

Household Resiliency Index

Guide for measuring household economic resiliency



HRI

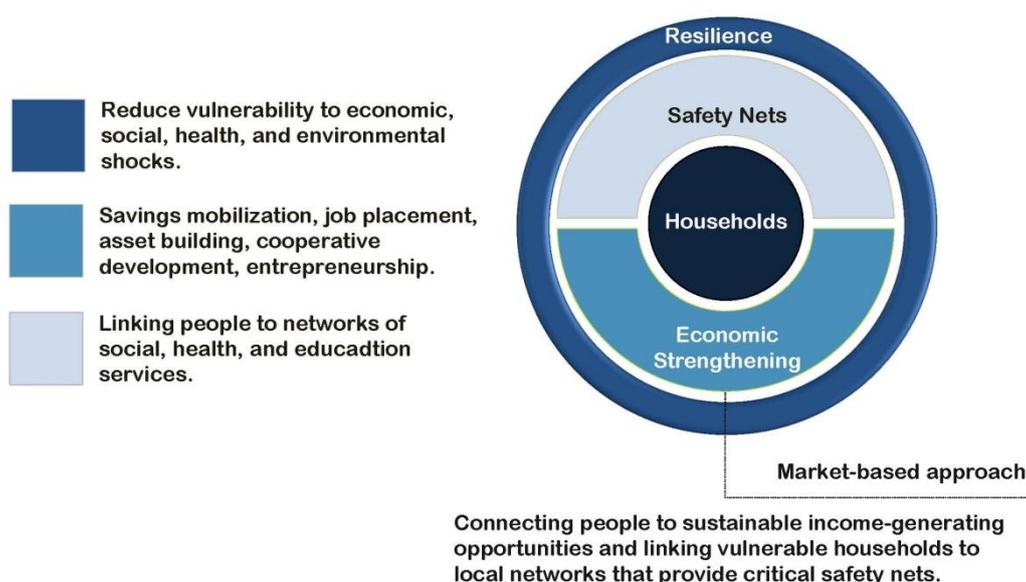
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1. Introduction

1.1. Building Resilience

At Global Communities, economic strengthening programs utilize a market-based approach, connecting people to real income generating opportunities, including savings mobilization, job placement, asset building, cooperative development, and entrepreneurship promotion. In addition, Global Communities links vulnerable households to local networks of social, health, and education services that provide critical safety nets. This comprehensive approach, illustrated in the diagram below, builds resilience and reduces household vulnerability to economic, social, health and environmental shocks.



Through the Social Services for Vulnerable Populations Program (SSVP), known locally as USAID/Higa Ubeho program in Rwanda, Global Communities provides holistic support for families with orphans and other vulnerable children (OVC) and families affected by HIV through a holistic set of services: integrated savings and lending groups (ISLGs), food security and nutrition support, education support, vocational training, psychosocial support, access to health service, and support for early childhood development. These services are intended to be short-term investments that will enable the households to develop sustainable strategies to respond to health and economic shocks and thus build their resilience. This guide is used by the program to measure changes in household resiliency so that the program can evaluate the impact of its interventions and make important decisions about service-delivery and graduation of households.

1.2. Pathway for Household Economic Resiliency

Global Communities has developed a simple system for categorizing and tracking the economic resiliency levels of beneficiary families. Building on PEPFAR/USAID’s Economic Strengthening Pathway, this system recognizes that household income, expenses, and conditions are not static, and seeks to monitor changes in resiliency through movement across this pathway. The plan employs the three typologies of family situations as outlined by the USAID OVC Task Force, which complements the Government of Rwanda’s Participatory Poverty Assessments, known locally as Ubudehe, including: (1) Families in Destitution (2) Families Struggling to Make Ends Meet (3) Families Prepared to Grow.

Over time, vulnerability may increase as households face health and economic shocks and struggle to cope with those changes. In such cases, households move left on the pathway. Alternatively households may become increasingly resilient as they benefit from program services and support. In such cases, households move right on the pathway– see diagram below. These movements along the pathway help OVC programs to understand the changing needs of households, and the impact of program interventions or services over time.



