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Utilisation of Improved Snail Production Technologies on the Livelihood of Farmers in Abia State, Nigeria

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Abstract

This study assessed the effect of utilisation of improved snail production technology on the livelihood of farmers in Abia State, Nigeria. Snowball sampling technique was used to select ninety (90) respondents for the study. A structured questionnaire was used to collect data. Mean, standard deviation and multiple regressions were employed in data analysis. Technologies highly utilised by the farmers include enclosed housing ($\bar{x}$= 3.46), water regulator ($\bar{x}$= 3.44), and feeding with fresh materials ($\bar{x}$ =3.54). Utilisation of these technologies positively affected farmers' productivity ($\bar{x}$= 3.44), income ($\bar{x}$= 3.07) and access to food ($\bar{x}$= 3.21). Effective utilisation of the technologies was constrained by difficulty understanding the technology ($\bar{x}$= 3.26), difficulty using technology ($\bar{x}$ = 2.57), high cost of housing ($\bar{x}$ = 2.81), and difficulty maintaining usage ($\bar{x}$ = 3.15). Age (t = -3.31) and level of educational attainment (t = 2.691) significantly influenced technology utilization. The utilization of improved snail production technology enhanced the livelihood of the farmers. The study recommends regular training programmes by government and relevant stakeholders for the youths, and retirees and provision of start-up capital to encourage wider adoption of improved snail production technologies

Keywords: Snail farming, technology adoption, farmer livelihoods,

Introduction

Snail meat is a tasty, healthy meat packed with lots of nutrients. It contains iron, phosphorus, calcium, sodium and protein in high quantity, with all the essential amino acid (Ijigbade et al., 2021). Snails are good immune boosters with low cholesterol and anti-inflammatory and antioxidant properties. They are also rich sources of vitamins E, A, K and B_{12} (Akinfenwa, 2022).

Snails are often found in the wild - mostly in the humid rainforest areas and their fringes and are actively seen during the rainy season. Snail farming is one of the livelihood sources of rural dwellers, they collect them for food, drugs or cosmetics or sell them and use the proceeds to attend to other family issues (Adewale and Belewu, 2022). Snails are often seen displayed for sale along the road and in some rural and urban markets. Snails usually become scarce and expensive during the dry seasons making it difficult for those who depend on them to earn a living (Aguaguiyi,

Emegha, and Umebali, 2022). Besides the seasonality of snails, environmental factors such as deforestation, rise in temperatures, reduced rainfall, bush burning, wild and unchecked hunting from the wild, and incessant use of agrochemicals have also contributed to a decline in their availability in the wild. Increase in the demand for snails due to their numerous benefits has also placed immense pressure on the supply which wild hunting can longer mee (Etukudo, et al., 2025).

Making a living from snail business requires constant availability of the product and this cannot be guaranteed by wild seasonal hunting. Families who depend on snail business their livelihood, require constant availability of the product. They harvest and sell the meat and other bye products and use the proceeds to cater for other basic needs. Seasonality of wild snail hunting as well as subsequent increase in the demand due to their numerous benefits have necessitated recent advancement in technology that has led to the domestication of snails (Nnamdi, 2025; Etukudo, et al., 2025).

Domestication of snails is the process of raising edible snails as food, pharmaceuticals, and cosmetics. It is also called snail farming or heliculture or heliciculture. Snail farming involves rearing of snails in an enclosure or in a natural environment where management and other conditions necessary for growth are controlled. Heliciculture has the potentials of being a lucrative business however, it is yet to gain the desired popularity (Akinfenwa, 2022, Etukudo, et al., 2025). According to Adewale and Belewu, (2022), intensive production and management of land snails are important and inevitable in order to overcome threats facing the survival of snails. Snail farming is an innovation that helps to make snail meat and its bye products readily available all year round at reasonably reduced prices.

It is a very profitable business that has both local and international markets because of high demand for snail meat. Snail farming has the potential to alleviate poverty, manage food insecurity, create employment and provide sustainable livelihood (Nnamdi, 2025). However, it requires a lot of patience to grow the snails to table size. Snails are very prolific - they lay many eggs and in quick successions. They can be sold at any of the stages of their development. The eggs and point of lay sized snails can be sold to farmers that are just starting, while table sized snails can be sold to consumers and other end users as food and raw materials for drugs and cosmetics.

