

YUHO AGRO PROCESSING INDUSTRIES

DPR OF 1 MTPD EXPANDABLE TO 2 MTPD RAW CASHEW NUT PROCESSING FACTORY



**P.O. Box 6366,
Mwanza,
Tanzania.**

**Project Report Prepared By:
Mr. Neil Satish Purandare
B.E. (Mech) India, M.S. (Mech) USA.**

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1. SUMMARY OF PLAN

The Raw cashew production in Tanzania is rapidly increasing. The highest production is shown in 2018. The worldwide cashew industry is of USD 4-5 Billion. Tanzania is one of the largest Raw Cashew Nut (RCN) producer of Africa. 90% of RCN is exported to India & Vietnam for Processing & 10% processed locally. After processing, India & Vietnam export the processed Cashew or Cashew Kernel to USA, Europe, UAE & Australia. By processing the RCN in house i.e. in Tanzania, country can increase the Forex Earning significantly.

The Tanzanian Government offers various benefits to the investor such as quick entry to expats for technical purpose, availability of Foreign currency loans & easy conversion of Tanzanian Shilling to foreign currency. The Manyoni Region has multiple farms in its Vicinity such as Ikungi, Itigi & Tabora. Total 10,000 Hectares of plantation are present in 50-100 km radius of Manyoni Region, where RCN Processing factory is located.

The Yuho Agro Processing Industries (YAPI) is grabbing the opportunity and setting up the plant in Manyoni Region of capacity 1 Metric Ton per Day Expandable to 2 Metric Ton per day of RCN. The company is going to export 80% Cashew kernel & 20% will be sold locally. There is no export levy on Cashew kernel however there is 15% on RCN. Thus, the company saves this cost due to in house processing. Since, there is no competition. Our Cashew will generate competitive pricing over other countries.

This Project will give jobs to youth and women. Additionally, skill development will be done in this field. The Project will be executed in one year. Total requirement of Project is USD 240,000 & working capital requirement is USD 100,000. The financial ratio is favorable to this Project. The NPV is positive and IRR is 17.50%, indicating that the project is technically feasible. It is affordable & worth funding.

2. MISSION AND STRATEGY

The following are the company's vision, mission and its core values:

VISION

To become a leading commercially viable medium sized company in Tanzania that produces and trades in high quality Cashew Nuts for domestic and export markets.

MISSION

To Process High Quality Raw Cashew Nuts and Export internationally with competitive price. Apply modern agriculture technology and managerial skill.

CORE VALUES

To achieve the vision and mission of the company, members have pledged to uphold the following six core values:

- **Product service Excellence:** Through excellent product and service delivery it will strive to exceed customer expectations.
- **Out-growers Partnership:** To optimize in order to meet set goals by consciously and deliberately nurturing team spirit, collaboration and consultation.
- **Integrity:** To uphold virtues of integrity through honesty and fairness in all operations.
- **Accountability:** To strive to be responsible custodians of all resources entrusted to the company in a professional and transparent manner.
- **Social responsibility:** Endeavor to be socially responsible to society and pursue company goals through socially acceptable practices that preserve the environment; promote social-economic development, support vulnerable groups and HIV/AIDS and malaria programs.
- **Gender Mainstreaming:** Embrace principles of gender equality, fairness and balance across gender.

OBJECTIVES

YAPI intends to set up the processing factory for RCN processing. This will add value to the product. The following are the key objective:

- A.** To take the strategic advantage of no competition in RCN processing industry and create good hold on cashew processing sector in Tanzania.
- B.** To setup the 1 TPD Expandable to 2 TPD RCN Processing Plant.
- C.** Earning in Forex by Exporting the 80% Cashew Kernel & taking the benefits of foreign currency loans with low interest rates.
- D.** Expanding the plan as per the worldwide demand.

SWOC

The Strength, Weakness, Opportunities & Challenges (SWOC) analysis of Yuho Agro Processing Industries(YAPI) has involved the assessment of both the internal & external environment in which the industry operates. The results are outlined below:

I. Strength:

- a) Enormous Potential for expansion & No internal Competition.
- b) Own 8500 M² of Highway touch Land (Dodoma-Singida Highway).
- c) Available Technical & Management Staff.
- d) Easy & Cheap Availability of Work force.
- e) Forex earnings due to 80% export.
- f) Easy availability of Raw Material in 50-100 Km radius of Factory area.
- g) Competitive USD pricing due to in house processing.
- h) Support from Cashew Board of Tanzania.
- i) Easily available financial support.

