Evaluating Graduation: Insights from the Vision 2020 Umurenge Programme in Rwanda

Vincent Gahamanyi and Andrew Kettlewell

Abstract This article examines poverty reduction arising from the Vision 2020 Umurenge Programme (VUP) by comparing the status of households receiving benefits for the first time in 2014 against households which received benefits in previous years and against non-beneficiary households. Key findings are that according to the community assessment of poverty (Ubudehe), beneficiaries of both Direct Support and Public Works have improved their situation, including asset holdings, savings, the ability to withstand shocks and perceived food security, and have therefore exited the programme. Other factors affect the progress of a household, including the presence of elderly household members, literacy of household head and access to microfinance from the Financial Services component of VUP. The programme is currently exploring whether it is possible to define a 'package' which constitutes a base for sustainable graduation, which, in addition to cash transfer and asset acquisition, should include linkages to skills-building programmes and employment opportunities.

1 Introduction to the Vision 2020 Umurenge Programme

The Vision 2020 Umurenge Programme (VUP) was conceived during the Government of Rwanda's 'Akagera IV Retreat' in February 2007, as a response to increasing poverty and the limited ability of various government interventions to address this concern. The evaluation of the Poverty Reduction Strategy 2000–05 noted that while the percentage of Rwandans living in extreme poverty had decreased from 41.3 per cent to 36.9 per cent between 2000/01 and 2005/06, because of population growth the absolute number of poor people grew from 4.8 to 5.4 million during this period. The challenge of high poverty rates was exacerbated by high and rising levels of inequality, as measured by the Gini coefficient, which rose from 0.47 in 2000/01 to 0.50 in 2005/06. VUP was established as an integrated local development programme to accelerate poverty reduction and rural growth to enhance the attainment of the government's Vision 2020 objectives. VUP, along with Governance and Growth for Jobs and Exports, comprised the three pillars of the Economic Development and Poverty Reduction Strategy (EDPRS) 2008–2012, which provided a medium-term framework for achieving the country's long-term development aspirations, as embodied in Rwanda Vision 2020 and the Millennium Development Goals.

VUP's objectives within the first generation EDPRS were: (1) to provide social assistance to the most needy and (2) to support households to graduate out of extreme vulnerability and poverty into sustainable means of self-support.

VUP contributed to three of the EDPRS priorities:

- Tackling extreme poverty through improved food security and targeted social protection (unconditional cash transfers and job creation on Public Works);
- Ensuring greater efficiency in poverty reduction

 through better policy implementation
 including greater coordination between levels
 of government, sharper prioritisation of
 activities, better targeting and more effective
 use of monitoring and evaluation; and
- Increasing economic growth through skills development (training and sensitisation on savings and investment), access to microcredit and development of community assets,

IDS Bulletin Volume 46 Number 2 March 2015 © 2015 Government of Rwanda. IDS Bulletin © 2015 Institute of Development Studies Published by John Wiley & Sons Ltd, 9600 Garsington Road, Oxford OX4 2DQ, UK and 350 Main Street, Malden, MA 02148, USA



Table 1 Scale-up of VUP

| Period | Cohort | Cumulative coverage | | | | | | |
|---------------|--------|---------------------|-----------------|-----------------------|-------------------|-----------------|-----------------------|--|
| | | Sectors | | | Beneficiaries | | | |
| | | Direct Support | Public Works | Financial Services | Direct Support | Public Works | Financial Services | |
| 2008 | 1 | 30 | 30 | 30 | - | 18,304 | - | |
| Jan-June 2009 | 2 | 30 | 30 | 30 | 6,850 | 17,886 | - | |
| 2009–10 | 3 | 60 | 60 | 60 | 9,692 | 61,335 | 55,675 | |
| 2010–11 | 4 | 90 | 90 | 90 | 18,892 | 103,557 | 53,228 | |
| 2011–12 | 5 | 120 | 120 | 120 | 27,631 | 94,397 | 55,326 | |
| 2012–13 | 6 | 180 | 150 | 150 | 43,671 | 89,011 | 55,212 | |

Source Vision 2020 Umurenge Programme Annual Reports (from Government of Rwanda 2010, 2011, 2012c, 2013b).

including those that reduce soil erosion and enhance soil fertility.

VUP provides cash transfers to targeted beneficiaries either on an unconditional basis to households unable to provide labour (Direct Support) or in return for work on community infrastructure projects (Public Works). These two cash transfer streams are supported by a third component, Financial Services, which provides small low-interest loans to individuals and also to groups and cooperatives where a significant proportion of the loan beneficiaries are among the poorest.

There is also a Community Sensitisation component, which complements the other three components and addresses a broad field of issues such as health and hygiene, education, empowerment, women's and children's rights, and family budgeting. This component is supported by a Community Sensitisation manual, developed in 2014 by UNICEF, which is currently being rolled out. VUP began making transfers in 2008 in the poorest sectors (subdistricts) in each of Rwanda's 30 districts across the country. Since then VUP has been systematically extended to additional sectors annually, as shown in Table 1. Until 2012 VUP scaled up to the second, third, then fourth poorest sectors in each district, every year. In 2013 VUP began to be targeted geographically – the poorest remaining districts across the country being favoured for further scale-up.

