Final Evaluation Briefing Paper

Sustaining impacts: Concern Worldwide's Graduation Programme in Rwanda

Stephen Devereux

Concern worldwide
Centre for Social Protection
IRIBA
IDS Institute of Development Studies
Irish Aid Government of Ireland Rialtas na hÉireann

Introduction

Since 2011 Concern Worldwide-Rwanda, in partnership with a local partner, Services au Développement des Associations (SDA-IRIBA) and with financial support from Irish Aid, have implemented a project called ‘Enhancing the Productive Capacity of Extremely Poor People’, also known as the ‘Graduation Programme’, in the Southern Province of Rwanda. The programme targets extremely poor households – defined as those who have no productive assets and are unable to meet their basic needs for food, health care, shelter and education.

The programme delivers a package of support that includes cash transfers to meet basic needs – averaging RwF.18,000 (about €22) per household per month – skills development and resources to improve livelihoods, and improved savings to increase resilience to shocks. In addition, intensive coaching is provided by volunteer Community Development Animators (CDAs) who each visit approximately 15 participants twice every month.

This package is similar but not identical to the support delivered by ‘graduation model’ programmes in Bangladesh and several other countries, and it shares the same objective of enabling sustainable exits from extreme poverty. By the end of the project cycle, participants are expected to have ‘graduated’ into self-reliant livelihoods.

The programme started in two rural sectors in Nyaruguru and Huye Districts. The first cohort of 400 households received income support (cash transfers) for 18 months between August 2011 and January 2013, and livelihood support (asset transfers, in two instalments) over a period of 28 months between November 2012 and March 2015. Four more cohorts have since participated, making a total of almost 16,000 beneficiaries in 3,200 households in four districts. Findings for the first cohort only are reported in this Briefing Paper.

What are graduation programmes?

The ‘graduation model’ was pioneered in Bangladesh in the early 2000s by BRAC, an NGO that designed a sequenced package of support for extremely poor people over a two-year period, which included regular cash transfers, access to savings, transfers of productive assets, livelihood training and coaching on life skills (e.g. hygiene, dietary diversity). The ‘Targeting the Ultra-Poor’ programme achieved impressive success rates. Within six years, 92% of participants ‘graduated’ out of extreme poverty (50 US cents a day per person).[1] This model was replicated in pilot projects in 8 countries in Asia, Africa and Latin America. Rigorous impact evaluations found similar success rates in most cases.[2]

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1 S. Hashemi and W. Umaira (2010), ‘New pathways for the poorest: the graduation model from BRAC’, BRAC Development Institute, Dhaka.

2 A. Banerjee, et al. (2015), ‘A multifaceted program causes lasting progress for the very poor: evidence from six countries’, *Science,* 348(6236): 772–788.

Methodology

A difference-in-differences methodology was designed for this evaluation, allowing changes in key indicators to be assessed both over time and between Graduation Programme participants and a control group from different communities. All 400 participants and 200 control group households were interviewed at baseline, and follow-up surveys were conducted after 12 months, 36 months and 48 months (2½ years after programme support ended). Attrition rates were relatively low, at 6% of participants and 12% of control group households.

This Briefing Paper draws from the final evaluation report of the Graduation Programme,[3] as well as the qualitative research report.[4] Findings are presented on several indicators of programme impact.

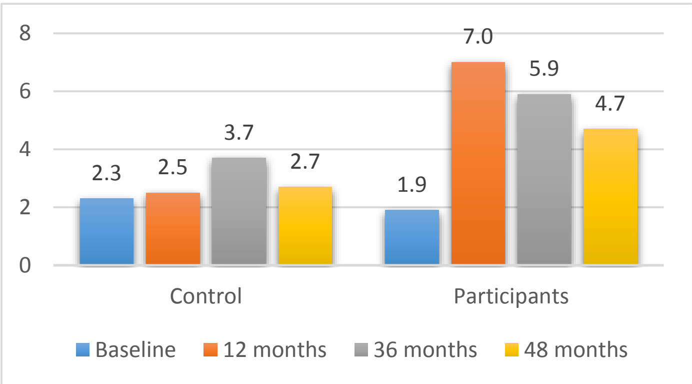
Deprivation

Deprivation is an inability to meet basic needs, so a deprivation index was compiled that captures two basic needs: food security and access to health care. The scale ranges from 0 (high deprivation) to 8 (low deprivation: eats 3 times daily, can always afford health care and medicines).

