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A Client-Community Assessment of the NGO Sector in Uganda*

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Abstract

Using original survey data on beneficiary assessment, we examine the performance of the NGO sector in Uganda. In general satisfaction with NGO intervention is high. We find evidence that NGOs endeavour to redress the balance between rich and poor communities but also that NGOs neglect isolated communities, possibly for cost reasons, and that the accessibility of NGOs to beneficiary communities is lower in poor communities. These factors significantly reduce client-community satisfaction with NGOs. Levels of NGO induced community participation in decision making also vary, with some evidence that participation has an effect on community satisfaction. Some NGO staff are perceived as unresponsive, less than good at what they do, and self-serving, and these perceptions also have a negative impact on community satisfaction.

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1. Introduction

Over the last two decades there has been a significant increase in the involvement of non-governmental organizations (NGOs) in the development process. This is a response, in part, to the growing frustration and impatience of donors with the perceived failure of governmental development assistance to generate growth and alleviate poverty. It may also reflect the apparent success of some non-governmental development initiatives, such as the Grameen Bank in Bangladesh, during the same period. (e.g. Glaeser, Sacerdote & Scheinkman 1996, Edwards & Hulme 1995, Farringhton, Bebbington, Wellard & Lewis 1993). Governments in both developed and developing countries are responding to this situation by fostering partnerships with the NGO sector. But such partnerships can only enhance development if the public interest is better served by funding NGOs rather than governments.

It is reasonable to assume that NGOs have greater autonomy than line ministries. This being the case, the motivations of NGOs and their staff need to be taken into account when designing the laws and systems that regulate the increasing number of NGOs and facilitate closer government-NGO cooperation. Our ideal and stylized view is of NGOs working to redress the welfare imbalance between rich and poor by focussing their efforts on the latter. But there are many accounts, some quite spectacular, supporting the opposite view. Consider, for example, the Movement for the Restoration of the Ten Commandments of God, a registered Ugandan NGO which is reported to have killed more than 700 of its, generally quite poor, members or followers in the late 1990's (e.g. Cauvin 2000, Wangah 2000). But both bad and good accounts relating to specific NGOs can be misleading. What policy makers need is an evaluation of the motivations and performance of a representative sample of their nations' NGOs.

Case studies and small-sample surveys of NGOs have provided many valuable insights into the role of particular factors in ensuring NGO efficiency, longevity, and success (e.g. Acharya,

Aryal, Karmacharya & Meyer 1999, Belshaw & Coyle 2001, Cannon 2000, Jagannathan 2003, Riddel, De Coninck, Muir, Robinson & White 1995). However, there have been very few evaluations of entire countries' NGO sectors and those that have been undertaken have tended to be descriptive and qualitative in nature (e.g. Gariyo 1995, Johnson & Johnson 1990, Pratt & Sahley 2003). As a consequence, we know very little about the motivations and performance of either NGOs in general or what we might refer to as a representative NGO.

The objective of this paper is to take a first step towards performing a nationally representative evaluation of NGO motivations. Our approach focuses on the levels of satisfaction that a large and nationally representative sample of NGOs generates within its client-communities. The evaluation presented here is of the Ugandan NGO sector and is based on data collected during 268 structured group interviews involving over 2500 individuals. The resulting sample of client-community evaluations is large enough to support an econometric analysis of Ugandan NGOs' motivations. Further, the data collected allows us to explore the relative importance of various aspects of NGO and NGO staff functioning as determinants of client-community satisfaction. In summary, the contribution of this paper is twofold: it presents an innovative methodology for involving client-communities in the evaluation of an entire nation's NGO sector, and it illustrates the value of that methodology through an application to the Ugandan NGO sector.

The methodology suffers from several major constraints and resultant shortcomings that are worthy of note. First, at least in its application to Uganda, the methodology could not support an assessment of cost minimization or technical efficiency. The data also do not allow a comparison, along these dimensions, of NGOs and other service providers, such as government facilities. This is because beneficiary assessments could not be matched with data on the quantities of actual physical services provided by NGOs. Such an analysis might be possible if one restricted the

research to specific services such as health centers and schools (e.g. Reinikka & Svensson 2003, Lindelow, Reinikka & Swensson 2003). However, the large majority of Ugandan NGOs are not involved in these activities. They focus instead on awareness raising, advocacy, and training, the output of which is extremely difficult if not impossible to quantify.

Some analysis of cost minimization would be possible if one were able to align beneficiary assessments with cost data. However, as documented by Barr, Fafchamps & Owens (2003) Ugandan NGOs do not typically charge for their services and beneficiaries are unaware of the full cost of the services rendered. Cost data collected directly from the NGOs themselves can also be problematic. Despite the fact that Ugandan NGOs tend to be run by well educated and apparently entrepreneurial individuals, few keep detailed financial records. In part, this may reflect the general absence or weakness of institutions that hold NGOs accountable. In aggregate the Ugandan NGO sector is primarily funded by international NGOs and bilateral donors that require feedback on how funds are used. However, these funds accrue to only a handful of NGOs. The majority rely on membership fees and small grants from larger domestic NGOs that have less onerous reporting requirements. Further, even when detailed financial records are kept, NGOs rarely document how much they spend in any particular location. Few Ugandan NGOs operate nationwide, many operate in only one, two, or three districts, and most operate in only one. However, even the latter of these three groups tends to operate in more than one beneficiary community. Finally, even if accurate and sufficiently detailed financial records were kept they could generate to misleading analytical results as costs would be subject to severe understatement because many Ugandan NGO inputs are non-monetary. They take the form of volunteer time and complimentary use of facilities and equipment. Imputing values for these inputs is theoretically possible, but in practice, is hindered by the generally sporadic and part-time nature of NGO operations (Barr, Fafchamps & Owens 2003).

Given these limitations, we restrict our attention to something we can assess, namely whether the beneficiaries of NGO interventions are satisfied, and we investigate whether NGOs geographically allocate their funding so as to redress existing welfare imbalances among communities. Taking a utilitarian welfare function as our benchmark, we find evidence that Ugandan NGOs are endeavouring to redress the balance between rich and poor communities. We also find that poorer beneficiary communities have restricted access to NGOs and that this significantly affects their satisfaction. The level of community involvement in NGO decision making also varies, with some evidence that this affects community satisfaction. Finally, some NGO staff and representatives are perceived as unresponsive, less than good at what they do, and self- rather than community-serving, and these perceptions have a negative impact on community satisfaction.

The paper has six sections. Section 2 describes our conceptual framework and empirical strategy. In Section 3 we describe the data collection approach and sampling methodology. In Section 4 we describe how the key variables in our dataset is generated during the client-community evaluation meetings and present descriptive statistics. The econometric analysis is presented in Section 5. We conclude in Section 6.

2. Conceptual framework

We wish to test whether NGOs are responsive to the needs of the communities they serve. To do this effectively, we construct a first best benchmark against which we can compare the performance of NGOs. Consider an ideal NGOs behaving like a benevolent social planner. The NGO has financial resources M for the provision of local public goods that it must allocate among various communities $j \in N$, where N is the total number of communities to be served. For the moment, assume that the communities are homogeneous so that all members have the same preferences and the same initial endowments of resources. We revisit this assumption

later. Communities have preferences among various public goods G_k indexed by $k \in K$ where, for simplicity, we have standardized public goods so that all prices equal 1. Preferences can be represented as utility function $U_j(G_1, ...G_K)$.[1] Suppose that a financial amount M_j is allocated by the NGO to public good projects in community j. If the NGO behaves optimally, it should allocate M_j among competing public goods

so as to maximize the following:

$$\max_{\{G_k\}} U_j(G_1, ...G_M) \text{ subject to } \sum_{k=1}^{K} G_k = M_j$$

The solution to this maximization has the form $V_j(M_j)$.

Now consider the allocation of resources among communities. If the NGO behaves like a utilitarian social planner, it should maximize aggregate welfare:

$$\max_{\{M_j\}} \sum_{j} V_j(M_j) \text{ subject to } \sum_{j=1}^{N} M_j = M$$

which leads to first order conditions of the form:

$$\frac{\partial V_i}{\partial M} = \lambda = \frac{\partial V_j}{\partial M} \text{ for all } i, j \in N$$

where λ is the Lagrance multiplier on the feasibility constraint $\sum_{j=1}^{N} M_j = M$. So, resources should be allocated across communities so as to equalize the marginal utility from an additional dollar of public good expenditure. If all communities have the same utility function, this means providing the same level of support to all communities.