II. Weakness:

- a) Capacity underutilization.
- b) Poor transport infrastructure.
- c) No outline from skill development program.
- d) Less consumption of cashew locally.
- e) High interest rates on finance.
- f) Competition from India & Vietnam.

III. Opportunities:

- a) Highly recognized Tanzania cashew in International & local market.
- b) Increasing production of RCN in Tanzania.
- c) Opportunity to increase market share for Tanzanian processed cashew.
- d) Availability of young people & their willingness to work hard.

IV. Challenges:

- a) Increase the consumption of cashew locally.
- b) Developing the Technical & Management Programs for entrepreneurs.
- c) Skill development program for the workforce.
- d) Financial availability with competitive interest rates.
- e) High Fluctuation of RCN prices.

GOALS/TARGETS

Yuho Agro Processing Industries' goals are in line with its mission, vision & core values. The following are the major goals:

- ✓ To take the advantage of zero competition and grow steady & sustainably.
- ✓ Increase the plant capacity to 2 TPD of RCN by 2027-2028.
- ✓ To create employment opportunities for local people.
- ✓ Through employment, execute the skill development program.

- ✓ To employ the local Youth & women.
- ✓ Create brand for our product in international & local market.

STRATEGIES

To achieve the objectives & goals , Yuho Agro Processing Industries(YAPI) has decided following strategies:

- Capture the market share as soon as possible.
- Reach the full production by 2024.
- Unlocking the project potential by expanding the factory.
- Securing long term contract with big international wholesaler like Walmart.
- Hire the service committed skilled people.
- Hire the hard-working youth.
- Optimizing the operational efficiency.
- Collaboration with various people to create the brand.
- Putting distributional channels for finished goods & optimizing supply chain.
- Work very closely with supporting institutions.

3. PRESENT BUSINESS DYNAMICS

PROJECT BACKGROUND & OPPORTUNITY

Cashew is one of the most sought-after nuts among dry fruits obtained from an exotic tree species. Tanzania is one of the largest Cashew Nut producer in Africa. The country provides 20% of Raw Cashew production in Africa. The export of Raw Cashew Nut provides 10-15% of the country's Foreign Exchange. The country's rank in cashew production is 8th in the world. The country comes 4th in Africa after Nigeria, Cote-D'Ivoire and Guinea-Bissau. More than 90% of crop harvested is exported to India for processing. Recently, Vietnam is also purchasing the crop for processing. While Tanzania's cashew nut sector, due to a combination of seasonality and price, is well positioned in the international market for raw cashew nuts, its processing sector remains underdeveloped and uncompetitive, particularly when buyers of raw cashew nuts can freely access the market. As per Cashew Board of Tanzania, the country produced 313,826.386 Metric Ton of raw cashew nut in 2018. It is expected to go higher in upcoming years.

In 2018, Tanzania exported almost 282,443.747 Metric Ton of Raw cashew nuts (RCN). The processing of Raw cashew nuts and exporting as finished product will increase the Forex Earning. The RCN processing sector is underdeveloped due to lack finance and technology. The YAPI have the means to finance the project, technical & Management team to execute the project. The Factory location in Manyoni, having

10,000 hectares of Cashew farms & minimum competition, gives the company early benefit and strategic advantage over others. The Yuho Agro Processing Industries(YAPI) identified these strategic benefits and is seizing the opportunity.

ANALYSIS OF AGRI-BUSINESS VALUE CHAIN ACTORS

The Tanzanian economy is heavily based on agriculture. The agriculture employs half the employed workforce of Tanzania. The 85% of foreign revenue comes from exporting the agriculture goods. Tanzania's economy relies on agriculture. The RCN is the 2nd most exported the agriculture commodity after coffee beans. The government is helping the small and medium enterprises to set the RCN processing factory. The processing on RCN will add the value to product and will earn additional Forex. Tanzania is one of the best producers of high-quality cashew. The cashew produced is W-180, W-320 & W-240.

The Cashew is auctioned by AMCOS. AMCOS is Agriculture Marketing Co-operative Society. It purchases the RCN crop and auctions to processor. The processor purchases the crop from these auctions. There are 7 regions in Tanzania, where processor/buyer can purchase the raw material in auctions. The production of RCN is increasing year by year and lack of availability to process the raw material in the country presents the strategic opportunity for us. The byproduct of RCN after processing is its shell and it can be sold separately. The RCN shell produces the Cashew Nut Shell Liquid (CNSL) which is used in paint industry.

The consumption of cashew as snacks is increasing. Particularly, it is used in breakfast cereals, health food, salad, baked goods and combination of various nuts. Thus, the demand for cashew nuts is increasing from the world. The value addition to RCN by processing will benefit in earning additional foreign Exchange.

