

ASSESSING RISKS MANAGEMENT STRATEGIES AMONG BACKYARD SNAIL FARMERS IN OWO METROPOLIS, ONDO STATE, NIGERIA

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Abstract

just like any other farming enterprise is faced by a number of production militating risk factors, ranging from production through to marketing. Risk is a condition that relates to the possibility that yield or output levels will be lower than projected (Ibekwe & Andopara, 2016). Etchu *et al.* (2008) itemized snail production limiting risk factors to include climate change, pests and diseases as well as lack of good quality stock. In addressing production limiting factors called risk, farmers adopt risks management techniques for the purpose of ensuring optimum production. Risk management in agriculture is an essential tool employed by farmers to guide against production shock (OECD, 2011). Risks threatens output, returns and the overall performance of a farm business (Hamid & Chiaman, 2010). Hamid & Chiaman (2010), added that selecting appropriate risk The study was conducted to assess risk sources and management strategies employed in backyard snail farming in the study area. The study employed a snowball sampling procedure to select 29 respondents for the study. Data were collected with the aid of structured questionnaire. Data collected were analysed with the aid of descriptive statistics such as frequency count, simple percentage and standard deviation. Results of analysis showed that the mean age of the respondents was 50.55±5.1 years. Results also showed that 40.3% of respondents had no formal education while the mean year of production experience was 4.97±3.1. Results further showed that 100, 89.7 and 79.3% of respondents indicated climate change/drought, poor quality foundation stock and theft as major sources of risk in backyard snail farming while watering and building mini fence were the major risks management strategies employed in the study area. Snail producers should be encouraged to adopt right risk management strategies for efficient performance.

Keywords: Assessing, management, strategies, backyard, snail

INTRODUCTION

Snail farming is a micro-livestock enterprise that creates supporting source of livelihood for both rural, semi-urban and urban dwellers. Snail farming is now a popular micro livestock enterprise in Africa, Nigeria, inclusive owing to high protein demand, biodiversity conservation and livelihood option (Rekha *et al.*, 2015). The spread of the non-conventional farming system is on the increase probably due to awareness of its nutritional, therapeutic, cosmetic and industrial properties (Ezeano, 2016). Snail farming management techniques is a right decision in the right time as a guide against production failure. The study therefore, investigate the sources of risks and risks management strategies employed by snail farmers in the area.

RESEARCH METHODOLOGY

The study was conducted in Owo metropolis in Owo Local Government Area (LGA) of Ondo State. The town is selected in the LGA for the study based on household's involvement in backyard snail farming. Ondo State is located in the western part of Nigeria. The state falls on longitude 4° 45' and 6°00' east of the Greenwich meridian and latitude 4° 45' north of the equator. The inhabitants of the metropolis are mainly civil servants and artisans who engage in secondary occupation mainly backyard farming among which is snail keeping. Snowball sampling procedure was used for the study. A backyard snail producer was located who helped identify other snail keepers in the study area. A total of 29 backyard snail keepers were identify for data collection. Data were collected on socio-economic characteristics of snail producers, risk sources and risk management strategies employed in the study area. Data collected were analysed with descriptive statistics such frequency counts, simple percentage, mean and standard deviation.

RESULTS AND DISCUSSION

SOCIO-ECONOMIC CHARACTERISTICS OF THE RESPONDENTS

Table 1 shows socioeconomic characteristics of respondents. The results in the table show that 72.41% of the respondents were male while just 27.59% of them were female. This implies that backyard snail farming in the