2 Purpose of this article

Enabling graduation from poverty' is one of four priorities of the rural development thematic area in the second generation EDPRS (Government of Rwanda 2012b: 39). This article, based on the results from three household surveys conducted in 2009, 2011 and 2014, explores the progress that beneficiaries of Direct Support and Public Works have made towards escaping from extreme poverty as a result of benefits provided by VUP. It contributes to the debate on graduation in the following ways:

- Defining more effective criteria for VUP graduation and exit: VUP targets the two lowest Ubudehe categories ('extreme social poverty') and participants exit the programme when they are categorised in Ubudehe category 3 or higher by their communities.
- Exploring graduation pathways: The VUP design allows for several graduation pathways: (1) direct alleviation of income poverty through Direct Support cash transfers and Public Works wages; (2) facilitation of access to basic services for all households in the sector together with access to vocational training; (3) streams of income generated from livelihood projects supported, *inter alia*, through Financial Services. Each of these pathways is effectively a theory of change participants are expected to graduate or exit VUP through receiving one or a combination of these benefits over a significant period of time.

• Exploring enablers and constrainers of graduation: Several VUP design features either enable or constrain graduation through these pathways: (1) whether the level of cash transfer paid to Direct Support beneficiaries is enough to lift recipients out of poverty; (2) whether the number of days of work and therefore the benefit received by Public Works beneficiaries is sufficient; (3) the challenges faced by Financial Services borrowers in generating enough profit to repay their loans.

The findings of this study will contribute to the enhanced design of VUP as an effective contributor to the 'viable pathways out of poverty' envisaged by EDPRS2 (Government of Rwanda 2012b: 49).

3 Targeting, exit and graduation from VUP Direct Support and Public Works

Targeting for VUP Public Works and Direct Support was moved from a one-year to a two-year basis in 2012 and since 2013 selection of beneficiaries has had three stages. Firstly, local administrations select the poorest geographical sector within each district where VUP is not yet operational. Secondly, within this sector the poorest households are identified under the Ubudehe process, which classifies all households into one of six categories according to community perceptions of poverty.

Those in the two poorest categories - Ubudehe categories 1 and 2 – are eligible for VUP Direct Support or Public Works (see Sabates-Wheeler et al., this IDS Bulletin). Selection for either Direct Support or Public Works depends on whether the household can supply labour. If targeted for Public Works, the households may be asked to participate in projects in or around their community and the number of days' work (and thus the level of cash transfer) is determined by the project design. An important stage in the targeting process is the approval of the Direct Support targeting list by the Joint Action Development Forum (JADF), which serves as a consultative forum for district development stakeholders (civil society organisations (CSOs), non-governmental organisations (NGOs), development partners, private and public sectors and local government). This creates an opportunity to correct errors in the targeting lists and mis-classifications in the Ubudehe status of potential beneficiary households.

The term 'graduation' was not used in the first EDPRS. In the context of social protection, the scope was more about extending coverage (paragraph 3.41: 'The sector plans to extend coverage of vulnerable persons by social safety nets from 12 per cent to 20 per cent' (Government of Rwanda 2008: 42)). Nevertheless, the focus of the first EDPRS was on sustainable development:

Both the Growth and VUP flagships foster improvements in agriculture productivity as well as manufacturing and service activities, through the imperative of promoting off-farm employment opportunities. While both the Growth and VUP flagships are expected to reduce poverty, the VUP focuses on the acceleration of such reduction. Finally, the Governance flagship provides an essential anchor for pro-poor growth. Indeed, none of the actions and interventions of EDPRS can succeed without continued and strengthened good governance (Government of Rwanda 2008: 47).

The intention was that VUP would 'release the productive capacities of the poor and extremely poor' (Government of Rwanda 2008: 75). This approach was embedded in all three components: (1) labour-intensive Public Works, which 'requires that they are planned and that they use community-based participatory approaches (e.g. Ubudehe) to build community assets and create an off-farm employment infrastructure'; (2) Financial Services, which facilitated 'cooperative and small- and medium-sized enterprise development and credit packages to tackle extreme poverty as well as to foster entrepreneurship and off-farm employment opportunities', and; (3) Direct Support, which, while providing unconditional cash transfers, was intended 'to expand access to health and education as well as to encourage the development of 'appropriate' skills, handicraft, or social service activities' (Government of Rwanda 2008: 75-7).

The focus of the first EDPRS, then, was on social protection linked to skills development and job creation. The EDPRS2 Social Protection Strategy (2013), developed from the second EDPRS 2012–2017, stated this more formally:

The strategy recognises that social protection plays an essential role, but is not sufficient in



Figure 1 VUP exit versus graduation from poverty

| Livelihood pathway | | Services | VUP supported Financial Services | | | | |
|-----------------------|---------------------|----------------|----------------------------------|---|------------|--------------|--|
| | Beneficiary status | | Sensitisation pro | | | | |
| | | | Direct Support Public Works | М | dit | | |
| Asset accumulation | Ubudehe category | Poverty status | | | Graduation | sustained | |
| A | 6 | Non-poor | | | Graduation | sostallied - | |
| | 5 | | | | | | |
| | 4 | Poor | | | | | |
| | 3 | | Exit from VUP | | | | |
| Asset | 2 | Extreme | | | | | |
| stabilisation | 1 | poor | | | | | |

itself to enable poor people to sustainably move out of (graduate from) poverty. Social protection has a key role to play in stabilising assets, incomes and capabilities in the poorest households, thereby enabling these households to take risks, make investments and start to accumulate assets, working their way out of poverty. But sustained graduation from poverty also requires linkages to other complementary programmes and services to help maintain households out of poverty and to enable them to further strengthen their livelihoods. Requirements for graduation include improvements in the quality of other public services, activities to enable poor people to access jobs or undertake investments (including training and skills-building), and commitments to tackle discrimination and secure basic rights and entitlements (Government of Rwanda 2013a: 17).

