designing CARE programs and projects turn first to this list to choose indicators that most closely correspond to their final and

intermediate goals. If none of these seem to be appropriate, choose indicators from other lists that have been accepted by various sectors and donors.³ Alternatively, program and project designers may opt to develop indicators that they feel are more locally relevant. In such cases adequate justification should be given as to why these indicators are more appropriate than are those on the standard list.

It is not expected that it would be appropriate for any project or program to incorporate all of the indicators on this list, or even one from every security area, in its baseline or evaluation. The recommendation is to choose those indicators that most nearly correspond to the goals of that program or project, based upon a holistic needs assessment and problem analysis. In addition, it is important is to look for indicators of impact beyond the sector most directly related to the project's interventions.

It should be shown how projects affect change above and beyond their direct outputs. These should be seen in at least two ways:

1. Multiple projects which, through synergy, lead to higher level (program) impact. An example would be a program goal of reducing malnutrition, which requires reduction in diarrheal disease, increase in the production of food and quality of nutrition. Thus three projects, each addressing one of these major contributing factors, might be needed to have an impact on malnutrition.
2. Single-sector projects which can have multiple impacts. One example might be an education project aimed at girls and women that , over time, contributes to improved health (through mothers who are more aware of healthy practices) and income (through women who are better managers of small businesses).

It needs to be recognized that multiple changes are brought about by projects, some intended and some unintended, some good and some undesirable. The design of a project should include plans for how that project will contribute to desirable impact even beyond its sector goal. The evaluation of a project should include an examination of impacts on target households as well consequences on others in the community and on the environment.

Problem analysis should determine the minimum data set of indicators through the identification of causal linkages.⁴ These indicators should be included in the M&E plan to measure impact at the household level.

It should be noted that this list contains only very general and broad definitions of these examples of standard indicators. Those who are responsible for actually measuring these indicators should refer to the details contained in the list of references, and/or seek professional assistance in conducting assessments, baselines or evaluations.

³ A list of several of these references is attached at the end of this section.

⁴ See the guidance provided in the CARE Project Design Handbook (2002).

Finally, it needs to be acknowledged that while some of the indicators in this set have been tested and are accepted as standards by various professional sectors, others are still evolving and need further definition and field-testing. Feedback on this list would be welcome, along with suggestions for adding other indicators, and tightening up the definitions of these.⁵

Note: The Millennium Development Indicators (MDIs) (related to the UN's Millennium Development Goals) have been added to this menu (as of 8/2002.⁶)

Note: Some of the indicators on the 1999 Menu may not really be appropriate for project final goals, per the CI Project Standards – mainly because they measure effect (behavior) rather than impact. These indicators would be fine for intermediary objectives, but final goals should aim higher. These indicators have been marked “??”.

⁵ Note: The IEI Working Group (1999) did not focus on indicators, instead referring indirectly to indicators available in documents produced by various sectors and working groups within and beyond CARE. Nevertheless, it was deemed useful (and appreciated by a number of persons) to include this Menu within the *CARE Impact Guidelines*. Users are reminded that this is not an exhaustive list; there are other good indicators “out there” which should be considered for use by projects and for future additions to this standardized list.

⁶ MDI definitions and considerations per “Measuring Development Progress: A Working Set of Core Indicators” by OECD, available at <http://www1.oecd.org/dac/Indicators/htm/list.htm>. See also http://www.developmentgoals.org/Definitions_Sources.htm and other sources.

GLOBAL INDICATORS⁷

Overall Millennium Development Goal:

The proportion of people living in extreme poverty in developing countries should be reduced by at least one-half by 2015.

INDICATORS	DEFINITION	CONSIDERATIONS / Dimensions captured
MDI: Incidence of Extreme Poverty: Population Below \$1/Day	Population below \$1 per day is the percentage of the population whose income/consumption falls below the <i>poverty line</i> . Individuals are considered to be as poor if the per capita real income/consumption of the household to which they belong is below the benchmark <i>poverty line</i> . The <i>poverty line</i> used here is one dollar (US) per person per day, measured at 1985 purchasing power parity. This figure was chosen because it is typical of the poverty lines in low-income countries. By the same token, it is much lower than the poverty lines found in middle- or high-income countries.	The indicator measures the proportion of the population whose income/consumption levels fall below a prescribed poverty line. It reflects the purchasing power that households have over goods and services needed to escape poverty (food, clothing, housing and other non-food essentials).
MDI: Poverty Gap Ratio: Incidence times Depth of Poverty	The Poverty Gap Ratio is the combined measurement of incidence of poverty and depth of poverty. Incidence of poverty, measured by the Poverty Headcount Ratio, is the proportion of people who live below the poverty line. Depth of Poverty is the difference between the poverty line and the average income of the population living under the poverty line, expressed as a fraction of the poverty line. By multiplying the incidence of poverty by the depth of poverty we get a measure of the magnitude of poverty.	This indicator measures magnitude of poverty, considering both the number of poor people, and how poor they are.
MDI: Inequality: Poorest Fifth's Share of National Consumption	Inequality is defined as the income/expenditure of the poorest 20% of the population divided by total income/expenditure of the whole population.	The indicator measures the inequality in the distribution of income/expenditure as it affects the most vulnerable group in population, who generally live below or close to the poverty threshold. While overall consumption growth in a country has a strong positive relationship with poverty reduction, inequality may increase or decrease. This indicator helps capture the extent to which changes in the poverty headcount affect

⁷ Millennium Development Indicators related to the over-all Millennium Development Goal of eradicating extreme poverty and hunger.

		the consumption level of the poorest fifth of the population.
MDI: Prevalence of underweight children (under 5 years of age)	Prevalence of underweight children measures the proportion of underweight children under-five as a percentage of child population under-five. A child is considered to be underweight if his or her weight-for-age ratio is more than two standard deviations below the median weight for the health reference population.	An indication of poverty is the prevalence of malnourished children. Of course, reducing malnutrition is an end in itself. The use of the underweight prevalence serves two purposes: to cross-check the results of the money-metric approach (poverty ratios), and to indicate progress in improving child nutrition, especially among the poor.

NUTRITIONAL SECURITY

Definition:

Individuals have nutritionally adequate diet and the food consumed is biologically utilized such that adequate performance is maintained in growth, resisting or recovering from disease, pregnancy, lactation, and physical and mental work.

INDICATORS	DEFINITION	CONSIDERATIONS / Dimensions captured
MDI: Prevalence of underweight children (under 5 years of age)	Prevalence of underweight children measures the proportion of underweight children under-five as a percentage of child population under-five. A child is considered to be underweight if his or her weight-for-age ratio is more than two standard deviations below the median weight for the health reference population.	An indication of poverty is the prevalence of malnourished children. Of course, reducing malnutrition is an end in itself. The use of the underweight prevalence serves two purposes: to cross-check the results of the money-metric approach (poverty ratios), and to indicate progress in improving child nutrition, especially among the poor.
Weight-for-age (underweight) [more details by CARE on above MDI]	The weight of a child compared to the norms for his/her age provides an indicator of malnutrition. The weight is measured in kilograms and the age in months. The prevalence of malnutrition is defined as the percentage of children whose weight for their age is below an established norm.	<ul style="list-style-type: none"> • Measure age grouping which is most appropriate for field situation. Priority given to under three year olds. • Age categories are required in presentation of the prevalence or means because of influences of stunting in older children makes the interpretation difficult. • Often difficult to measure weight-for-age due to the level of precision required. In order to obtain trustworthy data, the staff in the field generally require special training. In addition, difficulties arise in obtaining the exact ages of the children due to the lack of appropriate reference points. When possible, mothers should be asked to bring with them to the assessment site birth certificates, immunization cards, or other records that include the child's birth date. If these records are not available, the following two stage process will assist in obtaining more accurate age figures: 1. Identify the year of birth, and 2. Identify the season within the birth year.
Height-for-age (Stunting)	The prevalence of 'stunting' is defined as the proportion of children 6-36 months old who are below 2Z (2SDs) of the international height for age standard. This is a good measure	<ul style="list-style-type: none"> • Recommended proxy indicator for poverty and for use in targeting programs

