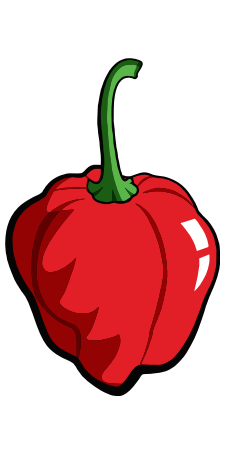
The One-Pager Business Plan (Pepper (Scotch Bonnet)

The One-Pager Business Plan is presented in bite-size and easy-to-understand language. It highlights the basic insights and considerations that help you decide if and how to engage in agricultural ventures.

Pepper in the World



In 2022, China was the world's largest pepper producer, with 16,810.52 million kilos and an average yield of 2.22 kilos per square meter. followed by Mexico, Indonesia, Turkey, and Spain with 3,113.24 million kilos, 3,020.26 million kilos, 3,018.77 million kilos, and 1,533.28 million kilos of pepper, respectively.

Pepper in Nigeria

The greater part of pepper production in Nigeria is undertaken in the northern parts of the country, including Kaduna, Kano, Jigawa, Katsina, Sokoto, Plateau, and Bauchi states. According to stakeholders in the business, pepper farming is one of the most profitable businesses in Nigeria and other countries.

Pepper Value Chain

Policy
Government Aid, Multilateral, etc.

Input
Seed, Fertiliser services etc.

Farm
You-Farm Labour Services, etc.

Processing
Manufacturer, Marketing dist. Export, etc.

Consumption
Industry Consumer, Export Trader etc.

Calendar Pattern for Open Field Pepper Production

🟢 Start 🔴 End

Activity	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Field Preparation	🟢	┈	🔴									
Planting			🟢	┈	🔴							
Weeding			🟢	┈	┈	┈	┈	┈	🔴			
Fertilizer Application			🟢	┈	┈	┈	┈	🔴				
Harvest							🟢	┈	┈	┈	┈	🔴
Processing	🟢	┈	┈	┈	┈	🔴	🟢	┈	┈	┈	┈	🔴

Irrigated Calendar Pattern for Open Field Pepper Production

Activity	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Field Preparation										🟢	┈	🔴
Planting	🟢🔴									🟢	┈	🔴
Weeding	🟢	┈	🔴			🟢	┈	🔴			🟢	🔴
Fertilizer Application											🟢	🔴
Harvest		🟢	┈	🔴								
Processing	🟢	┈	┈	┈	┈	🔴	🟢	┈	┈	┈	┈	🔴

Weeding	3 - 4 weeks after transplanting (WAP)	5 - 6 WAT
Fertilizer	Basal @ planting, 3 - 4 WAT	5 - 6 WAT
Pest Control	2-week intervals, stop at flowering	

SWOT Analysis

STRENGTH: Available base resources of land, labour, and technical know-how, well known in local and international markets.

WEAKNESS: Funding and climate change.

OPPORTUNITY: Used in most homes and growing markets due to international recognition.

THREAT: Global economic downturn, bad weather, natural disasters (droughts, epidemics), and the arrival of a competitor

PESTLE Analysis

POLITICAL: Agricultural transformation policies to encourage more farmers to produce pepper.

ECONOMIC: Economic reforms and a growing market for dried chili pepper export.

SOCIAL: Strong agricultural base and popularity of pepper.

TECHNOLOGY: Low-complexity technology for a medium-holder and a good spread of digital technology for information and extension.

LEGAL: Relative ease of doing farming business as little to no licenses or regulation are required.

ENVIRONMENT: Suitable crop geographical environment.

