

# EFFECTS OF RURAL ACCESS AND MOBILITY PROJECT (RAMP II) ON FARMER'S LIVELIHOOD IN OSUN STATE, NIGERIA.

Oluwatobi Josiah. Avodele

#### **Abstract**

This study examines the effects of the Rural Access and Mobility Project (RAMP II) on farmers' livelihoods in Osun. Stratified and simple random sampling were used to sample 106 farmers. Data were collected in 2018 by administering a questionnaire to the farmers to obtain relevant information. A t-test and one-way ANOVA were used to test the hypotheses. The results showed that the average age of the farmers was 54 years, and 80 % of them farmers were male. 93 % were large-scale farmers and their average estimated monthly income was #33,644,00. majority, 98.1% of farmers had an organized market available for their agricultural products. The results further show the benefits derived from RAMP II; 60 % of the respondents indicated having very high farm productivity. 97 % reported having high benefits from the project. 72.4 % of the respondents, 72.4 % reported having high accessibility to the market after project intervention, and 89.5 % of the farmers indicated that they now have easy transportation of farm produce. The results of the t-test analysis showed a significant difference between the impacts of the rural assessment and the mobility project before and after the ramp intervention.

Keywords: Rural road, Farmer's livelihood.

### 1. Introduction

To alleviate poverty, it is necessary to enhance mobility to enable both genders to easily reach their daily necessities, services, markets, and sources of income. In addition, the absence of a well-developed and easily accessible road network poses a significant obstacle for farmers residing in rural areas to avail themselves of fundamental social services (Starkey & Njocmga, 2010). Rural Access and Mobility Projects (RAMP II) have enabled rural farmers to efficiently transport their agricultural products to the market and minimize postharvest spoilage. The project was initiated to impact the daily lives of rural inhabitants, who are primary contributors to food production. Oriolowo (2017) stated that the project has greatly contributed to the exploration and utilization of the agricultural capabilities of the state. This has been achieved by enabling the transportation of farm produce to markets, which is recognized as a vital element for the economic advancement of the country. The objectives of the Rural Access and Mobility Project in Nigeria are to enhance road accessibility for rural populations in Osun State, and to enhance the sustainable maintenance of the state road network. The project consists of two components. The initial element pertains to the enhancement, restoration, and maintenance of the transportation infrastructure. The project's rural transport infrastructure component will assist in the upgrading, rehabilitation, and maintenance of the RAMP 11 (2015).

#### 2.1 Method

The primary data used for this study were collected using a semi-structured questionnaire administered to farmers in rural areas of selected locations in Osun State. Data were obtained on the socioeconomic characteristics of the respondents (information on farmers' age, household size, educational status, gender,

income, marital status, etc.), productivity, well-being, access to healthcare facilities, and so on. Secondary data: This was obtained from existing materials such as libraries and the Internet.

# 2.2 Sampling Procedure and Sample Size

The sampling techniques used were stratified and simple random sampling. Regions worked on (Ife, Ilesha, and Iwo regions) and were broken down into various rural areas. Thereafter, 33 farmers were selected using simple random sampling, each from two regions, and 40 from the third region, resulting in a total of 106 farmers.

Benefits derived from RAMP II: This was measured at the interval level using a 5-point Likert scale response in the form of VH = Very high, I-I = high, M = moderate, L = low, and VL = very low.

The effect of road conditions on agricultural production before and after the Rural Access and Mobility Project: This was measured using a 3-point response scale for major and minor constraints. Minor constraint. Not a constraint. As constraints faced before the project intervention, effects were measured at the interval level using a 5-point Likert scale response in the form of VH, M, L, and VL. (KEY: VH = Very high; 11 = High, M = Moderate, L = Low, VL = Very low).

Effects of RAMP II on the farmer's livelihood in the study area.

This was measured at the interval level using 5-point Likert scale response, in the form of SA = Strongly Agree, A = Agree, N = Neutral, SD = Strongly Disagree, D = Disagree.

