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*Institutional Design for Financial Intermediation by NGOs: Implications for Indigenous Self-Help Village Groups in The Gambia*

**Abstract:** This paper examines the implications of the institutional designs employed by two types of NGOs for the functions performed by indigenous self-help village groups called *kafos* in The Gambia. NGOs were found to be only a partial substitute for the financial and insurance functions traditionally performed by these *kafos*. Institutional duality is, therefore, observed due to the coexistence of *kafos* alongside the NGOs providing the multiple services demanded by villagers. The design of NGO programs based on lessons learned from *kafos* tend to complement the *kafos*, and the villagers seem better served. These findings have implications for interventions which disrupt but only partially substitute for traditional village arrangements and institutions.

## INTRODUCTION

Economists have begun to examine traditional informal village institutions and the implications of the coexistence of informal and formal institutions that provide services including a credit and insurance (Alderman and Paxon, 1992; Arnott and Stiglitz, 1991). Sub-saharan African (SSA) countries have a variety of multifunctional informal self-help groups that provide various services at the village level (Bouman, 1992). Such groups are called 'kafos' in The Gambia. Recently, non-governmental organizations (NGOs), frequently linked to international agencies, have rapidly expanded the scale and scope of their village-level operations in financial intermediation. While the operational designs of *kafos* are customized to suit the requirements of their members, the majority of NGO designs are conceived outside the village. Whereas some NGOs exert a *presence effect* by simply coexisting with *kafos*, others directly intervene into *kafos*, exerting an *intervention effect*<sup>1</sup>. While some NGOs follow the *savings first and untargeted credit approach*, others follow the classical supply-leading *credit first approach at subsidized rates*. The approach followed has profound effects on the functions performed and clientele served by the *kafos*.

The entry of NGOs into villages as financial intermediaries may cause the *kafos* either to disappear or to coexist with the NGOs leading to institutional duality. These developments have several distributional implications for the villages. This paper argues that the impact of introducing new institutions to resolve economic and social problems depends on their design that may either complement or substitute for indigenous village institutions. It provides insights about the implications of NGO institutional designs for *kafos* in The Gambia. The analysis is based on a purposive survey conducted in The Gambia on the functions performed by 41 *kafos* in 16 villages where two NGOs with different institutional designs are active.

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## THE CONCEPTUAL MODEL

The kafos in The Gambia are multifunctional, voluntary and usually homogenous in terms of members' age, ethnicity, gender and occupation, but have various membership sizes. These kafos have evolved from simple age based groups to multifunctional self-help groups that provide multiple services including insurance, financial intermediation, labour exchange, and social and political services.<sup>2</sup>

Kafos traditionally fill in for missing markets by providing important village services. The recent emergence of NGOs with diverse approaches for providing village level financial intermediation may cause positive or negative externalities on kafos. For example, the NGOs may use external funds to make zero interest rate loans directly to individuals or may use the kafos as lending conduits. These loans may disrupt the traditional kafos that usually charge a positive interest rate on loans made from internally mobilized funds. This could destroy local savings mobilization if the villagers become dependent on cheap external funds.

The entrance of NGOs into villages may cause a shift in the relative importance *within and among the functions* performed by the traditional kafos depending on whether or not the NGO financial technologies complement or substitute for traditional kafo activities. Consequently, kafos may either disappear entirely due to a Darwinian process of complete substitution or institutional duality may occur. The NGOs will diminish or displace the kafos if their financial services are perfect substitutes for the financial, insurance and other services provided by kafos. Otherwise, institutional duality will occur with the kafos and NGOs simultaneously providing multiple services. Alternatively, the NGOs may only complement the insurance and financial services of kafos so they will continue to perform their traditional functions. As a result, institutional duality will emerge with a potentially healthy symbiotic relationship between kafos and NGOs resulting in a positive sum welfare game.

