



Republic of Rwanda



# The Fifth Integrated Household Living Conditions Survey

# EICV5

# 2016/17

## Thematic Report VUP





# EICV5

**Integrated Household Living Conditions Survey  
(Enquête Intégrale sur les Conditions de Vie des Ménages)**

**-2016/2017 -**

**EICV5\_Thematic Report**

**VUP**

**December 2018**



The VUP Report is produced by the National Institute of Statistics of Rwanda (NISR).

Additional information about the VUP Report may be obtained from NISR:

P.O. Box 6139, Kigali, Rwanda;

E-mail: [info@statistics.gov.rw](mailto:info@statistics.gov.rw); Website: <http://www.statistics.gov.rw>

Recommended citation:

National Institute of Statistics of Rwanda (NISR), VUP Report, December 2018

## Acknowledgement


The Fifth Integrated Household Living Conditions Survey (EICV5) was conducted from October 2016 to October 2017, and is designed to provide accurate and up-to-date information that are useful to government, analysts, and the public as they seek to monitor and evaluate efforts to reduce poverty.

The NISR now conducts EICV surveys every three years, and this has been made possible by strong collaboration and support from our stakeholders, who are as interested as we are in supporting evidence-based decision making, and planning processes that are grounded on reliable and valid statistics.

We sincerely appreciate the support given by the Government of Rwanda for the development of statistics in the country, and are grateful for the help that we continue to receive from all government institutions.

We are most grateful to our development partners for the support that they have given for the collection and development of statistics in Rwanda, and especially for EICV5. They include UK Aid, the European Union, the World Bank, and the UN partners in the country.

The measurement and analysis of poverty and living standards is an exercise that requires considerable technical skills. We would like to thank NISR technical and management team for their work - from the planning and implementation of EICV5 through the analysis and publication of the results. We further appreciate the valuable technical support provided by the international experts. The generation and use of complex survey data can only be achieved through teamwork.



**Yusuf Murangwa**  
**Director General, NISR**



## Executive summary

The VUP program (Vision 2020 Umurenge Programme), run by the Ministry of Local Government, is the main social protection programme in Rwanda. It consists of three components: a direct cash transfer for very poor households who cannot work (“VUP Direct Support”), a public works programme for very poor households who can work (“VUP Public works”), and a microcredit scheme that provides small loans at modest interest rates to individuals or groups (“VUP Financial Services”).

The EICV5 VUP Panel report provides a statistical analysis of data collected about the program in the context of the EICV survey. The results rely on two components of the EICV surveys:

Cross sectional survey (EICV4 sample with 14,419 households and EICV 5 sample with 14,580 households) and,

VUP panel survey which interviews, in 2016/17, those who were VUP beneficiaries in 2014 (1,642 households consisting of households that were VUP beneficiaries in 2014, minus attrition and plus split households as shown in Figure 1.1).

The EICV5 VUP Panel survey shows that 49.9% of the VUP beneficiaries were poor in 2016/17, as compared to 54.2% as measured by the EICV4 VUP survey of 2013/14. The results also shows that 15.6% of VUP beneficiaries moved out of poverty while 13% of beneficiaries fell into poverty.

The results from EICV5 cross sectional survey show that 4.4% of households in Rwanda received VUP support in 2017, broken down as 1.3% receiving direct support, 1.9% receiving public works support, and 1.1% receiving financial services support (Table 4.1). Participation is much stronger in rural areas (5.3%) than in urban areas (0.3%) as expected, and strongest in the Southern Province. Participation is strongest in the first *ubudehe* category and the first three quintiles. Geographically we can see in Figures 4.1 and 4.2 that the district of Nyamasheke stands out with the highest VUP participation rate, and that the relatively high participation rate in the Southern province.

In general a shorter time is spent on Public Works support than on Direct Support (Tables 4.2 and 4.3), as one might expect, since Public Works support is subject to projects being available to work on. The most common payment delay for Public Work support is longer than a month.

We can see in Table 4.4 that the bulk of government spending on VUP loans is to informal groups (near 11 Billion RWF as reported-with survey weights-on the cross sectional sample). The main project activities planned with the VUP loan are farming, livestock and business or trade.

Table 4.5 shows that women make up almost two thirds (about 64%) of those getting VUP Direct Support in 2017 and about 56% of those getting Public Works support. There was however no gender bias in the use of VUP loans (Table 4.5).

Over three quarters of those getting Direct Support in 2017 are in households where the head is 65 or older. Direct Support tends to favour smaller households and much higher dependency ratios, whereas Financial Services tend to favour somewhat larger households

(with a mean household size about one member larger than households with no VUP support). Lower education and literacy tend to prevail for heads of Direct Support and Public Works beneficiary households, and the opposite is true of households with Financial Services support. The Direct Support program strongly favours households with a widowed, separated or divorced head, and all three programs, but particularly Direct Support, favour households with a disabled adult.

For cross section survey, poverty rate is higher among Public Works beneficiary households than in non-beneficiary households in both 2014 and 2017, whereas the poverty rate is higher in 2014 but lower in 2017 than that of non-VUP beneficiary households for the Direct Support program. Interestingly, the poverty rate among participants in the Financial Services program is lower in 2014 than non VUP beneficiary households, but about the same in 2017 as the poverty rate of non VUP beneficiary households.

Lower consumption percentiles are over-represented among Direct Support enrollees but that this over-representation weakens and even slightly reverses itself in 2017 (Figure 6.1). Lower consumption percentiles are over-represented among Public Works enrollees and this tendency is stronger in 2017. Support other than VUP (excluding pensions) is distributed to lower consumptions percentiles at lower levels than expected under uniformity.

It is clear from the curves in Figure 6.2 that in 2014 the Public Works program enrollees were poorest, followed by Direct Support enrollees and then Financial Services enrollees. However, quite interestingly, the Direct Support program tended to behave like the Financial Services program in 2017 in regard to poverty level.

---

**Table of Content**

<b>Acknowledgements</b> .....	<b>i</b>
<b>Executive summary</b> .....	<b>iii</b>
<b>List of tables</b> .....	<b>vii</b>
<b>Chapter 1. Introduction</b> .....	<b>3</b>
<b>Chapter 2. Methodological note</b> .....	<b>5</b>
<b>Chapter 3. Who are the vulnerable?</b> .....	<b>7</b>
<b>Chapter 4. Participation in VUP programs in 2017 from 2016-17 cross section data</b> ....	<b>9</b>
4.1 Distribution of VUP beneficiaries in EICV5 by area of residence .....	9
4.2 Comparison of VUP components between Cross-section and VUP panel surveys .....	11
4.3 Comparison of VUP and Non VUP beneficiaries – 2014 and 2017.....	13
<b>Chapter 5. Participation in the VUP program and coverage rates in 2014 and 2017 from the VUP survey</b> .....	<b>17</b>
5.1 Distribution of VUP beneficiaries in EICV5 .....	17
5.2 Social and Demographic characteristics of VUP beneficiaries – 2014 and 2017 .....	17
<b>Chapter 6. Participation incidence of VUP and benefit incidence of other support programs for 2014 and 2017</b> .....	<b>21</b>
<b>Chapter 7. Dynamics: The correlates of changes in VUP status</b> .....	<b>27</b>
<b>References</b>	<b>34</b>
<b>Annex 1: Standard errors and design effects for selected indicators, EICV5</b> .....	<b>35</b>





**List of tables**

Table 2.1: Transition matrix of VUP Household participation from 2014 to 2017 ..... 6

Table 3.1: Socio-economic characteristics of Rwandan households (cross-section), 2016/17 ..... 7

Table 3.2: Ubudehe category by household quintile, 2016/17..... 8

Table 4.1: Participation in VUP programs, 2016/17 cross sectional..... 9

Figure 4.1: Participation rates in the VUP program by district: thematic map ..... 10

Figure 4.2: Participation rates in the VUP program by district: bar graph ..... 11

Table 4.2: Duration, timeliness, and size of VUP direct support, 2016/17 ..... 12

Table 4.3: Work and payments conditions for those engaged in VUP Public Works, 2016/17 ..... 12

Table 4.4: Features of VUP financial services, 2016/17 ..... 13

Table 4.5: Profile of VUP program participants, 2013/14 and 2016/17 cross sectional ..... 14

Table 5.1: Participation in VUP programs, 2016/17, among VUP 2014 beneficiaries and split households ..... 17

Table 5.2: Profile of VUP program participants, among VUP data set households ..... 18

Table 5.3: Profile of VUP program participants by area of residence and socio demographic characteristics..... 19

Figure 6.1: Participation and benefit incidence curves, 2014 and 2017: Cross – sectional survey..... 22

Figure 6.2: Participation and benefit incidence curves 2014 and 2017: VUP survey ..... 23

Figure 6.3: Poverty incidence curves for the VUP program: 2014 and 2017 VUP beneficiaries ..... 26

Table 7.1: Proportion of households gaining or losing VUP status between 2014 and 2017 27

Table 7.2: Breakdown of changes in VUP status by economic, and socio-demographic characteristics (including poverty status and poverty mobility). ..... 27

Table 7.3: Breakdown of changes in VUP status by changes in economic, household, and socio-demographic characteristics – such as change in housing conditions, and poverty transition/mobility ..... 29

Table 7.4: Median and mean of ratios of consumption per adult equivalent in 2017 to 2014 by district; VUP panel survey (1,642 households) ..... 30

Figure 7.1: Median ratio of consumption per adult equivalent in 2017 to 2014 by district: thematic map; VUP panel .....	31
Table 7.5: Median and mean ratio of consumption per adult equivalent in 2017 to 2014 by district; full panel (2,427 households) .....	31
Figure 7.2: Median ratio of consumption per adult equivalent in 2017 to 2014 by district: thematic map; full panel .....	32
Table 7.6: Reasons for no longer benefitting from VUP programs, EICV5 surveys (2016/17) .....	33
Table A.1: Mean percentage (%) of dependent household members (under 15 and 65+), by consumption quintile .....	35
Table A.2: Distribution (%) of population in male-headed households by consumption quintile.....	35
Table A.3: Distribution (%) of population in female-headed households by consumption quintile.....	35
Table A.4: Percentage (%) of households containing member with disability, by VUP component.....	35
Table A.5: Percentage (%) of households owning a mobile phone, by VUP component .....	36
Table A.6: Percentage (%) of households receiving any type of public income support (excluding VUP), by urban/rural and consumption quintile.....	36
Table A.7: Percentage (%) of households receiving health/education payments (excluding VUP), by urban/rural and consumption quintile .....	36
Table A.8: Percentage (%) of households receiving any type of public income support (excluding VUP), by various household characteristics .....	37
Table A.9: Percentage (%) of population aged 16+ years with health insurance, by consumption quintile and employment status .....	37
Table A.10: Breakdown of changes in VUP status by economic and household characteristics .....	37
Table A.11: Breakdown of changes in VUP-Direct support status by changes in economic, household, and socio-demographic characteristics – such as change in housing conditions, and poverty transition/mobility .....	38
Table A.12: Breakdown of changes in VUP-Public Works status by changes in economic, household, and socio-demographic characteristics – such as change in housing conditions, and poverty transition/mobility .....	39
Table A.13: Breakdown of changes in VUP- Financial Services status by changes in economic, household, and socio-demographic characteristics – such as change in housing conditions .....	41

---

**List of figures**

Figure 1.1: VUP datasets.....	5
Figure 4.1: Participation rates in the VUP program by district: thematic map .....	10
Figure 4.2: Participation rates in the VUP program by district: bar graph .....	11
Figure 6.1: Participation and benefit incidence curves, 2014 and 2017: Cross – sectional survey.....	22
Figure 6.2: Participation and benefit incidence curves 2014 and 2017: VUP survey .....	23
Figure 6.3: Poverty incidence curves for the VUP program: 2014 and 2017 VUP beneficiaries .....	26
Figure 7.1: Median ratio of consumption per adult equivalent in 2017 to 2014 by district: thematic map; VUP panel .....	31
Figure 7.2: Median ratio of consumption per adult equivalent in 2017 to 2014 by district: thematic map; full panel .....	32



## Chapter 1. Introduction

The VUP program (Vision 2020 Umurenge Programme), run by the Ministry of Local Government, is the main social protection programme in Rwanda. It consists of three components: a direct cash transfer for very poor households who cannot work (“VUP Direct Support”), a public works programme for very poor households who can work (“VUP Public works”), and a microcredit scheme that provides small loans at modest interest rates to individuals or groups (“VUP Financial Services”).

Only households classified as Ubudehe categories 1 and 2- the two poorest categories in the four-point ranking determined by local communities in their own neighbourhood- are eligible for Direct Support or Public Works. Households in Ubudehe category 3, as well as those in categories 1 and 2, may apply for a Financial Services loan; households ranked in higher categories may also apply for a Financial Services loan provided that they do so as part of a group containing households from Ubudehe categories 1 and/or 2.

The VUP was launched in mid-2008 in 30 sectors, one in each district of the country. Each subsequent year, every district selected its next poorest sector for inclusion in the programme, resulting in an additional 30 participating sectors per year (60 sectors active in VUP from mid-2009, 90 from mid-2010 and so on). After the EICV3 household survey of 2010/11, and in accordance with the revised social protection strategy, the government enabled districts to roll out the programme in more than one sector per year so that as many poor, labour-constrained households as possible could be enrolled in the VUP even if they did not live in the poorest sectors. By July 2014, 330 out of the country’s 416 sectors (almost 80%) were participating in the VUP, of which 121 offered Direct Support only; 30 offered Direct Support and Financial Services; and the other 179 offered all three components. By 2017, all sectors of Rwanda participated in the VUP program.



## Chapter 2. Methodological note

The EICV5 has three main components: cross-sectional sample of households, VUP Panel Survey receiving VUP benefits and EICV4 Panel Survey.

The main objective of the VUP Panel Survey is to provide longitudinal data for a nationally-representative panel of households that received VUP benefits at the time of the EICV4, in order to obtain reliable estimates of trends in the socioeconomic indicators for these households. The VUP Survey conducted with EICV4 was based on a sample of 2,460 households selected from the VUP administrative frame using a stratified two-stage sample design. However, only the sample households which indicated that they were receiving VUP benefits at the time of the EICV4 survey were considered to be the sample for the VUP Panel Survey. Results presented in this report are obtained from VUP Panel Survey.

If the entire household moved or an eligible member moved, it was necessary to identify their new address so that they can be tracked there. The eligibility criteria for household members to be tracked and the tracking procedures are similar to those used for the EICV4 Panel Survey.

The analysis in this report is based on two sources of data: Cross sectional survey (EICV4 sample with 14,419 households and EICV5 sample with 14,580 households) and VUP panel sample consisting of 1,642 households that were VUP beneficiaries in 2014, minus attrition (175 households) and plus split households (324 households) as shown in figure below.

