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RURAL DEVELOPMENT NGOs AND SERVICE DELIVERY TO THE VERY POOR: AN EMPIRICAL ANALYSIS OF A TRAINING CENTER IN RURAL CAMEROON

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Abstract

The role of development nongovernmental organizations (DNGOs) in driving change, servicing the very poor and reducing poverty especially in rural areas in developing countries has been generally affirmed in the rural economics literature. This romantic image accounts to a large extent for the exponential numeric growth observed in the sector, and for burgeoning research on the subject by rural development economists. However, not enough empirical evidence exists on the extent to which such organizations actually service the very poor. This paper uses the example of a rural development NGO in the administrative unit of North West Cameroon to assess the extent to which the very poor actually benefit from DNGO services. A relative poverty approach is applied, allowing for the use of individual indicators and computed poverty indices to compare beneficiaries and non-beneficiaries of the DNGO service delivery based on cross sectional data. The results indicate that the DNGO serviced mainly poor communities. However, a disproportionately higher share of the benefits (60%) went to groups that were already well off before service delivery, than to the very poor. The paper then emphasizes the need for DNGOs to carry out poverty analysis prior to service delivery, as a prerequisite to effectively reach out to the very poor, particularly in rural areas in Cameroon.

Keywords: Development NGOs, service delivery, the very poor, rural Cameroon

1. INTRODUCTION

The importance of non-governmental organizations (NGOs) as key actors for poverty reduction and promoting sustainable development especially in rural communities have been repeatedly emphas-

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zed in the rural development and economic literature. This importance resonates from multiple perspectives. Market failure theorists, for instance, suggest that the poverty reduction relevance of NGOs emerges from the disinterest of businessmen to provide services to poorer segments of society who usually do not have the resources to afford such services that will provide benefits to the entrepreneur, as well as the growing inefficiency of governmental organisations to provide for the same type of needs. Under such circumstances, NGOs emerge to provide services that meet the demands of the poor (Hansmann, 1980). Supply-side theorists perceive NGOs as outlets for goodwill behaviour, dissemination of own ideas, and a means to promote conceived socially accepted values and norms of behavior (Rose-Ackermann, 1996; Steinberg, 2006). Social values as used here represent an enduring belief that a conceived end-state by the nonprofit managers is essentially different to a preferable, generally accepted or conventional agreed way of life (Rokeach, 1973). If individuals or communities have their conception of this end-state, they are motivated to create NGOs that practically allow them to direct their activities towards their preferred end state. This is more glaring, especially when states fail, are dysfunctional or do not function properly (Rose-Ackermann, 1996; Jegers, 2008; Balgah, 2014), or when state and other resources are very limited (Tchakoa and Nji, 1999). Integration theorists view NGOs as institutional responses to the shortcomings of specialized labour markets. NGOs then emerge to stimulate the compensation of shortcomings at the market place through self-propelled activities promoted by such organizations (Steinberg, 2006; Valentinov, 2009).

Irrespective of theoretical perspective, it is generally agreed that NGOs play crucial roles in reducing poverty especially in developing countries with regional, rural-urban or intra-household poverty disparities (Tchakoa and Nji, 1999; Fambom and Baye, 2002). In Cameroon, for instance, where disparities exist between different regions and between households in the same region (Baye, 2004), the poor have been identified as being mainly concentrated in rural areas (Epo and Baye, 2007). DNGOs can reduce these disparities by targeting the very poor in rural areas. Though data is difficult to find, DNGOs often direct services and therefore enormous funds towards the poor. The Presbyterian Rural Training Center Fonta, a DNGO of the Presbyterian Church in Cameroon for instance devoted almost FCFA 130 Million (US \$ 290,000) to poverty alleviation programs between 1994 and 1996 (Walla and Nji, 1997). While this seems plausible, not enough efforts have been made to assess how deep such NGO service delivery reaches out to the very poor. This article intends to empirically narrow this gap by examining a case study DNGO from the North West Region of Cameroon.

The paper will proceed as follows. It will briefly review the economic and development literature on targeting, before presenting the materials and methods implored in the study. The results and discussions will follow. Conclusions will then be made on the possible implications of the case study for service delivery by NGOs to the very poor in a developing country like Cameroon.

