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 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. [.edwards 1996, edwards hulme 1995, earringhton 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 expect NGOs to have greater autonomy than line ministries. This being the case, their motivations and those of 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 focusing their efforts on the latter. But there are many, and some spectacular, accounts supporting the opposite view. One chilling example is 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 followers in the late 1990's [.cauvin 2000, wangah 2000.]. Both bad and good accounts relating to specific NGOs can be misleading. What policymakers need is an evaluation of the performance of a representative sample of NGOs.

The objective of this paper is to take a first step towards performing such evaluation using a large and nationally representative sample of NGOs and their beneficiaries. Valuable insights have been gained from case studies and small NGO samples into the role of particular factors in ensuring NGO efficiency, longevity, and success [.acharya 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 [.gariyo 1995, johnson johnson 1990, pratt sahley 2003.]. Moreover, these have tended to be descriptive and qualitative in nature. Also, primarily due to the diversity within NGO sectors and the consequent problems associated with comparing NGO performance, existing sector-wide evaluations have been able to tell us very little about NGO motivations and the effect that NGOs have on the wellbeing of the people they serve.

Here, we present the findings of an evaluation of an entire nation's NGO sector by tackling the problem of diversity. We do so by focusing our attention on the levels of satisfaction that a representative sample of NGOs generates within its client-communities. The evaluation is undertaken in Uganda 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 NGO motivations in Uganda. Further, the data collected allows us to explore the relative importance of various aspects of NGO performance as determinants of client-community satisfaction. Thus, the contribution of this paper is twofold: it presents an innovative methodology for involving client-communities in the evaluation of an entire NGO sector, and it illustrates the value of that methodology through an application to the Ugandan NGO sector.

Ultimately, we would like to assess the performance of NGOs. Doing so is singularly complicated by the fact that NGOs do not typically charge beneficiaries for the full cost of the services they provide. In fact, in most cases beneficiaries are unaware of the true cost of the services provided to them. Consequently, from client-communities' answers to questions, it is impossible to assess whether NGOs effectively minimize costs. Given this limitation, we focus on a different question, namely, do NGOs geographically allocate their funding so as to redress

existing 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 the accessibility of NGOs to beneficiary communities is lower in poorer communities. This significantly affects client-community satisfaction with NGOs. Levels of NGO induced community participation in decision making also vary, with some evidence that participation by itself has an effect on community satisfaction. And finally, some NGO staff are perceived as unresponsive, less than good at what they do, and self- rather than community-serving, and these perceptions also have a negative impact on community satisfaction.

The approach adopted to assess Ugandan NGOs suffer from a number of shortcomings. First, it would be useful to compare beneficiary satisfaction with the physical services provided by NGOs. This would enable the researcher to assess allocative efficiency, that is, the extent to which services provided correspond to the (perceived) needs of beneficiary communities. Comparing NGO outputs with their input and input costs would further enable researchers to test cost minimization and technical efficiency and to compare NGO effectiveness to alternative service providers, such as government or donor-operated development projects. Unfortunately, this proved impossible given the extreme variety of services that Ugandan NGOs typically provide. To be able to quantify the services provided, one would have to focus on specific services such as health clinics or schools [.jan dehn report by magnus and ritva?.]. But most Ugandan NGOs are not involved in these activities. The services they provide rather take the form of awareness raising, advocacy, and training, the output of which is extremely difficult if not impossible to quantify.

One could hope to bypass the quantification problem by relying on cost data instead. Cost data would not enable researchers to test technical efficiency and cost minimization. But the

amount of money spent by an NGO in a given community would yield a direct measure of fund allocation across communities. Unfortunately it has proved impossible to construct such data for two fundamental reasons. First, many NGO inputs are non-monetary as they take the form of volunteer time and complimentary use of facilities and equipment [.owens barr fafchamps.]. Imputing a value on these inputs is made difficult by the fact that many NGOs operate on a part-time basis. Second, Ugandan NGOs in general keep few records so that it is not possible for them to tell how many resources are spent on each served community. The approach adopted here thus focuses on what we can potentially assess, that is, whether beneficiaries of NGO intervention are satisfied. While subjective and limited, this approach throws valuable light on a poorly known sector.

