

Breaking the Cycle

A Strategy for Conflict-sensitive Rural Growth in Burundi

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Export Crops

Toward a Significant Contribution to Growth

*By Dan Clay, Anne Ottawa, Luis Flores, Paul Delucco, Eric Kacou,
James Foster, John Baffes, and Tania Rajadel*

The mediocre performance of the coffee subsector has been largely responsible for the weak and volatile growth of the Burundian economy, even though it benefited substantially from public investments. Any future growth strategy should strengthen and diversify agricultural exports. While the country benefits from optimal agro-ecological conditions for the production of high-quality export crops, reinforcing their contribution to growth will require radically improving management of the main agricultural industries and efficiently accessing value-added markets.

Export crops would become more competitive by promoting best practices to manage costs and defining sales strategies. Potential improvements include increasing yields, reducing costs, increasing production reliability, and enhancing revenues. The latter can be achieved by implementing sales strategies based on protecting break-even costs and either maximizing returns above them or minimizing losses below them, depending on market conditions. This would entail adopting a wide range of contracts available for all commodity markets and new sales techniques. More fundamentally, enhancing sales revenues implies targeting markets and exploiting opportunities presented in new markets. Significant amounts of coffee, tea, and horticulture production could reach fair trade and other niche markets that highly value production from fragile countries. Burundi's history could become an asset in accessing these markets.

This chapter focuses on how coffee, tea, and horticulture could penetrate high-value niche markets. While other export crops could also contribute to growth, the team considers these areas for improvement give data availability, time constraints, and the importance of these three subsectors.

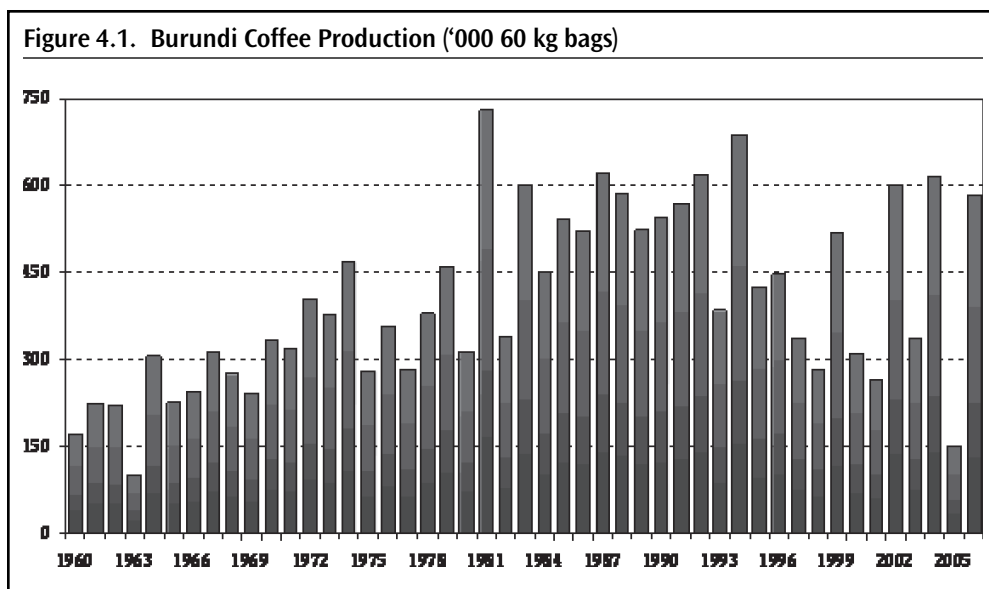
Coffee Subsector¹⁸

Brief History

Coffee is produced by about 800,000 households and accounts for 85 percent of the country's export revenues. It became the dominant cash crop, the main industry, and the prime source of export revenue very early in Burundi's history. While this dependence carries significant risks for the country today, it made sense for Burundi to rely on coffee when export prices were set by international agreements and thus generated high and predictable revenues. Moreover, the welfare of the State's ruling elite relied so much on coffee that the sector attracted most investments and efforts. The creation and management of State corporations have been instrumental in distributing rents among the ruling elite.

