2011

Business & Export Development Department



[CASHEW INVESTMENT PROPOSAL]

Gambia Investment & Export Promotion Agency

Contents

Acronyms
Country Economic Background
Global Cashew Trade Overview
The Gambian Cashew Value Chain8
Marketing Arrangements of Cashew in the Gambia9
The SeGaBi Marketing Framework9
Level of Processing in the Gambia9
The Support to the Value Chain – NGO/Govt10
The Cashew Season11
West Africa Cashew Industry Value Chain Depiction12
Challenges and Opportunities within the Cashew Sector and Value Chain
Marketing Challenges14
Processing Facilities14
Processing of Cashew Apple15
Best Practices Training15
Transportation15
Storage and Drying Facilities15
Proposal to Prospective Investor
Available Investment Incentives
Annex
Cashew Investment Scenario

Acronyms

- ACA African Cashew Alliance
- ECOWAS Economic Community of West African States
- GIEPA Gambia Investment & Export Promotion Agency
- GMD Gambian Dalasi
- GPA Gambia Ports Authority
- IRD International Relief & Development
- MT Metric Tons
- NES (Gambian) National Export Strategy
- OECD Organization for Economic Co-operation and Development
- RCN Raw Cashew Nut
- SeGaBi Senegal, Gambia, and Guinea Bissau
- VC Value Chain

Country Economic Background

The Gambia is the smallest country in West Africa with a population size of about 1.7 million people and a geographical area of 11,000 square miles, of which 34.8 percent is arable. The country gained political independence in February, 1965, and is among the most stable in the West African sub-region with English being its official language of administration. The 2010 GDP of the economy is approximately USD 1.1 billion.

On average, the economy has grown in real terms, by 5.9 percent since 2007. Inflation has remained in the single digits and was at 5.4 percent at end-June 2011, up from 4.5 percent a year earlier. Gross external reserves stood at US\$180 million at end-June 2011 representing 5 months of import cover. Foreign exchange rates have remained stable within a band of GMD26 to GMD29 for USD 1 over the last few years.

The Central Bank, the apex regulatory body of financial activities in the economy, continues to pursue sustainable and prudent Monetary and Fiscal Policies as is evidenced in the low Consumer Price Index (CPI) and manageable fiscal deficit position. The rediscount rate, the signal monetary policy rate of the Central Bank, remains predictable with the usual change of 50-100 basis points.

The economic outlook for 2011 remains positive with real GDP expected to grow by 5.5% and inflation is targeted at 6%. Central Bank policies allow for low inflation and stable foreign exchange rates given the Central Bank's tight monetary policy stance and free-float exchange rate system. The Central Bank maintains no restrictions on the country's capital account and allows for free repatriation of profits and foreign exchange earnings.

The investment climate remains positive as underpinned by a stable political and macroeconomic environment. The business environment continues to be conducive for foreign direct investment and private public partnership initiatives. The country has open and liberal trade policies with a commitment to improving public service delivery. The country has a comparatively well educated and cheap labor force competitive to any country in the sub-region. As a member of the Economic Community of West African State (ECOWAS), the Gambia is an economic gateway providing access to an ECOWAS market of over 200 million consumers.

Being a developing country, the Gambia also has its fair share of challenges. Principal among these are:

- It being a small open economy with low domestic demand given its population size.
- Endowment with a narrow natural resource base.
- An undiversified export base
- Low domestic savings
- Heavy reliance on agriculture for employment
- Growth volatility given reliance on few real sector activities and terms of trade vulnerabilities.

Global Cashew Trade Overview

Cashew occupies a prominent place in the international trade of nuts, accounting for nearly 20% of total trade by weight. West Africa currently harvests about 650,000 tons of raw cashew kernels per year, which makes up 30% of the world crop.

The vast majority (95%) of the cashew produced in West Africa are exported to India, where the kernels are baked, stripped of their shells, and processed into edible cashew nuts before being sold locally and internationally.

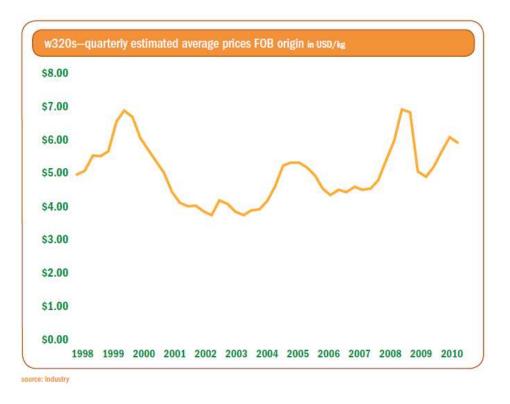
With the help of the Africa Cashew Alliance, West Africa is developing into an increasing significant producer and processor of cashew nuts, feeding into lucrative markets in India.