There are many species of edible land snails. However, the most popular species of economic interest are the West African giant snail *(Archachatina marginata*), Giant African Land Snail *(Achatina Fulica)* and the African giant snail (*Archatina archatina*) (Etukudo et al., 2025). Snail farming is a pocket-friendly venture that requires very little initial capital investment. It makes minimal noise and is very eco-friendly (KIMD group, 2025). Snails can be reared in containers, tyres, boxes made of wood or wire gauze, drums, trays, shelves made on walls. Several other kinds of snaileries are possible and depend on factors such as growth stage, scale of operation, available capital, size of land and location.

Improved snail production technologies have been developed and implemented in various parts of the world to enhance the efficiency, productivity, and sustainability of snail farming operations (Offia *et al*., 2022). Heliciculture has undergone significant transformation because of technological advancement, research and sustainable

practices. These innovations have changed a lot about the way snails are produced, managed, marketed and their diseases controlled (Adewale and Belewu, 2022).

Housing snails in fenced pens and enclosure, feeding them with fresh vegetables, fruits and formulated feeds (concentrates) as well as managing their environment using climate measuring devices and water regulators are some technologies developed to enhance snail farming and production. Others include selection of high-quality snails for breeding, and management of snail pest and diseases (Ndukwe, 2022 and Etukudo, et al., 2025).

The values associated with snail production cannot be overemphasized. Snails are a rich source of essential nutrients, easy to rear, with low initial investment and high returns due to demand. It is also environment friendly – no noise, no air pollution. Harvesting snails from the wild makes their availability seasonal, and the snails are scarce. This necessitated domestication of the snail rearing process. Research Institute of Nigeria and globally developed technologies to enhance snail production. This study therefore seeks to assess the effect of utilization of improved snail production technologies on the livelihood of farmers in Abia State. Specifically, the study:

i. examined the level of utilization of improved snail production technologies by the farmers;

ii. ascertained the effects of utilization of improved snail production technologies on the livelihood of the farmers; and

iii. identified the constraints facing utilization of improved snail technologies in Abia State

H_0: There is no significant relationship between the socio-economic characteristics of the farmers and their level of utilization of improved snail production technologies

Methodology

The study was carried out in Abia State. The State lies between Longitudes $7^0$23' and $8^0$20' East of the Equator and Latitudes $4^0$47' and $6^0$12' North of the Greenwich Meridian. It occupies a land mass of 5,833.11km^2 (Abia State Planning Commission (ABSPC), 2018) and the people are mainly subsistence farmers who major in food crop production such as cassava, yam, maize, plantain, cocoyam and vegetables. They also produce some cash crops such as cocoa, rubber and oil palm. A good number of the people are also engaged in trading and artisanship.

The population of this study comprised of all snail farmers in Abia State. The study adopted snowball sampling technique otherwise called referral sampling in selecting the respondents. There was no comprehensive list of snail farmers in Abia state ADP, thus 90 respondents were randomly selected across the state by reference from other snail farmers. Structured questionnaires were used in data collection.

The level of utilization of improved snail production technologies was realized using mean scores generated from a 4-point rating scale of very often (4), often (3), sometimes (2) and never (1). A midpoint of 2.5 was obtained for purpose of decision making. Mean score above or equal to 2.5 were adjudged as highly utilised technologies while scores less than 2.50 were considered low utilisation.

To realize the effects of utilization of improved snail production technologies on the livelihood of the farmers mean scores generated from 4-point rating scales of strongly agree (4 points), agree (3points) disagree (2 points) and strongly disagree (1 point) were used. A midpoint of 2.5 was obtained and used in decision making. Mean scores above or equal to 2.5 were adjudged as having positive effect on farmers livelihood while scores below 2.5 were adjudged negative.

Constraint faced by snail farmers in the utilization of improved technologies were measured using mean scores generated from 4-point rating scales of strongly agree (4 points), agree (3points) disagree (2 points) and strongly disagree (1 point). Mean scores were interpreted using a midpoint of 2.5 with values above or equal to 2.5 indicating major constraints while scores below 2.5 were adjudged minor constraints.