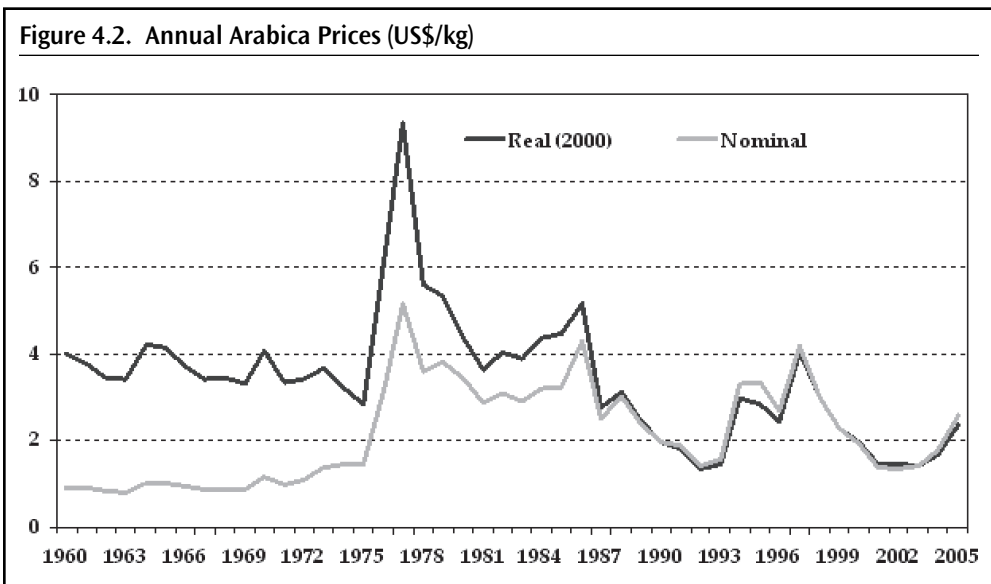
In this context, the State dramatically pushed for increasing the area under coffee and forced planting across the country. The most significant expansion of coffee cultivation was undertaken in the 1980s with a program of massive tree planting meant to increase annual production from 30,000 to 50,000 tonnes by the early 1990s (Figure 4.1). From 1980 to the early 1990s, the number of coffee trees increased from 90 million to over 220 million, and the area under coffee grew from 40,000 hectares to more than 85,000 hectares. Coffee is one of the most labor intensive crops, so this expansion relied on coercion, and farmers were forced to plant and look after trees that they were strictly forbidden to uproot. Despite these radical interventions, production hovered below 35,000 tonnes in the early 1990s and declined severely thereafter. The dramatic decrease in yield reflects an authoritarian policy that provided poor incentives. Planting trees on soils deemed inappropriate for coffee is one of many illustrations of this deficient policy.

The weak competitiveness of the Burundian coffee sector became a major concern when the International Coffee Agreement was suspended in 1989, and prices declined sig-



18. The section was written by Dan Clay (MSU) with the collaboration of Anne Ottawa (MSU), Ilhem Baghdadi (Economist, TTL, AFTS3), Paul Deluco (MSU) and Tania Rajadel (Economist, AFTS3).

nificantly (Figure 4.2).¹⁹ To overcome some of the major weaknesses of the subsector, the emphasis shifted to enhancing management and the quality of coffee in the early 1990s. Setting a minimum guaranteed price for producers was intended to stimulate production, while introduction of an auction system was intended to foster transparent and efficient sales practices. While restructuring and reorganizing the coffee subsector were acknowledged to be key in addressing these issues, reform schemes were ill-suited and failed to improve performance. This policy was also unsuccessful—quality declined steadily, producer prices remained among the lowest in the world, and the auction system fostered major collusion because there were few licensed bidders. The devastating conflict in 1993 halted the reform attempts as insecurity prevented proper care of the trees. In addition, in some regions farmers rebelled against rent-seeking by the ruling elite and destroyed coffee trees. While reform attempts resumed after the Arusha agreements, the competitiveness of the Burundian coffee subsector remains extremely weak and much remains to be done to make it an effective contributor to shared growth.