	of chronic malnutrition.	<ul style="list-style-type: none"> • Also primary indicator for long-term impact of food security • Changes are cumulative, so the age interval of children needs to be limited • In order to obtain trustworthy data, the staff in the field generally require special training. Use length of child under 24 months, and standing height thereafter, which is associated with an automatic drop in height on the growth chart. • Difficulties arise in obtaining the exact ages of the children due to the lack of appropriate reference points (see discussion above).
Mid-Upper Arm Circumference (MUAC)	% of children between 12-60 months of age with MUAC less than 12.5 cm.	<ul style="list-style-type: none"> • Though not as accurate as weight-for-age or height-for-age, MUAC is relatively easy to measure and a good proxy for current nutritional status of children in a community. • Does not require knowing the child's age, as long it appears to be between 1-5 years old.
<p>NOTE: Although these anthropometric measures of childhood nutritional status are good measures of poverty, they do not reveal the causes of poverty. For this reason, these measures are suitable for identifying poor populations, the magnitude of absolute poverty, and measuring changes in malnutrition. A further set of indicators is required to analyze the causes of malnutrition and absolute poverty.</p>		
<p><i>Appropriate mother and infant/child feeding practices</i></p>		
Rate of exclusive breastfeeding	Percentage of children under the age of six months (0-5 months) who are being fed solely on breast milk.	<ul style="list-style-type: none"> • Measures the extent to which mothers have adopted practices that are consistent with the recommendations of OPS/OMS and UNICEF. • There are very few cases where breastfeeding is counter-productive as a means to protect the health of the mother or child. Even in cases where the mother suffers from HIV/AIDS, the benefits of EMB are greater than the risk of the child contracting the disease.
??Prevalence of adequate weaning practices	Infants fed complementary foods: % of infants between 6 and 10 months, who are being fed complementary foods in addition to breast milk.	Appropriate weaning foods will depend on local situations.
??% of mothers continuing infant/child feeding during diarrhea	<ul style="list-style-type: none"> • % infants/children <24 mos. given continued foods and breast milk during diarrheal episode • % infants/children <24 mos. Given extra food (one extra meal/day) and breast milk following a diarrheal episode 	

	for at least two weeks "catch up growth"	
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FOOD SECURITY

Definition:

The capacity of household to produce or procure a stable and sustainable basket of adequate food.

INDICATOR	DEFINITION	CONSIDERATIONS/ Dimensions captured
<i>Sustained improvements of dietary intake in vulnerable individuals/ populations</i>		
% of population consuming minimum standards of required intake/diet	A. 24 hour recall survey B. Food frequencies survey (Disaggregated by age and gender.)	This would be ideal indicator of food vulnerability. However, this information is difficult and expensive to gather. COs should consider carefully if they have the capacity to collect and analyze consumption data; most probably will not. The following proxy indicators will be more appropriate for most COs.
?? The number of different foods or food groups consumed per day	The number of different foods or food groups consumed per day within a household. (Disaggregated by age and gender.) A. 24 hour recalls survey B. Food frequency survey (conduct small validation surveys first)	<ul style="list-style-type: none"> • Good measure of food insecurity. It measures the quality of the diet, by reflecting dietary diversity. Dietary diversity is usually highly correlated with caloric intake and protein adequacy, percent of protein from animal sources (high-quality protein), and with household income. • It is also a good broad-gauged proxy indicator of caloric consumption, i.e., whether households/families are consuming the minimum standards of daily nutrient requirements. • Seasonality must be considered
?? The number of meals consumed per day	The number of meals that are consumed per day within a household. (24-hour recall) (Disaggregated by age and gender.)	<ul style="list-style-type: none"> • Good indicator of food insecurity and a good broad-gauged proxy indicator of caloric consumption, i.e., whether households/families are consuming the minimum standards of daily nutrient requirements. • Definition of what constitutes a “meal” needs to be determined in cultural context • May require extra questions to assess intra-family equity of food distribution (e.g., to pregnant women, infants, etc.) • Based on recall data; best information from

		<ul style="list-style-type: none"> caregiver/mother/person who prepares food Seasonality must be considered
<p>?? Frequency of consumption of local index foods reflective of adequate amounts of micronutrients</p>	<p>A. Food frequency of six index vegetables (region specific) (John Hopkins University index for vitamin A rich- foods.)</p> <p>B. Alternative indicators for micronutrient deficiencies, program specific:</p> <ul style="list-style-type: none"> - % of children 6-60 mos. who received vitamin A capsule (VAC) in past 6 mos. - % of all mothers of infants <12 mos. who received VAC within 8 weeks of delivery - % of pregnant women receiving iron supplement - Proportion of households using iodized salt - % of households using fortified food 	<ul style="list-style-type: none"> Program specific; indicator should not be in core set unless program is addressing micronutrient(s) deficiencies Country defines which nutrients should be examined (e.g. calories, protein, micronutrients) May want to disaggregate by gender and age for programs dealing with intra-household allocation issues that do not also have a food utilization program focus.
<p>Improved safety-net for food insecure populations</p> <p>Note: Many types of safety nets exist: welfare, structural adjustment, emergency, seasonal, other.</p>		
Safety-Net Effectiveness	% of targeted poor who receive assistance (% of target beneficiaries who are not in the program but should be) AND % of the program or safety-net beneficiaries who do not meet targeting criteria	Programs determine denominator, i.e. target population
?? % of safety-net funded from domestic sources	Tracking estimates in % of in-kind (transfers) and cash from government to beneficiaries, compared with such assistance provided by outside agencies.	This is a measure of the efficiency of the host government safety net.
% of beneficiaries reaching pre-determined cut-offs for nutritional status.	Weight-for-age by age category (<3, <5 yrs.) (<2, <-3 SD cutoffs)	This is evidence of an "exit strategy."

HEALTH SECURITY (Primary Health Care and Population)

Definition:

The capacity of households and individuals to identify, prevent, and manage significant risks to their health, supported by optimal health technologies, continuing community norms and systems, capable institutions and appropriate public policies.

INDICATORS	DEFINITION	CONSIDERATIONS/ Dimensions captured
<i>General Health</i>		
Recent illness patterns	<p>Illness occurring in the past 2 weeks for any member of the family, serious enough to require treatment</p> <p>Shows quality of home diagnosis and management; can include usual prevention</p>	<ul style="list-style-type: none"> • Need information about local diagnostic terms and perceptions, including severity (unable to work?) • Is recall data; will be best quality if it comes from the main caregiver in the family (often the mother) • Seasonal influences may be strong, therefore best to repeat indicator in approximately the same season.
The number of work days missed due to sickness or injury	<p>The average number of work days missed per person during the two weeks prior the survey due to sickness or injury.</p> <p>Aims to measure the economic and social loss that a family suffers as well as morbidity itself.</p>	<ul style="list-style-type: none"> • Recall data: best comes from adult that missed work • Recognizes the importance of the health of adults and the consequences with regard to household livelihood security. It is worth monitoring and analyzing the interrelationship between this indicator and others in order to establish the existence or not of primary and secondary causes and effects and then take the necessary decisions.
??Health service access (distance/time)	The proportion of population for whom treatment of common diseases & injuries is available within one hour's walk. (World Bank 1997)	<ul style="list-style-type: none"> • Data on access can usually be gathered from secondary data. • Indicator of access to health services can be strengthened by adding questions/indicators related to: health centers with essential drugs on national list; quality of care.
<i>Maternal Health</i>		
MDI: Maternal Mortality Ratio	The Maternal Mortality Ratio is the annual number of maternal deaths per 100,000 live births. A maternal death is the death of a woman while pregnant or within 42 days of	<ul style="list-style-type: none"> • Maternal mortality reflects not only a woman's access to and use of essential health care services during pregnancy and child birth,

