

**PROFITABILITY OF SMALL SCALE SNAIL (*Archachatina marginata*) FARM ENTERPRISE IN ABIA STATE, NIGERIA****<sup>1</sup>Amusa, T. A and <sup>2</sup>Anugwo, S. C.**<sup>1</sup>Department of Agricultural Economics, Michael Okpara University of Agriculture, Umudike, Abia State<sup>2</sup>Department of Agricultural Economics and Extension Services, Federal University, Oye, Ekiti State**Correspondence:** E-mail: hamfeeq@yahoo.com; Phone: +2348036185143**Abstract**

The study investigated profitability of small scale snail farm enterprise in Abia State, Nigeria. Multi stage sampling technique was used to select 90 snail farmers across the three agricultural zones of the state. Data for the study were obtained through primary source using structured close-ended questionnaire. Data were analysed using frequency, percentages, means, gross margin and multiple regression analysis. The results of the showed that majority (42.2%) of the farmers used trench pens, 31.1% used fenced pens, 15.6% and 11.1% used drums and tyres respectively. In addition, the result showed that snail production was profitable with net profit of ₦101.87 per matured snail. Every naira invested in the business generated about ₦2.00. The coefficient of snail price positively and significantly influenced net return of snail farmers while costs of labour, feed and land rent significantly but negatively influenced net return of snail farmers. Prominent challenges facing snail farmers in the area include: inadequate financial capacity for business expansion, lack of access to supporting programmes such as cooperatives and education, weak knowledge of credit source by the farmers, pest and diseases infection, harsh weather condition among others. The study among others recommends that since snail farming is highly profitable, the teaming unemployed youths in the state should be empowered with necessary training and starter pack for engagement in snail farming to earn a living. Also, government should give snail farmers access to agricultural credit. This will help them for labour, feed and land that influence their profit.

**Keywords:** snail farming, profitability, cost and return, constraints, Abia State.**Introduction**

Snails are bilaterally symmetrical invertebrates with soft-segmented exoskeleton in the form of calcareous shells. Snails, according to Pat-Mbano and Chikwendu (2015) belong to the animal family known as *Mollusca*. Baruwa, Abogan and Kassali (2012) reported that there are several giant African snails which among others include: the giant snail in Ghana (*Achatina achatina*); Nigeria (*Archachatina marginata*) and East Africa (*Achatina fulica*). Amusan and Omidiji (1999) stated that giant African snails (*Archachatina marginata*) mostly found in Nigeria is common in the rain forest belt of Southern Nigeria and can reach a weight of 500 - 800g when fully mature and has commercial value than other species. Ngenwi, *et al*, (2010) reported that African giant snail (*Archachatina marginata*) has contributed immensely to the diets of both rural and urban dwellers serving either as delicacies or as main dishes in southern Nigeria.

A large proportion of snails found in Nigerian rural and urban markets are picked by rural dwellers from forests. The inadequacy in the supply of snails to meet its demand couple with increasing economic benefit of snail farming has further boost acceptance of heliculture as a farming enterprise. The domestication and rearing of snail for food and economic benefits is called Heliculture. According to Akinbobola (2019), snail farming also known as Heliculture is simply the act of farming enterprise of keeping or domesticating edible snails primarily for human consumption or for other purposes such as slime production. Ikegwonu (2013) reported that heliculture (Snail farming) is an easy enterprise because snails never fall sick, does not require you to buy food and does not require a lot of money to build and manage their pens. Snails are very prolific and capable of producing 100 eggs or more. Mohammed, Ahmed and Adjei (2014) observed that small size of this micro livestock (snail) is

undoubtedly one of the most significant assets since it make it possible to produce and manage on small areas and in cluster. Snail farming as an enterprise is one of the numerous approaches that will successfully transform Nigeria's subsistence agriculture.