Technical Consideration

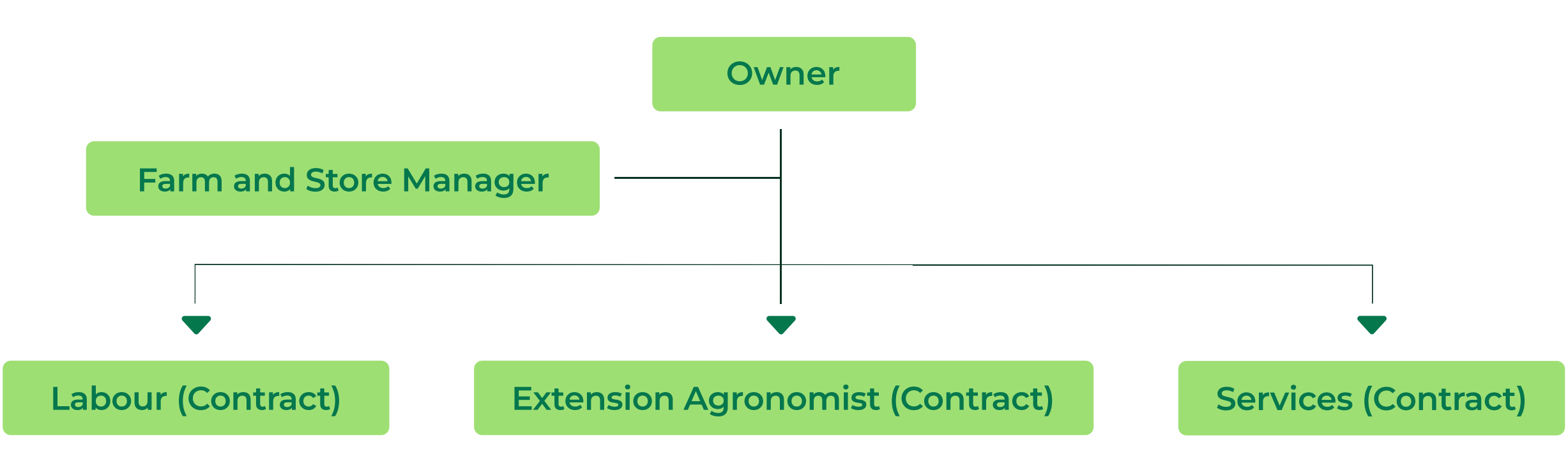
Pepper is a warm-season plant that requires adequate sunlight for optimum production. It can be planted in the wet and dry seasons provided irrigation is available. The pepper seeds are first sown in a well-prepared and fertile nursery bed or trail and transplanted after 21-30 days. Transplanting on ridges of 75 cm in size should be spaced 45 cm between plants (one plant per stand) to give a plant population of 29,630 plants per hectare. For transplanting on the seed bed, 6m x 4m is recommended, with plant spacing of 45cm apart in 60cm spaced rows. Transplanting should be done early in the morning or late in the evening to minimise transplanting shock. The maturity period after transplanting is between 60-80 days depending on the variety.

Marketing and Distribution

Pepper can be sold directly to the aggregators at the farm gate or moved to any major market where it is sold to consumers at the market rate. Pepper is a perishable crop. Care must be taken when handling the crop, and the shelf life must be taken into consideration from harvest to sale.

Operations

A medium-holder farm can be managed with a lean operational framework of not more than 5 people, mostly contracts with little overhead cost. Most administrative tools for such tasks as bookkeeping, project management and reporting can be sourced freely.



Owner

Farm and Store Manager

Labour (Contract)

Extension Agronomist (Contract)

Services (Contract)

As farms grow, headcount may increase; however, it is advised to keep operations lean and overhead low by using contract workers for most of the farm tasks while growing capacity in managerial areas.

Risk

Pepper farming at a medium scale is presented with a few risks that can be mitigated with low-complexity considerations and actions.

Environment Unfavourable environments such as land issues, insecurity and pastoralism	**Mitigant** Proper community engagement with legal backing, security assessment for safe areas against theft and insurgencies.	**High Probability**
Technical Poor technical knowledge on pepper production	**Mitigant** Obtain training on pepper farming; consult the service of an agronomist.	**Low Probability**
Pest & Diseases Outbreak of pests and diseases	**Mitigant** Proper weed control and use of cultural, chemical and biological pest control methods.	**Medium Probability**
Climate Drought or flood	**Mitigant** Use weather prediction information from NIMET; avoid flood-prone land. Make use of irrigation facilities during dry spells.	**High Probability**
Finance Lack of funds or poor funding	**Mitigant** Get adequate finance and credit to complete the production.	**Medium Probability**
Market Product rejection and ripping off by middlemen	**Mitigant** Apply good agricultural practices (GAP), produce based on the market quality requirement, and understand the market and market channels.	**Low Probability**
Pricing Poor pricing of commodity	**Mitigant** Work with other farmers and associations on pricing. Also, you can get a pre-contract agreement with your buyer.	**Medium Probability**

Economics of Production (June 2024)