PROGRESS MADE BY THE COMPANY TO DATE AND FUTURE PLAN

Yuho Agro Processing Industries(YAPI) is taking the advantage of the competition less cashew processing markets. The company will get all the sanctions before 31st August 2021 and start the construction. Progress made by the company is given below

1. Acquired the equity for the Project.
2. Complete Technical Know-how is obtained.
3. The company has placed the order & paid advance for Factory Shed, Plant & Machinery.
4. Company is ready for Land clearing & other Preliminary Processes.

Future Plans

According to demand or own production progress, the company will upgrade itself from 1 Metric TPD cashew processing to 2 TPD.

PROJECT COST AND WORKING CAPITAL REQUIREMENT

The Total project cost is \$240,000 (United states Dollar Two Hundred and Forty Thousand only). The bifurcation of the Project cost is given below in Table 1. The company also requires \$100,000 (United States Dollar One Hundred Thousand only) as working capital for the purchase of raw material during the auction.

TABLE 1: TOTAL COST OF PROJECT

SR. No.	Description	Cost (USD)
1	Cost of Plant & Machinery	53,227
2	Cost of Factory Shed	111,273
3	Local Cost: Clearing + Civil work + Other Expenses	45,500
4	Land Clearing & Pre-construction Activities Cost	20,000
5	Contingencies 5%	10,000
Total Cost		240,000

4. PRODUCT DESCRIPTION, BENEFIT & ASSESMENT

GENERAL DESCRIPTION

The cashew tree is tropical evergreen tree that produces cashew and cashew apples. The cashew is considered as one type of nut. The Cashew nut has another by product known as cashew shell. The cashew is native tree to Brazil. However, it is now cultivated in Central America, Africa & South-East Asia. In addition, the cashew is one of the cash crops that is why farmers prefer cashew over other crops.

The Cashew is good supplement of protein. That is why it is used in various healthy foods. Additional processing of roasting increases the value of cashew and is used in various snacks. Cashew butter is used as spread. The Cashew Apple and shell have their own usages. The Cashew Apple can be converted to fruit drink or distilled to liquor. The shell gives the CNSL, an oil that is used as lubricants and in paintings.

The RCN procured in AMCOS auction is of 51 to 53 OT from which contains mainly 5 types viz W-180, W-210, W-240, W-320 & W-450. In auction, we get 170 to 200 nut counts respectively. The buying price is decided on how much OT present in one lot.

KEY FEATURES

The proposed factory will be in Manyoni Region on Dodoma – Singida Highway. The factory is 580 Km from Dar-es Salaam Sea Port. The Factory will be processing 1 Metric Ton of Raw Cashew per Day. It will later expand to 2 Metric Tons of RCN per Day. The factory will be operational for 300 days in a year, processing total 300 Metric Ton of RCN per year. In one Metric Ton of RCN, recovery of the Cashew is 240 Kg and 760 Kg is of Cashew shell. Due to production in 7 regions, the buying of RCN is available at competitive price.

On factory side, the processing cost is expected USD 379 per ton of RCN, while average selling price of Cashew is USD 7 per Kg and for Shell the selling price will be USD 0.1 per Kg.

MAIN BENEFITS

The benefits are listed below

1. To use the lack competition in cashew processing sector.
2. High quality cashew will get high earnings.
3. Factory within 100 km radius of farms, hence easy availability of Raw Material.
4. Highly Competitive Export Price compared to other countries.
5. No Duty on Export of Processed Cashew.
6. 80% of processed goods can be exported.
7. Jobs to Youth as per National Strategy for Youth Involvement in Agriculture 2016-2021 strategy.
8. Earning in Foreign Exchange due to Value addition.

PRICING PLAN

YAPI will be buying the cashew from AMCOS auctions. Last two years higher side average price is around USD 1100 per Ton of RCN. On the processing side, the cost of processing which includes the salaries is around USD 340-410 per Ton. The variation is due to 80% utilization of capacity of the plant in initial 2 years. The Selling price will be USD 8 per Kg of Whole Cashew Kernel and USD 6 per Kg for Broken Cashew Kernel. The Pricing for Cashew Shell will be USD 0.1 per Kg.

COMPETITORS' OFFERINGS

In Tanzania only 10% of RCN production is processed. In addition, due to lack of Technology, Management skill, only few factories are into processing business. Therefore, there is no competition in Tanzania for Processing Sector.