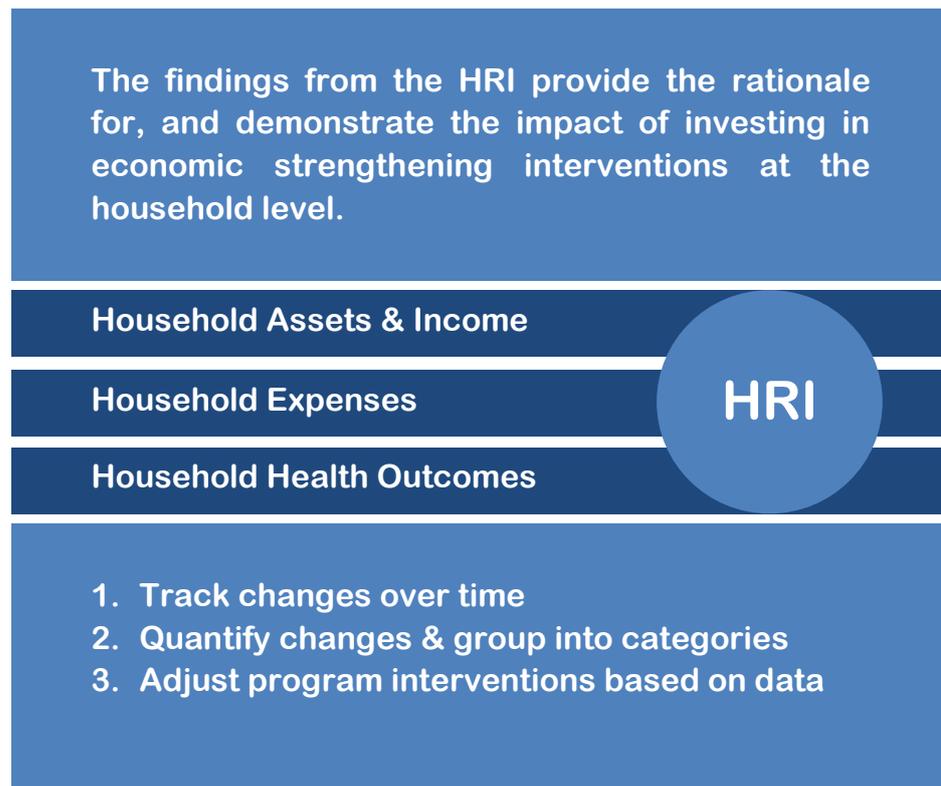
1.3. Categories of Household Economic Resilience

The categories within the Economic Strengthening Pathway are closely aligned to the national poverty rankings in Rwanda, known locally as Ubudehe. The table below shows the corresponding levels with the above typology. More information about each Ubudehe level is provided in the Annex.

Typology of Family Situations		
Category ① Families in Destitution <ul style="list-style-type: none"> •Ubudehe Level 1 •Ubudehe Level 2 	Category ② Families Struggling to Make Ends Meet <ul style="list-style-type: none"> •Ubudehe Level 3 	Category ③ Families Prepared to Grow <ul style="list-style-type: none"> •Ubudehe Level 4

2. Household Resiliency Index

Assessing and classifying households is achieved through a simple, user-friendly tool: the Household Resiliency Index (HRI). The HRI includes a quantitative questionnaire with points assigned to each response. The variables included in the questionnaire have been carefully selected to measure the impact of economic strengthening interventions on household assets, income, expenses, and health outcomes. The HRI provides a rationale for investing in economic strengthening in the poorest households, by providing baseline data on the household situation. Furthermore, it provides evidence of the impact of the program's investments.



The HRI is a simple tool that provides a rich set of information to guide and inform the program. First, the HRI tracks changes over time at the household level. Second, the HRI provides a framework for quantifying those results and grouping households into categories. Third, it helps program teams to adjust program interventions the changing needs of beneficiary households based on their position on the economic strengthening pathway. Finally, the HRI provides evidence of the program's impact on reducing household vulnerability.

The HRI is administered annually, at the same time each year in order to take into account seasonal fluctuations.

