

Retailers and Wholesalers of African Herbal and Natural Products: Case Studies from Ghana and Rwanda

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African countries have a plethora of natural products resources and supplies. The continent's rich botanical heritage offers an excellent opportunity to diversify away from its more traditional exports while still being able to both preserve and conserve its genetic resources. The development of natural products exporting could serve as effective alternative or complimentary economic opportunities for many African people, especially those in rural areas.

The natural products industry in Ghana and Rwanda are characterized by low input and low output and informal; primarily consisting of small-scale farmers (suppliers) with low levels of formal education and agricultural production knowledge. Traders lack regular supplies of good quality products. Organizationally, the scale of natural products operations may be a bottleneck. Additional obstacles hindering successful commercialization include lack of information, lack of capital, low product quality and assurance mechanisms, difficulty in accessing financial credit and loans at reasonable rates, and poor facilities and processing equipment, and little historical investment into this sector.

The domestic markets of wholesalers and retailers are largely at low levels of commercialization; traders have limited technical knowledge about natural products, and limited capital to expand their businesses and exploit available foreign markets. [Note: The terms wholesalers and retailers, operators or business operators and traders are used interchangeably in some cases as the same individual serves multiple roles. We use players as an inclusive term to include all those involved in this commercial sector.] On the demand side, there may be a corresponding lack of consumer information as to the range of products available, where to find them, what remedies they offer, and information on quality and safety.

This paper analyzes the results of a survey administered to natural products traders in Ghana and Rwanda, two African countries with potential to exploit the increased international consumer demand for natural products to economic advantage. The results from the Ghana and Rwanda traders' surveys show that most of the businesses are operated by retailers whose product supply is dependent on small-scale farmers and agents (those who buy products from farmers and supply to the wholesalers). The survey results also indicate that virtually all traders lack sufficient technical, financial, or trade assistance that may be typically received and expected in other agricultural and/or industrial sectors from government and non-government organizations including NGOs, donor communities, and international organizations. The product supply from these countries in the export market is very limited. Our preliminary results suggest tremendous potential to increase trade and thus agricultural and agro-forestry economic opportunities for farmers and collectors, yet, the obstacles remain challenging.

The objective of this study is to highlight the factors which serve to promote or act as obstacles to the natural products market in the retail and wholesale portions of Ghana and Rwanda. The specific objectives of the paper are: (1) profile the technical, financial, and organizational constraints the traders face (domestically and externally); (2) profile the natural product range and their functions; and (3) suggest and compare appropriate policy interventions for each of these two countries. By using a market-first approach, rather than a production approach, we hypothesize that greater new crop enterprises can be succeed, thus a knowledge of the marketplace

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and the current constraints to such markets, as described here, leads to a strategic approach to identify those crops and plant products to further commercialize.

SURVEY DESIGN

Rutgers University and the collaborating Agribusiness in Sustainable Natural African Plant Products (AS-NAPP, www.asnapp.org) partners in Ghana and Rwanda under the Partnership for Food Industry Development Natural Products (PFID/NP, www.pfidnp.org) project prepared separate survey instruments for farmers and traders to elicit information on production and marketing of natural products. The survey instruments were pre-tested in each partner country in the areas of production and marketing. This study compared traders of Ghana and Rwanda, using data collected from wholesalers as well as retailers in both countries. The survey also gathered traders' socio-economic data. A sample of 50 traders each was surveyed from Ghana and Rwanda.

A sample of 50 traders was randomly selected from Accra and Kumasi, the two major cities of Ghana, which account for the bulk of the natural plant products trade (exports, wholesaling, distribution, and retailing within the country). Trained personnel personally administered the interviews with collaborators at the country office. Respondents were assured of confidentiality, by letting them know that respondents were to be identified by a survey number, as an input to the summary results. Surveys were conducted between August and December 2005.

In Rwanda, a sample of 50 traders was randomly selected from Kigali, the capital and most important city where almost all sales of natural plant products are transacted in the country. In November, 2005, two university students administered the interviews to respondents who were assured of confidentiality.

RESULTS

Ghanaian and Rwandan Natural Products Industry

In Ghana, 74% of the trader respondents were categorized as retailers, 20% were considered to be both retailers and wholesalers, and the remaining 6% were wholesalers in natural products business. In Rwanda, 84% of the traders were categorized as retailers, 16% were considered as both wholesalers and retailers.. None of the traders in Rwanda were simply wholesalers (Table 1).

The majority of the natural product traders in both countries are retailers, have been in business for an average of less than 4 years, do not themselves produce natural products on their own farm, do not export any natural products out of the country, and have not received any support training toward trade, finance, or technology in natural products industry. Only 12% received technical advice in Ghana compared to 64% in Rwanda; only 2% received processing and marketing support in Ghana compared to 55% in Rwanda; and 14% received training in Ghana compared to 55% in Rwanda (Table 1).