	termination of pregnancy, irrespective of the duration and the site of the pregnancy, from any cause related to or aggravated by the pregnancy or its management, but not from accidental or incidental causes.	but also broader underlying socio-economic factors including women's general health and nutritional status, access to reproductive health care services including family planning, access to resources and educational, social and economic status.
MDI: Births Attended by Skilled Health Personnel	This indicator is the number of births attended by a skilled health worker over one year as a percentage of total number of births during the same period. Skilled health personnel [in this definition] include doctors and/or persons with midwifery skills who can manage normal deliveries, and diagnose, manage or refer obstetric complications. It <i>excludes</i> TBAs and other attendants who initially acquired skills by delivering babies through apprenticeship to other TBAs, even if they received a short course of training.	<ul style="list-style-type: none"> This indicator is a measure of the health system's potential to provide adequate coverage for deliveries and provides information on the actual use of skilled assistance during delivery. This indicator is an indirect measure of the health system's potential to provide adequate access to essential health care for pregnant women during childbirth coverage for deliveries and provides information on the actual use of skilled assistance during delivery. The skilled attendant should have the necessary back-up and supplies, drugs and equipment to provide life-saving care to women who develop pregnancy-related complications.
Met need for obstetric care services	$N^8 = \# \text{ women with complications treated in facility}$ $D = \text{Total expected obstetric complications in population}$ (norm is 15% of estimated pregnant women)	<ul style="list-style-type: none"> Numerator collected from hospital data Denominator from population estimates As a rule of thumb: women of reproductive age are 20% of population; 20% of these women are pregnant at any point in time; and 15% of pregnant women will require EOC (Emergency Obstetric Care) services.
Utilization rate of prenatal services	The percentage of mothers, with children under two years old (0-23 months), who say they received two or more prenatal consultations during their last pregnancy	<ul style="list-style-type: none"> The use of prenatal services is very important because in many cases a prenatal consultation is an introduction to all reproductive health services. The use of these services depends on factors related to the women's perception of quality and satisfaction as well as on the availability of and accessibility to these services. This analysis, and the subsequent program intervention which should be implemented (by CARE, the communities and potential

⁸ N = numerator; D = denominator. Coverage (%) = N divided by D x 100

		institutional partners) should identify solutions to the problems that are the major causes for <i>delay</i> in selecting health risks, the <i>delay</i> in attaining the required services and the <i>delay</i> in being attended with adequate care.
Women who deliver with a skilled provider	N = # women who deliver with a skilled medical professional (doctor, midwife) D = Total deliveries in community	<ul style="list-style-type: none"> This does not include trained or untrained TBAs; they can help with child survival, but have not been shown to make significant difference on maternal health
Anemia among pregnant women	N = # pregnant women who are anemic D = Estimate of total pregnant women in community	<ul style="list-style-type: none"> Obtained either by survey or secondary data. In some settings this data may be difficult to obtain
STI (sexually transmitted infections) prevalence among pregnant women	N = # pregnant women who screen positive for syphilis D = Sample of pregnant women in community screened (tested)	<ul style="list-style-type: none"> Treatment should be given to those found to be positive
<i>Sexually Transmitted Diseases</i>		
STI prevalence	N = # women or men age 15-49 that have had an STI in the past 12 months D = Total population of women and men age 15-49	<ul style="list-style-type: none"> If based on sample, D = number screened If based on secondary data, use reported prevalence Gonorrhea prevalence among men is easier to identify and can be a good proxy for STI prevalence
Condom usage	N = # women or men who report using a condom during their last sexual encounter D = Total sample asked this question during survey	<ul style="list-style-type: none"> More useful to focus on specific cohorts, such as commercial sex workers, truck drivers, other high-risk groups
MDI: Contraceptive Prevalence Rate	The percentage currently using contraception, both traditional and modern methods, among currently married women of reproductive age, including where possible, those in consensual unions.	<ul style="list-style-type: none"> The ability to make free and informed decisions regarding the number and timing of children is a key goal of the Cairo Programme of Action. Enabling women to take decisions about reproduction is closely related to decision-making in other aspects of their lives and provides them with the possibility of realistic alternatives to childbearing as a means of obtaining social status. There is general agreement that persistent widespread poverty as well as serious social and gender inequities have significant influences on, and are in turn influenced by, demographic parameters such as population growth, structure and distribution.
Contraceptive Prevalence	N = # men and women of reproductive age (15-49) who are	<ul style="list-style-type: none"> Surveys are usually conducted on only

<p>Rate (CPR) [additional details by CARE for measuring this MDI]</p>	<p>currently using (or whose partner is using) a contraceptive method at a given point in time [as identified through a sample survey]. $D = \text{Total women of reproductive age (15-49) at the same point in time [or total sample surveyed of population of reproductive age]}$</p>	<p>married women</p> <ul style="list-style-type: none"> • Further analysis can include looking at the method mix to see if it is skewed from the norm.
<p>Unmet need for FP services</p>	<p>Percentage of women in sample who wish to postpone their next birth more than 2 years or want to stop having children, but who are not currently using contraception.</p>	<ul style="list-style-type: none"> • Surveys are often used to determine such unmet needs
<p>Birth interval</p>	<p>$N = \text{Average time between pregnancies for women of reproductive age (interval between end of two pregnancies, irrespective of outcome)}$ $D = \text{Total women who have had at least 2 pregnancies}$ Woman may have one live birth and one stillbirth, but looking at the birth interval may help understand why she had the stillbirth. If you look only at 2 children you may miss the women who have the shortest intervals, because they may have had a neonatal or infant death and thus the birth interval is inflated.</p> <p>Can be useful to divide by cohorts. Shows reproductive health behavior. Can also give indication of infant mortality and pre-natal mortality</p>	<ul style="list-style-type: none"> • This optional indicator is often not included in surveys as it is difficult to measure. • A birth interval less than 24 months is associated with IMR and PMR. • While birth interval is useful, it may not be worth the trouble to measure. Look for other factors, e.g. how many children in a family are under 5. This is especially important where families have 3 or more children under the age of 5, or there have been several infant deaths. • Intentional abortion is a sensitive issue and it may be difficult to obtain accurate information without special questions and/or training of the interviewers • Contraception use data applies only to women who have had a recent pregnancy • Will miss maternal mortality because the questions will focus on living women. • Is based on recall data; likely to have poor data if one tries to go back further than two pregnancies
<p><i>Newborn & Infant Health</i></p>		
<p>Low birth weight prevalence</p>	<p>$N = \text{\# infants born weighing less than 2500 grams}$ $D = \text{total live births}$</p>	<ul style="list-style-type: none"> • This will probably have to come from secondary data. Underreporting is a large problem. WHO estimates that conservatively there is a 40% level of underreporting. However, this indicator is important because it influences program decisions. • Necessary to also look at causes of LBW, including malaria, anemia, micro-nutrition.