In its operational Targeting, Exit and Graduation Manual VUP defines both 'exit' and 'graduation' from VUP in terms of the Ubudehe classification:

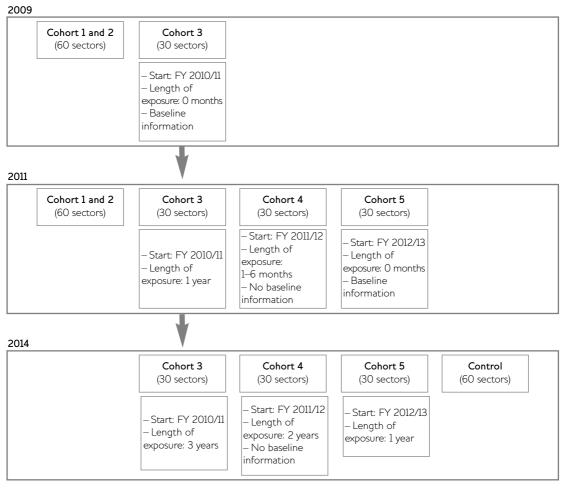
 'Beneficiary Exit refers to the process of a beneficiary household leaving a programme because they no longer meet the eligibility criteria.' This occurs when a beneficiary household is categorised as having reached Ubudehe category 3. At this stage the household ceases to receive benefits from Direct Support or Public Works but can still access the Financial Services component (Government of Rwanda 2012d: 3).

• 'Graduation describes a situation where a livelihood has been strengthened so that the households or recipients are able to maintain themselves out of extreme poverty for the medium to long term without VUP support.' This occurs when a beneficiary household is categorised as having reached Ubudehe category 5 (Government of Rwanda 2012d: 3).

Figure 1 demonstrates that those who have been recategorised into Ubudehe category 3 may have exited from the Direct Support or Public Works component of VUP but they are still in poverty. The national Ubudehe database of 2012 indicates that only around 1 per cent of the population have been categorised into Ubudehe categories 5 and 6.

Below we present results from a longitudinal study which looks at how the status of VUP beneficiaries has changed over time and how changes in Ubudehe status affect the sustainability of gains that households have made.

Figure 2 Sample sources used in the three surveys



4 Scope and methodology of the study

Three household surveys have been conducted by the Vision 2020 Umurenge Programme. The first survey, conducted in 2009, covered 90 sectors:

- 30 pilot sectors (Cohort 2008);
- 30 new sectors, operational in July 2009 (Cohort 2009); and
- 30 sectors planned to be operational in July 2010 (Cohort 2010).

The survey used a stratified, random sample of six households from each cell in each sector, a total of 465 cells. Three strata, based on Ubudehe categories at the time of the survey, were used for each cell:

 Stratum 1: Ubudehe 1 and 2 (lowest), sample of three households;

- Stratum 2: Ubudehe 3, sample of two households; and
- Stratum 3: Ubudehe 4, 5 and 6, sample of one household.

The first stratum was deliberately oversampled to allow for finer analysis of the bottom two categories, as they are the ones targeted by VUP. Aggregated, unbiased estimates nevertheless are obtained through the sampling weights, as determined by the application of probabilistic sampling theory (Asselin 2009).

The survey was designed to be run annually, ideally every June. In 2009, it was implemented during the period October through December in the 90 sectors, with a total sample size of 2,772 households.



The second household survey took place in December 2011. The 2009 sample in the first three cohorts was retained as a panel, and 2,567 of 2,772 households interviewed in 2009 were revisited, which is 92.6 per cent or an attrition rate of 7.4 per cent. The 2011 survey included an additional sample of 1,882 households from a further 60 sectors, making a total sample size of 4,449.

The latest household survey was conducted in 2014. This survey revisited 2,218 households that had been interviewed in 2009 and 2011 and again included an additional sample of 1,886 households from 60 sectors where the VUP is not yet operational. The sampling design over the three survey rounds is shown diagrammatically in Figure 2. Note that the households revisited in the 2014 survey were constrained to Cohorts 3, 4 and 5.

Table 2 disaggregates the 2014 sample by respondents' VUP status.

This study was conducted as part of an ongoing assessment of VUP impacts. The panel element was incorporated to focus on aspects of graduation over time. It looked at three questions:

- 1 How have households targeted for VUP been performing so far? This question explores the extent to which households have improved their 'social poverty' status, measured by (net) changes in Ubudehe status.
- 2 How have households been performing if we consider alternative indicators? Alternative indicators are defined as assets and (perceived) food security.
- 3 What are potential 'enabling' factors for graduation? This question explores the characteristics of households that managed to build up assets.

Data were collected through a questionnaire, administered by enumerators and included revisiting households included in the earlier surveys.

A number of the impact indicators were selfreported rather than objectively verified. Indicators falling into this category include Ubudehe category, number of meals consumed per day and livestock acquisition and disposal.

