



Influence of Agricultural Service Provision on Rural-Urban Migration in Delta State, Nigeria

Albert Ukaro OFUOKU^{1*} Christopher Okeleke CHUKWUJI¹
Rodney Akpoviri ISIORHOVOJA¹

¹Department of Agricultural Economics and Extension, Delta State University, Asaba Campus, PMB 95074, Asaba Delta State, Nigeria
* e-mail: ofuoku@yahoo.com

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Abstract: This study was conducted in Delta State, Nigeria. In the study, a two-stage conditional likelihood procedure and new data from Delta State, Nigeria were used to identify the correlation of rural-urban migration at the individual, household, and community levels, with special attention on agricultural services. Two surveys were conducted to get the data. The first set of data were sourced from Delta State Agricultural Development program (DTADP). The data included household and community level survey which were meant to assess ways of making agricultural service provision effective for small holder farmers. The survey was carried out in six (6) local government areas (two (2) from each agro-ecological zone) from the month of February to June, 2011, and data on markets, agricultural service provision and infrastructure were included in the survey. The second data were sourced from survey which covered 450 households (10 randomly selected household per community) from 45 communities (15 communities per LGA) in three (3) of the originally surveyed local government areas (one (1) from each agro-ecological zone) which were revisited in May 2012. The three Local Government Areas were selected to represent differences in agricultural productivity and level of agricultural service provision. Households in the most densely populated communities in Delta Central Agricultural Zone looked better off than Delta North and South agro-ecological Zones in terms of proximity to market, infrastructure and agricultural services. In all the agro-ecological zones, males were more prone to migration than females. In terms of level of education, there were significant differences between migrants and non-migrants. The results of the econometric analysis are in consonance with the theories of human-capital and network variables and assets, that these variables are salient correlates of rural-urban migration. While considering endogeneity of agricultural services, the findings indicated that agricultural service improvements which have the objective of reducing economic isolation of rural communities have the capability of promoting mobility of labour and free up farm labour for rural-urban migration by reducing costs of transaction and production.

Keywords: Rural-urban migration; Delta State, Nigeria; agricultural services; economic isolation; spatial integration.

1. Introduction

Migration is as old as the history of man as a result of the fact that man started moving from one geographical location to another, either on temporary or permanent basis, right from the ancient times. It is a common observation all over the world that rural-urban migration is the dominant pattern of migration (Ofuoku and

Chukwuji 2012). So many literatures talk about the causes and dynamics of rural-urban migration. The population of Nigeria is rapidly growing and it is thought to have put pressure on the available cultivatable land emanating from the encouragement of migration by increasing the domestic supply of labour. The macro-economic environment which is urban-based has resulted in

terms of trades that are unfavourable for agriculture and rural areas, widening the rural-urban differentials (Abdulai 1999). Tsegai (2007) discovered that income differentials were an important correlate of migration. Other factors such as lack of prestige of farm work, the social degradation and stigma associated with rural living, and lack of appropriate jobs and social amenities are thought to have effects on both educated and uneducated individuals (Wouterse 2010).

People have various reasons for embarking on migration. However, Ekong (2003) suggests that it is difficult to strictly pin-point the causes of migration as such since causation connotes absoluteness. It is difficult to point this or that factor as the absolute cause of an individuals' decision to migrate. In fact, it is more scientific to refer to the correlates of migration as factors that are systematically related to the phenomenon of migration without necessarily proving migration. Wouterse (2010), Ofuoku and Chukwuji (2012) found that people migrate for economic reasons, and the need to escape from adverse social and physical conditions. Von Braun (2004) suggests that people tend to be pushed from areas of decline and pulled to areas of prosperity.

According to Tadaro (1976), migrants' population does not typically represent a random sample of the overall population. Most rural-urban migrants are young, formally educated, less-risk averse and more achievement oriented (Ekong 2003; Ofuoku and Chukwuji 2012).