Results and Discussion

Level of Utilization of Improved Snail Production Technologies

The result on Table 1 shows the distribution of farmers based on their level of utilization of
improved snail production technologies in the study area.

Table 1: Level of utilization of improved snail production technologies

Technologies	Mean	SD
Snail enclosure (Hutch cage, open drum, wire mesh, tyre and other suitable enclosures)	3.46	1.6925
Fenced pen	1.51	0.5853
Climatic measuring devices	2.34	1.0827
Soil sterilization	2.62	1.3786
Irrigation /Water regulators	3.44	0.8422
Pest and predator scarier (use of condemn oil, lime etc)	3.34	0.8626
Formulated feed	1.37	0.4895
Feeding with fresh materials (fruits and leafy vegetables)	3.54	0.7391
Selection of quality breed stock	2.71	1.0119
Regular change of soil	2.11	0.8875
Regular health monitoring	3.03	0.9651
Grand mean	**2.47**	

Source: Field survey

On the level of utilization of improved snail production technologies, the study found that the farmers' levels of utilization of the technologies were still low ($\bar{x}$ = 2.47). Among the eleven technologies evaluated, seven were found to be highly utilized by

the farmers – use of enclosed housing such as hutches, boxes, tyres etc, ($\bar{x}$ = 3.46, SD = 1.6925), soil sterilization ($\bar{x}$ = 2.62, SD = 1.3786), pest and predator scarier ($\bar{x}$ = 3.34, SD = 0.8626), feeding with fresh materials ($\bar{x}$ = 3.54, SD = 0.7391), selection of quality breed stock ($\bar{x}$ = 2.71, SD = 1.0119) and regular health monitoring ($\bar{x}$ = 3.03, SD = 0.9651). This result shows that the farmers were probably using these technologies because they were affordable and readily available. Traditional methods of pest and disease control as well selecting good breed stocks from the wild cost little to nothing and snails thrive on eating vegetables and fruits although they do better when formulated feed is added. Farmers who are low on capital and have little or no knowledge of the benefits of using improved methods, will opt for the low cost.

Technologies with low utilization rate were; fenced pen ($\bar{x}$ = 1.51, SD = 0.5853), climatic measuring devices ($\bar{x}$ = 2.34, SD = 1.0827), water regulator, formulate feed ($\bar{x}$ = 1.37, SD = 0.4895) and regular change of soil ($\bar{x}$ = 2.11, SD = 0.8875) by the study farmers. Ahmadu et al (2021) reported that low adoption and utilization of most snail faming technologies were because of high cost of housing material, money and poor management. According to Offia, et al., (2022) these technologies are developed and used in different parts of the world to improve snail farming operations, productivity, sustainability and efficiency. Omeje, et al 2025 reiterated that improved technology utilization, helps farmers make informed decisions that can enhance productivity, increase food security, advance economic wellbeing and improve livelihood.

Perceived effect of Use of Improved Snail Production Technologies on the Livelihood of the Farmers

The results in Table 2 show the distribution of farmers by the perceived effects of using improved snail production technologies on their livelihoods.

Table 2: Perceived effect of use of improved snail production technologies on the farmers' livelihood

Responses	Mean	SD
Increased productivity	3.44	0.9132
Increased income	3.07	1.1880
Increased business opportunities	2.65	1.1334
Increased access to food	3.21	0.9656
Increased access to healthcare	2.12	1.0475
Access to market	2.89	1.0326
Better access to education	2.71	1.2474
Access to land	2.76	1.0527
Grand mean	**2.86**	

Source: Field survey

The study found that among the responses listed, the farmers indicated that increased productivity ($\bar{x}$ = 3.44, SD = 0.9132), increased income ($\bar{x}$ = 3.07, SD = 1.1880), increased business opportunities ($\bar{x}$ = 2.65, SD = 1.1334), increased access to food ($\bar{x}$ = 3.21, SD = 0.9656), access to market ($\bar{x}$ = 2.89, SD = 1.0326) better access to education ($\bar{x}$ = 2.76, SD = 1.0527), and access to land ($\bar{x}$ = 2.71, SD = 1.2474) were the areas with perceived positive effect from use of improved snail production technologies and mean values above 2.50. The results also showed that increased access to healthcare ($\bar{x}$ = 2.12, SD = 1.0475) had mean scores less than the acceptable mean of 2.50 and hence it was not perceived to have desired positive effect on their livelihood.