Clean deliveries	N = # deliveries where the cord is cut with a clean blade and/or a clean delivery kit is used D = total deliveries in sample	<ul style="list-style-type: none"> This mostly reflects home births with family members or TBAs, but could also capture data from institutions
Tetanus Toxoid (TT) coverage	N = # pregnant women who have received at least 2 TT shots D = total pregnant women in sample	<ul style="list-style-type: none"> Surveys examine vaccination cards
Proportion of Neonatal mortality to Infant mortality	N = # infants born alive but who die before they are named, or the 40 th day D = total live births included in sample	<ul style="list-style-type: none"> Underreporting is also a major problem for measuring this indicator. WHO estimates that conservatively there is a 40% underreporting level. Consider stratifying the data by early and late neo-natal plus perinatal deaths for analysis of likely causes of mortality
Immediate breastfeeding	N = # newborns that are breastfed within the first hour D = total newborns in sample	<ul style="list-style-type: none"> Usually measured by HH survey
Child Health		
MDI: Infant Mortality Rate	The Infant Mortality Rate is the number of children who have died between birth and their first birthday, expressed per thousand live births.	<ul style="list-style-type: none"> The child mortality and infant mortality rates measure the survival of children, but that survival is a reflection of the social, economic and environmental influences that impinge on the children's lives. It is, therefore, not just a measure of health services (both preventive and curative), but more broadly of the milieu into which children are born. These mortality rates are, therefore, good overall indicators of development as it affects children.
MDI: Under-Five Mortality Rate	The Under-Five Mortality Rate is the number of children who have died between birth and their fifth birthday expressed per thousand live births.	<ul style="list-style-type: none"> [See description for Infant Mortality Rate]
Coverage of the DPT-3 vaccination	Percentage of children from 12 to 23 months old who received the third dose of the vaccination against diphtheria-pertussis-tetanus (DPT) by time they reached 12 months of age.	<ul style="list-style-type: none"> Indicator serves as good proxy for the accessibility and quality of immunization services and the mothers' use of these services. Protection against DPT is often difficult to achieve. Of the vaccinations recommended for children, the extent of coverage of DPT-3 is less than the other vaccinations (where the availability of the antibiotics is the same) because it involves a series of 3 vaccinations, at intervals that should not exceed two months between each dose from the age of three months.

Prevalence of diarrhea	The percentage of children under the age of five (0-59 months) who have suffered one or more episodes of diarrhea during the two weeks prior to the survey.	<ul style="list-style-type: none"> • Prevalence of diarrhea is an indication of the level of sanitation in general, the availability and use of uncontaminated water, personal hygiene practices and in particular in the handling of food. • Best composite indicator of water and sanitation programs and child feeding practices • Blood in stools and severity of persistent diarrhea are better indicators, however not as commonly used • Conduct surveys during the dry season • Note: Complimentary activities for health security programs. (Important longer term indicator of food/livelihood insecurity)
% of children with diarrhea receiving oral rehydration therapy (ORT)	Nominator is number of children under 5 years of age (under 2 in some cases) who were reported to have been treated with ORT. Denominator is total in sample who had diarrhea during past two weeks (see above indicator for prevalence of diarrhea).	<ul style="list-style-type: none"> • Indicator used by USAID Tier 2 for ORT and by WHO's CDD program. Operational definition of ORT should include appropriate home-available fluids with salt and sugar, and continued or rehabilitation feeding in the management of diarrhea prior to the onset of dehydration.
Malaria treatment	% of children under 5 years of age (under 2 in some cases) who had high fever or other malaria symptoms during past 12 months and were treated for malaria	<ul style="list-style-type: none"> • Important indicator in malaria-infested areas • Objective is to reduce associated mortality and morbidity of children through rapid treatment with effective anti-malarials.
Treatment of Acute Lower Respiratory Infection (ALRI)	% of children under 5 years of age (under 2 in some cases) in target population who sought and received referral and treatment for ALRI during the past 12 months	<ul style="list-style-type: none"> • Indicator designed to assess if mothers recognize and seek medical treatment when their child shows symptoms related to ALRI. • The majority of pneumonia deaths occur in infants 1-3 months of age. • Rapid and difficult breathing are considered the major signs of pneumonia.
% of infants immunized against measles at 12 months	Measles immunization coverage based on observing cards: % of children now 12-23 months old who received measles vaccine by time they were 12 months old.	<ul style="list-style-type: none"> • Preferred proxy for immunization coverage. • The WHO standard correct age for measles vaccination is 9 months, though there may be other national standards. • Child Survival projects measure children's EPI coverage between 12 and 23 months.
<i>Water and Sanitation</i>		
MDI: Population with	Population with Access To Safe Water is the share of the	<ul style="list-style-type: none"> • Access to safe water is of fundamental

(sustainable) Access to Safe Water	population with reasonable access to an adequate amount of safe water (including treated surface water and untreated but uncontaminated water such as from springs, sanitary wells, and protected boreholes). In urban areas the source may be a public fountain or stand post located no more than 200m away. In rural areas the definition implies that members of the household do not have to spend a disproportionate part of the day fetching water. An adequate amount of water is that needed to satisfy metabolic, hygienic and domestic requirements, usually about 20 liters of safe water a person per day.	significance to lowering infant and child mortality. Its association with other socio-economic characteristics, including education and poverty, also makes it a good universal indicator of human development.
Access to safe water	The percentage of homes that have a nearby and sufficient source of safe water. Safe water is defined as a sustainable supply of water, in sufficient quantities and uncontaminated quality, throughout the entire year.	<ul style="list-style-type: none"> Measures changes in the availability of water supply in a community or in a group of communities (the target population) Access to safe water is necessary but not sufficient to achieve impacts on the prevalence of diarrhea and other infectious illnesses related to the fecal-oral transmission of human excretion and other agents. The sanitary handling of water when it is taken from the source to the house, its adequate storage in the house, and using clean cooking utensils to drink it or to use it in the preparation of food are equally important. It is also important to consider food management and protection of hydro resources to assure the sustainability not only of water for human consumption but also for the irrigation systems for food production and rural and urban development in general.
Average personal water consumption / use	Average personal water consumption or use, measured in liters per person per day, for drinking, cooking, bathing and washing clothes.	<ul style="list-style-type: none"> Preferred indicator for water access and use Measure is more sensitive if surveys are conducted during the dry season
?? Access to functional sanitation facilities	The percentage of homes that have access to a basic sanitation facility for the disposal of human excrement	<ul style="list-style-type: none"> Measures changes in the availability of these facilities in a community or in a group of communities (target population). A good basic sanitation program should always be combined with an education element in personal hygiene and in the hygienic handling of food. The availability and correct and continuous use of sanitation facilities are necessary but not sufficient to achieve impacts on the prevalence of diarrhea and other

		infectious illnesses related to the fecal-oral transmission of human excretion.
?? % population with appropriate hand washing behavior/ practices	<ul style="list-style-type: none"> • Washing hands after defecation (key indicator) • Washing hands before food consumption (key indicator) • Washing hands after child defecation by mother/ caregiver • Washing hands before meal preparation by mother/ caregiver 	<ul style="list-style-type: none"> • Gold standard- is to collect all four indicator measures of hand-washing behavior • Is relatively new indicator with limited field testing
??% of households possessing soap	Proxy for more difficult to obtain indicators on hand-washing behaviors	<ul style="list-style-type: none"> • Soap or satisfactory soap substitute needs to be locally defined.

ECONOMIC SECURITY

Definition:

Households have the capacity to generate sufficient income to satisfy the basic needs of the family, and to maintain or increase the goods necessary for the stability of the family economy.

INDICATORS	DEFINITION	CONSIDERATIONS/ Dimensions captured
<i>Level of real household income for vulnerable populations</i>		
MDI: Incidence of Extreme Poverty: Population Below \$1/Day	Population below \$1 per day is the percentage of the population whose income/consumption falls below the <i>poverty line</i> . Individuals are considered to be as poor if the per capita real income/consumption of the household to which they belong is below the benchmark <i>poverty line</i> . The <i>poverty line</i> used here is one dollar (US) per person per day, measured at 1985 purchasing power parity. This figure was chosen because it is typical of the poverty lines in low-income countries. By the same token, it is much lower than the poverty lines found in middle- or high-income countries.	The indicator measures the proportion of the population whose income/consumption levels fall below a prescribed poverty line. It reflects the purchasing power that households have over goods and services needed to escape poverty (food, clothing, housing and other non-food essentials).
Wealth (HH wealth ranking); equity	<ul style="list-style-type: none"> • Not easy to measure directly at HH level. Possibilities include: • Relative wealth ranking by key informants in community has been effectively done using PRA techniques. • Community-specific indicators of what people at different relative wealth levels are likely to spend their money on, e.g. physical acquisitions such as improved house, productive land, better clothes, bicycle, motorcycle, car, radio, TV, sending kids to school, etc. • Income: in itself also not easy to measure, except, for example, where there are micro-business and microfinance programs 	<ul style="list-style-type: none"> • Though wealth is what we intend to measure it is usually not cost-effective nor practical to do it. Thus various proxies are used, often related to visible expenditures. • Appropriate proxies need to be determined in local socio-economical context, i.e. by asking how people typically spend money at different levels of income. • It is important to use this indicator to develop a profile of distribution of wealth within a community.