The emergence of NGOs as financial intermediaries provides an alternative financial system for villagers in a country where formal financial institutions provide few services in rural areas. Channelling financial services through kafos may increase their pool of resources and improve NGO loan recovery rates and reduce the transaction costs in mobilizing savings<sup>3</sup>. In this way, NGOs and kafos can be complementary resulting in a positive sum game. NGOs may also substitute for some or all of the kafo financial services leading to a more efficient use of kafo resources in alternative functions. Substitution, however, can be counterproductive if NGOs create negative externalities by providing financial services that destroy the carefully built institutional safeguards of the kafos. They may also contribute to the deterioration or discontinuation of traditional kafo insurance mechanisms that are especially useful to *marginal populations* (the elderly, women etc.) but are not offered by the NGOs. For these reasons, the specific approaches followed by NGOs in financial intermediation can influence traditional village institutions with a significant impact on villagers and their communities.

## EMPIRICAL EVIDENCE FROM THE GAMBIA

The objective of this research was to examine the implications of NGOs providing financial services for the functions of traditional self-help village groups in The Gambia.

NGOs began offering financial services in the late 1980s and presently there are 14 NGOs using diverse institutional designs to supply financial services in rural and peri-urban villages (Graham *et al.*, 1992). We selected for study a total of 16 NGO and non-NGO villages, and two NGOs, Centre International de Development et de Recherche (CIDR) and Action Aid of the Gambia (AATG), that provide financial services. These two NGOs are active in rural areas where the majority of kafos are found, and their institutional designs are substantially different, allowing for interesting comparisons. Whereas Action Aid is a nationwide program, the CIDR provides only technical assistance to six villages in the Jahally-Pacharr area to set up and operate village savings and credit associations (VISACAs). Of the sixteen villages, five are serviced by both CIDR and Action Aid while the rest are serviced either by Action Aid alone or by no NGOs<sup>4</sup>. Data were gathered in two phases in 1991 and 1993 through the rapid appraisal approach and selected case studies of kafo activities in the sample villages.

### **Institutional Design Characteristics of the Action Aid and VISACAs**

Action Aid uses external funds to provide subsidized loans to individuals through village kafos. The CIDR provides only technical assistance in the formation of VISACAs and encourages the village kafos to participate as clients in these savings and credit programs. We hereafter refer to CIDR activities as VISACAs. Action Aid does not mobilize local savings since it depends upon external donor funds to provide loans. In sharp contrast, the VISACAs rely almost exclusively on internally generated funds through village savings mobilization to supply loans to individuals and kafos at village determined interest rates. Furthermore, while Action Aid supplies loans only for production purposes and for women, the VISACAs do not target any specific loan purpose or clientele group. The VISACAs are owned and operated by the villagers and the savings and loan services are based on terms and conditions established in village wide assemblies. The terms and conditions for Action Aid loan programs, however, are set by external donors. Indeed, the institutional design of the VISACAs closely emulates the traditional village kafos. Therefore, the VISACAs can be considered endogenous to the village while Action Aid is an externally imposed institution. Furthermore, the VISACAs encourage the kafos to become members of their associations, while Action Aid directly uses kafos as conduits for loans to individual villagers. Therefore, the VISACAs influence kafos by their *presence* while Action Aid influences kafos by its *direct intervention* into their operations.

### **The Sample**

A total of 41 kafos engaged in some form of financial intermediation and insurance functions were identified in the 16 villages and were examined for this study. The survey revealed that the kafos were fairly homogenous in member characteristics. Whereas 19 were comprised of only men and 14 were comprised of only women, eight were mixed gender. There were an average of three kafos per village and they were fairly large with an average membership size of 83 members, representing nearly 60 percent of the total adult village population (Table 1).

A classification based on level of NGO participation in the kafos showed that while 15 were not linked to any NGOs, 26 had some form of NGO involvement. Whereas 13 kafos functioned with no direct involvement with VISACAs and Action Aid but only subject to

pure NGO presence effect in the region, three were subject to the intervention effect from Action Aid as conduits for its loans, and ten were subject to both the *presence effect* from VISACAs and the *intervention effect* from Action Aid through direct NGO involvement (Table 1). The kafo functions were clearly influenced by the degree of NGO participation in their activities as will be discussed later.