If communities differ, however, resource allocation need not be equal. To illustrate this,

[1] To keep things manageable, we assume that the provision of public goods does not affect relative prices, so that local price specificity can be subsumed in community-specific preferences.

suppose that:

$$V_j(M_j) = V(Y_j + M_j)$$

where Y_j represents the initial resource endowment of community j. Further suppose that $V' > 0$ and $V'' \leq 0$. In this case, the optimal resource allocation is one that compensates for initial differences in endowments: less well endowed communities receive more. In this case, if we were to ask communities to evaluate the satisfaction provided by the NGO, we would expect it to decrease with Y_j: better off communities would receive less and consequently would have a lower judgement of the usefulness of the NGO.[2]

The above model can be generalized if we assume that the cost of providing public goods varies across communities. Such a situation could arise because of isolation: delivering a public good to a more isolated village is more costly because transportation required greater resources. To capture this idea in a simple way, let $\tau(d)$ be 1 minus the proportion of the funds that are lost due to transport costs. Put differently, if M_j is spent on community j, after deduction of transport costs only τM_j worth of local public goods is produced. We have $\frac{\partial \tau}{\partial d} < 0$: more isolated communities have a lower 'bang for the buck' effect. The NGO's optimization problem now is:

$$\max_{\{M_j\}} \sum_j V_j\left(\tau(d_j)M_j\right) \text{ subject to } \sum_{j=1}^{N} M_j = M$$

[2] This model can be generalized by letting public services and private consumption be imperfect substitutes. If public services are normal goods, the rich wish to consume more of them than the poor. Consequently, the marginal utility of public services is higher among the rich (e.g. Dasgupta & Kanbur 2001, Dasgupta & Kanbur 2003). Put differently, prosperous communities derive at the margin more satisfaction from public services than the poor. This effect works in the opposite direction from the community reallocation effect outlined above and would thus bias the predicted negative relationship between community prosperity and NGO satisfaction towards zero. So, if we do find evidence of a negative relationship, it can be interpreted as evidence of an effort to favor poor communities.

which yields first order conditions of the form:

$$\tau(d_i)\frac{\partial V_i}{\partial M} = \lambda = \tau(d_j)\frac{\partial V_j}{\partial M} \text{ for all } i, j \in N$$

To see how distance affects the allocation decision, assume that λ is constant and totally differentiate the above to see how M_j respond to changes in τ:

$$\begin{aligned} V'd\tau + \tau V''dM &= 0 \\ \frac{dM}{d\tau} &= -\frac{V'}{\tau V''} > 0 \text{ whenever } V'' < 0 \end{aligned}$$

From this we see that, if $V'' < 0$, the NGO allocates more resources to communities with a higher τ, i.e., to less isolated communities. The rationale is that isolated communities are too costly to serve and more good can be done with limited dollars by focussing on less isolated communities. Thus, we would expect more isolated communities to receive less and thus to be less satisfied with NGOs.

The above ideas form the basis of our empirical strategy. Let V_j be a measurement of community satisfaction about an NGO intervention and let Y_j and τ_j denote the prosperity of community j and its isolation. How these measurements are obtained is discussed in the next section. The model presented above suggests that more prosperous and isolated communities are less satisfied with the NGO intervention. To test the model, we might therefore estimate a regression of the form:

$$V_j = \alpha_0 + \alpha_1 Y_j + \alpha_2 \tau_j + u_j \tag{2.1}$$

and test whether $\alpha_1 < 0$ and $\alpha_2 < 0$.

The model can be further generalized to allow for heterogeneity among community members.

Presumably, not all individuals within a community have the same preferences regarding public goods $\{G_k\}$. If we seek to ascertain the community's satisfaction with the NGO by interviewing a sample of the population, responses may differ depending on how well the preferences of the people interviewed are matched by the services being provided by the NGO. We might expect different people-types to have varying levels of influence over the NGOs activities, for example. To allow for this possibility, we add a vector of Z_j variables that measure the main characteristics of the responding client-community groups to the regression equation (2.1). The estimated model then is:

$$V_j = \alpha_0 + \alpha_1 Y_j + \alpha_2 \tau_j + \alpha_3 Z_j + u_j \tag{2.2}$$

Equation (2.2) constitutes what, for reasons that will soon be apparent, we call the reduced form model.

The above setup assumes that community satisfaction depends only on outcomes, not on process. Yet many practitioners in the field insist that the way outcomes are reached affects the satisfaction people derive from NGO (and other) interventions. As a result, many NGOs advocate a participatory approach and seek to involve beneficiary communities in their activities. In addition to its direct effect on utility, beneficiary involvement may improve allocative efficiency by ensuring a better match between community needs and NGO interventions.

From the point of view of the NGO a participatory approach is more costly because NGO staff either have to maintain a permanent presence in the communities it is aiming to serve or must travel more frequently to the communities in order to meet with clients. For cost reasons, one would therefore expect NGOs to assume a less participatory approach in more isolated beneficiary communities. Participation also takes up beneficiaries' time. To the extent that more prosperous communities have a higher shadow cost of time, one would expect them to seek less participation in NGO activities – and consequently to be less impressed or satisfied with a

participatory approach.

It is immediately clear from the above reasoning that if participation by beneficiaries raises satisfaction – even without affecting outcomes – and if isolation and prosperity have effects on participation that are similar to their effect on outcomes, regressing satisfaction on isolation and prosperity cannot distinguish between their direct and outcome effects. For this reason, we reestimate the model with additional controls P_j for beneficiary participation:

$$V_j = \alpha_0 + \alpha_1 Y_j + \alpha_2 \tau_j + \alpha_3 Z_j + \alpha_4 P_j + u_j \tag{2.3}$$

If $\alpha_4 > 0$, this can be construed as evidence that participation raises satisfaction either directly or by improving the allocative efficiency of the NGO intervention. We also examine whether participation variables P_j vary significantly with isolation and prosperity, as suggested above. Indeed if participation has a distinct effect on satisfaction, it is important to identify which factors affect participation.

Formal beneficiary involvement in NGO interventions need not raise satisfaction if NGO staff are (or are perceived as) unresponsive, incompetent, or self-serving. The quality of the NGO intervention largely depends on the quality of its personnel. Staff quality may affect community satisfaction through better physical outcomes. It may also affect satisfaction directly if unresponsive and self-serving staff generate resentment among the beneficiary population. The precise reason why this may be the case is beyond the scope of this paper, but it is likely to have to do with issues of fairness, equity, and moral economy. To investigate whether such effects are present, we add measures of staff quality and motivation Q_j to the regression model (2.3). The full model is thus:

$$V_j = \alpha_0 + \alpha_1 Y_j + \alpha_2 \tau_j + \alpha_3 Z_j + \alpha_4 P_j + \alpha_5 Q_j + u_j \tag{2.4}$$

Staff quality Q_j variables are also regressed on other regressors to investigate whether they vary systematically with isolation and prosperity across communities. Just like isolation may raise the cost of participation, it may also lead NGOs to hire less competent or less motivated staff to work in isolated areas.

3. Data collection methodology

Having presented our conceptual framework and empirical strategy, we now describe how the client-community evaluation of a representative sample of Ugandan NGOs can be executed. In summary, our methodology involves randomly selecting a large sample of Ugandan NGOs, identifying one community served by each of these NGOs, and involving members of each of these communities in an evaluation of the NGO.

The selection of client-communities involves three steps. First, we determine the geographical coverage of the survey. The capital city, Kampala, is included given that many NGOs use Kampala as a base while operating throughout the country. In addition to Kampala, we focus on 14 districts randomly selected from a list of some 50 Ugandan districts. A small number of very remote districts are excluded from the selection on the basis of cost and because of the small number of NGOs registered therein. Districts in a state of unrest are also excluded in order to ensure the safety of enumerators and because the NGOs operating in these districts would not be functioning normally. The geographical sampling frame of the 15 districts (Kampala plus 14 rural districts) is listed in the first column of Table 1.

In the second step, we use the registers of NGOs held in the Office of the Prime Minister and the district headquarters to construct a list of NGOs whose headquarters are located in each of the 15 selected districts.[3] From this list we draw a random sample of 300 NGOs –

[3]It is worth noting that only a small proportion of the NGOs appearing on these registers could be found during the listing exercise. In Kampala, the 451 NGOs that ultimately appeared on our list represent only 25

100 in Kampala and a self-weighting sample of 200 across the other 14 districts. The sampling proportions are 0.22 for Kampala and 0.58 for the other 14 districts, reflecting the large number of NGOs registered in Kampala. Undersampling in Kampala is justified by the fact that, as shown by Barr, Fafchamps & Owens (2003), many Kampala NGOs are not actually in operation while most of those registered in the district are.[4] The composition of the eventual NGO sample by district is presented in Table 1.

