

## CASH TRANSFERS PROGRAMME AND ECONOMIC EMPOWERMENT OF RURAL HOUSEHOLDS IN RWANDA: EMPIRICAL ASSESSMENT

MUTAMULIZA EULARIE, VISHWANATHA

**Abstract:** This paper sought to analyze the effect of cash transfers programme on rural household empowerment and to assess the factors that influence rural household to use cash transfers programmes. The research study was carried out in 3 sectors of Nyamagabe District located in Southern Province of Rwanda. Structured questionnaire was developed and key informant interviews were used in gathering data from 240 rural households. Both descriptive statistics analysis and Probit regression model were used to analyze the data. The findings show that 115 (47.9%) of sampled rural household have used cash transfers programmes and 125 (52.1%) have never used any form of cash transfers programmes. The results shows also that the cash transfers programmes has a positive effect on rural households' empowerment such as in better education of their children, access to health services and high living standards, better food nutrition, poverty reduction, increased income, investment in business and increase in savings. The findings from Probit regression show that age, education, size of land, distance, savings, household size and total annual assets, influenced rural households to use cash transfers programmes. Therefore, the Government of Rwanda should promote cash transfers programme in rural areas in order to reduce poverty.

**Keywords:** Cash transfers, Economic Empowerment, Probit Model, Rwanda.

**Introduction:** The cash transfer has played a key role in economic development and has been seen as an important way of breaking the vicious cycle of poverty in developing countries. The programmes of cash transfer provide a realistic platform for economic growth and contribute to change local labor market and social networks. They consisted in the provision of money subsidies to target household, provided the assured school attendance of their children and attended health related activities (Tatiana, 2005). According to DFID (2016) cash transfers is defined as all regular cash transfer payments made to individuals and households to tackle poverty and vulnerability such as child-support grants, wages from employment on public work schemes, seasonal payments and other transfers to poor households and particularly vulnerable categories of people. Cash transfers are important in reducing opportunity cost of utilizing social services such as health and education and have a direct effect on the welfare of poor household and provide livelihood support (Nancy and Eldah, 2013). Cash transfers have been effective and are seen as viable mechanism in both developmental and humanitarian context (Zoë, 2012). In Rwanda, the use of cash transfers programme is seen as an appropriate strategy to overcome the difficulties faced by the majority of people living in rural areas. The Government of Rwanda has implemented the system of cash transfer in order to reach the marginalized and vulnerable people living in insecure and remote rural areas.

The use of mobile money was considered as powerful system of cash transfers based particularly on the need for the low- income and rural population.

Mobile money services basically are related to transfer of funds as well as some basic bill- payment services such as electricity among others (Jonathan *et al.*, 2013). According to the National Bank of Rwanda, mobile money transactions have increased considerably from 2014. There are 6.5 million mobile money users across networks in Rwanda, more than half of the country's population (NBR, 2015 Report).

Mobile money allowed users to make deposits and transfer of funds and this help family members and friends to exchange financial assistance in the form of remittances especially in remote areas with limited or no access to formal financial institutions like banks. However, the rural poor have limited access to the formal financial system and the use of cash transfers programmes still a major challenge faced by rural household in Rwanda. The cash transfers might be too difficult for them and this has been an issue faced by Rwandan cash transfer operators as well. Despite the importance of cash transfers programmes, little is known about its effect on their economic empowerment of rural households.

**Methodology of the study:** Both qualitative and quantitative methods were used for this study. The study was carried out in three sectors of Nyamagabe District namely Gasaka, Kibirizi and Tare. A well structured questionnaire was used to obtain information from a total of 240 respondents living in the study areas. Descriptive statistics and Probit Model were used to analyze the data. Descriptive statistics such as percentage and frequency were used to assess the socio-economic characteristics of rural household respondents and Probit Regression model was used to analyze the factors that influence rural

households to participate in cash transfers programmes. Probit model is preferred as a binary and takes a value of 1 (one) if household participate in cash transfer programmes) and a value of 0 (if rural household do not participate in cash transfers programmes). Thus, Green and David (2009) have given the formula of Probit model as follows:

$$Y_i^* = \sum_{k=1}^k \beta_k X_{ik} + \varepsilon_i \text{ ...Equation (1)}$$

$$Y_i = 1 \text{ If } Y^* > 0 \text{ .....Equation (2)}$$

$$Y_i = 0 \text{ If } Y^* \leq 0 \text{ .....Equation (3)}$$

Where participation in cash transfers programmes estimates has a dichotomous realization on  $Y_i$

$\beta_k$  = Parameters of the  $k^{th}$  variable to be estimated.