However, there is competition from international Market such as India, Vietnam and other African countries. Since, we are processing the RCN at source we save following costs:

1. 15% Export Levy for Exporting RCN (There is 0% export Levy for Processed Cashew).
2. Overseas Transportation cost
3. Commission of Agent

The total saving in cost is around USD 300-400 per Ton of RCN. That is why we have strategic lead over pricing the processed Cashew.

NATIONAL, REGIONAL AND LOCAL ECONOMIC IMPACT

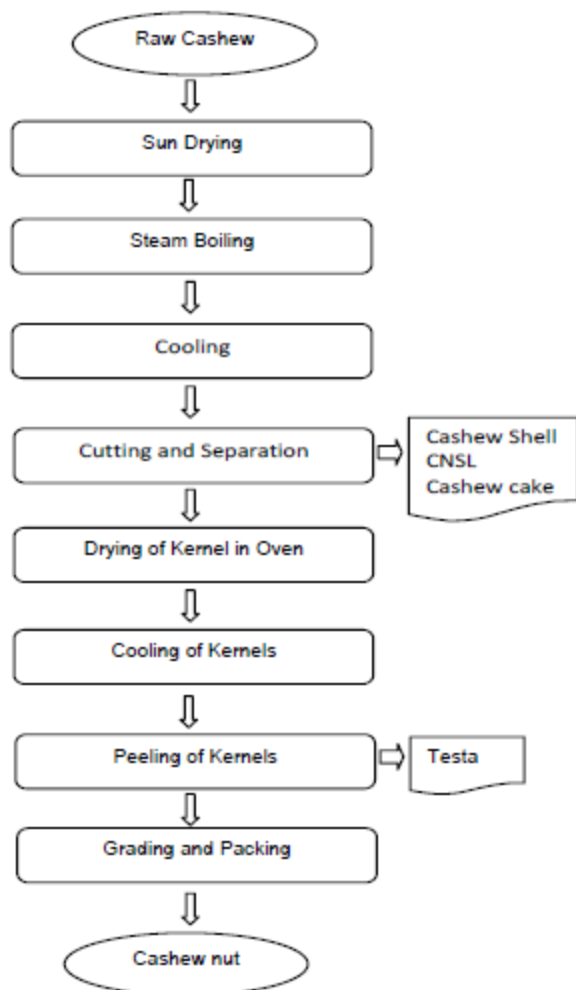
Tanzania produces 313,827 Metric Ton of Raw Cashew out of which 282,444 Metric ton is exported. In house of processing will benefit the country by earning additional USD 70 Million each year.

As per National Strategy for Youth Involvement in Agriculture (NSYIA) 2016-2021, tremendous opportunities of jobs will be created. In additional, the sector will create the employment for women as well. The Net result will be skill, job and life development among youth and women.

Locally, the impact is immense in job creation, wealth creation, quality of life improvement, improved infrastructure and social amenities including creation of local settlement not to mention alleviation of poverty.

5. MANUFACTURING PROCESS

The process of manufacture is well-established. Raw cashew nuts are dried in sun



and stored in gunny bags. The stored raw cashews are boiled by use of steam in a boiler. There are manufacturers of small-scale boilers available for boiling of cashew nut in most of the cashew processing areas. The boiling helps in softening of cashew shell. It becomes easy to remove nut inside cashew seed after boiling. The shell of steamed cashew nut is removed by skilled labor by using cashew cutting hand operated or automatic equipment. The cashew shell is used to extract cashew nut shell liquid (CNSL), which is an important by-product of cashew industry. The cashew kernels obtained are dried in a cabinet dryer. The outer reddish skin known as testa, is removed to obtain cashew nut after drying. Actual recovery of cashew nut is around 24 per cent, whereas 76 per cent account for shell. Cashew nut is graded on the basis of the color and on how the kernel is broken.

FIGURE 1: MANUFACTURING PROCESS FLOW CHART

6. OPERATIONAL PLANS

The Operation is important part of the process. Operational efficiency directly results into the increase of Operational Profit. With help of Aggregate planning, the production process is optimized for demand. The inventory management will be done for keeping the inventory minimum to zero. The inventory control will be done keeping monthly to quarterly turnover of inventory.

OPERATING METHODS/PROCEDURES

The six-sigma procedure analysis will be done for optimizing the process. Techniques such as Kanban, JIT (Just in Time) will be applied to keep the flow of goods properly. The aggregate planning method will be used to plan Demand for various type of cashew. The operational planning will help the processing of various types of the cashews at fast pace.