Past and Current Reforms

The 1992 reform entailed some restructuring and reorganizing of the industry. After harvesting, coffee cherries²⁰ were brought to one of the 136 washing stations managed by the Organization of Coffee Washing Stations (SOGESTALS, Sociétés de Gestion des Stations de Lavage), eventually becoming the fully washed Arabica. Some farmers still choose to do on-

19. All dollar figures are US dollars.

20. 'Cherry' is the fruit of the coffee tree, which is picked when it turns red. It normally contains two seeds, the 'beans' separately covered by thin membranes, called silverskins and parchment-like shells, enclosed in a thin mucilaginous substance. Immediately surrounding this is the skin of the fruit. Fruit skin and mucilaginous substance are removed in the pulping process. Pulped coffee in its parchment shell is called 'parchment coffee.' The parchment including the silverskin is removed by the curing process. 'Green coffee' is the internationally traded coffee before entering the roasting process.

site washing, which produced semi-washed Arabica. Typically, three-quarters of the production was of the fully-washed type, while the remaining one-quarter was semi-washed. Following washing, coffee was delivered to one of the coffee processing factories, two of which were operated by the parastatal SODECO (Société de Déparchage et de Conditionnement), while two others were privately owned (SONICOFF and SIVCA). Until May 2007, OCIBU (Office des Cultures Industrielles du Burundi), the parastatal that acts as the umbrella organization, sold the coffee to exporters through an auction established in 1992. Only licensed buyers belonging to the ABEC (Association Burundaise des exportateurs de café) were authorized to bid. Following its delivery to the SOGESTALS, OCIBU was the owner of coffee. Both the SODECO and SOGESTALS were paid fixed fees for their services. Coffee prices were pan-seasonal and pan-territorial. Coffee growers began delivering their coffee to the washing stations in March and received payment in July. On few occasions when prices were favorable, they could receive a second payment.

While the 1993 political crisis and the subsequent economic collapse halted the program, it is important to stress the major shortcomings and an inability to provide the incentives needed for better performance.

- The auction failed to improve transparency and enhance export prices. While the licensing system only authorized actors with reasonable counterpart risk, it limited the number of bidders so drastically that collusion was almost inevitable. It is also unclear whether risk management solely commanded the attribution of the licenses because authorized bidders were often reported to belong to the ruling elites. Moreover, the system channeled production only to commodity markets while specialty coffee markets that command a higher price premium were emerging.
- Coffee revenues were shared according to an ineffective pricing rule. The system of the *Redevances Connues d'Avance* (RCA) did not provide the actors of the value chain proper incentives to increase quality and volume.
- The reforms managed to foster neither competition nor development of private sector investment throughout the chain. State intervention remained too strong to attract private newcomers with the expertise and financial muscle to substantially improve the performance of the subsector.

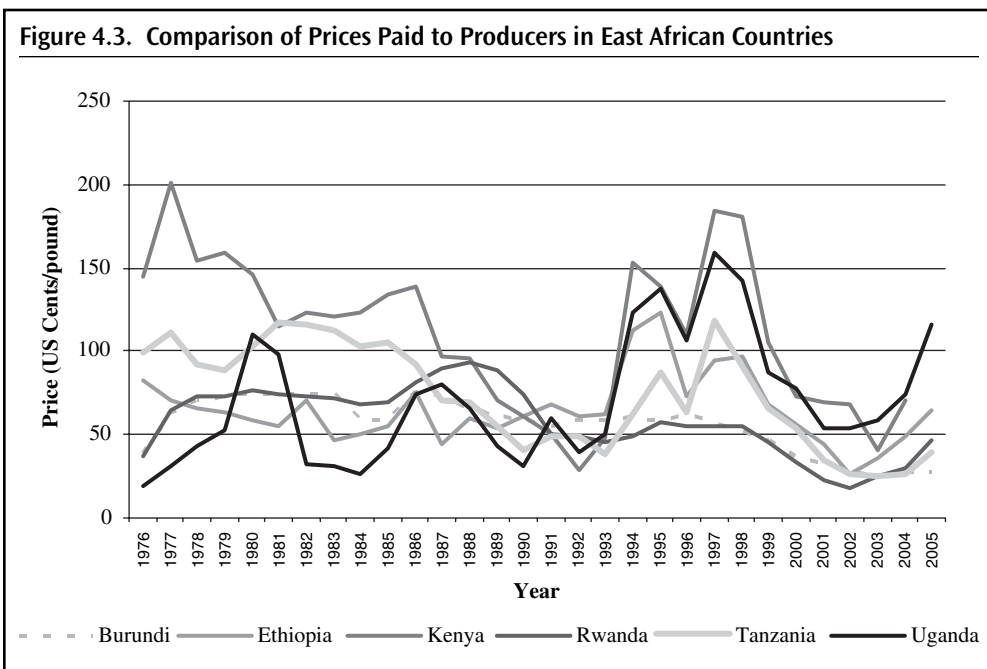
Taking stock of these deficiencies, reforms resumed in 2005, with the issuance of a series of ordinances adopted as of January 14, 2005, to liberalize price setting and marketing activities all along the chain and suppress the tax on orchards. The following step included removal of the State guarantee for financing the subsector and the creation, on March 30, 2006, of the Coffee Reform Committee to pilot preparation of privatization. Attempts were made to improve the auction system, but the marketing structure remained clearly inefficient because considerable quantities of coffee were marketed outside the official OCIBU channel, reportedly through Rwanda. While opinions on the quantities of coffee that go to Rwanda differ, industry representatives put the figure somewhere between 10 and 15 percent. However, during the 2004/05 season, as much as one-half (or even two-thirds) of coffee output may have been marketed through Rwanda. The numbers are certainly consistent with this estimate. The official crop estimate of 150,000 bags was the lowest figure since 1963. Although part of the decline from the previous crop of 600,000 bags was due to its