***Hypothesis**: Participants will register lower levels of deprivation*

Participants improved their score on the deprivation index substantially during the first year of the programme. Although the average score fell back after 36 and 48 months, it remained much higher than at baseline. The likely explanation for the improvement during the first year is that cash transfers financed purchases of food, health insurance and medicines, but after the first year the profits earned from programme-supported livelihood activities were lower than the cash transfer payments.

Figure 1. Deprivation index



3 S. Devereux and R. Sabates (2016), 'Enhancing the Productive Capacity of Extremely Poor People in Rwanda: Final Evaluation Report', Brighton: Institute of Development Studies (IDS) and Kigali: Concern Worldwide Rwanda.

4 D. Ajambo Akaliza, I. Ignatieva, R. Martin and J. Swatton (2016), 'Graduation Programme, Rwanda: adding to the evidence: a summary of qualitative research', Dublin: Concern Worldwide.

Assets

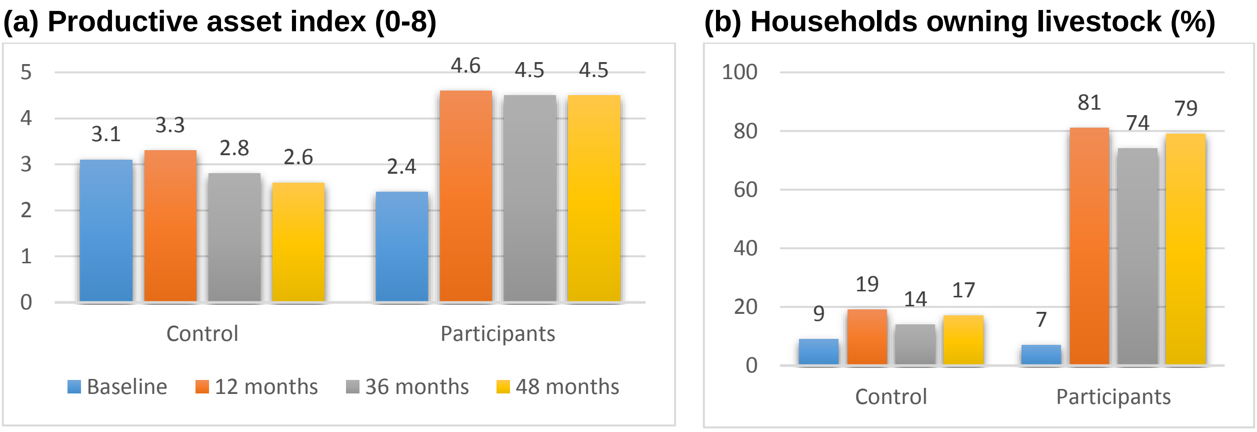
Productive assets generate flows of income and strengthen resilience against shocks. A productive asset index was constructed that combined ownership of land, livestock, farm tools and bicycles. The scale ranges from 0 (asset less) to 8 (asset rich).

***Hypothesis**: Participants will own more assets*

Participants doubled their index value within 12 months, and maintained this level for the next 36 months, while the control group recorded a slight decline over the survey period, making this a significant and sustained programme impact. In terms of individual assets:

- **Land:** Participants living on registered land trebled from 25% to 78% between baseline and 48 months, and those owning their own home doubled, from under half (45%) to almost all (96%). Participants farming more than one plot of land also increased dramatically, from 23% to 90%. This confirms that higher incomes were invested in land, housing and agriculture.
- **Livestock**: Participants owning any domesticated animals increased from just 7% to about 80% within 12 months of joining the programme, and remained at this level after 48 months. Most participants acquired small stock (goats, pigs, chickens, rabbits), but one in five owned at least one cow after 48 months, whereas no cows were owned by participants at baseline.
- **Consumption assets**: The graduation programme financed significant increases in ownership of kitchen utensils (plates, saucepans, spoons, forks), furniture and household equipment (chairs, basins, jerry-cans) and electronic goods (radios, mobile phones). For example, ownership of a mobile phone rose from 1% to 25% of participants between baseline and 48 months, but from 3% to only 7% among the control group.