The benefits of developing a local processing industry in West Africa are evident:

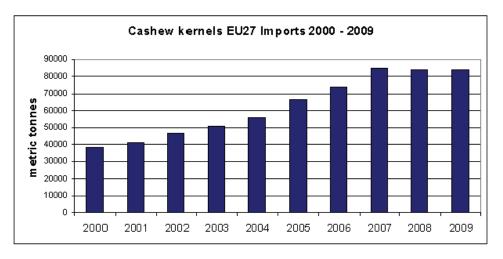
- Fairer prices for farmers selling to local processors
- Reduced unemployment
- Improved rural food security
- Improved income for farmers

Currently more than 1.2 million small-scale farmers grow cashew in West Africa. Countries with the best business environment and commitment of governments are likely to see the fastest increase in processing industries.

Although the price of cashew has been variable in the past, the trend is leaning on the upside as depicted by the graph below. The price spike in 1998/1999 was caused by crop shortfalls and processors contracting in advance for more product than they were able to deliver.

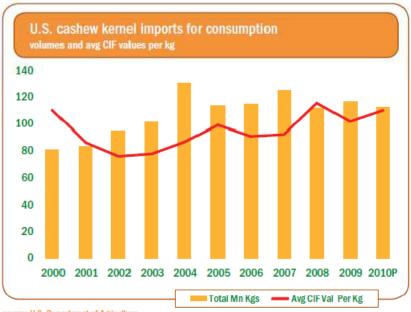


Equally, consumption has been steadily increasing in Europe over the last decade as depicted in the graph below:

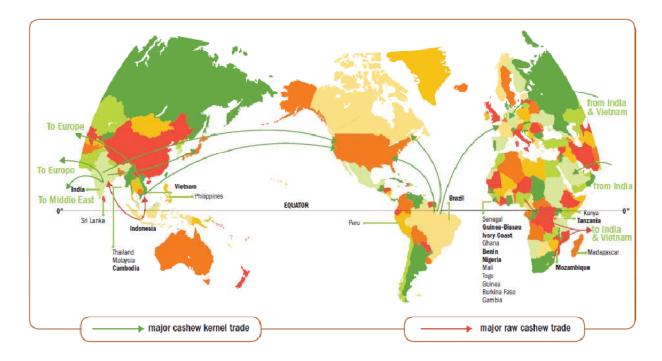


Source: <u>www.oecd.int</u>

Cashew nuts are an up-market snack food and the demand is set to increase in view of its health benefits and the rising purchasing power of emerging economies, notably China, Brazil, and India. The United States has also seen an upward trend in consumption.



source: U.S. Department of Agriculture 2010 projection as of imports through April



Source: Cashew Industry Highlights – Red River Foods, Inc, June 2010

The Gambian Cashew Value Chain

Cashew was introduced in the Gambia in the 1960s and was originally intended as a fire break surrounding forest areas. Cashew production as a cash crop has increased significantly since 2000, especially for small farms in the West Coast and North Bank regions. The production of raw cashew nuts has multiplied by more than 20 times in less than 10 years, from an estimated 150 metric tons (MT) in 2001 to 6500MT in 2009. Production is estimated to have reached 10,000MT in 2010.¹

The economic environment of The Gambia is ideal for investing in cashew. Notable among these ideal conditions are:

- Very good drying conditions
- Existence of good road & logistical infrastructure
- A superior quality nut (nut count of 190-210 per kilogram and an outturn of 23-28 kilograms of kernels per 80 kilograms of raw cashew nuts) compared to nuts of Senegal and Guinea Bissau.