**Figure 1.1: VUP datasets**

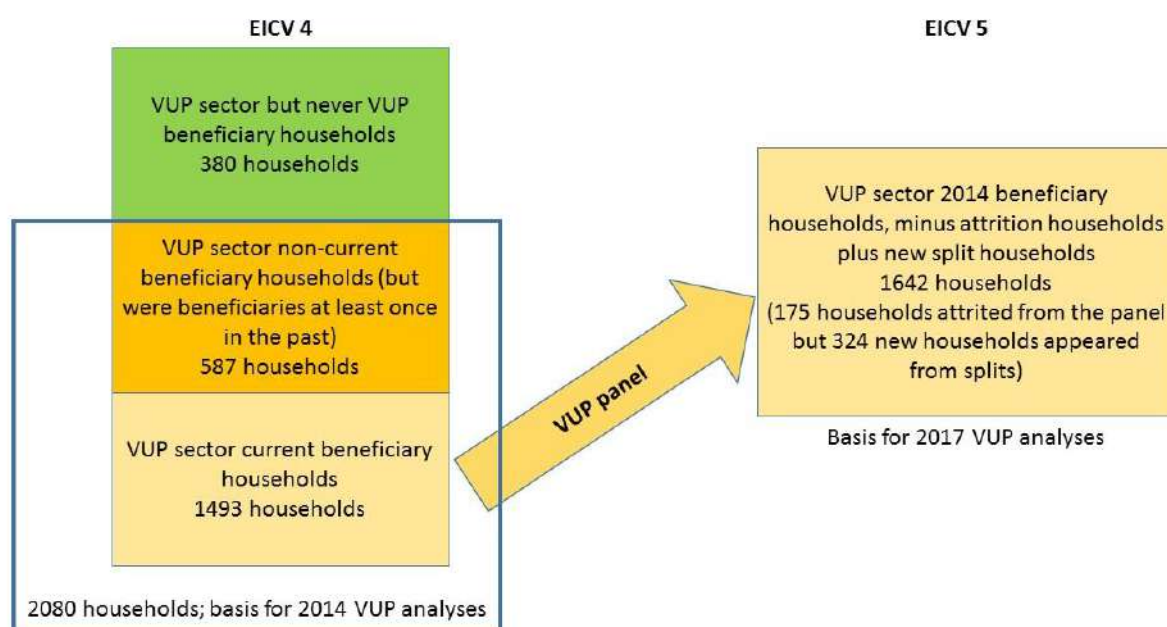


Table 2.1 summarizes the status in 2017 of the 1,642 VUP panel households. Over a half (56%) of 2014 direct support beneficiaries exited the VUP program in 2017, with higher proportions for 2014 public works (76%) and financial services (66%) beneficiaries. Overall, about 64% of 2014 VUP beneficiaries exited the program in 2017.



**Table 2.1: Transition matrix of VUP Household participation from 2014 to 2017**

Participated in VUP program in 2014	Participated in VUP program in 2017				Total
	Direct support	Public works	Financial services	Not 2017 VUP Beneficiaries	
Direct support	310 (37.2%)	42 (5%)	10 (1.2%)	471 (56.5%)	<b>833</b> <b>(100%)</b>
Public works	17 (3.7%)	64 (13.9%)	31 (6.7%)	348 (75.6%)	<b>460</b> <b>(100%)</b>
Financial services	7 (2%)	8 (2.3%)	103 (29.5%)	231 (66.2%)	<b>349</b> <b>(100%)</b>
<b>Total</b>	<b>334</b> <b>(20.3%)</b>	<b>114</b> <b>(6.9%)</b>	<b>144</b> <b>(8.8%)</b>	<b>1,050</b> <b>(63.9%)</b>	<b>1,642</b> <b>(100%)</b>

Source: VUP dataset; Sample size: 1,642 HHs; unweighted.

Regarding data collection, the NISR collected the data for the EICV5 cross-sectional, VUP panel and EICV5 panel surveys using computer-assisted personal interviewing (CAPI) with computer tablets for the first time using the same questionnaire, including the listing operation.

### Rounding of estimates

Estimates presented in the tables are shown rounded to one decimal place. To improve readability, estimates referred to in the interpretation of results have been rounded to the nearest integer, except for the discussion of relatively small percentages. Moreover, estimates of total population or total number of households are shown in tables expressed in '000's. Due to the rounding, the sum of subpopulation totals (e.g. Provinces or age groups) can be minimally different from the total population estimated at national level.

### Consumption quintiles

The results are presented by quintile. Quintiles are developed by sorting the sample of households by annual consumption values, and then dividing the population into five equal shares. The 20% of households with the highest annual consumption are allocated to quintile 5, and the 20% of households with the lowest levels of annual consumption are allocated to quintile 1. The poorest households and their members are found in quintile 1 and the richest are found in quintile 5.

Consumption is used as a proxy for income, as is usual when estimating poverty. Quintiles are a relative measure of individuals' consumption in comparison to the rest of the population during a specific period.

### Chapter 3. Who are the vulnerable?

In order to better understand the group the VUP is trying to serve, this section gives an overall picture of the poor and vulnerable in Rwanda. It also relates household living standards measured by household consumption per adult equivalent to *ubudehe* status (which is used for eligibility for VUP programs).

The word *ubudehe* refers to the long-standing Rwandan practice and culture of collective action and mutual support to solve problems within a community. *Ubudehe* categories were established by the government of Rwanda in 2015 and are defined as follows:

Category 1: Families who do not own a house and can hardly afford basic needs.

Category 2: Those who have a dwelling of their own or are able to rent one but rarely get full time jobs.

Category 3: Those who have a job and farmers who go beyond subsistence farming to produce a surplus that can be sold. The latter also includes those with small and medium enterprises who can provide employment to dozens of people, as well as public servants.

Category 4: Those who own large-scale businesses and industries, individuals working with international organizations, as well as managers in public services.

**Table 3.1: Socio-economic characteristics of Rwandan households (cross-section), 2016/17**

	All Rwanda	Urban	Rural
<b>Median annual consumption per adult equivalent (AE)</b>	<b>190,771</b>	<b>378,391</b>	<b>175,706</b>
<b>% of people who are:</b>			
Poor	38.2	15.8	43.1
Extremely poor	16.0	5.9	18.1
<b>% of households members who are:</b>			
Under 18	49.8	44.2	51.1
19-64	46.6	53.5	45.1
65 or older	3.6	2.3	3.8
<b>% of households that have:</b>			
Head who is 65 or older	12.4	7.1	13.7
Head who is widowed or separated/divorced	22.5	15.4	24.2
No adult males	17.6	14.9	18.2
An adult with a disability	12.1	10.0	12.6
<b>% of households that:</b>			
Do not have improved sanitation	13.8	6.4	15.6
Do not have water from an improved source	12.6	4.2	14.6
Do not use electricity as source of lighting	72.9	24.4	84.5
Do not have mutual health insurance	25.1	26.9	24.7
Do not have land	19.9	56.4	11.1
Do not have any livestock	40.5	73.8	32.5

Source: EICV5 cross-section survey; Sample size: 14,572 HHs (8 households are missing section 9 on the VUP programme)

Assignments of households to *ubudehe* categories are ascertained by a questionnaire administered to a representative of the household by the Ministry of Local Government.

Table 3.1 gives an overall poverty rate of about 38% and an extreme poverty rate of 16% for the whole country. The difference between urban and rural areas is reflected in such measures as the percentage of households using electricity for lighting is 76% in urban but 15% in rural areas.

**Table 3.2: Ubudehe category by household quintile, 2016/17**

Ubudehe category	Quintile (consumption per adult equivalent)					Total
	Q1	Q2	Q3	Q4	Q5	
Category 1	25.4	20.2	17.1	13.2	7.7	<b>15.7</b>
Category 2	38.9	38.4	36.2	33.7	25.1	<b>33.7</b>
Category 3	28.8	34.9	39.1	43.4	50.6	<b>40.5</b>
Category 4	0.0	0.0	0.0	0.0	0.8	<b>0.2</b>
Not found on list	6.9	6.6	7.6	9.7	15.8	<b>9.9</b>
<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>

Source: EICV5 cross-section survey; Sample size: 14,572 HHs

Ubudehe category	Quintile (consumption per adult equivalent)					Total
	Q1	Q2	Q3	Q4	Q5	
Category 1	25.8	22.9	21.2	17.7	12.4	100
Category 2	18.5	20.4	21.0	21.1	19.0	100
Category 3	11.4	15.4	18.8	22.6	31.9	100
Category 4	0.0	0.0	2.6	2.7	94.7	100
Not found on list	11.3	11.9	15.1	20.8	41.0	100
<b>Total</b>	<b>16.0</b>	<b>17.9</b>	<b>19.5</b>	<b>21.1</b>	<b>25.5</b>	<b>100</b>

Source: EICV5 cross-section survey; Sample size: 14,572 HHs

In Table 3.2, we can see that the first *ubudehe* category people are spread across all five quintiles, with a heavier representation in the first three quintiles as one would expect, and that the first quintile (the poorest) is spread across the first three *ubudehe* categories, with a heavier representation in Category 2.

## Chapter 4. Participation in VUP programs in 2017 from 2016-17 cross section data

In this chapter we compare the poverty level and other living conditions for those in VUP program and Non-VUP beneficiaries (table 4.5). However, we first assess the distribution of the VUP cross-section sample in the country (table 4.1), and examine the characteristics of each VUP component comparing cross-section sample to VUP panel sample (tables 4.2 – 4.4) to ensure that the results are aligned.

### 4.1 Distribution of VUP beneficiaries in EICV5 by area of residence

Table 4.1 shows that 4.4% of households in Rwanda received VUP support in 2017, broken down as 1.3% receiving direct support, 1.9% receiving public works support, and 1.1% receiving financial services support. Participation is much stronger in rural areas (5.3%) than in urban areas (0.3%) as expected, and strongest in the Southern Province.

Participation is strongest in the first *ubudehe* category and the first three quintiles.

**Table 4.1: Participation in VUP programs, 2016/17 cross sectional**

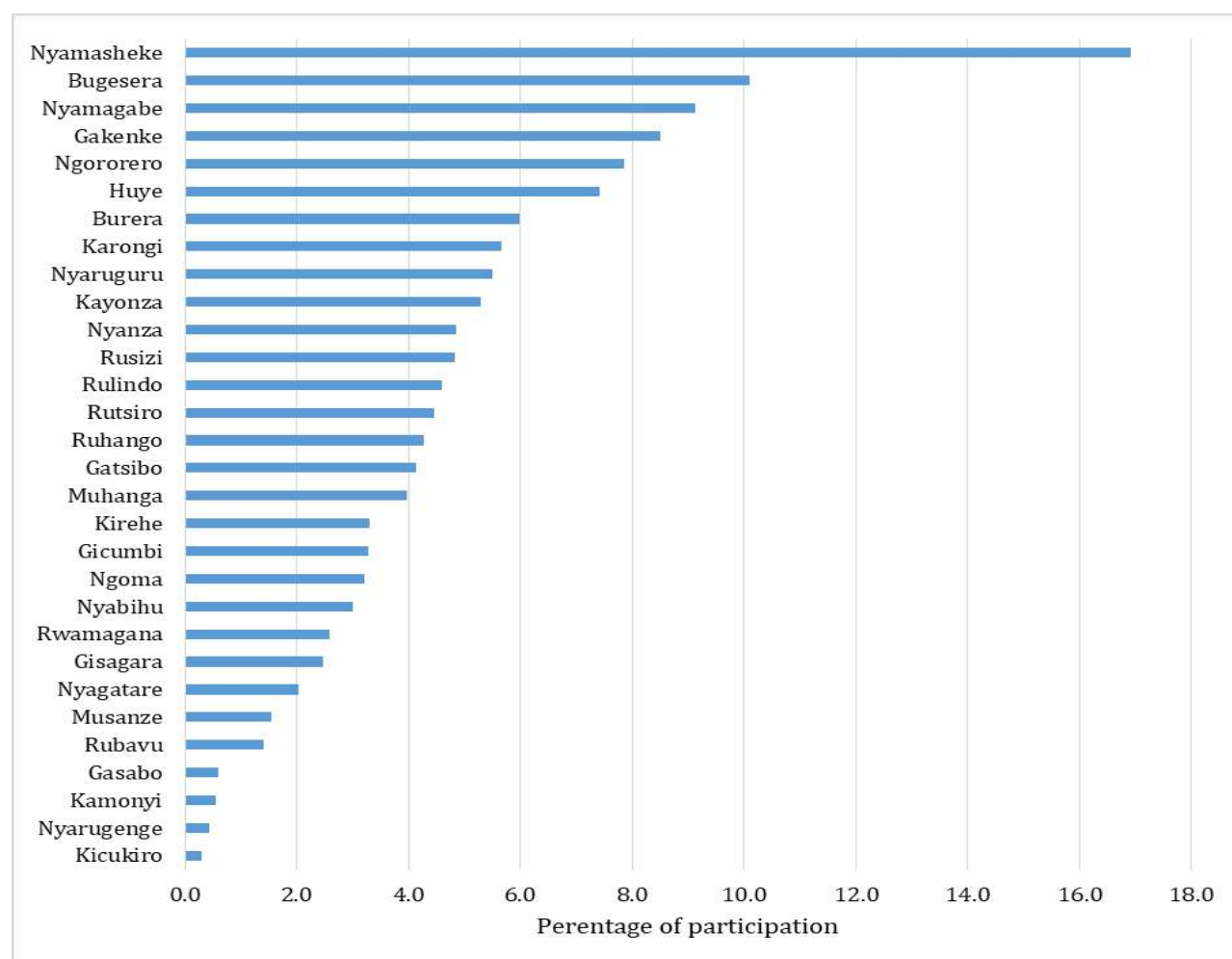
	Rwanda	VUP	Direct support	Public works	Financial services
<b>All Rwanda</b>	<b>100</b>	<b>4.4</b>	<b>1.3</b>	<b>1.9</b>	<b>1.1</b>
<b>Area of residence :</b>					
Urban	18.4	0.3	0.1	0.1	0.1
Rural	81.6	5.3	1.6	2.4	1.3
<b>Provinces:</b>					
Kigali	13.7	0.5	0.2	0.3	0.0
Eastern	23.0	4.7	1.6	2.0	1.1
Southern	22.6	6.3	1.3	3.8	1.1
Western	15.5	4.7	1.5	1.5	1.6
Northern	25.2	4.3	1.6	1.3	1.4
<b>Ubudehe categories:</b>					
Category 1	14.0	21.8	9.4	11.8	0.6
Category 2	34.3	2.0	0.0	0.8	1.2
Category 3	44.0	1.3	0.0	0.0	1.3
Category 4	0.3	0.0	0.0	0.0	0.0
Not found on list	7.4	0.4	0.1	0.2	0.2
<b>Quintile based on real consumption per adult equivalent</b>					
Q1	19.7	5.9	0.9	4.0	1.0
Q2	19.7	5.3	1.4	2.7	1.2
Q3	19.7	5.0	1.9	1.5	1.6
Q4	19.8	3.9	1.4	1.1	1.3
Q5	21.0	1.9	0.9	0.5	0.5

Source: EICV5 cross-section surveys (Sample size 14,572 HHs)

Geographically we can see in Figures 4.1 and 4.2 that the district of Nyamasheke stands out with the highest VUP participation rate, and that the relatively high participation rate in the Southern province.

Figure 4.1: Participation rates in the VUP program by district: thematic map



**Figure 4.2: Participation rates in the VUP program by district: bar graph**

#### 4.2 Comparison of VUP components between Cross-section and VUP panel surveys

We now examine the characteristics of each component of the VUP program, Direct Support (DS), Public Works (PW) and Financial Services (FS) in more detail.

##### *Direct support*

The length of time spent on Direct Support is fairly spread out across all recipients (about a third received support all year), with longer lengths somewhat more common, and payments are typically more than one month late, as Table 4.2 shows.

**Table 4.2: Duration, timeliness, and size of VUP direct support, 2016/17**

	Cross-section	VUP Survey
	Among households currently receiving Direct Support, support percentage that report:	
<b>Months receiving direct support (in last 12 months)</b>		
1-3 months	24.4	10.3
4-6 months	20.0	16.2
7-9 months	19.1	34.6
10-12 months	36.6	38.9
<b>Timeliness of payment</b>		
Regularly every month	33.3	15.2
Typically a month late	8.6	8.4
Typically more than a month late	58.1	76.4
<b>Value of payment in RWF</b>		
(last payment) Mean value_per month per HH	17,160	16,557

Source: EICV5 cross-section (Sample size 343 HHs) and VUP dataset (Sample size 334); total VUP dataset: 1642 HHs, total cross-section with VUP responses: 14,572 HHs.