2.1. Measuring Household Assets and Income

At the assets and income level the HRI focuses on measuring liquid assets and income at the household levels using 3 proxy indicators: monthly savings, livestock ownership, and monthly income. By assigning points to each asset, the HRI provide a measure to compare the households' situation each year. The excerpt below from the HRI shows the points assigned to each indicator.

Assets and Income – 35 Points			
	Indicator	Response	Points
Ownership of liquid assets	Monthly savings (Frws/month)	a. None	0
		b. 100 – 9,999	5
		c. 10,000- 19,999	10
		d. 20,000- 50,000	15
		e. Above 50,000	20
	Livestock owned	a. None	0
		b. Small livestock (atleast 1)	5
		c. Large livestock (atleast 1)	10
	Increase in monthly income	a. No	0
		b. Yes	5

Proxy Indicators

Average Monthly Savings (Rwf/Month)

The HRI measures households' monthly savings as the money that a household saves in formal and/or informal institutions. This indicator was chosen as a proxy for liquid assets given its correlation to disposable income, consumption and investment. This indicator is scored based on 4 possible responses ranging from 'zero' to 'above 50,000Rwfs'.

Livestock Ownership

Livestock is one of the dominant sources of livelihood for the majority of Rwandan families and the lack of livestock has been reported as one of the major causes of poverty in Rwanda¹. In rural Rwanda the ownership of livestock is considered an effective measure of the comparative economic status of households. The HRI considers livestock to be liquid assets and scores households based on whether or not they have livestock and the type of livestock they own.

Perception of changes in monthly income

Household income is a measure of the combined incomes of all people in a household. The HRI scores households according to their personal assessment of their changing financial situation. It signals improving confidence and buying power related to household income.

Household Assets & Income

¹ Ministry of Finance and Economic Planning, *EDPRS Poverty Analysis of Ubudehe*, 2007.

2.2. Measuring Household Expenses

Household expenses and spending capacity present another indication of household vulnerability. The HRI uses three proxy indicators to track household purchasing power, including food security, ability to pay for basic needs and invest in Income Generating Activities (IGAs). In selecting these three indicators, the HRI provides a simple and rapid way to understand the situation within the household. Higher scores over time indicate that the family is becoming increasing self-reliant; they are able to consume adequate food, meet their basic needs, and invest in income-generating activities. The excerpt below from the HRI shows the points assigned to each indicator.

Expenses – 35 Points			
	Indicators	Index	Points
Food security	Number of meals per day	One meal per day	0
		Two meals per day	5
		Three or more meals/day	10
Basic needs	Ability to pay for basic needs	Very difficult	0
		Manageable	5
		Easy	10
Investments	Ability to invest in IGAs	No IGA /Unable to invest in IGA	0
		Very difficult to invest	5
		Manageable	10
		Easy	15

Proxy Indicators

Average number of meals per day

Food security cannot be directly measured but there are several operational variables that can be used as an indication of food security one of which is the average number of meals/day. The HRI uses this indicator as a measurement of the level of food accessibility and availability for households. Although this generally varies depending on the month of the year, especially for households that depend on agriculture for their livelihoods, this indicator presents a general average and does not take seasonal variations into account.

Ability to pay for basic needs

A household's ability to meet its basic needs is an important proxy for measurement of a household's expense levels. The HRI considers basic needs as necessities for a household that are not directly provided by through program support. This includes non-insured medical expenses, shelter, clothing and water. These are all very critical needs for the welfare of a household. The HRI scores households' according to 3 options based on their perception of ability to pay for basic needs.

Ability to invest in Income Generating Activities

The HRI applies a household's ability and level of investment in Income Generating Activities (IGAs) as an important proxy indicator for household expenses and ultimately household economic resiliency levels. For this indicator, households' are scored on a 15 point scale ranging from unable to invest in IGAs to able to invest in multiple IGAs.

Household Expenses

2.3. Measuring Health Outcomes

To monitor changes in health outcomes, the HRI tracks changes in the household’s ability to support their children’s education, to access health services, and food production. These proxy indicators demonstrate how households are using their assets, and income to care for the household members. They demonstrate that families prioritize household expenditures to address health, nutrition, and education needs – a critical element in preventing and mitigating shocks in the future. The excerpt below from the HRI shows the points assigned to each indicator.