Figure 2. Productive assets



Savings

Belonging to a microfinance institution such as a savings group, and having savings, are two positive indicators of financial inclusion, which is often challenging for the poor. All participants opened Savings and Credit Co-operative (SACCO) accounts, so that cash transfers could be paid into their accounts, and they were encouraged to save some of this cash for emergencies and to invest in their income-generating activities.

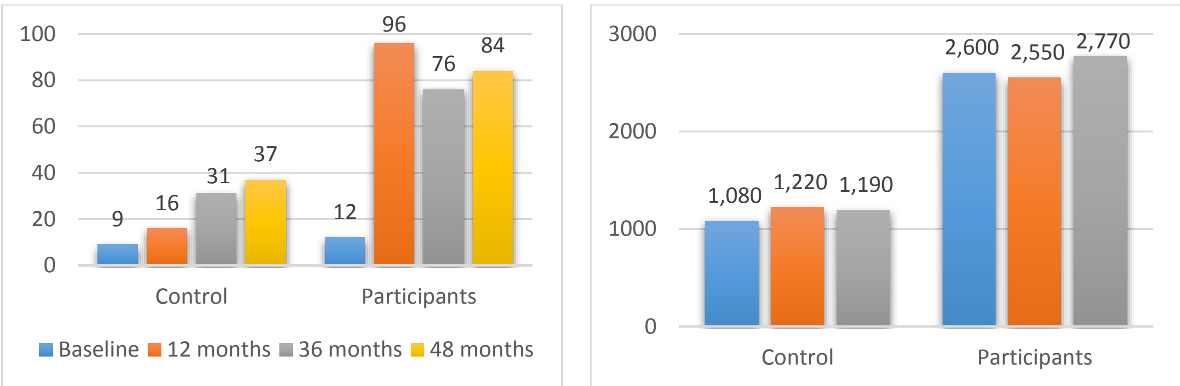
Hypothesis*: Participants will have increased savings*

Almost all participants acquired the savings habit during the programme cycle, and most maintained this afterwards. Participants with savings increased from just 12% at baseline to 96% one year later, falling back slightly to 84% after 48 months. Not all of this is attributable to the graduation programme, because more control group households also started saving, from just 9% at baseline to 37% after 48 months, possibly because local authorities were also encouraging people to join savings groups.

The average amount saved by participants with savings was more than twice the average amount saved by the control group (equivalent to more than €3 and €1.5 per month respectively) and remained more or less constant over time.

Figure 3. Savings

(a) Households with savings (%) **(b) Average amount saved (RwF)**



Education

Investment in education is important for the wellbeing of children and to break the cycle of poverty across generations. Increased access to education was therefore monitored as an indicator of improving wellbeing and long-term graduation potential.

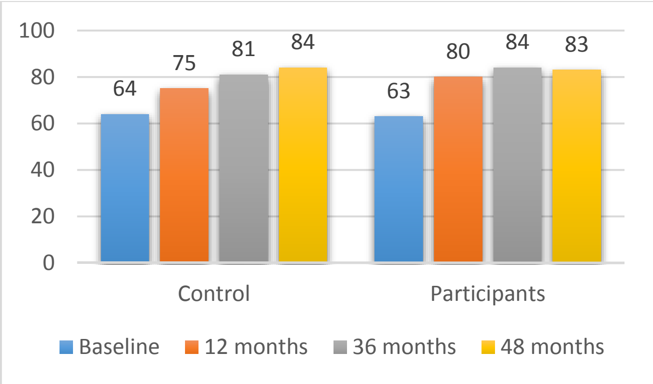
***Hypothesis**: More households will send their children to school*

Primary school enrolment improved in participant households, from 63% to 83% of children aged 7 to 16 between baseline and 48 months later. However this is not an attributable impact of the graduation programme, because the improvement was matched in control group households – from 64% to 84%. This shows the importance of tracking a control group: the positive trend is explained mainly by the government's policy of providing nine years of free basic education.