**Public works**

In general a shorter time is spent on Public Works support than on Direct Support (Tables 4.2 and 4.3), as one might expect, since Public Works support is subject to projects being available to work on. The most common payment delay for Public Work support is longer than a month, and most households have received less than 60,000 RWF over the past 12 months.

**Table 4.3: Work and payments conditions for those engaged in VUP Public Works, 2016/17**

	Cross-section	VUP Survey
	Among households currently receiving Public Works support, percentage that report:	
<b>Months of work done in past 12 months</b>		
1-3 months	43.5	49.6
4-6 months	39.1	37.5
7-9 months	13.4	11.2
10-12 months	4.0	1.9
<b>Timeliness of payment</b>		
On time every two weeks	5.9	7.0
Delayed between one week and one months	16.4	26.4
On time every month	4.6	4.6
Delayed after one month or First payment not paid yet	73.2	62.0
<b>Value of payments in past 12 mths (RWF)</b>		
0 - 30,000	36.8	41.6
30,001 - 60,000	27.3	29.4
60,001 - 90,000	18.7	18.8
90,001 - 120,000	10.9	8.0
120,001 - 150,000	2.2	0.6
150,001 - 180,000	1.5	0.1
Over 180,000	2.6	1.6

Source: EICV5 cross-section (Sample size 280 HHs) and VUP dataset (Sample size 128 HHs); total VUP dataset: 1642 HHs, total cross-section with VUP responses: 14,572 HHs.

**Financial services**

As one might expect, VUP recipients from the 2016-17 VUP panel survey, who are known to have received VUP support in 2014, have some seniority in the system, with 87.5% having received a loan more than a year ago.

We can see in Table 4.4 that the bulk of government spending on VUP loans is to informal groups (near 11 Billion RWF as reported-with survey weights-on the cross sectional sample).

**Table 4.4: Features of VUP financial services, 2016/17**

	<b>Cross-section</b>	<b>VUP Survey</b>
	<b>Among households currently receiving Financial Services support, percentage that report:</b>	
<b>Loan was received</b>		
Within past year	55.9	12.5
More than a year ago	44.1	87.5
<b>Type of loan</b>		
of which is Individual:		
Total Amount of loan ('000 RWF)	1,526,147	509,112
Total Amount repaid so far ('000 RWF)	640,552	313,080
of which is Cooperative (formal) :		
Number of people in group	10,466	6,697
Amount of loan ('000 RWF)	1,046,561	316,597
Amount repaid so far ('000 RWF)	716,625	143,055
of which is Group (informal) :		
Number of people in group	100,318	91,108
Amount of loan ('000 RWF)	10,844,202	7,801,355
Amount repaid so far ('000 RWF)	5,295,279	2,519,379
<b>Main project activity originally planned using the loan</b>		
Invest in farming	34.8	21.3
Buy livestock	35.7	35.8
Poultry	2.9	1.6
Invest in business or trade	19.8	34.7
Handicraft or other profession	0.0	0.6
Other	7.0	6.1
<b>Is the project profitable?</b>		
Yes	88.5	84.1
No	11.5	15.9

Source: EICV5 cross-section (Sample size 135 HHs) and VUP dataset (Sample size 148 HHs); total VUP dataset: 1642 HHs, total cross-section with VUP responses: 14,572 HHs.

The main project activities planned with the VUP loan are farming, livestock and business or trade. We note that 2016/17 financial services beneficiaries who were also VUP beneficiaries in 2014 (VUP survey) tended to use their loans (which were of a lower amount) more commonly for business or trade and less commonly for farming, relative to the overall group of households who received financial services support in 2016/17.

**4.3 Comparison of VUP and Non VUP beneficiaries – 2014 and 2017**

Examining Table 4.5, we see that women make up almost two thirds (about 64%) of those getting VUP Direct Support in 2017 and about 56% of those getting Public Works support. There was however no gender bias in the use of VUP loans as Table 4.5 shows. Table 4.5 also shows that, relative to individuals with no VUP support in 2016-17, a higher percentage of



VUP beneficiary individuals are female, particularly in the Direct Support program, although the percentage of those receiving Financial Services support who are females (51.2%) is close to the proportion of females among those not receiving VUP support in 2017 (51.7%). Female headed households predominate in the Direct Support program in 2014 and in both the Direct Support and to some extent Public Works program in 2017.

Over three quarters of those getting Direct Support in 2017 are in households where the head is 65 or older. Direct Support tends to favour smaller households and much higher dependency ratios, whereas Financial Services tend to favour somewhat larger households (with a mean household size about one member larger than households with no VUP support).

Lower education and literacy tend to prevail for heads of Direct Support and Public Works beneficiary households, and the opposite is true of households with Financial Services support.

The Direct Support program strongly favours households with a widowed, separated or divorced head, and all three programs, but particularly Direct Support, favour households with a disabled adult.

The rate of electricity use is much lower among VUP beneficiaries of all three programs in both years and more isolated households prevail, with a higher mean time to the nearest market than non VUP beneficiary households.

**Table 4.5: Profile of VUP program participants, 2013/14 and 2016/17 cross sectional**

	2014				2017			
	Direct support	Public works	Financial services	Non VUP	Direct support	Public works	Financial services	Non VUP
<b>All Rwanda</b>	<b>1.1</b>	<b>1.7</b>	<b>1.5</b>	<b>95.7</b>	<b>1.3</b>	<b>1.9</b>	<b>1.1</b>	<b>95.6</b>
<i>% of individuals who are</i>								
Poor	43.6	59.1	30.8	38.8	33.0	66.7	37.3	37.1
Extremely poor	20.6	20.3	10.0	16.3	10.0	32.8	12.6	15.5
Median expenditure/AE	<b>171,135</b>	<b>142,661</b>	<b>204,221</b>	<b>187,561</b>	<b>201,756</b>	<b>133,039</b>	<b>181,396</b>	<b>194,606</b>
<b>Demographic Characteristics</b>								
<b>Sex</b>								
Male	39.6	45.3	44.1	48.0	35.6	43.6	48.8	48.3
Female	60.4	54.7	55.9	52.0	64.4	56.4	51.2	51.7
<b>Age of head of household:</b>								
Under 18	0.0	0.4	0.0	0.3	0.3	0.0	0.0	0.2
19-64 yrs	36.9	93.0	90.3	88.1	23.1	82.0	96.3	89.0
65+ yrs	63.1	6.5	9.7	11.5	76.5	18.0	3.7	10.9
<b>Household size:</b>								
1-2	37.1	9.2	6.4	16.2	61.7	10.6	3.8	18.8
3-5	49.8	59.2	53.0	54.4	29.4	58.9	45.1	52.7
6-8	12.2	30.7	38.8	27.6	8.3	28.3	48.4	27.1
9+	0.9	0.8	1.8	1.8	0.7	2.2	2.7	1.5
Average household size	3.3	4.8	5.3	4.5	2.6	4.8	5.6	4.4
Dependency ratio	122.3	80.7	91.3	82.3	178.2	84.3	85.6	80.9
<b>Education of household head:</b>								
Some primary	81.2	66.6	47.2	55.2	78.5	65.3	47.1	53.1
Completed Primary	17.2	24.0	38.7	26.1	15.2	28.0	41.8	25.8
Post Primary and some Secondary	1.6	8.2	12.9	10.7	2.5	5.5	8.6	11.5
Completed	0.0	1.2	1.1	3.7	2.5	0.7	0.0	4.3

	2014				2017			
	Direct support	Public works	Financial services	Non VUP	Direct support	Public works	Financial services	Non VUP
Secondary								
Some or completed university	0.0	0.0	0.0	4.3	1.3	0.5	2.6	5.2
Literacy: 15+ years olds	19.5	59.2	75.0	64.6	18.8	48.5	79.3	66.9
<b>% of households with:</b>								
Male head	34.1	75.3	83.4	75.0	32.2	54.6	84.0	76.3
Head who is widowed or separated / divorced	71.9	21.8	17.2	23.3	72.8	40.4	16.6	21.0
Any disabled member	52.9	20.6	18.7	15.1	56.1	16.2	16.7	13.4
No adult males	46.6	15.2	12.1	15.5	57.6	27.3	7.9	16.5
An adult (18+) with a disability	52.0	17.1	14.3	12.8	54.9	12.7	11.6	11.1
<b>% of households that have:</b>								
Improved water source	83.6	80.9	86.2	83.4	85.8	86.2	81.4	87.5
Improved sanitation	74.8	79.4	84.0	83.4	83.0	82.1	90.5	86.3
Electricity as main source of lighting	1.8	3.0	12.2	20.5	5.9	5.1	15.1	28.1
Concrete floor in house	4.8	4.4	14.7	21.7	8.4	5.3	20.1	26.7
Corrugated iron roof	50.8	39.4	41.5	61.9	58.9	54.1	59.9	67.8
Wall with cement	10.2	11.6	30.0	28.0	14.4	11.2	26.0	34.7
Umudugudu	55.3	60.9	55.3	48.8	65.4	64.7	77.6	58.4
A radio	33.9	54.3	68.8	60.2	22.7	29.5	56.3	46.2
A mobile phone	32.0	48.8	72.3	64.3	22.6	49.1	78.5	68.2
A TV	0.5	1.2	4.4	10.3	0.7	0.0	6.6	10.8
A bicycle	4.6	11.7	20.3	16.0	3.7	5.9	26.7	13.6
Livestock/poultry	73.6	77.4	84.6	63.8	65.1	73.5	89.6	58.8
Savings account	94.1	87.5	82.5	52.6	96.7	95.1	94.0	51.6
Mean Time to nearest market (In minutes)	61	54	58	51	53.0	59.9	57.8	49.7

Source: EICV4 cross-section survey (Sample size 14,419 HHs, 66,081 individuals) and EICV5 (Sample size 14,572 HHs, 63,412 individuals) cross-section survey

Since VUP targets the poor, one would expect high levels of poverty for those under VUP program. We however observe that the levels of poverty for direct support and financial services beneficiaries were slightly lower compared to non-VUP beneficiaries in 2017. In addition the level of poverty for direct support beneficiaries has substantially decreased by 10.6 percentage points between 2014 and 2017.

The poverty rate is higher among Public Works beneficiary households than in non-VUP beneficiary households in both 2014 and 2017. We also observe that poverty within that group had increased from 59.1% in 2014 to 66.8% in 2017. The high poverty rates for public works beneficiaries might be attributed to; the short work period in a year, delayed payments and low payments received in a year as shown in table 4.3.



## Chapter 5. Participation in the VUP program and coverage rates in 2014 and 2017 from the VUP survey

In this chapter we describe the poverty level and other living conditions for those Enrolled in VUP whether currently benefiting or not in both EICV4 and EICV5.

### 5.1 Distribution of VUP beneficiaries in EICV5

Table 5.1 refers to the 1,642 households resulted from VUP beneficiaries in 2014 along with households that split from them in EICV5. The fact that the VUP is mainly a rural program is reflected in the 82.8% of ever benefited households residing in rural areas. However, among these 2014 beneficiaries and splits, urban households remained VUP participants in EICV5 at a higher rate (40.9%) than rural households (37.5%). This applies to households getting Direct Support but not to households getting Public Works and Financial Services support in 2017: rural households among 2014 beneficiaries and splits held support with 9.5%, compared to a 5.8% for urban households in Public Works and 18.2% compared to 3.4% for urban in Financial Service support.

**Table 5.1: Participation in VUP programs, 2016/17, among VUP 2014 beneficiaries and split households**

	All Rwanda	VUP	Direct support	Public works	Financial services
<b>Percentage of sample</b>					
All Rwanda	100.0	38.0	13.5	8.9	15.7
<b>Area of residence :</b>					
Urban	17.2	40.9	31.6	5.8	3.4
Rural	82.8	37.5	9.7	9.5	18.2
<b>Provinces:</b>					
Kigali	7.4	32.8	6.0	8.9	17.8
Eastern	25.8	39.2	17.6	5.5	16.1
Southern	23.1	35.9	17.7	15.5	2.8
Western	21.0	44.5	10.0	12.3	22.3
Northern	22.7	34.6	10.2	3.0	21.4
<b>Ubudehe categories:</b>					
Category 1	33.2	62.9	40.2	18.4	4.3
Category 2	34.6	25.8	0.0	7.8	18.0
Category 3	30.8	26.0	0.0	0.0	26.0
Not found on list	1.4	14.3	6.8	7.6	0.0
<b>Median Expenditure per AE by quintile</b>					
Q 1	30.6	38.7	9.2	16.5	13.1
Q2	22.1	37.7	13.8	10.9	13.0
Q3	20.9	39.8	15.5	3.4	20.9
Q4	18.4	35.9	14.6	2.7	18.6
Q5	8.0	36.8	20.9	3.1	12.8

Source: EICV5 VUP surveys (Sample size 1642 HHs)

### 5.2 Social and Demographic characteristics of VUP beneficiaries - 2014 and 2017

Turning attention to Table 5.2, one should recall that the 2014 sample includes households that both were VUP beneficiaries in 2014 or were enrolled in VUP program but not yet

benefiting, whereas the 2017 sample include households that were current VUP beneficiaries in 2014, along with their splits in 2017.

Examining these VUP households, it appears that in broad terms they follow the pattern observed with the cross-section households (see Table 4.5). Direct Support tends to reach female individuals, female-and-older headed smaller households, notably households with a head that is widowed, separated or divorced with less education and with a disabled adult. It reaches more isolated households, and those with less access to electricity.

The Public Works program follows a similar but less pronounced pattern, but the Financial Services program differs. It reaches larger better educated households with better access to electricity and technology such as cellular phones.

In 2017, VUP households are no less isolated than other households in the dataset (similar mean time to market).