The third step is the selection of the client-communities. Each sampled NGO is asked to list up to 6 parishes in which it is active. One of these 6 parishes is then selected at random for a client-community evaluation.[5] In total, 268 client-community evaluations were undertaken. The resulting distribution of client-community evaluations across the 15 districts is presented in the last column of Table 1. When comparing these numbers with the corresponding numbers of NGOs it is important to bear in mind that some of the Kampala-based NGOs are evaluated in the rural districts. 66 evaluation meetings are conducted in Kampala and 202 across the other 14 districts.

Once we have selected the parishes to be involved in the client-community evaluation, the

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percent of those registered. In the other districts the corresponding proportion was 41 percent. In some cases we think these figures reflect the accuracy of the information on the location of the NGO headquarters contained in the registers. However, we also suspect that there are many 'ghosts', i.e., NGOs that have ceased to exist, while remaining in the registers. There is no formal procedure in place for removing NGOs from the register when they are no longer operating or fail to re-register at the prescribed time.

[4] When sampled NGOs could not be contacted they were usually replaced by another randomly selected NGO from the list relating to the corresponding district. 82 such replacements were made. In 12 cases, enumerators in remote areas were forced by circumstance to make replacements by whatever means they could. Ultimately 295 NGOs were identified and contacted.

[5] A slightly more involved procedure is followed for Kampala-based NGOs because a considerable proportion of them operate in other districts and many are based in Kampala but do not serve communities there. Consequently, for Kampala-based NGOs, we first ascertain in which districts they operate. To find out whether the NGO operates in Kampala, it is asked to list the Kampala parishes – if any – within which they were active. This establishes whether the NGO operates in Kampala. Outside Kampala, enumerators in each of the 14 other districts draw a list all Kampala-based NGOs with a branch office in their district. One district is then randomly selected from all the districts in which the NGO operates.

Within districts, the selection of a parish to be the client-community for the evaluation exercise proceeds in much the same way as before. If the selected district of operation of the NGO is Kampala, one parish is randomly selected among those listed by the NGO. If the selected district is one of the other 14 districts included in the study, the NGO's branch office in that district is asked to list up to 6 parishes in which the NGO is active. One of these parishes is then randomly selected.

enumerators contact the parish chairman and make arrangements for a meeting. The chairman is asked to invite between six and ten community members to the meeting. The enumerators requests that men and women and people of all ages be represented but otherwise leaves the selection up to the chairman. The NGOs are not involved in the selection of the client-communities or any other aspect of the evaluation process. Staff members from the NGOs under evaluation are nevertheless present in some of the meetings. Since this may bias responses of the client-community, we take this into account in our analysis.

To ensure that the data provided by each of the client-communities involved in the evaluation is comparable, structured group interviews are conducted in each of the client-communities following a well-defined interview protocol. The protocol aims at gathering information that quantifies client-communities' satisfaction with the performance of the NGO they have been selected to evaluate, how accessible the NGO is to the community, how participatory the NGOs' decision making practices are, and the client-communities' perceptions about the quality and motivations of the NGOs' staff and representatives. Each of these measures is elicited through an activity designed to be entertaining and easily understandable. Information is also collected on the community such as various indicators of community prosperity and isolation and detailed characteristics of the respondents present at the interview.

4. Descriptive analysis

We begin by describing our measures of NGO satisfaction. We then discuss community characteristics. The main question of interest for this paper is the so-called 'bean question', a hypothetical question meant to capture the client-community's satisfaction with the NGO they have been asked to evaluate. The question is presented as follows. We ask the groups to imagine that they find out that the NGO is going to stop doing its work in Uganda, that a large sum

of money is needed to make it possible for the NGO to carry on doing its work, and that their parish has been asked to help find this money. Then, they are asked to imagine that the government gives their parish a grant. The client-community representatives present at the evaluation meeting are the committee that has to decide what to do with the grant. The government has said that they can share all, some, or none of the grant equally among the households in the parish and can contribute all, some, or none of the grant to the NGO to help keep it working. The representatives are given a pile of beans representing the grant and asked to separate it into two piles, one representing the money that they wish to be shared among the households and one representing the money that they wish to help keep the NGO working. The proportion of the beans allocated to the NGOs is taken as an indicator of their willingness to pay, conditional on the availability of funds, for the continuance of the NGOs' activities. This is taken as our measure of their satisfaction with the services of the NGO they have been asked to evaluate.

A histogram showing answers to the bean question appears in Figure 1. Nearly half of the client-communities say they are willing to give at least 60 percent of the beans to the NGO, suggesting a considerable level of satisfaction with NGO performance. Around 35 percent of client-communities are willing to give all the beans. Only three percent of the client-communities would give no bean at all to the NGO. The mean proportion of beans allocated to the NGO is just over 60 percent (see Table 2).

In order to explore in more detail the determinants of client-community satisfaction, information is also collected on aspects of NGO functioning and perceived NGO staff and representative's quality and motivations. There are only certain aspects of NGO staff and representative functioning that we can reasonably expect client-communities to evaluate. We cannot, for example, expect them to be able to make informed judgements about the accountability or efficient use of resources by the NGO. We can, however, expect them to have opinions about how accessible the

NGO is, the extent to which the NGO involves community members in planning and decision making, and the apparent skill levels and motivations of NGO staff and representatives.

To ascertain NGO accessibility, each respondent group is asked whether the NGO has a permanent presence within the parish,[6] whether representatives of the NGO visit the parish, and whether community members visit the NGO. Table 2 indicates that 62 percent of the evaluated NGO have an office or another type of structure within the parish. A further 30 percent of the evaluated NGOs visit the parish regularly. And 22 percent of the evaluated NGOs are visited by community members. The reader may be surprised to find that such a large number of NGO have a permanent presence in the parishes of their evaluation client-communities. This finding, however, is largely due to the fact that client-communities are selected precisely where NGOs are active.

Questions are also asked about community participation in NGO decision-making. In particular, each client-community is asked whether the NGO involves the community in decisions about what activities are to be undertaken and whether the NGO asks the community for feedback. Table 2 presents the answers to these questions. Some 55 percent of the client-communities state that they are involved in defining the activities undertaken by the target NGO and 57 percent are asked for feedback. There is a high degree of positive correlation between the two answers.

In order to capture perceptions about the motivation and quality of NGO' staff and representatives, community respondents are presented with several statements and asked to what extent they agree with them. Here we focus on responses to three statements: 'The NGO is always quick to respond when inhabitants of this parish or the parish as a whole ask for help'; 'The NGO representatives are good at what they do'; and 'The NGO exists to serve the purposes of its own staff rather than to help us'. Figure 2 presents the frequency distributions of community

[6] Typically an office or, in some cases, a clinic.

responses. The first two statements reflect a positive opinion of the NGO, the last is negative. Consequently, to facilitate interpretation we reverse the horizontal axis of the graphs for the last question so that the right of the graphs correspond to a positive opinion. In general the graphs suggest that the client-communities think highly of the NGOs' staff and representatives. Nearly 40 percent strongly agree that 'the NGO is always quick to respond when the inhabitants of this parish or the parish as a whole ask for help'. Over 50 percent strongly agree that 'the NGO representatives are good at what they do'. And over 60 percent strongly disagree with the statement that 'the NGO exists to serve the purposes of its own staff rather than to help the community'. This notwithstanding, some client-community groups reveal negative perceptions. Nearly 10 percent strongly disagree with the statement about responsiveness to the needs of the community and a similar proportion strongly agree that NGO staff are self-serving.

Next we present information on community characteristics. A first set of variables focuses on community isolation. We ask client-community respondent groups to estimate how far in kilometers their community is from three key institutions: the district headquarter, the local council (LC3) office, and the nearest hospital. We also ask how far they are from the nearest tarred road. The degree of isolation of the sampled communities varies considerably across the sample (see Table 3). The distance to district headquarters ranges from under half a kilometer to 64 kilometers. The average is 10 kilometers with, as expected, sampled communities in Kampala district being nearer. The distance to the nearest hospital varies between a few hundred meters and over 100 kilometers, with an average of 8 kilometers – less in Kampala. Local council (level 3) offices are between zero and 23 kilometers away, with a mean distance of 3 kilometers. Finally, the nearest tarred road is between zero and 400 kilometers away, the average distance being 10 kilometers.