### 2.3 Data Analysis

This was subjected to descriptive and inferential statistical analysis. Descriptive tools, such as frequencies and percentages, were used to describe the selected socioeconomic characteristics of the farmers, whereas inferential tools, such as the t-test and one-way ANOVA, were used to determine the relationships advanced in the research hypotheses.

#### 3.0 Result and Discussion

### 3.1 Socio-Economic Characteristics of Farmers

Table 1 shows the socioeconomic characteristics of farmers in the study area. The mean age of the respondents was 54 years, while the age ranges of 30–40 years was 5.6%, 41–50 years was 20.8%, and that of 51 years and older was 73.7%.

#### Sex

The results further revealed that the majority (80.2%) of farmers were male, whereas the number of female respondents was minimal (19.9%).

#### **Education**

It also shows their level of education, which was primary school, secondary school, tertiary school, and no formal education, with percentages of 46.2%, 31.1%, 5.7%, and 17.0%, respectively. Most had at least passed through primary education. This reveals that, as a rural area, human resources are always inadequate; therefore, the level of education that has the highest percentage is primary education (46.2%) and no formal education (17.0%), implying that primary education is the major level of education in the study area. Those with more privileges attended secondary school (31.1%) and very few attended tertiary education (5.7%).

## Marital status.

Table 2 further reveals that 2.8% were single, 82.1% were married, 5.7% were divorced, and 9.4% were widowed. This result is a clear indication of a relatively large proportion of married farmers in the study area. Omotayo (2011) suggested that marriage could potentially enhance the productivity and prosperity of a business, as family members could provide labor for farming and contribute to the business's success.

#### Household size

The mean household size was six persons, and the percentage of respondents who lived (five) in their houses was 33.1%, while the range 6–10 and above was 66.9%. This figure shows that one of the general characteristics of rural areas is large family size. Very few respondents had a household size less than five.

## Religious

Of the respondents, 22.6% were Christians, 52.8% were Muslims, and 24.6% were traditionalists. This indicates that there were slightly more Muslim farmers than Christian or traditionalist farmers in the study area.

## **Farming Scale**

Table 1 shows that the majority (92.5%) of the respondents were engaged in large-scale farming, while a minimal number (7.5%) of respondents were engaged in small-scale farming.

#### **Native Status**

The results show that the majority (93.4%) of the farmers were indigenous to the study area, while 6.6% of farmers were non-indigenous in the study area.

# **Estimated Monthly Income**

The table further shows that 26% earns less than #20,000, 38% earns #20,000 - #40,000, 28% earns #40,000 - #60,000. 3% earns #60.000-#80,000, 5% earns #80,000-110,000, and the mean income of the respondents is #33, 644.00.



Table 1: Distribution of socio-economic characteristics of the farmers

Variable	Frequency (%)	Mean	S.D
Age (years)			
30-40	6 (5.6)	54	6.688
41-50	22 (20.8)		
>50	78 (73.7)		
Sex			
Male	85 (80.2)		
Female	21 (19.9)		
Educational status			
No formal Education	18 (17.0)		
Primary	49 (46.2)		
Secondary	33 (31.1)		
Tertiary	6 (5.7)		
Marital Status			
Single	3 (2.8)		
Married	87 (82.1)		
Divorce	6 (5.7)		
Widowed	10 (9.4)		
Household size (persons)			
<5	36 (33.1)		
6-10	70 (66.9)	6	1.528
Religious Status			
Christianity	24 (22.6)		
Islam	56 (52.8)		
Traditional	26 (24.5)		
Farming System			
Small scale farming	8 (7.5)		
Large scale farming	98 (92.5)		
Native status			
Non-indigene	7 (6.6)		
Indigene	99 (93.4)		
Estimated money income (naira)			
<20,000	30(26)		
20,000-40,000	40(38)	#33.644.00	#19,156.19
40,000-60,000	32(38)		
60,000-80,000	4(3)		
80,000-100,000	6(5)		
Location			
Iwo region	40(37.8)		
Ilesha region	33(31.1)		
Ife region	33(31.1)	- 3	