Table 2 Sample distribution by household status, 2014 survey

| Status | Households ¹ |
|--------------------------------|-------------------------|
| VUP panel household | 2,675 |
| Direct Support beneficiary | 223 |
| Public Works beneficiary | 204 |
| Financial Services beneficiary | 251 |
| Eligible non-beneficiary | 1,302 |
| Total | 4,655 |

Source Government of Rwanda (2014).

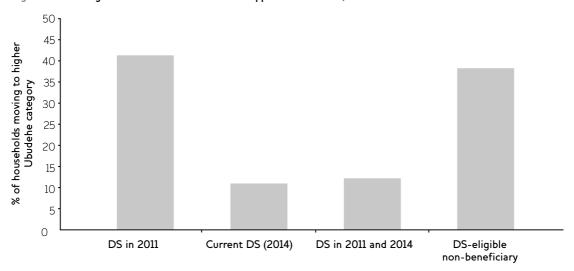
In presenting the findings, four groups of households were defined.

- 'DS 2011'/'PW 2011' refers to households which were selected for Direct Support/Public Works for the financial year 2010/11 only;²
- 'Current DS (2014)'/'Current PW' refers to households which were targeted for Direct Support/Public Works in financial year 2013/14 and are currently on the programme;
- 'DS in 2011 and 2014'/'PW in 2011 and 2014' refers to households which were on Direct Support/Public Works for financial year 2010/11 and are on Direct Support in 2014. Note, however, that it was not possible to identify whether households benefited from VUP during the intervening financial years.
- The fourth group is entitled 'DS-eligible non-beneficiaries'/PW-eligible non-beneficiaries' and refers to households which were eligible for VUP in financial year 2014 according to the Ubudehe categorisation but were not selected.

5 Key findings from the survey

The survey found that average annual receipt for a Public Works beneficiary household over the year was RwF 51,361.83 (US\$76)³ while a Direct Support household received RwF 158,600 (US\$233). The Direct Support payment is almost equivalent to the average per capita consumption of households in the second poorest quintile in Rwanda (NISR 2012). The difference arises for two reasons: firstly because Direct Support payments are monthly but receipt of

Figure 3 Net change in Ubudehe status for Direct Support beneficiaries, measured in 2014



Public Works depends on the duration of each specific project, and secondly because the Direct Support payment takes account of household size while the Public Works payment comes from a daily wage rate, calculated on the basis of local wage rates for comparable work.

VUP transfers were most commonly spent on food (75 per cent of households reporting that they had bought food), other consumables (reported by 38 per cent of the sample), farm investment and livestock purchase (36 per cent) and education (19 per cent).

Accumulating savings is an important element of the journey towards graduation. In the 2014 Household Survey 28 per cent of the households which received Direct Support reported having saved part of their VUP income, while 37 per cent of Public Works participants had made some savings. The average amount saved is RwF 28,468 (US\$42). These percentages increase when the beneficiaries also received a loan under the Financial Services component, to 33 per cent and 46 per cent, respectively.

Savings are part of the mechanism households use to compensate for the effect of a shock. Other main coping mechanisms are selling household assets, including livestock. The survey estimated that the average impact of a serious shock equates to a financial value of RwF 226,900 (US\$334). Considering job loss as a source of shock, 45 per

cent of households were affected and 27 per cent of these households were VUP beneficiaries. Drought or flood affected 37 per cent of households; of these 25 per cent were VUP households. Generally the VUP beneficiaries were found to be better able to cope with the impact of a shock – 10 per cent of Direct Support beneficiaries and 18 per cent of Public Works beneficiaries were capable of coping compared to 2 per cent of Direct Support-eligible and 15 per cent of Public Works-eligible non-beneficiaries.

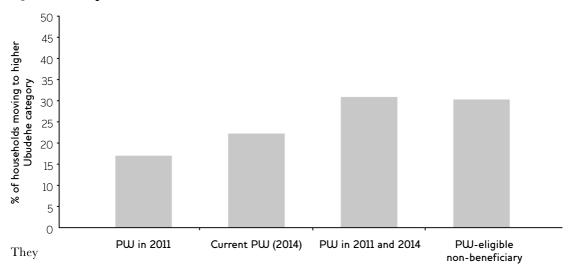
6 Has household social poverty status changed over time?

This question explores progress made towards graduation, measured by the change in the household's Ubudehe category, which is a community-based measure of poverty. As shown in Figure 1, once a household is classified in Ubudehe category 3 it ceases to be eligible to receive cash transfers from Public Works or Direct Support (but is still eligible to apply for a microfinance loan under the Financial Services component of VUP).

Figures 3 and 4 compare the net change in Ubudehe status for Direct Support-eligible (Figure 3) and Public Works-eligible (Figure 4) households.

Direct Support households are those which cannot provide labour, i.e. they have no adult between the ages of 18 and 65 who can work.

Figure 4 Net change in Ubudehe status for Public Works beneficiaries



are characterised by relatively high numbers of elderly people and those with disabilities, and the household size tends to be smaller than the norm.

It can be seen from Figure 3 that since 2009, 41 per cent of the Direct Support households that received VUP support for one year (2010–11) had moved to a higher Ubudehe category by 2014. However, in comparison, 35 per cent of Direct Support-eligible households that did not receive benefits had also moved up Ubudehe categories. This implies that no more than six percentage points of this positive trend among this cohort of Direct Support beneficiaries can be attributed directly to VUP.

