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Promoting Private Sector Participation in Agricultural Extension in Nigeria:  
Lessons from the New Institutional Economics

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Abstract

*This paper discusses strategies for enhancing private sector participation in agricultural extension delivery in Nigeria using some of the arguments of the New Institutional Economics. Bearing in mind the fact that the primary motivating factor of private enterprise is profit, the paper analyses, the feasibility of private provision of extension services by examining their economic nature. The question of moral hazard in private provision is also examined. Attention is drawn to the need to develop state contracting procedures to facilitate the transfer of responsibilities to the private sector.*

1.0 Introduction

Since independence, governments in Nigeria have assumed almost exclusive responsibility for providing extension services to farmers. In recent times, however, there have been calls for greater private sector involvement in the provision of extension services. This is probably in line with the current structural reforms which have seen the gradual withdrawal of government from the economy. The argument for structural reform is borne mainly out of the notion that the private sector performs more efficiently than governments and out of the desire to reduce government spending. It is, therefore, suggested that greater private sector involvement in extension service delivery would not only reduce financial burden on government, but also increase the effectiveness of agricultural extension. This would enhance the attainment of increased agricultural productivity and higher standard of living of traditional farmers, who are the primary targets of agricultural extension in Nigeria.

Regardless of the merits or demerits of those arguments, one fact is clear: there is severe fiscal pressure in the economy and the ability of government to sustain in to the future, effective provision of all social services (including agricultural extension) cannot be assured. To be sure, the smooth operation of the present nation-wide Unified Extension of the Agricultural Development Projects is reportedly hampered in some states, as a result of poor funding, notwithstanding the financial support of the World Bank (Baba et al., 1995). When the World Bank eventually withdraws, the situation will likely worsen.

It is, therefore, instructive to explore alternative arrangements that rely less on government for funding. One of the alternatives being proposed is greater private sector participation. But the private sector is motivated mainly by profit. The unresolved issue, here, is whether extension services provision is compatible with the realization of profit. This is the major issue addressed in this paper. The arguments sketched are acted mainly by the theorists of the new institutional economics.

2.0 Agricultural Extension Policies in Nigeria

The development of agricultural extension in Nigeria has a fairly long history. Its beginning coincides with the beginning of scientific agriculture, which, in turn, started with the advent of the British and the colonization of Nigeria. At the early stages, extension was carried out by itinerant native agricultural workers who travelled both on foot and bicycle from one farmer's farm to another and from village to village to advise farmers (mainly export crop producers) on how to

manage their farms, as well as to enforce government regulations. The organization of extension in this period followed the departmental structure at the nation's headquarters. In 1952, the responsibility of agricultural extension moved to the regional governments. In 1952, the (North, West and East) established extension services divisions which undertook all extension functions. This system continued into the early 1960s. Following the establishment of the Federal Ministry of Agriculture and Natural Resources in 1964, the ministerial structure was introduced. The ministry operated through field offices in various parts of the country (Akinbode, 1982). With the creation of 12 states in the late 1960s and the establishment of ministries of agriculture in each state, agricultural extension became mainly the function of the state ministries of agriculture.

Apparently dissatisfied with the performance of the agricultural sector, government in the 1970s introduced several programmes aimed at agricultural development. These include the National Accelerated Food Production Programme, the Operation Feed the Nation, the River Basin Development Authorities, and the Agricultural Development Projects (World Bank-assisted). In addition to other responsibilities, these programmes were also given the mandate to undertake agricultural extension activities, alongside the ministries of agriculture in each state. These programmes were more or less autonomous and their activities were not integrated.

In the late 1980s the unaided extension structure was introduced to Nigeria. This was spear-headed by the World Bank assisted Agricultural Development Projects (ADPs). This is the current agricultural extension responsibilities.

In addition to the above-stated extension providers, some universities have also provided extension services on a limited scale. There are also some non-governmental organizations involved in the provision of extension services in the country. On the whole, however, government has dominated and still dominates agricultural extension services in Nigeria. A striking feature is that the extension services are provided to farmers free of charge.

### 3.0 The New Institutional Economics

The New Institutional Economics (NIE) is one of the economic theories of organization that have recently received considerable attention in the structural reforms literature. It deals essentially with how incentives work in social and economic systems (Leonard, 1993). A fundamental departure from neo-classical micro-economics, NIE makes more realistic assumptions about human behaviour. For instance, it supplants the neo-classical assumption of universal rationality of man with "bounded rationality" and explicitly recognises the existence of costs to transactions, which are ignored in the neo-classical doctrine. It offers a number of concepts about human and organizational behaviour under different institutional arrangements which are quite useful in the analysis of reforms. These include transaction costs, bounded rationality, opportunism, incentives, paired agent theory, asset specificity, public and private goods, externalities, monopolies, game theory and property rights. While asset specificity is a description of those concepts that have been employed in the arguments to be presented later.