Health Outcomes – 30 Points			
Education	Ability to pay for children’s school fees (level)	None	0
		Primary	5
		Secondary, TVET and above	10
Access to health services	Household members fully covered by health insurance	No	0
		Yes	5
Food production	Household food production level	Unable to produce own food	0
		Able to produce but not enough for home consumption	5
		Able to produce enough for home consumption	10
		Able to produce surplus	15

Proxy Indicators

Ability to pay for children's education (level)

Ability to afford educational investments is considered a critical indicator for a household's purchasing power. Education expenses include school fees, boarding fees, school materials, uniforms, teacher incentives, insurance and school meals. Households with children of school going age are classified according to their ability to afford school fees and to cover the payment of other school expenses for their children at different levels; None, Primary and Secondary. These results are intended to show the ability to cover these costs regardless of whether or not children are receiving these services from the program or are receiving free education through the GoR 9/ 12YBE system.

Households' health insurance coverage

Access to health care is limited in the majority of low income countries and is considered a suitable indicator for assessing levels of poverty. Health insurance coverage is a widely accepted variable in the measurement of access to health services. The HRI scores households on a scale of 0 – 5 based on whether or not all members in the household have full health insurance coverage.

Household food production level

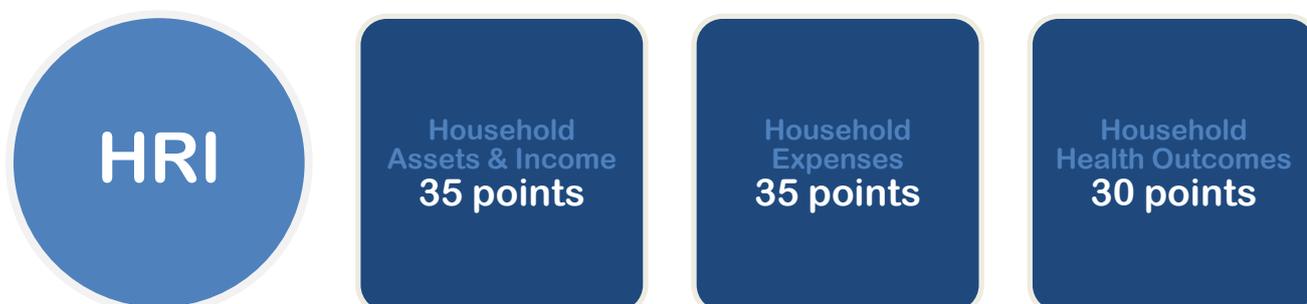
The majority of households in Rwanda are engaged in agricultural production activities; this is particularly so in rural areas where 97% of households are engaged in cultivation of land for crop production.² The HRI considers the measurement of the extent of a household's ability to produce its own food as an important proxy indicator at the household outcome level. Households' are scored on a scale of 0-15 based on their ability to produce food and how much food they are able to produce in terms of consumption and surplus.

Household Health Outcomes

² National Institute of Statistics of Rwanda (NISR), *Integrated Living Conditions Survey (EICV3)*, 2011.

3. Calculating HRI Scores

Household assets/ income, and health outcomes are weighed with a total of 35 points each, followed by household expenses with a total of 30 points. The tool therefore scores households on a range from 0 – 100.



The total HRI score for each household determines the classification into one of the three typologies. With a total of 10 questions across each of the three HRI Categories of Assets & Income, Expenses, and Health Outcomes, the maximum number of points is 100. This Index takes into consideration the possibility that a household could score high points in one element and low points in another; the assumption is that the overall score across all the indicators gives a clear indication of the household category as shown in Figure 1. The table below shows the classification of households based on HRI scores.