$X_{ik}$  = Variable determining participation decision in cash transfers programmes

$\varepsilon_i$  = Disturbance term

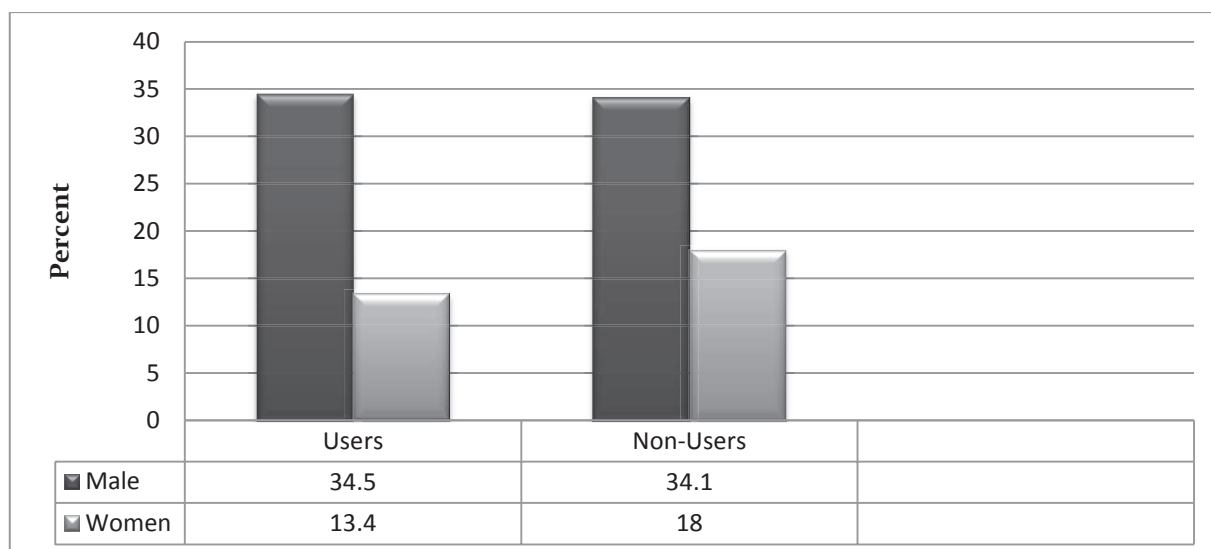
**Variables used in the Model : Dependent Variable:** "Participation in Cash Transfer programmes"

**Independent variables:** Gender of household head (Gender: Male = 1, females = 0); Age of household head (Age) in years; Education level of household head (Education); Farm Labor Participation (Farm\_Lab\_part); Marital status of Household Head (Marital\_stat), household land size (Size\_land); Distance (Distance from homestead to cash transfers office in km); Household off-farm income (Off\_farm\_incom), Household Savings (Savings); Household Size ( hh\_Size); Total annual Assets (Total\_Ann\_Assets).

$\mu_i$  = The error term

### Results and Discussion:

#### Descriptive Analysis of the socio-economic of the respondents in Nyamagabe District



**Fig. 1 shows Users and Non-Users of Cash Transfer programmes categorized by Gender**

Sources: *Author Survey results*

Fig.1 shows that in the study area, out of the total sample of 240 respondents, 115 (47.9 percent) have used cash transfers programme and the remaining 125 (52.1 percent) of respondents have not used any form of cash transfer or remittance. The results show that men have been the main users of cash transfers than women in the study areas. Out of 165 (68.7%) of male respondents, 83 (34.5 percent) reported that they have used cash transfers programme whereas 82 (34.2 percent) reported that they did not use any cash transfers programmes.