The paper has five sections. Section 2 describes our conceptual framework and empirical strategy. In the third section we describe the data collection approach and sampling methodology. In Section 4 we describe how each of the variables in our dataset is generated during the client-community evaluation meetings and we present descriptive statistics. The econometric analysis is presented in Section 5.

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 to 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 each community is homogeneous so that all members have the same preferences. We revisit this assumption later in the section. Community 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:

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

where λ is the Lagrance multiplier on the feasibility constraint $\sum_{j=1}^{N} M_j = M$. This says that 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,

¹To 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:

$$V_i(M_i) = V(Y_i + M_i)$$

where Y_j represents the endowment of community j. Further suppose that V' > 0 and $V'' \le 0$. 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 of transport costs from the capital city. 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:

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

which yields first order conditions of the form:

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

²This 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 [.kanbur indraneel.]. 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 outline here and thus tends to bias towards zero the predicted negative relationship between community prosperity and NGO satisfaction. If, however, we do find evidence of such negative relationship, this can be interpreted as evidence of an effort to favor poor communities.

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

$$V'd\tau + \tau V''dM = 0$$

$$\frac{dM}{d\tau} = -\frac{V'}{\tau V''} > 0 \text{ whenever } V'' < 0$$

From this we see that, if V'' < 0, the NGO allocates more resources to communities with a higher τ , that is, less isolated communities. The rationale is that isolated communities are too costly to serve and more good can be done with limited dollars in less remote communities. In this context, 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 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 the preferences of the people interviewed. In a democratic system, the NGO would seek to follow the preferences of the median voter, that is, the person with median characteristics. Consequently, the more interviewees differ from the median voter in their community, they more likely they are to diverge from the median voter in their appreciation of the NGO's work. To allow for this possibility, we add to the regression equation (2.1) a vector of Z_j variables that measure the main characteristics of the interviewees. 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 depend 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 also improve allocative efficiency by ensuring a better match between community needs and the choice and details of the intervention.

From the point of view of development agencies, whether government or non-government funded, a participatory approach is more costly because staff time and travel costs must be incurred to meet with villagers. For cost reasons, one would therefore expect beneficiaries in more isolated communities to be less involved in NGO interventions. Participation also takes time for beneficiaries. To the extent that more prosperous communities have a higher shadow cost of time, one would expect them to seek less involvement with NGO activities – and consequently to be less impressed or satisfied with their action.

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:

$$V_i = \alpha_0 + \alpha_1 Y_i + \alpha_2 \tau_i + \alpha_3 Z_i + \alpha_4 P_i + u_i \tag{2.3}$$

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 is designed. 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 –

³It 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 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

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 [.fafchamps owens barr.], many Kampala NGOs are not actually in operation while most of those registered in the district are.⁴ The composition of the 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 enumerators contact the parish chairman and make arrangements for a meeting. The chairman

the registers. However, we also suspect that there are many 'ghosts', i.e., NGOs that have ceased to exist, 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.

⁴When 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.

⁵A 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.

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 performance and motivations of the NGOs' 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 willingness to pay for the services of the target NGO. The question is presented as follows. We ask the groups to imagine that they find out that the NGO they have been asked to evaluate 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 gave 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 main 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.

In order to explore in more detail the determinants of client-community satisfaction, information is also collected on several specific aspects of NGO staff practices, performance and motivation. There are only certain aspects of NGO performance 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 5 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 5 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 3 presents the frequency distributions of community responses. The first two statements reflect a positive opinion of the NGO, the last is negative.