HRI Variables	Scores:	Classification: Economic Strengthening Pathway
Assets & Income	0-30	Category 1: Household in Destitution
Expenses	31-60	Category 2: Households Struggling to Makes Ends Meet
Health Outcomes	61-100	Category 3: Households Prepared to Grow

4. Interpreting HRI scores

Higher scores over time indicate that the family is becoming increasingly resilient. Stable scores over time indicate that the situation in the household remains unchanged, and they may require additional services and support. Lower scores over time indicate that the household is becoming more vulnerable and requires additional services and support.



HRI Score = 0-30

These households are aligned with Category 1, Households in Destitution. These households have very few assets and low or unstable income levels. Regarding household expenses, Category 1 households show signs of extreme food insecurity. They find it very difficult to pay for their household basic needs and are generally unable to invest in income generating activities (IGAs). Furthermore, they are unable to pay for the children's school fees and have limited access to health services.

HRI Score = 31-60

These households are aligned with Category 2: Households Struggling to Make Ends Meet. Households in this category have some liquid assets although limited, including some savings and livestock, and income levels for these households are generally unstable. These households experience moderate food insecurity, can pay for some basic needs but not regularly. Category 2 Households are able to periodically invest in IGAs, and pay for some school expenses for their children - though mostly at the primary school level. They have some access to health services and are able to produce enough food for home consumption.

HRI Score = 61-100

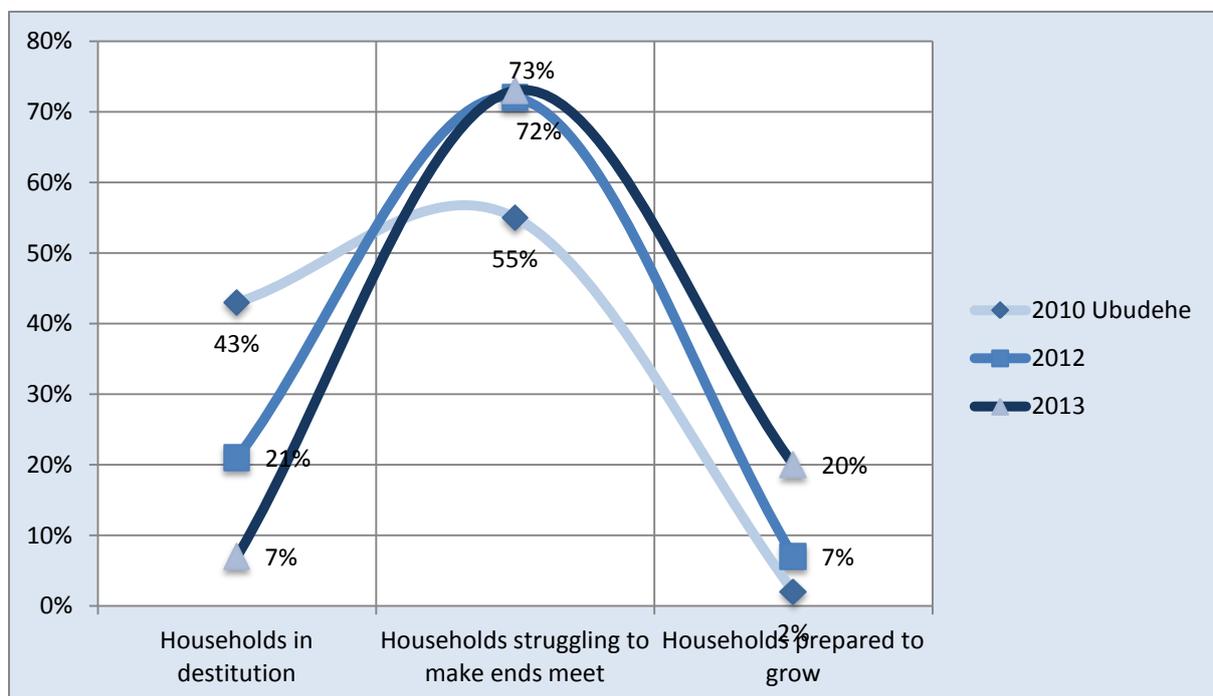
This category is aligned with Category 3: Households Prepared to Grow. Households in this category have relatively high levels of liquid assets including large livestock and cash savings with sufficient income to meet their basic needs. Category 3 households are generally food secure, and they report having the ability to meet their basic needs and invest in IGAs. These households are able to pay for their children's education up to secondary school level, afford health services, and produce enough food for home consumption with some of the households having the capacity to produce for market.

