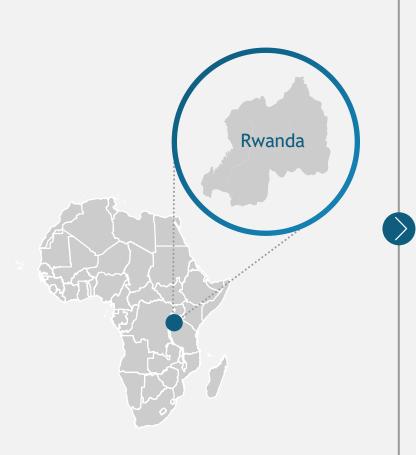


Rwanda at a glance





Population size 12.1 million



Govt. & Parliament
Presidential republic
Bicameral parliament



Official languages Kinyarwanda, French, English, Swahili



GDP per capita
USD 774 (3.8x since '02)



Literacy/Unemployment 68% / 16%



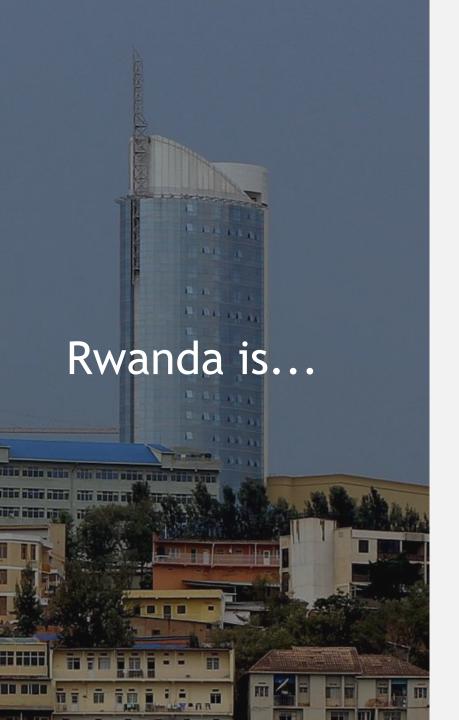
GDP (10 yr growth) USD 9.1bn (7.5% p.a.)



Currency/exchange rate Rwanda Francs (RWF) ~RWF 875/USD¹



Ratings B+, "stable" - Fitch B, "stable" - S&P





- 2nd fastest growing economy in Africa (7.5% p.a. since 2007)
- Most improved nation in human development in the world
- Young and growing population (~70% of population under 30)



...low risk

- 5th safest country to walk at night worldwide
- Lowest debt ratio in region & stable credit ratings
- Stable currency



...business friendly & modern

- 2nd for doing business in Africa¹
- 1st for Government transparency in Africa
- Most women in Parliament and in a gender-balanced Cabinet in the world (respectively 61% and 50%)



...a regional platform

- Strong African hub potential; highly connected African airline
- 3rd MICE ranking in Africa; +18 ranks in 3 years
- Growing bilingual, educated workforce (~50k tertiary grad./yr)



...IT ready

- 1st in the EAC for network readiness; 5th in Africa
- 95% 4G LTE network coverage
- 7,000km of fiber domestically and 3 international fiber optic routes provide reliable connectivity to Seacom

1. Doing Business 2019
Sources: UN (UN-HDI), World Bank, WEF, Global and Africa Competitiveness Report, ICCA, Global Gender Gap report, Gallup, ICCA, RDB, BSC (majority 2017)

There are three identified opportunities in sustainable packaging

Focus Area



Recycling for Sustainability

Highlights

- Estimated 30K TPA plastic & 75K TPA paper packaging imports
- Focus on recycling PE, PET & Paper to improve sustainability of packaging
- Strong waste collection & recycling with necessary EPR policies & systems need to be implemented



Bio-material as Single Use Plastic alternative

- Plastic bag ban in 2008. Single Use Plastic ban announced in 2019
- Need to provide alternative materials for domestic use
- Opportunity to promote bio-pulp based environment safe extruded and molded products



Packaging for value added exports

- Strong base of agri-exports Tea (USD 80Mn p.a.),
 Coffee (US 70 Mn p.a.) & Horticulture (USD 20 Mn p.a.)
- Shift from bulk to packaged export for enhanced value
- Initial focus on branded tea export segment