Agriculture was the mainstay of the Nigerian economy before the discovery of oil. Agriculture was booming in Nigeria in the post independence period, but as Nigeria gained independence in 1960, there followed the discovery of oil. The oil boom led to rapid urbanization as multinational oil exploring and servicing companies moved massively into the study area. The entry of various missionaries who established schools prompted a lot of children to acquire education. The educated ones were no longer interested in farming when they become aware of white collar jobs provided by the oil exploring and servicing companies and ministries.

Adewale (2005) opines that rural-urban migration negatively impacts on the quality of rural life, especially when such migrants carry away their needed productivity to the city. He further stated that such migrants to the urban areas place greater burden on farmers. This is linked to the fact that farmers spend more time to cover the same area of land than when he or she had the assistance of the migrant. While scholars such as Nicholls (1964) conclude that there are positive consequences of rural-urban migration, in terms of increasing labour scarcity which emerge from migration and productivity outcome and wage increase in rural areas, Tadaro and Harris (1971) are of the view that a fall in agricultural output is likely to emanate from rural-urban migration, given the existence of positive marginal product of labour in agriculture, especially in the relatively land abundant economies of Africa and Latin America, and some South Asian Countries.

The correlates of migration are thus likely to be identified within the important key considerations that characterize the livelihood positions and prospects of households in rural communities (Wouterse 2010). It is not that every individual does not respond to opportunities for migration in similar manner. In situations like this, the characteristics of the individual potential migrant form the explanatory variables in migration. According to Wouterse (2010), at the individual level, the selection aspects of migration, particularly immigration, have been highlighted. Taylor and Martin (2001) suggest that the human-capital view of migration, for example, implies that individuals who self-select into migration are those for whom, over time, the expected-income differential between migration and non-migration is greatest and/or the costs of migration are lowest.

A possible point of genesis for consideration of the relationship between agricultural service provision and migration is the application of a farm household model as used by Singh *et al* (1986), Ellis (1993) in examining the relationship between decentralization and migration.

The household economic model predicts migration as a function of on-farm returns to

labour time compared to off-farm earning opportunities (Worterse 2010). Given an asset base (such as land, farm infrastructure and equipment) and a defined amount of total labour time, the household's decision is based on a comparison between the returns to time spent on the farm and time spent on non-farm wage earning when deployed to non-farm work. Factors that increase the returns to time spent on farm activities would tend to reduce the motivation to migrate (Worterse 2010). Two such salient variables are increased farm output prices and farm wage rates and greater opportunities in off-farm work would raise the motivation to migrate.

Agricultural services in Nigeria are decentralized. Decentralization, according to Owusu (2005), is expected to improve service and infrastructure delivery in poor rural communities. Adequate infrastructures which are also meant to serve agriculture and agricultural services provision can interact in various ways to promote the returns to the on-farm labour supply. With good transportation and communication infrastructure, spartial integration of product and factor markets is enhanced. When this happens, transaction costs are reduced. Renkow *et al* (2004) observe that through reduction in the transaction costs of market exchange, infrastructure can enhance the net returns to agricultural production. This implies that decentralization many reduce the need for migration as means to supplement agricultural income through increased returns to agricultural production. Finally, Worterse (2010) suggests that of particular importance in an imperfect market environment, where hired labour cannot easily be substituted for on-farm labour, reductions in transaction costs due to better infrastructure can relax time constraint of a household. The implication is that freed-up own labour can take advantage of the off-farm employment opportunities that may be available and better as a result of the factor markets' spatial integration. Many studies have largely focused on the dynamics, causes and consequences of international migration (Worterse 2010), but less attention is paid to the relationship between rural-urban migration and agricultural service provision

and this subject matter is very important and very relevant to the farming communities that represent the poorest part of the Nigerian population. This is the first study to scientifically relate community-level agricultural service provision to the correlates of emigration in Delta State, Nigeria. This study was therefore undertaken to determine the relationship between agricultural service provision and rural-urban migration in Delta State, Nigeria. It was hypothesized that there is no significant relationship between agricultural service provision and rural-urban migration.

