

HYBRID	 WORLD CASHEW CONFERENCE	Jointly organised by Cashewinformation.com &  AEC-CI <small>ASSOCIATION DES EXPORTATEURS DE CAJOU COTE D'IVOIRE</small>
	JNEC-CI Journées Nationales des Exportateurs de Cajou de Côte d'Ivoire	16-18 Feb, 2022 Radisson Blu Hotel Abidjan, Cote d'Ivoire

"Sustainability Initiatives in Cashew Industry".

Case Study – Cashew Processing Hub at GDIZ, Benin



Cashew Processing Hub : Glo-Djigbe Industrial Zone (GDIZ), Benin



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General Context

Significant gross Beninese production but still very limited local processing

The production raw cashew nut: one pillar of the Beninese economy



140,000 - 150,000

Tons of raw cashew nuts produced per year
(world top 10 and african top 5)



9%

Share of cashew sector in exports

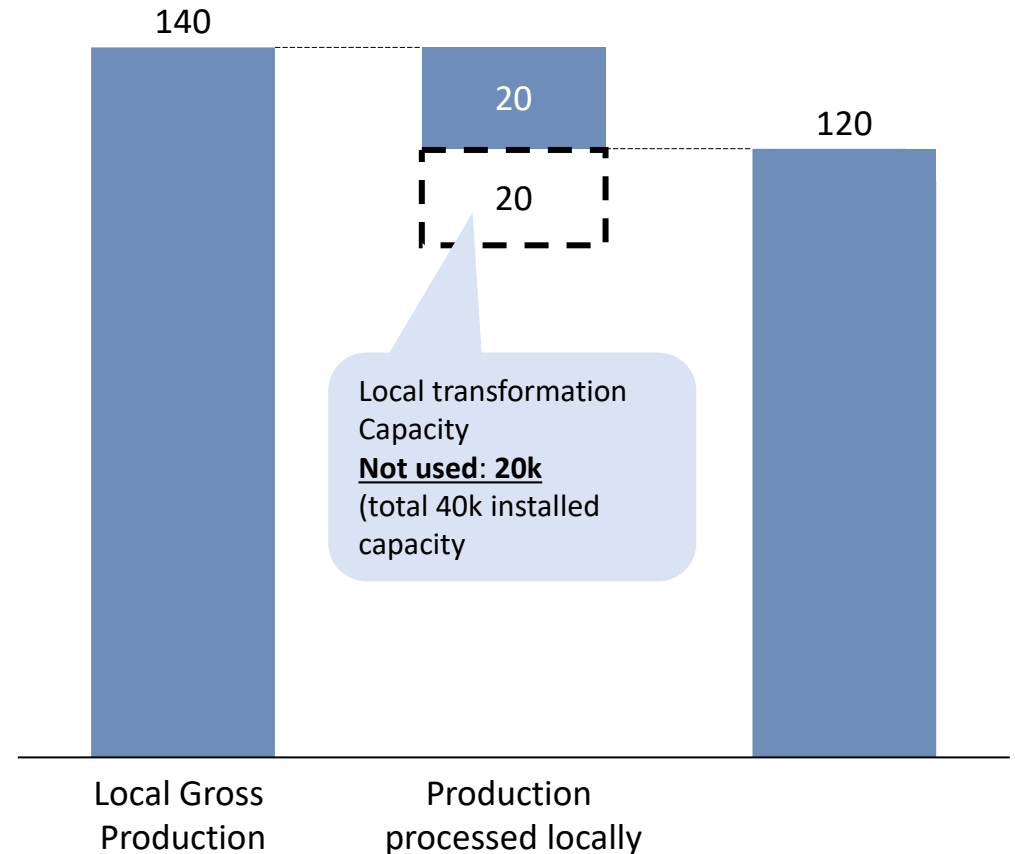


200,000

Actors involved in the sector cashew nut

Negligible Local Transformation (c. 14% of production)

Thousands of tons, Raw Cashew



International trends in the Cashew Sector

1

Strong Market Growth



- The **global demand for cashew nuts is growing strongly (+ 5.5% /year between 2013 and 2019)** due to the growing popularity of cashews in **developed nations** (cf. trend 2) and due to increase in purchasing power of households in **emerging countries**
- **Cashew nut prices have increased by 2.4% /year since 2005**, with peaks explained by production shocks in the face of growing demand

2

Sustainable development



- **Consumers, retailers and wholesalers are more and more sensitive to compliance with social and environmental standards**
- Requirement of **traceable** ("from the field to the cupboard ") and **eco-friendly** (eg, manufactured using renewable energy sources) products, especially with regards to **foodstuff**
- **Circularity** as a tool to promote **Ecosystem development** and **Economies of Scale**