Cashew nut production in Senegal, The Gambia, and Guinea Bissau (SeGaBi region) has increased by more than 72 percent in the past ten years, from an estimated 96500 MT in 2001 to 165,500 MT in 2009. The table below shows the figures for each of the countries.²

Year	Gambia	Senegal	Guinea Bissau	World
1997-2001	<25MT-150MT	5,000MT	91,350MT	1,178,000MT
200	2 250MT			
200	3 500MT			
200	1,000MT	13,000MT		
200	5 1,500MT	15,000MT		
200	5 1,750MT	21,000MT		
200	7 2,000MT	27,500MT	96,117MT	1,637,000MT
200	3 ,000MT	31,000MT	100,000MT	
200	9 6,500MT	35,000MT	+124,000MT	2,000,000MT

Sources: Gambia – estimates & unpublished; Senegal – Projections, Duke Research Data Resources; Guinea Bissau - estimates

The current yields in cashew farming in the region stands at around 400kg/ha. This is low considering the potential yield of 1500kg/ha if best cashew farming practices are adopted.

¹ Local Cashew Facilitator Farmer Field School Training Manual – The Gambia River Basin Cashew Value Chain Enhancement Project

² Local Cashew Facilitator Farmer Field School Training Manual – The Gambia River Basin Cashew Value Chain Enhancement Project

Marketing Arrangements of Cashew in the Gambia

Currently the amount of cashew that is exported out of the Gambia is much higher than the amount of cashew that is grown. The amount that is grown (roughly 10,000MT) is mostly purchased by seasonal Indian exporters who then export it to India. There is currently no major purchaser of cashew nuts, and as a result, farmers are never sure of who to sell their products to, and at what price. Over the years, however, the price of raw cashew nuts (RCN), per kilo, has steadily increased as a result of increasing global demand and the quality of the Gambian crop.

The SeGaBi Marketing Framework

The Gambia Ports Authority recognized as being among the most efficient and competitive in Africa in terms of speed of handling merchandise – usually just a few days, in contrast to the 10-15 days in alternative ports. The Port has a productivity rate of 17 moves per hour (containers) and 1000 MT / 10.5 hours (bulk cargo) and transactions cost. Currently, the cashew throughput at the ports is estimated at 54,000MT annually which is an 8% increase over 2009.³

Banjul is at least as efficient as Dakar for ship-to-shore handling, and much more efficient for on-shore handling. The cost to export one (20-foot) container, as listed by the World Bank "Doing Business in Gambia" report, is US\$831, whereas the average in Sub Saharan Africa is US\$1,961. However in Senegal, cost to export one container is US\$1,098, and US\$1,940 to import. In Guinea Bissau, the export cost per container is US\$1,545 whereas cost to import is US\$2,349.⁴

The Gambian Ports Authority has also laid the groundwork for expansion over the next few years. The Authority has acquired 22,000 square meters of land in it's vicinity in an effort to expand its open storage space and thus reduce Port congestion and improve ship turnaround time.

Level of Processing in the Gambia

Currently, cashew processing in the Gambia is negligible. It is estimated that only between 5-10 MT are processed annually. This demonstrates the opportunity for processing given that 10,000 MT of RCN are produced locally, and over 100,000 MT of RCN pass through the Gambia from Guinea Bissau & Senegal for exports.

³ Estimated by the Gambia Investment & Export Promotion Agency

⁴ Doing Business Report – <u>www.doingbusiness.org</u>

The Support to the Value Chain – NGO/Govt.

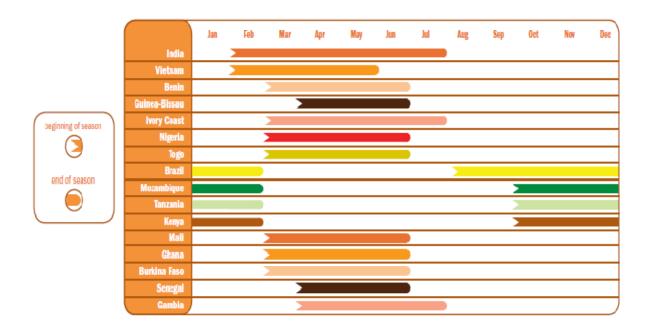
Currently, the NGO community is working closely with Cashew farmers to improve productivity. The Gambia River Basin Value Chain Enhancement Project (CEP), which is being run by an NGO called International Relief and Development (IRD), is funded by Foreign Agricultural Service of the United States Department of Agriculture under a Food for Progress grant scheme. The project is designed to increase the livelihoods of rural farmers involved in the cashew trade, providing support to farmers, processors, and traders in the Gambia, Senegal (Cassamance), and Guinea Bissau. The goal of the CEP project is to enable 50,000 cashew farmers to maximize returns from cashew production and improve their livelihoods in the targeted regions of the SeGaBi. Their three main activities are:

- i. Organizational Strengthening of Cashew Producers and Processors- strenghthening organizational and entrepreneurial capacities of cashew farmers and their associations for greater control and management of cashew production, processing, and marketing.
- ii. Improved Cashew Production Practices introduce higher yielding cashew varieties and innovative agronomic, environment management, and post-harvest practices.
- iii. Value Added to Cashew Expand capabilities for value addition to cashew apple and nut, and promoting increased domestic consumption as an avenue to diversify market outlets.