CAPITAL EXPENDITURE PROJECTIONS

TABLE 2: CAPITAL EXPENDITURE PROJECTIONS PART

Year to End September	2022 USD
Cost of Plant & Machinery	53,227
Cost of Factory Shed	111,273
Local Cost: Clearing + Civil work + Other Expenses	45,500
Land Clearing & Pre-construction Activities Cost	20,000
Total	230,000

7. MANAGEMENT & ADMINISTRATION

KEY MANAGEMENT PROFILES

Yuho Agro Processing Industries(YAPI) consist of Two highly accomplished directors. Their profiles are Given below:

1. Executive Director: Mrs. Hosiana Benard Kusiga



Mrs. Hosiana Kusiga has Completed Master of Business Administration. She has also completed Advanced Diploma in Urban and Rural Planning. Ms. Kusiga's MBA experience will help in Operation and Maintenance of Factory.

2. Executive Director: Mrs. Yuster Zephine Byabusha



Mrs. Yuster Zephine Byabusha has completed MSc. in Project Planning and Management. She has also completed BSc. in Land Management and Valuation. Mrs. Byabusha's Project Planning & Management experience will come handy in executing the Project and delivering the final product on time.

MANAGEMENT STRUCTURE

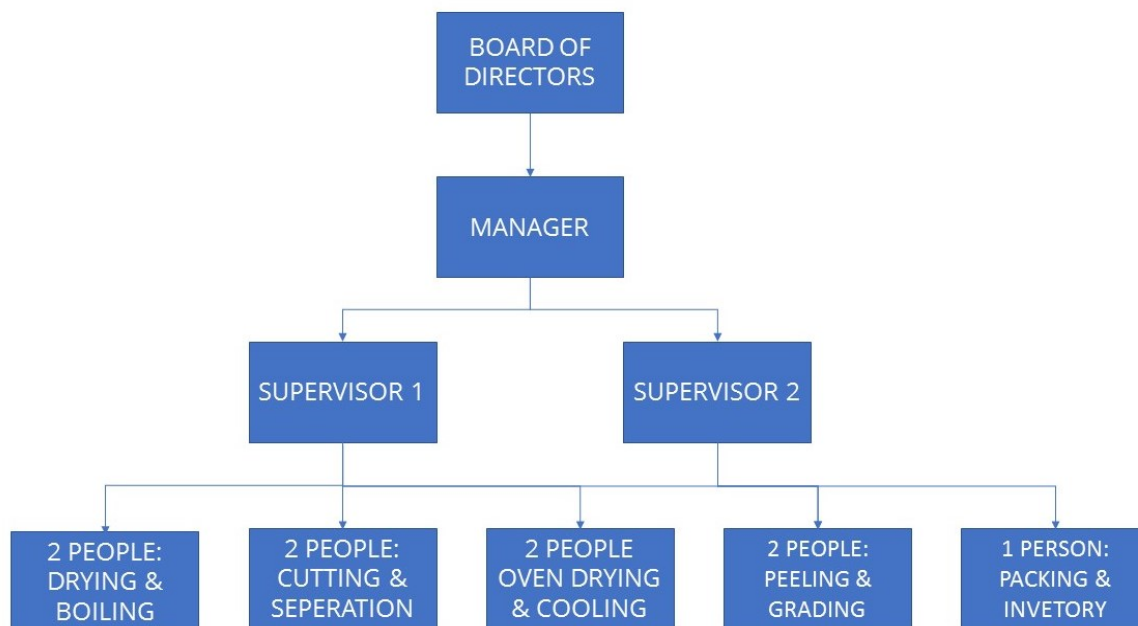


FIGURE 2: FULL ORGANISATION STRUCTURE

ADMINISTRATION & SYSTEMS

Both the Executive Directors are responsible for the operational part with the help of Manager. The Manager is responsible for the full operation of the company assisted by two supervisors. The Board of Directors will guide the manager on critical issues. The Board of Directors will foresee the operation of the company by issuing directives on policy matters. The management committee will meet regularly to discuss and deliberate on issues concerning the company. The management will create the guidance report quarterly to decide the further strategy.