**Table 1** *Characteristics and Activities Performed by Kafos, by NGO Activities*

Items	Total Sample	No NGOs Present	NGO Activity		
			Presence Effect	Intervention Effect	Presence and Intervention Effect
(1)	(2)	(3)	(4)	(5)	(6)
1. Number of kafos	41	15	13	3	10
2. Average number of members	83	46	116	57	104
a. male members	28	22	37	0	35
b. female members	55	24	79	57	69
3. Average age of kafos (years)	7	6	8	6	5
4. Activities performed (Number of kafos reporting)					
a. Insurance	31	12	8	3	8
b. Non-rotating savings and credit	31	13	9	3	6
c. Rotating savings and credit	6	0	2	0	4
d. Labour	11	2	4	0	5
e. Socio political	12	0	7	0	
5					
5. Total number of activities	91	27	30	6	28
6. Average number of activities/kafo	2.2	1.8	2.3	2.0	2.8

### **Kafo Functions**

The kafos generally were multifunctional and performed both economic and non-economic functions. These functions can be classified as four broad types:

*Insurance* In general, members (women, men or both) were engaged in a common activity such as jointly cultivating a plot of land and contributing the proceeds to a kafo fund primarily used to mitigate village level contingencies and, to a lesser extent, individual member contingencies. This type of group fund is often used to assist villagers who are economically disadvantaged to meet their emergency needs.

*Financial intermediation* Savings were mobilized without interest through regular fixed amounts of contributions to a group savings fund that was usually nonrotating in nature. Loans to kafo members for contingency needs were usually supplied from the fund at a

*kafo determined interest rate.* Penalties for non-repayment of loans included social sanctions against the family of the borrower. The accumulated fund was equally divided among members at the end of a specified time (eg. ramadan feast). Rotating savings and credit associations (ROSCAs) are also increasingly found within kafos as a subset of their activities. Kafos used as conduits by Action Aid had an additional source of funds for lending from Action Aid. These kafos used part of these funds for production purposes on their common fields and lent out the rest to individual members.

*Labour* Labour was mobilized among kafo members and often hired out during periods of peak demand. The proceeds were divided among the members and, to a lesser extent, contributed to the kafo fund to meet member and kafo level contingencies.

*Social and political* These included the organization of soccer clubs, village festivals, political rallies, etc.

Based on the above classification, the activities of the kafos are presented in columns 3 to 6 in Table 1 by type of NGO participation in the village. Column 4 reports the number and characteristics of kafos that functioned with no direct involvement with VISACAs or Action Aid but only subject to pure NGO presence effect in the region. Column 5 provides details on kafos subject to the intervention effect from Action Aid as conduits for its loans. Column 6 describes the kafos that were subject to both the presence effect from VISACAs and the intervention effect from Action Aid through direct NGO involvement. The first important observation is that the traditional kafos did not disappear with the entry of NGOs into the villages but continued to coexist with them and continued to perform various activities including providing insurance and financial intermediation. This indicates that the financial services of the NGOs did not fully substitute for the traditional kafo activities. Secondly, the average number of kafo activities seems to have increased with the entry of NGOs into the village. The kafos in villages without NGOs primarily provided insurance and financial services, and temporary kafos were formed to provide labour and socio-political functions. With the emergence of NGOs as financial intermediaries, the kafos partially shifted from their traditional insurance and financial activities into labour and socio-political activities. In addition, since the NGOs were only a partial substitute, the kafos continued to perform some insurance and financial intermediation functions to provide the full range of services demanded by villagers. For example, the targeted production loans provided by Action Aid only partially satisfied the villager's demand for financial services, so kafos filled in the demand for contingency credit and savings services for their members. Thirdly, the observations on kafo sizes based on their type of NGO involvement shows no clear pattern. But, women's participation in kafos subject to the intervention effect from Action Aid is higher compared to other kafos because Action Aid specifically targets women.