Snail farming has become an important farm enterprise in Nigeria because it has being recognized to have a long-standing and widespread importance as a source of human food. Okonkwo, Ahaotu, Uwalaka and Ikojo (2013) affirmed that snail farming has attracted attention among Nigerian farmers due to its ability to generate income and step up protein intake among households. Many agricultural strategies have been adopted in Nigeria, yet daily per capita animal protein intake is less than 10g in the country. This is very low relative to the Food and Agricultural Organization recommended minimum requirement of 35g. In order to bridge this gap, it is suggested that there is the need to explore other sources of animal protein such as snail farming for improved protein intake of the people. One of the important alternative sources of animal protein which has received relatively scanty attention in Nigeria is the snail. Akinbobola (2019) stated that nutritionally, snail meat has been consumed by humans worldwide and high in protein content (12 – 16%), iron (45 – 50mg/kg), low fat and contains almost all the amino acid needed by humans for healthy living. In affirmation, Ume, Onuh, Onunka and Ucha (2016) noted that snail meat is high in protein (37-51%) compared to that of poultry (8.3%), fish (18%), cattle (17.5%) and sheep (6.4%) and its meat contains all amino acid needed for human nutrition. In the opinion of Pat-Mbano and Chikwendu (2015), snail meat has a high medicinal value and has been a major ingredient in the diet of people living in high forest zone of Nigeria. The Snail meat can control hypertension and its blue liquid is used in stopping excessive bleeding from open wounds. Apart from nutritive value, Afolabi (2011) corroborated that snail has medicinal value, including alignment against; whooping cough, high blood pressure, ulcers and asthma. Chah and Inegbedion (2012) observed that snail meat is a highly priced delicacy in many Nigerian cities and that confirms economic significance of snail farming.

Snail farming can definitely be a veritable means of generating income, reducing health problems (Pat-Mbano and Chikwendu, 2015). Economic importance of snail farming cannot be underscored because of the great prospects of the business. Steve (2017) noted that snail farming requires small capital and the working capital may be very low compared to other animal husbandry like poultry, fishery, cattle rearing and goat farming. According to Agbogidi and Okonta (2011), the need to improve the mass production of snails cannot be overestimated because snails can be reared both on small scale and large-scale production systems. The authors further added that snail rearing can be seen as a veritable means of generating income. There is now a renewed interest in snail farming because of its inherent potential in food security and sustainable livelihood in rural households. The amount of capital required for the establishment of a snailery is appreciably small relative to establishing other livestock farming and snail farming requires little labour with no strenuous physical exertion (Goodman, 2008). Snails generally are harmless and noiseless, therefore quite easy to handle (Agbogidi, *et al.*, 2008). They can be reared in urban environment without infringing on the peace of neighbours. This is because, snail farming need small space requirement for operation. In addition to aforementioned economic attributes of snail farm enterprise, snails have been shown to adapt to various environmental conditions.

In Nigeria, snails are an important source of income for some farmers who dwell in the rainforest areas of the country. These rural dwellers collect them in the wild in the rainy season; sell them at premium price along the roadside and at some rural and urban markets (Agbogidi and Okonta, 2011). Ikegwonu (2013) while commenting on the merits of snail farming noted that: every part of the snail is vital in food, pharmaceutical, manufacturing and fishing industry and that, snail farming requires a very little amount of capital and running cost is low and is very conducive to rear as no odour, stress, noise and irritation is involved. Profit generated in snail farming is far higher when compared to other livestock farming, snail

farming is compatible with other work responsibilities.

The multifaceted benefits of snail has increased the rate at which rural dwellers hunt for them in forests during the rainy season. Abia State Agricultural Development Programme [ASADEP] (2010) reported that the rate of harvest of snail from forest has increased tremendously. Also, impact of human activities such as deforestation, pesticide use, slash and burn agriculture and spontaneous bush fires had resulted in reduction in snail population. This situation has widened the supply and demand gap for snails in Nigerian markets, Abia State inclusive. This observation necessitates encouragement of heliciculture (snail farming) as a means of conserving this important resource and to close the existing supply and demand gap. Amao, Adesiyun and Salako (2007) justified that it is only through conscience effort of snail farming that man can conserve snails. This is because, the domestication of snails in commercial scale in farms will not only conserve them but will make them more readily available all year round, increase its availability for increased protein intake and serve as source of livelihood to many farmers, retirees, women and teaming unemployed youth in Abia State. To stimulate the interest of intending farmers into snail production, the profitability of the enterprise must be assessed to serve as incentive. Consequently, this study was carried out to examine the profitability of small scale snail farming enterprise in Abia State, Nigeria.