5. Tracking changes Using HRI

5.1. Longitudinal Cohort study to measure changes in HRI

By looking at a holistic set of indicators, the HRI provides programs with a system for measuring, categorizing, and reporting on the household's situation over time. This assessment follows a Longitudinal Cohort Study (LCS) design, with the same indicators measured annually for a representative cohort of households. Tracking changes in HRI overtime provides important insights and knowledge on household resiliency and supports evidence-based decision making on emerging program strategies and services.

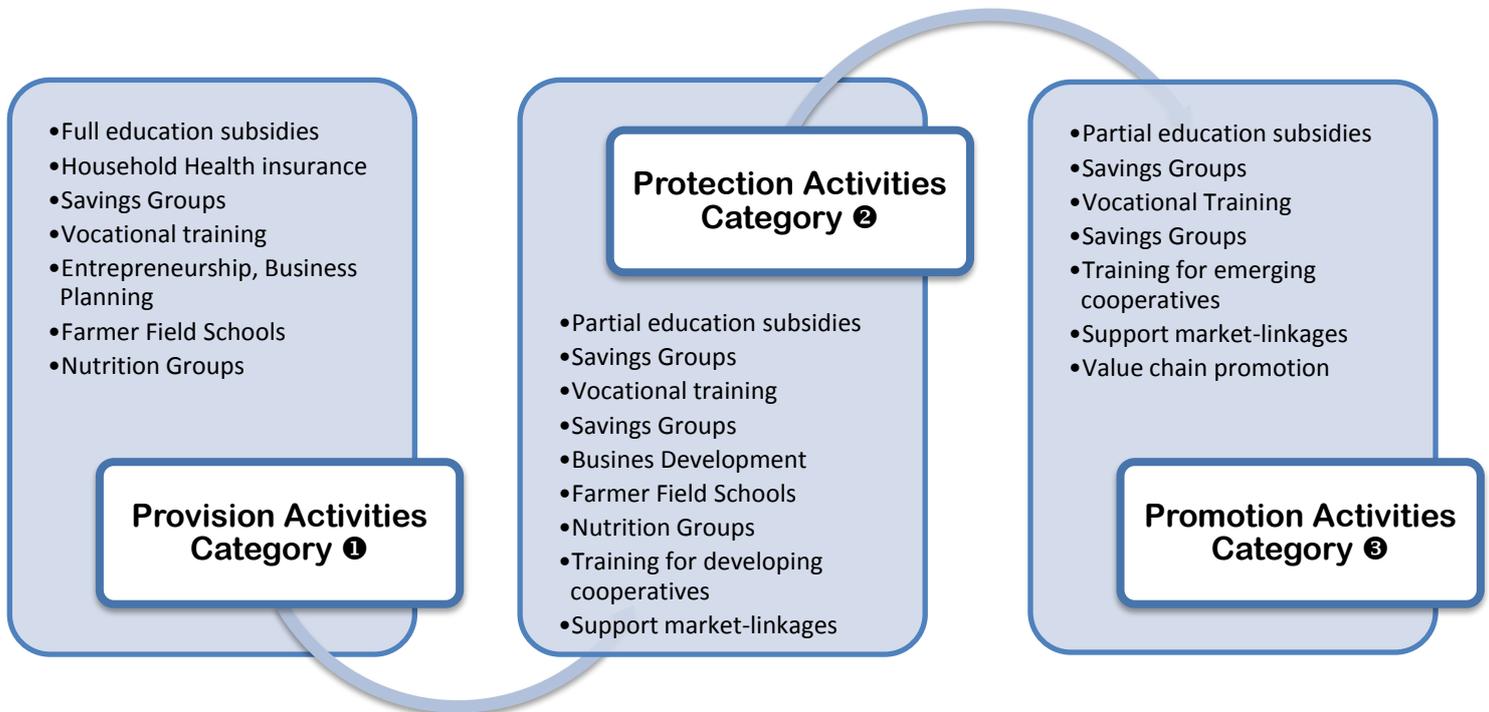
The chart below provides an illustration of changes in household economic resiliency following two years of program services and support under the USAID/Higa Ubeho program. It illustrates the percentage of beneficiary households in each of the three categories in 2010, 2012, and 2013 respectively, thus providing a clear picture of changes in vulnerability, showing a much smaller percentage of households in Category 1 and more families in Category 2 and 3.



