# PRODUCTION ACTIVITIES AND CHALLENGES ENCOUNTERING BY SWEET POTATO FARMERS IN KWARA AND OSUN STATES

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**ABSTRACT:** *Production of agricultural crops cannot be over emphasized for food security, poverty eradication and sustainability of life and its existence. Therefore, agriculture is the bedrock towards economic growth and rural development. This study examined production activities of sweet potato in Kwara and Osun States It also identified the challenges faced by the sweet potato farmers in the study area. Multistage sampling technique was used to select 496 sweet potato farmers. An interview guide was used through structured questionnaire to obtain primary data which were analysed using descriptive statistics (frequency table, percentage and mean). The study revealed that majority practiced self labour (42%) in Kwara State while family labour (47%) was majorly practiced in Osun State, with the mean labour used of 3.84 and 3.23 in Kwara and Osun States respectively. Majority inherited land acquired from their parents, occupying less than six hectares of land for production of sweet potato. It was also shown that land conflict, inadequate vine, insect infestation, spoilage and access to credit were the major challenges facing farmers during production of sweet potato. The study concludes that sweet potato farmers encountering a lot of challenges which causes reduction in production of sweet potato in the study areas. It is therefore recommended that, settlement of land conflict issues should not be delayed, particularly when it comes to the use of agricultural purposes. Then the research institute(s) saddled with the responsibilities of storage and preservation of agricultural produce should come-up with methods of preserving this crop to extend it shelf-life and reduce postharvest loss of this vital crop.*

**KEYWORDS:** **P**roduction, challenges, sweet potato, land conflict, activities.

# INTRODUCTION

## Background of the Study

Sweet potato is a perennial plant belonging to the Convolvulaceae family (Yan *et al*., 2014) sweet potato ranks as the fifth most important food crop in the tropics and the seventh in the world food production after wheat, rice, maize, potato, barley, and cassava (FAO 2019).in the world production of sweet potato, Asia accounts for closeto76%, followed by the African continent (19.5%). Among the top five producers are China, Nigeria, Uganda, Indonesia, and the United Republic of Tanzania. China is the highest producer, producing about 75.6 million tons, followed by Tanzania and Nigeria which produced 3.57 and 2.73 million tons, respectively (FAO 2019). Sweet potato takes important roles in the global food system, all of which have fundamental implications for meeting food requirements, reducing poverty, and increasing food security. Although, it is a crop that is consumed in all parts of the country, its level of production still remains low.  As a result of climate change, the reduction of arable land, increasing population, and frequent occurrence of natural disasters (Adewumi and Adebayo, 2016). In terms of adaptability to diverse environments and yield potential, the potato is a preferred crop, especially in developing countries, where most undernourished households depend on potatoes as primary or secondary sources of food and nutrition. Sweet potato crop can potentially address issues including income generation, healthy food crop, nutritional deficit, poverty reduction, and food security in developing and less developed countries (Woolfe 1992). Improving agricultural production is essential to achieve a sustainable development process that will contribute to reducing poverty and enhancing food security and income growth but the production of food and other agricultural products does not end when the crop is harvested and that some agricultural products are not consumed in their raw form, therefore, consideration and finding solution to the farmer's challenges during production of agricultural crops is very essential to improve food security and cater for ever increasing populace. This study looked into the production activities of sweet potato and also considered some of the challenges encountered during production by the farmers.

## RESEARCH METHODOLOGY

### The study Areas

The study was carried out in Kwara and Osun States of Nigeria.

### Sampling Procedure and Sample Size

Multistage sampling technique was used in the selection of the respondents, due to the population density of the study area and also, for the selection of major producers and processors of sweet potato. Firstly, two states were purposively selected, secondly, four Local Government Areas (LGAs) were selected purposively from each selected state that are major producers of sweet potatoes crop, making a total of eight LGAs. Thirdly, from each of the four LGAs per state, four sweet potatoes farming and processing villages were randomly selected making a total of 32 communities for the two states. Lastly, Krejcie and Morgan sample table was used to select 248 farmers for each of the two selected states respectively based on their population size of 700, making a total of 496 famers selected for this study.