Less progress is seen among current beneficiaries and households that benefited from Direct Support in 2011 and 2014. This finding is perhaps a reflection that these households need continuous support and are unlikely to graduate.

The picture is quite different for Public Works households (Figure 4). Here the biggest improvement can be seen among households which have received support over more than one financial year, where 30 per cent have improved their Ubudehe status. Households that have only benefited from the programme for one year have not seen their Ubudehe status improve much.

However, Public Works-eligible non-beneficiary households have also improved their status,

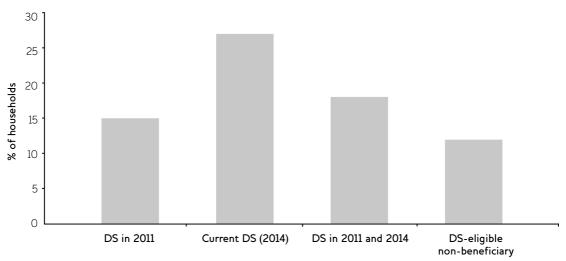
almost to the same extent as households which have received benefits in 2011 and 2014. It is hypothesised that this reflects that these households did, in fact, have sufficient capacities and capabilities to improve without being targeted, and thus were correctly excluded from the targeting list, even though they were in the requisite Ubudehe category. Potentially this shows the value that the JADF adds by reviewing the targeting list. The JADF includes membership from CSOs, NGOs, development partners, private and public sectors as well as local government. Their collective knowledge of the communities enables the JADF to ensure that the targeting list contains those in most need.

The fact that approximately one-third of households that were eligible for Direct Support or Public Works improved their Ubudehe status, despite receiving no benefits from VUP, is probably a reflection of the general economic growth that Rwanda has enjoyed in recent years. This complicates the attribution of poverty reduction to any specific interventions, including VUP.

7 How have households been performing against alternative indicators?

This section looks at how the sample households have performed if assessed against other indicators of poverty – food security, meals per day and asset accumulation. These are indicators of how the VUP beneficiaries are using the cash transfers.

Figure 5 Perceived food security among Direct Support beneficiaries



7.1 Food security

Improving food security remains a key issue to be addressed by VUP. The Comprehensive Food Security and Vulnerability Analysis (CFSVA) carried out by the World Food Programme (WFP) in 2012 found that 79 per cent of households in Rwanda had 'acceptable' levels of food consumption, 17 per cent had 'borderline' food consumption and 4 per cent had 'poor' food consumption. 'This shows clear improvement since the 2006 CFSVA and seems to indicate a slight, although not confirmed, improvement in household food consumption since the last

CFSVA and Nutrition survey was conducted in February–March 2009' (WFP 2012; 39).

Figures 5 and 6 show how VUP participants perceive their food security, compared to eligible non-beneficiaries. Direct Support households (Figure 5) appear to have benefited more from VUP than Public Works households (Figure 6), relative to eligible non-beneficiaries. This might be because the value of transfers is higher for Direct Support beneficiaries, and/or because Direct Support cash transfers are fully additional income but Public Works income is often earned

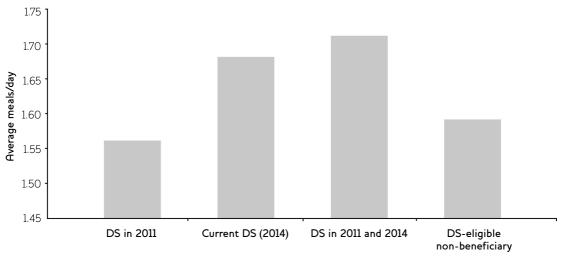
Figure 6 Perceived food security among Public Works beneficiaries

25
20
10
8
5
0
PW in 2011 Current PW (2014) PW in 2011 and 2014 PW-eligible non-beneficiary

Source Government of Rwanda (2014).



Figure 7 Average number of meals per day among Direct Support beneficiaries



instead of doing other work, which reduces the net value of Public Works transfers.

It is clear from regular monitoring of expenditure by the VUP team that both Direct Support and Public Works households spend much of their VUP cash on food, and indeed one of the 'headline findings' from the survey is that 75 per cent of households report spending at least some of their transfers from VUP on food. The survey found that the amount received by a Direct Support household is higher than that received by a Public Works household, while the Public Works

household is typically larger (5.1 persons on average compared to 2.7 persons in a Direct Support household). Notably, non-eligible households were more likely to eat produce that they had grown themselves.

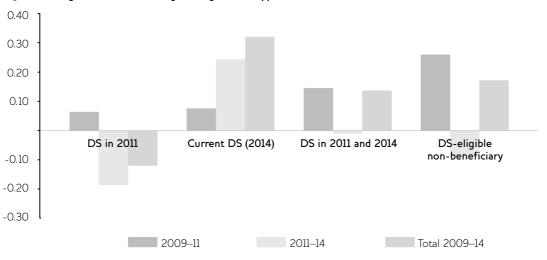
7.2 Meals per day

The survey also indicated a significant improvement in food intake among VUP beneficiaries. For example, 66 per cent of Direct Support beneficiaries consumed at least two meals a day, whereas only 44 per cent of the Direct Supporteligible households in the non-VUP sectors ate at

Figure 8 Average number of meals per day among Public Works beneficiaries 1.66 1.64 1.62 Average meals/day 1.60 1.58 1.56 1.54 1.52 1.50 PW in 2011 Current PW (2014) PW in 2011 and 2014 PW-eligible non-beneficiary

Source Government of Rwanda (2014).