### 4.0 Economic Nature of Extension Services

The only way to achieve active private sector participation in agricultural extension delivery is the assurance of the possibility of profit in the delivery of such services. This will, in turn, depend on the economic character of the services in question. Generally a good or service could be economically classified as either private, private with externality, or public. A good is said to be private where exclusion or non-rivalry apply. Exclusion applies where the individual consuming a service captures its full benefits, while the rival principle obtains when two or more individuals cannot consume the service at the same time. A public service, on the other hand, obtains where neither the exclusion nor rival principles are at work. A private good with externality is said to exist when the benefits of a service spill-over to others.

Because those who pay for a public service or private service with externality cannot prevent others who have not paid from benefiting, there arises a free-rider problem. In other

... and, nobody will take the initiative and pay for such services because everybody would want to ... and "free-ride". This results in a market failure situation. The private sector with profit motive, ... ordinarily cannot provide such a service since nobody will pay. Under such circumstances, ... government involvement is necessary. Private services, on the other hand, could be privately ... provided since no market failure situation arises from their provision.

Looking at extension services, generally, it would appear that most of them are public ... services or private services with externalities. For instance, information on improved practices ... disseminated through the mass media is a public service; it is almost impossible to deny any farmer ... access to the information and several of them would receive it at the same time. Therefore, a ... private provider cannot utilise the mass media to reach a target. In that case, government may have ... to retain the use of mass media which may be restricted only to emergency situations (such as ... because outbreak) or pay a private provider of extension services to prepare and send such ... messages and use its power of taxation, if necessary, to recover the cost from farmers.

Information on improved methods is shared through individual or group meetings; also face ... to face, but slightly different market failure problem. When an extension agent visits (or contacts) ... a farmer or a well-defined group that has paid for that information, the concerned farmer(s) ... requires a substantial part of the service. Nonetheless, part of the information could spill-over to ... others who have not paid for it through a number of mechanisms inherent in the nature of ... agricultural production and African social setting. Agricultural production takes place in the "open" ... and it is possible for a farmer who has not paid for some information to acquire it by mere ... observation. For instance, a farmer who wishes to adopt an improved spacing recommendation ... could observe it from a neighbour's field. In addition, improved information passed on to one farmer ... who has paid could spread through discussion with others who have not. Ordinarily, we would ... expect that a farmer who has paid will not be willing to disclose information without cost to a ... neighbour. But the strong affective ties in African societies will threaten such a proposition.

It is evident from the foregoing that most methods of agricultural extension could create ... market failure, which tends to suggest that only government is best suited for agricultural extension ... its need not be the case, however. Farmers in a locality could be organised into a cooperative ... and private providers contracted to provide extension services to them. The cooperative could ... over a particular recommendation domain to minimise the effects of externalities; information ... passed to farmers in a domain may not be applicable or relevant to outside farmers.

Another possible way of dealing with the problem of externalities in private provision of ... extension services could be for government to pay private providers and use its power of taxation ... which only the state could (legitimately exercise) to recover its expenses from the farmers. It could ... be argued that the government may do this well through the services and use its power of coercion to ... cover its expenses from farmers, or why go through private providers? The answer probably lies ... in the high transaction costs (incurred by farmers) towards government work, rent input, and ... corruption) of running government services in Nigeria. Private providers have an incentive to ... minimise costs and may deliver the services more efficiently.

#### 4.1 Monopoly, franchise bidding and private provision

Majority of farmers in Nigeria are found in scattered localities in the rural areas. ... To concentrate demand and create economy of service delivery, it may be necessary to ... allocate only one provider to a particular group of farmers. This would, however, create ... a monopoly problem in which farmers could easily be exploited by the provider. The ... common solution to monopoly problem is price or rate setting and direct regulation by ... government. But the ability of government in Nigeria to effectively monitor the prices set ... by private providers is doubtful. In any case, direct regulation will raise the specter of ... transaction costs exponentially. A second solution offered by the NIE is that of *ex ante* and ... *ex post* competitive franchise bidding.

Franchise bidding is based on the argument that the threat of competition has the ... same effect as competition itself (Williamson, 1984, 1985; Wolf, 1988; Leonard, 1993).

Thus, if private extensionists are subjected to franchise bidding before and after the selection, to provide extension services, they compete away their monopoly power.

The major threat to this proposition is posed by asset specificity. If the provision of extension services require investments in transaction-specific assets, then a principal once selected, will have advantages over subsequent competitors and the monopoly problem would ensue. Williamson's (1984) view on the problem of asset specificity is illuminating:

"Whether or not competition is fully efficacious or not depends on whether the good or service in question is supported by durable investments in transaction specific assets. Where no such specialised investments are incurred, the initial winning bidder realises no advantage over non-winners. Although it may continue to supply for a long period of time, this is only because, in effect, it is continuously meeting competitive bids from qualified rivals. Rivals cannot be presumed to operate on a parity, however, since substantial investments in transaction specific assets are put in place. Winners in these circumstances enjoy advantages over non winners, which is to say parity is upset. The reason why contractual asymmetry between the winning bidder on the one hand, and non winners on the other is because economic values would be sacrificed if the on going supply relations were terminated. ... Not only is the supplier unable to realise equivalent value from specialised assets to be redeployed to other uses, but the buyer must induce potential suppliers to make the same specialised investment, were he to turn to an outside supplier."