**Table 3.1: Table for Sample Size**

| N | S | N | S | N | S |
|---|---|---|---|---|---|
| 10 | 10 | 220 | 140 | 1200 | 291 |
| 15 | 14 | 230 | 144 | 1300 | 297 |
| 20 | 19 | 240 | 148 | 1400 | 302 |
| 25 | 24 | 250 | 152 | 1500 | 306 |
| 30 | 28 | 260 | 155 | 1600 | 310 |
| 35 | 32 | 270 | 159 | 1700 | 313 |
| 40 | 36 | 280 | 162 | 1800 | 317 |
| 45 | 40 | 290 | 165 | 1900 | 320 |
| 50 | 44 | 300 | 169 | 2000 | 322 |
| 55 | 48 | 320 | 175 | 2200 | 327 |
| 60 | 52 | 340 | 181 | 2400 | 331 |
| 65 | 56 | 360 | 186 | 2600 | 335 |
| 70 | 59 | 380 | 191 | 2800 | 338 |
| 75 | 63 | 400 | 196 | 3000 | 341 |
| 80 | 66 | 420 | 201 | 3500 | 346 |
| 85 | 70 | 440 | 205 | 4000 | 351 |
| 90 | 73 | 460 | 210 | 4500 | 354 |
| 95 | 76 | 480 | 214 | 5000 | 357 |
| 100 | 80 | 500 | 217 | 6000 | 361 |
| 110 | 86 | 550 | 226 | 7000 | 364 |
| 120 | 92 | 600 | 243 | 8000 | 367 |
| 130 | 97 | 650 | 242 | 9000 | 368 |
| 140 | 103 | 700 | 248 | 10000 | 370 |
| 150 | 108 | 750 | 254 | 15000 | 375 |
| 160 | 113 | 800 | 260 | 20000 | 377 |
| 170 | 118 | 850 | 265 | 30000 | 379 |
| 180 | 123 | 900 | 269 | 40000 | 380 |
| 190 | 127 | 950 | 274 | 50000 | 381 |
| 200 | 132 | 1000 | 278 | 75000 | 382 |
| 210 | 136 | 1100 | 285 | 1000000 | 384 |

**Source:** *Krejcie and Morgan, 1970*

**krecjie and Morgan formula**

Total number of respondents used was constructed using the following formula for calculating sample size.

$s = X^2 NP(1-P) \div d^2(N-1) + X^2 P(1-P).$

> $s$ = required sample size.

$X^2$ = the table value of chi-square for 1 degree of freedom at the desired confidence level (3.841).

> $N$ = The population size. = 700

$P$ = the population proportion (assumed to be .50 since this would provide the maximum sample size).

$d$ = the degree of accuracy expressed as a proportion (.05).

**Farmer's population: N was selected to be 700**

Sf = 3.841x700x0.50 (1-0.05)/ (0.05)$^2$(700-1) +3.841x0.5(1-0.5)

Sf = 1344.35(0.5)/ (0.0025) (699) +1.9205(0.5)

Sf = 672.175/1.7475+0.96025

Sf = 672.17/2.70775

Sf = 248.24

**Sf = 248 Farmers Respondents per state.**

**Nature and Sources of Data**

Primary data was used for this study and data was obtained through the administration of structured questionnaire to the respondents in selected study areas.