Information is also collected on indicators of prosperity within the Community (see Table

3). We ask respondent groups to assess the prevalence of particular housing characteristics, ownership of certain consumer durables, paid employment, and land ownership within their communities. For each characteristic, they do this by dividing a pile of beans representing

all the households in the community into those with and those without the characteristic. There is considerable variation across the sample with respect to indicators of prosperity. On average, client-community groups estimate that 75 percent of the households in their communities have an iron roof, 48 percent have a cement floor in their home, 22 percent own a TV, 73 percent own a radio, 37 percent own a bicycle, and 8 percent own a car. On average, 18 percent of client-community households have at least one member in paid employment, and 60 percent have no access to land upon which to grow food. All of these proportions vary widely across the sample, typically between zero and 100 percent of households depending on the question. As expected, the incidence of iron roofs, cement floors, and landlessness is far greater in Kampala.

Because the composition of the respondent group may affect their answers, information is also collected on the characteristics of these respondents. To this effect, after the interview is completed the sex of each respondent is recorded and each respondent is asked about his or her age, education, religion, and whether he/she is a member, staff, or beneficiary of the evaluated NGO. Table 4 presents the characteristics of the 2566 individuals who participated in the evaluations and shows how they are distributed across the client-communities. The average age of the participants is 38 years, although across groups the average age varies between 18 and 65. Women represent 43 percent of the participants in the evaluation. Some groups are entirely male and others entirely female, although the majority of groups are mixed. Christians make up the large majority of participants with 36 percent being protestant, 32 percent Catholic, and 7 percent Pentecostal. Muslims make up 20 percent of the participants. Levels of education among the participants are high by Ugandan standards, with considerable variation in educational

attainment across the groups. Over the entire population of respondents, 21 percent have some tertiary education; 41 percent have primary and some secondary education; 32 percent have primary education only; and 6 percent have no education at all. Just over 2 percent of participants are staff members of the NGOs they are asked to evaluate. At least one NGO staff member is present in 14 percent of the evaluation meetings. Some 39 percent of the participants are linked to the NGOs they are asked to evaluate, either as members or beneficiaries. At least one such person is present in 75 percent of the evaluation meetings. These figures are not surprising since, as Barr, Fafchamps & Owens (2004) have shown, NGO membership – and the payment of a small membership fee – often are conditions for receiving NGO benefits. Given that, by design, client-communities are served by an NGO, it is normal that many respondents are NGO members.

5. Econometric analysis

5.1. Reduced form

We now turn to the econometric analysis. We begin with regression model (2.2). Our objective here is to assess whether NGOs allocate funds geographically so as to reduce geographical imbalances. If they do so, we expect more prosperous communities to be less satisfied with NGOs. We also recognize that isolation raises the cost of service delivery – and thus reduces the 'bang-for-the-buck' generated by public service provision. Consequently, we expect more isolated communities to be less satisfied with NGOs.

Our dependent variable is the 'bean variable' that captures, in a stylized manner, the community's satisfaction or willingness to pay for the NGO's service in a way that hopefully controls for possible cash constraints. On the right hand side, we include measures of community isolation, consumer durables, and endowments. Given the relatively small number of observations,

we choose to capture isolation with a composite isolation index that is a weighted sum of our four distance variables. The weights are determined using principal factor analysis.[7]

We capture the prosperity level and initial endowments of the client communities with three variables. The first, which relates to durable asset holdings, is a weighted sum of the proportion of households with iron roofs, cement floors, TVs, radios, bicycles, and cars as a measure of durable assets. Weights are defined using principal factor analysis.[8] The proportion of households with at least one member in paid employment and the proportion of landless are entered as separate independent variables. We expect communities with fewer landless to be more prosperous – and hence less satisfied with NGO services. In Uganda, paid employment is essentially found at either end of the income spectrum: salaried employees in civil services or the private sector tend to earn more than the average, but agricultural laborers earn less. We expect the first group to dominate in cities and the second to dominate in rural areas. We therefore anticipate that rural communities with lots of households in paid employment will be poorer and hence more satisfied with NGOs if the latter target poor communities, while urban communities with lots of households in paid employment will be richer and hence less satisfied with NGOs if the latter target poor communities.

By providing the client-community groups with hypothetical grants rather than exploring their willingness to pay out of their own pocket, we hope to avoid the problem of variable ability to pay. However, if financial markets are imperfect and the client-community groups are variably credit constrained, this could affect their bean allocation decision. Further, omitted variable

[7] The isolation variable is defined as follows: isolation = (0.0138618 * distance to district headquarters) + (0.0273842 * distance to nearest hospital) + (0.0499485 * distance to local council (LC3) offices) + (0.0074877 * distance to nearest tarred road) – 0.5647407

[8] The durables variable is defined as follows: durables = (0.008526 * proportion of households with iron roofs) + (0.0106439 * proportion of households with cement floors) + (0.0049975 * proportion of households televisions) + (0.0081021 * proportion of households with radios) – (0.0004181 * proportion of households with bicycles) + (0.0184374 * proportion of households with cars) – 1.996624. One asset, bicycles, enters the weighting function with a negative sign. This is consistent with the idea that bicycles are a significantly cheaper form of transport than cars. Thus, holding a bicycle may be an indication of poverty, especially within the context of our sample of relatively well off communities.

bias would arise if, as is likely, the prosperity indicator is correlated with credit constraints. To minimize this bias, we include a variable to proxy for the extent to which the client-community is credit constrained. This variable is constructed as follows. During the structured group interviews, client-community respondents were asked to list their community's priority needs. We then asked whether their community needed each of a list of thirteen services, one of which was credit. Our credit constraint proxy takes the value 2 if the representatives mentioned credit in their answer to the first question, 1 if they answered 'yes' when asked explicitly about their need for credit, and 0 otherwise.

Finally, a number of characteristics of interview respondents are included to control for possible bias and heterogeneity effects. For obvious reasons, we expect NGO members and staff to be more satisfied with the NGO. To the extent that bargaining power within the community affects the choice of public service provided by the NGO, we expect that the needs of women are less well served by the NGO and therefore we expect female respondents to be less satisfied with the NGO. We also include a Kampala dummy to control for possible differences in preferences between urban and rural populations.

Regression results are presented in Table 5. The estimator is a two-limit tobit, with upper and lower limits on the proportions of beans allocated to the NGOs at zero (8 observations in the full sample) and one (62 observations in the full sample). Three regressions are presented. The first regression includes the full sample of client-communities. The second is for the rural client-communities only and the third is for the Kampala-based communities. While the regressions for the full sample and the rural sub-sample are significant, the model (2.2) appears to have no power explaining Kampala communities' satisfaction with NGOs. This may be due to the fact that isolation is less important in the capital city: compared to rural areas, all parts of the city can be accessed with relative ease. Moreover, residents in one part of the city can probably

access public services located elsewhere in the city, so that local prosperity is not as important in determining NGO location. This being the case, we focus our discussion to the first two regressions.

In accordance with the utilitarian model, community satisfaction declines with isolation across both the full sample and the sub-sample of rural communities. The finding that community satisfaction declines with prosperity (as measured by our durable goods index) also accords with the model and is consistent with the idea that NGOs endeavour to redress the balance between rich and poor communities. The coefficient estimates on wage employment also accords with model predictions – positive in rural areas and negative (though not significant) in Kampala. The landlessness variable has the wrong sign but is not significant. The credit constraint proxy variable is not significant either, suggesting either that credit constraints are unimportant or that the grant component of the bean question successfully deals with this problem.

In general, respondent characteristics do not affect reported satisfaction with NGO intervention. This is a reassuring indication that stated satisfaction with NGOs is not subject to strong respondent bias. However, as anticipated, we find that women express less satisfaction with NGOs. This suggests that the needs of women are less well served by Ugandan NGOs. We also find that younger respondents are less satisfied with NGO intervention, an effect that is mildly significant at the national level but is apparently driven by Kampala responses where the magnitude of the coefficient is much larger.

5.2. Beneficiary participation and NGO staff quality

As discussed in Section 2, the above analysis abstracts from beneficiary participation and staff motivation and quality effects. To these we now turn using the various measures of accessibility, participation and staff motivation and quality presented in Table 2. Before estimating equation

(2.4) we investigate whether isolation and prosperity affects beneficiary participation (see Table 6) and perceived staff motivation and quality (see Table 7).

