



How Lucrative is the Snail Farming Business?

A Guide To Running
A Profitable Snail Farm In Ghana

Snail Farming vs. Stocks and Bonds

The global edible snail market size was valued at approximately USD 2.3 billion in 2023 and is projected to reach USD 4.6 billion by 2032, according to DATAINTELO.

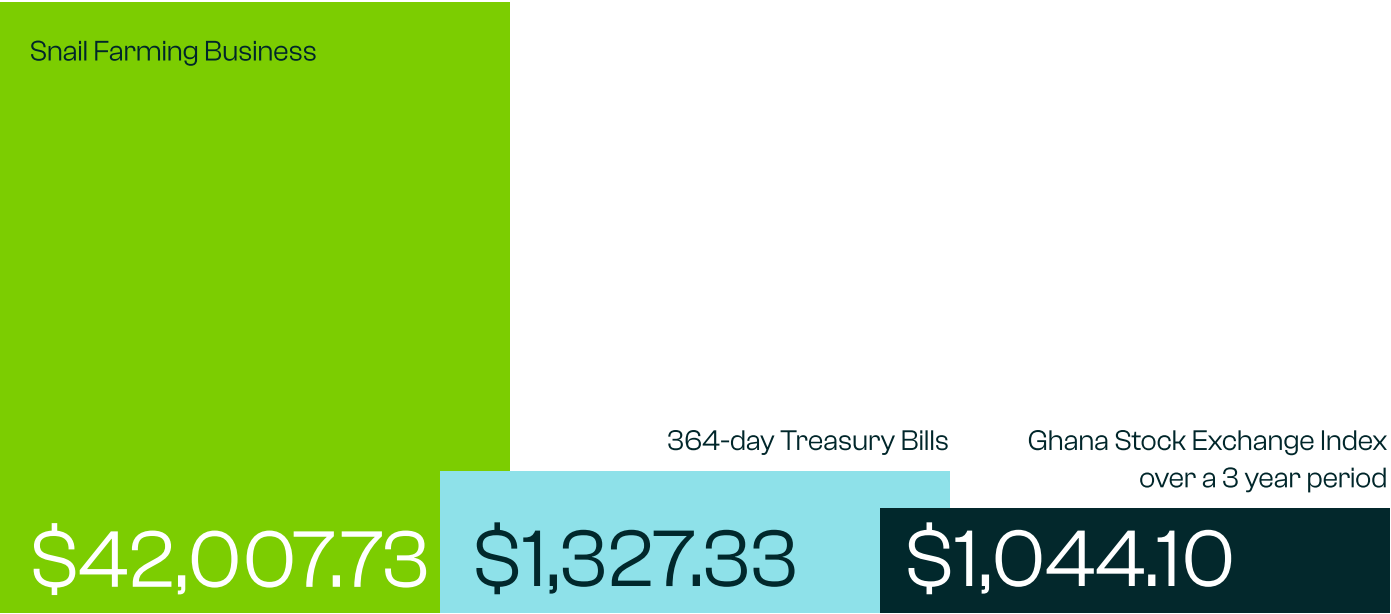


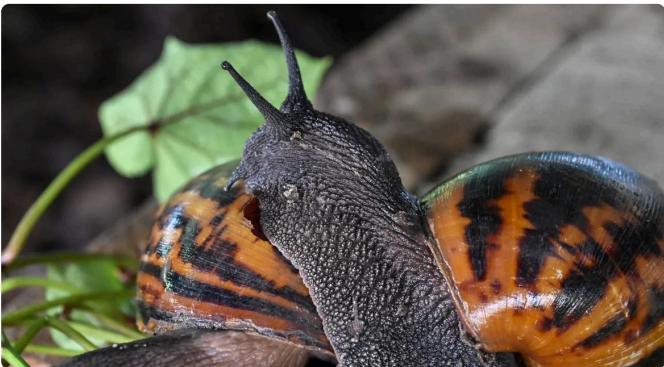
Fig 1. Annual free cash flow with a \$1,000.00 Investment

The figure above underscores the staggering returns of snail farming in contrast to the returns of stocks and bonds. With an investment of \$1,000.00, your return in a snail farming business could generate an average annual free cash flow of \$42,007.73, compared to \$1,327.33 from 364-day Treasury Bills and \$1,044.10 from the Ghana Stock Exchange (GSE) Index over a three-year period.

These figures are based on investing Treasury Bills at the last three-year December average yield of 32.73%, assuming the GSE Index maintains

the last three-year average annual return of 4.41%, and that the snail farming business follows the financial model outlined in the table 1 with an average ROI of 4100.8%.