**Analysis of data collected**

Descriptive statistics was used to analyzed both objectives (Production Activities of Sweet Potato Farmers in the study area and the challenges facing the sweet potato farmers during production)

**RESULTS AND DISCUSSIONS**

**Production Activities of Sweet Potato Farmers**

The result in Table 1 presented the distribution of production activities of sweet farmers in both Kwara and Osun States. It reveals that most of the sweet potato's farmers (41.9%) used self labour utilized for farming activities, 29.0% relied on family labour while 28.9% went for hired labour in their farm for the production of sweet potatoes in Kwara State. However, most of the respondents (46.0%) in Osun State patronized family labour in carrying out farming operations, 36.8% relied on hired labour while only 16.5% used self labour for the production of sweet potatoes. Moreover, it was also revealed that 63.4% of the respondents in Kwara Stare used less than 5 labour in sweet potato production with 36.6% using between 5 and 10 labour, while in Osun state, it was revealed that 73.9% of the respondents used less than 5 labour in sweet potato production of sweet potatoes, 24.4% used between 5 and 10 labour, while 1.6% used more than 10 labour. Forty three percent (43.0%) of the respondent in Kwara state inherited their farm land from their parents or family land, 22% borrowed the hectares of land used, 20.6% got the land from been leased out for certain numbers of years, while 13.9% purchased the land used for the cultivation of sweet potatoes.

Likewise, in Osun state 49.6% of the respondents acquired their land by inheritance from their parent or from family lands, 27.3% borrowed the land their using for production, 12% got their land from been leased out while 11% acquired their lands through purchasing from the land owners. Also, it was revealed that 77.4% and 65.7% of the potato farmers used less than 6 hectares of land in both states respectively, 18.5%, and 33.5% used more than 9 hectares of land, while 4.1%, and 0.8% of the respondents utilized land between 6 and 9 hectares in Kwara and Osun states respectively. This indicated that most of the sweet potato famers do not have enough land to increase their production and this can hinder them from fully engaging in commercializing their produce. This may be as a result of land tenure system or because of Famers/herders conflict on day-to-day in the farm. This can hinder them from fully engaging in commercializing their produce.

Furthermore, concerning the aim and major purpose of growing sweet potato in the study area, it was revealed that 85% and 89.7% of the respondents grows sweet potato for the purpose of sales to earn income and improve their standard of living in both States respectively, being the fact that, it is so easy to cultivate and market driving because of its importance in diet and medicinal ability to cure diseases. This implies that majority of the potato farmers produce for commercialization practice to meet the needs of general public and earns income to improve their standard of living. Coarsely, about 89.7% and 83.9% had no access to Extension Agent in the study areas, while only 10.3% and 16.1% of the respondents have accesses to an Extension Agent in one way or the other.

This implies that they will be lacking behind in term of getting new innovations on the cultivation and marketing of sweet potato and other agricultural practices. Credit facilities accessibility shown that 68%, of the respondent in Kwara state had an access to any source of financial sector for loan, while 32% of the respondents have no accesses to credit facilities. But in case of Osun state, it is other way round, 50.4% did not have access to any financial institution for credit loan, it was only 49.6% shows the indication of having access to credit facility either from their cooperative society or other financial sources. This implies that they may not have sufficient money to run their agricultural practices at the right time in Osun state compared to Kwara state respondents.

Most farmers (57.6% and 67.8%) in both states did not join any farmers association, while only 42.4%, 32.2% of the respondents engaged themselves in farmers association in their areas correspondingly. This is the main reason why majority of the respondents couldn't have access to any credit facilities and to an extension Agent in the study areas which peradventure hindered them from new innovation most especially commercialization practices and other agricultural practices in order to develop themselves and enhance their standard of living. It was shown that sweet potato farmers (59.3%,47.1%) in both states (Kwara and Osun) cultivate production twice in a year

The mean average was ₦140,592.60, which was around 60.1% spent less than ₦150,000 naira on inputs purchased for cultivation by Kwara state sweet potato farmers, whereas, in the counterpart state, the mean average was ₦154,177.70, which falls between 150,000 and 200,000 ( around 24%)  This showed that most of the sweet potato farmers in the study areas were smallholders and their contribution in agricultural commercialization is still at minimal level

The distribution of Quantity Produced by the sweet potato farmers in Kwara state shown that about 41.6% produced between 1500 and 2000 bags of sweet potatoes within a year of production, 39.9% produced more than 2500 bags, while in Osun state, the Quantity Produced by the sweet potato farmers shown that 61.2% produced between 2001 and 2500, followed by 25.2% of respondents produce followed by 26.2% produced quantities greater than 2500 bags, while only 2.9% of the respondents produced less than 1500 bags per production year. This implies that sweet potato farmers were smallholder farmers which unable to meet up to the demands of the populace.