Figure 9 Changes in livestock holdings among Direct Support beneficiaries



least twice a day. The benefits accumulating to Public Works households, however, were less pronounced (59 per cent of Public Works beneficiaries compared to 54 per cent of Public Works-eligible non-beneficiaries).

Figures 7 and 8 show the average number of meals per day consumed by Direct Support and Public Works-eligible households in the survey.

In both cases – Direct Support and Public Works – those who have received benefits for longer report eating more meals per day, on average. With this measure, VUP beneficiaries perform better than non-beneficiaries.

However, it is still apparent that all households, even those currently receiving support from VUP, are consuming on average less than two meals per day. A further key message from this section is that more than 70 per cent of all VUP-eligible households in the survey still regard their household as not being food-secure.

7.3 Livestock acquisition

Livestock acquisition is important in Rwanda, a country where more than 85 per cent of the population are engaged in agriculture either formally or informally. According to data produced by the National Institute of Statistics of Rwanda (NISR), 'the number of domestic animals has increased 10 per cent for Cattle, 43 per cent Sheep, 103 per cent Goats, 81 per cent Pigs, 1,682 per cent Rabbits and 97 per cent

Poultry between 2005 and 2011' (UNDP/University of Rwanda 2012)).

The importance of livestock to people in poverty is referred to in the sector diagnostic and identification of EU interventions to support sustainable agriculture and food security in Rwanda: 'Almost all farmers have kept livestock at some point in their life but may have had to sell them to overcome a crisis such as a partial crop failure. This is one of the reasons why livestock should normally be part of any farming system, to act as a buffer in times of crisis' (Atkins 2014).

In this survey, 36 per cent of households said that they had spent part of their VUP benefits on farm investment and livestock. The impact estimates from the household survey indicate an overall positive impact of the VUP on livestock holdings.

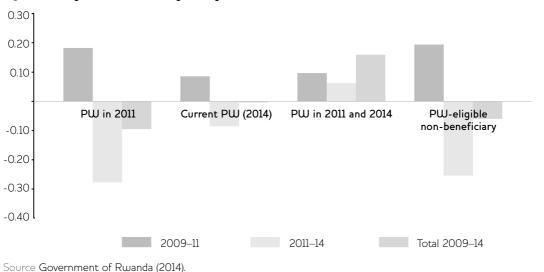
The evolution of livestock holdings by beneficiary group in our sample is presented in Figures 9 and 10. The graphs present data for each group in three ways:

- Changes in Tropical Livestock Units (TLUs) over the period 2009–11;
- Changes in TLUs over the period 2011–14;
- Aggregate changes over the period 2009–14.

The graphs indicate that Public Works and Direct Support households that benefited from the programme in 2011 only managed to build up



Figure 10 Changes in livestock holdings among Public Works beneficiaries



livestock during the beneficiary period. Thereafter, i.e. when no longer receiving VUP support (in the period 2011–14), however, they seem to have lost the incremental livestock investment.

Households that have benefited over a longer period seem to have been able to build up livestock much more sustainably. The descriptive picture henceforth suggests that longer term support is needed in order to ensure a gradual and potentially more sustainable expansion in assets and material wellbeing.

Overall, the survey found that that 50.4 per cent of Direct Support beneficiaries versus 5.1 per cent of Direct Support-eligible households invested in livestock, compared to 34.4 per cent of Public Works beneficiaries versus 12.7 per cent of Public Works-eligible households.

Direct Support households that benefited from the programme only in 2011 managed to build up livestock during the period in which they received benefits. A similar picture emerges for Direct Support beneficiaries in 2014 – they also show livestock acquisition during the period when they are receiving benefits.

Thereafter, the 2011 beneficiaries seem to have lost the livestock they accumulated and, indeed, disinvested more than they had been able to invest during the period when they were receiving benefits. This is consistent with other findings from the survey, which found that 26 per

cent of the households interviewed had experienced at least one major negative event in the previous 12 months, with all the associated costs of a shock.

Current Direct Support beneficiaries have made the greatest advance in building up livestock, since they are currently receiving support. Households that have received support continuously seem to have kept their initial levels of accumulation stable.

However, Direct Support-eligible non-beneficiaries show a larger increase in livestock during the period 2009–11 than those receiving Direct Support benefits. This supports the view that the non-beneficiaries – ostensibly eligible according to their Ubudehe category but not accepted for the programme during targeting – were correctly excluded from targeting, as they could acquire livestock assets without needing VUP transfers. The pattern of disinvestment is also apparent for non-beneficiaries.

However, the analysis noted that the drop in 2011 is quite sensitive to outliers. There are a few select households which seem to have sold all their livestock in the interim period. If they are excluded from the analysis then there is no average disinvestment for this group but a slight increase.