3

"Healthy" trend



- **Vegan / Vegetarian Trend** - consumers are increasingly attracted to cashew nuts for their **nutritional benefits** (source of protein for vegetarian diets) as well as for the **carbon emission linked to livestock**.
- The **proven health benefits** (reduction of cardiovascular risks) of cashew nuts further increase the attractiveness to consumers



4

Relocation of Transformation



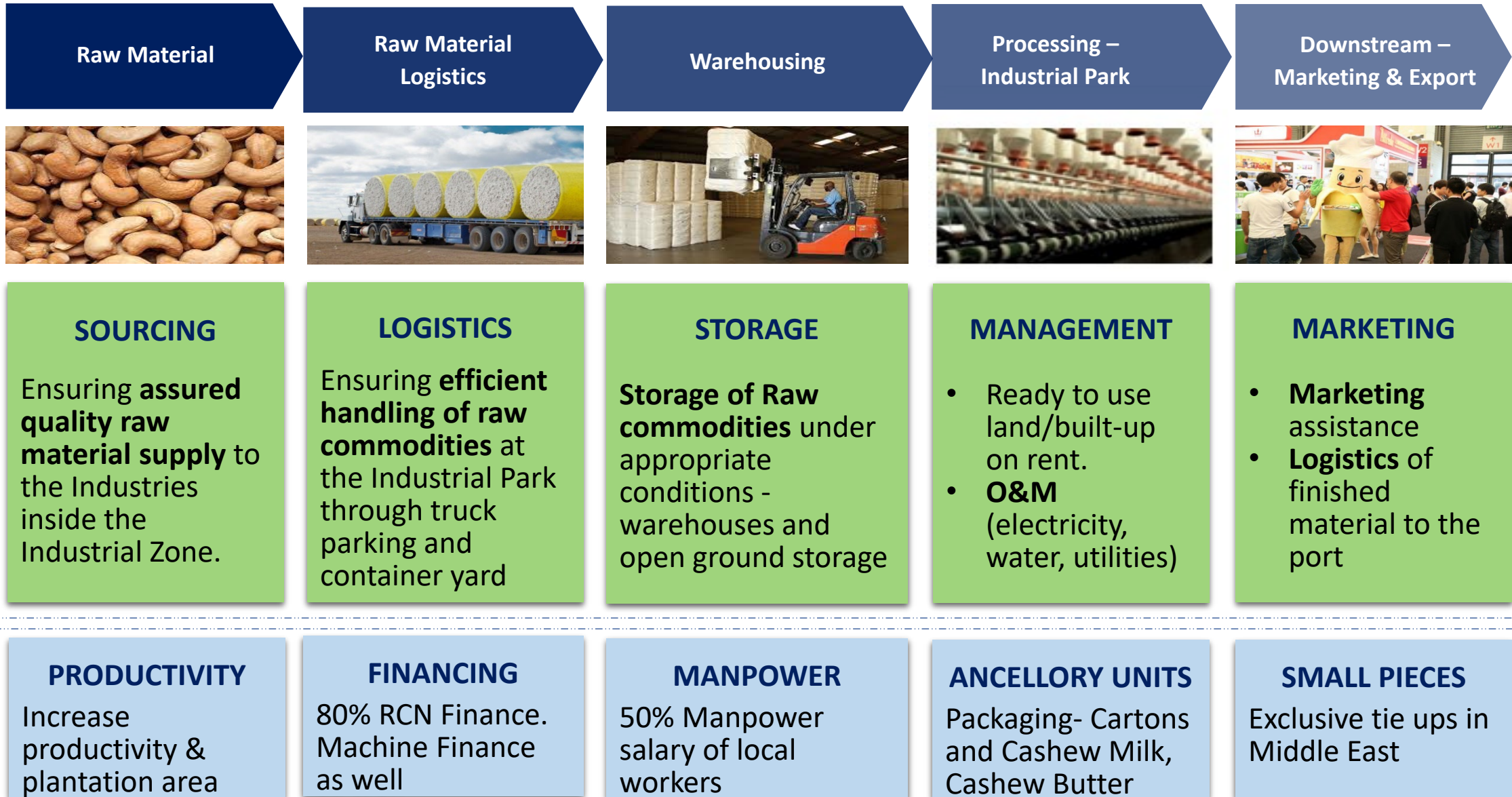
- The current logistics chain represent nearly **10% of global greenhouse gas emissions**
- **Development of cashew nut processing in Africa**, since African countries are major producers, would thus make it possible to meet the requirements of the SDGs¹ in **reconfiguring logistics chains** (migration of processing activities **from Asia to Africa**, closer to American and European consumption centers)



Sources : Olam, INC, Clipper Mag, UNCTAD

Note : (1) Sustainable Development Goals

Cashew Processing Hub & GDIZ's Role...