**Table 5.2: Profile of VUP program participants, among VUP data set households**

	2014				2017			
	Direct support	Public works	Financial services	Enrolled in VUP but not benefiting	Direct support	Public works	Financial services	Not current VUP beneficiaries
<b>All Rwanda</b>	<b>23.8</b>	<b>17.9</b>	<b>24.0</b>	<b>34.3</b>	<b>13.5</b>	<b>8.9</b>	<b>15.7</b>	<b>62.0</b>
<i>% of individuals who are</i>								
Poor	48.8	69.2	43.6	52.7	38.8	80.9	43.6	49.1
Extremely poor	24.1	42.0	18.8	23.1	17.4	55.0	22.0	25.8
<b>Median expenditure/AE</b>	<b>160,844</b>	<b>118,993</b>	<b>173,124</b>	<b>155,457</b>	<b>182,629</b>	<b>98,708</b>	<b>174,432</b>	<b>161,046</b>
<i>Demographic Characteristics</i>								
<i>Sex</i>								
Male	38.5	47.6	49.7	48.4	37.5	48.3	48.4	46.3
Female	61.5	52.4	50.3	51.6	62.5	51.7	51.6	53.7
<i>Age of head of household:</i>								
Under 18 yrs	0.7	0.3	0.0	0.0	0.0	0.0	0.0	0.0
19-64 yrs	36.6	88.7	92.7	90.0	23.8	82.4	91.9	72.9
65+ yrs	62.7	11.0	7.3	10.0	76.2	17.6	8.1	27.1
<i>Household size:</i>								
1-2	46.8	8.9	4.3	9.9	67.5	8.9	3.3	19.4
3-5	42.9	52.7	47.2	50.0	25.4	54.3	45.7	48.6
6-8	9.5	37.8	46.0	39.3	6.5	36.8	49.7	29.6
9+	0.9	0.6	2.6	0.9	0.6	0.0	1.2	2.3
Average household size	3.1	5.0	5.6	5.0	2.5	4.8	5.6	4.5
Dependency ratio	144.9	80.2	90.6	82.2	178.1	86.2	85.7	87.0
<i>Education of household head:</i>								
Some primary	79.9	60.3	55.5	57.1	74.6	49.6	58.3	67.7
Completed Primary	14.0	34.8	35.9	30.6	19.5	45.0	33.0	23.2
Post Primary and some Secondary	5.5	4.4	5.9	9.4	5.2	2.1	7.7	6.3
Completed Secondary	0.6	0.4	2.2	1.1	0.7	0.9	0.3	2.1
Some or completed university	0.0	0.0	0.5	1.8	0.0	2.4	0.8	0.7
Literacy: 15+ years olds	22.0	54.9	71.1	62.3	19.1	55.9	71.3	49.9
<i>% of households with:</i>								
Male head	35.4	65.9	80.2	73.1	29.8	56.9	80.0	58.9
Head who is widowed or separated/divorced	69.2	30.6	21.0	25.8	77.6	45.1	18.6	40.4
Any disabled member	50.2	13.9	15.4	13.3	57.4	23.7	25.3	28.8
No adult males	49.9	20.2	8.9	15.4	57.6	25.7	11.3	27.9
An adult (18+)	48.7	10.6	11.5	10.2	55.0	21.3	21.8	24.7

	2014				2017			
	Direct support	Public works	Financial services	Enrolled in VUP but not benefiting	Direct support	Public works	Financial services	Not current VUP beneficiaries
with a disability								
<i>% of households that have:</i>								
Improved water source	88.7	90.6	86.7	86.8	85.5	85.7	81.2	84.5
Improved sanitation	68.7	78.8	83.5	73.1	79.0	72.2	84.7	84.3
Electricity as main source of lighting	2.4	5.2	11.1	8.5	4.5	7.3	24.0	12.8
Concrete floor in house	6.9	5.6	16.4	9.8	7.6	7.4	22.5	15.3
Corrugated iron roof	55.0	63.1	59.9	48.7	54.3	72.9	61.3	61.7
Wall with cement	9.0	7.1	26.4	18.6	13.7	11.8	30.5	18.2
Umudugudu	59.6	53.3	73.3	60.3	62.6	57.8	68.5	60.6
A radio	31.9	47.5	66.2	58.7	30.5	28.5	58.7	37.9
A mobile phone	24.1	49.2	72.7	60.7	20.8	51.4	79.8	53.5
A TV	0.2	1.0	4.4	2.9	0.8	0.5	6.5	2.4
A bicycle	3.6	6.9	24.1	17.8	4.3	0.8	19.8	12.0
Livestock/poultry	72.7	67.5	84.0	77.4	78.2	84.3	84.6	74.3
Savings account	99.3	97.1	87.3	92.8	99.5	100.0	86.7	82.8
Mean Time to nearest market (In minutes)	64.2	60.8	63.0	59.7	52.0	52.9	54.4	51.2

Source: EICV4 VUP surveys (Sample size 2,080 HHs, 8962 individuals) and EICV5 (Sample size 1642 HHs, 6509 individuals) VUP surveys

Comparing poverty status among VUP beneficiaries in 2014 and 2017, it can be observed that poverty rate has substantially decreased by 10 percentage points between EICV4 and EICV5 for direct support beneficiaries while remained the same for financial services and increased for public work beneficiaries which is similar to the pattern observed using cross section survey (table 4.5).

The increasing poverty rate observed among Public Works beneficiary households over time might be attributed to the same assumptions as stipulated in section 4.3

**Table 5.3: Profile of VUP program participants by area of residence and socio demographic characteristics**

	2014					2017				
	VUP-DS	VUP-PW	VUP-FS	No VUP	Entire VUP 2014 sample	VUP-DS	VUP-PW	VUP-FS	No VUP	Entire VUP 2017 sample
<b>Rwanda</b>	<b>23.8</b>	<b>17.9</b>	<b>24.0</b>	<b>34.3</b>	<b>100</b>	<b>13.5</b>	<b>8.9</b>	<b>15.6</b>	<b>61.9</b>	<b>100</b>
<b>Location</b>										
Urban	37.2	21.8	26.6	14.4	100	31.7	5.8	3.4	59.1	100
Rural	23.5	17.8	24.0	34.7	100	9.7	9.6	18.1	62.5	100
<b>Provinces</b>										
Kigali City	13.1	30.5	19.4	37.0	100	6.1	9.0	17.8	67.1	100
Southern	28.0	12.9	23.7	35.4	100	17.7	5.5	16.1	60.7	100
Western	27.8	22.5	17.0	32.7	100	17.7	15.5	2.6	64.2	100
Northern	17.7	28.5	23.9	29.8	100	10.0	12.3	22.2	55.5	100
Eastern	23.6	6.4	32.5	37.5	100	10.2	3.0	21.5	65.3	100
<b>Poverty</b>										
non-poor	25.6	11.6	28.6	34.3	100	16.5	3.4	17.5	62.6	100
poor	22.1	23.6	19.9	34.4	100	10.5	14.5	13.8	61.2	100
<b>Extreme poverty</b>										
non-extremely poor	24.3	13.9	26.3	35.5	100	15.2	5.5	16.6	62.7	100
extremely poor	22.3	29.3	17.5	30.9	100	8.8	18.4	12.9	59.9	100

<b>Gender of the head</b>										
Male	20.1	17.5	25.5	36.9	100	12.3	8.1	17.3	62.3	100
Female	55.9	13.8	9.6	20.7	100	34.9	7.4	5.2	52.4	100
<b>Age of the head</b>										
15-34	12.3	21.7	30.5	35.5	100	4.8	8.1	13.0	74.0	100
35-44	12.8	15.9	27.8	43.5	100	2.8	10.3	21.5	65.4	100
45-54	16.4	20.7	22.8	40.1	100	9.4	8.3	20.3	62.0	100
55-64	29.7	20.6	17.6	32.1	100	15.2	12.5	11.3	61.0	100
65+	77.6	6.4	5.0	11.0	100	48.9	3.9	2.7	44.5	100

*Source:* EICV4 VUP survey (Sample size 2,080 HHs, 8962 individuals) and EICV5 (Sample size 1,642 HHs, 6509 individuals) VUP survey

Turning now to Table 5.3, it appears that the coverage in 2014 of all three programs is stronger in urban than in rural areas. This may seem counter-intuitive (see also Table 5.1), but one needs to remember that the 2014 sample here consists of households that were VUP beneficiaries or lived in VUP-eligible areas in 2014 (and were at least once VUP beneficiaries), and of 2014 VUP beneficiaries and their split households in 2017. Among these groups of households, the urban coverage is indeed stronger, but this is only the case for Direct Services in 2017. Public Works and Financial Services display a stronger rural coverage in 2017.

Again among these groups of households, overall VUP coverage is stronger in the Northern region, but the overall coverage difference between Kigali and the remaining regions is not strong.

As for coverage of poor/non-poor households, again among these groups of households, coverage is essentially the same for poor and non-poor, for both 2014 and 2017. We do observe a higher Direct Support coverage of households headed by females and of households headed by an older person, in both 2014 and 2017.

---

## Chapter 6. Participation incidence of VUP and benefit incidence of other support programs for 2014 and 2017

Figures 6.1 and 6.2 display participation incidence curves for all three components of the VUP program and benefit incidence curves for all other public support (excluding pensions) for both 2014 and 2017. Figure 6.1 pertains to households in the cross-sectional survey, whereas Figure 6.2 focuses on households in the VUP survey.

On these graphs the horizontal axis displays each percentile of consumption per adult equivalent, and the vertical axis displays the proportion each such cumulative percentile represents among the total number of enrollees in the program. If enrollees were distributed uniformly across consumption percentiles, we would expect a 45 degree line as a participation curve.

For example, we can see in Figure 6.1 that the lowest adult equivalent consumption quintile (20%) represents about 25% of the total number of enrollees in the direct support program in 2014. A curve above the 45 degree line implies that lower consumption percentiles are over-represented among program enrollees. If the curve lies below the 45 degree line, lower consumption percentiles are under-represented among program enrollees.

The graph pertaining to all other public support is a benefit incidence graph: percentiles of consumption per adult equivalent are plotted on the horizontal axis, and on the vertical axis are plotted cumulative shares of amount of support received from the program. Again, a curve below the 45 degree line implies a program that provides less to poorer percentiles than would be expected under uniformity of allocation (such a program is sometimes referred to as a regressive program), and a curve above the 45 degree line implies that the program is providing more to lower percentiles than expected under uniformity of allocation (such a program is sometimes referred to as a progressive program).

Figure 6.1 reveals that lower consumption percentiles are over-represented among Direct Support beneficiaries but that this over-representation weakens and even slightly reverses itself in 2017. The observed under-representation in lower consumption quintiles in 2017 might be related to the reduction of poverty among direct support beneficiaries as observed in chap 4.

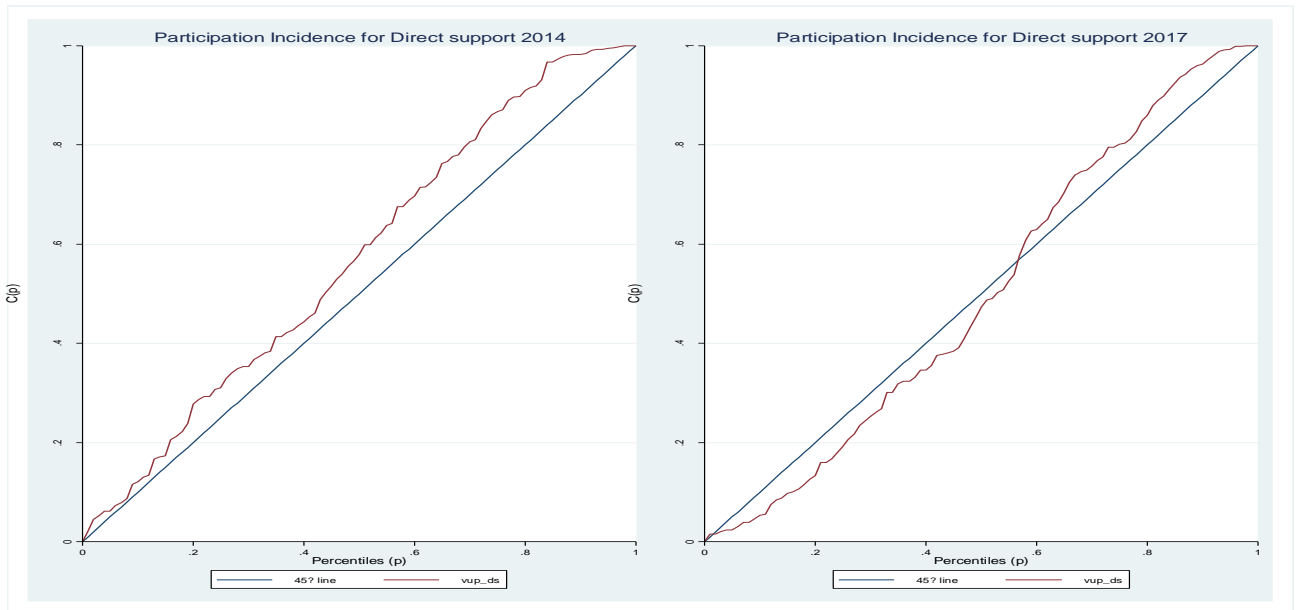
Lower consumption percentiles are over-represented among Public Works enrollees and this tendency is stronger in 2017.

Support other than VUP (excluding pensions) is distributed to lower consumption percentiles at lower levels than expected under uniformity.