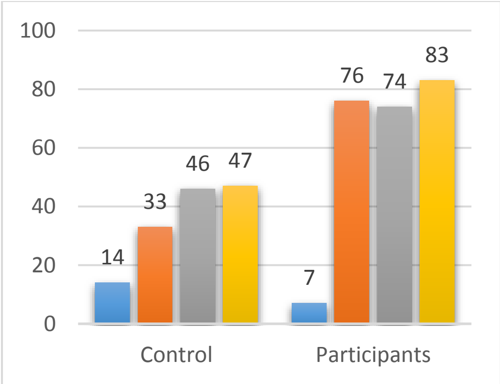
Non-fee costs also present challenges for poor parents, so affordability of school uniforms was added as another indicator of access to education. There was an immediate and sustained surge in the proportion of participants who could afford uniforms for their children, which can be explained by rising incomes. This indicator also improved among control group households, but not to the same extent, so this is a significant and positive attributable impact of the programme.

Figure 4. Education

(a) Primary school enrolment (%)



(b) Children with school uniforms (%)



Food security

Although nutrition status was not measured, several indicators of food security were collected, including meat and milk consumption, fruit and vegetable production (which was encouraged by the programme), and perceptions of malnutrition. Consuming meat and milk is an indicator of a rising standard of living, and eating vegetables and fruit increases dietary diversity, which is associated with improved nutrition status. Perceived malnutrition is a subjective measure.

__Hypothesis__: Participants will improve their food security

- **Consumption**: There was a significant increase in participant households eating meat and milk during the first 12 months, but this was only partially sustained over time as these numbers dropped after 36 months, while remaining significantly higher than baseline at 48 months.
- **Production**: Joining the programme resulted in an increased likelihood that the household would grow vegetables and fruit, but this also peaked after 36 months before falling back, raising questions about how sustainable this change is in the absence of programme support.
- **Malnutrition**: There was a trend decline in participants reporting that they were observing symptoms of malnutrition among their household members, from one in four to almost zero households, which is a sustained positive outcome. However, the same trend was recorded among control group households, so this cannot be attributed to the Graduation Programme.

Social inclusion

Poverty excludes people from communal events because they cannot pay the required contributions, and poor people often exclude themselves from social networks because they feel ashamed – e.g. if they don't have decent clothes to wear to a community meeting. The Graduation Programme aimed to promote social inclusion by empowering poor families financially and building their self-confidence.

__Hypothesis__: Participants will engage more in community activities

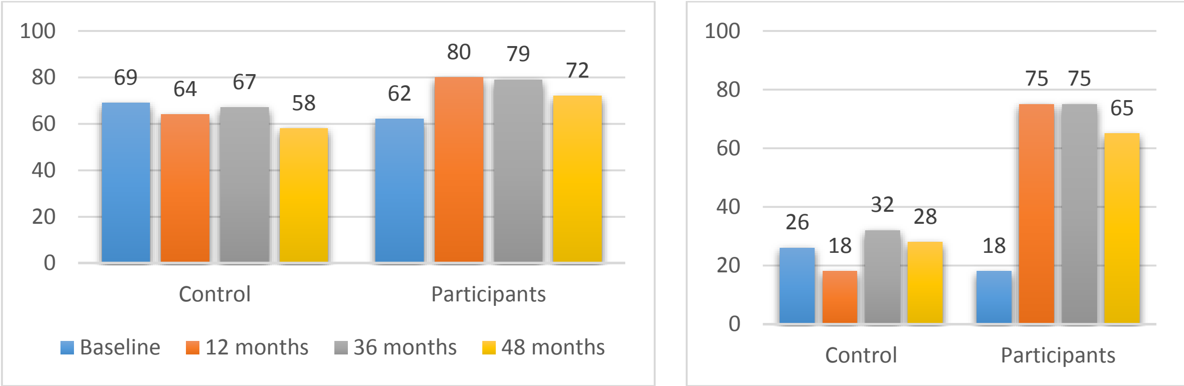
Several indicators of participation in community activities were monitored. There was a surge in membership of cooperatives among participating households, up from 18% to 75% within 12 months, which fell back slightly to 65% after 48 months. Belonging to a cooperative was identified as a potential enabler of graduation.