The Gambian Government is keen to support the Agriculture sector and has demonstrated it's commitment through The Gambia Investment and Export Promotion Agency; the Agency mandated by the Government to provide incentives to potential investors in key areas, including Agriculture. The commitment of the Government is also demonstrated through its choice of cashew as one of the value chains earmarked under the Diagnostic Trade Integrated Study to achieve the country's trade development objectives. The Cashew Value Chain is also earmarked under the National Export Strategy of the country for the realization of export development and competitiveness.

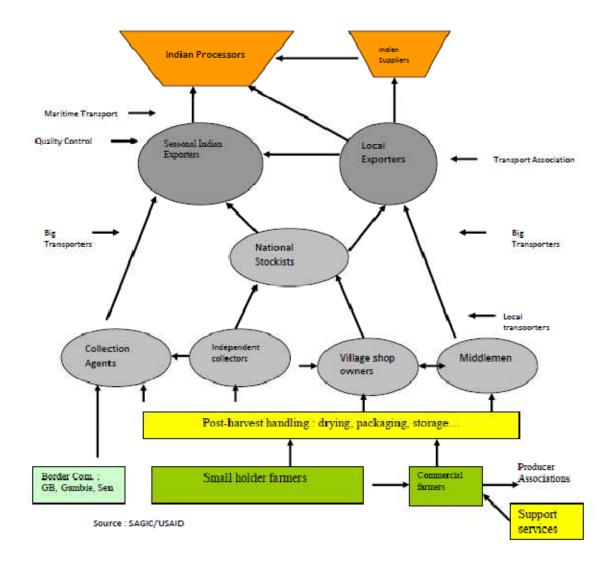
The Cashew Season

The Cashew Season consists of three flowering cycles per year. Seed harvesting in the Gambia starts in March and ends in July.



Source: Red River Foods International Inc, June 2010

West Africa Cashew Industry Value Chain Depiction



The above depiction outlines the process flow of the cashew nut from farmer to processor. There are several different stages in between the farmers and processors which further squeezes the margins of the farmers. The Gambian value chain is also reflected in this diagram – specifically, after the post harvest handling, purchasing is generally handled by middlemen, village shop owners, and collection agents. The product is then transported to either local exporters, seasonal Indian exporters, or to national stockists. National stockists, who are mostly Gambians, are generally local businessmen that stand to make a profit by buying, storing, and selling RCN to seasonal Indian buyers. Almost all of these nuts that are purchased are eventually shipped to India for processing.

Challenges and Opportunities within the Cashew Sector and Value Chain

The cashew value chain is complex and presents a number of opportunities for farmers and investors to take advantage of. Some of the current challenges in the Gambia cashew industry are:

- 1. Pricing challenges the variance between pricing offered by middlemen relative to prevailing international prices.
- 2. Marketing challenges lack of official cashew buying centers in the Gambia.
- 3. Insufficient and expensive transportation from rural farming areas to the urban areas.
- 4. Inadequate processing facilities.
- 5. Challenges with farm perimeter fencing and the encroachment by grazing livestock.
- 6. Lack of quality testing laboratories, and experts to man them.
- 7. Lack of storage and drying facilities at the farm level.
- 8. The maturing period for cashew is too long for some farmers to consider entering the market.
- 9. Threat of bush fires
- 10. Inadequate extension services supporting the cashew VC
- 11. Lack of adequate processing done on the cashew apple.
- 12. Lack of boreholes for watering at the farm level
- 13. Lack of effective Agricultural Research Centers and Extension Services to provide advisory services on diseases, pests, and worms.
- 14. Inadequate community sensitization on the benefits of cashew farming.
- 15. Lack of availability of seeds/seedlings.