AgroMall Market Survey

Activities	Product Type	Unit	Required Unit	Cost per Unit	Amount (₦)
Land		Ha	1.00	25,000	25,000.00
Land Preparation					
Ploughing	Labour	Ha	1.00	70,000	70,000.00
Ridging	Mechanised	Ha	1.00	67,000	67,000.00
Inputs					
Seed	Hybrid Seeds	300g (1000 seeds count per 10g)	30.00	6,000	180,000.00
Fertiliser 1	NPK	50kg Bag	7.00	35,000	245,000.00
Fertiliser 2	UREA	50kg Bag	4.00	32,000	128,000.00
Fertiliser 3	Calcium nitrate	35kg bags/ hectare	2.00	25,000	50,000.00
Fertiliser 4	Murate of Potash (MOP)	50kg Bag/hectare	3.00	38,000	114,000.00
Biostimulant 1	Tecamin Max	Litre	2.00	6,500	13,000.00
Biostimulant 2	Agriful	Litre	2.00	6,500	13,000.00
Herbicides 1 (pre-plant/ pre-emergence)	Glyspring	Litre	4.00	5,500	22,000.00
Herbicides 2 (post-emergence)	Metribuzin	Litre	3.00	5,000	15,000.00
Fungicide 1	Apron XL, Maxim 4fL, Dynasty	250g Sachet	4.00	2,500	10,000.00
Fungicide 2	Ridomil Gold	250g Sachet	4.00	4,500	18,000.00
Insecticide	FarMore F1500, Ampligo	Litre	4.00	6,500	26,000.00
Total Input Cost					**996,000.00**
Operations/Labour					
Planting of seeds in Nursery	Broadcasting	Ha	1.00	10,000	10,000.00
Nursery Management		Man-days	2.00	10,000	20,000.00
Transplanting	Labour	Ha	1.00	60,000	60,000.00
Gap filling	Labour	Man-days	4.00	1,500	6,000.00
Fertiliser Application	Labour	Ha	4.00	8,000	32,000.00
Insecticide Application	Labour	Ha	5.00	8,000	40,000.00
Herbicide Application	Labour	Ha	4.00	8,000	32,000.00
Harvesting	Mechanised	Ha	150.00	800	120,000.00
Logistics		Ha	4.00	50,000	200,000.00
Miscellaneous		Ha	1.00	50,000	50,000.00
Total					**570,000.00**
Total Operation Cost					**1,566,000.00**
Insurance				3.0%	46,980.00
Cost of fund				10,0%	156,600.00
Total Production Cost					**2,562,000.00**

It is advised that capital expenditure be avoided at this stage and all capabilities be sourced as services. Labour and service costs may vary per state or region and are amortised per hectare.

Dry season irrigation additional cost

Irrigation Schedules

Parameter	Description	Required Units	Cost/Unit	Amount
Tube well	Drilling of tube wells	1.00	255,000	255,000.00
Water Pump 3 inches - tiger	3 Inches	1.00	150,000	150,000.00
Hose Intake	Each Unit of 7 Meters	5.00	5,000	25,000.00
Hose discharge	Each Unit of 10 Meters	20.00	1,500	30,000.00
P.M.S purchase at N620 per litre for 120 days of irrigations at 5 litre/engine	1 engine @620 naira/ litres PMS	620.00	600 litres	372,000.00
Engine maintenance and servicing		1.00	1,500	3,000.00
Total				**835,500.00**

It is advised that capital expenditure is avoided at this stage and all capabilities are sourced as services. Labour and services costs vary per state or region and are amortised per hectare.

Profitability of Production (June 2024)

AgroMall Market Survey

Parameter	Description	Cost/unit	Amount
Total cost of cultivation/ha (₦)			**2,562,000**
Expected yield (20 tonnes per ha =600 bags)	1 bag of pepper is averagely 30kg	600 bags	**600 bags**
Market Price/ha (₦)	17 of 60kg baskets/ton	45,000/crates	50,000
Expected Revenue/ha (₦)	17 x 40 tons		30,000,000
Profit Margin/ha (₦)			27,438,000
Return on Investment (ROI)			1071%
Capital Turnover (CTO)			91%

Salaries and operating expenses are amortised per hectare. Profitability can move widely with commodity price movements.

Funding

There are funding sources for medium-scale pepper farming if capacity and capability are demonstrated. Typical funding sources from formal financial institutions include:

- **Out growers**
- **Investors and partnerships**
- **Grants**
- **Development interventions**
- **Banks:Microfinance and commercial**

Funding considerations will require that feasibility and viability are demonstrated, some track record in agriculture will also support a positive funding outlook.

Who is Suited for This?

Any interested person that has the knowledge or is ready to acquire knowledge on pepper production. The best-suited are agriculture students, graduates, professional farmers, side hustle farmers, and enthusiasts.

Consideration Score

- Viability - **HIGH**
- Feasibility - **HIGH**
- Profitability - **HIGH**
- Ease of entry - **HIGH**
- Aggregate Risk - **MEDIUM**
- Probability for Growth - **HIGH**
- Resilience and Sustainability - **HIGH**
- Aggregate Consideration Score - **HIGH**

Conclusion

Pepper crop production is one of the most consumed vegetables and spices in Nigeria. It has a high market value; you cannot go wrong in terms of profit if you properly understand the good agronomic practices and management required for optimal production.