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

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 2). 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. 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 3 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 [.fafchamps owens barr.] 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 ultimate objective 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 the 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 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 isolation and prosperity in the community. The client-community survey collected various isolation measures. 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

For similar reasons, we capture prosperity with 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 are poorer and hence more 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 bias would arise if, as is likely, the prosperity indicator is correlated with credit constraints. To minimize this bias, we include a variable meant to proxy for the client-community's need for credit. This variable is constructed as follows. During the structured group interviews, client-

 $^{^{7}}$ The isolation variable is defined as follows: isolation = (0.0138618 * distance to district headquarters) + <math>(0.0273842 * distance to nearest hospital) + <math>(0.0499485 * distance to local council (LC3) offices) + <math>(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) + <math>(0.0106439 * proportion of households with cement floors) + <math>(0.0049975 * proportion of households televisions) + <math>(0.0081021 * proportion of households with radios) - <math>(0.0004181 * proportion of households with bicycles) + (0.0184374 * proportion of households with cars) - <math>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.

community respondents were asked to list their community's priority needs. We then asked them specifically about community needs for each of a list of thirteen services, one of which is 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 prompted in the second question about about their need for credit, and 0 otherwise. We also include a Kampala dummy to control for possible differences in preferences between urban and rural populations. 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.

Regression results are presented in Table 4. The estimator is 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 while the third is for the Kampala-based communities. While the regressions for the full sample and the rural sub-sample are significant, the regression covers only Kampala client-communities. Model (2.2) appears to have no power explaining Kampala communities' satisfaction with NGOs. This may be due to the fact that isolation is not very relevant for the capital city since, relative 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 a determinant of NGO placement as it would be in rural areas. 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 non significant) in Kampala. The landlessness variable has the wrong sign but is not significant. The credit contraint proxy variable is not significant either, suggesting either that credit constraints are unimportant or that the hypothetical question asked in the survey manages to bypass this problem.

Respondent characteristics also affect reported satisfaction with NGO intervention. As anticipated, women are less willing to pay for the continuation of the target NGOs. This suggests that the needs of women are less well served by Ugandan NGOs. We also find that reported satisfaction increases with the number of community respondents who are members of the target NGO. In contrast, the presence of NGO staff at the interview appears to have no significant impact on reported satisfaction, possibly because of the very small number of NGO staff in our sample of respondents.

5.2. Beneficiary participation and NGO staff quality

As discussed in Section 2, the above analysis abstracts from beneficiary participation effects. To these we now turn using the various indicators of participation and staff quality presented in Table 5. Results are summarized in Table 6 for beneficiary participation and Table 7 for NGO staff quality.

We first focus on accessibility and community participation in NGO decisions. The ease of accessibility of the NGO for community members is measured by an accessibility 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. Community participation is also constructed as a weighted sum of the answers to the two participation questions, with the weights determined using principle factor analysis. ⁹ Figure 3 shows how this weighted sum is distributed across client-communities.

Regression results are presented in Table 6. Regressors are the same as in Table 4. As before, we report the full sample results in the first column and results from the rural sample and Kampala separetely in the second and third column respectively. Accessibility regressions are ordered probits while participation regressions are OLS. All standard errors are corrected for possible hereroscedasticity. Results do not entirely correspond to expectations. Isolation is seen to reduce isolation and community participation but the effect is never significant, except in Kampala where we do not expect it to matter. The only significant isolation effect that is consistent with expectations is the positive Kampala dummy in the participation regression: communities based in the capital city in general participate more to NGO decisions, a finding consistent with the ease of access offered by proximity.

Prosperity – as measured by the durable assets index – is positively and significantly associated with higher NGO accessibility in rural areas, contrary to what we expected. This effect is further confirmed by the negative sign on salaried employment in rural areas (where agricultural laborer status is associated with lower incomes). These findings suggest that more prosperous beneficiary communities find it easier to avail themselves of NGO services. In contrast, more prosperous communities participate less in NGO interventions, although the effect is in general not significant – except for salaried employment in Kampala, which we associate with higher

 $^{^{9}}$ The participation variable is defined as follows: patricipation = (0.8857221 * community involved in decisions about activities) + <math>(0.8909297 * community asked for feedback) - 0.9985664.

incomes. Another result of interest is that accessibility and community participation rises 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. As shown by [.barr owens fafchamps.], NGO members are normally involved in NGO decisions.

We now turn to staff quality Q_j . Three measures of staff quality are considered based on respondent subjective assessments of whether NGO staff are responsive to the needs of the community, whether staff are 'good at what they do', and whether staff are seen as 'selfserving'. The variables are the likart scores that quantify the extent to which client-community respondents agree with the statements presented above. Variables were described in Table 5. Because self-serving staff is a 'bad', we expect relevant signs to be reversed in the self-serving staff regressions.