area is dominated by male farmers. The results also show that majority (34.4%) of respondents fell in the age range of 41-50 years while 20%, 25%, 9.4% and 10.6% fell in the age ranges of ≥ 40 years, 51-60 years, 61-70 years and ≥ 71 years, respectively. This implies that active men were in the enterprise. The results further show that 45% of the respondents were widowed while 6.9%, 31.4%, and 16.1% were single, married and divorced, respectively. Majority (43.9%) of the respondents had household size range of 8-9 while 18.9%, 19.4% and 16.1% percent had household size ranges of ≤ 2 , 3-4 and 5-7, respectively. The mean household size in the area was 5.01 ± 2.4 . Majority (40.3%) of the respondents had no formal education while 35.6%, 14.5% and 9.1% of respondents had primary, secondary and tertiary education, respectively. Also, 43.9% of respondents had snail production experience range of 4-5 years while 17.5%, 19.7% and 16.7% of respondents had snail farming experience ranges of ≤ 1 year, 2-3 years and 6-7 years, respectively. Majority (65.52%) of the respondents owned the building they live in while 34.48% of them indicated otherwise. Building ownership might be the reason for involvement in the enterprise.

Table 1: Socio-economic characteristics of the respondents

Variable	Frequency	Percentage	Mean $\pm$ Std. Dev.
Sex			
Male	21	72.41	
Female	8	27.59	
Age of respondents			
≤ 40	6	20	
41-50	10	34.4	50.55 $\pm$ 5.1
51-60	7	25	
61-70	3	9.4	
≥ 71	3	10.6	
Marital status			
Single	2	6.9	
Married	9	31.4	
Divorced	5	16.1	
Widowed	13	45	
Household size			
≤ 2	5	18.9	
3-4	6	19.4	5.01 $\pm$ 2.4
5-7	5	16.1	
8-9	13	43.9	
Level of education			
No education	12	40.3	
Primary education	10	35.6	
Secondary education	4	14.5	
Tertiary education	3	9.1	
Year of snail keeping			
≤ 1	5	17.5	
2-3	6	19.7	
4-5	13	43.9	4.97 $\pm$ 3.1
6-7	5	16.7	
Ownership of building			
Owned	19	65.52	
Otherwise	10	34.48	

Std. Dev = Standard deviation

Risk sources in snail farming

Table 2 showed the risk sources in backyard snail farming in the study area. The result showed that all respondents (100%) indicated climate change/drought as major source of risk in backyard snail production. This was ranked 1st source of risk in backyard snail farming in the study area. The table further showed that 89.7% indicated poor quality foundation stock as major source of risk in the study area. This was ranked 2nd major source of risk in the area. Also, 79.3% and 37.9% indicated theft and pest/disease as major sources of risk in backyard snail farming. Theft and pest/disease were ranked 3rd and 4th major sources of risk in the study area. This implied that backyard snail farming in the area is faced with several risk factors.

Table 2: Risk sources in snail farming

Item	Frequency	Percentage	Rank
Climate change/drought	29	100	1st
Poor quality foundation stock	26	89.7	2nd
Theft	23	79.3	3rd
Pest/disease	11	37.9	4 th

MULTIPLE RESPONSES**RISK MANAGEMENT STRATEGIES**

Table 3 showed the risks management strategies in backyard snail farming in the study area. The result showed that 93.1% managed climate change/drought by periodic watering of snailry. The result also showed that just 48.3% of respondents sought experts' advice before stocking while 82.8% and 31% managed theft and pest/diseases risks by building mini fence round the snailry and checking snailry for pest picking. This implied that backyard snail farmers in the area managed risk factors for efficient performance of snailry.

Table 3: Risk management strategies

Management strategies	Frequency	Percentage
I carryout periodic watering	27	93.1
I seek expert's advice before stocking	14	48.3
I build mini fence round my snailry	24	82.8
I check snailry for pest picking	9	31.0

CONCLUSION

The study concluded that the backyard snail farmers in the area were still in their active ages. The major production risks faced in backyard snail farming in order of severity were climate change/drought, poor quality foundation stock, theft and pest/disease. The major risks management strategies employed by snail farmers were periodic watering and building mini fence round snailry. Small scale snail farmers should be encouraged to manage drought and theft risks by watering the snailry as well as building mini fence round the snailry.

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