Industry Structure



Industry Structure: Methodology

Research into agriculture and food processing industries was conducted to better understand the flow of staple food items throughout the country.

- Research was conducted from August to September of 2008
- Information was collected through secondary research, site visits and interviews with local operations managers
- Detailed data on importation volumes and sources was provided by the Rwanda Bureau of Standards, BNR, RRA, RADA, MINICOM
- Local production figures were provided by the Ministry of Agriculture, BNR, RRA, RADA, MINICOM



Local Food Production and Imports

In general, Rwanda's imports goods from Kenya (19%), Uganda (12%) and Tanzania (5%)¹, which is consistent for staple food items, in addition to imports of rice from Pakistan and sugar from South Africa.

	Local Production			Imports		
	MT (000)	% of total	Tons (000)	% of total	Sources	
Cassava	1,682	100%				
Maize	34	60%	22	40%	Uganda. Tanzania	
Rice	34	62%	20	38%	Pakistan (53%), Uganda (14%) <i>, Vietnam (11%),</i> UAE (10%)	
Salt	0	0%	41	100%	Kenya (91%), Egypt (6%), Uganda (2%)	
Sugar	17	42%	23	58%	South Africa (33%), Kenya (21%), Uganda (10%), Egypt (9%), Malawi (7%), UAE, Zambia	
Oil			20	100%	Uganda (70%), Kenya (24%), <i>Indonesia (4%),</i> India (1%), Burundi	
Wheat Flour	30	83%	6	17%	Tanzania (54%), Uganda (41%), Belgium (4%), Egypt (2%)	

¹National Bank of Rwanda, Main Trading Partners, 2005

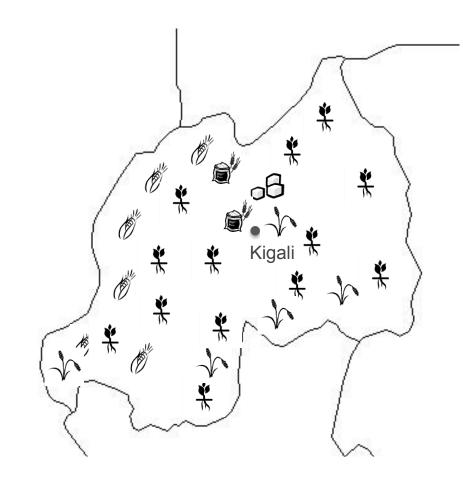
²Cassava production includes raw root, leaves and ground root for flour

Source: Rwanda Bureau of Standards, 2007 import records, Ministry of Agriculture 2008 production data, interviews and calculations



Local Food Production

Agricultural production in Rwanda varies by geography; while cassava is grown nation-wide, maize is concentrated in the north and rice in the south. Furthermore, most processing, for sugar and flour are located close to Kigali.



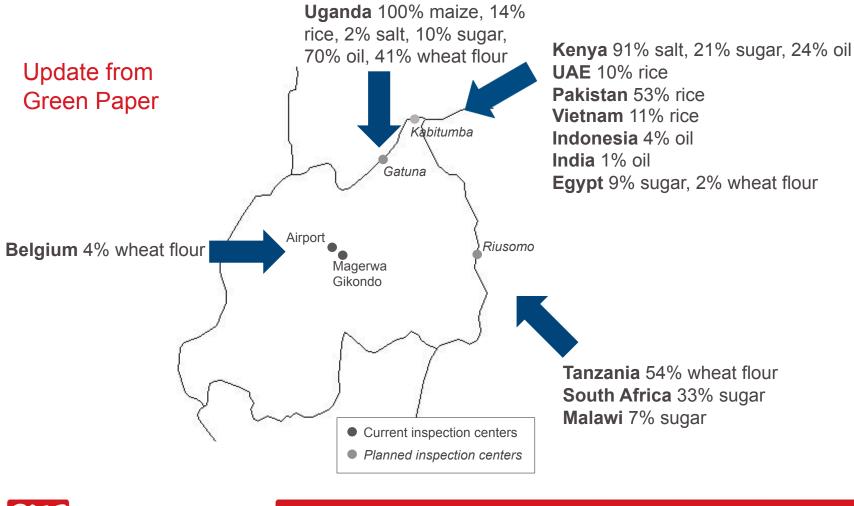
St	aple Food	% Locally Produced
*	Cassava	~100%
Ø	Maize	TBD
\checkmark	Rice	62%
Q	Salt	0%
08	Sugar	42%
0	Oil	12%
	Wheat Flour	83%

Source: Rwanda Bureau of Standards, 2007 import records, Ministry of Agriculture 2008 production data, interviews and calculations



Food Imports

Imported staple food products—the majority of which are from neighboring and East African countries, with a small amount from Europe, Asia and the rest of Africa—are inspected by RBS upon arrival at one of five check points.