Investment opportunity

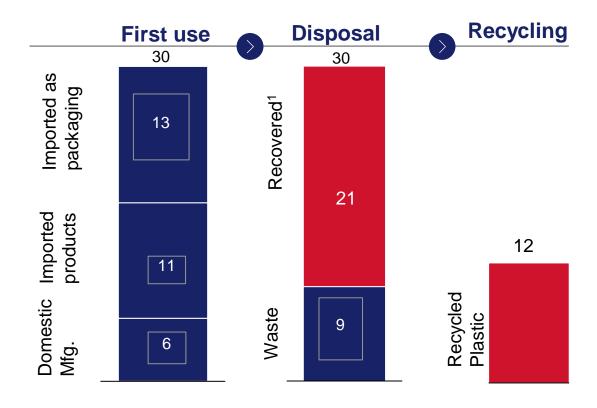
- 12K TPA plastic recycling plant
- 2 25K TPA paper recycling plant

3 15 K TPA bio-material based sustainable packaging plant

5K TPA paper board packaging for branded tea exports

Opportunity 1: 12 K TPA Plastic recycling plant for Rwanda

Plastic cycle, '000 TPA, 2019



Investment:

USD 16 Mn

Revenue:

USD 14 Mn p.a.

Opportunity Insights

Estimated 30K TPA of plastic packaging used in Rwanda market.

Local waste collection systems already in place. Collection & segregation efficiency to be enhanced with digital platforms

Opportunity to develop a minimum 12K TPA size recycling plant.

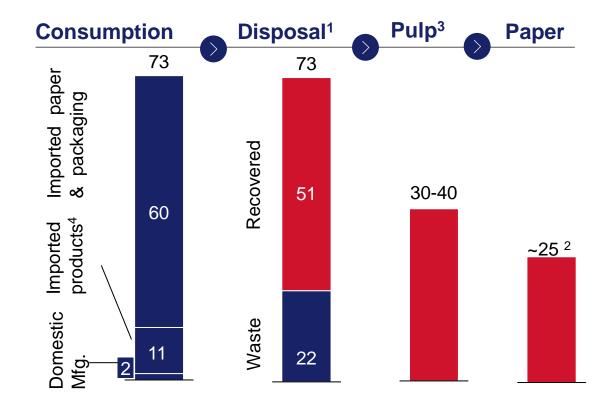
Initial focus on PE & PET recycling

Recycled plastic can be targeted for circularity for packaging material or downcycling to other applications

Recovery rate of recyclable plastic estimated to be 70% based on benchmarks for countries with strong waste management practises

Opportunity 2 : 25 K TPA Paper recycling plant for Rwanda

Paper cycle, '000 TPA, 2019



- 1. Estimated potential based on South Africa paper recycling rate of ~70%
- 2. Depends on mix of recycled to virgin pulp (estimated at 0 20% virgin pulp)
- 3. Assumption 80% conversion of paper to pulp, 80% conversion of pulp to paper packaging
- Based on India benchmarks of packaging value as % of total imports Food 1.8%, Beverages 0.8%, Pharma - 1.4%. Personal care - 1.9%. Paper value estimated at ~\$500/ton

Investment:

USD 15 Mn

Revenue:

USD 15 Mn p.a.

Opportunity Insights

Estimated 75K TPA of paper packaging used in Rwanda market.

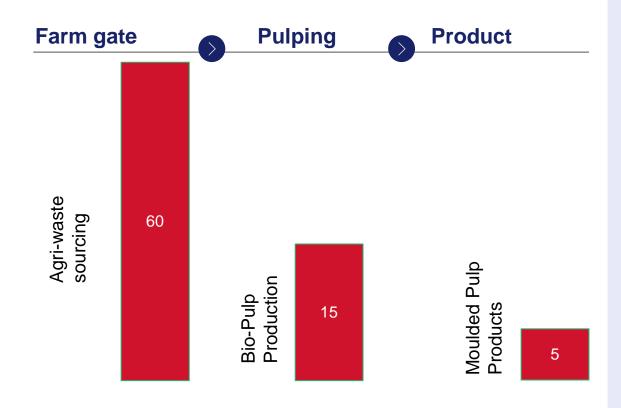
Local waste collection systems already in place. Collection & segregation efficiency to be enhanced with digital platforms

Opportunity to develop a minimum 25K TPA size paper recycling plant.