First consider beneficiary participation as indicated by NGO accessibility and community involvement in NGO decision-making. The accessibility of the NGO for community members can be captured by an index varying from 0 to 3. Value 3 is assigned to the index if the NGO has an office or clinic in the parish, 2 if NGO staff or representatives visit the parish, 1 if members of the parish visit the NGO, and zero otherwise. The mean NGO accessibility score is 2.46. Figure 3 shows how this index is distributed across client-communities. Our measure of community involvement in NGO decision making is a weighted sum of the answers to the two decision making questions, with the weights determined using principal factor analysis.

Regression results for community participation are presented in Table 6. The regressors are the same as in Table 4. As before, we report results for the full sample and then for the rural and Kampala samples separately. The accessibility regressions are ordered probits while the decision making regressions are OLS. All standard errors are corrected for possible hereroscedasticity. The results do not entirely correspond with our expectations. Isolation does reduce accessibility and involvement in decision making, although the effect is significant only in one of the Kampala models where we do not expect it to matter. If the Kampala dummy is interpreted as an indicator of isolation, its significant positive coefficient in the decision making model does accord with our expectations. Also, inconsistent with the model are the findings that in rural areas prosperity, measured by the durable assets variable, is positively and significantly associated with NGO accessibility, while paid employment, assumed to take the form of low wage agricultural labouring jobs, is negatively and significantly associated with the same variable. These findings suggest that NGOs are more accessible to more rather than less prosperous beneficiary communities. In Kampala, paid employment is assumed to be relatively high wage

formal sector jobs. Hence it is reasonable to assume that in Kampala wage employment is associated with a higher opportunity cost of time. It is therefore not surprising to find that Kampala communities show less involvement in NGO decision making. Finally, accessibility and community involvement in NGO decision making rise quite strongly with the proportion of community respondents who are members of the NGO. As we have discussed earlier, this is anticipated because NGO membership is often a prerequisite for access to NGO services and, as shown by Barr, Fafchamps & Owens (2004), NGO members are normally involved in NGO decisions.

We now turn to an analysis of the determinants of perceived staff and representative quality and motivation Q_j. Here, we take as the dependent variables the client-communities' subjective assessments of

whether NGO staff and representatives are responsive to the needs of the community, good at what they do, and self- as opposed to community-serving. The variables are likart scores quantifying the extent to which client-community respondents agree with the statements presented above. Since self-serving staff are a 'bad' while the other two staff characteristics are 'good', we expect signs in the self-serving staff regression to be the opposite of that in the other two regressions.

The regression results are presented in Table 7. There are three sets of two regressions, each set containing one regression for rural communities and one for Kampala communities. (The regressions for the full sample are excluded only to conserve space.) The regressors are the same as before. All the regressions are ordered probits with standard errors adjusted for heteroskedasticity. For rural communities, the results indicate no significant relationship between perceived staff motivations and quality, isolation, and community prosperity. The only variable that is significant throughout is the proportion of NGO members among the respondents. Results

tend to be more significant in Kampala, but, given the small sample size and the frequent sign reversals, they should be viewed with caution. The main lesson to be learnt from the regressions in Table 7 is that perceived staff motivations and quality are generally unrelated to community isolation and prosperity. This being the case, the reduced form coefficients on these variables should not be subject to omitted variable bias due to the exclusion of staff quality variables from the reduced form models.

5.3. Full model

We now estimate the full model (2.4) that includes the participation and perceived staff motivation and quality variables. As explained in Section 2, the objective here is to control for possible omitted variable bias, while at the same time investigating the direct effects of variations in NGO and NGO staff functioning on client community satisfaction.

The regression results are presented in Table 8. In the first three columns of this table, the set of regressors in Table 4 is now augmented by the two participation variables and the three staff motivation and quality variables. The inclusion of these variables improves the significance of the regressions while, for the whole sample and the rural sub-sample, having little effect on the magnitude of the coefficients on the isolation and prosperity variables. The main conclusion is that the relationship observed in rural regions between isolation, prosperity, and NGO satisfaction is not due to differences in community participation or NGO staff motivations and quality. The model presented in Section 2 is thus supported for rural areas. Ugandan NGOs operate in a way that is consistent with the objective of equalizing welfare across communities but are hindered in this endeavour by the costs associated with reaching more isolated communities.

The analysis for the sub-sample of Kampala communities requires more care to interpret. In the reduced from model (Table 4), isolation and prosperity were found to have no significant

effect on community satisfaction with NGOs. After inclusion of participation and staff motivation and quality variables (see the column headed 'Kampala 1'), durable assets and salaried employment are now significant but, in the case of the former, have the wrong sign. To test whether these counter-intuitive results are due to overfitting, we drop some of the insignificant client-community group characteristics from the set of regressors (see the column headed 'Kampala 1') and reestimate the regression. Results are shown in the 'Kampala 2' column. The non significance of the isolation and prosperity variables returns, indicating that the results reported in the Kampala 1 column are not robust.

Turning to the participation variables, we see that across the full sample and the rural sub-sample, greater NGO accessibility is associated with higher client-community satisfaction. Further, in rural areas, where community involvement in NGO decision making is lower, isolation is greater, durable asset holdings are lower, and wage employment is both rare and associated with less prosperity, greater community participation in NGO decision making is associated with higher satisfaction. These results support the field workers' view that participation in NGO decisions raises beneficiary satisfaction. In contrast, in Kampala, where community involvement in NGO decision making is higher, isolation is less of an issue, durable asset holdings are greater, and salaried employment is more prevalent and associated with greater prosperity, greater community participation in NGO decision making is associated with lower satisfaction. These results suggest that it is possible for NGOs to require too much community participation, especially where the opportunity cost of beneficiary time is high.

Staff motivations and quality also matter. In the rural sub-sample, satisfaction with the NGO is higher when NGO representatives are perceived as being good at what they do, while for the full sample and the Kampala sub-sample (focussing on the more parsimonious model) satisfaction is lower where NGO representatives are perceived as self-serving.

6. Concluding Remarks

On the basis of original survey data gathered in Uganda, we have examined whether satisfaction with NGO activities varies systematically with isolation and prosperity. To our knowledge, this is the first attempt to assess NGO beneficiary satisfaction applying statistical methods to data from a large representative survey. Using a simple model of NGO service delivery, we argued that satisfaction with NGO intervention should be lower in prosperous communities if NGOs seek to equalize welfare across rich and poor communities. We also argued that higher delivery costs will cause NGOs to allocate fewer resources and hence generate less satisfaction in more isolated communities.

Both model predictions are confirmed by our analysis of rural client-community satisfaction with NGOs. Kampala is different. Here, our basic model has no predictive power. This is probably due to the fact that isolation is less relevant for the capital city since, NGOs can access all parts of the city with relative ease. Moreover, residents in one part of the city can probably access public services located elsewhere, so that local prosperity is not an important determinant of NGO placement.

We also investigate whether satisfaction with NGOs depend on community participation. Our results suggest that this is indeed the case in rural areas. They support the claim often made by development practitioners that community participation raises satisfaction with outside interventions. We cannot, however, ascertain whether this is due to a better resulting match between NGO activities and community needs – what we called allocative efficiency – or to a direct effect of participation on satisfaction. In contrast, in Kampala, where the opportunity cost of beneficiary time may be a more important factor, there is some evidence that NGOs are demanding too much participation on the part of their client communities. Staff quality also affects satisfaction with NGO services to the community. Findings indicate that communities

value NGO staff members who are 'good at what they are doing' and are unimpressed by self-serving NGO staff.

The results presented here suffer from a number of shortcomings. First, as we have already discussed, various measurement problems preclude a combined analysis of beneficiary satisfaction with NGO outputs, inputs, and costs. Second, our data does not allow us to address any potential endogeneity biases in our estimated models. Community participation and membership may, for example, be the result rather than causes of satisfaction. Third and most importantly, our analysis is based on data collected only from communities in which NGOs are active, while in Uganda there are likely to be a large number of communities receive no services from NGOs. Given our findings that NGOs generate less satisfaction in more isolated communities and are less accessible to less prosperous communities, it seems reasonable to surmise that the most needy communities in Uganda may be entirely beyond the reach of the nation's NGOs and hence excluded from our sample. This has implications for the way is which we should view our finding that NGOs allocate their interventions so as to redress the welfare imbalance between rich and poor communities. A different kind of data and analysis are necessary to ascertain the extent to which NGOs target or ignore the most needy communities of the country. More work is needed on these important issues.

