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Multidimensional Effects of Migration on Output of Farming Households in Southwest Nigeria

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Abstract

The effects of migration have often been limited to the receipt of monetary remittances to sending households. However, there are other dimensions of migration with effects on the households. We argue that migration remittances could have monetary, social, and technical dimensions with differential effects on farming households' livelihood outcomes. This study investigated the multidimensional effects of migration on 115 migrant-sending and agriculturally based households' production output in Saki west Local Government Area, Oyo State in Southwest Nigeria. The main reasons for migration of household members were employment, education, and farming. While the destination of migrants was mainly to other rural communities, (42 %); followed by urban cities (37 %). Social remittances included access to markets (41.4 %), access to information about health (28.6 %); membership of social groups (23.2 %) and information about insurance (6.8 %). Technical remittances on the other hand included improved access to production inputs (herbicide, pesticides), knowledge of improved practices, improved technologies, and value addition. Financial remittances averaged, ₦8, 400 per month; and were mainly used for non-agricultural purposes. Thus, while financial remittance increased household income, its effect was to increase expenditure, rather than investment. Our findings further showed that among other variables, households who received social and technical remittances had significantly higher production output than those who did not, while financial remittances had reducing effect of output. Other factors that influenced production output were farm size and education. The findings bring to the fore the importance of social networks in introducing production enhancing practices among migrant sending agriculturally based households. Also, policies that enhance acquiring farmland; and stronger land tenure system, while fostering community initiatives for growth are recommended.

Keywords: Migration, multidimensional remittances, social remittances, technical remittances, Agricultural production,

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1.0 Introduction

Over the years, people have moved away from their home countries for a several reasons, migration has been a significant part of human history, with people traveling globally to settle either permanently or temporarily. Researchers have endeavoured to comprehend the factors that propel migration in various areas and among various populations (de-Brauw, 2019; Forte *et. al*, 2017). Studies show a link between agricultural production and migration. People move from rural to urban areas seeking better opportunities, social amenities, and infrastructure. As a nation grows, more people migrate out of rural areas in search of social amenities and infrastructure (UN, 2013). Studies have shown a link between agricultural production and migration. Migration, particularly rural-urban migration, significantly impacts agricultural production both positive and negative ways. Intal (2017) found that structural changes and urbanization lead to losses in agricultural labour force and arable land, causing a decline in agricultural production. Oji and Agu (2018) highlight that emigrants' distribution and characteristics vary across countries and regions. While it can lead to a loss of labour force in agriculture, it also brings benefits such as knowledge transfer, technology adoption, and financial remittances. Remittances from migrants support agricultural development by providing resources for investment in technology, education, and healthcare. According to Tadaro and Harris (2017), rural-urban migration is likely to lead to a decrease in agricultural output in land-rich economies such as Africa, Latin America, and South Asia, where agriculture has a positive marginal product of labour.

Migration in developing nations like Nigeria impacts agricultural production by reducing the labour force but also brings advancements through knowledge transfer and access to technology. Despite Nigeria's abundant natural resources, agricultural production remains low due to outdated farming methods, limited access to modern inputs and credit, poor infrastructure, and inadequate research and extension services. Small-holder farmers, who cultivate less than 50% of the country's cultivable land, face challenges in adopting efficient techniques and accessing necessary resources, exacerbating the production issue. However, migration also contributes positively to agricultural production by enabling knowledge and technology transfer, as migrants often bring back information and resources. Therefore, this research is aimed at assessing the multidimensional effects of migration on output of farming households.

2.0 Methodology

The study was conducted in Saki west LGA in Oyo State, Nigeria. Multi-stage sampling technique was adopted and carried out in four stages. Four villages were randomly selected, and the villages are Baabo, Tenleke, Wasangari Alabafe and Moojo. 36 farmers were selected from Baabo, 26 farmers from Tenleke, 31 from Wasangari Alabafe and 22 from Moojo using a simple random sample technique. A total of 115 farming households with migrants were surveyed. The sampling unit for the study was household head. Data was collected from farming households using questionnaires, focusing on socio-economic characteristics and migration status. Descriptive statistics was used to analyse the socio-economic characteristics and migration patterns. Analytical methods such as Ordinary Least Square (OLS) regression was used to assess migration's impact on output production, considering variables like sex, age, marital status, education, farm size, and remittances.

3.0 Results and Discussion

Majority of the farming households were male headed (81.03%) with larger household sizes (average of 10 persons) and significant land cultivation (34.48% on 5-10 acres). Also, most household heads were married (89.40%), and the age distribution skewed towards the 36-50 age group, with a mean age of 50.930 years. The mean farm income earned by farming

households was ₦611,826 per annum. Furthermore, most of the migrants were male (51.49%) but with a rising female participation (48.51%), especially among youth aged 20-35. The migrants migrated majorly to rural towns (42.41%) and urban cities (37.05%) for better opportunities. Economic factors, most especially employment opportunities (40.95%) and education (29.89%), primarily influenced migration decisions. This shows the pursuit of economic stability and advancement among migrants.

3.1 Assessing multiple dimensions of migration Remittances

The study assessed migration remittances as financial, social, and technical, with varying levels of access and effects within agricultural households. More than 50% of the households received monetary remittances with an average of ₦8,365.22 per month. It was revealed that 67% of the money received was allocated to non-agricultural uses. Also, migration increased households' expenditure which affected farmers' savings and income differently. Migration also influenced production participation in cooperative association, access to marketing linkages, access to insurance and health information. migration prompts changes in agricultural practices, with varying adoption rates for herbicides, pesticides, improved seeds, and technologies. Likewise, not all farmers embraced improved agricultural practices.