2. SERVICING THE VERY POOR: A SUCCINCT LITERATURE OVERVIEW

Directly servicing the very poor by governments and NGOs especially in developing countries has proven to be a vital and efficient approach to explicitly or implicitly reach country-specific poverty reduction targets or contribute to global development goals. Efficiency of service delivery is measured as the percentage of the group initially targeted compared to those who eventually benefit from a service. Targeting includes all efforts to direct access to a service to selected beneficiaries. For instance to fight poverty and reduce income inequality, certain services may target only the poor or the very poor (Sen, 1995; Hoddinott, 2001). The more precise the poor are targeted, the less costly it is to fight poverty (Sen, 1995). In this light, for an antipoverty policy to effectively achieve its goal, it must target the poor and at best, the very poor. In other words, limited resources must be targeted to those who need them most (Tchakoa and Nji, 1999). For Development NGOs to effectively contribute to poverty alleviation, they must target their limited resources to the very poor in rural areas (Baye, 2005). Traditionally, the economic literature has used poverty lines

(between 1 and 2 US \$/day) to define who is poor or not (Ravallion, 1992; Deaton, 1999; Hoddinott, 2001; Baye, 2005; Carter and Barrett, 2006). The very poor are logically categorized by how much and to what extent they depart in a negative sense from the poverty line. This approach – in spite of some criticisms (such as the actual value of the US \$ in different countries, the fact that such measurements are often cross sectional, requiring comprehensive Living Standards Measurement Surveys for validity) the poverty line has remained key in determining the very poor from the near poor or the non-poor. Indicator based approaches have nevertheless been developed as alternative options for disaggregating poverty groups in society. Such indicators that should be easily observable, verifiable and objectively describe and measure poverty would form the basis of an eventual individual or household poverty index. The higher the index, the better off the household is, and vice versa. Negative indices will generally indicate that households are very poor, compared to other sections of society with positive indices (UNDP, 2000; Henry *et al.*, 2003; Carter and Barrett, 2006; Zeller *et al.*, 2006). In this sense, service delivery to the very poor could therefore be proxied by the initial indices of beneficiary households, while impacts would be measured on the level of (positive or negative) change of such indices after service delivery, in relation to the situation before. Thus while the poverty lines provide absolute measures of poverty, indicator based approaches are much more important in identifying relative poverty differences within the same communities.

A number of approaches are applied in the development economics literature to improve targeting of services to specific groups. Generally speaking, there are two broad approaches, namely administrative and self targeting. Administrative targeting on the one hand refers to targeting approaches that encourage the active participation of desired group(s) while discouraging others. Self targeting on the other hand puts service delivery at the disposal of all. Service delivery beneficiaries-such as the very poor- self select themselves. Very often, services are packaged so that they are less appealing to undesired groups, for example the rich (Irungu and Zeller, 2002). For poverty alleviation programs, it seems primordial to identify and target services to the very poor, thereby increasing efficiency of service delivery, especially when resources are very limited (Sen, 1995; Skoufias *et al.*, 1999; Tchakoa and Nji, 1999; Holzmann *et al.*, 2003; Müller and Bibi, 2007). Very often, administrative targeting has been achieved on the basis of prior assessment of living standards, household consumption expenditures, poverty lines or the cost-of basic-needs (Ravallion, 1992; Deaton, 1999; Baye, 2005). Scarcity of household level data especially in developing countries has necessitated the emergence of targeting approaches based on indicators, whereby service delivery increasingly depends on independent indicators of poverty such as land size, educational level, housing, access to food, or on a calculated poverty index (Ravallion, 1992; Balgah and Buchenrieder, 2010). Although this approach is practically plausible, it is not completely void of program capture by the better-off, this likely to result in targeting inefficiency of government and NGO pro-poor programs (Phillips *et al.*, 2014).

There is considerable evidence of attempts to assess targeting levels by government and NGO programs in developing and developed countries. An example is the work of Dufhues and Buchenrieder (2005) on government microfinance schemes that aimed at reaching out to the poor in Vietnam. They report a satisfactory targeting efficiency, as half of the households who benefited from access to credit were predominantly poor. However, the poorest households were not fully targeted. Irungu and Zeller (2002) assess the targeting efficiency of child protection programs carried out by two Kenyan based DNGOs. They report that DNGO services benefitted more of the less poor compared to the very poor households. Households with lower social capital benefitted less than those with higher social capital. As targeting made use of community knowledge and processes, the authors challenge the importance of community level participation in enhancing better targeting (Kevane and Conning, 2002). Nevertheless, the program was lauded to have succeeded geographically, by targeting communities with higher poverty incidences in Kenya. The preceding examples show divergent results, justifying further empirical research.