# 3.2 Benefit Derived from Rural Access and Mobility Project. II

Table 2 displays the benefits that the respondents in the study area received from RAMP II. Benefits were categorized as very high, high, moderate, low, and very low. An increase in household income: 50.5% had high benefits, 48.6% had moderate benefits, and 1% had low benefits. This implies that the majority (50.5%) of respondents had a high increase in household income. In the majority of African, Asian, and Latin American rural households, farming plays a significant role in their livelihoods, with approximately 90% of them engaging in farming-related activities. Furthermore, farming contributes to a substantial portion of their household income, ranging from 70% in Africa to 50% in Asia and Latin America (Winters et al. 2010). Ability to pay children's education fees: 70.5% of the respondents had a very high ability to pay children's school fees compared to their previous state before the project, 24.8% had a high ability, and 4.8% had a moderate ability to pay children's school fees. Contribution to household well-being: 33.3% had very high benefits from their contribution to household well-being, 63.8% had a high contribution, and 2.9% had a moderate contribution. A large proportion (63.8%) of the respondents benefited from a high level of contribution to household well-being. Farm productivity: 60% had very high farm productivity, 39% had high farm productivity, and 1% had moderate farm productivity. This shows that the majority (60%) of the respondents benefited from the project as their farm productivity was very high.

Agricultural development program intervention: This shows that 1.9% of the respondents indicated that agricultural development program intervention was very high, 4.8% indicated that intervention was high, 76.2% indicated moderate, and 17.1% indicated that agricultural program intervention was low. Medical facility: 1.9% indicated that the level of medical facilities was high, 8.6% moderate, a larger proportion (83.8%) indicated that it was low, and 5.7% indicated that the level of medical facilities was very low. Banking facilities: 22.9% indicated that the level of banking facilities was very high, 69.5% indicated that it was high, 6.7% indicated that it was moderate, and 0.9% of the respondents indicated that the level of banking facilities was low.

Access to news on agricultural production: 11.3% of the respondents had high access to news on agricultural production, 84% had moderate access, and 4.7% indicated that they had low access to news on agricultural production. Marketing facilities for agricultural products: The majority (58.1%) of respondents had high-benefit marketing facilities for their agricultural products, 35.2% had moderate-benefit marketing facilities, and 6.7% had low-benefit marketing facilities for their agricultural products. Flood situations: 1.9% of the respondents indicated that the flooding situation was high, 4.7% indicated that the flooding situation was moderate, 8.5% reported that the flooding situation was low, and 84% reported that the flooding situation was very low. This implies that the majority (84%) of respondents reported that the flooding situation in the study area was very low as a result of the project.

Table 2: Distribution of Benefit Derived from RAMP II

s/n	Variable	VHF	HF (%)	MF (%)	LF (%)	VLF	Mean	S.D
		(%)				(%)		
1	Increase in	0	53 (50.5)	51 (48.6)	2 (1.0)	0	5	0.521
	household income							
2	Ability to pay	74 (70.5)	26 (24.8)	5 (4.8)	0	0	4	0.508
	children education							
	fee							
3	Contribution to	35 (33.3)	67 (63.8)	3 (2.9)	0	0	5	0.546
	household							
	wellbeing							
4	Farm productivity	63 (60.0)	41 (39.0)	2 (1.0)	0	0	5	0.513
5	Agricultural	2 (1.9)	6 (4.8)	80 (76.2)	18 (17.1)	0	3	0.521
	development							
	programme							
	intervention							
6	Medical facility	0	2 (1.9)	9 (8.6)	88 (83.8)	6 (5.7)	4	0.465
7	Banking facility	24 (22.9)	73 (69.5)	7 (6.7)	1 (0.9)	0	2	0.562
8	Access of news on	0	12 (11.3)	89 (84. <mark>0</mark> )	5 (4.7)	0	3	0.388
	agricultural							
	production							
9	Marketing facility	0	61 (58.1)	37 ( <mark>35.</mark> 2)	7 (6.7)	0	5	0.622
	for agri <mark>cult</mark> ural							
	produces							
10	Food situation	0	2 (1.9)	5 (4.7)	9 (8.5)	89	1	0.628
						(84.0)		

# 3.3 Categorization of Benefit

The results showed the categorization of benefits derived from the Rural Access and Mobility Project. Categorizing as low with a score of 10–29 and high with a score of 30–50, the majority (97.1%) of the respondents benefited greatly from the project, whereas only 2.8% of the respondents benefited at a low rate.