However, it is important to note that past performance of stocks and bonds is not necessarily indicative of future results.



Requirement of starting a Snail Farm in Ghana

Business Registration



The Snail farm needs to be registered as a legal business (Sole proprietorship, partnership, or limited liability company) with the Registrar General's Department.

Operations



Snail Farming has very low operating expenses per revenue relative to other animal rearing businesses like poultry and fish farming.

The largest expense is a capex expense, the acquisition of land, this followed by cost of the breeder snails and the housing unit for the snails.

These make up about 64% of total cost. Other costs include labour, vegetation as feed, marketing and distribution, utility costs etc.



Snail Farm Business: Summary of Cashflow Analysis

Description	Unit	Year 1	Year 2	Year 3
Average Number of Breeding Stock	Snails	1,000	1,000	1,000
Duration for Reproductive Maturity	Months	10.00	10.00	10.00
Average Number of Eggs laid per clutch per Snail	Eggs	50	50	50
Number of Clutches within the Year	Clutches	2.00	2.00	2.00
Total number of eggs within the year	Eggs	100,00	100,00	100,00
Hatchability rate	%	50%	50%	50%
Number of Hatchlings	Hatchlings	50,00	50,00	50,00
Percentage of Hatchlings that reach full maturity	%	50%	50%	50%
Number of Hatchlings that reach full maturity	Hatchlings	25,000	25,000	25,000
Snails retained for breeding	Snails	1,000	1,000	1,000
Snails to be Sold	Snails	24,000	24,000	24,000
Average weight per snail	Kg	0.30	0.30	0.30
Total Weight Sold	Kg	7,200	7,200	7,200
Average price per kilogram	GHS	50.00	60.00	72.00
Average Revenue from sale of Snails	GHS	360,000.00	432,000.00	518,400.00
Capital Cost				
Greenhouse Construction	GHS	20,000.00	5,000.00	5,000.00
Acquisition of Land	GHS	60,000.00	-	-
Water storage system	GHS	5,000.00	500.00	500.00
Breeder Snails (GHS 20 each)	GHS	20,000.00	-	-
Automated Irrigation System	GHS	3,000.00	300.00	300.00
Initial Tools and Equipment	GHS	4,000.00	400.00	400.00
Training and Consultancy	GHS	5,000.00	500.00	500.00
Crates	GHS	2,000.00	200.00	200.00
Total	GHS	153,200.00	7,820.00	9,384.00
Operating Cost				
Water Supply Cost	GHS	6,000.00	7,200.00	8,640.00
Utility Cost	GHS	3,600.00	4,320.00	5,184.00
Internal Vegetation	GHS	6,000.00	7,200.00	8,640.00
Miscellaneous Expenses	GHS	3,600.00	4,320.00	5,184.00
Marketing and Distribution	GHS	3,000.00	3,600.00	4,320.00
Labour Costs	GHS	12,000.00	14,400.00	17,280.00
Transport	GHS	3,500.00	4,200.00	5,040.00
Total	GHS	37,700.00	45,240.00	54,288.00

Economics

Operating Income	GHS	322,300.00	386,760.00	464,112.00
Operating Margin	%	90%	90%	90%
Free Cashflow	GHS	203,300.00	379,860.00	457,212.00
Return on Investment	(%)	170.8%	5505.2%	6626.3%

Financials

The values in the table represent a potential three-year cash flow projection for a snail farm business with an average annual breeding stock of 1,000 snails using a greenhouse housing structure.

Total CAPEX and operating expenses are projected to be approximately GHS 120,000.00 and GHS 38,000.00, respectively, in year 1, with average operating expenses of GHS 46,000.00 over the projected three-year period. Growth is assumed to come solely from inflation, which is projected at 20% over the three-year period. The tax rate is set at 0% and the table assumes no reinvestment of cash flows.

The snail farming business has the potential to be highly profitable, with operating income margin reaching 90% for large scale operations and an average return on investment of 4100% based on the three-year projected cashflows.

Major Risks Involved in Snail Farming

Mortality Risk

Snails have a mortality rate of 10% to 30% in poorly managed farms, especially among hatchlings which can result in Loss of stock, reduced marketable snails, and lower revenue.



Reproductive Risk

Failure of snails to lay eggs as expected due to poor nutrition, improper climate, or stress could lead to reduced production, fewer hatchlings, and lower revenue.

Market & Demand

Prices for snails may fluctuate due to demand and supply issues. If local demand drops, snails may remain unsold, leading to overcrowding and increased feeding costs.