A relative poverty assessment approach is used here to compare targeted and non-targeted households, as a means to measure the targeting efficiency of service delivery by a DNGO in the North West Region of Cameroon.

3. MATERIALS AND METHODS

3.1. Background and problem setting

Development NGOs play crucial roles in the development of the smallholder agriculture in Cameroon. One DNGO with a long development history in the country is the Presbyterian Rural Training Center (PRTC) Fonta. Established in 1968, the center delivers development-oriented services to “poor” rural communities under the umbrella of the Presbyterian Church in Cameroon (PCC). Its key mission consists to fight poverty in rural areas in the Northwest region of Cameroon where it concentrates its activities, through training, extension and adaptive, participatory research (Balgah and Buchenrieder, 2011).

The Northwest is one of the two predominantly English- speaking regions in Cameroon. It lies within latitude 5° 40′ and 7° 10′ North of the equator and longitude 9° 36′ and 11° 10′ east of the Greenwich meridian (Tah, 2001). The region counts about two million inhabitants who live predominantly (80 percent) in rural areas. Most of the region lies between 1,200- 1,700masl, with agricultural activities witnessed at elevations as high as 2,200masl. It receives an average annual precipitation of 2,000mm. The natural ecosystem is covered by wooded savanna hence the name: The Grasslands of Cameroon (Scheidegger, 1997). Patches of secondary and cultivated forests can be seen on the hills and valleys. Economic development of the region depends largely on agriculture which is predominantly subsistence and carried out on small holdings using hand tools like hoes and cutlasses (Balgah and Buchenrieder, 2011). Highly complex intercropping systems with up to five crops usually on wide ridges (1.5-2m) can be observed. Fish farming has been developed over the years as an integral part of the complex farming systems in the region. Only households with permanent or usufruct access and rights to specific resources (e.g. a permanent water supply) are privileged to farm fish. Most fish ponds are therefore located on gentle slopes either far away or close to the homesteads. Fish farming practices are either extensive or semi intensive, with intensive systems only occasionally practiced at government fish stations. A land based production system with earth ponds is the rule. Usually, unsophisticated technology is used and the fishes mostly depend on natural food with the chief external feed source being kitchen left over. Most ponds however contain compost heaps built on the basis of available vegetation. Family labor is often employed. The region counts some 1,365 fish farmers owning some 1700 ponds, with a mean pond size of 200m²/ farmer (Ayika, 2003).

PRTC as a rural development NGO operates as a service delivery organization under the umbrella of the Presbyterian Church in Cameroon. It aims at servicing 600 very poor people annually in rural areas, who often neither do not benefit from state services¹ nor can afford private development services². Integrated fish farming is one of the DNGO’s extension (service delivery) packages.

¹ In Cameroon, an extension worker coordinates a very broad zone often consisting of one to three villages. Most farmers therefore do not know the extension workers assigned to them. Although almost 20 percent of government extension workers in Cameroon work in the research (Northwest) region, the extensionist –farmer ratio is still about 1 to 1000. This ratio has only been slightly improved following the recruitment of 25.000 workers into the civil service undertaken in 2011. Fonjong, (2004) and Goufo (2008) for instance consider the shortage of extension workers a hindrance to agricultural and rural development in the country, justifying NGOs intervention in service delivery to the very poor.

² Training private candidates in Cameroon’s national veterinary, animal or agricultural colleges since the early1990s has generated an emerging market for private extension services, initially servicing the commercial plantations.

We use the integrated fish farming program to assess the ability of the case study NGO to service the very poor, as the program implicitly aims at improving the diets and income of the very poor in the research area. Additional motivation for choosing this program sector for analysis emanates from the key role that farmed fish plays for very poor, as a potential source of home produced animal protein (Missikire, 2001). Also, Cameroon has been a net importer of fish for a long time. Integrated fish farming therefore represents a sustainable option to enhance local production. Lastly, the fish farming program has been lauded for its ability to enhance poverty alleviation amongst the poorest of the poor in North West Cameroon (Walla and Nji, 1997; Balgah, 2004). This conjecture has never been verified. This is even more interesting as the case study organisation is one of the oldest national DNGOs in Cameroon.