<p>Value of household productive assets (per capita)</p>	<ul style="list-style-type: none"> • The productive assets indicator demonstrates the resources available to households to support their economic status and maintain their lifestyle and protect them during production or revenue failures. • Include the value of land, either in terms of ownership or access. However, it is difficult to assess land value in absolute terms. The relative value within community norms is most important. 	<ul style="list-style-type: none"> • Wealth can be measured as a combination of liquid and productive assets. Due to the different purposes of each, these are listed here as two separate indicators. • Include <i>all</i> productive assets, because they form an important aspect of the household's ability to remain economically viable. Differential productive assets between households or groups indicate differential economic capacities and different levels of vulnerability. • Although land value is not easily assessed, it is a critical part of assets and can be integrated into an analysis by comparing different mixes of valued assets versus land for different groups or regions.
<p>Value of key household liquid assets (per capita)</p>	<p>Measurement of the combined cash equivalent value and quantity of the most important liquid assets used and owned by the household. Measurement is calculated per capita to enable comparisons between different households of varying sizes.</p>	<p>Liquid assets are those which are easily sold or consumed. They are distinguished from productive assets in that the latter are needed to generate future income.</p>
<p>Household income in relation to basic food basket, by source</p>	<p>This is a key access indicator that measures the amount of family economic resources available to satisfy basic food needs. As the proportion spent on food increases, there is less available for other needs, and the family is more vulnerable and less economically secure. There may even be insufficient resources to fulfill basic food needs, indicating food insecurity as well.</p>	<ul style="list-style-type: none"> • One of the most difficult and complicated to collect of any of the HLS indicators. However, household economic status is a fundamental window into livelihood security • Income and assets are very sensitive issues. There are always serious concerns about the complexity and validity of these data. Acceptance of certain degrees of imprecision is necessary but should not discourage collection and does not negate its value. Experience has shown the importance of getting income information from each income earner, since errors can occur when respondents report for others; the importance of capturing all sources of income since much revenue is generated by episodic activities, such as part-time or seasonal labor, or sales of assets; care is needed to not double count production value and the portion of production commercialized as cash revenue
<p>??Business management skills</p>	<p>Abilities to run a business as an entrepreneur</p>	

??Technical skills	Trade or craft skills which enable persons to earn a living either as an entrepreneur or employee	
<i>Increased access and control of resources by women</i>		
MDI: Share of women to men in wage employment in the nonagricultural sector.	This indicator measures the workers in the nonagricultural sector (industry and services), expressed as a percentage of total.	
Increase in household income earned by women	Where available: Analysis of income and expense records of women's businesses Otherwise: Based on women's own accounting/reporting	Where precise intra-household income is not feasible to measure, rely on reporting by individuals during interviews, or groups during focus group discussions.
Women's effective rights to use, own, and inherit land and other productive assets	Percent of women who have acquired productive assets including joint or separate land titles.	Disaggregate % of farms with recognized title for men and women (<i>this is very important to both genders for differing reasons</i>).
??Percent of all small loans given to women	Percent of loans given by project or other financial institutions in target community which are received by women.	Obviously most applicable where there is a SEAD/Savings & Loan program operating; otherwise need to collect data from other financial institutions.
<i>Sustainable increase in domestic food production linked to vulnerable populations</i>		
The number of months of food shortage	The number of months during the past year that households experience food shortages (defined locally)	<ul style="list-style-type: none"> The number of months of self-provisioning is a standard proxy indicator of food security. The number of months that food stocks normally last is an indicator that is primarily applicable in highly subsistence-oriented areas where households depend on their own production rather than market purchases for food. However, it can also be used to reflect changes in welfare in other cases if non-farm income remains fairly constant. In both cases however, all sources should be factored in.
Production (per vulnerable household)	<ul style="list-style-type: none"> Total production (volume/commodity) in cash or grain equivalents Value of production (overall value per commodity) Number of months of self-provisioning (number of months per year a household is able to subsist from the last harvest) 	<ul style="list-style-type: none"> Number of months of self-provisioning is very context and livelihood system specific. Note: self provisioning is NOT equivalent to self-sufficiency
Yield	<ul style="list-style-type: none"> Production per unit of land or of labor, averaged over 3-5 year period (per crop) Standard deviations of annual yields over 3-5 year period 	<ul style="list-style-type: none"> N.B. In areas where land is plentiful, indicator should be yield per whatever the limiting factor is (e.g. labor, HH) Weigh indicator relative to country/region

	<ul style="list-style-type: none"> Weighted yield gap analysis: Yield gap is the difference between actual and potential yield (with similar inputs and resources) 	<p>situation (in some cases progress can mean stabilizing yields, e.g. reverse or halt declining yields)</p> <ul style="list-style-type: none"> Collect annual data, observe trend over 3-5 years. Weighted yield gap of crops produced, averaged over crops for a single indicator. Yield by itself does not take into account the cost effectiveness of producing that crop. (See indicator below for net profit.)
Net profit	Net profit per unit of land (or other resource) averaged over 3-5 year period.	<ul style="list-style-type: none"> Land is often used as unit of analysis for agriculture, but labor, head of cattle, etc. could be appropriate. Takes into account the net margin between costs of inputs and income from production.
Area under improved natural resource management practices	Unit/area- (i.e. hectares- under improved conservation practices at the farm, regional and national levels.) (e.g. contour bunding, windbreaks, agro-forestry, reforestation, organic fertilizer use, water management interventions, etc.)	<ul style="list-style-type: none"> Gives indication of how much land in area is being managed using improved natural resource management practices– or extent of the need for such practices.
<i>Improved Marketing, Processing, Storage and Distribution Systems for Vulnerable Populations</i>		
??Food Marketing Costs and Margins (expressed as market margin ratio and as %)	<ul style="list-style-type: none"> Marketing margins (ratio of retail price and farm gate price in vulnerable areas) for staples, by season (to be factored with inflation rat) Expressed as a % of retail price Difference in retail price at harvest and retail price during the lean season in the major rural deficit market Difference in retail price at harvest and retail price during the lean season in a major city. 	
??Costs of Key Agricultural Inputs	Retail price for major inputs in major growing areas, e.g. fertilizer, seeds, and pesticides in relation to urban wholesalers.	Comparing the retail price in targeted growing areas and the retail price in nearest wholesale supply centers.
??Availability of Key Agricultural Inputs	Availability of major inputs in major growing areas, e.g. fertilizer, seeds, pesticides (quantity/need of inputs compared to market availability)	Quantity/need of inputs is based on estimated demand. Should be measured just prior to cultivation stage requiring these inputs.
??Post-harvest Management Losses	<ul style="list-style-type: none"> Proportion of stored crops lost to pest damage, environment (expressed as percent of total crops) Estimated percent of produce lost or unsold for lack of transportation Reduction in processing and/or handling losses 	

EDUCATIONAL SECURITY (Basic and Girl's Education)

Definition:

The capacity of households to obtain/receive and benefit from a basic education, including functional literacy. A household can be said to be Educationally Secure when all its members either have or are in a position to acquire an affordable education at a sufficient level to assure their effective participation in the social and economic life of their community and nation.