Recycled paper can be targeted for circularity for carton or corrugated box applications

Opportunity 3: 15 K TPA Bio-material based sustainable packaging

Bio-pulp cycle, '000 TPA



Investment:

USD 13 Mn

Revenue:

USD 15 Mn p.a.

Opportunity Insights

Single Use Plastic ban in Rwanda – to phase out plastic food service trays, cutlery, plastic bags.

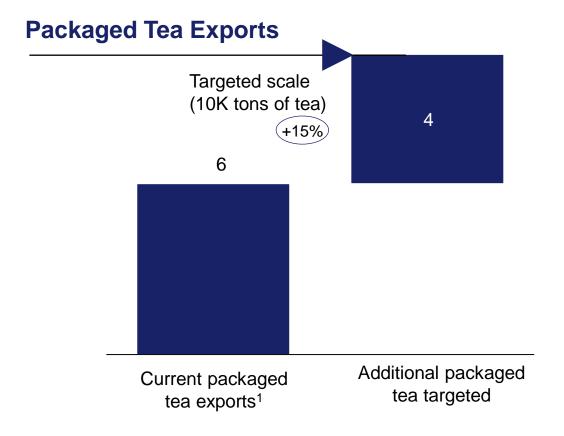
Agri waste based completely bio- degradable packaging as alternative

600 K TPA of cereal production in Rwanda and access to bagasse from neighboring countries

Initial opportunity to target 15,000 TPA bio-pulp & 5K TPA molded product

Source: Technology vendor interviews 7

Opportunity 4 : 5K TPA carton packaging for branded tea exports Tea, '000 TPA



Investment:

USD 3 Mn

Revenue:

USD 7 Mn p.a.

Opportunity Insights

Tea is one of the largest exports from Rwanda with 30K TPA and USD 86 Mn p.a. value

Quality of Rwanda tea is one of the best due to high altitude estates

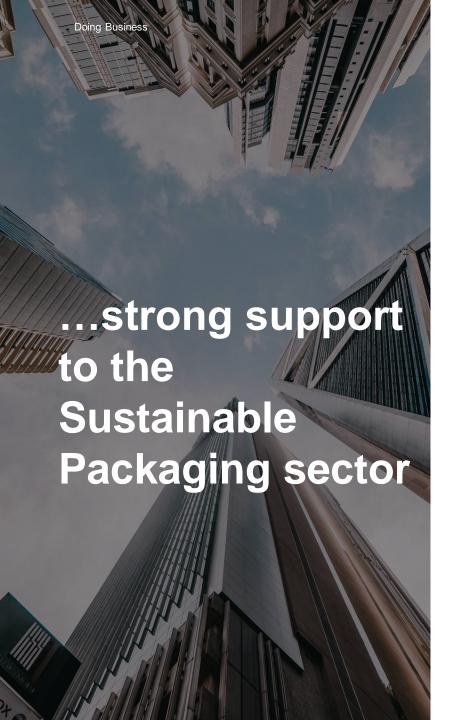
Nearly eighty percent of Rwanda tea is exported as bulk

Target to double packaged tea exports to 10 K TPA

Initial opportunity to target 5K TPA paper carton and tea bag production

Source: ITC Trade Map, MINICOM Business Case Packaging

 ²⁰¹⁸ total export volume



Rwanda Government

- EPR policy under implementation
- Key investment incentives (https://rdb.rw/why-rwanda/investment-incentives/)
- Single window project support through RDB

Industry Bodies

- Private Sector Federation support to use recycled materials
- Tourism & Hospitality emerging demand for green solution

Development Agencies

 Technical & financial assistance from –GIZ; GGGI;ENABEL; UNDP Rwanda; Fonerwa

Suggested next steps to support sustainable packaging as an investment opportunity in Rwanda