Some of the above challenges cut across the Value Chain and which when addressed through the requisite investments would create wealth creation opportunities. The cross-cutting challenges cum opportunities are:

- 1. Marketing challenges lack of official cashew buying centers in the Gambia.
- 2. No processing facilities
- 3. Farmers and technicians in need of best practices training.
- 4. No processing done on the cashew apple.
- 5. Insufficient and expensive transportation from rural farming areas to urban areas.
- 6. Lack of storage and drying facilities at the farm level

The above 6 challenges represent investment opportunities that would not only go a long way in helping to improve operational standards of the industry, but would also help the value chain to realize the wealth generation opportunities that have long been associated with cashew.

Marketing Challenges

With regards to the marketing challenges, the cashew value chain is fraught with layers middlemen between the farmer and the processor. Even though there is demand for the product, the market is fragmented and individual farmers have a hard time selling their product to middlemen or collecting agents. Farmers also get paid much less than the market price because of the fragmentation of the market, which makes benchmarking and price comparison offered by various buyers difficult, if not impossible. There is also lack of information as to when the marketing (buying) of cashew starts. In this regards, investment in a **Cashew Purchasing Company** which aims to be a competitive supplier on the international market would de-clutter the cashew value chain as well as improve the margins of Gambian cashew farmers. Given the current production capacity of the Gambia market, such a company would also purchase raw cashew nuts that come from neighboring Senegal and Guinea Bissau.

Processing Facilities

In terms of processing facilities, a large proportion of cashew nuts are exported to processors in India as depicted by the value chain diagram. With the 165,000 tons of cashew nuts that come out of the SeGaBi region, there is an opportunity for companies to set up processing facilities in the Gambia and to become a major processor in Africa. The advantage of the location is its efficient and cost effective port system relative to that of the sub-region. The challenges inherent in processing cashew must not be understated and lessons must be learned from neighboring countries where processing has faced enormous difficulties. The following is a graphical representation of the process.



(Please see annex for more detailed processing information)

Packaging and labeling is a major aspect of the value chain that is a challenge in the Gambia. This is an industry on its own and has a market beyond cashew. This opportunity should be closely examined.

Processing of Cashew Apple

Another potential venture would be **processing of the cashew apple**. This would be a venture for which the input would basically be free as farmers in the SeGaBi region throw cashew apples away. In some parts of the world, the pulp from the cashew apple is used to make juice, spirits, and jams. Another serious potential for the cashew apple is ethanol production. This will be expanded upon below.

Best Practices Training

For the Gambia cashew sector to grow, it is essential that **farmers and technicians are trained in best practice techniques**. This is part of the medium to long-term strategy being pursued by the Gambian Government and is a strategy that would complement any successful long term investment in the Gambia. In the value chain, the only component that would not be under the direct control of an investor (unless investing in a plantation) would be the growing of cashew – thus any buyer has an incentive to contribute to quality control measures. Currently, an American NGO, International Relief and Development, is implementing a US Department of Agriculture project with the aim of increasing the organizational ability of the Cashew Farmers Associations. The IRD would be an obvious and productive partner in any training venture.

Transportation

Due to the fragmented nature of cashew marketing, farmers don't always know who to sell their products to. This makes it difficult to plan for **transportation and other logistics, which are expensive.** A buyer in the country would find it prudent to have their own transportation arrangements to cater for collection logistics. For the parts of the year that the trucks would not be used for cashew, additional revenue could be realized by running an efficient and affordable transportation service. Given the massive improvement in the road networks over the last two years, an investment in transportation arrangements could be rewarding and would save farmers the time and money involved in transporting their products from the hinterland to the capital city and its immediate surroundings where most businesses in the cashew trade are concentrated.

Storage and Drying Facilities

The **lack of storage and drying facilities** is another challenge. Some farmers dry the nuts, but due to their lack of training and poor facilities, the product is not sufficiently dried. Insufficient drying of the RCN runs the risk of reducing the value of the nuts. The middlemen who purchase these nuts are forced to re-dry the nuts thus further increasing the risk of pest infestation and value reduction. Middlemen often pay less for such products and the farmers suffer value losses. It is necessary for farmers to be aware of the proper techniques and the relevant facilities to be able to deliver a quality product for the next stage in the value chain as this would benefit both the farmer and the industry.

Proposal to Prospective Investor

Our proposal for investment in the cashew value chain follows from our position as the lead Government Agency mandated to facilitate investments into the country and our genuine understanding of the cashew value chain along with the importance attached by the government to develop the value chain into a major cash crop in the Gambia.