INDICATORS	DEFINITIONS	CONSIDERATIONS/ Dimensions captured
MDI: Net Enrolment in Primary Education	Net Enrolment in Primary Education is defined as the percentage of children of primary school age who are enrolled in primary education.	Enrolment in Primary Education measures one of the three dimensions of universal primary education: the extent of educational participation of the eligible primary school-aged children and youth.
Primary school enrollment	<ul style="list-style-type: none"> The percentage of children who are enrolled in primary school during the current year, expressed as percentage of the total population of children of school-going age (discounting those who have graduated on to secondary school), disaggregated by gender Indicator allows trends analysis of changes in the availability of, access to, and participation in primary education by school-age children. May also show <i>desire</i> to attend school and gender disparities in education 	<ul style="list-style-type: none"> The percentage of 6 to 14 year old children who are enrolled in primary education programs (or higher) reflects the HH's perception of the importance of student participation in education and the availability, quality and relevance of affordable education services. A country or region's primary school enrollment rates may be influenced by the labor force participation of its females and by the prevalence of center- or home- base d childcare.
Gross enrollment rate (disaggregated by gender, rural/urban, and other vulnerable populations e.g., children affected by AIDS). Expressed as a % Gross enrollment is for ECD?? and formal and non-formal basic education	<ul style="list-style-type: none"> Gross enrollment refers to the percentage of children who are enrolled in ECD and formal or non-formal basic programs during the current year, expressed as a percentage of the total population of children of school-going age. Indicator allows trends analysis of changes in the availability of, access to, and participation in primary education by school-age children. May also show desire to attend school and gender disparities in education. 	<ul style="list-style-type: none"> The percentage of 6 to 14 year old children who are enrolled in primary education programs (or higher) reflects the HH's perception of the importance of student participation in education and the availability, quality and relevance of affordable education services. A country or region's primary school enrollment rates may be influenced by the labor force participation of its females and by the prevalence of center- or home- based childcare.
MDI: Completion of 4th	Survival to 5 th Grade of primary education measures the	Survival to 5 th grade captures the second of three

Grade of Primary Education	proportion of school children enrolled in grade 1 of primary education who have enrolled in grade 4 and as a percentage of the initial number of school children in grade 1.	components of universal primary education: completion of a basic education. Children who complete grade 4 (and enroll in grade 5) of primary school are generally believed to have attained the objectives of primary education by having basic literacy and numeracy skills that would enable them to continue learning.
Educational achievement of young adolescents	Proportion of children in target community aged 15 with a minimum of P7 education, disaggregated by gender	<ul style="list-style-type: none"> • Aims to understand education trends, including availability, access, levels of attainment, desertion rates, and gender disparities in completion rates. • P7 is proxy for problem solving skills, social values, basic numeracy and literacy. Age 13-15 is the usual age for completion of P7, and it is at the end of the pre-employment and pre-child-bearing age. • To assess whether basic educational needs are being met and the capacity of HH to support education. • Indicator does not say anything about quality of education or school environment (bullying, stigma, lack of privacy at toilets, sexual harassment by teachers and fellow students, etc.) • Does not assess performance on P7 exams • Does not assess current enrollment in school
<p>Transition rate (disaggregated by gender, rural/urban, and other vulnerable populations e.g., children affected by AIDS). Expressed as a %</p> <p>Transition/continuation rates for formal and non-formal basic education programs.</p>	Transition or continuation rate refers to the number of pupils who are admitted to the first grade of a higher level of education in a given year (e.g., pupil transitions from primary grade 6 to junior secondary grade 7), expressed as a percentage of the number of pupils enrolled in the final grade of the lower level of education in the previous year.	<ul style="list-style-type: none"> • The percentage of students who continue on to a higher level of education reflects the HH's perception of the need to gain more detailed knowledge that in turns contributes to the sustainable development of the country. • This also reflects the intake capacity of the next level of education. Low levels of continuation rates can signal problems with access (availability) of education programs or deficiencies in the examination system or lack of quality in the education system.
Completion rate (disaggregated by gender, rural/urban, and other vulnerable populations, e.g.,	Completion rate refers to a cohort of pupils enrolled in the first grade of a given level (EDC, primary, secondary) cycle of education who reach each successive grade and complete the final level of that cycle of education.	<ul style="list-style-type: none"> • This indicator demonstrates student retention and is an indicator of internal efficiency—the ability of an education system to retain students to increase basic literacy and numeracy levels.

children affected by AIDS). Completion rates for ECD??, formal and non-formal basic education, and youth literacy/life skills programs	Expressed as a %.	
MDI: Literacy Rate of 15 to 24 Year Olds	This indicator is simply the proportion of the population aged 15 to 24 who are literate. A person is said to be literate when he or she can both read and write with understanding a short and simple statement on his or her everyday life.	Literacy in 15-24 year-olds captures the recent education outcomes of primary and secondary education. Given the age structure of the population and the cost of adult education, it would be more costly to redress the previous lack of education by targeting adult literacy more generally. Adult literacy figures for the whole population are, however, included under [MDI] "General Indicators"
Adult literacy [more details by CARE]	The literate adult population (15 years and older) expressed as a percentage of the total population aged 15 and above who can pass a basic functional literacy test in their own language, disaggregated by gender.	<ul style="list-style-type: none"> • Adult literacy is associated with higher income, lower fertility rates, lower infant mortality rates, and improved nutrition to name a few. • Functional literacy is important because educational attainment can be lost if the skills learned are not used regularly. Thus, depending solely on the number of grades completed could result in an overestimation of the literacy rate.
??Quality of educational services	<ul style="list-style-type: none"> • % of students passing national exams, disaggregated by social class or location (rural vs. urban) • repetition and drop out rates • teachers per student • text-books per student • # days spend in class during year • # of hours of instruction • measures of accepted basic best practices for teachers such as, level of training received, number of school days they show up for class, have materials ready etc. 	It is not sufficient to measure how many children go to school; there needs to be some measure of how accessible schools are to them, and, importantly, whether or not they are getting a quality education.
MDI: Ratio of Girls to Boys in Primary and Secondary Education	This indicator is defined as the combined primary and secondary gross enrolment ratio for girls as percentage of the combined primary and secondary gross enrolment ratio for boys.	Investment in education for girls has been shown repeatedly to be one of the most important determinants of development, with positive implications for all other measures of progress. Achieving gender equality in education will be a measure of both fairness and efficiency.
MDI: Ratio of Literate	This indicator is the <i>female</i> Adult Literacy Rate as a percentage of <i>male</i> Adult Literacy Rate in a given age group.	Gender disparity in adult literacy results from unequal opportunity of boys and girls to acquire

Females to Males (aged 15 to 24 years)		basic literacy skills in primary and secondary education and the legacy of adults, particularly women, who received no education.
??Years Input Per Graduate Internal efficiency rate for primary school only whether considered a formal or a non-formal program.	Internal efficiency refers to the estimated average number of pupil-years spent by pupils (or students) from a given cohort who graduate from a given cycle or level of education, taking into account the pupil-years wasted due to drop-out and repetition. Internal efficiency can serve as a proxy of quality of the educational system.	The quality of the education provided to children is as important as access. Quality effect access, or the willingness of household to make financial and other sacrifices to send their children to school. According to a recent World Bank study, access and quality are both important to economic development, but quality is more important.
??Female participation in education system or Civil Society Organization: <ul style="list-style-type: none"> • % of female teachers • % of female participants in civil society organizations (CSOs) 	<ul style="list-style-type: none"> • The number of female teachers at a given level of education expressed as a percentage of total number of teachers (male/female) at the same level. • The number of female CSO participants expressed as a percentage of total number of CSO participants (male/female) at the same level. 	<ul style="list-style-type: none"> • Indicator shows gender composition of the teaching force or CSO sector. It helps to assess the need for opportunities and incentives to encourage women to participate in teaching or CSO activities. • Techniques promoting equity are critical for achieving values and skills consistent with sustainable development and effective participation in decision-making.
Education Policy Environment <ul style="list-style-type: none"> • Policies government has enacted to create a more enabling environment for civil society organizations • Policy issues that have changed as a result of CSOs interventions • ECD??, formal and non-formal basic, and youth literacy/life skills programs 	<ul style="list-style-type: none"> • Policies refer to education reforms achieved under CARE programs to improve or facilitate CSOs work in improving the educational system (access, achievement, and quality). 	<ul style="list-style-type: none"> • Financial resources also assist in appropriate policy and decision-making and this indicator may be linked to the gross domestic product spent on education. • Recognition of government's attitude of role CSOs play in improving the education system.