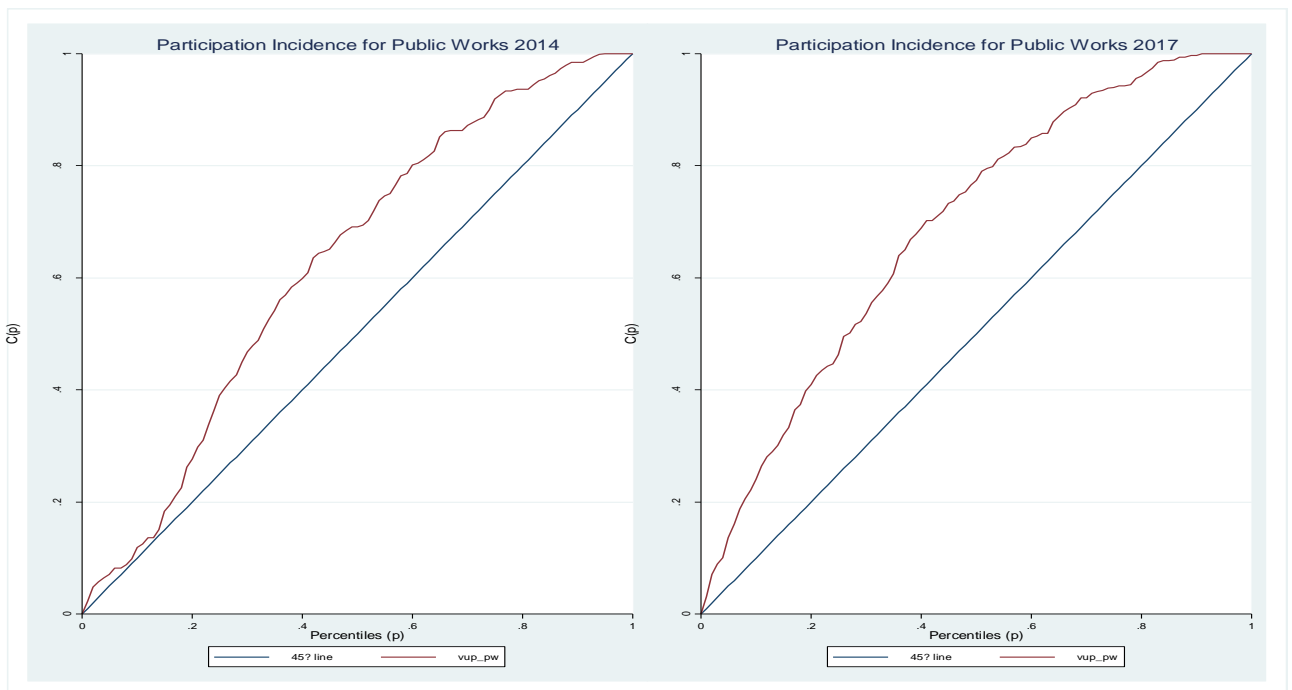


**Figure 6.1: Participation and benefit incidence curves, 2014 and 2017: Cross - sectional survey**

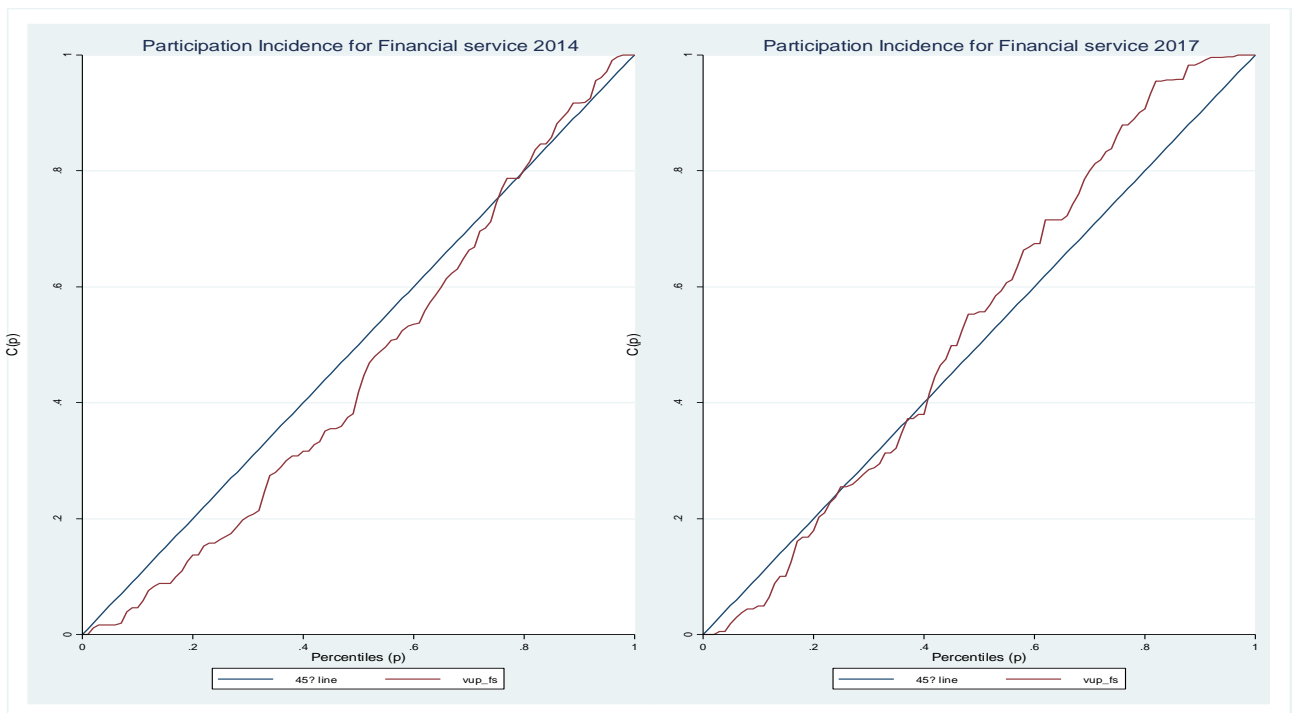
**Direct Support (Participation incidence curve)**



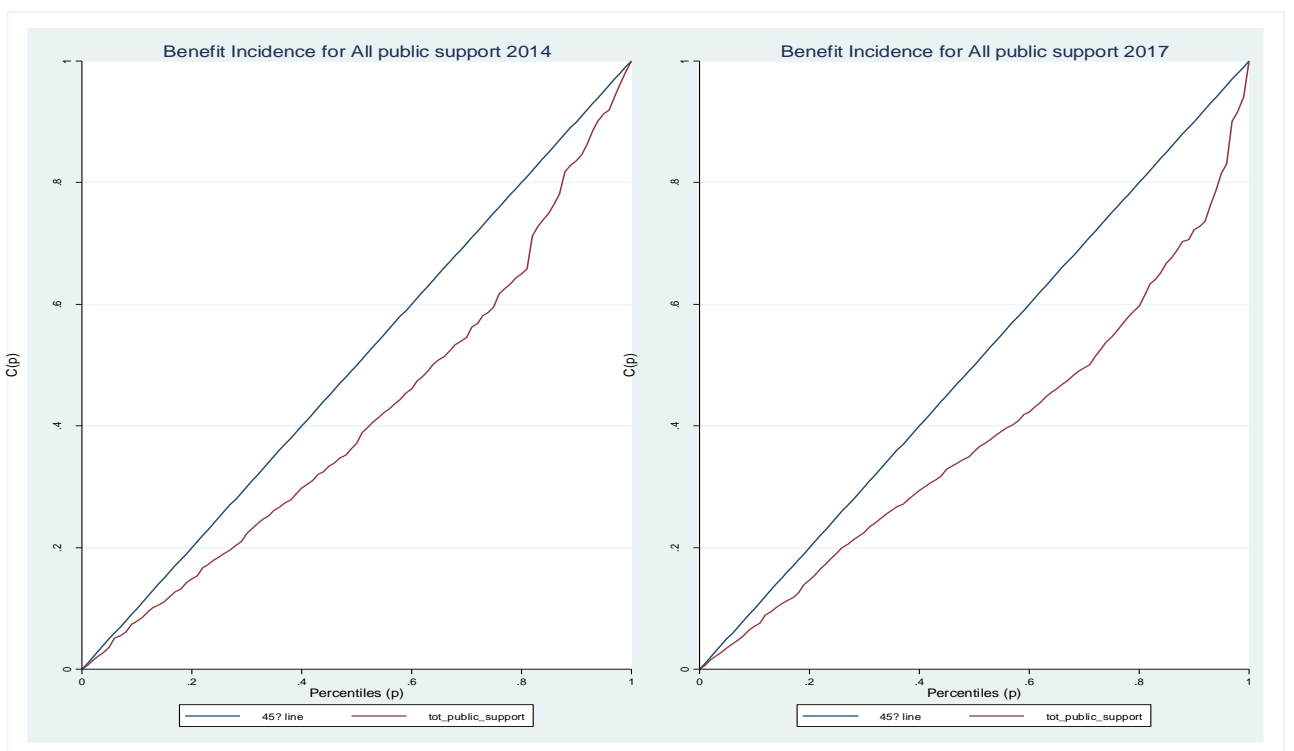
**Public Works (Participation incidence curve)**



**Financial Services (Participation incidence curve)**



**All other Public Support (Benefit incidence curve)**



**Figure 6.2: Participation and benefit incidence curves 2014 and 2017: VUP survey**

Examining Figure 6.2, which pertains to households in the VUP dataset, we see that in 2014, the participation curve for Direct Support is close to uniformity. In 2017, the curve wanders further from the uniformity line. It seems that lower consumption percentiles are slightly

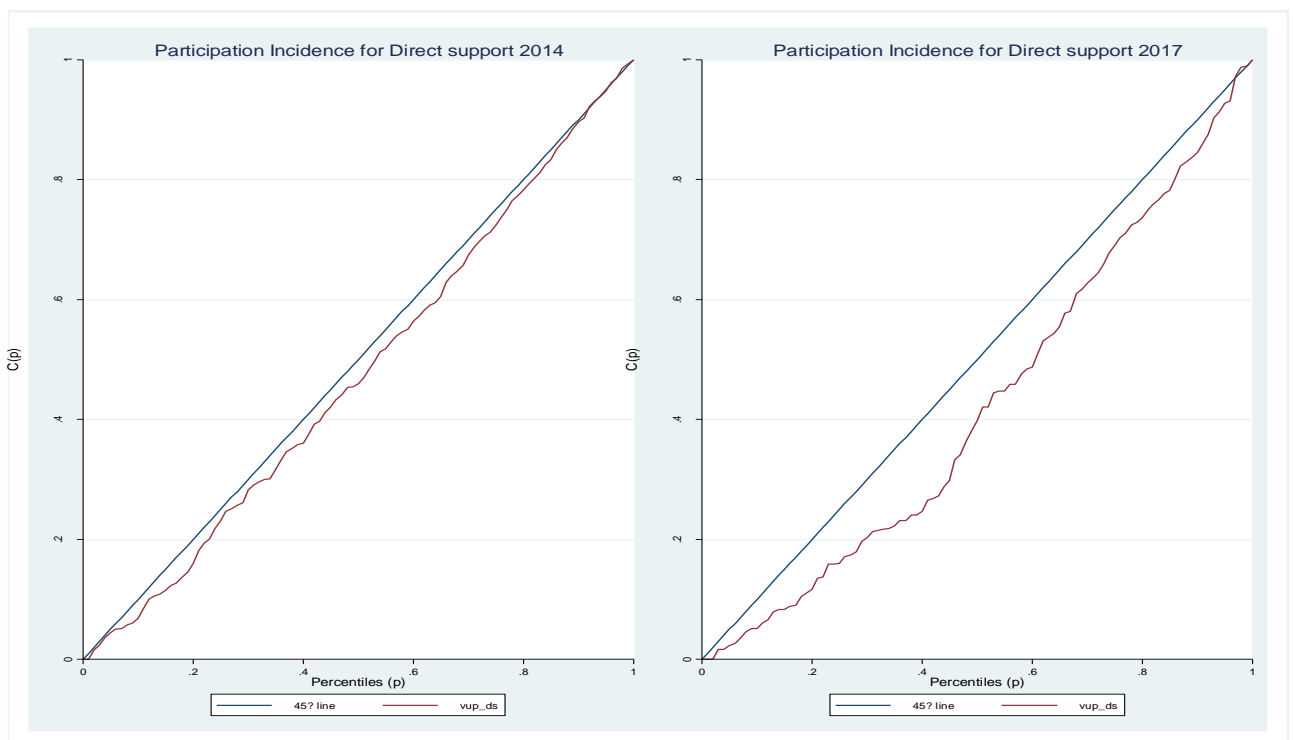
under-represented among Direct Support enrollees in 2014 and that this trend is stronger in 2017. One might think that situation has worsened, however it reflects improvement in living condition among direct support beneficiaries between 2014 and 2017 as their proportion in low quintiles decreased in that period.

On the other hand, lower consumption percentiles are over-represented among enrollees in the Public Works program, and this trend is stronger in 2017.

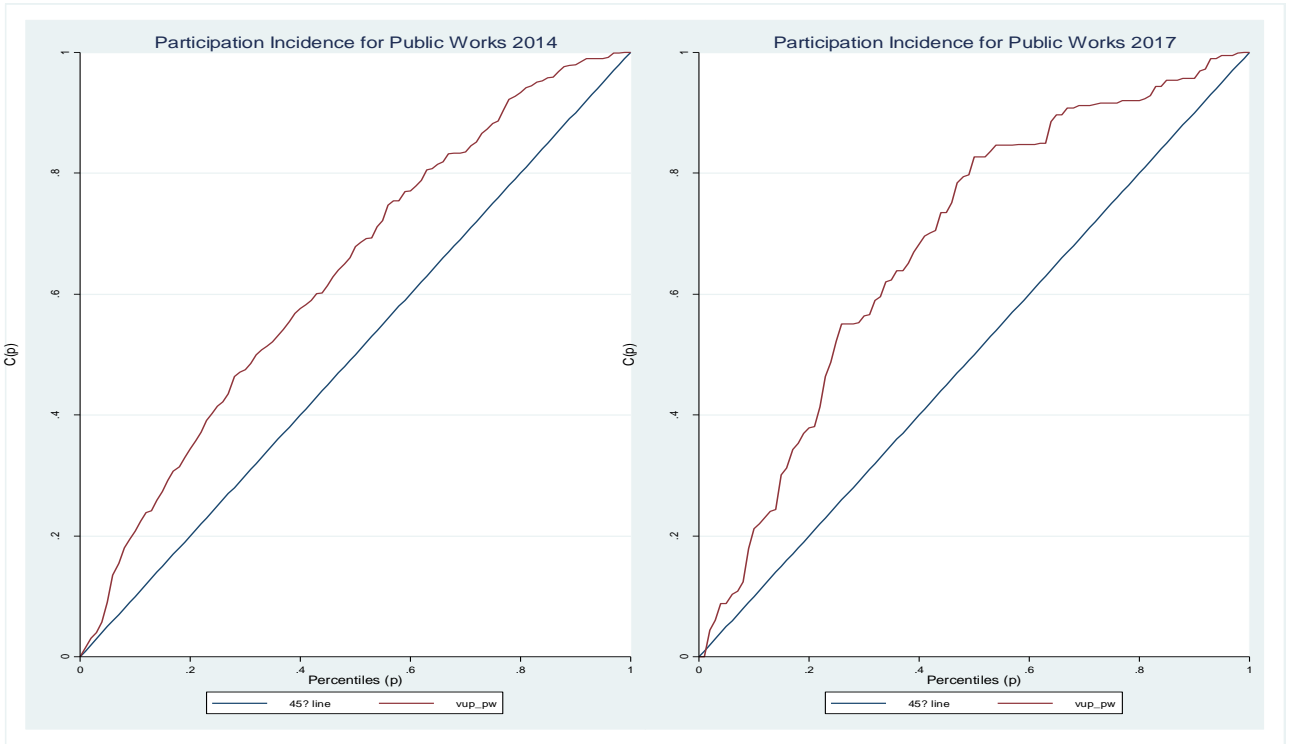
Lower consumption percentiles are under-represented among enrollees of the Financial Services program in 2014, but the pattern gets somewhat closer to uniformity in 2017.

Support other than VUP (excluding pensions) is distributed among lower consumption percentiles at a level less than expected under uniformity in 2014, and this trend is stronger in 2017.

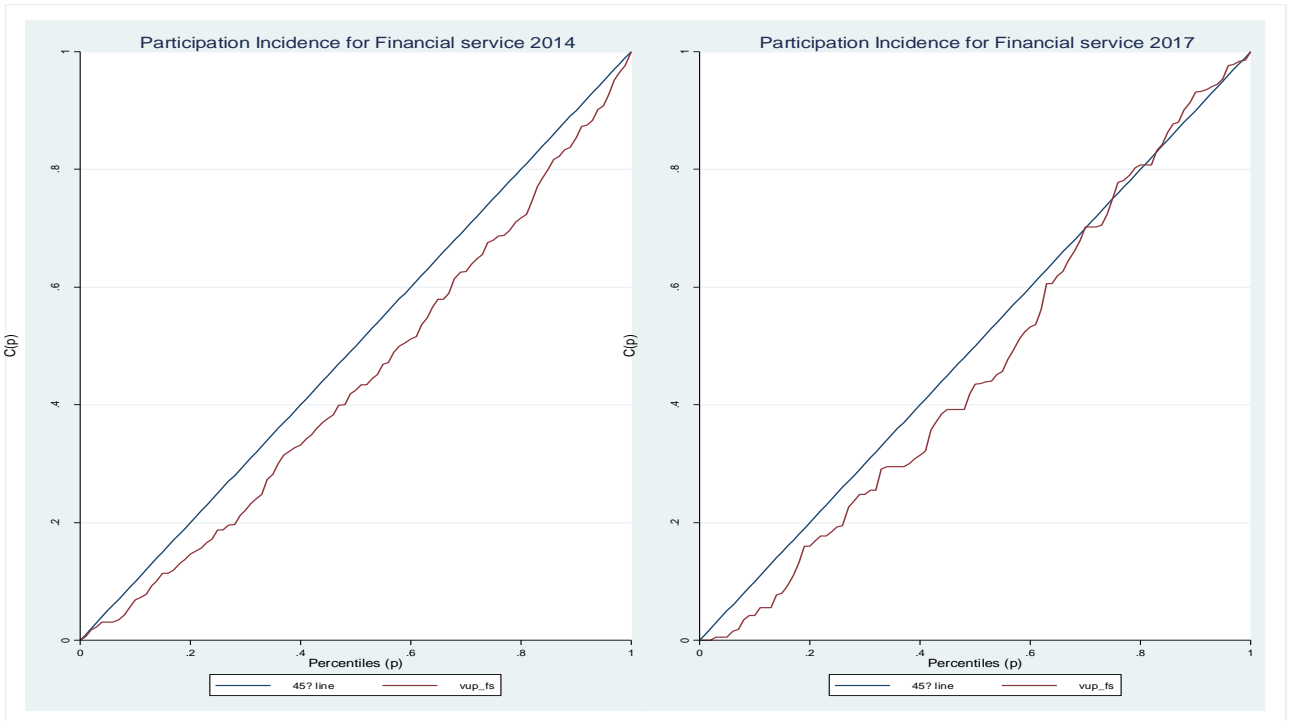
**Direct Support (Participation incidence curve)**