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Table 1. Client community evaluations by district

District	NGOs selected	Community evaluations
Kampala	99	66
Arua	6	5
Busia	6	6
Iganga	25	27
Jinja	19	18
Kabale	9	10
Kasese	40	38
Kibale	4	5
Kotido	3	5
Lira	12	12
Luwero	7	10
Mbale	25	23
Mbarara	13	14
Mukono	19	20
Rakai	8	9
Total	295	268

Table 2. Community participation and perceived NGO staff and representative quality

	Full sample		Kampala		Rural	
	Means and proportions	Obs.	Means and proportions	Obs.	Means and proportions	Obs.
Community satisfaction						
Willingness to pay (mean proportion of beans)	60%	256	62%	196	53%	60
NGO accessibility						
NGO has permanent structure in community	62%	261	64%	201	57%	60
NGO regularly visits the community	30%	261	28%	201	38%	60
NGO is visited by community members	22%	261	19%	201	32%	60
Involvement in decision making						
NGO asks the community about activities *ex ante*	55%	260	53%	199	62%	61
NGO asks the community for feedback *ex post*	57%	259	56%	199	62%	60
NGO staff and representative motivations and performance						
quick to respond…	38%	259	38%	201	36%	58
good at what they do	43%	259	44%	200	42%	59
self- rather than community-serving	18%	259	18%	201	18%	58

Table 3. Isolation and initial endowments of client-communities

	Full sample		Rural		Kampala	
	Means and proportions	Obs.	Means and proportions	Obs.	Means and proportions	Obs.
Distance to…						
district head quarters	9.73	264	11.17	198	5.41	66
nearest hospital	7.60	264	8.75	198	4.16	66
LC3	2.89	262	2.70	196	3.44	66
nearest tarred road	10.09	256	13.28	191	0.70	65
Proportion of families with…						
iron roofs	75%	263	70%	198	90%	65
cement floors	48%	263	41%	197	68%	66
TVs	22%	259	20%	193	28%	66
radio	73%	268	71%	202	79%	66
bicycle	37%	267	46%	201	10%	66
car	8%	264	8%	198	7%	66
at least one member in paid employment	18%	263	19%	197	17%	66
no land	60%	262	55%	196	75%	66

Table 4. Client-community representatives and group characteristics

	Representatives		Groups			
	Means and proportions	Obs.	Means and proportions	Obs.	Minimum	Maximum
Demographic characteristics						
Age in years	37.6	2523	37.4	263	17.9	65.0
Age < 25	13%	2566	13%	265	0%	100%
Age 25 - 40	45%	2566	46%	265	0%	100%
Age 40 - 55	31%	2566	30%	265	0%	100%
Age > 55	10%	2523	10%	263	0%	100%
Females	43%	2562	43%	265	0%	100%
Married	76%	2547	76%	264	0%	100%
Religion						
Catholic	32%	2562	32%	265	0%	100%
Protestant	36%	2562	36%	265	0%	100%
Moslim	20%	2562	20%	265	0%	100%
Penetcostal	7%	2562	7%	265	0%	100%
Other	4%	2562				
Education						
None	6%	2504				
Primary education only	32%	2504	32%	264	0%	100%
Secondary education	41%	2504	42%	264	0%	91%
Tertiary education	21%	2504	21%	264	0%	90%
Occupation						
farmer/fisherman	30%	2409				
public servants	20%	2409				
self-employed	32%	2409				
other employed	18%	2409				
inactive	16%	2409				
Link with NGO being evaluated						
Staff of NGO	2%	2474	2%	259	0%	75%
Member or direct beneficiary of NGO	39%	2474	38%	259	0%	100%
At least one member of staff of NGO present			14%	265	0%	100%
At least one member or beneficiary of NGO present			75%	265	0%	100%
Size of SGI group			9.7	265	4	33

Table 5. Econometric analysis of NGO motivations (reduced form model)

	Willingness-to-pay measure of client-community satisfaction with NGO		
	All	**Rural**	**Kampala**
Isolation	-0.1341	-0.1539	0.1052
	[0.0539]**	[0.0580]**	[0.2608]
Durable assets	-0.1118	-0.1668	0.0176
	[0.0550]**	[0.0629]**	[0.1445]
Wage employment	0.0063	0.0087	-0.0036
	[0.0022]***	[0.0025]**	[0.0057]
Landlessness	-0.001	-0.0018	0.0012
	[0.0009]	[0.0012]	[0.0016]
Credit constrained	0.0088	-0.0356	0.0069
	[0.0519]	[0.0642]	[0.0915]
Kampala (dummy)	-0.0427		
	[0.0860]		
Client-com. Group size	-0.0012	0.0019	-0.0095
	[0.0106]	[0.0111]	[0.0375]
Proportion women	-0.3876	-0.4054	-0.6624
	[0.1900]**	[0.2155]*	[0.4928]
Mean age	0.0101	0.0059	0.0226
	[0.0055]*	[0.0064]	[0.0117]
Prop. no secondary school	0.013	-0.0494	0.2252
	[0.1423]	[0.1567]	[0.3591]
Proportion Catholic	0.1823	0.2488	-0.0164
	[0.1684]	[0.1868]	[0.3980]
Proportion Muslim	-0.0995	-0.0037	-0.4678
	[0.1771]	[0.1955]	[0.4129]
Proportion Pentecostal	0.0562	-0.0814	0.7774
	[0.3029]	[0.3291]	[0.8202]
Prop. connected to NGO	0.0175	0.0359	0.1892
	[0.1049]	[0.1176]	[0.2732]
Proportion NGO staff	-0.0632	-0.2322	-0.0446
	[0.4031]	[0.4456]	[1.0263]
Constant	0.3579	0.5524	0.0512
	[0.2838]	[0.3227]	[0.7086]
Observations	216	163	53
Sig. level of regression	4.29%	2.28%	78.96%

* significant at 10% level; ** significant at 5% level; *** significant at 1% level

Table 6. Econometric analysis of community participation

	Accessibility			Involvement in decision making		
	All	**Rural**	**Kampala**	**All**	**Rural**	**Kampala**
Isolation	-0.1059	-0.061	-0.2724	-0.1316	-0.0244	-3.8785
	[0.0978]	[0.1112]	[0.5723]	[0.1377]	[0.1462]	[1.3605]***
Durable assets	0.4053	0.4802	-0.034	-0.163	-0.0584	-0.3177
	[0.1446]***	[0.1643]***	[0.4749]	[0.1584]	[0.1704]	[0.4423]
Wage employment	-0.0067	-0.0096	0.0208	-0.0035	-0.002	-0.0377
	[0.0051]	[0.0054]*	[0.0167]	[0.0058]	[0.0061]	[0.0189]**
Landlessness	-0.0021	-0.0034	-0.0032	-0.0014	-0.0028	0
	[0.0025]	[0.0031]	[0.0055]	[0.0027]	[0.0032]	[0.0065]
Kampala (dummy)	-0.5424			0.4408		
	[0.2318]**			[0.2351]*		
Client-com. Group size	0.0004	0.0494	-0.3398	0.0477	0.0561	0.1487
	[0.0287]	[0.0317]	[0.0932]***	[0.0332]	[0.0361]	[0.1884]
Proportion women	0.2201	0.3944	-2.083	-0.2206	-0.0014	-1.2227
	[0.5033]	[0.5385]	[1.4399]	[0.5557]	[0.6025]	[1.6169]
Mean age	-0.0006	0.0087	-0.0107	0.0007	-0.0071	0.0442
	[0.0141]	[0.0153]	[0.0381]	[0.0162]	[0.0189]	[0.0489]
Prop. no secondary school	-0.23	-0.5434	2.1204	0.1666	0.2145	-0.2418
	[0.3656]	[0.4001]	[1.1689]*	[0.4020]	[0.4484]	[1.2829]
Proportion Catholic	-0.3523	-0.5696	0.2964	-0.4747	-0.3493	-0.6131
	[0.3964]	[0.4413]	[1.0967]	[0.4532]	[0.5166]	[1.4441]
Proportion Muslim	0.5537	0.528	0.9189	0.3258	0.107	3.7395
	[0.4949]	[0.5474]	[1.2801]	[0.4553]	[0.5007]	[1.5957]**
Proportion Pentecostal	1.2642	1.3562	2.4267	0.9549	1.7188	-2.6631
	[0.8678]	[0.9543]	[2.4206]	[1.0074]	[1.0765]	[3.2040]
Prop. connected to NGO	0.9555	0.8006	2.2616	2.5079	2.381	3.6015
	[0.2721]**	[0.3136]*	[0.7858]**	[0.3605]**	[0.3861]**	[1.3864]***
Proportion NGO staff	0.3829	0.8377	-1.6218	0.1137	2.369	-9.2126
	[1.3079]	[1.4521]	[3.7100]	[1.4427]	[1.7223]	[5.9491]
Observations	223	166	57	216	162	54
Significance of regression	0.01%	0.01%	0.04%	0.01%	0.01%	1.29%