2. Methodology

The study was conducted in Delta State, Nigeria. The study area is located in the Niger Delta Area. It consists of 25 local government areas covering a total of 24, 480 sq km. The State lies within latitude 5°00' 6°30'N of the Equator and 5°00' and 6°45'E of the Greenwich Meridian. The state is demarcated into three Agro-ecological zones such as Delta South, Central and North Agro-ecological Zones. Delta South agro-ecological zone is covered with mangrove swamp forests. Delta Central Agro-ecological zone lies under fresh water and rain forests, while Delta North Agro-ecological zone is covered with derived savannah.

The people of Delta State are predominantly farmers who cultivate root crops (Cassava, yam cocoyam and sweet potato-*Ipoema batata*); grain crops (maize, and beans) plantation crops (rubber, oil palm fruits and manginally, cocoa); and fruit and leaf vegetables(such as cucumber, water melon, tomatoes, garden egg, water leaf, fluted pumpkin, amaranthus, etc). They also rear livestock (such as goats, sheep, rabbit, cane rat, and guinea pig); and poultry.

Data were collected to identify correlates of rural-urban migration at individual, household, and community levels. Multi-stage sampling technique was applied in this study. Two surveys were conducted to get the data, as adapted from Abdulai (1999). The first set of data was sourced from Delta State Agricultural Development program (DTADP). The data included household

and community level survey which were meant to assess ways of making agricultural service provision effective for small holder farmers. The survey was carried out in six (6) local government areas (two (2) from each agro-ecological zone) from the month of February to June, 2011, and data on markets, agricultural service provision and infrastructure were included in the survey. The second data were sourced from survey which covered 450 households (10 randomly selected household per community) from 45 communities (15 communities per LGA) in three (3) of the originally surveyed local government areas (one (1) from each agro-ecological zone) were revisited in May 2012. The three Local Government Areas were selected to represent differences in agricultural productivity and level of agricultural service provision.

Migration decisions are made in the context of prevailing institutional and structural labour market conditions, local wealth-property relationship and geographical disparities in economic opportunities and services (Wouterse 2010). A study of the factors that influence rural-urban migration is therefore best done by utilizing a model that incorporates factors at both individual/household and contextual levels. Exclusion of any of these subjects of explanatory variables may result to misspecified equations and biased estimates of causal relationships (Bilsborrow *et al.* 1987). In this study, econometric analysis of rural households in Delta State, Nigeria was utilized to identify correlates of rural-urban migration at the individual, household and community levels. The survey data that were collected from the pull areas were used to assess how characteristics of place of origin influence rural-urban migration. Emigration may involve one or more individuals from the same household while other members remain behind. It may also involve every member of the household. This implies that no member of the household will remain in the push area to give the details of the circumstances there. Bilsborrow *et al.* (1987) suggest that an origin area (push area) survey can only provide reliable information for analyzing the correlates of emigration by individuals.

Decisions to emigrate founded on a process whereby on individual in household in community takes cognizance of information at the three levels. Bilsborrow *et al.* (1987) applied the simplest expression of a general multilevel model of individual emigration as follows:

$$m_{ijk,t} = f(X_{ijk,t}, X_{jk,t}, X_{jk,t-1}, X_{k,t-1}) \quad (1)$$

where $m_{ijk,t}$ is the probability to migrate by i -th individual who is a member of the j -th household in k -th community at time t , while $X_{ijk,t}$, $X_{jk,t}$, $X_{jk,t-1}$ and $X_{k,t-1}$ represent individual characteristics at time t , household characteristics at times t and $t-1$ and community level characteristics at time $t-1$, respectively. The dependent variable takes the form of a binary choice variable – decision to migrate or not from a rural area to an urban area. The probability of an adult son or daughter that was 15 years or more old in 2011 in a household to have migrated from the rural household to an urban area for economic reasons between February 2011 and May 2012, relative to being a non-migrant in that period was analyzed. As done by Wouterse (2010), one year cut-off was chosen to focus on recent behaviour and to give room for the analysis to include household and community levels data collected in February 2008. However, a large category of women who migrated because of marriage are excluded. Migration in search of education is classified as being for economic reasons, as this choice is generally motivated by long-run economic goals (Wouterse 2010).