### **Econometric Analysis and Results**

Regression analysis was performed to explain the implications of NGO institutional design on kafo activities. While the VISACA is a village designed, non-interfering institution based on self-generated funds, the Action Aid is an externally designed program that directly intervenes into kafos with subsidized and targeted credit programs. It is difficult to

separate the effects of terms and conditions from the intervention and non-intervention policies of the two NGOs. The limits on the tractability of the analysis, therefore, confine us to nest the presence and intervention effects along with terms and conditions such as the interest rate used by NGOs for providing financial services. Single equation logit models were estimated using the maximum likelihood method to examine the factors affecting the insurance and financial intermediation activities performed by kafos. The dependent variable is dichotomous, taking a value of 1 if the kafo performs insurance or financial intermediation, and 0 otherwise.

The independent variables include the ratio of number of kafo members to total population of the village, CONRATIO, and the gender composition of the kafo, GENDER, represented by the ratio of female members to total kafo members. The effect of NGO involvement is measured by four dummy variables where the value of one represents the following: NGOABS indicates absence of NGOs in the village, VISACA and AATG indicates involvement of VISACAs or Action Aid with the sample kafo, respectively, and VISAATG captures the interaction effect of both VISACA and Action Aid on the sample kafos. The regression analysis controls for the AATG dummy which is incorporated into the constant. The targeting of women kafos by Action Aid is represented by GENAATG calculated as the interaction between the GENDER and the AATG dummy.

**Table 2** *Single Equation Logit Estimates for the Determinants of Insurance and Financial Activities of Kafos*

Independent Variables (1)	Dependent Variable	
	Insurance (2)	Financial Intermediation (3)
Constant	1.209 (1.181)	0.629 (1.071)
CONRATIO	-1.695 (4.981)	4.116 (4.565)
GENDER	-3.096 * (2.245)	-1.277 (1.44)
NGOABS	0.374 (1.154)	1.278 (1.222)
VISACA	-2.477 ** (1.529)	-0.457 (1.072)
VISAATG	2.427 * (1.673)	-1.506 (1.275)
GENAATG	3.675 ** (1.901)	1.462 (1.582)
Log-likelihood	-18.04	-20.78
Chi-square	9.47	6.84
Maddala R <sup>2</sup>	0.21	0.17

Notes: Asymptotic standard errors given in parentheses.

\*\* , \* represent significance at 5 and 10 percent levels, respectively.

The regression results are presented in Table 2 and the corresponding weighted aggregate elasticities in Table 3. Significant chi-square values and good R<sup>2</sup> values confirm the explanatory power of this type of analysis of cross-section data. The signs of the variables are, in general, consistent with expectations. Column 2 presents the results for the insurance regressions. The negative and significant sign for the variable VISACA confirms the proposition stated earlier that the presence of the VISACAs in the villages tend to reduce the insurance functions performed by the kafos compared to Action Aid.

This indicates that the untargeted loan and saving services provided by the VISACAs partially substitute for the insurance functions performed by kafos. In contrast, since Action Aid loans were targeted towards production purposes, especially for women, kafos have continued to perform their traditional insurance role by providing contingency loan and savings services in the villages. The significant, positive and elastic coefficient for GENAATG compared to the significant but negative coefficient for GENDER further confirms the argument that by targeting women for production loans, the Action Aid fails to completely substitute for village insurance functions.