HEAD COUNT PROJECTIONS**LABOR REQUIREMENT & PAY ROLL COST FOR 1 MTPD FACTORY**

TABLE 3: TOTAL STAFF REQUIREMENT

YEAR ENDING 31ST December	2021	2022	2023	2024
Head Count - Manager	01	01	01	01
Head Count - Office Assistant/ Supervisor	02	02	02	02
Head Count - Direct Production	09	09	09	09
Total	12	12	12	12

PAYROLL COST & DETAILED MANPOWER FOR FACTORY

TABLE 4: PAYROLL COST

YEAR ENDING 31ST December Cost/ Ton Raw Cashew Nut	Payroll Cost/Ton (240) 2022	Payroll Cost/Ton (270) 2023	Payroll Cost/Ton (300) 2024	Payroll Cost/Ton (300) 2025
Processing Cost	260	260	260	260
Direct Production	36	32	29	29
Maintenance	40	40	40	40
Utilities	9	9	9	9
Transport	10	10	10	10
Supervision	25	22	20	20
Management	50	44	40	40
Total per ton Cost In US\$	430	417	408	408

TABLE 5: REQUIRED MANPOWER IN 1 MTPD FACTORY

SR NO.	POST	TOTAL
1	Drying, Steam Boiling, Colling of RCN	2
2	Cutting & Separations	2
3	Drying of Kernel, Cooling of Kernel	2
4	Peeling, Grading & Packing	2
5	Stacking the Inventory	1
	Total	9

Management Employees: (3)

1. Manager (1)
2. Office Assistant/Supervisor (2)

SALARY PATTERN FOR STAFF OF 1 MTPD FACTORY

TABLE 6: SALARY PATTERNS FOR STAFF OF 1 MTPD FACTORY

SR No.	Post	Quantity	Salary per Month	Salary of the Year
(A) Management Section :				
01	Office Manager @ 1000/-	01	\$1,000/-	\$12,000.00
	Sub Total	01	\$1,000/-	\$12,000.00
(B) Office Section :				
01	Office Assistant @ \$250/-	02	\$500/-	\$6,000.00
	Sub Total	02	\$500/-	\$6,000.00
(C) General Section :				
01	Worker "Direct Production" @\$80/-	9	\$720/-	\$8,640.00
	Sub Total	48	\$720/-	\$8,640.00
FINAL TOTAL				
	Sub Total "A"	01	\$1,000/-	\$12,000.00
	Sub Total "B"	02	\$500/-	\$6,000.00
	Sub Total "C"	09	\$720/-	\$8,640.00
	GRAND TOTAL	12	\$2,220/-	\$26,640.00

8. FINANCIAL PROJECTIONS

Assumptions applied in the development of financial projections are in line with cashew industry practice in Tanzania. The key assumption applied are given below

A. Project Total Area:

The Land is owned by Mrs. Hosiana Kusiga. The Land is 8500 Sq. Meter on Dodoma-Singida Highway, 580 km away from Dar-es-Salaam seas Port.

B. Project Capacity & Future Expansion:

The initial capacity is 1 TPD and it will be operational for 300 days. Plant will work for 10 Hours per Day. The yearly processing will be 300 Tons of RCN. Yearly the cashew production will be 72 tons and Cashew Shell will be 228 Tons. Depending upon demand, the future expansion will be to 2 TPD.

C. Capacity Utilization:

For 1st year the capacity utilization will be 80% and 2nd year onward it will be 100%. However, for the calculation purpose the 2nd year capacity is taken as 90% and from 3rd year onward the capacity is taken 100%.

D. Time for Project Completion:

Project will be completed by October 2022.

E. Project Lifetime:

The total estimated lifespan of the project is 15 years as per the standard practices from the year of commercial production i.e. 2022. The Harvesting season starts from September 2022.

F. Initial Investment & Working Capital Requirement:

The initial investment cost required is USD 240,000 & Working capital for the purchase of raw material is USD 100,000.

G. Concessions:

No export Levy on Processed cashew. Zero VAT on the Export. In addition, unconditional transferability through authorized dealer bank in freely convertible currency for the repayment of foreign currency loan.

KEY ASSUMPTIONS**A. Operational Assumptions:**

- Processing of RCN: 1 Ton per day, operating period 300 days
- Processing Capacity: 1 Tons Processing for 8 Hours per Day
- Daily working Hours: 10 Hours
- **Capacity utilization:** 1st year 80% i.e. 240 Ton per year. 2nd year 90% i.e. 270 Tons per year & 3rd year onwards 100% i.e. 300 Tons per year.
- Expansion program will be after 100% repayment of loan.
- Cost of RCN: USD 1100 per Ton
- Recovery is 24% Cashew Kernel (Processed Cashew) & 76% Shell.
- Out of 24% : 75% Whole Cashew & 25% Broken Cashew.
- Sales Price: USD 8 per Kg for Whole Cashew & USD 9 per Kg for 2026.
- Sales Price: USD 6 per Kg for Broken Cashew & USD 7 Per Kg for 2026.
- Sales Price USD 100 per Ton for shell
- 80% cashew will be exported & 20% sold locally.
- 30% corporate Tax
- Loan can be taken in USD due to export-oriented Project.
- Each year 25% depreciation on Plant & Machinery & 20% on civil Construction as per Tanzanian Tax Laws.