The attempt to establish a relationship between rural-urban migration and agricultural service provision is not an easy one, since the assignment of agricultural services in a particular community may not be random. Thus it is essential to use a methodology that controls for endogeneity of agricultural services effectively. Putting into consideration, the various types of agricultural services, one cannot satisfactorily measure them by mere counting procedure. Therefore one discrete and two continuous and endogenous variables were used. For each of the variables, a reduced-form linear probability must be computed

and residuals extracted (Wouterse 2010). Instrumental variable probit is not appropriate when one or more of the endogenous regressors are binary (Wouterse 2010). Thus, the two-stage conditional maximum likelihood (2SCML) method originally used by Rivers and Vuong (1988) was utilized. According to Wouterse *et al* (2010), the 2SCML procedure begins with estimations using the endogenous explanatory variables as dependent variables in the first-stage reduced-form regression models, while in the second stage, the residuals of the first-stage models are included in the probit model as additional variables, along with the original endogenous regressors. Rivers and Vuong (1988) suggest that in addition to producing estimates that are consistent and accurate standard errors, it allows statistical testing for endogeneity.

In order to ensure proper identification of the agricultural services and rural-urban migration equations, it is necessary to find a set of suitable exogenous variables (Wouterse 2010). Ethnic fractionalization (*EF*) at the community level, size of the community (number of households), the size of the local government area (population) was done. A dummy variable which takes the value of one (1) if the major crop cultivated in the community was cassava. Fragmentation in terms of ethnicity will likely influence the ability of a community to attract agricultural services. The procedure explained by Mauro (1995) was followed in the calculation of ethnic fractionalization as:

$$EF = 1 - \sum_{i=1}^I \left(\frac{n_i}{N} \right)^2, \quad i = 1, \dots, I, \quad (2)$$

Where n_i represents the number of households in the i -th ethnic group, N represents the total number of households in the community, and I represents the number of ethnic groups in the community. Therefore, *EF* assesses the probability that two households selected randomly from a given community will not belong to the same ethnic group. The higher the *EF* index, the more fragmented the community (Wouterse,

2010). The community and local government area sizes may also explain the level of provision of agricultural service. The local government area-level differences are in terms of population density and poverty. These may explain the type and level of agricultural services provided.

3. Results and Discussion

Agricultural service, infrastructure and market provision Access to credit was low generally as 20.4% of farming households in Delta Central Agro-ecological Zone, 15.6% of farming households in Delta North Agro-ecological Zone and 12.3% of farming households in Delta State Agricultural zone accessed loan from sources outside their respective communities in 2011. it was discovered that 9.6% of the households demanded for a loan and were refused. About 30.9% of the households did not apply for a loan because of lack of collateral. The implication is that there may have been demand for loan which outweighed the supply in the study area.

Agricultural services that were available included grinding and grating mills, tractor hire service, agricultural produce transport vehicles, harvest transport vehicle, agricultural extension service and veterinary service. Communities in Delta and Central North Agro-ecological Zones had access to five of these services, while communities in Delta South agro-ecological Zone had access to four of these services. Great difference was observed in the agro-ecological zones with respect to these services. In Delta Central Agro-ecological Zone, grinding and grating mills were present in 78% of the communities as opposed to 56% of communities in Delta North Agro-ecological Zone and 39% of communities in Delta South Agro-ecological zone. These indicate that more agricultural activities take place in Delta North and Central agro-ecological zones than in Delta South Agro-ecological zone.