3.2. Design and sampling procedures

The case study service delivery DNGO did not have baseline information on the beneficiaries of the fish farming project. Therefore, only cross sectional analysis after service delivery could be performed. To measure the service delivery efficiency to the very poor, we compare beneficiaries with a matched sample of non-beneficiary households in the same beneficiary communities. We purposively selected two divisions (Mezam and Boyo) in Northwest Cameroon, considering that they had the highest concentration of beneficiaries of the DNGO's service delivery. Mezam division also has better access to the Bamenda city market than Boyo division. This sampling approach reduces bias and improves beneficiary representativeness. Only beneficiary villages of DNGO services were sampled (Balgah and Buchenrieder, 2011). Seven villages from Mezam division (Kedjom keku, Fonta, Njimbee, Akossia, Asanje, Mforya and Nibe) and three from Boyo division (Mbesa, Akeh and Ajung) that satisfied the above mentioned criterion were retained for the survey. A structured questionnaire was applied to collect data on household demography, income structures as well as other additionally interesting variables. Data was collected at household level. The household included all who lived together in the same house. A household member was only legible if he or she spent nine out of twelve months a year with the household (Ellis, 1993). Exceptions to the rule were household heads and children of school going age, which impacted household welfare and expenditures, and who by obligation, could not live in the house for nine months a year as stipulated above.

152 households (including a census of 60 beneficiaries and a random sample of 92 non-beneficiary ones) provided primary data for comparison. The rural training center provided a list that was used to identify service delivery beneficiaries. Matched non-beneficiaries were randomly drawn from the same villages as the beneficiary households, using household lists constructed by community leaders in the research villages (Balgah and Buchenrieder, 2010). Efforts were made to maintain the ratio of 2:3 for beneficiaries and non-beneficiaries as suggested in the relative poverty assessment tool (Henry *et al.*, 2003; Zeller *et al.*, 2006). This accounts for only 92 households being sampled amongst non-beneficiaries.

Subsamples of 30 beneficiary and 30 non-beneficiary households were purposively identified to collect data on income and expenditures at household level, over a one year period. The basis for selecting these households was their capacity and readiness to provide information through recall, considering that households in the research area do not regularly record household financial transactions. Thus while the first survey round collected general information using a structured questionnaire, the second round focused on household income and expenditures analysis, only with the 60 households purposively selected during the first round. In both surveys, the household head and spouse participated together in the recall process (Balgah and Buchenrieder, 2010, 2011). Poverty indicators based on relative poverty assessment framework provided poverty variables used to compare beneficiaries and non-beneficiaries (Henry *et al.*, 2003). All households participated in a feedback workshop organized after the surveys. The data was analysed using the Statistical Package for the Social Sciences (SPSS). Results from the data analysis will be presented in the next section.

4. RESULTS

4.1. Socio-economic analysis of sampled households

The sample literacy rate (42.5 percent) fell far below half of the national average assessed by WRI (2006) at 94 percent. However, literacy rate was significantly different amongst household heads, as 72 percent of beneficiary household heads were literate as opposed to only 53 percent of the matched ones. The household size of beneficiary households (mean of 5.3) was significantly larger, compared to non-beneficiaries (4.6), suggesting a possible positive correlation between household size and the adoption of fish farming. Over 80 percent of all households (81.4 percent beneficiaries and 81.3 percent of the matched ones) reported food insecurity. At the same time both household types reported and average of almost three meals/day. Under these circumstances, food insecurity is likely to be sporadic, being more serious only at the beginning of the planting season between March and June, when food is usually scarce. Luxury food consumption was not only high, but also significantly different ($P < 0.001$) between beneficiaries and non-beneficiaries. Tea, eggs, fish and meat considered in the research area as luxury foods in ascending order of importance were cumulatively consumed on average trice/week by beneficiary households and twice by non-beneficiary ones. However, the consumption of home produced fish by beneficiaries was zero/week; cancelling any conjecture that higher consumption could have resulted from access to service delivery. Consumption of inferior meals – twice/week was similar for beneficiaries and non-beneficiaries.