Robust standard errors in brackets

* significant at 10% level; ** significant at 5% level; *** significant at 1% level

Table 7. The motivation and performance of NGO staff and representatives

	Responsiveness		Good at what they do		Self-serving	
	Rural	**Kampala**	**Rural**	**Kampala**	**Rural**	**Kampala**
Isolation	-0.0461	-1.923	0.3124	-1.003	-0.1763	1.7914
	[0.1575]	[0.7713]**	[0.1807]	[0.6514]	[0.1528]	[1.1970]
Durable assets	0.0211	0.6299	-0.0558	-0.0726	0.0106	1.9122
	[0.1537]	[0.3545]*	[0.1608]	[0.4047]	[0.1539]	[0.4529]**
Wage employment	0.004	-0.0233	0.0138	0.0012	-0.0097	-0.1204
	[0.0046]	[0.0156]	[0.0058]*	[0.0147]	[0.0054]	[0.0303]**
Landlessness	-0.0042	-0.0006	-0.0024	0.0095	0.0032	0.0061
	[0.0029]	[0.0045]	[0.0028]	[0.0056]	[0.0029]	[0.0053]
Client-com. Group size	-0.0123	0.3371	0.0056	0.0586	-0.0219	0.503
	[0.0265]	[0.1271]***	[0.0313]	[0.0996]	[0.0293]	[0.1724]**
Proportion women	-0.1041	0.309	-0.5377	3.4392	0.3031	-1.2662
	[0.5709]	[1.2277]	[0.5464]	[1.4208]*	[0.5802]	[1.6520]
Mean age	0.018	-0.0154	0.0166	0.0858	0.0004	-0.0992
	[0.0166]	[0.0287]	[0.0156]	[0.0270]**	[0.0204]	[0.0301]**
Prop. no secondary school	0.2601	0.0081	-0.2684	1.2816	0.1197	0.3705
	[0.3466]	[0.9412]	[0.3717]	[1.0602]	[0.3863]	[1.2360]
Proportion Catholic	0.5462	-0.2109	0.76	-0.6549	-0.6319	2.0241
	[0.3960]	[1.1426]	[0.4567]	[1.2026]	[0.4180]	[1.2644]
Proportion Moslim	0.6403	2.2032	0.0577	-0.067	-0.8587	2.4141
	[0.4667]	[1.2199]	[0.4904]	[1.0472]	[0.5006]	[1.2667]
Proportion Penecostal	1.3955	-4.0532	1.3798	-7.2858	-1.5328	2.2645
	[0.7228]*	[2.4755]	[0.8626]	[2.7429]**	[0.8794]	[3.0173]
Prop. connected to NGO	2.2237	1.0158	1.4866	0.2393	-1.155	-0.8041
	[0.3606]***	[0.8377]	[0.3371]**	[0.8707]	[0.3304]**	[1.0559]
Proportion NGO staff	-0.4856	-1.6466	-0.9701	-0.7127	0.8793	-10.397
	[0.9749]	[3.8284]	[1.2781]	[2.6727]	[1.0643]	[7.4656]
Observations	166	52	165	53	166	52
Sig. level of regression	0.01%	8.70%	0.03%	0.32%	1.23%	0.01%

Robust standard errors in brackets

* significant at 10% level; ** significant at 5% level; *** significant at 1% level;

Table 8. Econometric analysis of NGO motivations

	Willingness-to-pay measure of client-community satisfaction with NGO			
	All	**Rural**	**Kampala 1**	**Kampala 2**
Isolation	-0.1308	-0.1586	0.3052	-0.1053
	[0.0517]**	[0.0549]***	[0.2388]	[0.2310]
Durable assets	-0.1332	-0.2132	0.3103	0.1509
	[0.0552]**	[0.0628]***	[0.1366]**	[0.1250]
Wage employment	0.0063	0.0094	-0.0166	-0.0066
	[0.0021]***	[0.0025]***	[0.0061]**	[0.0041]
Landlessness	-0.0004	-0.0008	0.0021	0.0018
	[0.0009]	[0.0012]	[0.0014]	[0.0014]
Credit constrained	-0.0265	-0.0597	-0.0849	0.0479
	[0.0518]	[0.0652]	[0.0804]	[0.0787]
Kampala (dummy)	-0.0318			
	[0.0874]			
Client-com. Group size	-0.0024	-0.0034	0.0582	0.0578
	[0.0102]	[0.0104]	[0.0413]	[0.0328]*
Proportion women	-0.4026	-0.4504	-0.7967	-0.2381
	[0.1819]**	[0.2048]**	[0.4218]*	[0.3421]
Mean age	0.006	0.0033	0.009	0.0139
	[0.0053]	[0.0060]	[0.0102]	[0.0109]
Prop. no secondary school	0.0484	0.0048	0.28	
	[0.1379]	[0.1503]	[0.2825]	
Proportion Catholic	0.1412	0.2379	-0.028	
	[0.1684]	[0.1871]	[0.3208]	
Proportion Muslim	-0.0455	0.0263	0.4912	
	[0.1755]	[0.1907]	[0.3973]	
Proportion Pentecostal	-0.0383	-0.3255	0.6617	
	[0.3131]	[0.3399]	[0.7879]	
Prop. connected to NGO	-0.1353	-0.2245	0.5077	
	[0.1238]	[0.1391]	[0.2577]*	
Proportion NGO staff	0.0718	-0.3212	-0.0191	
	[0.4009]	[0.4254]	[1.1055]	
NGO accessibility	0.0825	0.121	0.0011	-0.0304
	[0.0489]*	[0.0578]**	[0.0950]	[0.0793]
Involvement in decision making	0.0468	0.1321	-0.2449	-0.2159
	[0.0503]	[0.0575]**	[0.0960]**	[0.0927]**
NGO reps responsive	-0.0232	-0.0183	-0.0032	0.0382
	[0.0325]	[0.0393]	[0.0570]	[0.0503]
NGO reps good at what they do	0.1141	0.1076	0.0878	0.0327
	[0.0421]**	[0.0560]*	[0.0549]	[0.0554]
NGO reps self-serving	-0.0516	-0.0193	-0.2112	-0.161
	[0.0281]*	[0.0344]	[0.0501]***	[0.0466]***
Constant	0.0797	0.1057	-0.1053	-0.4727
	[0.3444]	[0.3975]	[0.6767]	[0.6767]
Observations	207	158	49	52
Sig. level of regression	0.03%	0.01%	1.56%	4.28%

* significant at 10% level; ** significant at 5% level; *** significant at 1% level