Increased snail productivity is most likely to bring about business growth, which will in turn enhance income necessary for meeting other basic family needs and sustaining livelihood. Utilization of technologies such as snail farming technologies have been recognized as important for enhancing growth, overcoming poverty, and enhancing food security. Nnamdi (2025) noted that the proper application of knowledge, sound investment, and effective market strategies in snail farming offer sustainable livelihoods, enhance food security, and meet the growing demand for snails.

Constraints Faced by snail Farmers in the Utilization of improved Technologies

Constraints faced by the snail farmers in the utilization of improved technologies in the study area are presented in Table 3.

Table 3: Constraints faced by the farmers in the utilization of the technologies

Constraints	Mean	SD
Difficulty understanding technology	3.26	0.6101
Difficulty using/practicing the technology	2.57	0.6701
High cost of housing	2.81	0.4920
Pests and predators infestation	3.16	0.7920
Difficult to maintain or continue	3.15	0.4326
High cost of formulated feed	3.42	0.6333
Poor access to credit	2.93	0.5466
Diseases	1.70	0.9297
Seasonal variation in weather	2.98	1.0165
Access to land	1.86	0.9164
Not socially acceptable	3.35	0.4814
Technologies disagree with my culture	1.95	0.8857
Poor access to information on heliciculture	3.06	0.7325

Source: Field survey

The results reveal that difficulty in understanding the technology ($\bar{x}$ = 3.26, SD = 0.6101), difficulty using/practicing the technology ($\bar{x}$ = 2.57, SD = 0.6701), high cost of housing ($\bar{x}$ = 2.81, SD = 0.4920), pest and predator attacks ($\bar{x}$ = 3.16, SD = 0.7920), difficulty maintaining or continuing use ($\bar{x}$ = 3.15, SD = 0.4326), high cost of formulated feeds ($\bar{x}$ = 3.42, SD = 0.6333), poor access to credit ($\bar{x}$ = 2.93, SD = 1.0165), seasonal variation in weather ($\bar{x}$ = 2.98, SD = 1.0165), not being socially acceptable ($\bar{x}$ = 3.35, SD = 0.4814) and poor access to information on heliciculture ($\bar{x}$ = 3.06, SD = 0.732) had mean score of 2.5 and above and thus were seen as major constrains faced by the snail farmers in the utilization of the technologies. Factors that influence adoption and use of improved technologies are usually ease of use, cheaper cost, better advantage and people's preference among others. The cost of new technologies is often beyond the purchasing power of rural dwellers. Lack of training also makes utilization of technologies difficult and perhaps expensive. Knowledge is pivotal to growth and advancement. Nnamdi (2025) reiterates that training and access to information are very vital for success. Low yield and poor quality of snails could be attributed to this.

Relationship between Selected socio-economic Characteristics of the Farmers and their Level of Utilization of the Improved Snail Production Technologies

The results in Table 4 show the relationship between selected socio-economic characteristics of the farmers and their level of utilization of the improved snail production technologies in the study area. Among the four functional forms estimated, the semi-log was chosen as the lead equation based on a high coefficient of determination (R^2) value, number of significant factors and agreement with a priori expectations. The F-value was highly significant at 1% level indicating a regression of best fit. The R^2 value of 0.4545 showed that 45.45% of the variability in level of utilization of improved snail production technologies was explained by the independent variables.