Women's attendance at women's meetings was relatively high initially, at 62%, but increased to 72% after 48 months, while the opposite trend was observed among control group households – a fall from 69% to 58%.

Qualitative research confirmed that the programme enhanced participants' self-respect and standing in their communities. "Whenever I passed by my neighbours' houses they abused me because I was poor, but they no longer insult me". Some participants were voted into local leadership positions.

Figure 5. Attendance at women's meetings and membership of cooperatives

(a) Attendance at women's meetings (%) **(b) Membership of cooperatives (%)**



A few incidents of negative social impacts were reported, including resentment by non-participants, intra-household conflict around control over cash transfers, and criticism of 'slow mover' participants for failing to use the resources they were given effectively.

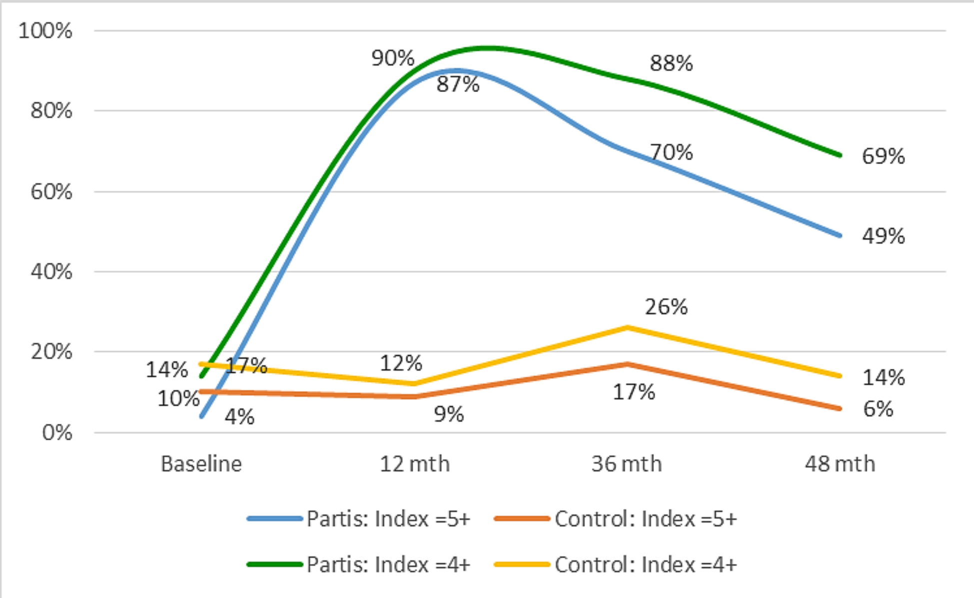
Graduation

Graduation rates are measured as the percentage of programme participants who achieve a defined threshold for an outcome indicator such as income or asset ownership. We report graduation rates over time based on the deprivation index and two asset indexes.

The deprivation index ranges from 0 (extreme deprivation) to 8 (food secure with good access to health care and medicines). Only 4% of participants achieved a score of 5 on this index at baseline, but 87% reached this threshold by 12 months, though this fell back to 49% after 48 months. 'Net graduation' rates (the difference in changes since baseline between participants and the control group) was 84 percentage points after 12 months and 49 percentage points after 48 months.

If a lower bar is set of only 4 for this index, greater numbers of participants graduated – 90%, 88% and 69% in each survey round, from a slightly higher baseline of 14% – and 'net graduation' was 81 and 58 percentage points after 12 months and 48 months respectively.