Concerning habitation, about 90 percent of all sampled households lived in their own houses. House ownership was found to be very important in the research area. Most of the houses were permanent and generally in good condition. Owning a permanent house seems to be highly appreciated socially in the research region. This was confirmed through key informant interviews. Table 1 presents an analysis of assets by household type. With the exception of transport facilities, non-beneficiary households owned significantly less assets than beneficiaries. For instance, non-beneficiaries of DNGO service delivery own on average almost 2 hectares less land, compared to beneficiaries.

Per capita expenditure on dressing (clothing/foot wears) is a key indicator in relative poverty assessments. Empirical evidence from previous studies suggests that this variable often accounts for 5 to 10 percent of household expenditures, increasing with household incomes (see for instance Zeller *et al.*, 2006). Also as clothing/foot wears are not purchased very often, households are often likely to recall such expenditures, compared for instance to food items (Minten and Zeller, 2000). Per capita expenses on dressing for beneficiaries were significantly higher than for non-beneficiaries ($P < 0.001$), suggesting higher incomes for beneficiaries of DNGO service delivery than for non-beneficiaries.

Table 1: Comparative analysis of values of some selected household assets

	Household Type	Mean	Standard Dev.	P values
Value of livestock assets (FCFA)	Beneficiary	92760	102830	0.009
	Non-beneficiary	50890	89510	
Land size (ha)	Beneficiary	5.991	4.7	0.011
	Non-beneficiary	4.093	3.8	
Value of selected household equipment (FCFA)	Beneficiary	35210	70905	0.031
	Non-beneficiary	15125	42260	
Family size	Beneficiary	5.3	3.0	0.077
	Non-beneficiary	4.6	2.2	
Value of transport facilities (FCFA)	Beneficiary	14390	48740	0.516
	Non-beneficiary	20590	6200	

Per capita expenditure on clothing and footwear (FCFA)	Beneficiary	24880	11240	0.001
	Non-beneficiary	19115	10170	

Source: Field data

Notes:

- (1) All monetary values have been rounded up to the nearest FCFA
- (2) 1 US\$ = FCFA 450.

Household incomes analysis by household type is presented in Table 2. As conjectured above beneficiaries generally have higher incomes compared to non-beneficiaries, even if it is lower than national averages. For instance, gross revenues for service beneficiaries and non-beneficiaries per capita of FCFA 94170 (almost US\$ 210) and FCFA 95,650 (around US\$ 215) poorly compare with Cameroon's purchasing power parity (PPP) of FCFA 1209920 (almost US\$ 2670) (Globalis, 2009). The population growth rate in the research region of 4.5 percent is higher than the national average of 3.3 percent (World Bank, 2009). HIV/AIDS prevalence rate of 8.7 percent amongst sampled households surpasses the national mean of 5.1 percent (UNAIDS, 2004). Over 80 percent of all households in the sample depend mainly on agriculture for their livelihoods. These figures lead us to conclude that the DNGO at least succeeded in geographical targeting. However these results say little about the DNGO's ability to service the very poor. To investigate this, further analysis is necessary, key results of which will be presented in the following section.

Table 2: Income analysis for beneficiary and non-beneficiary households

Variable	Household description	Mean in FCFA	Standard Dev.	P values
Total farm cash income	Beneficiary	205220	146995	0.135
	Non-beneficiary	159235	77480	
Total non cash income	Beneficiary	174695	89760	0.850
	Non-beneficiary	170420	84630	
Total non farm income	Beneficiary	119200	122845	0.780
	Non-beneficiary	110340	121320	
Gross revenues	Beneficiary	499110	231190	0.306
	Non-beneficiary	439990	211365	
Gross margin	Beneficiary	445255	199330	0.300
	Non-beneficiary	392925	187900	

Source: Field data

Notes:

- (1) All monetary values have been rounded up to the nearest FCFA
- (2) Household gross margins were calculated by deducting the variable costs from the household gross revenues
- (3) 1 US\$ = FCFA 450.