The Project – GDIZ

Development of an integrated cashew processing hub



- Cashew Processing Units
- Complementary Units: Plastic Bags, Laboratory Carton Box Packing Unit, Cashew Milk, etc.
- Warehouses
- Cashew Drying Area
- CNSL Plant

CHARACTERISTICS



Number of processing units : 10



Complementary units: Laboratory, Carton packaging units, Plastic bags, CNSL Unit, Briquette & Charcoal: 5



Status : Under construction



Start of operations:

August 2022 - 2 units each 15,000 tonnes/year
Jan 2022 - 2 units each 15,000 tonnes/year
Mar 2023 - 6 units each of 10,000 tonnes/year



Environment Approval :

IFC Compliant Land compensation and Environment Impact Assessment & Monitoring



GDIZ Warehousing & Logistics

Improve the logistics of the sector - Development of storage capacities

Project description



Warehouses under construction - GDIZ

CHARACTERISTICS



Area : 100,000 m²



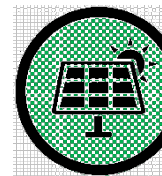
Number of warehouses: 14



Status : Under construction



Operations Start date :
March 2022 (30,000 m²)
April 2022 (70,000 m²)



Roof Top Solar Power:

- 100,000 Sqm roof Top Solar on Warehouses
- 125,000 Sqm roof Top Solar on Industries





The Project – GDIZ

Development of an integrated cashew processing hub

Presentation of complementary units

Food
Ingredient's laboratory
for products
derivatives (eg, milk, butter)

Packaging Units
processed cashews

Unit of **shell processing**
nuts and husk Charcoal,
briquettes, color pigment

Unit of **oil production**
cashew nut (CNSL¹)



Development of
local know-how, and
some **quality** finished
products



Integration toward
downstream, **creation of**
value local



Optimization of **rate**
of use of the
raw material



the **best of**
waste - product
organic chemical



Facility: Single Window Clearance...

LEED Certified Single Window Clearance (SWC) building



Design Concept

SWC Building
Designed to be built
as **GREEN LEED
CERTIFIED GOLD
BUILDING**



1st

Building
in Benin
(Proposed)



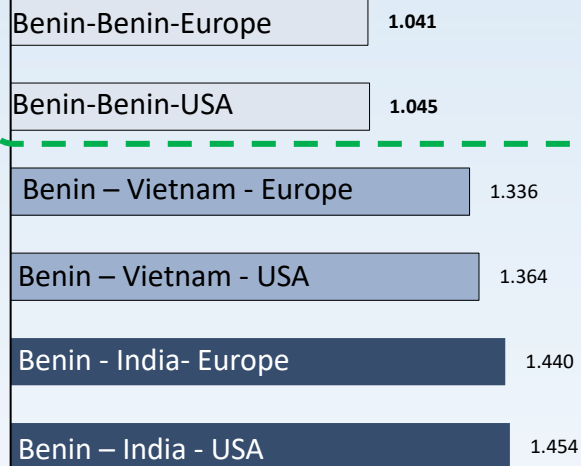
Sustainable Development Policy

Adopt a sustainable development policy

Lowest Carbon Footprint

Life Cycle Assessment Study of Cashew Processing

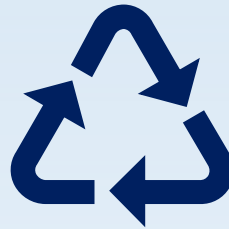
Production-Processing-Market
Co2 emitted per Kg



~38% higher carbon footprint if processing from India

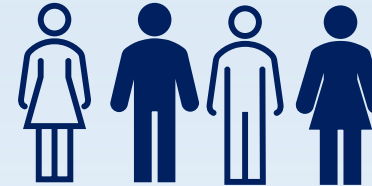
~28% higher carbon footprint if processing from Vietnam

Achieve Zero Waste



- Create a zone with **zero waste loss**.
- Options being developed to **reuse waste** (industrial symbiosis) especially Cashew Shells and husk.

Diversity & Inclusion



- Target 30% workforce with women employees.
- Setting up a Vocational Training Center in GDIZ SEZ.
- **Nationally accredited** vocational training programmes for workforce training.

Responsible Supply Chain Management



- Organically Sourced Traceable Cashew
- 3rd Party Verification & Certification
- Product are sourced from a responsible supply chain.
- Track how the product was grown, harvested and processed.