## **Materials and Methods**

### **Area of Study**

The study was carried out in Abia State, southeastern part of Nigeria. Abia State is located within the tropical rainforest zone and lies between longitudes  $7^{\circ} 10^1$  and  $8^{\circ}$  East of the Greenwich meridian and latitudes  $4^{\circ} 40^1$  and  $6^{\circ} 14^1$  North of the equator. Abia State lies south of Enugu and Ebonyi States as well as east of Anambra and Imo States. It is bounded in the east by Cross River and Akwa Ibom States and in the south by Rivers State. The state is made up of seventeen (17) administrative local government areas broadly divided into three agricultural zones which include: Aba, Ohafia and Umuahia agricultural zones. The state has a

climate marked by two major seasons; the rainy season which lasts between April to October and dry season that last from November to March like other states in the rainforest zone. Abia State occupies a land area of about 5,243.775sq.km which is approximately 5.85% of the total land area of Nigeria. The estimated population of Abia State according to report of National Bureau of Statistics (2012) was 3,256,642 people. Agriculture is one of the main occupations of the people of the state, providing income and employment for more than 65% of the population. Food crops grown in the state include yam, cassava, maize, cocoyam and different types of vegetables while the main agricultural cash crops are cashew, mango, citrus and oil palm among others. Livestock reared in Abia State include poultry, piggery, micro livestock such as bees, snails among others.

### **Sampling and Data Collection**

Multi stage sampling technique was used to select 90 snail farmers that constituted the respondents for the study. The first stage involved purposive selection of the three agricultural zones (Aba, Ohafia and Umuahia) in the state. This is because, snail production, though the population of the farmers cut-across the three agricultural zones in the state. In second stage, two local government areas (LGAs) were randomly sampled from each of the three agricultural zones making six LGAs for the study. At the third stage, random sampling was used to select three communities from each of the six LGAs making 18 communities for the study. With the assistance of agricultural extension agents and key informants in the selected communities, the lists of the snail farmers were compiled from which sampling was drawn. The fourth stage of the sampling involved random selection of 5 snail farmers from each of the 18 selected communities making a total of 90 snail farmers across the state that constituted the sample for the study.

Data for this study were obtained from primary source through the use of structured close-ended questionnaire. Due to proper monitoring of the data collection exercise, the entire 90 copies of administered questionnaire were retrieved and screened suitable for the study. Data collected

with the questionnaire bothered on: methods of snail production, cost and returns on snail production, socio-economic characteristics of the farmers and challenges experience by snail farmers in the state. Data were analysed using frequency, percentages, means, gross margin and multiple regression analysis.

### Gross Margin Analysis

Profitability indicators are gross margin, net return and return per naira invested as used by Ogisi, Begho and Alimeke (2013). Hence, the net return of the farmers were used as a proxy of profitability of their snail farming enterprise.

### Gross Margin

$$GM = TR - TVC$$

Where: **GM** = Gross Margin

**TR** = Total Revenue

**TVC** = Total Variable Cost

### Net Return Analysis

$$NR = TR - TC$$

$$TC = TVC + TFC$$

Where: **NR** = Net Return

**TR** = Total Revenue

**TC** = Total Cost

**TVC** = Total Variable Cost

**TFC** = Total Fixed Cost (depreciation)

**Return per Naira Invested**

$$RPI = \frac{TR}{TC}$$

Where: **RPI** = Return per Naira Invested

**TR** = Total Revenue

**TC** = Total Cost (Total Fixed Cost (depreciation) + Total Variable Cost).

### Profit Function Analysis

Profit function analysis was applied to estimate the relationship between factor inputs (fixed and variable inputs) prices used by the snail farmers and its profitability (net returns) of the snail farmers as dependent variable. The generalized profit function model is given as follows:

$$\pi = f(P_1, P_2, P_3, P_4, P_5)$$

Where  $\pi$  = net return

$P_1$  = price of output (₦)

$P_2$  = per unit price of labour (₦)

$P_3$  = per unit price of feed (₦)

$P_4$  = land rent (₦)

$P_5$  = cost of medicine (₦)

## Results and Discussion

**Table 1: Summarized statistics of the variables used in the snail production analysis**

Variables	Nature of Data	Min.	Max.	Mean	Std. Dev.
Output/unit price	Continuous	90.00	230.00	152.43	16.32
Cost of labour	Continuous	6,100.00	18,400.00	12,623.14	142.98
Cost of feed	Continuous	1,220.00	4,830.00	3,239.73	50.43
Cost of land rent	Continuous	800.00	5,200.00	3,810.34	61.70
Cost of medicine	Continuous	0.00	180.00	61.07	10.44
Depreciation	Continuous	843.40	4,946.00	3,604.33	54.61
Income	Continuous	29,700.00	132,582.00	70,879.95	690.83
Market tax	Continuous	0.00	110.00	50.00	9.80
Cost of breeding stock	Continuous	1,870.00	5,886.00	3,934.19	63.77