Local Food Production: Cassava

While there is some centrally processed cassava, the majority is produced by independent farmers and independently milled.



Cassava plants grow nationwide

the skin peeled

The roots or tubers Tubers soak in water to are unearthed and extract the cyanide and then dried in the sun

Dried tubers are pounded at home into "flour"

Or taken to a local mill to be ground for 20-40 RwF per kg

- ISAR (Institute of Agriculture Science) is providing technical assistance to help the Teritembe Women's Association in the production of their Akiwacu brand of cassava flour.
- This association mills 1 ton of flour per week from cassava purchased from • local farming cooperatives and sells it to retailers for 42 RwF per kg



Local Food Production: Rice

The Government of Rwanda invited ICM Agribusiness, an Australian company, to assist in the development and expansion of the domestic rice production capacity.

- ICM aims to dramatically increase production levels starting with a joint venture with two rice producing cooperatives in Gikonko-Changugu in the Southern and Rwamagana in the Eastern Provinces beginning in 2006
- Technical assistance provided by ICM has increased production capacity in the mills, trained local farmers, and initiated production of high quality seeds
- Production capacity in Southern Province is 1500-2000 tons per season and in the Eastern Province is 400-600 tons per season
- In addition, ICM subsidizes fertilizer and has made an investment in production of higher quality packaging
- In 2005 statistics from the Ministry of Agriculture shows that 56,000 tons of rice were locally produced
- By 2007 70% of national need was being met through local production





Local Food Production: Sugar

In 1998, the country's only sugar plant, Kabyue Sugar Works (KSW) started production and now produces approximately 60% of the national market.

- Madhivani Group purchased the then state-owned factory in 1997 and refurbished it expanding annual capacity from 450 tons to over 14,500 tons, meeting 57% of demand. However, the plant doesn't have enough raw material supply to expand further to meet the national demand
- The Government of Rwanda gave KSW 3000 hectares of land at Nyabarongo in 2001 in order to increase local cane production. However, a portion of this land floods causing the cane to rot before it can be harvested.
- •KSW has not received a VAT exemption, but does get a 5% waiver on imported equipment.
- The plant strives to be self-reliant for power and environmentally efficient, generating 835 kilowatts of electricity from the remains after cane crushing
- The plant employs 5000 people directly and indirectly. Private cultivators are given cane seeds and technical assistance free of charge.





Local Food Production: Flour

Pembe has been producing maize and wheat flour in their facilities in Byumba since taking over a 2007.

- Based in Kenya, Pembe has been in operation since 1989 and in addition to the facility in Rwanda has plants in: Nairobi, Kenya; Tanga, Tanzania and Kampala, Uganda
- Much of the wheat milled in Rwanda is imported via Tanzania from Argentina and Russia due to the low quality of the crops produced in Rwanda
- National (RBS) and international (EU) standards of quality govern quality
- Pembe ordered equipment from GBS Group in 2006 that would allow for capacity of up to 200 tons per day
- Pembe currently adds protein to the flour and management believes that other fortificants could be incorporated with the protein without disrupting the production process
- Has been granted a 5 year exemption from VAT in order to lower prices and be
 able to compete with the informal sector





Local Food Production: Sosoma

DUHAMIC-ADRI is a non-profit organization focused on integrated rural development, including projects in agriculture, economic opportunities and support for rural populations.

- In an effort to support rural populations, DUHAMIC-ADRI produces a transformational food, Sosoma, which is a mix of soy, sorghum and maize
- This product is produced to order, generally by NGO customers such as the WFP, PIH and CARITAS, for use in food aid programs
- Two products, which differ in the size of grain, are manufactured in the DUHAMIC-ADRI plant in Kigali, which has a capacity of 10 tons per day
- Their fortificant mixer has a capacity of 50kg, so up to 4-5 tons of fortified Sosoma 2 can be produced per day, but is only made to order
- Non-fortified Sosoma 2 costs 600 RwF per kg and fortified costs 700 RwF per kg, however the 100 RwF is not the total cost of fortification
- Fortificant is purchased from South Africa for 17.10 USD per kg for vitamin and 3.26 USD per kg for mineral premix and includes: vitamins A, C and B12, thiamin, riboflavin, niacin, folate, calcium, zinc and iron



