

# Rwanda - Land Husbandry, Water Harvesting and Hillside Irrigation Project Impact Evaluation 2016, Fourth Follow-up Survey

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# Sampling

## Sampling Procedure

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There were two baseline surveys, one for the 1B sample group and another for the 1C sample group.

### 1B sample:

A baseline survey was implemented in three 1B LWH project sites. Rwamagana-34, Rwamagana-35 and Kayonza-4, and three control sites were selected by pairwise-matching. The sample was designed to meet three criteria: geographic representation at the site-level, inclusion of multiple members of farmer groups within sites, and sufficient size to power tests of variations in treatment within the Phase 1B sites.

To meet these criteria, sampling was done through a two-stage process. In the first stage, researchers randomly sampled "seed" households, stratified by village. The total number of "seed" households varied by treatment status. For treatment sites, the number of "seeds" depended on the estimated number of Self-help Group (SHG), calculated based on the site population and the typical size of SHGs, which is 20 households. For control sites, the number of "seeds" was set at 25, which provided sufficient power for the measurement of overall project impact.

In the second stage, researchers asked each "seed" farmer to list four "plot neighbors", i.e. people who have contiguous or near-contiguous plots to his own. These four people were added to the survey sample, and the five respondents together constitute a synthetic SHG. Since the SHGs are formed based on proximity of agricultural land, households in synthetic SHGs are likely to be assigned into a single farmer group. Comparison sites were elected using pair-wise matching, from a list of sites considered eligible to receive LWH but that will not receive the project.

### 1C sample:

A baseline survey was implemented in four 1C LWH project sites. The LWH Project works at a site level (the valley and surrounding hills chosen for the intervention). The LWH project implemented different activities at different areas within the site: Command Area, Command Area Catchment, and Water Catchment areas. Because Phase 1C site Gicumbi was only receiving land husbandry interventions, the sample was taken only from the Water Catchment area of the site. At Muyanza site, the full portfolio of LWH interventions to be implemented, as reflected in the sampling across the different areas. Comparison sites were selected using pair-wise matching, from a list of sites considered eligible for the LWH project but not to receive the project. Extensive data was recorded for the sites considered eligible for the project, including data on geography, weather and land use patterns, making the identification of such matching sites possible.

# Questionnaires

## Overview

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The baseline household survey used a multi-module questionnaire, with a specific focus on agricultural production, access to agricultural extension services, rural finance, and food security. In addition, the questionnaire contains modules on housing, labor, education, health, income and household assets.

## Data Collection

### Data Collection Dates

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<b>Start</b>	<b>End</b>	<b>Cycle</b>
2016	2016	N/A

### Data Collection Mode

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Computer Assisted Personal Interview [capi]

#### **DATA COLLECTION NOTES**

All questionnaires were double-entered by a team of 12 data entry clerks and 1 data entry manager, with the first entry occurring in the field concurrent to data collection. First and second entries were compared and all discrepancies corrected through manual checks of the hard-copy questionnaires. In some cases, the field team was sent back to the field for verification.

## Data Processing

No content available

# Data Appraisal

No content available



## Related Materials

### Questionnaires

#### Baseline Household Survey Questionnaire, 1B Sample Group

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Title Baseline Household Survey Questionnaire, 1B Sample Group  
Language English  
Filename gafsp\_rwanda\_baseline\_hh\_survey\_no\_village\_names.pdf

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#### Baseline Survey Questionnaire, 1C Sample Group

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Title Baseline Survey Questionnaire, 1C Sample Group  
Language English  
Filename baseline\_1c\_questionnaire\_no\_village\_names.xls

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#### First Follow-up Survey Questionnaire

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Title First Follow-up Survey Questionnaire  
Language English  
Filename lwh\_fup1\_quest\_3june2013\_no\_village\_names.pdf

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#### Second Follow-up Survey Questionnaire

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Title Second Follow-up Survey Questionnaire  
Language English  
Filename lwh\_fup2\_final\_questionnaire\_no\_village\_names.xlsx

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#### Third Follow-up Survey Questionnaire

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Title Third Follow-up Survey Questionnaire  
Language English  
Filename rwanda\_lwh\_ie\_third\_follow\_up\_questionnaire\_final\_no\_village\_names.xlsx

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### Reports

#### Land Husbandry, Water Harvesting and Hillside Irrigation Project: Baseline Household Survey Report

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Title Land Husbandry, Water Harvesting and Hillside Irrigation Project: Baseline Household Survey Report  
Author(s) LWH Project Development Impact Evaluation Initiative (DIME) Global Agriculture & Food Security Program (GAFSP)  
Date 2013-03-01  
Language English  
Filename lwh\_baselinereport.pdf

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## Land Husbandry, Water Harvesting and Hillside Irrigation Project: Phase 1C Baseline Household Survey Report

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Title Land Husbandry, Water Harvesting and Hillside Irrigation Project: Phase 1C Baseline Household Survey Report  
Author(s) LWH Project Development Impact Evaluation (DIME) Global Agriculture and Food Security Program (GAFSP)  
Date 2015-02-01  
Language English  
Filename phase\_1c\_baseline\_report.pdf

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