With respect to availability of market, on the average, the distance to the nearest market for the main crop (cassava) was about 5.2 kilometers for communities in Delta Central Agro-ecological Zone; 6.3 kilometers for communities in Delta North Agro-ecological Zone and 8.5 kilometers

for communities in Delta South Agro-ecological Zone. Markets held every four days in more than half of the communities in Delta Central Agro-ecological Zone, while they held less frequently (weekly) in more than half of the communities in Delta South Agro-ecological Zone and every five days in more than half of the communities in Delta North Agro-ecological zone. There is substantial difference in terms of distance to the nearest input market among the communities in the three agro-ecological zones. Communities in Delta Central Agro-ecological Zone travel about 21 kilometers to an input market, while communities in Delta North and South Agro-ecological Zones travel 23 kilometers and 30 kilometers to input markets respectively. With respect to infrastructure, tarred roads led to 75% of communities in Delta Central Agro-ecological Zone as opposed to 60% and 42% of the communities in Delta North and South Agro-ecological Zones respectively.

On the whole, households in the most densely populated communities in Delta Central Agricultural Zone looked better off than Delta North and South agro-ecological Zones in terms of proximity to market, infrastructure and agricultural services. This disparity is expected in agricultural service provision and existing infrastructure and market that serve the farming households are expected to have effect on rural-urban migration. According to Wouterse (2010), economic isolation has been associated with higher transaction costs. Renkow *et al* (2003) assert that spatial integration by improved rural services is likely to boost net returns to agricultural production and reduce the need for emigration. Integration of agricultural services with infrastructure delivery and market proximity may boost net returns to agricultural production and discourage emigration from rural to urban areas. Therefore, unimproved agricultural service delivery coupled with inadequate infrastructural and amenities development will enhance economic isolation and may enhance emigration

of own-farm labour from rural areas to urban areas.

Migrant's Decision

The decision to emigrate is specified as a function of variables that are assessed or measured at the individual, household, and community levels as shown in Table 1.

Considering individual characteristics, Tadaro (1976) states that most rural-urban migrants tend to be young, less risk averse, more educated and adventurous. Table 1 shows that there is significant age difference between migrants and non-migrants in the study population. There is also significant difference in the gender of migrants and non-migrants in the study area. In all the agro-ecological zones males are more prone to migration than females.

In terms of level of education, there are significant differences between migrants and non-migrants. The more educated citizens tend to make decision to migrate than the less educated ones. The sign borne by the T-test value in primary education shows that the less educated ones are less likely to emigrate than the educated ones. This is congruent with Taylor and Martin (2002) who observe that education has been found to promote rural outmigration; individuals tend to take their education to labour markets where they will reap the highest economic returns to their schooling. However, Taylor (1986) suggests that individuals with mid-level education are more likely to migrate internally rather than internationally, where return to education is higher. Generally, the results indicate that migrants tend to be better educated than non-migrants, while a larger population of the migrants received a secondary education.

Table 1. Descriptive Statistics of Explanatory Variables of Migrant's Decision at the Individual, Household and Community Levels

Variable	Migrant	Non-migrant	T-test
Individual level			
Age	21.50(4.41)	24.65(4.52)	2.43
Gender (male=1, female=0)	0.38(0.52)	0.68(0.56)	13.29
Primary Education (yes=1,no=0)	0.09(0.38)	0.20(0.41)	-4.54
Secondary education (yes=1,no=0)	0.41(0.43)	0.10(0.35)	2.65
Household level			
Household size in 2011	6.55(4.40)	8.42(4.51)	2.39
Age of household head	60.0(15.22)	62.50(15.26)	2.98
Landholdings in Feb. 2011	10.51(9.44)	9.16(9.41)	2.53
Livestock Holdings in Feb 2011	1.50(3.61)	3.10(6.92)	2.74
Migration history of head (yes=1,no=0)	0.18(0.40)	0.06(0.25)	2.54
Access to electricity in Feb. 2011(yes1,no=0)	0.45(0.54)	0.28(0.45)	11.92
Community level			
Number of agricultural services (Feb, 2011)	4.51(1.77)	4.62(2.05)	0.31
Tarred road (yes=1,no=0)	0.46(0.50)	0.43(0.49)	3.10
Distance to input market (Feb. 2011)	19.21(18.72)	23.10(20.15)	1.48