**Public Works (Participation incidence curve)**



**Financial Services (Participation incidence curve)**



**All Public Support (Benefit incidence curve)**

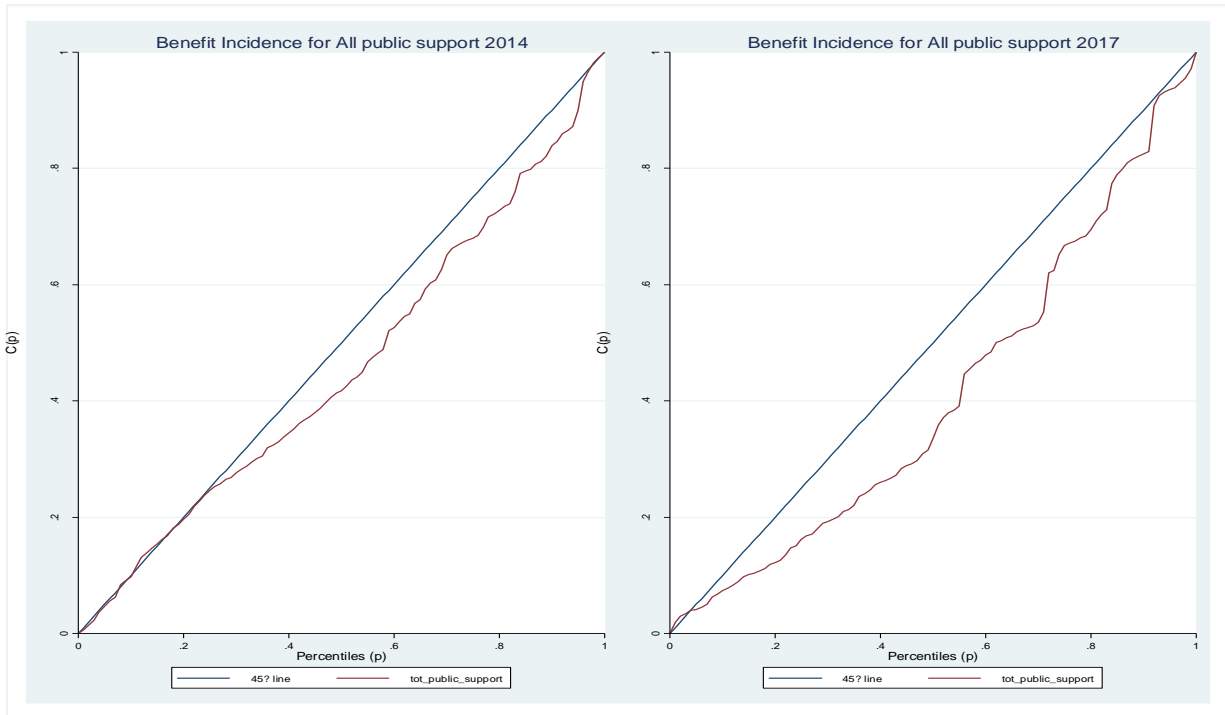
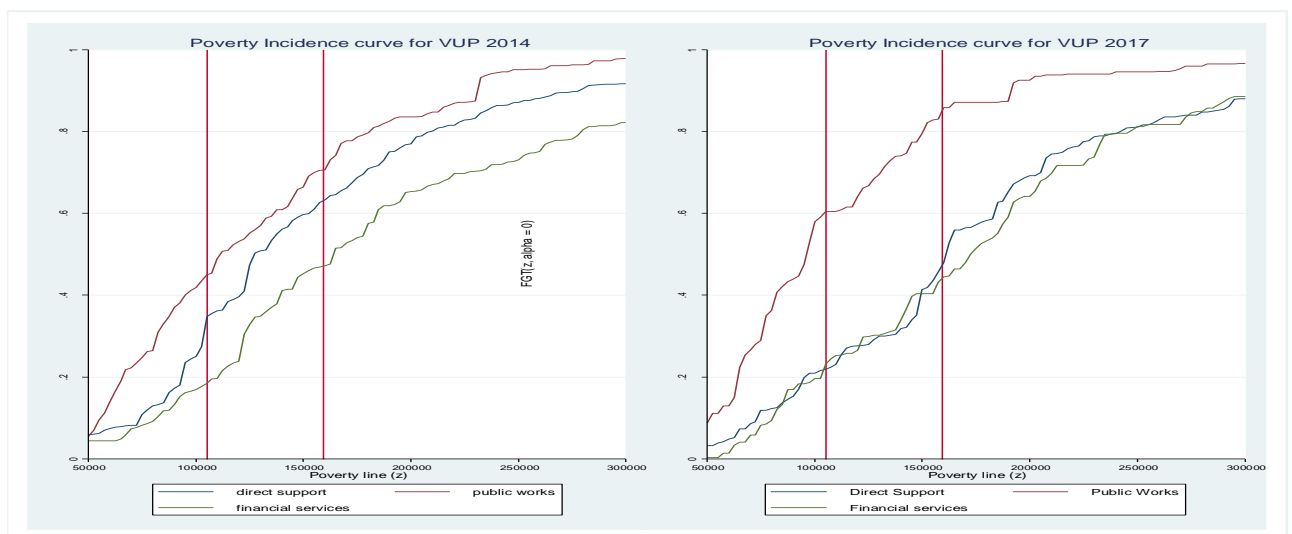


Figure 6.3 displays poverty incidence curves for individuals participating in each of the three VUP programs. The horizontal axis displays a range of consumption per adult equivalent levels to be used as poverty lines, and the vertical axis displays the proportion of people who are poor if one uses the poverty line on the horizontal axis. It is clear from the curves that in 2014 the Public Works program enrollees were poorest, followed by Direct Support enrollees and then Financial Services enrollees. However, quite interestingly, the Direct Support program tended to behave like the Financial Services program in 2017 as far as poverty incidence goes.

**Figure 6.3: Poverty incidence curves for the VUP program: 2014 and 2017 VUP beneficiaries**



## Chapter 7. Dynamics: The correlates of changes in VUP status

In this section, we examine the profile of households who dropped- or maintained - their VUP status.

**Table 7.1: Proportion of households gaining or losing VUP status between 2014 and 2017**

	EICV4/EICV5 VUP panel			
	Received VUP program in 2014 only	Received VUP program both in 2014 & 2017	Received VUP program in 2017 only	Never enrolled in this program
VUP-DS	26.5	17.6	1.5	54.5
VUP-PW	21.6	4.6	2.6	71.2
VUP-FS	21.3	8.5	2.0	68.2
At least one VUP program	36.8	63.2	0.0	0.0

Source: EICV4 & EICV5 VUP Panel (Sample size 1,642 HHs)

Examining Table 7.1, we see that 36.8% of households in the 2017 VUP panel (households that received VUP support in 2014 and their splits) did not maintain that support in 2017. One could refer to this percentage as a dropout rate. Broken down by VUP program, the dropout rates are in the twenty five percent approximate range for all 3 programs, Direct Support having the highest dropout rate (26.5%).

The top panel of Table 7.2 shows that households who dropped their Direct Support status were poor in 2014 and 2017 at a higher rate (56.3% in 2014, 56.1% in 2017) than those who maintained this status (44.2% in 2014, 38.2% in 2017). This is also reflected in the higher median consumption per adult equivalent for households who maintained their status. Direct Support maintainers were exclusively in *ubudehe* category 1, 54.2% of them were rural households, with the Southern and Western provinces well represented in that group.

**Table 7.2: Breakdown of changes in VUP status by economic, and socio-demographic characteristics (including poverty status and poverty mobility).**

VUP-Direct support					
	Received VUP-DS program in 2014 only	Received VUP-DS program both in 2014 & 2017	Received VUP-DS program in 2017 only	Never enrolled in this program	Total
<b>Poverty rate and Consumption per AE</b>					
Poverty rate 2014	56.3	44.2	69.0	54.8	54.2
Poverty rate 2017	56.1	38.2	44.8	49.7	49.7
<b>2014 Median expenditure per AE</b>	<b>139,604</b>	<b>170,013</b>	<b>124,716</b>	<b>146,442</b>	<b>147,377</b>
<b>2017 Median expenditure per AE</b>	<b>141,201</b>	<b>186,872</b>	<b>173,657</b>	<b>159,920</b>	<b>159,920</b>
<b>2017 Ubudehe categories:</b>					
Category 1	42.3	100.0	96.0	18.7	43.3
Category 2	36.6	0.0	0.0	40.9	30.6
Category 3	20.2	0.0	0.0	38.2	24.8
Not found on list	0.9	0.0	4.0	2.2	1.4
<b>Area of residence</b>					
Urban	44.7	45.8	7.8	3.6	23.5

## EICV5-VUP Report

Rural	55.3	54.2	92.2	96.4	76.5
<b>Provinces:</b>					
Kigali City	5.5	2.1	8.4	9.3	27.7
Southern Province	31.6	33.2	23.0	23.6	23.8
Western Province	23.0	32.7	29.6	20.3	20.7
Northern Province	16.3	16.8	27.3	24.5	21.0
Eastern Province	23.6	15.3	11.7	22.2	6.8
<b>VUP-Public Works</b>					
	<b>Received VUP-PW program in 2014 only</b>	<b>Received VUP-PW program both in 2014 &amp; 2017</b>	<b>Received VUP-PW program in 2017 only</b>	<b>Never enrolled in this program</b>	<b>Total</b>
<b>Poverty rate and Consumption per AE</b>					
Poverty rate 2014	66.5	79.8	70.4	47.2	54.2
Poverty rate 2017	54.4	84.4	73.1	44.2	49.7
<b>2014 Median expenditure per AE</b>	<b>125,131</b>	<b>106,102</b>	<b>124,933</b>	<b>164,689</b>	<b>147,377</b>
<b>2017 Median expenditure per AE</b>	<b>145,935</b>	<b>93,479</b>	<b>130,229</b>	<b>169,774</b>	<b>159,920</b>
<b>2017 Ubudehe categories:</b>					
Category 1	24.1	67.3	78.2	45.2	43.3
Category 2	48.5	31.2	21.8	26.2	30.6
Category 3	24.5	0.0	0.0	27.5	24.8
Not found on list	3.0	1.5	0.0	1.1	1.4
<b>Area of residence :</b>					
Urban	4.1	2.2	38.0	29.4	23.5
Rural	95.9	97.8	62.0	70.6	76.5
<b>Provinces:</b>					
Kigali City	13.8	8.6	4.6	4.9	27.7
Southern Province	19.8	9.7	25.7	31.1	23.8
Western Province	23.7	46.7	24.4	22.2	20.7
Northern Province	33.4	29.0	24.6	16.8	21.0
Eastern Province	9.3	6.0	20.8	25.0	6.8
<b>VUP-Financial Services</b>					
	<b>Received VUP-FS program in 2014 only</b>	<b>Received VUP-FS program both in 2014 &amp; 2017</b>	<b>Received VUP-FS program in 2017 only</b>	<b>Never enrolled in this program</b>	<b>Total</b>
<b>Poverty rate and Consumption per AE</b>					
Poverty rate 2014	46.7	36.8	46.3	60.8	54.2
Poverty rate 2017	38.9	45.7	34.3	55.8	49.7
<b>2014 Median expenditure per AE</b>	<b>164,588</b>	<b>190,210</b>	<b>167,353</b>	<b>134,270</b>	<b>147,377</b>
<b>2017 Median expenditure per AE</b>	<b>172,831</b>	<b>171,555</b>	<b>177,175</b>	<b>144,215</b>	<b>159,920</b>
<b>2017 Ubudehe categories:</b>					
Category 1	10.7	11.6	13.1	57.5	43.3
Category 2	34.4	37.0	49.2	28.0	30.6
Category 3	51.9	51.4	37.7	13.2	24.8
Not found on list	2.9	0.0	0.0	1.2	1.4
<b>Area of residence :</b>					
Urban	4.4	2.5	6.7	32.1	23.5
Rural	95.6	97.5	93.3	67.9	76.5
<b>Provinces:</b>					
Kigali City	5.5	8.3	10.8	6.8	27.7
Southern Province	29.0	27.6	28.9	27.4	23.8
Western Province	19.2	3.8	0.0	28.6	20.7
Northern Province	15.6	22.7	45.8	21.1	21.0
Eastern Province	30.7	37.5	14.6	16.2	6.8

**Source:** EICV4 & EICV5 VUP Panel (Sample size 1,642 HHs)

The situation is quite different as far as Public Works are concerned, as shown in the middle panel of Table 7.2. Households who maintained their Public Works status were poor in 2014

at a higher rate (79.8%) than those that dropped out of Public Works (66.5%), and this difference widened in 2017. This is also reflected by a much lower median consumption per adult equivalent for households who maintained their Public Works status. Maintainers are also concentrated in the Western Province.

Looking at poverty among dropouts and maintainers in the Financial Services program, a reversal occurs in 2017: maintainers were relatively poorer in 2017 whereas dropouts were relatively poorer in 2014. We note however that medians of consumption per adult equivalent for dropouts and maintainers are similar.

Ubudehe category 3 is strongly represented in both dropouts and maintainers of the Financial Services program. The Eastern Province, well represented in both groups, is particularly well represented among the maintainers.

**Table 7.3: Breakdown of changes in VUP status by changes in economic, household, and socio-demographic characteristics – such as change in housing conditions, and poverty transition/mobility**

<b>VUP-Direct support</b>					
	Received VUP-DS program in 2014 only	Received VUP-DS program both in 2014 & 2017	Received VUP-DS program in 2017 only	Never enrolled in this program	Total
<b>Poverty transition:</b>					
Poor both years	38.9	20.6	36.0	39.0	36.7
Poor 2014 only	13.9	20.4	28.1	14.9	15.5
Poor 2017 only	17.2	17.6	8.7	10.7	12.9
Never poor	30.0	41.4	27.2	35.4	34.8
<b>Change in expenditure/AE</b>					
welfare decreased	53.5	44.1	47.8	47.8	48.6
welfare increased	46.5	55.9	52.2	52.2	51.4
<b>VUP-Public Works</b>					
	Received VUP-PW program in 2014 only	Received VUP-PW program both in 2014 & 2017	Received VUP-PW program in 2017 only	Never enrolled in this program	Total
<b>Poverty transition:</b>					
Poor both years	43.4	70.6	59.7	30.7	36.7
Poor 2014 only	21.3	10.3	8.0	14.5	15.5
Poor 2017 only	11.0	13.9	13.3	13.5	12.9
Never poor	24.3	5.2	18.9	41.3	34.8
<b>Change in expenditure/AE</b>					
welfare decreased	45.1	53.7	63.7	48.7	48.6
welfare increased	54.9	46.3	36.3	51.3	51.4
<b>VUP- Financial Services</b>					
	Received VUP-FS program in 2014 only	Received VUP-FS program both in 2014 & 2017	Received VUP-FS program in 2017 only	Never enrolled in this program	Total
<b>Poverty transition:</b>					
Poor both years	32.8	28.5	27.1	40.7	36.7
Poor 2014 only	14.0	9.4	20.6	17.3	15.5
Poor 2017 only	6.2	17.3	7.2	15.2	12.9
Never poor	47.0	44.9	45.1	26.9	34.8
<b>Change in expenditure/AE</b>					
welfare decreased	42.2	60.8	42.0	49.1	48.6
welfare increased	57.8	39.2	58.0	50.9	51.4

**Source:** EICV4 & EICV5 VUP Panel (Sample size 1,642 HHs)

Focusing attention on dropouts and maintainers in each component of the VUP program (Table 7.3), we observe that maintainers in the Direct Support program appear to have



improved their poverty status quicker than dropouts. In fact 20.6% of maintainer households were poor both years while the corresponding proportion among dropout households was 38.9%. In addition the proportion of household which were poor in 2014 only was higher among maintainers (20.4%) as compared to the one for dropouts (13.9%).