Table: 3: Categorization of Benefit

Variable	Status	Scoring	Frequency (%)
Benefit derived from	Low	10-29	3 (2.8)
RAMP			
	High	30-50	102 (97.1)

Source: Field Survey, 2018

Minimum score =  $1 \times 10 = 10$ Maximum score =  $5 \times 10 = 50$ 

Average = (min + max/2)score = 10 + 50/2 = 60/2 = 30

10 - 29 = Low

30 - 50 = High

# 3.4 Effect of Road Condition on Agricultural Production before Rural Access and Mobility

Table 4 shows the effects of road conditions on agricultural production before RAMP II. The effects were categorized as major, minor, or none. High cost of maintenance: 93.3% of the respondents reported that the high cost of maintenance was a major effect, while 6.7 was a minor effect. Poor road network: 99% indicated that poor road networks had a major effect on agricultural production before RAMP, and 1% as a minor effect.

Disease and pest infestation: The majority (88.6%) of the respondents reported disease and pest infestation; 9.5% reported a minor effect, and 1.9% reported disease and pest infestation did not affect their agricultural production. Insufficient capital: The majority (95.2%) of respondents indicated insufficient capital as a minor effect affecting their production due to the condition of the road, while 4.8% reported it not to be an effect. Lack of storage facilities: 1.9% reported that lack of storage facilities had a major effect on their agricultural production, the majority (83.8%) reported a minor effect, and a small proportion (14.3%) reported a lack of storage facilities that did not have an effect on their production. Spoilage of farm produce due to bad roads: 56.2% indicated that spoilage of farm produce due to bad roads was a major effect affecting their agricultural production due to the bad condition of their roads. A minor effect was indicated by 31.4 %, whereas 12.4% indicated that it was not an effect. Market price fluctuations: 87.7% reported that market price fluctuations had a minor effect on agricultural production, whereas a very small proportion (12.3%) reported price fluctuations had a major effect. Water unavailability: 7.6% reported that water unavailability was the major factor affecting their production. A minor effect was reported by 32.4% of respondents, while 60% reported no effect on agricultural production. High cost of machinery: 6.7% indicated a high cost of machinery as a major effect, 45.7% indicated a minor effect, and 47.6% indicated that the high cost of machinery did not affect agricultural production. Marketing challenges: 21.9% of the respondents reported marketing challenges as having a major effect, while a larger proportion (78.1%) reported marketing challenges as having a minor effect on their agricultural production.

Table 4: Distribution of Effect of Road Condition on Agricultural Production before RAMP

Variable	Major F (%)	Minor F (%)	Not effect F (%)	Mean	S.D
High cost of maintenance	99 (93.3)	7 (6.7)	0	2.93	0.251
Poor mad network	105 (99.0)	1 (1.0)	0	2.99	0.098
Disease and Pest infestation	94 (88.6)	10 (9.5)	2 (1.9)	2.87	0.394
Insufficient capital	0	101 (95.2)	5 (4.8)	2.95	0.214
Lack of storage facilities	2 (1.9)	88 (83.8)	15 (14.3)	2.82	0.434
Spoilage of farm produce	60 (56.2)	33 (31.4)	13 (12.4)	2.44	0.706
due to bad road  Market price fluctuation	13 (12.3)	93 (87.7)	0	2.88	0.331
Water unavailability	8 (7.6)	34 (32.4)	64 (60.0)	2.52	0.637
High cost of machinery	7 ( <mark>6.7)</mark>	48 (45.7)	51 (47.6)	2.41	0.615
Marketing challenges	23 (21.9)	83 (78.1)	0	2.78	0.416