Fig. 1 also shows that out of 65 (31.3 percent) of women respondents, 32 (13.4 percent) were users of

cash transfers programme whereas 43(18 percent) were non-users of any cash transfers programme. In the study areas, men become more active to use the cash transfers programmes in order to improve their livelihoods.

#### Effect of Cash Transfers Programmes on Rural Household Empowerment in Huye District

The table I below represents the effect of cash transfers programmes on rural household's empowerment in the study areas. The respondents were asked whether they had ever used cash transfers programmes for enhancing their well-being. The table I shows that the cash transfers programmes have increased the life of standard for rural households.

**Table I: Effect of cash transfers programme on economic empowerment of rural Household**

Effect of Cash Transfers	Frequency (N=115)	Percentage (100%)
High living standards	21	18.3
Better Education of Children	28	24.3
Access Health Services	20	17.4
Better food security and nutrition	12	10.4
Poverty reduction	10	8.7
Increasing income	5	4.3
Investment in business	11	9.6
Increase in Savings	8	7

Sources: Author Survey results

Findings from table 1 show that the majority of rural household in Nyamagabe District have reported that the participation in cash transfers programmes have increased their standard of living. Therefore, 18.3 percent of respondents reported that after use of cash transfers, their living standards become very high, whereas 24.3 percent reported better education of their children, 17.4 percent reported to have access to health services, 10.4 percent reported better food security and nutrition for their children, 8.7 reported poverty reduction, 4.3 percent reported an increase in their income, 9.6 percent reported that they have invested in their businesses and 7 percent reported an increase in their savings.

**Estimation of the Factors Influencing Rural Household to use Cash Transfers Programme using Probit Model:**

**Table II: Results from Probit Model**

Explanatory Variables	Coefficients	Std Err.	Z	P-Value	Marginal Effect (dy/dx)
Gender	.3095193	.249171	1.24	0.214	.1228455
Age	.0243495	.0084153	2.89	0.004***	.0096641
Education	.3095779	.1637616	1.89	0.059*	.1228688
Farm_lab_part	.1619327	.1338734	1.21	0.226	.0642697
Marital_stat	-.0318708	.0907545	-0.35	0.725	-.0126492
Size_land	.0899147	.0229315	3.92	0.000 ***	.0356864
Off_Farm_Incom	.1126928	.2176148	0.52	0.605	.0447268
Distance	.9312244	.2987939	3.12	0.002***	.369595
Savings	.987123	.4027213	2.45	0.014**	.3673492
hh_size	.1108228	-.0602832	-1.84	0.066*	-.0439846
Total_Ann_assets	5.86e-07	3.23e-07	1.81	0.070*	2.33e-07
_cons	-3.781782	.8463125	-4.47	0.000 ***	
Number of obs = 240 LR chi2(11) = 159.61 Prob > chi2 = 0.0000 Pseudo R2 = 0.4803 Log likelihood = -86.343355 y = Predicted probability= .45956544					

Source: Author computation

Note: \*, \*\* and \*\*\* denote significance level at 10 percent, 5 percent, and 1 percent respectively.

Table 2 presents the results from Probit regression. The findings show that out of 11 variables, seven were statistically significant such age, education, size land, distance, savings, household size, and total annual assets. The table shows also the marginal effect on the significant variables on conditional probabilities.

**Age:** The results show that age of household is statistically significant at 1 percent and influence positively the participation in cash transfers programme. The marginal effect show that if the age of rural household increase by one year, the participation in cash transfers programme will increase by 0.96 percent. This means that the older rural household is more experienced by using cash transfers for improving their livelihood.

**Education:** Education of household is statistically significant at 10 percent and influences positively the participation in cash transfers programme. The marginal effect show that if the level education of rural household increase by one year, the probability to participate in cash transfers programmes will increase by 12.28 percent. Thus, rural household with more education are the likely to use cash transfer for poverty reduction.