Figure 6. Graduation trajectories by deprivation index

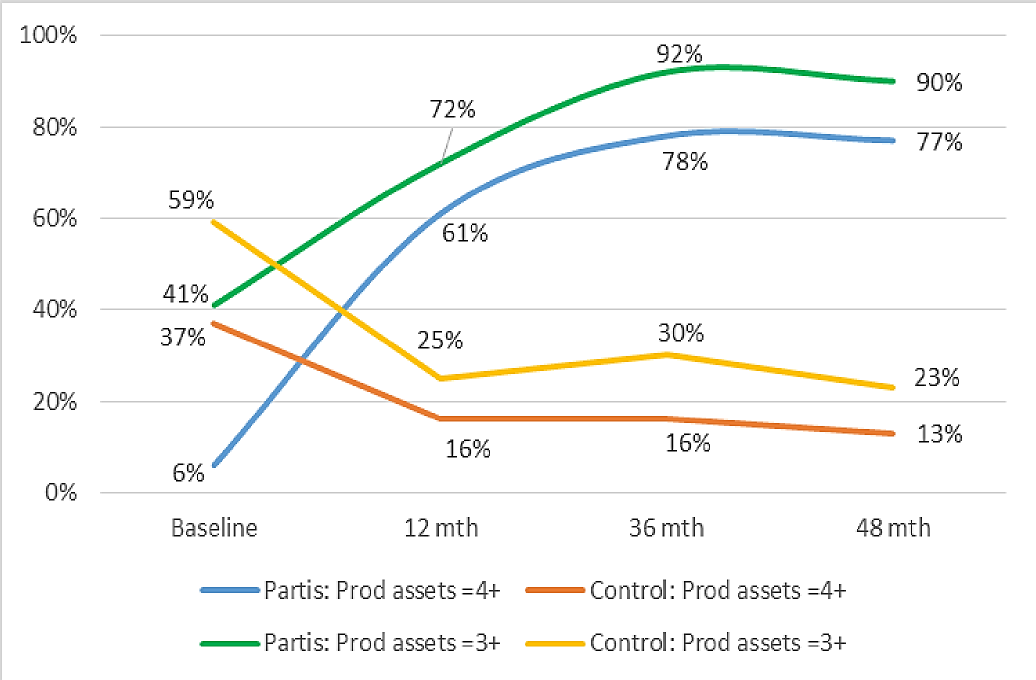


The productive asset index was based on ownership of 8 productive assets, including land, livestock, farm tools and bicycles. A threshold value for graduation using this index was set at 4 out of 8, because only 6% of participants owned 4 or more distinct productive assets at baseline. The graduation rate was 61% after 12 months and actually increased to 77% after 48 months. 'Net graduation' rates are higher, at 65 and 85 percentage points respectively, because control group households lost some of their productive assets over time. Setting a more lenient threshold of 3 productive assets results in higher graduation rates of 72% after 12 months and 90% after 48 months.

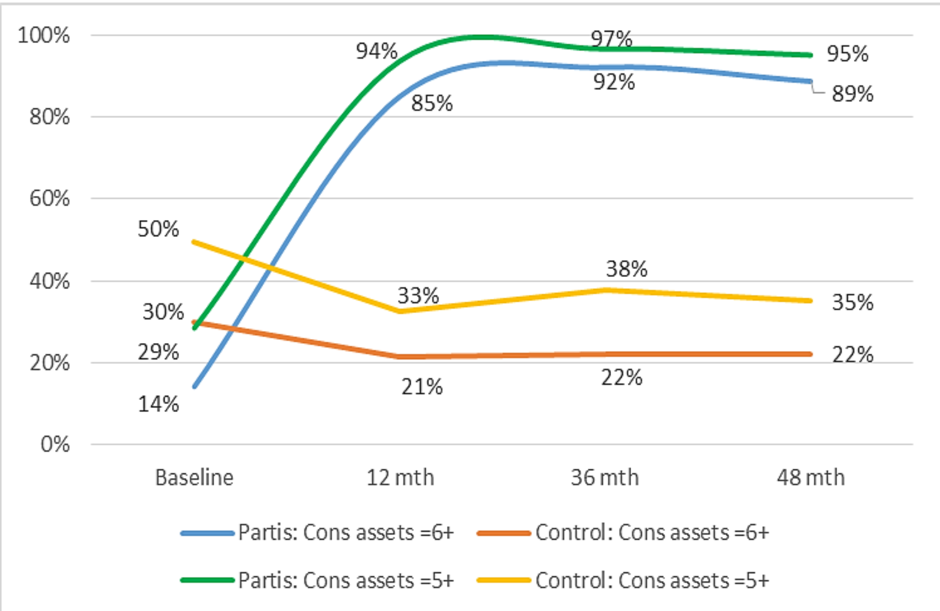
The consumption asset threshold was set at ownership of 5 out of 9 consumption assets, which included kitchen utensils, furniture and electronic goods. A similar graduation trajectory was observed as for both productive assets. Households owning at least 5 distinct consumption assets increased from 14% at baseline to 85% within 12 months, and this level was maintained after 48 months, which indicates sustained graduation.