4.2. Targeting efficiency of the DNGO service delivery to the very poor

The descriptive statistics presented above lead us to conclude that non-beneficiaries are generally poorer than beneficiaries. Nevertheless, it is not possible at this stage to attribute this difference to the impact of access to DNGO services. This is methodologically challenging in the absence of baseline information or panel data for both household types. To resolve this, we proceed in two steps. Firstly, we identify the strongest poverty indicators in order to combine them to calculate individual household poverty indices (Zeller *et al.*, 2006). Such indices will form the basis of relative poverty groupings that will be used to categorize the households. Secondly, we determine the actual contribution of service delivery -in this case the fish farm- to household wellbeing of

beneficiaries. A significant contribution can be attributed to access to service delivery. Both steps are discussed and their results presented in the following sections.

4.2.1. Calculating individual household poverty indices

The first step towards computing individualised household poverty indices included the identification of the strongest indicators for relative poverty; using linear correlation analysis. This was done by running ALL ordinal and ratio-scaled variables in the data against the per capita dressing expenditures, the bench mark variable in the relative poverty assessment approach. The correlation directions are used to select the variables for calculating the poverty indices. According to Henry *et al.* (2003), the preference for linear correlation emanates from the fact that “it does not require that the units used in the variables be same. The resulting values range from -1.00 to 1.00, and their sign and magnitude indicates how the two variables relate to each other”. Negative coefficients indicate inverse relationships while positive ones indicate positive relationships. Zero or values close to it suggest no relationships. All variables correlating in the right direction with the per capita expenditures on clothing/footwear at a significance level less than 10 percent were retained for calculating the individualised household poverty indices, based on Principal Component Analysis (Henry *et al.*, 2003; Balgah and Buchenrieder, 2010). Principal component analysis - PCA combines the different indicators to produce a poverty index which indicates the poverty status of the individual household in relation to other households in the sample. The resulting poverty index [P*] for each household represents its poverty status in comparison to other sampled households. PCA therefore extracts the “poverty component”, used to calculate specific household indices from a relative poverty perspective (Henry *et al.*, 2003; Zeller *et al.*, 2006; Balgah and Buchenrieder, 2010).

The new index of poverty is computed as:

$$P^* = w_1P_1 + w_2P_2 + w_3P_3 + \dots + w_nP_n \quad \dots\dots\dots (1)$$

Where the specified weights for each variable (wn) insure that the newly computed household index (P*) captures the variance in all selected variables (Pn).

The Eigen value sizes illustrate the extent to which the variances can be explained by the different components of the model. An Eigen value of minimum one is used to determine if the component can be considered as explaining any observed variances (Zeller *et al.*, 2006).

The Eigen values calculated for each component in the model are displayed in Table 3 below. Components 1 and 2 that cumulatively explain almost 54 percent of all the variance contain Eigen values greater than 1, with the poverty component (I) explaining over 35 percent of the total variances and the second component (household specific characteristics) explaining almost 19 percent.

Table 3: Explained common variance

Component	Eigen values			Extraction sums of squared loadings		
	Total per component	% explained variance	% cumulatively explained	Total	% explained variance	% cumulatively explained
I	2.12	35.34	35.34	2.120	35.34	35.34
II	1.12	18.59	53.93	1.115	18.59	53.93
III	0.92	15.38	69.31			
IV	0.81	13.56	82.87			
V	0.65	10.87	93.74			
VI	0.38	6.26	100.00			

Source: Field data

A histogram of the calculated poverty indices for all households is demonstrated in Figure 1. This figure illustrates a skewed relative poverty distribution amongst the sampled households. However, households with lower scores are relatively poorer than those whose scores are higher (Henry *et al.*, 2003; Balgah and Buchenrieder, 2010; 2011).