*Source: Field Survey, 2017*

The summarized statistics of the variables used in the analysis are presented in Table 1 which showed that the mean unit price of a matured snail is ₦152.43, with an average labour cost of ₦12,623.14 and average cost of feed of ₦3,239.73. The mean cost of rent for snail farmers was ₦3,810.34 while cost of medicine was as low as ₦61.07 indicating cost of disease and health management is low in snail farming relative to other groups of livestock. Depreciation on equipment was ₦3,604.33,

mean amount spent on tax was ₦50.00 while mean cost of breeding stock was ₦3,934.19. The mean income of snail farmers was ₦70,879.95 which indicates that snail farming is a profitable farm enterprise. The findings of Okonkwo, et al (2013) and Baruwa, Abogan and Kassali (2012) also affirmed that snail production is a very profitable farm enterprise due to appreciable values of gross margin and Net farm income per farming season.

### Snail Production Methods in the Study Area

Frequency and percentage distribution of the production methods practiced by the snail farmers was examined and result presented in Table 2. The result in the Table showed that majority (42.2%) of the farmers used trench pens production method, 31.1% used fenced pens, 15.6% and 11.1% used drums and tyres respectively for rearing their snails to market weight. Okonkwo, et al, (2013) identified snail management practices in Imo State to include

fenced pen (43.4%), drum or pot pen (32.1%), trench pens (15.1%) and tyre pens (3.8%). The findings of the present study contradicted that of Chah and Inegbedion (2012) who in a study carried out in Edo State found that majority (78.0 %) of the respondents (snail farmers) in Edo State used car tyres to house their snails. The difference in location of the two study areas may be responsible for the variation in trend of the results.

**Table 2: Frequency Distribution of Snail Farmers by Methods of Production**

Method of production	Number of respondents using the systems	Percentage
Fenced pens	28	31.1
Drums, box or pots	14	15.6
Trench pens	38	42.2
Tyres pen	10	11.1
<b>Total</b>	<b>90</b>	<b>100</b>

*Source: Field Survey, 2017*

### Costs and Returns of Snail Farmers

The costs and returns was used to determine the profitability of snail production enterprise in the study area. Table 3 shows the costs and returns from snail production in Abia State. Snail production requires as low as about fifty one naira to raise a snail to an average marketable size. The total variable cost relative to total cost was large (67.73%) because of low fixed capital inputs involved, indicating that snail production requires little capital investment. Labour cost was the largest components of the total cost (53.69%). This is at variance with the other types of livestock such as poultry where feed is the most expensive input (Ahmadu, Erhabor and Jimoh, 2010). This may be due to the fact that most of the snail farmers feed their snails with cocoyam leaves, pawpaw peels or other vegetable wastes obtained from the farms and their surroundings with little or no cost to the farmers. This finding contradicts the assertion of Cobbinah, Vink and Onwuka (2008) that snail production requires high capital investment. Although, the authors affirmed that in snail production both technical, labour and other input requirements are relatively low compared to those in other categories of livestock farming such as poultry, pigs, goats, sheep and cane rat. The result further indicated that snail production

was profitable (net return = ₦101.87 per matured snail). Every naira invested in the business generated an average of about ₦2.00 per snail farmer. This is in line with the findings of Ahmadu and Ojogho (2012), who reported the returns per naira invested per snail to be 1.73 naira in Edo State of Nigeria. This indicates high economic potential of snail farming enterprise for increased household income and enhancement of the living standard of the farmers. Okonkwo, et al (2013) carried out a study in Imo State and found that snail production is a very profitable farm enterprise due to appreciable values of gross margin and Net farm income per farming season. Baruwa, Abogan and Kassali (2012) equally affirmed in their study that estimated gross margin of ₦32,275 and a net profit of ₦30,375 signified that snail enterprise was profitable and the payback period for the initial investment was one year meaning that farmers could recover their investment in a single year. Hence, snail enterprise is sustainable, since inability to make profit will result in an unsustainable enterprise (Onyeagocha, et al, 2012). Thus, snail production is a farm enterprise that low income earners and unemployed persons could comfortably embark upon for sustainable livelihood.