Source: Field Survey, 2018

# 3.5 Effects of Road Condition on Agricultural Production after RAMP II

This table shows the effect of road conditions on the agricultural produce of respondents after Rural Access and Mobility Project II in the study area. The effects were categorized as very high, high, moderate, low, or very low. Availability of farm machinery: 35.2% of the respondents indicated very high availability, 63.8% indicated high availability, and 1% indicated that the availability of farm machinery was moderate. The availability of treated seedlings was very high (19%); the majority (65.7%) of the respondents reported that the availability of treated seedlings was high, while 6.7% reported it to be moderate. Availability of laborers or workers: A larger proportion (93.3%) of the respondents indicated very high availability of laborers, 4.8% indicated high availability, and 1.9% indicated that the availability of laborers was moderate. Financial institution/support: 5.7% reported that the availability of financial support was high, 16.2% reported it to be moderate, and 34.3%

reported it to be low, while the majority (43.8%) of the respondents indicated it to be low. Accessibility to good healthcare facilities: 52.4% of the respondents indicated moderate accessibility to good healthcare facilities, whereas 47.6% indicated low accessibility. Accessibility to educational facilities for children was very high (1.9%), high (27.6%), or moderate (70.5%). Accessibility to the market: 72.4% of the respondents indicated that they had high accessibility to the market because of the motorable roads, 25.7% indicated that accessibility to the market was moderate, and 1.9% reported having low access to the market. Accessibility to electricity supply: The majority (81.9%) of the respondents indicated that accessibility to electricity supply was very high, 12.4% high, 3.8% moderate, and 1.9% low. Davis (2000) opined that the objective of research should be to tackle policy issues that can improve farmers' mobility and rural accessibility, while also increasing their income-generating assets and alleviating rural poverty.

This result further demonstrates the respondents' mobility levels. Easy transportation of farm produce: 87.5% reported that easy transportation of farm produce was high and 6.7% reported it to be moderate. 1.9% were low and 1.9% were low. According to Tracey-White (2005), the absence of transportation facilities and poor road conditions in rural areas impedes mobility. A significant increase in travel time was reported by 3.8% of the respondents; 22.9% reported a moderate increase, 72.4% reported a low increase, and 0.9% reported a very small increase. An increase in transportation fees: 3.8% reported that the increase in transportation fees was very high, 9.5% reported transport fees to be high, 63.8% reported it to be moderate compared to what they used to pay before, 16.2% indicated that the increase in transport fees was low, claiming to have gone down to what they used to pay before the RAMP 11 intervention, and 6.7% indicated it to be very low, claiming that transport fees were not exorbitant as before. Transportation infrastructure and road systems are crucial for the long-term viability of agricultural production in sub-Saharan Africa as they significantly influence variables such as mobility (John & Carapctis, 1991).

Table 5: Distribution of Effect of Road Condition on Agricultural Production after RAMP II

s/n	Variable	VHF	H (%)	MF	LF (%)	VLF	NT	Mean	SD
		(%)		(%)		(%)			
A	Availability								
1	Availability of	38	67	1 (1.0)	0	0	0	4.34	0.497
	farm machinery	(35.2)	(63.8)						
2	Availability of	21	69	7 (6.7)	0	0	9 (8.6)	13.30	30.063
	treated seedling	(19.0)	(65.7)						
3	Availability of	99	5 (4.8)	2(1.9)	0	0	0	4.91	0.343
	laborer/workers	(93.3)							
4	Financial	0	6 (5.7)	17	36	47	0	4.16	0.900
	institution/support			(16.2)	(34.3)	(43.8)			
В	Accessibility								
1	Accessibility to	0	0	55	51	0	0	4.48	0.502
	good hea <mark>lth-</mark> care			(52.4)	(47.6)				
	facility								
2	Accessibility to	2 (1.9)	29	75	0	0	0	4.26	0.481
	education facility		(27.6)	(70.0)					
	for children								
3	Accessibility to	0	76	28	2 (1.9)	0	0	4.70	0.499
	the market		(72.4)	(25.7)					
4	Accessibility to	87	13	4 (3.8)	2(1.9)	0	0	4.89	1.219
	electricity supply	(81.9)	(12.4)						
C	Mobility								
1	Easy	0	95	7 (6.7)	2(1.9)	2(1.9)	0	4.84	0.539
	transportation of		(89.5)						
	farm produce								
2		0	4 (3.8)	24	77	1(0.9)	0	1.83	0.527
	travelling time			(22.9)	(72.4)				
3	Increase in	4 (3.8)	11 (9.5)	67	17	7 (6.7)	0	3.12	0.817
	transportation fee.			(63.8)	(16.2)				