Our presentation of the current status of the cashew industry and the schematic of its value chain is an effort to familiarize you with the challenges and opportunities that are present in the industry and to help inform your assessment of the opportunities available, and the benefits that could accrue from an investment in cashew in the Gambia.

The investment opportunities that are available, as per the outline challenges, are as follows:

- Investment in a country-wide cashew buying company, complete with storage, transportation and drying facilities. This would assure farmers in the Gambia producing a quality product that there is a guaranteed buyer that will pay the prevailing market price for their product. This would be supported by an out-grower scheme / cooperative type setup.
- 2. Investment in ethanol production from cashew apples bio-ethanol researchers all over the world are looking for alternative sources of energy to meet growing demand. Bio-ethanol has recently emerged as an important renewable source of energy which is clean and usable in combustion engines. Utilizing other crops such as maize, potato etc. for ethanol production poses a serious threat to the food security of billions of people in the near future. It is at this juncture that cashew apples, an important organic resource generated in cashew plantations and wasted in large quantities, is a very attractive substrate to produce bio-ethanol. This provides the ideal scenario of a cash crop combined with energy production capabilities on the same land.

The use of agriculture substrates in industrial biotechnological processes has been increasing because of its low cost. Cashew apples are considered an agriculture low cost product in the SeGaBi region because the cashew cultivation is done mainly to produce cashew nuts. Almost 100% of the cashew apples are lost in the field after removing the nut. In studies of the use of clarified cashew apple juice as a substrate for microbial cultivation, results show that cashew apple juice is a good source of reducing sugars and can be used to grow *Leuconostoc mesenteroides*, a species of bacteria, to produce high added value products such as dextran, lactic acid, mannitol, and oligosaccharides. By-products of processing cashew apples are also often suitable for use as fertilizer which would contribute to further wealth generation.

3. Investment in a processing facility that sources raw nuts throughout The Gambia, as well as Senegal and Guinea Bissau. Although 90% of raw nuts are exported to India and Vietnam for processing, the rising labor costs in those countries are becoming a challenge. The Gambia therefore presents an opportunity as a potential country where cashew processing can be undertaken at minimal and competitive wage costs relative to those that obtain in India and

Vietnam. The feasibility of this opportunity is very realistic considering the volume of cashew that flows through The Gambia from Senegal and Guinea Bissau and the amount of arable land available to expand cashew production in The Gambia. (Please see annex for Cashew Processing Facility Investment Scenario)

- 4. Investment in Cashew plantation farms in the dominant cashew growing regions West Coast Region, North Bank Region, and Central River Region to take advantage of the superior quality nut of the Gambia and reduce dependence on RCN from Senegal and Guinea Bissau. The Lower River Region has great potential for full production given the adequate level of rainfall that is prevalent in this area. Currently, it is estimated that cashew is planted on less than 5% of cultivable land in the Gambia
- 5. Investment in cashew apple fruit processing Currently, Brazil is one of biggest processors of cashew apples. There are currently 12 big juice extraction and processing plants, dozens of small bottler companies, and roughly 5 million US dollars of exports generated from this sub-industry. This burgeoning industry currently employs 2.5 thousand people and is set to grow. The Gambia can establish itself as a competitor in this market, given the abundance of raw materials that are widely available as inputs. There are several different types of products that can be derived from the apples:
 - a. Juice products: fermented, pulp, clarified, concentrated, sodas, syrup, etc.
 - b. Tertiary processing: Ice cream, mousse, candy, jams, spices, animal feed, colorant

It is our expectation and genuine belief that an investment in the above recommended areas would have a positive impact on employment creation, wealth generation, and poverty alleviation. Equally, we are confident that investment in any of the five proposed opportunities would help set the standards in cashew processing and compliance with Hazard Analysis and Critical Control Points, both of which are necessary criteria to fully leverage the export opportunities to the United States and the European Union.

Available Investment Incentives

Investment incentives are offered by the Gambia Government and administered by the Gambia Investment and Export Promotion Agency (GIEPA). Minimum investment of two hundred and fifty thousand US Dollars (USD250, 000) in priority sectors (Agriculture is a priority sector) qualify for a Special Investment Certificate (SIC) for a period of 5 years. Investments located in a priority geographical area get an additional 3 years. Holders of a SIC qualify for the following:

- Tax Holiday on Corporate or Turnover Tax (32%)
- Exemption from Withholding Tax on Dividend Payments.
- Import Sales Tax Waiver on importation of capital equipment, construction materials, and spares for a period of 5 years from date of signing an investment agreement.
- Import Sales Tax Waiver on importation of raw and intermediate inputs for a period of 5 years from the date of commencement of operations.