**Table 3: Costs and Returns in Snail Production per Production Cycle in the Study Area**

Variable	Value/respondent return	Value/snail	% of total cost
Output (no of snails)	465		
Selling price/snail (₦)	152.43		
Gross income	70,879.95	152.43	
	<b>Variable cost (₦)</b>		
Feed	3,239.73	6.97	13.78
Labour (7 mandays)	12,623.14	27.15	53.69
Medication	61.07	0.13	0.26
<b>Total Variable Cost</b>	15,923.94	34.25	67.73
	<b>Fixed cost (₦)</b>		
Capital (Depreciated value of fixed inputs)	3,604.33		15.33
Market tax	50.00		0.21
Breeding stock	3,934.19	8.46	16.73
<b>Total fixed cost</b>	7,588.52	16.32	32.28
<b>Total Cost</b>	<b>23,512.46</b>	50.56	100.00
Gross margin (₦)	54,955.77	118.18	
Net return (₦)	47,367.25	101.87	
Return per ₦ invested (₦)	2.01		

**Source:** Field Survey, 2017

#### **Factors Affecting Profitability of Snail Farming in Abia State.**

The result of the profit function analysis presented in Table 4 shows the factors that influence profitability of snail farmers in Abia State. The result shows that the overall model was statistically significant implying that the variables contributed significantly to profit. The

adjusted  $R^2$  for the estimated regression showed that about 89% of the profit made by the snail farmers was explained by the explanatory variables. Durbin-Watson (DW) value of 2.21 showed the absence of both autocorrelation and multicollinearity. All the significant variables were in line with a priori expectations.

**Table 4: Profit Function Estimates of Factors Affecting Profitability of Snail Production in the Study Area**

Parameters	Coefficient	Standard errors	t- values
Output price	1.002128	0.0061916	161.85***
Cost of Labour	-1.305802	0.069036	-18.91***
Cost of Feed	-.7228942	0.240599	-3.01***
Cost of land rent	-1.220463	0.4325363	-2.82***
Cost of medicine	1.744241	1.897692	0.92
Intercept	1092.692	696.366	1.57
$R^2$	0.891		
F- statistics	6813.63*		
Durbin-Watson (DW)	2.21		
Observation	90		

\*\*\* = significant at 1%, level of probability respectively.

**Source:** Field Survey, 2017

The coefficient of output price positively and significantly influenced profit of snail farmers at 1% level of probability. This suggests that, an

increase in output price will have a direct increase in snail farmer's profit. Cost of labour, cost of feed, and cost of land rent all had

negative but significant influenced on profit of snail farmers at 1% level of probability. This is to be expected because; a percentage increase in either cost of labour, cost of feed, cost of renting land will reduce the level of profit to be earned by snail farmers. The findings of this study agreed with the result of Nwike and Ugwumba (2015) who found that cost output, cost labour and farm size significantly influenced the profitability of farmers. The result of this study also supported that of Afolabi (2013) that cost of feed had negative relationship with profit of snail farmers in Ondo State which indicate that an increase in cost of feed would lead to a decrease in the revenue of snail farmers. Though, the result of this study on negative relationship between cost of labour and profit disagreed with other part of the finding of

Afolabi (2013) who found that cost of labour was positively signed with profit of snail farmers Ondo State. This suggests that an increase in cost of labour would lead to an increase in revenue of respondents; this ordinarily negates *a priori* expectation.

### Constraints to Snail Farming in the Study Area

Data on the constraints facing snail farmers were obtained using 4-point rating scale instrument that was structured into response options of: Strongly Agree = (SA), Agree = (A), Disagree = (D) and Strongly Disagree = (SD) with corresponding values of 4, 3, 2 and 1 respectively. The cut-off point value of 2.50 was used for decision rule.

**Table 5: Mean Ratings of Farmers on Constraints to Snail Farming in Abia State**

SN	Constraints to Snail Farming	$\bar{X}$	SD	Remarks
1	Level of education of the farmers	1.98	0.87	D
2	Poor access to information relating to snail farming	2.63	0.65	A
3	Problem of diseases infection from contamination	2.87	0.54	A
4	Effects of harsh weather condition	2.73	0.75	A
5	Lack of proper farmland ownership	2.01	0.81	D
6	Lack of stable market for snail produced	1.87	0.96	D
7	Low/lack of financial capacity for business expansion	3.29	0.45	A
8	Tedious nature of snail farming business	2.85	0.52	A
9	Age of the respondent as either too young or old	1.73	0.98	D
10	Low technical know-how in handling snail products	2.45	0.87	D
11	Religious or cultural beliefs against snail consumption	1.54	0.99	D
12	Poor transportation network for distributing snails	2.56	0.67	A
13	Low patronage or acceptance for snail your area or vicinity	2.23	0.82	D
14	Lack of access to supporting programmes such as cooperatives, education.	3.10	0.47	A
15	Lack or inadequate extension visits or contacts	3.54	0.42	A
16	Insufficient knowledge of credit source by the farmers	3.16	0.46	A
17	Lack of collateral security to secure loan to support farming	2.65	0.63	A
18	Inadequate inputs such as juveniles and other important materials in the snail farming.	3.02	0.55	A
19	Involvement of the farmers in some off farm jobs, e.g. trading, artisans etc affecting the snail farming.	1.99	0.94	D