The majority of respondents were involved in the retailing area of the marketing chain in both countries. Ghanaian respondents had on average 16 years of natural products business experience and most of them have over 10 years experience. Rwandan respondents averaged 4.5 years of business experience and very few of them have more than 4 years experience.

About 76% of Ghanaian wholesalers/retailers received products directly from growers and 36% from agents as compared to 10% and 100% for Rwanda. In Ghana, the other sources of natural products to those in the trade were farmers (26%), wild crafters collecting and then selling plant products from the forest (20%) and directly from suppliers (12%). In Rwanda, farmers supplied goods to 4% of the wholesalers/retailers; and no products came from wild crafters and collectors or other suppliers. In terms of natural products production, about 4% of Ghanaian traders produced on their farm, where as, about 2% was reported in Rwanda (Table 1).

About 24% of respondents received support towards trade, finance, and technical training in Rwanda, as compared to 14% for Ghana. About 64% of Rwandan traders received technical advice, as compared to 12% for Ghana (Table 1).

Compared to only 6% of Ghanaian players, 58% of Rwandan players reported that there was a lack of infrastructural support available to meet their requirements. Most of Ghanaian and Rwandan wholesalers and retailers responded that the distribution of infrastructure needs to be improved for their enterprises to grow. They also reported the lack of information sharing with their customers all along the commodity chain was a

Table 1. Results of survey in Ghanaian and Rwandan natural products industry.

Category	Distribution %		Category	Distribution %	
	Ghana	Rwanda		Ghana	Rwanda
Business type			Growth expectations		
Wholesale	6	0	Return on investment	88	88
Retail	74	84	Staff employed	48	42
Combined	20	16	Profit	92	86
Natural product sourcing			Age		
Farmers	26	4	< 20	2	6
Forest	20	0	21–35	22	54
Agents	36	100	36–50	54	38
Other people	76	10	51–65	18	0
Suppliers	12	0	> 65	4	2
Received finance, trade training support			Education		
Yes	14	24	None	16	4
No	86	76	Primary school (1–7)	44	40
Type of support received			Secondary school (8–12)	26	33
Technical advice	12	64	College diploma/ certification	12	17
Processing and marketing	2	55	University diploma/degree	2	6
Information training	14	55	Resources		
Financial assistance	4	55	Family inheritance	16	0
Vocational training	4	9	Special educational skills	6	26
Respondents' opinions			No skills	78	74
Infrastructure available locally for processing is adequate to your requirements	6	58	Marital status		
Specific needs required to improve distribution infrastructure?	92	98	Married	82	50
Information is shared with buyers/ retailers/ consumer?	84	100	Single	0	36
Business has current support needs?	100	57	Separated	2	0
Type of support needed			Widower/widow	10	14
Technical advice	78	37	Gender		
Processing and marketing	96	33	Male	18	63
Short seminars/courses	100	33	Female	82	37
Financial assistance	94	89	Industry predictions		
Agricultural certification	96	15	Positive	96	40
Other	100	11	Neutral	2	16
			Unsure	2	44

constraint to business. Only 4% of Ghanaian and 2% of Rwandan traders currently export natural products into the Global market. Only 2% of the Ghanaian traders were exporting natural products to the US while Rwandan traders had not yet ventured into this market. While those in Ghana did not perceive government taxes as an issue, those in Rwanda see high taxes as a significant problem. Whether the collection of taxes and the declaration of sales in both countries are similar is unknown.

Relative to annual business turnover, on average, Ghanaian traders received 754 million Ghanaian Cedi's (US\$ 81,594), where as, in the case of Rwandan traders; this is about 1.4 million Rwandan Francs (US\$ 2,584), both averages low relative to the potential in the domestic and export medicinal plant market.

Demographic Characteristics

In both countries, 94% of the traders come from urban areas and 6% from rural areas. The average family size of an operator was 7 in Ghana and 5 in Rwanda. Women were the dominant traders (82%) in Ghana, as compared to 37% for Rwanda (Table 1). Most of the traders from both countries had primary school education. Over all, Rwandan traders were more likely to have had some higher education levels than Ghanaian traders. About 16% of the Ghanaian traders business was inherited from their family and 6% of them have special educational skills. In Rwanda, all operators started their business on their own and 26% of them had special educational skills (Table 1).

Commonly Traded Natural Products and Uses

In Ghana, most of the natural products are used for medicinal purposes (Table 2). In contrast, all the products in Rwanda were used as seasonings, flavorings, cosmetics, and in food preparation (Table 3). In Ghana, *Khaya senegalensis* was the top ranked natural product, followed by *Alstonia boonei*, whereas in Rwanda, white pepper was the largest traded natural product followed by pilau masala (mix of five spices). However, there are also a number of natural products, which, although not heavily traded, appear to have better prospects in the future such as moringa (*M. oleiferara*) and mukwano edible oil (Table 3). On the whole, quantities supplied by Rwandan traders were much lower compared to Ghanaian traders.