At the household level, there is significant difference between migrants and non-migrants in terms of household size, age of household heads, land holdings, livestock holdings, migration history of household head and access to electricity. In this study, the household size of the non-migrant is larger than that of the migrant. This is at variance with *a priori* expectation that migrants come from large families. The age of non-migrant household head is higher than that of the migrant household head. The land holdings of migrant household are larger than the land holdings of non-migrant households. This is attributed to the fact that remittances from migrants help to raise the income level of their households and thus have extra money with which to purchase plots of land. This finding is at variance with that of Wouterse (2010) in his study in Northern Ghana. The livestock holdings of non-migrant household head are more than that of the migrant household head. The livestock management system takes the form of free range system where the livestock roam about to fend for themselves Reardon *et al* (1992) opine that rural household heads in sub-Saharan Africa generally consider holding livestock as an important route

to furthering wealth; they can use livestock as collateral for loans to start non-farm enterprises, and the revenues from sales of animals and by-products can be included in non-cropping income. Migrant household heads tend to have more migration history than non-migrant household head. This is in consonance with Taylor and Martin (2002) who observe that migrants are more likely to emanate from a household whose head had a past history of migration.

With respect to community level correlates of migration, there is no significant difference between migrants and non-migrants in terms of number of agricultural services provided. However, non-migrant communities had more agricultural service provision than migrant communities.

The number of available agricultural services could potentially influence the decision to migrate (Wouterse 2010). Wouterse (2010) suggests that increased availability of agricultural services is likely to lower the transaction costs for marketing of farm outputs, thereby increasing the returns to agricultural production and reducing the need for migration to supplement agricultural income. In terms of the availability of tarred road, there is significant difference in migrant and non-migrant communities. Migrant communities had more tarred road network than non-migrant community.

Tarred road is known to increase accessibility of a community, especially during the raining season. This enhances market integration and also promotes labour movement. It is also suggested by Wouterse (2010) that it could reduce the need for migration to supplement agricultural income by lowering transaction costs.

There is no significant difference between the migrant's and non-migrants' communities in terms of nearness of migrant households to input markets. The nearer a community is to an input market, the lower the cost of transaction and cost of migration. Generally, there are no significant differences in individual community-level characteristics. However, in combination, all these characteristics can influence the decision to migrate.

Estimation for migration decision

Table 2 indicates that at the individual level, migration tends to increase with age. Increase in age brings about the likelihood of increased migration, but at decreasing rate. This finding confirms that of Wouterse (2010). Males are more likely to embark on rural-urban migration compared to females. This finding is at variance with those of Mensah-Bonsu (2003), Wouterse (2010) for Northern Ghana. Males see themselves as bread winners traditionally and therefore migrate in search of higher income jobs in urban areas.

Better educated individuals more likely embark on rural-urban migration, in consonance with human capital model. Taylor and Martin (2001) state that the human-capital model of migration implies that individuals who self-select into migration are those for whom, over time, the expected-income differential between migration and non-migration is greatest and/or the migration costs are lowest. Selection decisions are known to be linked with quality outcomes of immigrant. The selection of immigration by an individual is therefore seen to be indicative of the individual's true quality relative to the home country's population (Borjas 1987).

At the household level, landholdings positively influenced rural-urban migration. It is observed that migration is possible on possession of fund and information, thus households with small landholdings may not be able to source the fund needed fund for its member to emigrate.