But private provision of extension services is unlikely to involve substantial investments in durable transaction-specific assets. Transport facilities, audio-visual aids and other assets necessary for agricultural extension have ready alternative uses. Hence, franchise bidding is worthy of consideration when planning to transfer extension services to the private sector.

#### 4.2 Principal-Agent Theory, moral hazard and private provision

Whether one individual depends on the actions of another, an agency relationship arises (Pratt and Zeckhauser, 1985). In such a relationship one party, the principal, enters into a contractual agreement with another, the agent, in the expectation that the agent will subsequently choose actions that produce outcomes desired by the principal (Moo, 1984). Examples of the well known agency relationships are doctor-patient, politician-citizen, employee - employer and lawyer-client. In the same manner, the extensionist is an agent and the farmer is the principal.

Whenever an agency relationship exists, the problem of moral hazard surfaces. This is largely because, as the NIE literature suggests, human agents are subject to opportunistic behaviour. Opportunism has been described as the condition of self-interest seeking with guile, usually achieved through incomplete or distorted disclosure of information, in an attempt to mislead, disguise, obfuscate, or confuse (Williamson, 1984, 1985). The problem is worsened, whenever there is information asymmetry between the individuals involved in the contract. By and large, this is often the case in agency relationships. Frequently the agent has specialised knowledge which the principal lacks. Therefore, how is the farmer to ensure that the extensionist will always act in his (the farmer's) best interest since the interest of both may not be perfectly aligned? For instance, what is to prevent a profit-driven extensionist from providing substandard services (such as fake inputs) when the farmer is not able to evaluate their quality? A challenge for principal-agent theory therefore, is to design an incentive structure that would deter private extensionist from opportunistic behaviour. Agency theory makes the following propositions in connection with this problem of moral hazard:

- a. a large stock of value that could be lost in a malpractice suit, such as reputation or assets subject to suit, is a strong incentive for good behaviour; an extensionist found providing substandard services could lose reputation and business (Pratt and Zocklauer, 1985).
- b. long-term relationships develop the stocks of value needed for "enforcement" and make limited monitoring more effective; if the extensionist expects to make long-term repeated transaction, he/she is likely to behave properly since bad behaviour will be detected with time.
- c. professional colleagues, through their associations, could undertake the monitoring mentioned in "(b)" above; this could be achieved through professional associations such as the Agricultural Extension Society of Nigeria, which will, however, need to be strengthened to undertake this task effectively (Touhy and Wolfson, 1978).

It is evident from the above propositions that there are in-built mechanisms that would check malpractices in private provision. In addition, government could delegate the responsibility of monitoring providers to professional associations with the same expertise as the providers.

#### 4.3 Input supply

To earn reasonable profit, private providers may have to combine extension work with input supply. Providers could undertake the sale of improved seeds, feeds, fertilizer and other inputs. This will not only enhance the income of providers, but it has the added advantage of ensuring the link of input supply with advice on their utilization. This need not be the case of "jack of all trades". One of the frequently cited causes of failure of past extension services is that extension workers were involved in too many activities. But this was so mainly because the extensionists were government workers who engaged in corrupt practices in the distribution of inputs. With private providers, the benefits of linking advice with distribution will likely outweigh the distraction caused by such endeavour.

#### 4.4 Link with research

Private providers require, on a continuous basis, information on new practices to be extended to farmers. This could be achieved through a strong link with research institutes which, at least initially, will continue to be funded mainly by government. The providers will therefore, have to register with research institutes with mandate over their recommendation domain. The institutes will serve as source of information on improved practices and also train extensionists on the application of such practices. In addition, universities, colleges of agriculture and other relevant tertiary institutions will have to be actively involved in organising in-service training courses for extensionists.

Professional associations also have important roles to play in updating the knowledge and competence of providers of extension services, through their workshops and conferences. To keep abreast of developments in the field of agricultural extension in other parts of the world, the professional associations, in turn, need to affiliate with relevant international bodies.

#### 5.0 Conclusion

As is evident from section 2, Nigeria has no major experience in private provision of extension services which: has been dominated by government. This calls for caution in trying to transfer certain extension responsibilities to the private sector. It should be started on a pilot scale so that experiences gained could guide future expansion. Furthermore, empirical information is required on the ability and willingness of farmers, who are accustomed to free services, to pay for

extension advice. State contracting procedures in hiring and firing private providers and delegating responsibilities to professional associations need to be developed. It may also be necessary to designate, clearly, recommendational domains across the country and encourage the development of cooperative spirit among farmers. Government will also have to determine the appropriate level of professional qualification required to establish a practice and establish some special credit facilities to provide providers with starting capital.

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