While the quantity sold showed 35.8% of the respondents that sold the bags of sweet potato of more than 2000 bags yearly, 31.3% sold between 1000 and 1500 bags, followed by 28.4% sold between 1501 and 2000, while 4.5% of the respondents sold less than 1000 bags in Kwara state. Whereas, in Osun state, 49.2% of the respondents sold between 1501 and 2000 bags, and 30.6% sold more than 2000 bags yearly. This implies that sweet potato farmers in the study area produce to generate income and better their standard of living.

The distribution of Amount Sell/bag by kwara state farmers revealed the mean average as₦3727.98 kobo which was 73.6% of the respondents sell between 3,500 and 4,000 per bag, while that of the Osun state was ₦4,003.31 kobo. This is an indication that the price sold per bag of this commodity is not much, may be because of its perishability nature which cannot be stored for longer period of time before spoilage, but the variation in price per state may depends on factors like production cost, and others.

The table also shown the distribution of sweet potato major buyer by the respondents indicates that about 46.9% were middlemen38.7% were wholesalers in kwara state, this implies that the farmers sold their produces right from the farm gate. While in osun state, it was shows that the major buyers of this sweet potato are wholesaler (46.3%) followed by 32.6% were middlemen and 21.1%were retailers. And the place of sales it was discovered majority of the respondents in both states (67.1%, 52.5%) Kwara and Osun states respectively sell their produce at the major market. This implies that sweet potato farmers were engaging themselves in commercialization activities by participating in the market in a little way in as much as they were still selling to the wholesalers. The distribution revealed the level of commercialization awareness by the sweet potato farmers, whereby majority (71.6%, 60.7%) of the respondent in both states were not aware of commercialization practice, although, majority sells their produce at the market but not aware of what is called commercialization because they sell directly to the wholesalers.

Furthermore, it was also shown the nearness to the market of the sweet potato farmers where their average kilometers to the market are 74km, 64km for both Kwara and Osun States respectively This implies the farms distance to the nearest market is a little bit far and they will thereby going to incur transportation cost in bringing their produce to the market.

Lastly, it was shown that the revenue generated in both states was between 5 and 10 million per annum (77.7%) for Kwara State and (90.9%) for Osun State. The pooled results show that most sweet potatoes farmers (46.4%) inherited their farm land from their parents or family land, 25% borrowed the hectares of land used, 16.3% got the land from been leased out for certain numbers of years, while 12.6% purchased the land used for the cultivation of sweet potatoes. This indicated that most of the sweet potato famers does not have enough land to increase their production and this can hinder them from fully engaging in commercializing

their produce. Also, revealed that 71.5% of the potato farmers used less than 6 hectares of land, 26% used more than hectares of land, while only 2.5% of the respondents utilized land between 6 and 9 hectares. This may be as a result of land tenure system, or because of Famers/herders conflict on day-to-day in the farm. This can hinder them from fully engaging in commercializing their produce.

**Challenges faced by Sweet Potato Farmers**

The result in table 2 show the challenges faced by potato farmers in the study area. The challenges were ranked as perceived by the respondents. The result revealed that Insect infestation was ranked 1st. This implies that insect infestation is a peculiar challenge to the two-state making it a severe challenge to sweet potato production in the study. In order to reduce the effect of insect infestation to sweet potato production, Government and relevant stakeholder should avail farmers of pesticide and insect control systems for easy of production. On the other hand, High Income in Agricultural production is key to sustainability and continuity. The study revealed that low income of farmers was ranked 3rd for Kwara and 4th for Osun State while the pooled for both States is 2nd. This implies that farmers in the Kwara and Osun State are faced with low income form the production of sweet potato. This could be attributed to inadequate or improper market structure for sweet potato in the study areas.