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. Regressors are the same as before. All regressions are ordered probits with standard errors adjusted for heteroscedasticity. For rural communities, results in general show little or no significant relationship between staff quality, isolation, and community prosperity. The only variable that is significant throughout is again 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 it is unclear whether these results should be trusted. The main lesson from the staff quality regressions is that staff quality is little related with our variable of interests. We therefore expect that reduced form coefficients are not strongly biased by omitted variable bias due to the non-inclusion of staff quality variables.

5.3. Full model

We now estimate the full model (2.4) that includes participation and staff quality variables. As explained in Section 2, the objective is to control for possible omitted variable bias.

Regression results are presented in Table 9. The two participation variables and the three staff quality variables have been added to the regressors present in Table 4. The inclusion of these variables improves the significance of the regressions but, for the whole sample and the rural sub-sample, it has had little effect on the magnitude of the coefficients of the isolation and prosperity variables. If anything, the coefficient of the prosperity indicator increases, a result consistent with the earlier observation that prosperity is positively correlated with NGO accessibility. The main conclusion is thus that the relationship observed in rural regions between isolation, prosperity, and NGO satisfaction is not due to differences in NGO participation or staff quality. The model presented in Section 2 is thus conforted for rural areas: Ugandan NGOs operate in a way that seeks to equalize welfare across communities but is hindered by transport costs.

For Kampala, the story is somewhat different. In Table 4, isolation and prosperity were found to have no significant effect on NGO satisfaction. After inclusion of participation and staff quality variables, prosperity and salaried employment are now significant but, in the case of prosperity, with the wrong sign. We suspect that these counter-intuitive results may be due to overfitting driven by the small size of the Kampala sample. Put differently, we are asking too much from the data. Consequently, we discount the Kampala results as non robust.

Turning to the participation and staff quality variables, we see that across the sample as a whole and the rural sub-sample, greater NGO accessibility is associated with higher client-community satisfaction. In rural areas, where participation is generally lower, greater community participation in NGO decision making is associated with higher satisfaction, whereas in Kam-

pala, where community participation is generally higher, less community participation in NGO decision making is associated with higher satisfaction. Staff quality also matters. In the rural sub-sample, satisfaction with the target NGO is higher when NGO representatives are perceived as good at what they do. Satisfaction is also lower where NGO representatives are perceived as self-serving.

Taken together, the rural results confirm the field workers views that participation in NGO decisions raises beneficiary satisfaction. Furthermore, we also find that staff quality is important and that beneficiary communities are less satisfied with the services they receive when NGO staff are perceived as self-serving.

6. Concluding Remarks

Using 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 would explain why NGOs shy away from more isolated communities. Both model predictions are by and large confirmed regarding rural NGO activities.

Kampala is different, with results that are either non-significant or lacking robustness. This is probably due to the fact that isolation is not very relevant for the capital city since, 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 an important determinant of NGO placement.

We also investigate whether satisfaction with NGOs depend on community participation. Results suggest that this is indeed the case. They grant creedence to the claim often made by fied workers that community participation raises satisfaction with outside interventions. We cannot, however, ascertain whether this is due to a better adequacy between NGO activities and community needs – what we called allocative efficiency – or whether this is due to an effect of participation directly on satisfaction, without influencing the actual mix of services delivered. More research is needed on this topic. 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 dislike self-serving NGO staff. This serves to underline the philanthropic nature of NGO activity.

The results presented here suffer from a number of shortcomings that need to be kept in mind when interpreting our findings. We have already discussed the unfortunate impossibility to compare beneficiary satisfaction with NGO outputs, inputs, and costs. We should also keep in mind that our analysis is based on communities in which NGOs are active. Our test that NGOs allocate their intervention so as to favor poorer communities is conditional on the community being served. There are many communities and few NGOs. It is likely that many communities receive nothing from NGOs. We have seen here that NGOs appear to shy away from more isolated villages. 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.