**Size land:** Size of land is significant at 1 percent and influences positively the participation in cash transfers programmes. The marginal effect shows that if one unit of land size increased, the likelihood to participate in cash transfers programme will increase by 3.56 percent.

**Distance:** Distance coefficient was significant at 1 percent and influences the participation in cash transfer programmes. The marginal effect results show that if the distance from the home and the cash transfer programme office increases by 1 km, the probability to use cash transfer will also increase by 36.9 percent. However, rural households living far from cash transfer office are aware of the benefit for using cash transfers programme for increasing their livelihoods even if there is a high transport cost.

**Savings:** Savings coefficient is significant at 5 percent and influence positively the participation in cash transfers programmes. Thus, marginal effect results show that savings will increase the probability to participate in cash transfers programmes by 36.7 percent.

**Size of Household:** Household size coefficient is significant at 10 percent and influences negatively the participation in cash transfers programme. The marginal effect results show that if there is an increase of one family member, the probability to

participate in cash transfers programmes will decrease by 4.4 percent.

**Total annual Assets:** The coefficient of total annual assets is significant at 10 percent and influences positively the participation in cash transfers programmes. If the value of total asset increases by one unit, the probability to use cash transfers programmes will increase.

**Conclusion and Policy Implications:** Cash transfer provides a realistic platform for economic growth and contribute to change rural household livelihoods. In Rwanda, cash transfer programme, is one of the policies that have successfully been implemented to reduce poverty in rural areas. This paper assessed the effect of cash transfers on rural household empowerment and analyzed the factors that influence rural household to use cash transfers programmes. The results have shown that the use of cash transfer has a positive effect on rural households' empowerment especially in Nyamagabe District and in Rwanda in general. Furthermore, the marginal effects have been estimated on socio-economic factors that influence rural household to participate in cash transfers programme using Probit regression model. The study findings shows that age, education, size of land, distance, savings, household size and total annual assets were significant and influenced rural households to participate in cash transfers programmes.

The study recommends that the Government of Rwanda and other policy makers should support rural household to increase their knowledge through trainings and to improve their wellbeing. Government of Rwanda and other stakeholders should encourage the use of cash transfer programme in order to promote economic growth of the country and thus to reduce poverty.

## References:

1. DFID (2016). "The Role of Cash Transfers in Reducing Poverty and Vulnerability: Assessing the Sustainability of DFID's Results", Approach Paper. Retrieved from [www.nationalarchives.gov.uk/doc/open-government-licence/version/3](http://www.nationalarchives.gov.uk/doc/open-government-licence/version/3)
2. Green H. William & David A. Hensher (2009). "Modeling Ordered Choices", New York University
3. Jonathan Argent, James A. Hanson and Maria Paula Gomez (2013). "The Regulation of Mobile Money in Rwanda" Working Paper, International Growth Center, Kigali-Rwanda
4. Nancy Nafula and Eldah Onsomu (2013). "The Role of Cash Transfers in Poverty Reduction: Evidence from Kenya, KIPPRA" Discussion Paper No. 158, Social Sector Division Kenya Institute for Public Policy, Research and Analysis, Nairobi, Kenya.
5. National Bank of Rwanda, NBR (2015). Annual Report, 2015. Government printed; Kigali-Rwanda
6. Rachel Slater (2008). Cash Transfers, Social Protection and Poverty Reduction, Background Paper Commissioned for the UNRISD Flagship Report on Poverty. Overseas Development Institute, United Nations Research Institute for Social Development.
7. Tatiana Britto (2005). Recent trends in the development agenda of Latin America: An analysis of conditional cash transfers, Working paper, Ministry of Social Development, Brazil.
8. Zoë Scott (2012). "Topic Guide on Social Protection, Governance and Social Development Resource Centre (GSDRC)" International

---

Development Department, College Of Social Sciences, University Of Birmingham, UK.

\*\*\*

Mutamuliza Eularie

Research Scholar, Department of Economics, Mangalore University,  
Mangalagangothri, Karnataka State, India

Vishwanatha

Professor and Chairman of the Department of Economics, Mangalore University,  
Mangalagangothri, Karnataka State, India