Source: Field Survey, 2018

# 3.6 Effect of Rural Access and Mobility Project II on Livelihood of the Respondents

This table shows the effect of RAMP II on the respondents' livelihoods. The effects were categorized as strongly agree, agree, slightly disagree, disagree, or strongly disagree. Construction in my community has increased my productivity; 43.4% of the respondents strongly agreed, while 56.6% of the respondents indicated that construction in their community increased their productivity. Kwom (2001) observed that roads exert a significant positive influence on both income and agricultural productivity in rural Indonesia. I have a good motorable road: 8.6% strongly agreed, while the majority (84.8%) of the respondents agreed to have a good motorable road. and very few (6.7%) of the respondents slightly disagreed with having a good motorable road. I have access to the market. A large proportion (56.2%) of the respondents strongly agreed, while a small percentage (43.8%) agreed to have easy access to the market. My production yield increased from what I used to have; the majority (61.9%) of the respondents strongly agreed to have had an increase in production yield, while 38.1% agreed. The majority (80%) of the respondents strongly agreed to have an income increment, 19% agreed, and only 1% of the respondents slightly disagreed. Government agencies now come to assess development in the community; 5.7% strongly agreed, a larger proportion 84.8% agreed that government agencies now visit to assess development in the community, and 9.5% slightly disagreed. Farm production loss was reduced: 77.1% strongly agreed that farm production loss had reduced, 21.9% further agreed, and 1% slightly disagreed. My household members had access to healthcare facilities: 1% strongly agreed, 43.9% agreed to have access to healthcare facilities, and 57.1% slightly disagreed. My children attended good school: 1.9% strongly agreed, a larger proportion (82.9%) of the respondents agreed, and 15.2% slightly disagreed. I can easily use farm machinery on my farm: 4.8% strongly agree, 15.2% agree, and 80% slightly disagree. I now employ myself outside of my community. The majority (85.2%) of the respondents strongly agreed to be able to employ workers outside their community, 3.8% agreed, and a very small proportion (I%) of the respondents slightly disagreed. traveling time was reduced the majority (91.4%) of the respondents strongly agreed, 7.6% agreed that traveling time was reduced owing to a good motorable road, and 1% slightly disagreed. Transportation costs are now moderate: 9.5% strongly agreed, 72.4% agreed, 16.2% slightly disagreed, and very few percentages (1.9%) disagreed. The community now has stable electricity. The majority (73.3%) of respondents strongly agreed that the community now has stable electricity, 22.9% agreed, and 8.8% slightly

Table 6: Distribution of Effect of RAMP II on Livelihood of the Respondents

	Variable	SAF	AF (%)	SF (%)	<b>DF</b> (%)	<b>SDF</b> (%)	Mean	SD
		(%)	1100	J. D.		الماما		-1
1	Construction in my	46 (43.	60	0	0	0	4.43	0.497
	community has	4)	(56.6)					
	increased my							
	productivity							
2	I have good mo <mark>tora</mark> ble	9 (8.6)	90	7 (6.7)	0	0	4.02	0.392
	road		(84.8)					
3	I have easy access to	59	47	0	0	0	4.56	0.499
	the market	(56.2)	(43.8)					
4	My production yield	65	41	0	0	0	4.62	0.488
	has increased from	(61.9)	(38.1)	hrou	ah li	novo	ition	
	what I used to have				3			
5	Increment of income	84	21	1 (1.0)	0	0	4.79	0.432
		(80.0)	(19.0)					
6	Government agencies	6 (5.7)	90	10 (9.5)	0	0	3.96	0.390
	now come to access		(84.8)					
	development in the							
	community							
7	Farm produce loss has	82	23	1 (1.0)	0	0	4.76	0.450
	reduced	(77.1)	(21.9)					
8	My household	1 (1.0)	45	60	0	0	4.41	0.513
	members have access	, ,	(43.9)	(57.1)				
	to health care facility							