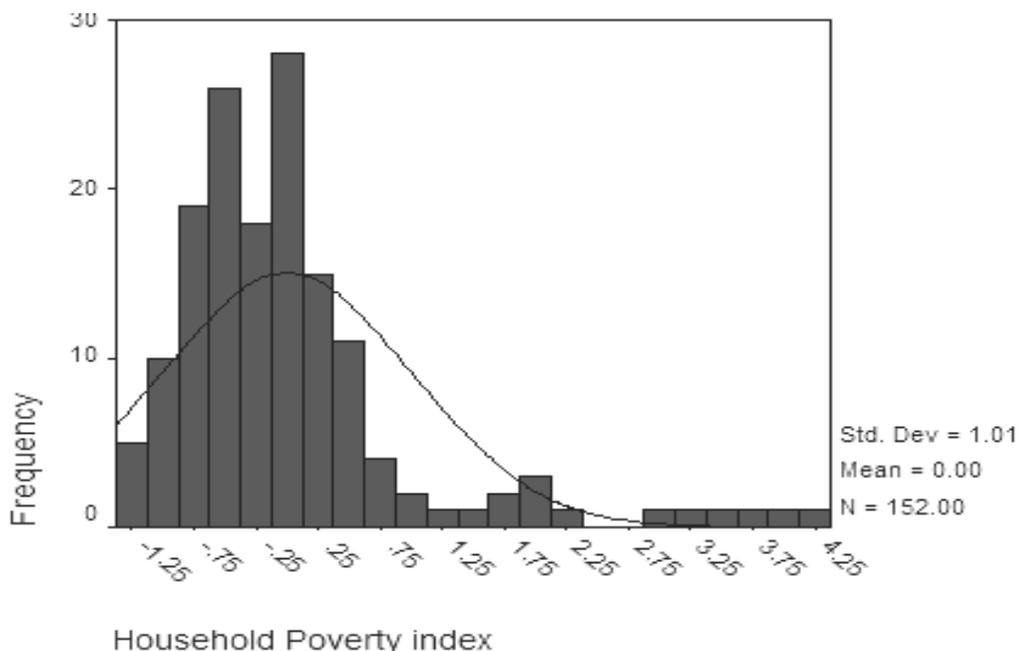


Figure 1: Distribution of household poverty indices for sampled households

Most households have negative indices, indicating that the project generally targeted poor households. However, it does not conclude about the ability of the DNGO service delivery to target the very poor households. To address this issue, we create relative poverty groups using the computed household indices. Since non-beneficiaries represent the population, we use the corresponding indices to create three terciles representing, the lowest, the middle and the upper terciles. The lowest tercile (33 percent of non-beneficiaries) constituted the “very poor” households. These households had indices only up to -0.59. The middle tercile designated as the “less poor” were demarcated with indices from -0.58 to -0.09. The last tercile designated as “well off” had indices higher than -0.09. Beneficiary households were then subjected to these grouping patterns to see how they will vary with respect to the general population. Using uniform poverty terciles of non-beneficiaries allows us to see how beneficiaries of DNGO service delivery vary with respect to the general population (Henry *et al.*, 2003; Zeller *et al.*, 2006). As demonstrated in Figure 2, almost 60 percent of beneficiaries belong to the “well off” tercile, compared to 33 percent for the general population. Around 22 percent belong to the “less poor” tercile and only 18 percent are part of the “very poor”. In other words, the service delivery of the rural training center reached a higher proportion of the well off than the very poor.