For Public Works beneficiaries, livestock accumulation seems to be more erratic. Only

Table 3 Percentage of surveyed households reporting ownership of selected assets

| | Direct Support recipients % | DS-eligible in non-VUP sectors % | Public Works recipients % | PW-eligible in non-VUP sectors % | Non-beneficiaries in VUP sectors % |
|---------------------|-----------------------------------|--|---------------------------------|--|--|
| Agricultural assets | | | | | |
| Hoe | 82.8 | 67.3 | 89.4 | 84.5 | 88.1 |
| Axe | 38.6 | 34.7 | 49.6 | 39.5 | 48.0 |
| Sickle/machete | 69.2 | 56.1 | 78.4 | 67.9 | 77.4 |
| Household assets | | | | | |
| Radio | 25.7 | 16.3 | 42.1 | 33.4 | 45.2 |
| Mobile/fixed phone | 13.4 | 10.2 | 36.5 | 33.7 | 41.2 |
| Stove | 4.0 | 2.0 | 5.9 | 6.1 | 7.9 |
| Chair | 70.0 | 58.2 | 79.8 | 74.0 | 81.6 |
| Sofa | 4.3 | 2.0 | 9.4 | 6.3 | 9.7 |
| Table | 31.6 | 29.6 | 44.7 | 39.7 | 53.2 |
| Bed | 47.5 | 29.6 | 54.4 | 46.7 | 59.0 |
| Mattress | 52.3 | 28.6 | 44.2 | 34.6 | 50.5 |

households that have been in Public Works continuously seem to have been able to gradually build up livestock. This is not surprising given that the average Public Works transfer value is only one-third of that received by Direct Support beneficiaries.

The pattern of investment and disinvestment in livestock has been observed in other surveys. The sector diagnostic and identification of EU interventions to support sustainable agriculture and food security in Rwanda under the 11th EDF Phase 1 Diagnostic Report states that:

Almost all farmers have kept livestock at some point in their life but may have had to sell them to overcome a crisis such as a partial crop failure. This is one of the reasons why livestock should normally be part of any farming system, to act as a buffer in times of crisis (Atkins 2014).

7.4 Household assets

A further indication of a household's progress towards graduation is the non-livestock assets that the household has been able to accumulate. The survey asked VUP beneficiaries and nonbeneficiaries whether they owned a number of specific assets. Results are shown in Table 3, comparing Direct Support and Public Works beneficiaries, comparative households in non-VUP sectors and non-eligible household in VUP sectors.

Both Public Works and Direct Support households have been able to acquire more assets than the respective Public Works and Direct Support-eligible households in non-VUP sectors.

In addition, a higher proportion of Public Works households have acquired each of the assets listed in Table 3 compared to Direct Support beneficiaries. This is despite the fact that Direct Support households have received significantly more in benefits than Public Works households, suggesting that Public Works households may be better able to generate income from other sources.

Finally, comparing assets owned by households in VUP sectors not benefiting from VUP shows that non-beneficiaries have acquired more assets than VUP beneficiaries, although the gap between Public Works households and non-eligible households is much smaller. In fact in terms of 'productive assets' (hoes, axes and machetes) there is higher ownership in Public Works households. The fact that VUP-eligible nonbeneficiaries have acquired more assets than VUP beneficiaries supports the view that the VUP-eligible households not selected were not as poor as those which were selected.

8 What are potential 'enabling' factors for graduation?

The findings in this section result from an analysis of the 'top performing' households and looks for common characteristics for these households. The survey considers the 'top performers' to be the top 20 per cent of households in terms of livestock accumulation over time (from 2009–14, the analysis is therefore limited to Cohort 3 households only).

The conclusions are drawn from a probit regression (marginal effects) of a number of characteristics on being in the top performer group, carried out as part of the impact evaluation on which this article is based (Government of Rwanda 2014).

A number of factors were considered, including the age and gender of the household head, presence of elderly and of children in the household, distance to market, whether or not the household has savings and whether or not the household was involved in an enterprise. The dimensions seen⁴ in well-performing households were:

- Households with literate heads are more likely to improve graduation chances.
- Household composition can hamper 'graduation'.
 Livestock accumulation seems to be somewhat
 affected by household composition; households
 with elderly members are less likely to expand
 their livestock holdings greatly.
- Loans (i.e. access to Financial Services) seem to work as an enabling factor. Households that have obtained a loan are 18.9 percentage points more likely to be part of the top performing category.
- Successful households experience less shocks and are insured. Insurance in this context means coverage by the Mutuelle de Santé health

insurance programme, which minimises the impact of illness on the earning ability of a household.

Community Sensitisation has positive effects.
 Finally, regular attendance of Community Sensitisation meetings also seems to have a positive influence.

9 Conclusions and implications

The early years of VUP focused on the delivery of a safety net, through Direct Support and Public Works. More recently, attention has shifted towards poverty reduction and graduation.

While a number of households have 'exited' VUP, the survey found no household which has 'graduated' as it is currently defined in Ubudehe poverty terms, i.e. none has been reassessed as having reached Ubudehe category 5. That said, there has been significant progress towards reducing extreme poverty, as measured by the progression of beneficiaries from Ubudehe categories 1 and 2 to categories 3 and 4, though the extent to which this progress can be attributed to VUP is not clear.

As things stand, households on the Direct Support component benefit to a higher degree compared to households on the Public Works component. This is further compounded when the difference in household size is recognised: the benefits going into Public Works households are typically shared among more household members. Recognising that Public Works households have a greater capacity to graduate – by definition they are the households which can provide labour – the VUP has re-emphasised the need to provide Public Works beneficiaries with more days of work each year, by focusing on more labour-intensive projects.

Furthermore, the household survey confirms an important point which has been recognised: progress towards graduation does not appear to be sustainable for many when benefits have been received only for a short time. In 2012 VUP moved from annual to biennial targeting and a further move towards triennial targeting is planned. This will help to maintain a longer stream of benefits for targeted beneficiaries.