PROJECTED STATEMENT OF FINANCIAL PERFORMANCE (P&L)

TABLE 7: PROJECTED PROFIT & LOSS STATEMENT IN USD

Operating Years	2022	2023	2024	2025	2026
Operating Sales					
a) Sales – Cashew Kernel	432000	486000	540000	540000	612000
b) Sales – Cashew Shell	18240	20520	22800	22800	22800
Total Sales	450240	506520	562800	562800	634800
Cost of Sales					
a) Purchasing Cost	264000	297000	330000	330000	330000
b) Processing Cost	72038	81043	90048	90048	101568
c) Indirect Cost	27014	30391	33768	33768	38088
d) Depreciation	44661	41335	38840	36986	35565
Sub Total	407714	449769	492656	490784	505221
Gross Profit	42526	56751	70144	72016	129579
Office & Admin Expenses	13507	15196	16884	16884	19044
Op. Profit Before Interest	29019	41555	53260	55132	110535
Financial Cost	21440	18752	16064	13376	10688
Profit After Financial Cost	7579	22803	37196	41756	99847
Carry Forward Loss	0	0	0	0	0
Tax @ 30%	2274	6841	11159	12527	29954
Profit After Tax (PAT)	5305	15962	26037	29229	69893

PROJECTED STATEMENT OF CASH FLOW

TABLE 8: PROJECTED CASH FLOW STATEMENT IN USD

Operating Years	2022	2023	2024	2025	2026
Cash Flow (CF)					
Profit After Financial Cost	9740	24763	39005	43451	101457
Depreciation: ADD	44661	41335	38840	36986	35565
CF Before TAX	52240	64138	76036	78724	135412
Tax paid: SUBTRACT	(2274)	(6841)	(11159)	(12527)	(29954)
CF Before Term Loan	49966	57297	64877	66197	105458
Principle Amount of Loan	(33600)	(33600)	(33600)	(33600)	(33600)
Net Cash Flow	16366	23697	31277	32597	71858
Cumulative Net Cash Flow	16366	40063	71340	103938	175796

PROJECTED STATEMENT OF BALANCE SHEET

TABLE 9: PROJECTED BALANCE SHEET IN USD

Operating Years	2022	2023	2024	2025	2026
ASSETS					
Fixed Assets	230000	185339	144004	105164	68196
Depreciation (Subtract)	(44661)	(41335)	(38840)	(36986)	(35565)
Total Fixed Assets	185339	144004	105164	68196	32631
Cash & Cash Accruals	10000	26366	50064	81340	113938
Current Assets	52240	64138	76036	78724	135412
Total Assets	247579	234508	231264	228260	281981
LIABILITIES					
Share Capital	72000	72000	72000	72000	72000
Reserve & Surplus	5305	21267	47305	76533	146427
Total Shareholders' Funds	77305	93267	119305	148533	218427
Secured Loans	134400	100800	67200	33600	0
Current Liabilities	35874	40441	44759	46127	63554
Total Liabilities	247579	234508	231264	228260	281981

RATIO ANALYSIS

TABLE 10: RATIO ANALYSIS

Operating Years	2022	2023	2024	2025	2026
PROFITABILITY RATIO					
EBITDA	87187	98086	108984	108984	165144
Operating Sales	450240	506520	562800	562800	634800
EBITDA Margin	19.36	19.36	19.36	19.36	26.02
Profit After Tax	5305	15962	26037	29229	69893
Total Revenue	450240	506520	562800	562800	634800
PAT Margin	1.18	3.15	4.63	5.19	11.01
Profit After Tax (A)	5305	15962	26037	29229	69893
Total Assets (B)	247579	234508	231264	228260	281981
Return on Asset (ROA) A/B	2.14	6.81	11.26	12.81	24.79
Profit Before Interest & Tax	29019	41555	53260	55132	110535
Overall Capital Employed	211705	194067	186505	182134	218427
Return on Capital Employed	13.71	21.41	28.56	30.27	50.61

OPERATING & LEVERAGE RATIO					
Operating Revenue	450240	506520	562800	562800	634800
Total Assets	247579	234508	231264	228260	281981
Total Asset Turnover Ratio	1.82	2.16	2.43	2.47	2.25
Total Debt	134400	100800	67200	33600	0
Equity	72000	81740	106503	145508	188958
Debt to Equity Ratio	1.87	1.23	0.63	0.23	0.00
DEBT-SERVICE COVERAGE RATIO (DSCR)					
Net Operating Income	73680	82890	92100	92100	146100
Total Debt Service	55040	52352	49664	46976	44288
DSCR	1.34	1.58	1.85	1.96	3.30
Average DSCR	2.01				