cyclical nature, even accounting for such behavior (comparing it to the earlier minimums), the actual crop should have been at least 300,000 (twice as high as the actual figure).

Current developments highlight further insufficiencies. There was no modification in the structure, organization, and property of the industry, so ordinances failed to reflect any actual changes or improvements. Recent visits by specialty coffee roasters showed a strong appetite to contract direct sales with Burundian coffee producers, however, the ordinance establishing direct sales was only theoretical because the property was still in the hands of OCIBU and direct sales therefore required State clearance! As a remedy, Pierre Nkurunziza, the President of Burundi, affirmed in a press release on May 1, 2007 that producers were now the owners of fully-washed and green coffee. Yet, such a change could not happen overnight, because it requires building capacity for producers to effectively market their coffee and a legal and regulatory framework properly defining duties and rights of all interests. In this confusing context, producers were led to contract the sale of all domestic production to a single broker based in New York, therefore lessening their expected revenue and jeopardizing their future access to specialty markets. An aggravating factor was lack of transparency in negotiating the contract, which was not cleared by an international lawyer.

Current Performance and Main Challenges

Further evidence of poor performance of the coffee subsector is provided by a comparison of prices paid to producers in East African countries (Figure 4.3). While the six producers bottom out in the four years after the end of the International Coffee Agreement in 1989, Kenya, Uganda, Ethiopia, and Tanzania show improved producer prices that correspond with the Brazilian frost of 1994 that saw higher coffee prices in all commodity markets.



Rwanda and Burundi, plagued by serious political difficulties, show no change in producer prices over the same period. In 1999, the producer prices in all six countries go into free-fall again and do not show signs of recovery until 2004. Rwanda and Burundi had the lowest producer prices in the region from 1994 to 2004. That distinction is now held exclusively by Burundi because of Rwanda's new found success in coffee with a jump in prices paid to farmers starting in 2003.

After 40 years of cyclical violence and political instability, Burundi must make important changes to its coffee subsector and develop the capacity to participate in rapidly changing global coffee markets. Growing in importance are specialty markets that depart from the traditional commodity-oriented coffee markets in that they are defined primarily in terms of their high product quality and other differentiating characteristics. This development is particularly encouraging for Burundi, whose agro-ecology and well-developed coffee infrastructure support the production of highly prized "mild Arabicas," and where the political will seems to create an institutional environment needed for the subsector to realize this remarkable potential.

Becoming a significant player in this new market environment will require a vision for where global market trends are headed and for the changes Burundi needs to make to become competitive with other coffee producing countries in the region and other continents that have a 10–15 year head start. A first step is to look forward 10 years or more with a vision for how producers, processors, exporters, and the various support institutions in Burundi will be organized to ensure successful entry and participation in these global markets. A second step is adopting a gradual but well-defined strategy for transforming the coffee subsector, including the priority questions about transfer of state-held assets.

While the state-owned infrastructure and restrictive regulatory framework that governs the coffee subsector in Burundi today may have been initially intended to protect the small farmer, in today's post-International Coffee Agreement (ICA) environment it has had the unintended consequence of stifling innovation and progress. With more than 140 washing stations throughout its coffee growing regions, Burundi is well positioned under privatization to capitalize on its comparative advantages and begin to directly access higher value specialty markets for a significant share of its coffees. An enormous plus for Burundi is the intense curiosity about coffee from Burundi expressed through the specialty coffee industry, as evidenced clearly in the 2000 SCAA success of its 'Ngoma Mild' coffee and recent visits of coffee specialty buyers in Burundi (February and April 2007). The specialty coffee concept offers small producing countries the greatest opportunities; the industry is prepared to work with Burundi as it has with Rwanda.