Table 4: Relationship between selected socio-economic characteristics of the farmers and their level of utilization of the improved snail production technologies

Variable	Linear	Exponential	Double log	Semi-log +
Sex	-0.0194	-0.0078	-0.0045	-0.0086
	(-0.26)	(-0.36)	(-0.21)	(-0.12)
Marital status	-0.0341	-0.0085	-0.0095	-0.0372
	(-0.65)	(-0.55)	(-0.62)	(-0.71)
Age	-0.0027	-0.0007	-0.0488	-0.1729
	(-0.96)	(-0.89)	(-1.36)	**(-3.31)****
Educational	-0.1339	0.0372	-0.1235	0.4424
attainment	(-2.21)*	(2.08)*	(-2.16)*	**(2.691)****
Annual income	0.0371	0.1139	0.0562	0.1849
	(0.95)	(0.98)	(1.10)	(1.08)
Household size	-0.0503	-0.0151	-0.0675	-0.2216
	(-1.81)*	(-1.83)*	(-1.49)	(-1.45)
Occupation	-0.0431	-0.1117	-0.0247	-0.9455
	(-1.12)	(0.87)	(-0.98)	(-1.11)
Farm experience	-0.0159	-0.0063	-0.0063	0.0065
	(-0.46)	(-0.62)	(-0.23)	(-0.07)
Extension agent	0.2023	-0.0624	0.0622	0.2013
access	(1.87)*	(1.95)*	(1.94)*	**(1.86)***
Membership of	0.2410	0.0716	0.0669	0.2246
cooperative	(2.23)*	(2.24)*	(2.09)*	**(2.07)***
Access to credit	0.0603	0.0178	0.0177	0.0585
	(0.72)	(0.72)	(0.73)	(0.71)
Constant	3.9802	1.3765	1.5266	4.5049
	(10.75)***	(12.57)***	(8.670)***	(7.57)***
Number of observation	90	90	90	90
F value	3.92	4.02	4.03	4.05
R squared	0.4220	0.4214	0.4228	0.4545
Adj. R-squared	0.3123	0.3116	0.3131	0.3152

Source: Field Data *P≤0.05

Age (t = -3.31), and level of education (t = 2.691) were significant. This indicates that an increase in age will lead to a corresponding decrease in utilisation of improved snail production. This result is expected and consistent with prior expectations, as production declines with advancing age. The result supports the findings of Okwuokenye et al. (2023) that age related negatively to farmers' perception of snail farming and, by implication, younger farmers are likely to be more favourably disposed to snail farming than the older ones. Nwoye, et al., (2022), are also of the opinion that age is inversely related to technology utilization. However, it is contrary to the findings of Ume et al., (2016) that there was a positive relationships between age and utilization of snailery production technologies with the explanation that snailery is less labour intensive and hence age cannot be a barrier to its production. The coefficient for educational attainment was also significant and positively related with the level of utilization of improved snail production technologies in the study area at 5% level of probability. This indicated that increase in the level of education

of the farmers will increase the level of utilization of improved snail production technologies. Higher Educational levels increase the ability to obtain, process and use information relevant to the adoption of a new technology (Maduka, et al., 2021). Ahmadu et al., (2021) also reiterated that education is one of the factors that positively influence adoption of improved agricultural technologies among smallholder farmers. According to Omeje et al., (2025), education plays critical role in technology utilization. Onu et. al. (2024) maintained that ageing and low level of education of the average Nigerian farming population are connected to their aversion to risk, reluctance to adopt innovation and eventually low productivity.

More so, the coefficients for sex, marital status, annual income, household size, occupation, farming experience and access to credit had no significant relationship with level of utilization of snail production technologies in the study area. The study therefore rejected the null hypothesis that there is no significant relationship between selected socio-economic characteristics of the farmers and their utilization to improved snail production technologies and accepted the alternative.

Conclusion and Recommendations

Snail farming is a venture that has very promising prospects. The requirements to run the enterprise are usually very pocket-friendly compared to other livestock production businesses. However, the level of utilisation of improved snail production technologies in the study area is low. The study revealed that improved snail production technologies have the potential to enhance snail farmers' livelihood. If properly utilised, they help to improve productivity, increase income, improve living standards, boost food security and advance the economy. Poor training in the use and maintenance of technology, the cost of housing and feed, seasonal variability, and predators and pest infestations are major challenges affecting the utilisation of the technologies.

The study therefore recommends that regular training on snail farming for the youths, women and retirees should be organised by government, non-governmental organisations, community leaders and relevant stakeholders who are interested in empowerment. Start-up capitals should also be provided for the trainees to encourage wider adoption. The benefits inherent in snail as food and as a business should be propagated to the rural dwellers.