More so, Cost of production is ranked 3rd as constrained faced by farmers. Furthermore, the study also revealed that inadequate vine was ranked 4th. This implies that vines were not properly preserved or farmers lacked the technical knowhow in ensuring the survival of the vine during off season, thereby making it inadequate during planting season. Meanwhile Poor storage facility with processing of sweet potato was ranked 5th which was considered a key constraint amongst other constraints. Similar finding was reported as a key constraint by Fawole (2017) where the study examined the constraints to production, marketing and processing of sweet potato as a peculiar aspect. Inadequate Labour was ranked 6th for the study areas. This implies that for the both State, the supply of Labour was reported to be moderate.

Labour supply in production activities are essential to productivity. On the other hand, low patronage was ranked 7th position. The implication of this that, farmers in kwara state still experience low patronage despite the high production rate of sweet potato in the state, while Osun state enjoy relative moderate level of patronage. Adewale, & Abdulazeez, (2021) confirmed same in their finding of Assessment of sweet potato production and processing among farming Households in Nigeria, they reported Marketability of processed sweet potato is not much of constraint. Transportation cost in Kwara was ranked to be 8th. This implies that for the both states were this study was carried out, cost of transportation relatively fair. The result revealed that farmers in Kwara state ranked the challenge of Land conflict as 9th position. This implies that farmers faced a lot of land conflict which will reduce the available land for production. Lastly, Spoilage, Access to credit and bad road were ranked 10th, 11th and 12th respectively. This implies that as much as they considered to be a constraint, but not as severe as others peculiar in the study areas.

## CONCLUSION

It is concluded that majority practiced self labour (42%) in Kwara State but family labour (47%) in Osun State, with the mean labour used of 3.84 and 3.23 respectively. Majority inherited land acquired from their parents, occupying less than six hectares of land for production of sweet potato. Furthermore, the challenges encountered during production revealed that land conflict, inadequate vine, insect infestation and spoilage, access to credit were the major challenges facing farmers during production of sweet potato.

## RECOMMENDATION

Production of agricultural crops cannot be over emphasized for food security, poverty eradication and sustainability of life and its existence. Therefore, agriculture is the bedrock towards economic growth and rural development. However, it is recommended that:

- Settlement of land conflict issues should not be delayed, particularly when it comes to the use of agricultural purposes for production of sweet potato.

- There should be more awareness of the importance of sweep potato value addition to generate more income and improve their standard of living.

- The research institute(s) saddled with the responsibilities of storage and preservation of agricultural produce should come-up with methods/techniques of preserving this crop to extend their shelf-life and reduce postharvest loss of this vital crop.