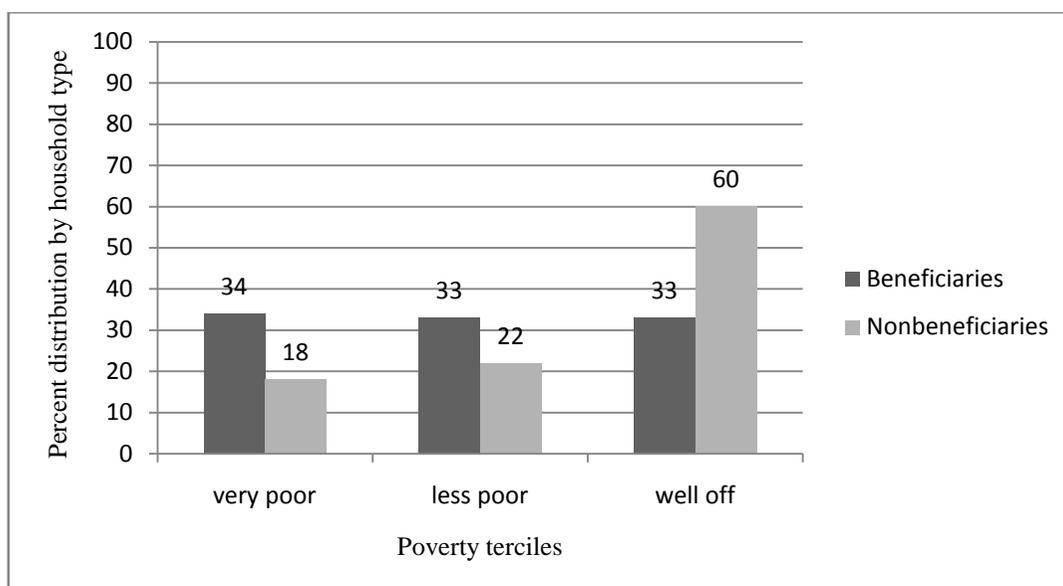


Figure 2: Poverty distribution by terciles and by household type

4.2.2. Contribution of service delivery to poverty reduction

We have to keep in mind that the project did not keep baseline information for beneficiaries. To verify if the difference with non-beneficiaries can be attributed to the DNGO service delivery, we compare the net contribution of the benefits of service delivery (fish farming enterprise) to the wellbeing of beneficiary households. If it is significant, then the observation in Figure 2 will be attributed to an impact of DNGO service delivery. The contrary scenario will suggest poor targeting of service delivery to the very poor by the DNGO. The mean income per annum (around US\$ 8) from fish farming was found to contribute less than one percent to the gross annual revenue of beneficiary households (almost US\$ 1110). Therefore, the fact that beneficiary households are generally well off than non-beneficiaries cannot be attributed to project intervention. In other words, more of the better-off households than the very poor ones had been targeted by the DNGO. This indicates a targeting inefficiency of the very poor by the organization. This conclusion is expected, as enormous household contributions in the form of land, labour, and local pond construction inputs (e.g. Cement and Sand) were required to benefit from NGO services (Balgah, 2004). Only households with sufficient resources could benefit. Such a strategy naturally discriminated against the very poor. Nevertheless, the low poverty indices (Figure 1) indicate a generally acceptable level of service delivery to the poor.

It is true that beneficiary contribution is crucial for the sustainability of development programs. However, for organizations targeting the very poor, it seems plausible to carry out poverty assessments before service delivery as a prerequisite to identify and effectively service the very poor. Service delivery to the very poor by DNGOs is therefore not automatic, as it is often influenced donor money and policies (Brummett *et al.*, 2008; Balgah, 2014)³. DNGOs who depend on donors for continual funding and sustainability will have to think carefully before attempting to change existing approaches. One option recently proposed is for such NGOs to engage in commercial activities (Balgah, 2014). The costs and benefits as well as long term consequences should however be properly assessed prior to policy change.

³ Many funding agencies are often contented with simple output indicators if they assume that their NGO partners are working in poor communities. Sometimes, they also are not willing to pay for poverty assessments. Nonprofit Commercialization can liberate executing development NGOs to effectively carry out such assessments, needed to service the very poor. For further discussions, see for instance Brummett *et al.* (2008) and Balgah (2014).

5. DISCUSSION AND CONCLUSIONS

Targeting services to the very poor has often been used to laud the importance of NGOs as key actors in reducing poverty especially in developing countries. Empirical evidence on this is scarce and at best mixed. This article empirically analyses the ability to service the very poor by a rural development institution in Northwest Cameroon. We have applied a relative poverty assessment approach to assess beneficiaries and non-beneficiaries in order to ascertain the ability of the case study DNGO, to target services to the very poor. We observe an acceptable geographic targeting of rural areas as most of the poverty indices of the households both for beneficiary and non-beneficiary households are negative. The results confirm the theoretical position that DNGOs can be generally efficient in servicing the poor, particularly in less developed countries where states and markets often fail to provide development services, particularly to those in rural communities. However, the very poor accounted for only about 40 percent of all who benefitted from the DNGO's service delivery. Beneficiaries were therefore found to be generally well off than non-beneficiaries, although this could not be attributed to the impact of service delivery. In other words, the better off have been targeted more than the very poor, suggesting an unsatisfactory servicing of the very poor by the DNGO. Because service delivery is essentially donor driven, commercialization has been proposed as an option to improve targeting efficiency of such organizations. Assessing poverty before service delivery can significantly increase the number of the very poor who benefit from DNGO services.

Without putting to jeopardy the role of DNGOs in servicing the poor, our results suggest the need for constant analysis rather than generalization currently conceived in the development literature. Nevertheless, it seems as if the role of DNGOs will continue to be important particularly in less developed countries where state and market institutions are likely to fail, or where states often have very limited resources to engage in broad based development initiatives.

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