Cashew – Life Cycle Assessment

LCA assessment - Methodology



Goal

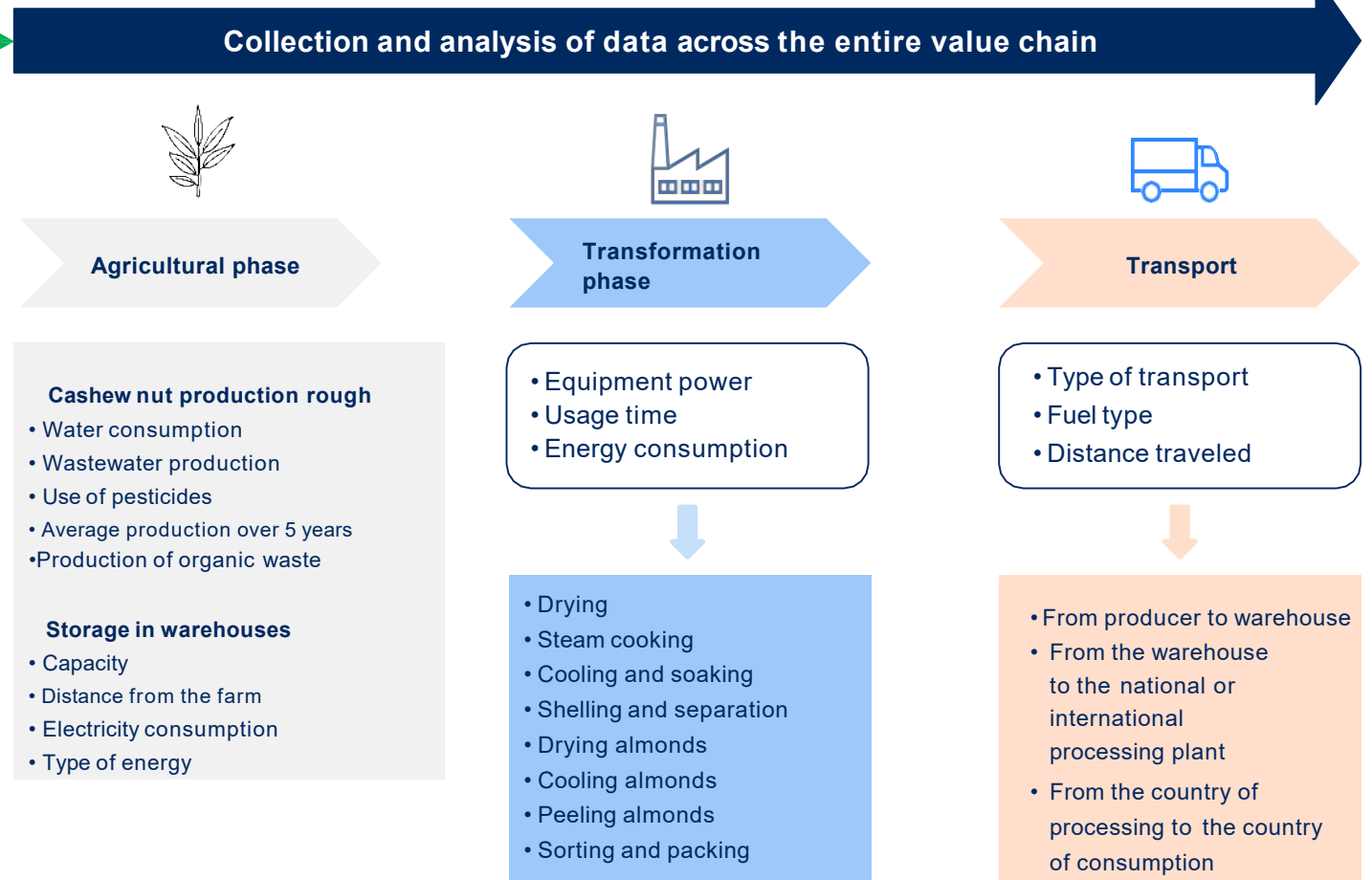
Determine the environmental impact of production and some processing of cashew nuts in Benin compared to other countries

Partnership with the independent consulting firm to do a life cycle assessment according to ISO 14040 and ISO 14044 standards :

- **Purpose and scope** : multi-country benchmarking study to assess the carbon and water footprint of processed cashew production
- **Stock analysis** : assessment of inputs and outputs of raw materials and energy at all stages of the value chain
- **Impact assessment across the entire value chain**
- **Results interpretation**



Sources : ARISE,



GDIZ Growing Client list

Snapshot of Signed Clients for the cashew processing zone



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THANK YOU