References

Abia State Planning Commission (ABSPC) (2018). Abia State economic empowerment development strategy report. Bi-annual review. Government House Press Umuahia.

Adewale, C., I. & Belewu, K. Y. (2022). Economic analysis of snail production and its contribution to food security of farming households in Nigeria, *Agricultura Tropica Et Subtropica,* 55,159-168

Aguaguiyi, F. N., Emegha, K. and Umebali, E.E. (2022). Determinants of snail production in Delta State. *GOUni Journal of Faculty of Management and Social Sciences*. 10(1): 110 - 131

Ahmadu, J.A., Ida-Ogbomo, E.O. and Oyoboh, D.E. (2021) Contribution of snail production to income status of snail farmers in Edo South, Edo Stat, Nigeria. *Agro-Science* 20(3): 289-293

Akinfenwa, G. (2022). Snail farming: Agribusiness with huge potential most farmers ignore BusinessAgro. The Guardian Newspaper 04th December 2022

Etukudo, O. M., Inyang, A. B., Nkantion, U. N., Patani, I. and Okon, B. (2025). Snail farming in Nigeria: Tapping into the economic potential of heliculture. A review. *Journal of Agricultural Extension and Rural Economics* 2(3): 42-54

Ijigbade, J.O., Owoeye, R.S. and Johnson, S.B (2021). Snail marketing as a means of rural livelihood in Ondo State, Nigeria. *Journal of Plant Sciences and Agricultural Research* 5(4): 1-5

Kimd Group (2025). Understanding the Benefits of Snail Farming
Kimd Group of Companies https://kimd.org/category/our-blog/commercial-snail-farming/ Accessed 02/05/2026

Maduka, O.A.; Onu, S.E. & Nwago, K.I. (2021). Analysis of utilization of improved production technologies among fish farmers in Abia State, Nigeria. *Journal of Agricultural Economics, Extension & Social Sciences.* 4(1):68-75

Nnamdi, A.E. (2025). Snail farming in Nigeria: A pathway to sustainable livelihoods and food security. Foraminifera Market Research Report

Nwoye, I.I.; Onubogu, O.H.: Uzochukwu, I.E. (2022), Availability and utilization of digital marketing tools among fresh African catfish marketers in Omambala Region of Anambra State. *Journal of Agricultural Extension* 26(2): 61- 69

Offia, E. C., Aguaguiyi, F. N., Emegha, K., & Umebali, E. E. (2022). Determinants of snail production in Delta State. *GOUNI Journal of Management and Social Scienumeces*, 10(1), Article 19.

Okwuokenye, G.F., Onyemekihian, F. and Damisa, A.K. (2023). Analysis of effect of socio-economic characteristics on the perception of farmers on giant land snail (Achatina Achatina) production in North Central States, Nigeria. *FUDMA Journal of Agriculture and Agricultural Technology.* 9(1): 218 - 225

Omeje, E.E.; Ukwuaba, I C.; Nwangwu, K.N.; Umaru, I.I.; Ibe, J.C.; Ume, C.O. and Offorma, T.J. (2025). Rural-urban differentials in utilization of artificial intelligence for improved agricultural production among crop farmers in Southeast Nigeria. *Journal of Agricultural Extension* 29(2): 39 – 50

Onu, S.E., Ukoha, J.I, Njoku, C.L., Obasi, I.O. and Onwuka, G.I. (2024). Youth Involvement in Sweet Potato Production in Abia State, Nigeria. Journal of Agricultural Extension. 28(2) 55 – 65

Taku, N.J.; Ndah, N.R.; Viyoi, K.T. and Elonge, S.A. (2025). The potentials of snail farming to the livelihood of farmers in Kumba, Southwest Region Cameroon. *Journal of Agriculture and Food Science* 22(2): 249-261

Ume, S.I., Onuh, N.C., Onunka, B.N. and Ucha, S.O. (2016). Adoption of snail production technologies by farmers in Onicha Local Government Area (LGA) of Ebonyi State, Nigeria. *Asian Journal of Agricultural Extension, Economics & Sociology.* 12(4): 1-8