**Table 3** *Weighted Aggregate Elasticities for the Determinants of Insurance and Financial Activities of Kafos*

Independent Variables	Dependent Variable	
	Insurance	Financial Intermediation
Constant	0.05	0.14
CONRATIO	-0.03	0.15
GENDER	-1.68	-0.16
NGOABS	0.01	0.07
VISACA	-0.04	-0.05
VISAATG	0.04	-0.11
GENAATG	1.71	0.09

The regression coefficients for financial intermediation presented in column 3 have the expected signs but are not significant because there is little variation in the financial services provided by kafos with various levels of NGO involvement. Table 1 shows that invariably all kafos provided financial intermediation services. However, there were shifts within the financial services provided by kafos based on the level of NGO involvement. The case studies revealed that the economically marginal members of kafos were not directly serviced by either the VISACAs or Action Aid. However, access by economically advantaged villagers to untargeted loans from the VISACAs may have reduced their crowding out of loans for marginal populations. On the other hand, the fact that Action Aid targeted production loans implied that villagers had to continue to depend on kafos for contingency loans. This reduced the access to loans for economically marginal kafo members. In addition, the borrower screening and contract enforcement techniques followed by VISACAs were also adopted by kafos to allocate their loan funds and this increased their loan repayment rates from 70 percent up to 95 percent. Meanwhile, loans made by kafos from funds provided by Action Aid carried few penalties so the recovery rate was less than 45 percent. While the untargeted loans from VISACAs did not substitute for financial services performed by kafos, they complemented the kafos because they are included as their members. Since the VISACAs do not intervene in kafo activities and they make untargeted loans from locally mobilized deposits at village determined interest rates, they are likely to produce positive benefits for kafos. Therefore, it is likely that the aggregate welfare of the village will at least not be reduced and may even increase because of the VISACA. In contrast, the targeted loans made by Action Aid at subsidized interest rates using external funds seem to negatively influence kafos by eroding their carefully built institutional safeguards. As a result, since Action Aid only partially substitutes for kafo activities, it may well reduce aggregate village welfare because the gains realized by some may not offset the losses of others.



## CONCLUSION AND POLICY IMPLICATIONS

Kafos have traditionally provided a variety of services including insurance, financial intermediation, labour and social and political services in Gambian villages. Recently, NGOs following diverse philosophies have expanded rapidly into villages and some are providing financial services. Whereas some NGOs exert a *presence effect* by simply coexisting with kafos, others directly intervene into kafos, thereby exerting an *intervention effect*. While some NGOs follow the *savings first and untargeted credit approach*, others follow the classical *supply-leading, subsidized credit first approach*. This paper addresses the implications of the institutional designs followed by two different NGOs, Action Aid that intervenes in kafos with externally imposed terms and conditions for the credit program and VISACAs that do not intervene in kafos for functions performed by traditional village kafo groups. The study shows that the financial services provided by both Action Aid and VISACAs are only partial substitutes for kafo activities, but only VISACAs have positive externality effects on kafos in the sample villages. The implication is that institutional designs matters. An externally designed institution with a rudimentary financial technology that directly intervenes into traditional village structures may be inferior to a non-interfering institution that complements traditional village kafos. NGOs need to be cautious in designing their financial programs so that their actions do not damage the positive attributes of traditional village institutions.

## NOTES

<sup>1</sup> It has been argued that targeting groups rather than individuals reduces transaction costs and repayment problems for lenders (Stiglitz, 1990; Varian, 1990). Empirical evidence from developing countries, however, shows mixed results in loan repayment performance with group lending (Huppi and Feder, 1990).

<sup>2</sup> See Nagarajan, Meyer and Ouattara (1993) for a discussion about the evolution of kafos in The Gambia.

<sup>3</sup> Rural households, especially women engaged in vegetable farming, often save in small quantities at frequent intervals (Shipton, 1992). The transaction costs involved in mobilizing these funds on an individual basis are often high for financial intermediaries. A group of savers, such as a kafo, can collectively deposit a larger amount and thus reduce transaction costs for the financial intermediaries.

<sup>4</sup> None of the sample villages was serviced by formal financial institutions, although three were eligible for production credit from the Gambia Cooperative Union.