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**APPENDIXES**

**Table 1: Distribution of According to Production Activities of Sweet Potato Farmers**

| Variables | Kwara Farmersv | | | Osun Farmers | | | Pooled | | |
|---|---|---|---|---|---|---|---|---|---|
| | Freq | % | Mean | Freq | % | Mean | Freq | % | Mean |
| Labour Acquired | | | | | | | | | |
| Self labour | 102 | 41.98 | | 40 | 16.53 | | 142 | 29.28 | |
| Family labour | 71 | 29.22 | | 113 | 46 | | 184 | 37.94 | |
| Hired labour | 70 | 28.81 | | 89 | 36.78 | | 159 | 32.78 | |
| Labour used | | | | | | | | | |
| <5 | 154 | 63.37 | 3.84 | 179 | 73.97 | 3.23 | 333 | 68.66 | 3.54 |
| 5-10 | 89 | 36.63 | | 59 | 24.38 | | 148 | 30.52 | |
| >10 | | | | 4 | 1.65 | | 4 | 0.82 | |
| Land Acquired | | | | | | | | | |
| Leased | 50 | 20.58 | | 29 | 11.98 | | 79 | 16.29 | |
| Inherited | 105 | 43.21 | | 120 | 49.58 | | 225 | 46.39 | |
| Purchased | 34 | 13.99 | | 27 | 11.16 | | 61 | 12.58 | |
| Borrowed | 54 | 22.22 | | 66 | 27.27 | | 120 | 24.74 | |
| Land Used | | | | | | | | | |
| <6 hectares | 188 | 77.37 | 4.51 | 159 | 65.70 | 5.98 | 347 | 71.55 | 5.25 |
| 6-9 hectares | 10 | 4.12 | | 2 | 0.83 | | 12 | 2.47 | |
| Above 9 hectares | 45 | 18.52 | | 81 | 33.47 | | 126 | 25.98 | |
| Farm size | | | | | | | | | |
| Small Scale | 188 | 71.55 | | 159 | 65.70 | | 347 | 71.55 | |
| Medium Scale | 10 | 2.47 | | 2 | 0.83 | | 12 | 2.47 | |
| Large Scale | 45 | 25.98 | | 81 | 33.47 | | 126 | 25.98 | |
| Aim of growing | | | | | | | | | |
| Household consumption | 29 | 11.93 | | 2 | 0.83 | | 31 | 6.39 | |
| Income generation | 207 | 85.19 | | 217 | 89.67 | | 424 | 87.42 | |
| Others | 7 | 2.88 | | 23 | 9.50 | | 30 | 6.19 | |
| Access to Extension Agent | | | | | | | | | |
| No Access | 218 | 89.71 | | 203 | 83.88 | | 421 | 86.80 | |
| Access | 25 | 10.29 | | 39 | 16.12 | | 64 | 13.20 | |
| Access to Credit Facilities | | | | | | | | | |
| No Access | 77 | 31.69 | | 122 | 50.41 | | 199 | 41.03 | |
| Access | 166 | 68.31 | | 120 | 49.59 | | 286 | 58.97 | |
| Association Membership | | | | | | | | | |
| Not Belong | 140 | 57.61 | | 164 | 67.77 | | 304 | 62.68 | |
| Belong | 103 | 42.3 | | 78 | 32.23 | | 181 | 37.32 | |
| Frequency of Production | | | | | | | | | |
| Quarterly | 81 | 33.33 | | 90 | 37.19 | | 421 | 86.80 | |
| Twice in a year | 144 | 59.26 | | `14 | 47.11 | | 64 | 13.20 | |
| Yearly | 12 | 4.94 | | 27 | 8.68 | | 33 | 6.80 | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Two years interval | 6 | 2.47 | | 17 | 7.02 | | 23 | 4.74 | |
| **Input Purchased** | | | | | | | | | |
| <150,000 | 146 | 60.08 | 140,5 | 147 | 60.74 | 154,1 | 293 | 60.41 | 1473 |