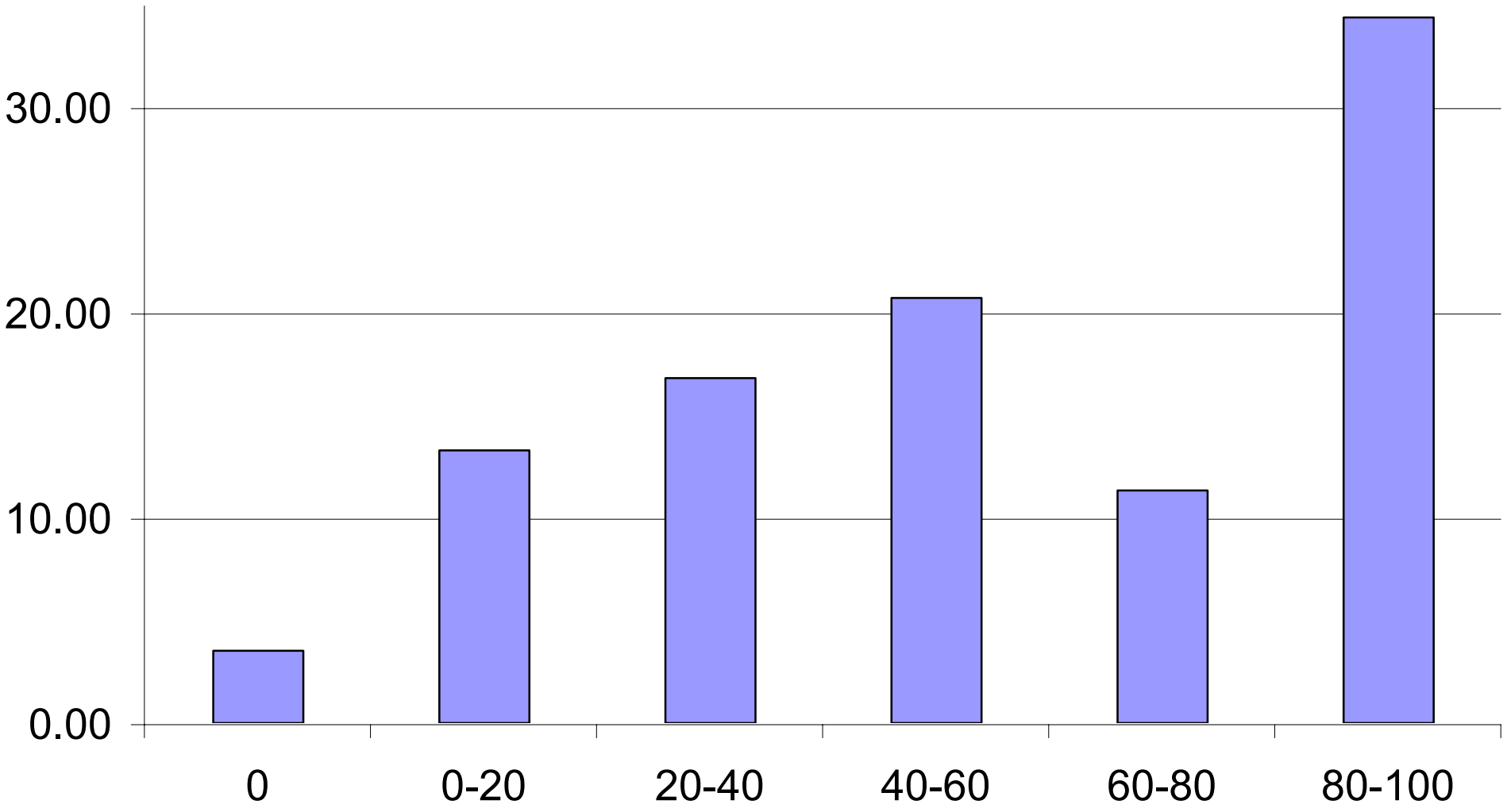
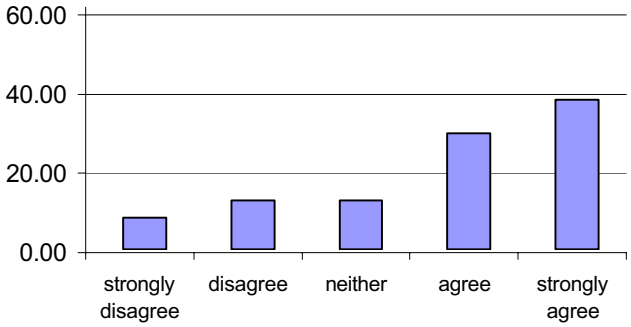
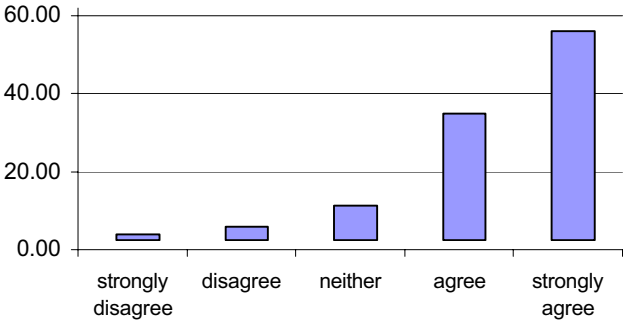


Figure 1. Percentage of beans

[NGO] is always quick to respond when inhabitants of this parish or the parish as a whole ask for help



[NGO] representatives are good at what they do



[NGO] exists to serve the purposes of its own staff rather than to help us

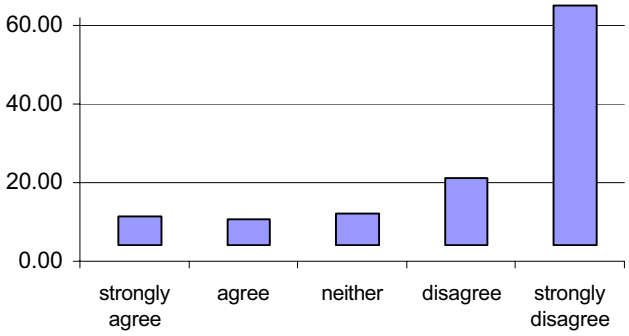


Figure 2. NGO staff motivation

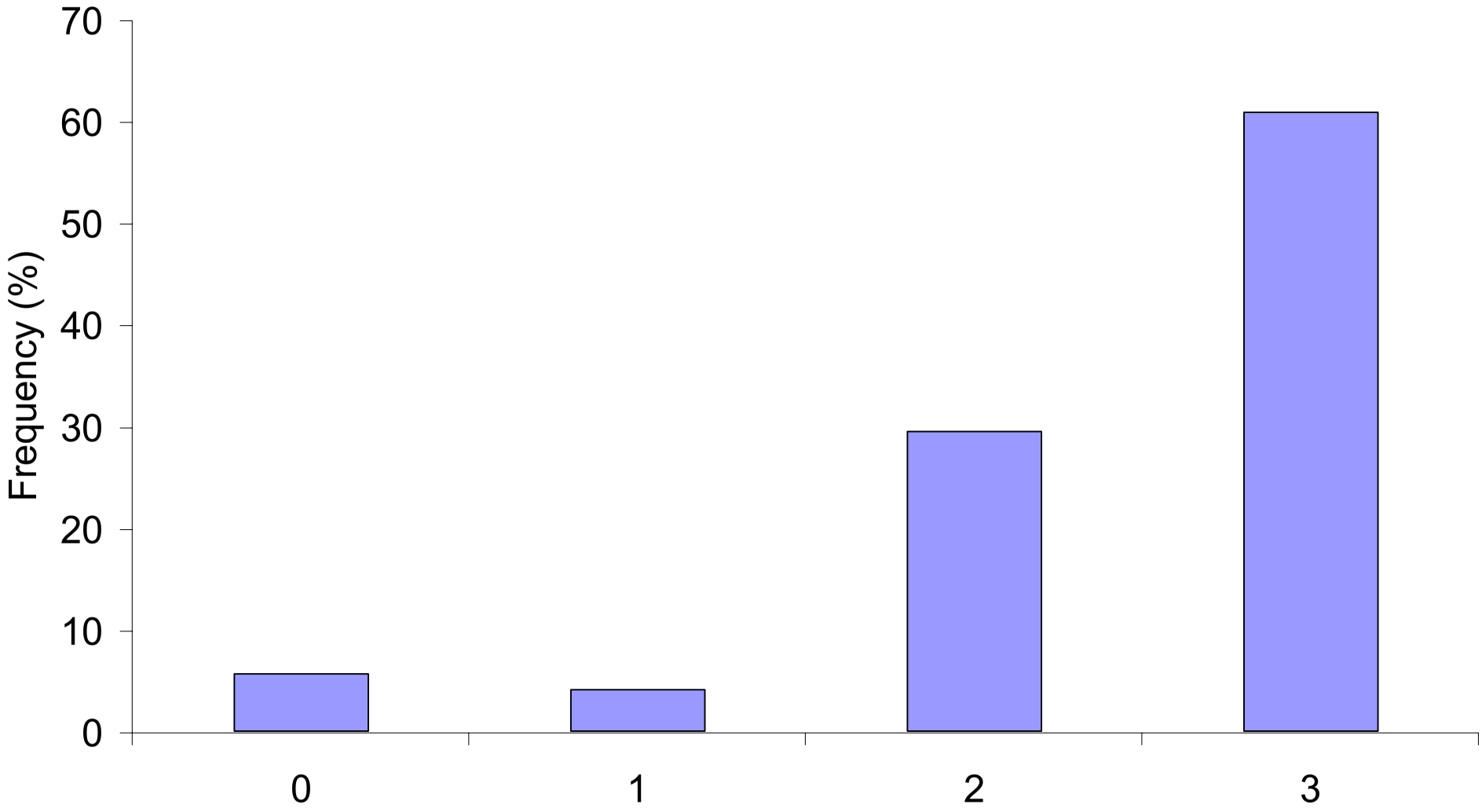


Figure 3. NGO accessibility