## REFERENCES

- Alderman, H. and Paxson, C.H., 1992, 'Do the Poor Insure?: A Synthesis of the Literature on Risk and Consumption in Developing Countries', World Bank WPS 1008, Washington, D.C.
- Arnott, R. and Stiglitz, J.E., 1991, 'Moral Hazard and Nonmarket Institutions: Dysfunctional Crowding Out or Peer Monitoring?', *The American Economic Review*, Vol. 81, No.1, pp.179-190.
- Bouman, F., 1992, 'ROSCA and ASCRA: Beyond the Financial Landscape', Paper presented at the Seminar on Pioneers, Problems and Premises of Rural Financial Intermediation in Developing Countries, The Netherlands, November.
- Graham, D.H., Meyer, R.L. and Cuevas, C.E. (eds.), 1992, 'Financial Markets in the Gambia: 1981-91'. Department of Agricultural Economics and Rural Sociology, The Ohio State University, Columbus, Ohio.
- Huppi, M. and Feder, G., 1990, 'The Role of Groups and Credit Cooperatives in Rural Lending', World Bank, *Research Observer*, Vol. 5, No. 2.

- Nagarajan, G., Meyer, R.L. and Ouattara, K., 1993, 'Financial Intermediation by NGOs: Implications for Indigenous Village Groups in the Gambia', Paper presented at the Annual Meeting of the American Agricultural Economics Association, Orlando, August.
- Shipton, P., 1992, 'The Rope and the Box', in Adams, D.W. and Fitchett, D. (eds.), *Informal Finance in Low-Income Countries*, Westview Press, Boulder, Colorado, pp.25-42.
- Stiglitz, J.E., 1990, 'Peer Monitoring and Credit Markets', *World Bank Economic Review*, Vol. 4, No. 3, pp.351-366.
- Varian, H.R., 1990, 'Monitoring Agents with Other Agents', *Journal of Institutional and Theoretical Economics*, Vol 146, No. 1, pp.153-176.

**DISCUSSION OPENING** Rekha Mehra (*International Centre for Research on Women, USA*)

The authors of this paper are to be commended for addressing an important and timely topic, namely, the role of non-governmental organizations (NGOs) in grass-roots development. Of late, the role of NGOs in development policy and programs has been growing in both developed and developing countries. Some of the impetus for their growth has come from the recent emphasis in development planning and policy-making to reduce the role of the government, whether in the marketplace or in implementing development programs. The implicit assumption generally is that NGOs' performance will be better.

The paper serves a very useful purpose in clarifying that NGOs are diverse organizations and that their performance can vary greatly. They represent a range of possibilities — some good, some bad. They can be effective or not, they can adopt sensible or inappropriate strategies. In particular, the authors focus on a key linkage, the relationship between indigenous and international organizations. This is an important area because donor aid is often channelled through international or developing country agencies to local NGOs. It is useful to know what works in these partnerships, and the authors highlight some of these points. They include learning from indigenous grassroots organizations, building on a base that is already in place, and complementing the work of local NGOs rather than crowding them out.

The paper is somewhat less effective in clarifying what *does not* work. The authors conclude that the relative 'success' of CIRD can be attributed to its non-interventionist approach while the failure of Action Aid is due to its interventionism. This is an intuitively appealing idea and generally makes sense. In this case, however, the data provided in the paper appear to support a somewhat different conclusion. Namely, the weakness of Action Aid lay in its failure to adopt sound financial strategies. The problem was compounded by its interventionist approach in that it forced these inappropriate financial strategies on its partners.

Clearly, Action Aid did not do its homework. It would have been interesting to learn why, when so much information is available about the elements of successful financial services, the organization still chose to go with 'cheap' credit. It would also be interesting to know why local NGOs accepted the offer of 'cheap' credit when they already seemed to be on the right track.

In a parallel vein, it was not simply the institutional factor of coexistence among the VISACAS that had a positive impact on the other local organizations, but rather that CIRD had something to offer, a positive example of borrower screening and contract enforcement that was worth emulating and made good technical sense.

I would also have been interested in knowing more about why Action Aid chose to target women with its poor financial strategies. I can only guess that it was because they thought the poor strategies would be easier to impose on a more marginalized group. It provides a good example of what *should not be done for women* and what donors should be wary of among NGOs who want to work in women-in-development.