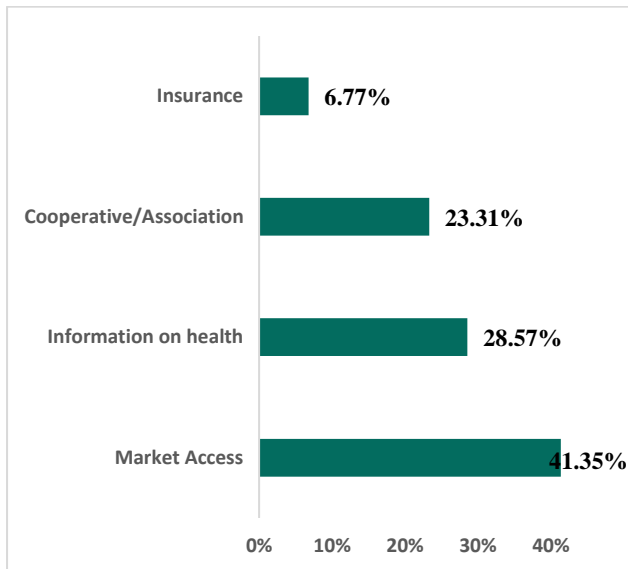


Fig. 1: Access to different social attributes

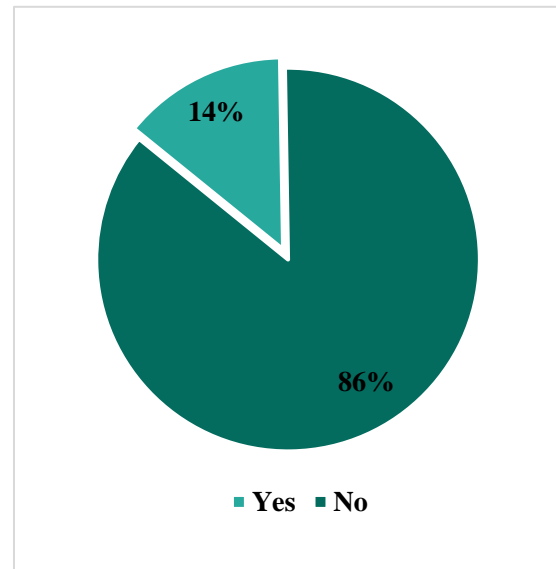


Fig. 2: Access to improved agronomic practices

3.2. Multidimensional Effects of Migration on Households' Production

Majority of the households had a total output ranging from ₦100,000 - ₦500,000. The mean output value was ₦612,443(±₦492, 899). Furthermore, the analysis revealed that both social and technical dimensions affect output positively. However, the financial dimension showed a negative relationship with production as output was reduced by 13% for monetary remittances receiving households. This can be attributed to the diversion of money received to non-agricultural uses rather than agricultural investments. households with access to social benefits had an incremental effect of 22% on output due to access to information and marketing linkages (Mignouna *et al.* 2011). Access to improved agricultural practices shared by migrants also boosted production of the farmers (Gbassey *et al.*, 2012). Other factors that influenced production output were farm size (0.06, $p \leq 0.01$) with a positive influence on output, farming experience (-0.007, $p \leq 0.1$), and level of education (0.074, $p \leq 0.05$) both having a negative

effect on total output. Farm size significantly influences production, with larger farms correlating with higher output levels.

Table 1: Multidimensional effects of migration

Dimensions	Yes	No	T-test
Social	70	45	4.624*
Financial	43	72	0.882
Technical	16	99	1.153***

*, *** representing 10% and 1% significance level respectively

Source: Field survey, 2024

Table 2: Estimates of the multidimensional effects of migration on Production Output

Value of Total Output	Coef.	Std. err.	T	P> t
Sex (Ref:female)	-0.07375	0.119956	-0.61	0.540
Age	-0.00042	0.004482	-0.09	0.926
Marital status (Ref: non-married)	0.093807	0.092641	1.01	0.314
Household size	0.008304	0.007902	1.05	0.296
Highest Level of education (Ref: No formal education)	-0.0740**	0.03356	-2.21	0.030
Farm size (acres)	0.059515***	0.008749	6.8	0.000
Farming Experience	-0.00675*	0.004048	-1.67	0.099
Secondary Occupation (Ref: Non-farming)	0.080456	0.053943	1.49	0.139
Primary Occupation (Ref:Non-farming)	-0.12834	0.117606	-1.09	0.278
Social Dimension	0.220938**	0.086706	2.55	0.012
Financial dimension	-0.12677	0.094662	-1.34	0.184
Technical dimension	0.011533	0.126714	0.09	0.928
Constant	12.01094	0.321826	37.32	0.00
R ²	0.7759			
Adjusted R ²	0.7471			
F(F(13, 101))	26.90			
Prob > F)	0.0000			

*, **, *** representing 10%, 5% and 1% significance level respectively

5.0 Conclusion

The study revealed that output of farming households was influenced by migration beyond financial remittance with social and technical remittances contributing positively to production (Gbassey *et al.*, 2012). Farmland size also showed a notable influence on output with larger farms having larger output. Thus, policies that enhance farmland access, strengthen the land tenure system, support community initiatives, and support agricultural households amidst migration challenges should be encouraged.

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