Migration history of household head is likely to influence rural-urban migration. A household head that had migrated before is more likely to allow and sponsor rural-urban migration of any of his household member. The coefficient of the migration history of the household head is positive and significant. This is more so when such head would have established networks of connections with people in the urban areas. The coefficient of access to electricity is significant, but negative. This implies that adequate access to electricity reduces the tendency of an individual to embark on rural-urban migration. Bilsborrow *et al* (1982) suggests that lack of amenities positively influence migration.

With respect to community-level characteristics, the existences of tarred road positively influence rural-urban migration. With the presence of tarred roads, a community is better connected with its surrounding communities. This tends to enhance spatial integration of its factor markets and products, and hence enhance labour mobility.

The number of agricultural services offered in the community influences migration. Long distance from an input market decreases the tendency to embark on rural-urban migration. Renkow *et al* (2004) state that it has been demonstrated that economic isolation is positively associated with transaction costs. When the findings at the community and the household levels are combined for income-generating assets, the alternative hypothesis which says that improved agricultural service provision such as the ones captured in this study, influences the tendency of an individual to embark on rural-urban migration.

Table 2. Results from the 2SCML Estimation for Migration Decision

Variable	Migration
Individual Level	
Age Squared/100	0.18(0.06)*
Gender	-0.21(0.10)**
Primary Education	0.20(0.09)**
Secondary Education	-0.76(0.16)
Household Level	0.66(0.13)**
Household Size in 2011	-0.06(0.02)**
Age of Household head	0.00(0.01)
Landholdings in February 2011 (ha)	0.11(0.51)**
Livestock holdings	-0.07(0.04)
Migration history of household head	0.56(0.25)**
Access to electricity	-0.62(0.11)**
Community level	
Number of agricultural services (Feb. 2011)	0.29(0.12)**
Distance to input market (Feb. 2011)	-0.05(0.03)**
Tarred road	0.89(0.36)*
Wald-test of exogeneity chi sq	21.58
Prob. Chi sq.	0.0003
Pseudo R-squared	0.75

*significant at 10% level, **significant at 5% level

Figures in parentheses are robust standard errors

For its number to emigrate

This is so because adequate provision of agricultural services reduces transaction and operational costs involved in agricultural production, thus farm labour is freed up for rural-urban migration.

4. Conclusion and Implications

This study utilized data from the survey of two consecutive years involving 450 households in 45 communities from the three agro-ecological zones of Delta State, Nigeria. This study empirically created a linkage between community level agricultural service provision and correlates of rural-urban migration. The results derived from the econometric analysis support the human-capital and network theories, and pointed out the salient role of assets in the decision to engage in rural-urban migration. The results indicate that community-level factors significantly influence rural-urban migration. Communities that are economically isolated in terms of lack of agricultural services are less likely to influence rural-urban migration. Therefore, improvements in agricultural services provision that enhances the spatial integration of factor markets goods

would tend to enhance rural-urban labour migration. The agricultural services that reduce transaction costs that are related to agricultural production will reduce the demand for farm labour, and hence free up individuals to embark on rural-urban migration.

Policy makers have the objective of reducing rural-urban migration with the aim of decongesting urban areas. These policy makers want to approach this objective by considering the correlates of rural-urban migration that emanate from lack of agricultural services such as inadequate extension service, limited infrastructure and lack of access to electricity, etc. the findings in this study indicate that agricultural services and adequate infrastructural and amenity asses which tend to enhance spatial integration may have contrary effect of promoting migration. Although this finding demonstrates that rural-urban migration could be promoted, the existence of these services in my opinion can also make some household members who sought and have jobs to commute between rural and urban areas to attend to their jobs.

On the other hand, adequate provision of agricultural extension and other agricultural services that will enhance productivity and easy access to market may also motivate household heads who are the actual farmers to remain in the rural areas and allow one member of his households to migrate. It is also possible that spatial integration may redirect migration and make migrants to become return-migrants, especially in this era of high rate of unemployment. Return migrants may decide to establish own farm as a way of creating employment for them.

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