The situation is reversed as far as the Public Works program is concerned. Public Works maintainers were poor both years at a much higher rate (70.6%) and poor only in 2014 at a much lower rate (10.3%) than dropouts (43.4% and 21.3% respectively).

Looking at the Financial Services program, we see a 10 percentage point difference between dropouts and maintainers in the percentage poor only in 2017. Maintainers are poor both years (28.5%) and poor in 2014 only (9.4%) at lower rates than dropouts (32.8% and 14% respectively). A percentage of 39.2% of maintainers saw their consumption per adult equivalent increase between 2014 and 2017, compared to 57.8% of dropouts.

Table 7.4 gives the median and mean ratio of household consumption per adult equivalent in 2017 to 2014 by district. Ratios near a value of 1 indicate that typical consumption from households in the district have not changed much between 2014 and 2017 in real terms (both consumptions are measured in January 2014 RWF). A caveat is that the number of households in the VUP panel some districts can be quite small (for example 14 in Nyanza or Kamonyi). Of particular note is the district of Musanze, with a median ratio of 1.65.

**Table 7.4: Median and mean of ratios of consumption per adult equivalent in 2017 to 2014 by district; VUP panel survey (1,642 households)**

District	Median Ratio	Mean Ratio	Number of observations	District	Median Ratio	Mean Ratio	Number of observations
Nyarugenge	1.3	1.47	82	Ngororero	1.05	1.34	27
Gasabo	1.36	1.53	166	Rusizi	1.1	1.33	40
Kicukiro	1.05	1.25	156	Nyamasheke	0.91	1.1	98
Nyanza	0.87	0.99	14	Rulindo	1.04	1.25	75
Gisagara	0.83	0.87	54	Gakenke	1.24	1.45	91
Nyaruguru	0.92	1.11	53	Musanze	1.65	1.81	62
Huye	0.66	0.75	26	Burera	0.89	1.15	80
Nyamagabe	0.94	1.07	39	Gicumbi	1.11	1.32	87
Ruhango	0.99	1.17	49	Rwamagana	1.11	1.07	31
Muhanga	1.15	1.27	47	Nyagatare	0.64	0.8	25
Kamonyi	1.24	1.28	14	Gatsibo	1.16	1.18	48
Karongi	1.46	1.54	30	Kayonza	0.99	1.31	33
Rutsiro	0.97	1.01	23	Kirehe	1.04	1.12	44
Rubavu	0.84	1.03	22	Ngoma	0.9	1.16	50
Nyabihu	0.97	1.32	40	Bugesera	1.22	1.13	36

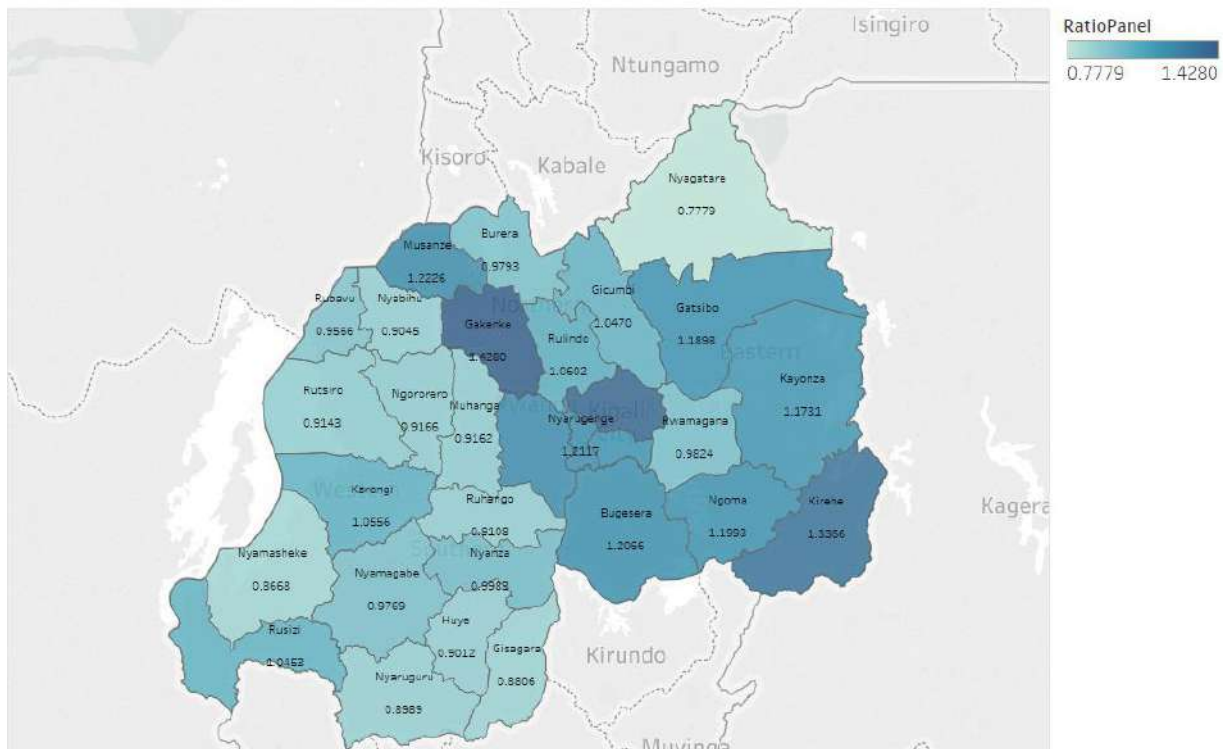
With the same caveat as for Table 7.4 regarding small sample sizes in the VUP panel in some districts, we can observe in Figures 7.1 and 7.2 how the median ratio of consumption per adult equivalent in 2017 to 2014 varies geographically across the country.

Figure 7.1 displays a thematic map of these median ratios: lighter colors imply a smaller ratio, with ratios less than one indicating that living standards have worsened over the period 2014-2017. Median ratios are particularly low in the districts of Nyagatare and Huye.



**Figure 7.2: Median ratio of consumption per adult equivalent in 2017 to 2014 by district: thematic map; full panel**

Median Consumption Ratio Panel



In Table 7.7, we see that the dominant reason why households exit the program is that they moved to a non-eligible Ubudehe category. Other reasons include having paid-off their VUP loan, or finished their VUP Public Works project.

**Table 7.6: Reasons for no longer benefitting from VUP programs, EICV5 surveys (2016/17)**

	Cross-section survey	VUP panel survey
	<i>Among households that exited VUP programs, percentage with the following reasons:</i>	
Moved to a higher Ubudehe category	43.2	44.5
We did not participate in training	0.4	0.5
We are supported by other organizations	1.1	2.3
We found other sources of income	6.3	7.1
The daily wages are too low [PW only]	0.4	1.0
Delay in payment [PW only]	2.8	0.7
Illness or disability [PW only]	4.6	4.0
Paid off VUP loan	13.0	18.5
Worksites are too far away [PW only]	4.1	3.6
We do not want/like this kind of support	0.2	0.0
VUP Work ended	11.9	5.5
<i>Don't know</i>	9.5	10.5
Others	2.5	2.0

Source: EICV5 cross-section survey; households who at least once participated in the VUP program but are not participating in 2016/17 (Sample size: 938 HHs) and VUP survey (Sample size: 742 HHs)

### References

Hartwig, Renate. Short-term welfare effects of Rwanda's Vision 2020 Umurenge Programme. Preprint, 2013.

Local Administrative Entities Development Agency (LODA). Vision Umurenge 2020 Programme (VUP) Document, 2016.

National Institute of Statistics of Rwanda. Rwanda - Integrated Household Living Conditions Survey (EICV4), 2013-2014, Documentation, Cross-Sectional Sample, Central Data Catalog, available at <http://microdata.statistics.gov.rw/index.php/catalog/75>, accessed July 23 2018.

National Institute of Statistics of Rwanda. Integrated Household Living Conditions Survey (EICV4): Social Protection and VUP report, 2015.

**Annex 1: Standard errors and design effects for selected indicators, EICV5**

**Table A.1: Mean percentage (%) of dependent household members (under 15 and 65+), by consumption quintile**

EICV5	Estimate (%)	Standard error	95% confidence level		CV	Design effect	No. of observations
			Lower	Upper			
All Rwanda	45.0	0.2	44.6	45.4	0.0047	1.16	63,412
<b>Quintile</b>							
Q1	52.0	0.4	51.2	52.7	0.0074	0.75	13,095
Q2	49.0	0.4	48.2	49.7	0.0079	0.76	12,881
Q3	45.6	0.4	44.8	46.3	0.0087	0.80	12,827
Q4	42.5	0.5	41.5	43.4	0.0116	1.26	12,617
Q5	36.2	0.5	35.3	37.1	0.0130	1.21	11,992

Source: EICV5 cross-section. Base population: all persons.

Notes: (1) A dependent person is defined as age 0-14 years or 65+ years

**Table A.2: Distribution (%) of population in male-headed households by consumption quintile**

EICV5	Estimate (%)	Standard error	95% confidence level		CV	Design effect	No. of observations
			Lower	Upper			
All Rwanda	80.6	0.39	79.8	81.3	0.0048	6.15	63,412
<b>Quintile</b>							
Q1	78.7	0.93	76.9	80.6	0.0118	6.58	13,095
Q2	80.9	0.81	79.4	82.5	0.01	5.37	12,881
Q3	80.2	0.76	78.7	81.7	0.0095	4.59	12,827
Q4	81.2	0.79	79.6	82.7	0.0098	5.2	12,617
Q5	81.8	0.79	80.3	83.4	0.0096	5.3	11,992

Source: EICV5 cross-section. Base population: persons from male-headed households.

**Table A.3: Distribution (%) of population in female-headed households by consumption quintile**

EICV5	Estimate (%)	Standard error	95% confidence level		CV	Design effect	No. of observations
			Lower	Upper			
All Rwanda	19.4	0.39	18.7	20.2	0.0201	6.15	63,412
<b>Quintile</b>							
Q1	21.3	0.93	19.4	23.1	0.0439	6.58	13,095
Q2	19.1	0.81	17.5	20.6	0.0424	5.37	12,881
Q3	19.8	0.76	18.3	21.3	0.0383	4.59	12,827
Q4	18.8	0.79	17.3	20.4	0.042	5.2	12,617
Q5	18.2	0.79	16.6	19.7	0.0434	5.3	11,992

Source: EICV5 cross-section. Base population: persons from female-headed households.

**Table A.4: Percentage (%) of households containing member with disability, by VUP component**

EICV5	Estimate (%)	Standard error	95% confidence level		CV	Design effect	No. of observations
			Lower	Upper			

<b>All Rwanda</b>	14.4	0.32	13.8	15.1	0.0221	1.2	14,572
<b>All VUP</b>	34.4	1.59	31.3	37.6	0.0463	1.85	1,642
Direct Support	57.4	2.87	51.8	63.1	0.05	1.25	334
Public Works	23.7	5.36	13.2	34.2	0.2259	2.03	114
Financial Services	25.3	4.87	15.8	34.9	0.1925	2.44	144
Not current VUP benefic.	28.8	2.05	24.7	32.8	0.0714	1.95	1050

*Source: EICV5 cross-section; EICV5 VUP. Base population: all households; currently participating or participated in the past.*

**Table A.5: Percentage (%) of households owning a mobile phone, by VUP component**

EICV5	Estimate (%)	Standard error	95% confidence level		CV	Design effect	No. of observations
			Lower	Upper			
<b>All Rwanda</b>	67	0.52	65.9	68	0.0077	1.76	14,571
<b>All VUP</b>	49.1	2.17	44.8	53.3	0.0442	3.09	1,642
Direct Support	20.8	2.38	16.2	25.5	0.1143	1.27	334
Public Works	51.4	6.67	38.3	64.5	0.1297	2.28	114
Financial Services	79.8	3.98	72	87.6	0.0498	1.91	144
Not current VUP benefic.	53.5	2.69	48.2	58.8	0.0504	2.77	1050

*Source: EICV5 cross-section; EICV5 VUP. Base population: all households; currently participating or participated in the past.*

**Table A.6: Percentage (%) of households receiving any type of public income support (excluding VUP), by urban/rural and consumption quintile**

EICV5	Estimate (%)	Standard error	95% confidence level		CV	Design effect	No. of observations
			Lower	Upper			
<b>All Rwanda</b>	25.6	0.59	24.5	26.8	0.0232	2.69	14,580
<b>Urban/rural</b>							
Urban	17.8	1.12	15.6	20	0.0632	2.43	2,526
Rural	27.5	0.69	26.1	28.8	0.0251	2.81	12,054
<b>Quintile</b>							
Q1	33.5	1.3	31	36.1	0.0387	1.76	2,429
Q2	28.7	1.14	26.5	31	0.0396	1.64	2,656
Q3	26.7	1.02	24.7	28.7	0.0383	1.52	2,868
Q4	24.2	0.92	22.4	26	0.0383	1.44	3,078
Q5	18.9	0.79	17.4	20.4	0.0416	1.51	3,549

*Source: EICV5 cross-section. Base population: all households.*

**Table A.7: Percentage (%) of households receiving health/education payments (excluding VUP), by urban/rural and consumption quintile**

EICV5	Estimate (%)	Standard error	95% confidence level		CV	Design effect	No. of observations
			Lower	Upper			
<b>All Rwanda</b>	14.5	0.36	13.8	15.2	0.0248	1.52	14,580
<b>Urban/rural</b>							
Urban	10.7	0.79	9.1	12.2	0.0739	1.84	2,526

Rural	15.4	0.4	14.6	16.2	0.0261	1.46	12,054
<b>Quintile</b>							
Q1	21.1	0.97	19.2	23	0.0461	1.32	2,429
Q2	17.2	0.84	15.5	18.8	0.0491	1.29	2,656
Q3	15	0.75	13.5	16.5	0.0502	1.27	2,868
Q4	11.7	0.62	10.5	12.9	0.0528	1.14	3,078
Q5	10.4	0.59	9.2	11.6	0.0569	1.4	3,549

Source: EICV5 cross-section. Base population: all households.

**Table A.8: Percentage (%) of households receiving any type of public income support (excluding VUP), by various household characteristics**

EICV5	Estimate (%)	Standard error	95% confidence level		CV	Design effect	No. of observations
			Lower	Upper			
<b>All Rwanda</b>	25.6	0.59	24.5	26.8	0.0232	2.69	14,580
<b>Age of head of household</b>							
Under 18	26.8	9.62	8	45.7	0.3584	1.04	21
19-64 yrs	23.2	0.61	22	24.4	0.0264	2.69	12,693
65+ yrs	42.4	1.27	39.9	44.9	0.0298	1.19	1,866
<b>Sex of head of household</b>							
Male	22	0.66	20.7	23.2	0.0299	2.74	10,856
Female	36.6	0.97	34.7	38.5	0.0266	1.49	3,724
<b>Disability status of any household member</b>							
HHS containing at least one member with disability	35.4	1.14	33.2	37.6	0.0323	1.22	2,141
<b>Disability status of head of household</b>							
No disability	24.4	0.61	23.2	25.6	0.0249	2.69	13,349
With disability	39.3	1.5	36.4	42.2	0.0381	1.12	1,231

Source: EICV5 cross-section. Base population: all households.