Vision of What the Sector Could Be in 10 Years

Privatization need to transfers property from the public to the private sector and ensure that the transfer will improve competitiveness and contribute to shared growth. The design of the privatization scheme should: (a) identify the market structure that will lead to the greatest efficiency; (b) specify competition rules that will govern organization of the market structure and the deregulation process, which will lead to this market structure; and (c) detail modalities of the property transfer from State to private investors.

Privatization will not cure poor sales management and subsequent fiscal risks unless the Government designs privatization schemes to attract solid long-term investors. Given that

such investors might not be found locally, it might be suitable to target regional investors who have the expertise and financial strength. These investors could introduce best available practices provided the Government establishes the right incentives to ensure that the optimization of local production and processing does not suffer from investors' global interests. One possible strategy to align foreign investors' incentives with those of the key domestic stakeholders could be a minority equity position for producer associations.

The Government's growth strategy should prevent conflict, thus the privatization process must be designed to mitigate the risk of rent-seeking. Creation of forums should enable the Government to hear all the concerns of all stakeholders and address them through processes likely to gather assent of the majority. It is particularly important to ensure that equity principles are respected and that the long-flouted rights of coffee growers are heard and considered. Reinforcing the investigation and bargaining capacity of coffee producer organizations will be key to achieving this objective.

Changes in Marketing, Production, and Processing

Develop a Focused Marketing Strategy and Implementation Capacity. Burundi should develop a comprehensive strategy for marketing its coffee, including marketing materials with a media kit presenting Burundi's history. A marketing specialist will be needed to cultivate appropriate contacts and potential coffee relationships in North America, Japan, Europe, and alternative markets, oversee the organization, dispatch coffee samples, arrange meetings and presentations, and develop and manage trade show exhibits and marketing materials.

Develop Capacity to Conduct Strategic Country Buyer/Roaster Tours. The ability to host prospective buyers in Burundi requires skilled coordination as well as cooperation among washing stations, dry mills, coffee producer associations/federations, the Ministry of Agriculture, and other government bodies. Buyers need to have the opportunity to visit coffee growing regions, observe washing station operations, meet growers and washing station owners/managers, view all aspects of coffee milling, and engage in cupping of select coffee samples.

In delegating this role Burundi may want to consider a team approach at the federation level, drawing upon representatives from various coffee regions who will organize and host tours for prospective coffee buyers. This would include preparation of brochures, maps, and fact sheets, together with a step-by-step itinerary for distribution to buyers upon their arrival. Also important is the planning and organization of presentations at washing stations and other receptions, making sure that key coffee and government officials attend. Representatives of the coffee subsector and the media should be invited to such events.

While this diagnostic assessment was performed, two visits by buyers were organized in Burundi this year, and follow-up is planned. The Government is preparing a statement for an important event that is to be held in Portland, Oregon (USA) for a large audience of specialty coffee buyers. Such a statement should help increase their awareness of Burundi's history, assure them of the Government's commitment to understand and address concerns that might be preventing them from buying Burundian coffee, and present to the media an action plan to tackle these issues. This action plan will reaffirm the liberalization of direct sales at all levels of the coffee commercialization chain as well as Burundi's dedication to move the current privatization process forward. The implementation of this process already provides valuable lessons to be shared with other sectors such as the tea industry.

Promote Quality of Burundi Coffee Through Cupper Training. Expanding Burundi's capacity nationally, regionally, and at the washing station level for quality control through the development of cupping skills is paramount. A logical first step is to act on observations by Coffee Corps cuppers who recently held cupper training sessions. The East Africa Fine Coffee Association works in concert with industry roasters to secure volunteer trainers for the Coffee Corps program and is an important organizational resource.

Cupping Laboratories—Improvements and Additions. Refinements are necessary at the national cupping lab (currently at OCIBU) to ensure a state-of-the-art level. Plans should also be explored to strategically place cupping labs in Burundi's coffee growing regions at the level of either the coffee producer federations or the SOGESTALs. As privatization occurs and growers are provided incentives for quality, the need for cupping labs to evaluate coffee quality attributes will increase. Eventually we expect that cupping labs will be established at each washing station. Opportunities for direct sales of high quality specialty coffees will require this level of competence and well-managed washing stations will quickly realize how it will benefit them.