Programme designers are well aware that some households, especially those receiving Direct

Support, might never graduate and will therefore require continuous support (for example, elderly people living alone).

However, it was recognised in the original design of VUP that while the safety net can significantly improve lives and stimulate savings it cannot, in itself, produce graduation. More work is required to define the pathways to sustainable graduation. Access to VUP's Financial Services, insurance, education and training are elements to take into consideration for sustainable graduation in the long run. The complete 'package' could contain the following elements:

Addressing basic needs and encouraging saving:

- Providing for food and basic needs;
- Providing for basic living environment;
- Facilitating access to basic government services;
- Enabling savings.

Sensitisation:

- Enabling financial inclusion through financial literacy training;
- Sensitisation to other social issues (hygiene, women's empowerment, etc).

Asset-building as the basis for a sustainable livelihood:

- Inevitably, asset-building is likely to focus on the agricultural sector;
- Access to microcredit for investment;
- Linkages to aspects such as crop and livestock insurance.

Skills-building either for employment or for running their own business:

 McCord and Slater (this IDS Bulletin) highlight that stable employment is a preferred alternative to building a new micro-business for many poor people – not everyone is entrepreneurial. However, this requires strengthening linkages to local labour markets, including by providing a skills training programme. While the need for this was recognised in the original design of VUP in 2007, these linkages have yet to be built.

Business support is also important for those who want to start a micro-business as a means of building a sustainable livelihood. The draft sector diagnostic and identification of EU interventions to support sustainable agriculture and food security in Rwanda noted that 'Perhaps the greatest overall constraint to increased livestock production is farm advisory services, including veterinary and para-vet (AHWs or Animal Health Workers) services' (Atkins 2014).

Many of the areas discussed in this section are being addressed in one form or another, for example:

- VUP has commissioned the provision of financial literacy training from the Rwanda Development Board, which started in 2013;
- The Local Economic Development programme exists in all districts and is prioritising the creation of sustainable jobs;
- The Ministry of Agriculture is implementing a crop insurance scheme;
- The Business Development Fund has taken over responsibility for Business Development Centres and is in the process of re-engineering the provision of services.

The main challenges now facing VUP and the social protection sector more generally are:

- To define the 'graduation package' which is likely to be benchmarked in terms of asset acquisition;
- To build effective linkages to ensure that those who are about to exit VUP safety nets can benefit from other programmes which take them to sustainable graduation;
- To manage this expanded commitment to poverty reduction in the context of the available resources.

Notes

- 1 There is some cross-membership of these groups. There are ten households in Direct Support also accessing Financial Services and 56 households benefiting from Public Works and Financial Services. In addition, there are 141 non-VUP households in VUP sectors that access Financial Services.
- 2 The 2009 Household Survey included some households in Cohort 3 which were targeted for VUP benefits in 2010/11 but had not at

References

- Asselin, L-M. (2009) Vision 2020 Umurenge Programme: The Household and Cell Infrastructure Surveys 2009, Kigali: Government of Rwanda
- Atkins (2014) 'Sector Diagnostic and Identification of EU Interventions to Support Sustainable Agriculture and Food Security in Rwanda under the 11th EDF. Phase 1 Diagnostic Report' (unpublished), Kigali: Government of Rwanda
- Government of Rwanda (GOR) (2014) VUP Household and Cell Infrastructure Surveys 2014, SESMEC Ltd and Renate Hartwig
- Government of Rwanda (GOR) (2013a) Social Protection Strategy, Kigali: GOR
- Government of Rwanda (GOR) (2013b) Rwanda Local Development Support Fund Annual Report 2013, Kigali: GOR
- Government of Rwanda (GOR) (2012b) 2nd Economic Development and Poverty Reduction Strategy 2013–2018, Kigali: GOR
- Government of Rwanda (GOR) (2012c) Rwanda Local Development Support Fund Annual Report 2012, Kigali: GOR
- Government of Rwanda (2012d) Vision 2020 Umurenge Programme, Targeting, Exit and Graduation Guidelines, Kigali: GOR

- that time received benefits. They were effectively used as a counterfactual. These households received benefits in 2010/11 and are included in the DS 2011 and PW 2011 categories in the analysis in this 2014 Household Survey.
- 3 The exchange rate used is US\$1 = RwF 680.
- 4 The analysis did not identify causal relationships, but only aimed to identify key characteristics which top-performing households seemed to have in common.
- Government of Rwanda (2011) Rwanda Local Development Support Fund Annual Report 2011, Kigali: GOR
- Government of Rwanda (2010) Vision Umurenge Programme Annual Report 2009–10, Kigali: GOR
- Government of Rwanda (2008) *Economic* Development and Poverty Reduction Strategy 2008–2012, Kigali: GOR
- NISR (2012) Third Integrated Household Living Conditions Survey (EICV3), Kigali: National Institute of Statistics of the Government of Rwanda
- UNDP/University of Rwanda (2012) Rwanda National Human Development Report, Kigali: United Nations Development Programme
- WFP (World Food Programme) (2012)

 Comprehensive Food Security and Vulnerability

 Analysis and Nutrition Survey, www.wfp.org/
 content/rwanda-comprehensive-food-securityvulnerability-analysis-nutrition-survey-dec-2012
 (accessed 26 February 2015)