Figure 7. Graduation trajectories by asset thresholds

(a) Productive assets



(b) Consumption assets



An econometric analysis and qualitative fieldwork identified several factors that are associated with graduation or being a 'fast mover'. Households that achieved sustained reductions in deprivation and increased in asset ownership tend to be larger and have more labour capacity. Literacy, home ownership, membership of cooperatives or savings groups and receiving non-programme support (e.g. remittances) all increase the likelihood of sustainable graduation. Gender was not a factor: male- and female-headed households are equally likely to graduate.

Most households did the best they could with the resources provided by the Graduation Programme, but some failed to make progress due to shocks beyond their control, which was identified as the main constraint to graduation. One 'slow mover' faced multiple shocks during two years on the programme: her house was destroyed, her neighbours accused her of being a thief, her goat and pigs died, her income-generating activity collapsed, and she lost her self-respect.

Discussion

The impact evaluation of Concern Worldwide's Graduation Programme in Rwanda found that most participants improved their situation on most indicators, both absolutely and relative to the control group. The biggest impacts were recorded in the first year, when cash transfers were used to acquire productive assets, invest in livelihoods, buy land, build houses and improve household food security.

Some of these gains started to decline after the cash transfers ended, probably because profits earned from income-generating activities were lower in value, but most indicators remained significantly above baseline levels four years after joining the programme.

Importantly, positive impacts were also found for non-material indicators such as social inclusion. Programme participants were more likely to join cooperatives and attend women's meetings and other community activities, and they feel more respected by their neighbours than before.

The success of the Graduation Programme in Rwanda is due to the full package of support being delivered – cash transfers, asset transfers, access to savings, livelihood training, coaching and mentoring – not to any single component.

The main risk that could cause reversals over time are unforeseen shocks that poor households cannot cope with, such as a severe illness. For this reason, participants should be linked up with other social protection and basic social services after they exit from graduation programmes. This is consistent with experience from other countries. Complementary interventions are needed to ensure that the impacts are sustained. The fact that most participants in Rwanda renewed their health insurance cards after the Graduation Programme ended is an important indicator of sustainability.

Methodologically, it is important to separate out programme impacts from programme effects – the fact that giving cash and assets to poor people automatically makes them better off. Real impacts can be found by monitoring both the sustainability of material improvements over time, and positive trajectories in non-material indicators such as women's empowerment and social cohesion.

Finally, instead of defining graduation by a single indicator at a single point in time, several indicators should be measured at several points in time – baseline, midline, endline and follow-up – to identify graduation pathways or trajectories and to assess whether the impacts are sustainable. Our analysis suggests that composite indexes of deprivation and asset ownership provide a robust picture of how households' lives and livelihoods are evolving, during and after their participation in the programme.

Photo credits from left to right: Crystal Wells/Concern Worldwide, March 2014; Robin Wyatt/Concern Worldwide, May 2015; Robin Wyatt/Concern Worldwide, May 2015.

Acknowledgements

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