**Table A.9: Percentage (%) of population aged 16+ years with health insurance, by consumption quintile and employment status**

EICV5	Estimate (%)	Standard error	95% confidence level		CV	Design effect	No. of observations
			Lower	Upper			
<b>All Rwanda</b>	76.5	0.5	75.5	77.5	0.0065	4.91	35,610
<b>Quintile</b>							
Q1	63.5	1.2	61.3	65.8	0.0181	3.4	6,195
Q2	68.9	1.1	66.8	71.1	0.0158	3.62	6,646
Q3	74.6	1.0	72.7	76.5	0.013	3.5	7,128
Q4	81.5	0.8	79.8	83.1	0.0103	3.56	7,608
Q5	88.7	0.7	87.4	90.0	0.0077	3.92	8,033

Source: EICV5 cross-section. Base population: persons aged 16+ years.

**Table A.10: Breakdown of changes in VUP status by economic and household characteristics**

	Received VUP-DS program in 2014 only	Received VUP-DS program both in 2014 & 2017	Received VUP-DS program in 2017 only	Neither year	Total
<b>VUP-Direct support</b>					
<b>Asset ownership :</b>					
A radio	29.7	30.8	26.7	45.6	38.0
A mobile phone	36.2	20.1	30.1	68.3	49.1
A TV	0.8	0.7	1.7	4.0	2.4



A bicycle	2.9	4.3	4.9	16.9	10.3
Livestock/poultry	70.6	79.2	65.9	80.1	77.2
Savings account	86.1	99.8	95.5	84.6	88.4
<b>Employment :</b>					
Farm	0.8	0.8	0.9	0.9	0.8
Off-farm	0.2	0.1	0.1	0.6	0.4
<b>VUP-Public Works</b>					
<b>Asset ownership :</b>					
A radio	44.3	24.3	35.9	37.3	38.0
A mobile phone	55.8	45.1	62.6	47.1	49.1
A TV	1.3	0.8	0.0	2.9	2.4
A bicycle	12.4	1.3	0.0	10.8	10.3
Livestock/poultry	71.0	89.1	75.9	78.0	77.2
Savings account	83.8	100.0	100.0	88.3	88.4
<b>Employment :</b>					
Farm	0.9	0.9	0.7	0.8	0.8
Off-farm	0.5	0.8	0.6	0.3	0.4
<b>VUP-Financial Services</b>					
<b>Asset ownership :</b>					
A radio	44.1	58.9	57.9	32.7	38.0
A mobile phone	77.0	81.5	72.8	36.2	49.1
A TV	5.3	7.8	1.3	0.9	2.4
A bicycle	23.7	18.2	26.6	5.0	10.3
Livestock/poultry	83.1	85.1	82.4	74.3	77.2
Savings account	82.8	83.6	100.0	90.2	88.4
<b>Employment :</b>					
Farm	0.9	0.9	0.9	0.8	0.8
Off-farm	0.5	0.6	0.6	0.3	0.4

Source: EICV4 & EICV5 VUP Panel (Sample size 1,642 HHs)

**Table A.11: Breakdown of changes in VUP-Direct support status by changes in economic, household, and socio-demographic characteristics – such as change in housing conditions, and poverty transition/mobility**

VUP-Direct support	Received VUP-DS program in 2014 only	Received VUP-DS program both in 2014 & 2017	Received VUP-DS program in 2017 only	Neither year	Total
<b>Change in electricity</b>					
electricity in both years	3.6	2.1	5.3	7.9	6.2
change from other sources to electricity	9.7	6.7	8.0	14.8	12.6
change electricity to other source	0.2	0.0	0.0	0.9	0.6
other source in both years	86.6	91.2	86.6	76.3	80.6
<b>Change in cement floor</b>					
not using cement in both years	85.8	90.1	79.0	79.6	82.2
change from cement to other types	3.0	0.0	0.0	1.9	1.9
change from other types to cement	4.5	7.2	18.4	7.3	6.8
using cement in both years	6.7	2.6	2.6	11.3	9.1
<b>Change in metal roof</b>					
not using metal roof in both years	32.4	43.9	25.3	36.3	36.2
change from metal roof to other types	2.6	2.7	0.0	1.1	1.6
change from other types to metal roof	3.4	4.4	5.7	4.0	4.0
using metal roof in both years	61.6	49.1	69.1	58.5	58.2
<b>Change in radio ownership</b>					
not owning radios in both	50.8	51.2	54.4	28.8	36.8

VUP-Direct support	Received VUP-DS program in 2014 only	Received VUP-DS program both in 2014 & 2017	Received VUP-DS program in 2017 only	Neither year	Total
years					
owning radios in 2014 only	16.3	10.6	2.5	23.2	19.8
owning radios in 2017 only	11.0	13.1	16.4	10.0	10.7
owning radios in both years	21.9	25.1	26.7	38.0	32.7
<b>Change in TV ownership</b>					
not owning tv in both years	98.4	98.0	97.4	93.7	95.3
owning tv in 2014 only	0.0	0.0	0.0	2.0	1.3
owning tv in 2017 only	0.8	2.0	0.0	2.8	2.2
owning tv in both years	0.8	0.0	2.6	1.5	1.1
<b>Change in mobile phone ownership</b>					
not owning mobile phone in both years	46.0	60.0	49.6	20.8	31.5
owning mobile phone in 2014 only	9.1	7.4	4.6	7.1	7.5
owning mobile phone in 2017 only	16.4	14.7	8.8	14.5	14.9
owning mobile phone in both years	28.6	17.9	37.1	57.7	46.1
<b>Change in bicycle ownership</b>					
not owning bicycle in both years	92.9	87.7	89.2	74.6	80.4
owning bicycle in 2014 only	2.9	3.1	0.0	6.1	5.0
owning bicycle in 2017 only	2.0	2.9	8.0	7.0	5.4
owning bicycle in both years	2.2	6.2	2.7	12.3	9.2
<b>Change in average household size</b>					
Increased	27.1	23.3	41.4	40.3	35.3
Unchanged	45.8	57.0	40.2	38.2	42.2
Decreased	27.1	19.7	18.4	21.5	22.5
<b>Change in Livestock ownership</b>					
not owning livestock in both years	10.3	8.5	10.5	7.2	8.1
owning livestock in 2014 only	14.4	8.1	3.2	9.6	10.4
owning livestock in 2017 only	10.6	15.0	33.2	13.2	13.1
owning livestock in both years	64.7	68.3	53.1	70.0	68.4

Source: EICV4 & EICV5 VUP Panel (Sample size 1,642 HHs)

**Table A.12: Breakdown of changes in VUP-Public Works status by changes in economic, household, and socio-demographic characteristics – such as change in housing conditions, and poverty transition/mobility**

VUP-Public Works	Received VUP-PW program in 2014 only	Received VUP-PW program both in 2014 & 2017	Received VUP-PW program in 2017 only	Neither year	Total
<b>Change in electricity</b>					
electricity in both years	5.3	1.0	0.4	7.2	6.2
change from other sources to electricity	9.3	10.7	3.4	14.2	12.6
change electricity to other source	1.4	0.0	0.0	0.5	0.6
other source in both years	84.0	88.3	96.1	78.2	80.6
<b>Change in cement floor</b>					
not using cement in both	89.7	91.4	94.6	78.6	82.2

## EICV5-VUP Report

VUP-Public Works	Received VUP-PW program in 2014 only	Received VUP-PW program both in 2014 & 2017	Received VUP-PW program in 2017 only	Neither year	Total
years					
change from cement to other types	1.2	0.0	0.2	2.3	1.9
change from other types to cement	4.0	2.3	0.2	8.3	6.8
using cement in both years	5.1	6.3	5.0	10.7	9.1
<b><i>Change in metal roof</i></b>					
not using metal roof in both years	38.4	29.5	23.1	36.7	36.2
change from metal roof to other types	1.3	0.0	4.7	1.7	1.6
change from other types to metal roof	2.9	4.4	2.0	4.3	4.0
using metal roof in both years	57.5	66.1	70.3	57.2	58.2
<b><i>Change in radio ownership</i></b>					
not owning radios in both years	34.9	52.1	41.7	35.8	36.8
owning radios in 2014 only	16.3	20.4	14.4	21.1	19.8
owning radios in 2017 only	12.3	9.3	22.3	9.9	10.7
owning radios in both years	36.4	18.2	21.6	33.2	32.7
<b><i>Change in TV ownership</i></b>					
not owning tv in both years	97.9	99.4	100.0	94.0	95.3
owning tv in 2014 only	0.8	0.0	0.0	1.6	1.3
owning tv in 2017 only	0.7	0.6	0.0	3.0	2.2
owning tv in both years	0.5	0.0	0.0	1.5	1.1
<b><i>Change in mobile phone ownership</i></b>					
not owning mobile phone in both years	31.5	49.5	26.7	30.2	31.5
owning mobile phone in 2014 only	8.2	4.5	3.8	7.7	7.5
owning mobile phone in 2017 only	14.7	14.3	30.7	14.3	14.9
owning mobile phone in both years	45.7	31.7	38.7	47.8	46.1
<b><i>Change in bicycle ownership</i></b>					
not owning bicycle in both years	81.8	98.5	100.0	77.6	80.4
owning bicycle in 2014 only	3.0	0.0	0.0	6.2	5.0
owning bicycle in 2017 only	8.8	1.5	0.0	4.9	5.4
owning bicycle in both years	6.4	0.0	0.0	11.2	9.2
<b><i>Change in average household size</i></b>					
Increased	40.7	38.2	40.4	33.2	35.3
Unchanged	35.2	39.2	43.4	44.6	42.2
Decreased	24.1	22.6	16.1	22.2	22.5
<b><i>Change in Livestock ownership</i></b>					
not owning livestock in both years	10.1	9.2	9.9	7.3	8.1
owning livestock in 2014 only	14.4	2.1	12.5	9.8	10.4
owning livestock in 2017 only	17.1	29.1	20.2	10.2	13.1
owning livestock in both years	58.4	59.6	57.4	72.8	68.4

Source: EICV4 & EICV5 VUP Panel (Sample size 1,642 HHs)

**Table A.13: Breakdown of changes in VUP- Financial Services status by changes in economic, household, and socio-demographic characteristics - such as change in housing conditions**

VUP- Financial Services	Received VUP-FS program in 2014 only	Received VUP-FS program both in 2014 & 2017	Received VUP-FS program in 2017 only	Neither year	Total
<b><i>Change in electricity</i></b>					
electricity in both years	8.5	14.2	7.2	3.5	6.2
change from other sources to electricity	19.1	17.1	26.7	8.2	12.6
change electricity to other source	0.9	0.4	0.6	0.5	0.6
other source in both years	71.4	68.3	65.6	87.8	80.6
<b><i>Change in cement floor</i></b>					
not using cement in both years	71.8	71.9	78.2	89.1	82.2
change from cement to other types	2.0	3.4	4.6	1.3	1.9
change from other types to cement	11.1	8.9	5.2	4.6	6.8
using cement in both years	15.1	15.9	11.9	5.0	9.1
<b><i>Change in metal roof</i></b>					
not using metal roof in both years	34.6	38.4	29.0	36.8	36.2
change from metal roof to other types	0.8	1.8	7.6	1.6	1.6
change from other types to metal roof	5.5	3.1	0.0	3.7	4.0
using metal roof in both years	59.1	56.7	63.4	57.9	58.2
<b><i>Change in radio ownership</i></b>					
not owning radios in both years	25.3	16.6	17.9	46.9	36.8
owning radios in 2014 only	28.8	23.1	24.6	15.1	19.8
owning radios in 2017 only	8.6	10.0	13.8	11.6	10.7
owning radios in both years	37.3	50.3	43.6	26.4	32.7
<b><i>Change in TV ownership</i></b>					
not owning tv in both years	91.9	87.9	96.4	98.4	95.3
owning tv in 2014 only	2.6	3.5	2.2	0.2	1.3
owning tv in 2017 only	4.3	4.3	0.0	1.0	2.2
owning tv in both years	1.3	4.2	1.4	0.4	1.1
<b><i>Change in mobile phone ownership</i></b>					
not owning mobile phone in both years	10.7	11.5	23.5	45.0	31.5
owning mobile phone in 2014 only	7.4	5.4	2.8	8.3	7.5
owning mobile phone in 2017 only	11.5	19.7	4.1	15.8	14.9
owning mobile phone in both years	70.4	63.4	69.5	30.9	46.1
<b><i>Change in bicycle ownership</i></b>					
not owning bicycle in both years	64.0	73.0	71.1	89.4	80.4
owning bicycle in 2014 only	8.6	8.8	0.0	2.8	5.0
owning bicycle in 2017 only	7.4	6.1	9.6	4.3	5.4
owning bicycle in both years	19.9	12.1	19.3	3.5	9.2
<b><i>Change in average household size</i></b>					

<b>VUP- Financial Services</b>	<b>Received VUP-FS program in 2014 only</b>	<b>Received VUP-FS program both in 2014 &amp; 2017</b>	<b>Received VUP-FS program in 2017 only</b>	<b>Neither year</b>	<b>Total</b>
Increased	34.8	51.6	66.3	30.5	35.3
Unchanged	45.4	28.9	20.6	44.8	42.2
Decreased	19.8	19.5	13.1	24.7	22.5
<b><i>Change in Livestock ownership</i></b>					
not owning livestock in both years	4.9	6.1	1.9	10.2	8.1
owning livestock in 2014 only	7.5	8.4	14.5	11.8	10.4
owning livestock in 2017 only	10.5	6.3	16.6	15.5	13.1
owning livestock in both years	77.2	79.1	66.9	62.5	68.4

Source: EICV4 & EICV5 VUP Panel (Sample size 1,642 HHs)

## **Annex 2: Persons who contributed to the EICV5 Rwanda Poverty Profile Report**

### **National Coordinators**

- Yusuf MURANGWA, Director General of NISR
- Ivan MURENZI, Deputy Director General of NISR

### **National technical Coordinators**

- Dominique Habimana, Director of SMRP
- Roger Kamana, Team Leader

### **Sampling Experts**

- David Megill
- Roger Kamana, Team Leader

### **National field work Coordinator**

- Juvenal MUNYARUGERERO

### **Regional data collection Supervisors**

- Jean Baptiste Serugendo
- Astrid SEGAHWEGE
- Jean Claude Nzabonimpa
- Serge Mugabo
- Alice Uwimana
- Ali Baba Mwango

### **Data collection IT supervisors**

- Jimmy Mukasa
- Massud HARERIMANA
- Donat Nkundimana
- Jean Jacques Faustin Sharangabo
- Jean Marie Vianney NKURUNZIZA

### **EICV5 data processing Team**

- Donat Nkundimana
- Massud HARERIMANA
- Jean Jacques Faustin Sharangabo
- Jean Marie Vianney NKURUNZIZA
- Mario Vaisman

### **EICV5 Poverty Analysis and report writing**

- Serge MUGABO, Statistician – NISR
- Roger Kamana, Team Leader – NISR
- Baba Ali Mwango, Team Leader –NISR
- Professor Jonathan Haughton, International poverty expert
- Professor Heba El Laithy, International poverty expert
- Professor Dominique Haughton, International poverty expert

### **Rwanda Poverty Profile Report proof Reading**

- Roger Kamana
- Serge Mugabo
- Didier Muhoza
- James Byiringiro

### **Design and layout**

Jean Claude Nyirimanzi