RISK AND SENSITIVITY ANALYSIS

1. Net Present Value (NPV):

TABLE 11: NET PRESENT VALUE IN USD

<i>Operating Years</i>	<i>Cash Flow</i>	<i>Investment Cost</i>	<i>Rate of Return</i>	<i>Discounting Factor</i>	<i>Present value</i>
2021	0	(240,000)	8%	1.00	(240,000)
2022	52240	0	8%	0.93	48370
2023	64138	0	8%	0.86	54988
2024	76036	0	8%	0.79	60360
2025	78724	0	8%	0.74	57864
2026	135412	0	8%	0.68	92159
2027	138955	0	8%	0.63	87565
2028	165955	0	8%	0.58	96833
2029	192955	0	8%	0.54	104248
2030	192955	0	8%	0.50	96526
2031	213205	0	8%	0.46	98755
2032	214060	0	8%	0.43	91807
2033	220810	0	8%	0.40	87687
2034	261310	0	8%	0.37	96083
2035	261310	0	8%	0.34	88966
2036	261310	0	8%	0.32	82376

NET PRESENT VALUE: 1,004,587 – NPV is Positive, Project is Executable.

2. Internal Rate of Return (IRR):

NPV of any project declines as the discount rate increases and for discount rates higher than the project IRR, NPV will be negative. NPV is profile of the project at various discount rates. The accept or reject rule using IRR method is to accept the project if its internal rate of return is higher than the opportunity cost of capital. The project shall be rejected if its internal rate of return is lower than the opportunity cost of capital ($R < K$), where R is Internal Rate of Return and K is cost of Capital.

In the Excel Sheet formula of IRR, it is found that the Internal Rate of Return R is 17.50%. The cost of Capital K is 8%. **Since, IRR is greater than the cost of capital, the project should be accepted.**

9. FUNDING FROM FINANCER FUNDING REQUIREMENTS

The total Project cost is USD 240,000. Out of which the YAPI will infuse the equity of USD 72,000. Remaining USD 168,000 is required as term loan with 1-year moratorium period & repayment time of 5 years. In addition, for the purchase of raw material USD 100,000 working capital is required. The bifurcation of the project cost USD 240,000 is given below in Table 18.

TABLE 12: TOTAL FUNDING REQUIREMENT

SR. No.	Description	Equity (USD)	Term Loan (USD)
1	Cost of Plant & Machinery	25,000	28,227
2	Cost of Factory Shed	25,000	86,273
3	Local Cost: Port Clearing + Civil work + Other Expenses	2,000	43,500
4	Land Clearing & Pre-construction Activities Cost	20,000	0
5	Contingencies 5%	0	10,000
	TOTAL	72,000	168,000

10. IMPLEMENTATION PLAN

The plant is constructed in Manyoni in Dodoma-Singida Highway. Total time required to construct the plant is 12 months. Out of 12 months last 4 months will be for Trial & start of commercial Production. The detailed EPC plan is given below:

EPC PLAN

TABLE 13: ERECTIONING AND COMISSIONING PLAN

Operations	1	2	3	4-5	6-8	9-10	11-12
Design Phase							
Manufacturing							
P&M-Shipment							
Construction							
Trial							
Commercial Production							

SUBSEQUENT YEARS

The Factory will reach its full capacity in 3rd year after the construction of factory. Expansion plan is set for 2027-2028. However, if market requires more processing & if the company has secured couple of big long-term contracts, then expansion will begin early.

11. CONCLUSION

The worldwide cashew industry is around USD 4-5 Billion, and it is in growing phase. Recently, people from western world are using cashew as healthy snacks. The industry has immense capacity for the RCN Processing in Tanzania. The project completes in 7-8 months & remaining 4 months is used for trial and commercial production. The lack of competition in this field gives as early bird advantage to capture the market share in short period of time. The project adds value to socio-economic, forex and skilled based growth.

Most importantly, the NPV with rate of return 8% is USD 1,004,587 in which, the Net increase in cash flow value is conservative. With the proper boost, the NPV can increase significantly. With conservative approach for cash flows, the IRR is 17.50% which is considered as good in cashew field. The EBITDA is 19-26%. PAT margin is steadily increasing to 16%. The Shareholder fund becomes double just in 5 years with CAGR of 15%. Thus, the project is worth funding.