CONCLUSIONS

The obstacles for wholesalers/ retailers and exporters in Ghana and Rwanda include access to finance and markets, and the lack of herbal market information especially relating to external markets. There is also a lack of processing capacity, and technical training relating to herbal products handling. Many of the top ranked natural products from both Ghana and Rwanda have significant potential for increased domestic and regional sales, and others for international trade (Table 2, 3) once current constraints are addressed. Strengthening technical support and efforts to establish continuity and regularity of product supplies as well as quality standards are needed and both contribute positively to the success of the Ghanaian and Rwandan natural products business, both domestic and international. Constraints need to be addressed by the respective agencies and governments relative to public policy. Regulatory issues need to be improved to strengthen the ability of the traders to more easily participate in global opportunities in the field of natural products market. The domestic (local and regional) markets also provide a strong economic base in the natural products trade and should not be overlooked as a major vehicle for economic growth and trade benefiting the source country. Additional opportunities to create value-added natural products at the community level will also provide economic benefits at the local level that may or may not be realized with the traditional trade of raw materials that are later exported. This survey showed that in both countries the vast majority of those involved in the natural products sector recognize the need to share information with their buyers, retailers, and consumers, and that such a process strengthens long-term business relationships. The majority of those involved in the sector indicated that the lack of infrastructural support limited their business and trade opportunities. Development and strengthening of effective partnerships with the public sector and increased cooperation from local governments and other international agencies are needed.

Table 2. Distribution of top ten natural/herbal products by Ghanaian wholesalers/retailers. Products are listed in order of descending rank based on total value.

Scientific name, Family	Uses	Avg. quantity distributed/sold by wholesaler/retailer (t)	Avg. price/t (GHC) ^z
<i>Khaya senegalensis</i> , Meliaceae	Appetizer, blood tonic, fever, malaria, stomachache, stomach ulcers, waist pains, fresh delivery, menstrual pains, headache, ulcers	1.08	2290
<i>Alstonia boonei</i> , Apocynaceae	Convulsion, ulcer, fresh delivery, measles, measles, stomach ulcer	0.34	2633
<i>Paullinia pinnata</i> , Sapindaceae	Bone diseases, fertility enhancer, fracture, rheumatism, joint diseases, waist and joint pains, stomach ulcer	0.26	1873
<i>Enantia polycarpa</i> , Annonaceae	Fever, malaria fever, stomach ulcer	0.13	4650
<i>Commiphora myrrha</i> , Burseraceae	Fresh delivery, ulcer, stomach ulcer, menstrual pains, post partum, fresh delivery	0.32	2726
<i>Pycnanthus angolensis</i> , Myristicaceae	Blood tonic, constipation, menstrual pains, unstable pregnancy, stomach ulcer	0.28	1415
<i>Terminalia ivorensis</i> , Combretaceae	Diarrhea, menstruation pains, ulcer	0.28	1890
<i>Rauvolfia vomitoria</i> , Apocynaceae	Aphrodisiac, piles, blood cleansing, stroke & kooko	0.16	1539
<i>Ricinodendron heudelotii</i> , Euphorbiaceae	Elasticity of the womb, increased fertility, menstrual disorder & pains	0.05	2431
<i>Bombax buonopozense</i> , Bombacaceae	Fever, malaria fever	0.05	2000

^zGHC=Ghanaian cedi, 9,240 = \$US 1.

Table 3. Distribution of top ten natural/herbal products by Rwandan wholesalers/ retailers. Products are listed in order of descending rank.

Product name (scientific name, Family)	Uses	Avg. quantity distributed (g)	Avg. price/g (RWF) ^z
White pepper (<i>Piper nigrum</i> , Piperaceae)	Seasoning/flavoring	600	1.25
Pilau masala ^y	Seasoning/flavoring	400	1.25
Samona herbal soap (<i>Hemerocallis</i> sp., Liliaceae)	Cosmetics	271	1.57
Samona jerry (<i>Hemerocallis</i> sp., Liliaceae)	Cosmetics	174	2.63
Black pepper (<i>Piper nigrum</i> , Piperaceae)	Seasoning/flavoring	101	6.96
Simbambili (<i>Capsicum</i> sp., Solanaceae)	Seasoning/flavoring	69	5.24
Rina oil ^x	Food preparation	65	49.23
Moringa (<i>Moringa oleifera</i> , Moringaceae).	Cosmetics	37	62.40
Mukwano oil ^w	Food preparation	34	62.69
Carrotina ^y	Cosmetics	11	46.30

^zRWF 550= \$US 1.

^ySpice mix (cumin seeds, cloves, cardamoms, black pepper and cinnamon).

^xEdible oil blend (unknown composition).

^wEdible oil blend (palm, sunflower, and soyabean oil).

^vNatural products used in cosmetics (identity unknown).

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