Further to the above incentives, investors operating within a priority investment area that continually export at least 80% of their products can be granted an Export Processing Zones License (EPZL). In addition to the above benefits (under SIC), EPZL holders are entitled to the below benefits, which in addition to the benefits (under SIC) are tenable for a period of 10 years:

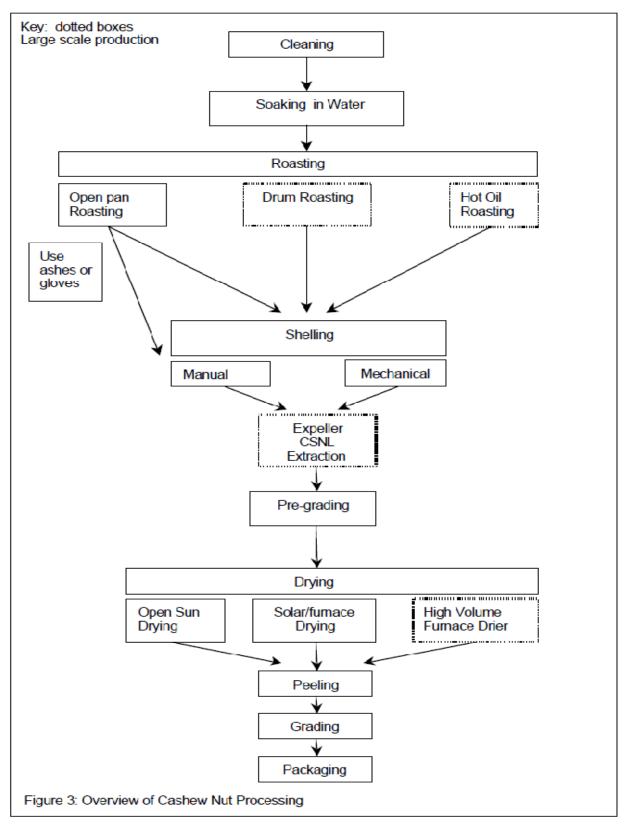
- Export duty waivers
- Municipal Tax waivers

An investment enterprise located outside the export processing zone that exports at least 30% of its output is entitled to the following incentives and facilities provided by the Agency:

- Ten percentage points concession on the Corporate Tax rate for 5 Years
- Financial planning and advisory services from the Agency
- Participation in training courses, symposia, seminars and workshops on export promotion missions.
- Export market research findings & information
- Advertisement & publicity campaigns in foreign markets during outward missions undertaken by the Agency
- Product design & consultancy services offered by the Agency

EPZ Licenses entitling investors to the above benefits are, however, renewable on a yearly basis under circumstances of evidence of compliance with the agreed indications of employment creation, export thresholds, and general EPZ protocol and statutes.

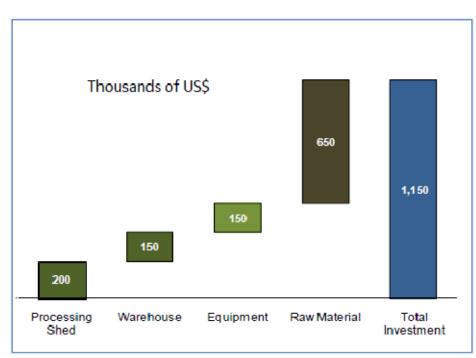
Annex



Cashew Investment Scenario

A cashew processing facility producing one thousand metric tons per year that operates with fully manual techniques can be operated in any rural location and provides employment to the local population. These models are particularly suited to cashew processing in Africa and these facilities are quite efficient in terms of better output recovery.

The facilities require small capital investment, i.e. US\$350,000 (including US\$150,000 for a warehouse) is sufficient for a facility building and US\$150,000 for necessary production equipment for 1000MT/year capacity of cashew nuts. In addition, for such a facility, US\$650,000 will be needed to purchase the raw material. So a fully manual cashew processing facility requires a global investment of about US\$1.2 million in the first year.



Investment Required for a Fully Manual Processing Facility

Source: African Cashew Alliance