| 150,000 -200,000 | 81 | 33.33 | 92.60 | 58 | 23.97 | 77.70 | 139 | 28.66 | 71.10 |
| 200,001 – 250,000 | 4 | 1.65 | | 8 | 3.31 | | 12 | 2.47 | |
| >250,000 | 12 | 4.94 | | 29 | 11.98 | | 41 | 8.45 | |
| **Quantity Produced (bag)** | | | | | | | | | |
| <1,500 bags | 11 | 4.53 | 2342. | 3 | 1.24 | 2277. | 14 | 2.89 | 2310. |
| 1,500 2000 bags | 101 | 41.56 | 69 | 61 | 25.21 | 89 | 162 | 33.40 | 36 |
| 2,001 – 2500 bags | 34 | 13.99 | | 148 | 61.16 | | 182 | 37.53 | |
| >2500 bags | 97 | 39.92 | | 30 | 12.40 | | 127 | 26.19 | |
| **Quantity Sold (bag)** | | | | | | | | | |
| <1,000 bags | 11 | 4.53 | 1857. | 3 | 1.24 | 1857. | 14 | 2.89 | 1857. |
| 1,000- 1,500 bags | 76 | 31.28 | 74 | 46 | 19.01 | 82 | 122 | 25.15 | 78 |
| 1,501 – 2,000 bags | 69 | 28.40 | | 119 | 49.17 | | 188 | 38.76 | |
| >2000 bags | 87 | 35.80 | | 74 | 30.58 | | 161 | 33.20 | |
| **Price sold/bag** | | | | | | | | | |
| <3,500 | 41 | 16.87 | 3727. | 9 | 3.72 | 4003. | 50 | 10.31 | 3865. |
| 3,500 -4000 | 170 | 69.96 | 98 | 187 | 77.27 | 31 | 357 | 73.61 | 36 |
| 4,001 – 4,500 | 10 | 4.12 | | 2 | 0.83 | | 12 | 2.47 | |
| >4,500 | 22 | 9.05 | | 44 | 18.18 | | 66 | 13.61 | |
| **Major Buyer** | | | | | | | | | |
| Wholesalers | 94 | 38.68 | | 112 | 46.28 | | 206 | 42.47 | |
| Retailers | 21 | 8.64 | | 51 | 21.07 | | 72 | 14.85 | |
| Middlemen | 114 | 46.91 | | 79 | 32.64 | | 193 | 39.79 | |
| Consumers | 14 | 5.76 | | 0 | 0.00 | | 14 | 2.89 | |
| **Place of sales** | | | | | | | | | |
| At farm gate | 58 | 23.87 | | 63 | 26.03 | | 121 | 24.95 | |
| In the street | 22 | 9.05 | | 52 | 21.49 | | 74 | 15.26 | |
| At major market | 163 | 67.08 | | 127 | 52.48 | | 290 | 59.79 | |
| **Commercialization Awareness** | | | | | | | | | |
| Not aware | 174 | 71.60 | | 147 | 60.74 | | 321 | 66.19 | |
| Aware | 69 | 28.40 | | 95 | 30.26 | | 164 | 33.81 | |
| **Nearness to the Market** | | | | | | | | | |
| <40km | 76 | 31.28 | 74.29 | 72 | 29.75 | 63.67 | 148 | 30.52 | 68.99 |
| 40-60km | 50 | 20.58 | | 47 | 19.42 | | 97 | 20.00 | |
| 61-80km | 17 | 7.00 | | 51 | 21.07 | | 68 | 14.02 | |
| 81- 100km | 28 | 11.52 | | 49 | 20.25 | | 77 | 15.88 | |
| >100km | 72 | 19.59 | | 23 | 9.50 | | 95 | 19.59 | |
| **Revenue generated** | | | | | | | | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| <5 millions | 43 | 10.52 | 6,55, | 8 | 3.31 | 7,405 | 51 | 10.52 | 7,129 |
| 5 – 10 millions | 189 | 84.33 | 092 | 220 | 90.91 | ,281 | 409 | 84.33 | ,619 |
| >10 millions | 11 | 5.15 | | 14 | 5.79 | | 25 | 5.15 | |
| **Total** | **243** | **100.00** | | **242** | **100.00** | | **485** | **100.00** | |