ENVIRONMENTAL SECURITY

Definition:

The capacity of households or communities to use and adequately manage natural resources and bio-diversity, assuring equitable and sustainable availability.

INDICATOR	DEFINITION	CONSIDERATIONS/ Dimensions captured
MDI: Biodiversity: Land Area Protected	<ul style="list-style-type: none"> • This indicator represents the extent to which areas important for conserving biodiversity, cultural heritage, recreation, natural resource maintenance, and other values, are protected from incompatible uses. • Numerator: Surface of totally protected areas expressed in km² • Denominator: Total surface of the country in km² • Totally protected areas are areas maintained in a natural state and are closed to extractive uses. They comprise National Nature Reserves, National Parks, and National Monuments. Partially protected areas are managed for specific uses such as recreation, or to provide optimum conditions for certain species or ecological communities. They are also necessary to protect valued expressions of human relationships with nature in terms of landscape. 	Protected areas are an essential tool for ecosystem conservation, with functions going well beyond the conservation of biological diversity. As such they are one of the building blocks of sustainable development.
Survival of indicator species	<ul style="list-style-type: none"> • Count or scientific estimate of the population of key indicator species of fauna or flora within given area (usually a reserved park). • Selection of species to include should be based both on what naturalists and the local population consider to be important. 	In ICD projects when members of surrounding communities are aware of the value of maintaining the environment, their participation in the monitoring of the survival of indicator species can be an important part of the relationship between development and environmental conservation.
Access to quality land	<ul style="list-style-type: none"> • The assessment of quality land is defined by local farmers who provide a rating of each of their plots on a four point scale: poor quality, average quality, good quality, and superior quality (usually irrigated) land. • Quality land is then defined as any land rated "good" or "superior" (or irrigated) by each farmer. An average is calculated based on individual ratings of each plot. 	Indicator should not only measure number of farmers and the quality of land they report owning or having access to, but also the size (area) of each quality of land, and the conditions of access.
Conservation practices	<ul style="list-style-type: none"> • The percentage of households that have applied two or more conservation practices during the 6 months prior to the 	This indicator relates to the sustainability of the physical environment, particularly to farmland. It is assumed that incidence of use of conservation

	<p>survey, by area.</p> <ul style="list-style-type: none"> Conservation practices include: physical methods of ground conservation such as bank terraces, ditch control or surrounding ridges; ground conservation methods using vegetation such as windbreaks, live fences, and reduction in the use of chemical pesticides. 	<p>practices indicates environmental awareness on the part of households that use them. (See indicator below on improved natural resource management practices.)</p>
<p>Access to and management of key natural resources</p>	<ul style="list-style-type: none"> Procedures (including by-laws, rules), knowledge and behaviors in place at community level to ensure sustainable access and use of locally most important natural resources on public and private land Shows ease of current access and can demonstrate changes over time. Also shows understanding and actions to maintain access. 	<ul style="list-style-type: none"> Strongly influenced by seasons; do repetitions in the same season Need qualitative preparatory work to identify key natural resources in the locale and relevant behaviors Links with indicator on management of common good resources (community level) Need for trained person to verify subjective assessments of the effectiveness of the measures in use, i.e., that rate of use does not exceed rate of recovery Illegal use may be difficult to identify Can use qualitative group approaches to find out trends
<p>The availability of continuous water sources throughout the year, and the quantity of water they provide</p>	<ul style="list-style-type: none"> The number of water sources with water flow throughout the entire year in a defined area The quantity of water they provide (especially at the end of the dry season). The accessibility of this water to meet human needs, e.g. drinking, washing and irrigation. <p>Optional indicator:</p> <ul style="list-style-type: none"> In areas without springs or other flowing water sources, the depth of the water table is measured in several wells in each community, on a date during the low water period. In subsequent years, on the same date, the depth of the water table is measured again. 	<ul style="list-style-type: none"> Trends in the number of water sources (increase, decrease or stability) are an impact indicator of the environmental safety of the selected area. This indicator is rural-based and is important for watershed management and soil and water conservation in areas with mountains and well-defined basins
<p>Rate of deforestation</p>	<p>With the help of satellite images in a defined area, primary forest, secondary forest and deforested areas may be measured as a percentage of the total area being examined. In this same area, primary forest, secondary forest and deforested areas are measured again every year or at longer intervals.</p>	<p>In areas where satellite images and Geographical Information Systems (GIS) are available, it is recommended that the deforestation rate be observed.</p>

HABITAT SECURITY

Definition:

The access of individuals and households to adequate shelter (relevant to local conditions) and related resources to ensure that households have a healthy and sanitary environment, protection from harm (violence/aggression) and detrimental elements, to enable safe and secure livelihoods.

INDICATOR	DEFINITION	CONSIDERATIONS/ Dimensions captured
Percent of families with adequate housing (defined contextually)	The number of households whose dwellings fulfill a minimum "set" of quality criteria	The quality of a dwelling has an impact on the health of the family. It is also a good proxy indicator of poverty.
Percentage of households with adequate garbage disposal	The percentage of households that dispose of garbage or solid matter in an adequate manner.	The adequate disposal of garbage has an impact on the health of the family and indirectly reflects the economic situation and the living conditions of the family.
Victimization incidence (crime rate)	<p><i>Serious crime</i> refers to murder, rape, assault, robbery, etc.</p> <p>A victim is one who personally has been hurt by a perpetrator, or has a household member who has been.</p>	<ul style="list-style-type: none"> • This indicator is especially important in both urban and rural settings and can help understand issues of trust, community cohesion, political violence, ethnic violence and/or violence against women or minorities. • When people have been victims of a crime and are not safe in their communities, their ability to engage in productive and income-earning activities and their willingness to participate in the life of their community, may be significantly impacted.

<p>The percentage of community members who feel safe in their communities</p>	<p>The percentage of community members, disaggregated by gender, that state that they feel safe in their communities</p>	<ul style="list-style-type: none"> • Feelings of safety can also affect a person's freedom of movement, which affects the ability to engage in productive and income-earning enterprises. It is important because while employment and productive activities exist, movement might be restricted in such a way that people can not engage in these activities. • Also, this indicator can help us understand who is more affected by violence. Women are often more vulnerable than men to physical harm and violence both inside (domestic) and outside the of the home. Women's movements, thus their potential, are generally more restricted than men's, particularly at night.
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SOCIAL NETWORK SECURITY (Community Empowerment)

Definition:

The capacity of households and communities to maintain and participate in social networks that enable them to pursue viable livelihoods by reducing risks, accessing services, protecting themselves from deprivation and accessing information for lowering transaction costs.