Feasibility Study

Carry out a pre-feasibility study for plastic recycling and/or bio pulp with existing investment leads



EPR Implementation Guidelines

Develop more comprehensive EPR implementation guideline for Rwanda



Further analysis

Carry out further analysis across specific packaging challenges such as the making of cement bags or how to make agri packaging more sustainable in Rwanda

7 key steps can aid in the implementation of EPR policies

BACKUP

Steps

Public Private dialog to define the scope and roadmap for EPR implementation

Independent PRO (Producer Responsibility Organization) to oversee and administer the implementation of the policy

Role clarity & capability building – across stakeholders including clarity on financial and operational responsibility between producers, PRO and municipality

Appropriate EPR pricing based on a product or material's sortability, recyclability, recycled content, and existence of sorting and recycling infrastructure

Monitoring & Evaluation systems

Build demand for recycled materials

Case examples

The Singapore Packaging Agreement (SPA) was a joint initiative by government, industry and NGOs to reduce packaging waste

Germany - has transitioned from a single, non-profit PRO to several for-profit PROs, operating in competition with each other.

Belgium - Municipalities have contracts with PROs and are responsible for collecting packaging waste from households.

South Africa - proposed 2% (paper) to 10% (multi-layer plastic) of packing material costs as fees

Singapore - Mandatory Packaging Reporting (MPR) framework, where stakeholders, such as manufacturers and importers and retailers be required to submit packaging data and 3R plans to the National Environment Agency

EU - PCR usage norms for plastic in EU 30% target

GoR could set up private partnerships and a dedicated unit to tackle waste management

BACKUP

Rwanda waste management overview

Fully privatised waste collection

Little formal recycling of waste with collected waste dumped in the Nduba landfill

Gaps in access to waste management services (~50% of Rwandans have access)

Inadequate financing of waste management in (~2x of current budget allocation required for landfill operations

Waste management learnings

Set up a dedicated administrative structure and finances to sustain an effective & responsive waste management system

Partner or outsource to informal and formal private sector players

Adopt enabling policies to finance collection programs e.g., eco-tax

Phase interventions as collection system matures (wet-dry to multi bin segregation, informal to formal collection)

Case examples

In Senegal, the national government established a single public entity to streamline all waste management planning and services

In Tunisia, 70–90 percent of collected waste is recycled through more than 70 active private recyclers

Tunisia's waste management program is partly financed by the private sector through an ecotax of 5 percent on the net added value of certain locally manufactured or imported plastic polymers.

In Panaji, India, the city corporation slowly phased from wet-dry sorting to multi-bin sorting





A selection of companies that operate in Rwanda!









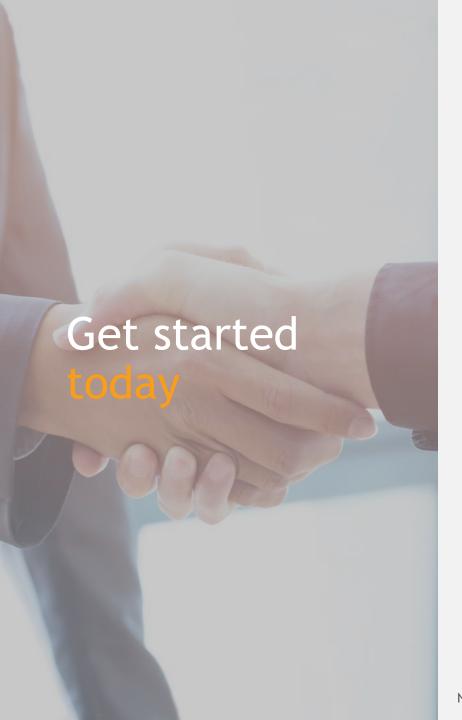














For more information, please contact RDB at

Rwanda Development Board (RDB)

KN 5 Rd, KG 9 Ave

P.O. Box 6239, Kigali, Rwanda

Tel (Local): 1415

Tel (International): +250 727775170

General Information: info@rdb.rw

Investment-related queries: investorfeedback@rdb.rw









Online Business Registration: http://org.rdb.rw/busregonline