**Source:** *Field Survey,2022*

**Table 4.21: Challenges faced by Sweet Potato Farmers**

| Variable | KWARA FARMERS | | | | | OSUN FARMERS | | | | | POOLED | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | High | Moderate | Low | Undecided | Kwara Rank | High | Moderate | Low | Undecided | Osun Rank | High | Moderate | Low | Undecided | Pooled Rank |
| Insect infestation | 75 (30.9) | 150 (61.7) | 18 (7.4) | 0 (0.0) | 5TH | 55 (22.7) | 165 (68.2) | 22 (9.1) | 0 (0.0) | 2ND | 130 (26.8) | 315 (64.9) | 40 (8.3) | 0 (0.0) | 1ST |
| Low Income | 37 (15.2) | 155 (63.8) | 51 (21.0) | 0 (0.0) | 3RD | 16 (6.6) | 149 (61.6) | 72 (29.7) | 5 (2.1) | 4TH | 53 (10.9) | 304 (62.7) | 123 (25.4) | 5 (1.0) | 2ND |
| Farm cost | 75 (30.9) | 121 (49.8) | 46 (18.9) | 1 (0.4) | 8TH | 60 (28.0) | 169 (69.8) | 13 (5.4) | 0 (0.0) | 1ST | 135 (27.8) | 290 (59.8) | 59 (12.2) | 1 (0.2) | 3RD |
| Inadequate Vine | 63 (25.9) | 157 64.6) | 23 (9.5) | 0 (0.0) | 2ND | 53 (21.9) | 120 (49.6) | 69 (28.5) | 0 (0.0) | 7TH | 116 (23.9) | 277 (57.1) | 92 18.9) | 0 (0.0) | 4TH |
| Storage Facility | 81 (33.3) | 113 (46.5) | 48 (19.8) | 1 (0.4) | 11TH | 59 (24.4)) | 162 (66.9) | 21 (8.7) | 0 (0.0) | 3RD | 140 (28.9) | 275 (56.7) | 69 (14.2) | 1 (0.2) | 5TH |
| Inadequate Labour | 60 (24.7) | 143 (58.8) | 40 (16.5) | 0 (0.0) | 6TH | 68 (28.1) | 131 (54.1) | 36 (14.9) | 7 (2.9) | 5TH | 128 (26.4) | 274 (56.5) | 76 (15.7) | 7 (1.4) | 6TH |
| Low Patronage | 39 (16.1) | 151 (62.1) | 53 (21.8) | 0 (0.0) | 4TH | 78 (32.2) | 119 (49.2) | 45 (18.6) | 0 (0.0) | 8TH | 117 (24.1) | 270 (55.7) | 98 (20.2) | 0 (0.0) | 7TH |
| Transportation Cost | 73 (30.0) | 137 (56.4) | 33 13.6) | 0 (0.0) | 7TH | 84 (34.7) | 114 47.1) | 44 (18.2) | 0 (0.0) | 9TH | 157 (32.4) | 251 (51.7) | 77 (15.9) | 0 (0.0) | 8TH |
| Land conflit | 151 (62.2) | 82 (33.7) | 8 (3.3) | 2 (0.8) | 1ST | 99 (40.9) | 104 (42.9) | 39 (16.1) | 0 (0.0) | 11TH | 250 (51.5) | 186 (38.4) | 47 (9.7) | 2 (0.4) | 9TH |
| Spoilage | 85 (34.9) | 117 (48.2) | 41 (16.9) | 0 (0.0) | 9TH | 99 (40.9) | 130 (53.7) | 13 (5.4) | 0 (0.0) | 6TH | 184 38.0) | 247 (50.9) | 54 (11.1) | 0 (0.0) | 10TH |
| Access to Credit | 97 (39.9) | 114 (46.9) | 48 (19.8) | 0 (0.0) | 10TH | 92 (38.0) | 108 (44.6) | 42 (17.4) | 0 (0.0) | 10TH | 189 (38.9) | 222 (45.8) | 74 (15.3) | 0 (0.0) | 11TH |
| Bad Road | 56 (23.1) | 35 (14.4) | 151 (62.1) | 1 0.4) | 12TH | 81 (33.5) | 50 (20.7) | 111 (45.8) | 0 (0.0) | 12TH | 137 (28.3) | 85 (17.5) | 262 (54.0) | 1 (0.2) | 12TH |

**Source:** *Field Survey, 2022.*