**Note:**  $\bar{X}$  = Mean; SD = Standard Deviation; A = Agreed; D = Disagreed.

**Source:** Field Survey, 2017

The result of the mean ratings of the responses of the snail farmers on the constraints of snail farming in Abia State showed that 11 out of the 19 items in Table 5 had mean values that ranged

between 2.56 to 3.54 which are greater than the cut-off point value of 2.50 on 4-point rating scale. This indicated that the 11 identified items are agreed by the farmers as constraints to their

snail farming activities. The constraints with their corresponding mean values include: poor access to information relating to snail farming (2.63), problem of diseases infection from contamination (2.87), effects of harsh weather condition (2.73), low/lack of financial capacity for business expansion (3.29), tedious nature of snail farming business (2.85), poor transportation network for distributing snails (2.56), lack of access to supporting programmes such as cooperatives, education (3.10), lack or inadequate extension visits or contacts (3.54), insufficient knowledge of credit source by the farmers (3.16), lack of collateral security to secure loan to support farming (2.65) and inadequate inputs such as juveniles and other important materials in the snail farming (3.02). Okonkwo, et al (2013) identified major challenges facing snail farmers as attacks from predators such as rats, lizard, snake, frog, bird, ants, termites and cockroaches, theft, lack of finance, lack of space and inexperience of some snail farmers. Also in affirmation, Chah and Inegbedion (2012) identified lack of capital/money, inability to get good laying stock, unavailability of formulated feed to buy, and slow growth rate of snails as major constraints against snail farmers in Edo State. In their separate studies, Baruwa, Abogan and Kassali (2012) identified challenges facing snail farmers as snail theft, pest attack, disease outbreak, lack of funds and inadequate market while Ume, et al (2016) identified poor access to credit, pest problem, problem of theft, poor laying of egg, inadequate management information and problem of predator as major challenges confronting snail farmers.

On the other hand, the mean ratings on the remaining 8 items in Table ranged from 1.54 to 2.45 which are less than the cut-off point value of 2.50 on 4-point rating scale. This implied that the remaining 8 items are not constraints facing snail farmers as far as Abia State is concerned. The 8 items and their corresponding mean values include: level of education of the farmers (1.98), lack of proper farmland ownership (2.01), lack of stable market for snail produced (1.87), age of the respondent as either too young or old (1.73), low technical know-how in handling snail products (2.45), religious or

cultural beliefs against snail consumption (1.54), low patronage or acceptance for snail your area or vicinity (2.23) and involvement of the farmers in some off farm jobs, e.g. trading, artisans etc affecting the snail farming (1.99).

### **Conclusion and Recommendations**

Snail farming (*Heliculture*) is a farm enterprise that has not received deserved policy attention due to inadequacy of empirical evidences on its profitability. Hence, this study examined profitability of small scale snail farming enterprise using Abia State as case study. From the data were collected and analysed, the study found that snail farming is a highly profitable farm enterprise in Abia State. Price of snails in the market, cost of labour, feed and land rent are significant variables that influence profit of the farmers. Prominent challenges facing snail farmers in the area include: inadequate financial capacity for business expansion, lack of access to supporting programmes such as cooperatives and education, inadequate extension visits or contacts, weak knowledge of credit source by the farmers, pest and diseases infection, harsh weather condition among others. Based on these findings, the study concludes that snail farming (*Heliculture*) is a profitable farm venture if carried out with adequate management. The study therefore recommends that:

1. Since snail farming is highly profitable, the teaming unemployed youths in the state should be empowered with necessary training and starter pack for engagement in snail farming to earn a living. This will reduce unemployment, crime rate and boost food security and farmers income in the state.
2. Government and other stakeholders in agricultural sector in the state should give small scale snail farmers access to credit through micro finance institutions. This will help them care for cost of inputs that influence their profit.
3. There should be high level of farm sanitation and medication to reduce pest attack, and increased extension visits to increase knowledge and technical-know-how of snail farmers for enhanced operation in the state.

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