9	My children attend good school	2 (1.9)	88 (82.9)	16 (15.2)	0	0	4.13	0.394
10	I can easily use farm machinery on my farm	5 (4.8)	16 (15.2)	85 (80.0)	0	0	4.45	2.353
11	I now employ outside my community	101 (95.2)	4 (3.8)	1 (1.0)	0	0	4.94	0.271
12	Travelling time has been reduced	97 (91.4)	8 (7.6)	1 (1.0)	0	0	4.90	0.326
13	Transportation cost is now moderate	10 (9.5)	76 (72.4)	17 (16.2)	2 (1.9)	0	3.90	0.570
14	Community now has stable electricity	77 (73.3)	25 (22.9)	4 (3.8)	0	0	4.70	0.539

# 3.7 Hypotheses Testing

# 3.7.1 $H_0$ : There is no sig difference between the impact of ramp before and after rural access and mobility project intervention

Table 7 shows a t-test analysis of the difference between the impacts of the rural assessment and mobility project before and after ramp intervention in the study area. The results showed a significant difference between the impact of the rural assessment and mobility project before and after the project intervention (t = 10.135, p = 0.000). Thus, the results revealed that the rural access and mobility project had an impact after project intervention.

Table 7: Test of difference between the impacts of rural assess and mobility project before and after RAMP intervention.

Variable	N	- Hi-	S.D	t.value	df	p.value	Decision-
Before RAMP II	106	27.5905	1.82765	10.135	104	0.000	Significant
After RAMP II		58.1905	20.16241	10.135			

Source: Field Survey, 2018

# 3.7.2 Ho2: There is no sig difference in the effect of ramp II on livelihood of the respondents across the region.

The results of the one-way ANOVA in Table 8 show the difference in the effect of the Rural Access and Mobility Project on the livelihoods of respondents across the region. The results revealed no significant difference in the effects of Rural Access and Mobility projects on respondents' livelihoods (F=I.279, p=0.283). The null hypothesis was accepted because the p-value was greater than 0.05.

Table 8: Test of Difference in effect of Rural Access and Mobility Project on livelihood of the respondents across the region

Variable	Group	Sum of	Df	Mean of	F	P
	categorization	square		square		
Effect of Rural	Between	24.981	2	12.490	1.278	0.283
Access and	group					
Mobility Project	Within group	996.733	102	9.772		
		1021.714	104			

# 3.7.3 H<sub>0</sub>3: There is no significant difference in the benefit of Rural Access and Mobility Project II across the region.

The results of the one-way ANOVA in table 10 show a significant difference in the benefits of the Rural Access and Mobility Project among the respondents across the region. The results revealed a significant difference in the benefits of the Rural Access and Mobility Project for respondents (F = 3.959, p = 0.022). The null hypothesis was rejected because the p-value was less than 0.05.



Table 9: Test of Difference in the benefit of Rural Access and Mobility Project II across region

Variable	Group	Sum of	Df	Mean of	F	P
	categorization	square		square		
Benefit of Rural Access	Between group	29.248	2	14.624	3.959	0.022
and Mobility Project	Within group	376.809	102	3.694		
	Total	406.059	104			

#### 3.8: Post HOC test of confirmation of difference in benefit

Table 11 shows that the Iwo region (35.8182) benefited greatly from the project, followed by the Ilesha (35.8182) and Ife (34.7500) regions.