Based on the above HRI findings, the USAID/Higa Ubeho program have data to adjust the program services and support in line with decreasing levels of vulnerability for the majority of the households supported by the program. In addition, the program can make provisions to accommodate those households that remain in Category 1, and consider graduating those in Category 3.

6. Adjusting Program Interventions Using HRI

The HRI is important for directing the scale of program services and support because it is directly linked to specific programmatic interventions that are recommended for each level of USAID’s Economic Strengthening Pathway³. The diagram below highlights the types of services aligned to each level of vulnerability/resilience which are provided in the USAID/Higa Ubeho program.



³ USAID. Orphans and Vulnerable Children Task Force: ‘Economic Strengthening Standards of Practice: Monitoring & Measuring Household Economic Strengthening’. *OVC Task Force Skill Building Series; Economic Strengthening of Highly Vulnerable Households*. November 21, 2011.

7. Annex

7.1. Rwandan Poverty Classifications: Ubudehe System

Category	Name	Description
Ubudehe Level 1	Extremely Poor	Those who need to beg to survive. They have no land or livestock and lack shelter, No adequate clothing and food. They fall sick often and have no access to medical care. Their children are malnourished and they cannot afford to send them to school.
Ubudehe Level 2	Very poor	The main difference between the <i>Ubudehe 2</i> and the <i>Ubudehe 1</i> is that this group is physically capable of working on land owned by others, although they themselves have either no land or very small landholdings, and no livestock, they also live on poor diet.
Ubudehe Level 3	Poor	These households have some land and housing. They live on their own labour and produce, they can afford food, even if the food is not very nutritious. However they do not have a surplus to sell in the market, they often cannot afford secondary education for their children and they often have no access to health care
Ubudehe Level 4	Resourceful poor	This group have some cattle, they have average food production and their children go to secondary school. They have less difficulties in accessing health care.
Ubudehe Level 5	Food Rich	This group has larger landholdings with fertile soil and enough to eat. They have livestock, often have paid jobs, and can access health care.
Ubudehe Level 6	Money Rich	This group has land and livestock, and often has salaried jobs. They have good housing, often own a vehicle, and have enough money to lend and to get credit from the bank. Many migrate to urban centres.

7.2. Complete HRI Scoring Tool

Assets and Income – 35 Points			
	Indicator	Response	Points
Ownership of liquid assets	Monthly savings (Frws/month)	a. None	0
		b. 100 – 9,999	5
		c. 10,000- 19,999	10
		d. 20,000- 50,000	15
		e. Above 50,000	20
	Livestock owned	a. None	0
		b. Small livestock (atleast 1)	5
		c. Large livestock (atleast 1)	10
	Increase in monthly income	a. No	0
		b. Yes	5
Expenses – 35 Points			
Food security	Number of meals per day	a. One meal per day	0
		b. Two meals per day	5
		c. Three or more meals/day	10
Basic needs	Ability to pay for basic needs	a. Very difficult	0
		b. Manageable	5
		c. Easy	10
Investment in Income Generating Activities (IGAs)	Ability to invest in IGAs	a. No IGA (Unable to invest in IGA)	0
		b. Very difficult to invest	5
		c. Manageable	10
		d. Easy	15

Household Outcome – 30 Points

Education	Ability to pay for children's school fees (level)	a. None	0
		b. Primary	5
		c. Secondary, TVET and above	10
Access to health services	Household members fully covered by health insurance	a. No	0
		b. Yes	5
Food production	Household food production level.	a. Unable to produce own food	0
		b. Able to produce but not enough for home consumption	5
		c. Able to produce enough for home consumption	10
		d. Able to produce surplus	15