INDICATORS	DEFINITION	CONSIDERATIONS/ Dimensions captured
<p>Level of active participation in community organizations</p>	<ul style="list-style-type: none"> • <i>Community organization</i> refers to any type of community group organized for a common purpose. <i>Active participation</i> occurs when someone attends at least 70% of the official meetings of the organization. • Shows some information about coping strategies, safety nets, and opportunities in HHS, communities. Linked with access to services and resources • Objective is to measure the level of real participation of people in their community organizations and thus in their communities' activities. • Better indicator would be qualitative description of the empowerment of local citizens as evidenced by their level of participation in community organizations, and by the significance of those organizations on affecting desired policies and change. 	<ul style="list-style-type: none"> • Community information can be collected from key informants and group discussions; HH data from surveys • Determines whether community members have the opportunity to participate in reference to time, access, and their acceptance by the group • Still learning about influence of socio-economic status, etc. on patterns of membership and groups; interpretation of results will therefore require skills and time
<p>Level of democratization of community organizations</p>	<p><i>Democratization</i> refers to whether members of community organizations feel they have a voice and a vote in their organizations. A person has a 'voice and a vote' if he/she can influence the decisions made by the community organization.</p>	<p>Whether a person 'feels' they have influence is important because organizations may have rules regarding equal participation of their members, but they may not put them into effective practice</p>
<p>MDI: Proportion of seats held by women in national parliament [or other organizations]</p>	<p>The MDI refers to the percentage of seats held by women in national legislative assemblies. The number of seats refers to both elected and appointed members.</p>	<p>[Similar ratios of women to men in other organizations, especially elected bodies such as local government or community-based organizations, would also be useful indicators of gender equity related to community empowerment.]</p>
<p>Mutual support of kin and friends in neighborhood / community</p>	<p>The continuous presence of adult kin (outside the nuclear family, >15 years of age) and close friends in a neighborhood works to provide a 'safety net' for that community and provides a basis for exploring the range of resources to which household members may have access, particularly in</p>	<p>This indicator establishes the incidence of adult kin and friends living in a neighborhood or broader community as a means for beginning to understand what these networks and their functions are, and to determine the possible</p>

	reference to times of emotional or economic stress. May also be used to lower transaction costs.	range of resources available to families in target communities
Access to organizations/ services that offer any type of social service	Organizations and services include both NGOs and government institution. The calculation is based on adults who feel they have access to at least one organization or service that offers some kind of social service	Base indicator on identification key services in local context.
Community influence on local or regional government	Percentage by community members, disaggregated by gender, who feel that their community organization (s) influences local and/or regional government decision-making. This is an indicator of community empowerment	The aim of this indicator is to measure the population's perception of the influence that heir community organization(s) has on local and/or regional government. It will help understand the levels of interaction between community organizations and local government and if local government is responsive to community concerns.
Participation of local people in the management of "common goods"	<ul style="list-style-type: none"> • Participation includes nature and extent of community members' roles in decision-making and monitoring • Key 'common goods' include: health, water, sanitation, education, security, and environment (publicly owned, forests, lakes, river, grazing land, wetlands) • Include spiritual resources such as churches, mosques, temples, etc. • Can show participation as contribution to discussion/debate; representation of stakeholders on management committees; involvement in key decisions, implementing and enforcement. • An indicator of community empowerment 	<ul style="list-style-type: none"> • Interpretation of 'participation' is variable; have to be careful to distinguish 'attendance' and 'participation' • Barriers to participation may be extensive, and they may be subtle (not so easy for people to be aware of to admit) • Sustainability of changes in extent of participation may be difficult to measure, especially if it starts with external support • Need to collect information for two year span

PERSONAL EMPOWERMENT

Definition:

Self-empowerment and human capabilities include the capacity to gain access to and use services and information, to experiment and innovate, to compete and to collaborate with others, and to use new conditions and resources.⁹

These are important components of household livelihood security. However it is difficult to measure them in precise terms. A few tentative suggestions are included below. Many have to do with perceived change in attitudes and personal capacity. They could be reflected in changed behavior. These require very culturally and location-specific definitions.

➔ *Contributions are welcome to the evolving field of defining and measuring personal empowerment and human capabilities.*

INDICATOR	DEFINITIONS
Life skill enhancement	<ul style="list-style-type: none"> • For economic pursuits, such as financial management, negotiating skills, time management, etc. (See more under Economic Security.) • Social skills, dealing with other people, dealing with conflict
Capability skills (from Glenn and Nelson 1989)	<ul style="list-style-type: none"> • Perceptions of <i>personal capabilities</i>– ‘I am capable’ • Perceptions of <i>personal significance</i> (in primary relationships) – ‘I can contribute in meaningful ways and I am genuinely needed.’ • Perceptions of <i>personal power or influence over life</i> – ‘I can influence what happens to me.’ • <i>Intapersonal skills</i> – the ability to understand personal emotions, use that understanding to develop self-discipline and self-control, and learn from that experience • <i>Interpersonal skills</i> - the ability to work with others and develop friendships through communication, cooperation, negotiation, sharing, empathizing and listening • <i>Systemic skills</i> – the ability to respond to the limits of everyday life with responsibility, adaptability, flexibility and integrity • <i>Judgmental skills</i> – the ability to use wisdom and evaluate situations according to appropriate values

⁹ From Chambers and Conway, 1992

References related to these and other indicators, and means for measuring them

Several of the websites containing the Millennium Development Goals and Indicators and (in some cases) their definitions and measurement include the following:

<http://www.un.org/millenniumgoals/>

http://www.developmentgoals.org/Definitions_Sources.htm

<http://www1.oecd.org/dac/Indicators/pdf/METHOD.PDF>

<http://www.undp.org/mdg/Millennium%20Development%20Goals.pdf>

United Nations General Assembly: "Road map towards the implementation of the United Nations Millennium Declaration" Report of the Secretary-General, 6 September 2001.

Available at <http://www.un.org/documents/ga/docs/56/a56326.pdf>

For a full list of (mostly UN) resources on indicators check the web site:

<http://nt1.ids.ac.uk/eldis/hot/indicator.htm>

CARE, Latin America and Caribbean Regional Technical Committee. "The Application of Household Livelihood Security Indicators in Baseline Studies." CARE/PAD/PHLS tools list CD available from PHLSinfo@care.org. Atlanta. 1998

CARE-Haiti (Alexander, Sara H.). "Scoring – A Household Livelihood Security Index for CARE Haiti." CARE/PAD/PHLS tools list CD available from PHLSinfo@care.org. Atlanta. 1998

CARE-Uganda (Barton, Tom). "Program Impact Evaluation Modules." CARE/PAD/PHLS tools list CD available from PHLSinfo@care.org. Atlanta. 1999

USAID (Ferris-Morris, Margie and Gabrielle Dennis of PRISM). "Proceedings of the (December 1995) USAID Workshop on Performance Measurement for Food Security." USAID/CDIE/PME. Washington DC. 1997.

IMPACT Food and Security Nutrition Monitoring Project (on behalf of USAID): series including the following:

- Riely, Frank, Bruce Cogdill and Laura Bailey. "An Introduction to the Monitoring and Evaluation of U.S. Title II Food Aid Programs." 1996
- Anon. "Food Security Indicators and Framework for Use in the Monitoring and Evaluation of Food Aid Programs." 1997
- Lung'aho, Mary S. "Infant and Child Feeding Indicators Measurement Guide." 1997
- Diskin, Patrick. "Agricultural Productivity Indicators Measurement Guide." 1997
- Magnani, Robert. "Sampling Guide." 1997

(Copies of the above series available through LINKAGES/AED linkages@aed.org or FAM fam@foodaid.org)

USAID (with Center for International Health Information). "PHN Sector: Background Paper on Recommended Performance Indicators." 1997

United Nations Commission on Sustainable Development (with World Bank, FAO, WWF and others). "Indicators of Sustainable Development." Available at www.un.org

World Bank. "Expanding the Measure of Wealth: Indicators of Environmentally Sustainable Development" Rio+5 Edition. Available through John A. Dixon jdixon@worldbank.org. (No date, but received in 1997).

Inter-American Foundation. "Overview of Performance Indicators." Working draft 4/98.

Sphere Project (with Steering Committee for Humanitarian Response, Interaction with Voice, ICRC and ICVA. Series includes "Minimum Standards" in Water Supply and Sanitation, Nutrition, Food Aid, Shelter and Site Planning, Health Services. E-mail sphere@ifrc.org or www.ifrc.org/pubs/sphere. 1998

ECHO (Eijkenaar, Jan and John Telford). "Applying Indicators for the Monitoring and Evaluation of ECHO Funded Emergency Humanitarian Aid Projects." Jacqeline.coeffard@echo.ced.be. Draft two 1997.

For information on CARE's Partnership and Household Livelihood Security (PHLS), including Design, Monitoring and Evaluation (DME), Food Resources, Partnerships, Civil Society, Environment, etc. see <http://www.kcenter.com/phls/>

For links to sources within and beyond CARE containing multiple DME resources see www.kcenter.com/care.dme.