Table 10: Post HOC test of confirmation of difference in benefit

Location of the respondents	N	Mean
Ife Region	33	34.7500
Ilesha Region	33	35.8182
Iwo Region	40	35.9500

Source: Field Survey, 2018

# 4.0 SUMMARY, CONCLUSION AND RECOMMENDATIONS

# 4.1 Summary

The study revealed that approximately 73.7 % of the respondents were aged 50 years and older, 80.2% were male, and 46.2% had education up to the primary level. 82.1 % of the respondents are married, 66.9% of the respondents have household size between 6 and 10 persons, 92.5 % of the respondents are large-scale farmers, 37.7 % of the farmers earn between #20,000 and #40,000, 87.6 % of the farmers are into crop production farm types, and 68.6 % of the respondents produce agricultural products for family use and sale. 98 % of the farmers, 98.1 °had an organized market available for their agricultural products, 52.4 % of the respondents belonged to a cooperative society, and 96 % of the respondents indicated that their financial situation was sufficient. The results further demonstrated the benefits of RAMP II for the respondents 50.5 % of the respondents, 50.5 % reported a large increase in household income. 63.8 % of the farmers, 63.8 % reported a high contribution to household wellbeing. Sixty % of respondents indicated very high farm productivity. 97 % of the farmers, 97 % reported having high benefits from the project. 99 % of the respondents indicated that a poor road network had a major effect on their agricultural production before project intervention. 72.4 % of the respondents, 72.4 % reported having high accessibility to the market after project intervention, and 89.5 % of the farmers indicated that they now have easy transportation of farm produce. A total of 77 % of respondents indicated that farm production losses decreased. Descriptive statistics, such as frequency counts, percentages, means, and standard deviations, were used to test the objectives of the study, and inferential statistics, such as the t-test and one-way ANOVA, were used to test the stated hypotheses.

#### 4.2 Conclusion

In conclusion, the study revealed that rural access and mobility projects have an impact after project intervention; 72.4 % of the respondents reported having high accessibility to the market. 89.5 % of the farmers, 89.5 % indicated that farm produce was now easily transported. The study also shows that there is a great

difference in the benefits of rural access and mobility projects among the respondents across the region because 97 % of the farmers reported having a high benefit from the project.

## 4.3 Recommendation(s)

Based on findings of the study, the following recommendations were made:

- 1. Provision of credit facilities to rural farmers to boost their productivity
- 2. Construction of rural road networks by the government or private agencies for easy transportation of agricultural produce to reduce transportation costs and spoilage of produce due to bad roads, as reported by farmers and consumers.

The marketing system must be reorganized with a focus on promoting the establishment of agricultural marketing cooperatives among farmers. This effectively eliminates the exploitative practices of intermediaries, and enhances access to credit.

#### Reference

- John, D. N. R. & Carapetis, S. (1991). Intermediate Means of Transport in Sub-Saharan, Africa Its Potential for Improving Rural Travel and Transport World Bank Technical Paper No.161. Africa Technical Department Series. World Bank, Washington D.C, USA.
- Kwom, E. (2001). *Infrastructure*, *Growth and Poverty Reduction in Indonesia*: A Cross Sectional Analysis. Asian Development Bank. Mimeo. Manila.
- Omotayo, A.O, (2011). *Malaria Incidence, Treatment and farming household's welfare* in Ido Local Government Area of Oyo State, Unpublished M.sc dissertation, Department of Agricultural Economics, Faculty of Agricultural and Forestry, University of Ibadan, Nigeria. Osun News Portal (2011). Ministry of information and strategy, State of Osun, Nigeria.
- Oriolowo, L. (2017). From www.osunramp.org (Retrieved on 15 June 2018).
- RAMP 11 (2015). From www.osunramp.org (Retrieved on 15 June 2018).
- Starkey P.& Njienga P. (2010). *Improving sustainable rural transport service: Constraints. Opportunities and Research Needs. AFCAP Practitioner Conference*, held in the UK from 23-25 November 2010.
- Tracey-White, J. (2015). Rural Urban linkages: An infrastructure identification and survey Guide. FAO Agricultural services Bulletin 161. FAO, Rome, Italy.

# Research Through Innovation