In making these cupping labs available on a centralized (national or regional) level, Burundi will be able to support improved quality control on larger volumes of quality coffee and gain international recognition of the quality of Burundi's coffee.

Relationship Coffee Pilot Initiative. In order to demonstrate a relationship coffee model, Burundi could engage in a pilot project involving a private washing station and dry mill. The pilot initiative would start with a visit by a group of specialty coffee roasters and their importers.

The benefits of such a trial program are multiple. First, the pilot begins the necessary diversification of export marketing to include some leading coffee markets that are currently absent from Burundi's small mix of buyers. Second, the knowledge about how quality premiums are paid to growers in direct trading relationships will make very real the notion that 'quality pays.' Finally, study of the pilot project will help refine Burundi's overarching plan for privatizing its coffee infrastructure.

Given the history of the coffee sector, the selection of such a pilot should be carefully based on objective criteria and avoid strengthening and promoting the ruling elite.

Attention to Coffee Production and Processing. Burundi is much farther along on production and processing than it is on marketing, but there are numerous areas where special attention is required if coffee quality is to be improved to a point where it will attract a large and sustainable cadre of specialty coffee buyers/roasters. On the production side for instance, it would be important to use proper cultivation techniques during the growing season, especially mulching and application of fertilizers and pesticides. On the processing side, more attention needs to be given to progress of fermentation processes.

Policy Reforms and the Way Forward

How the coffee subsector is liberalized and privatized will have a clear impact on the country's ability to access high-value specialty markets and needs to be carefully considered.

Liberalization and privatization of the coffee subsector in Burundi should significantly reduce the flow of coffee through the "tender" (auction) in favor of developing direct mar-

ket links with buyers. Licensed millers should be able to freely process washed parchment coffee from any producer. Washing station owners and managers and their coordinating bodies should determine the quality of coffee lots that will be segregated for individual marketing and export.

To market their coffee, sellers in Burundi need to understand how to identify, present, and promote the quality of their coffee, as well as reward those growers who produce it. There is a need to license producers and millers; and warehouse, cup, and ship coffee samples to prospective buyers. Market development, cupper training, and the introduction of IT and other marketing improvements are also essential. The industry itself can address many of these activities through coffee producer federations. Others will require a level of public coordination, particularly in areas of industry regulation and policy. All of these responsibilities command attention in the debates surrounding reform of the coffee subsector.

Tea Subsector²¹

Brief History

Tea was introduced to Burundi in 1931 at the Gisozi research station. It gained importance when the agricultural research institute, ISABU (Institut des Sciences Agronomiques du Burundi) established the first tea plantations in Teza in 1963 and Rwegura in 1966. Smallholders began producing tea during the 1970s and 1980s following various donor-supported projects. Four tea factories were financed by the European Investment Bank, the investment arm of the European Union, while a fifth was financed by CCCE (Caisse Centrale de Coopération Economique), the French aid agency, predecessor of AFD (Agence Française Développement). Production grew steadily and exceeded 6,000 tonnes in the early 1990s, but experienced a hiatus in the two years following the civil conflict—a decline from 7,000 to 4,200 tons, with one-half of the decline accounted for by the Teza tea factory.

Tea is currently Burundi's second largest cash crop after coffee, contributing approximately \$10 million to export earnings, or 12 percent of total merchandise exports. During the period 2001 to 2006, Burundi's annual tea output averaged 7,500 tons, roughly 30 percent of which was produced by four estates and the rest by over 50,000 smallholders. Smallholders account for 75 percent of the area allocated to tea but 71 percent of tea production. Average yields for smallholders are 4.0 t/ha of green leaf compared to 4.8 t/ha tons of green leaf for factory estates.²² The typical Burundian tea grower produces 400 kg of made tea from a 0.1-ha plot, earning about \$46 for the year 2006.

As tea is grown at high altitudes, often on mountainous areas with steep slopes, it seldom competes with food or other cash crops. There are five tea-producing areas in Burundi with individual factories—Teza, Rwegura, Tora, Ijenda, and Buhoro. With the exception of

21. This section was written by Eric Kacou (OTF) and James Foster (OTF).

22. Note, however, that these yields are not strictly comparable because the corresponding area may include land which is allocated to tea, in principle, but may have been abandoned. According to a World Bank (1993, p. 20) report, estates achieve higher yields compared to smallholders because they occupy the most productive soils of the tea areas. Perhaps a more likely reason is that factories pay less for green leaf from their own plantations and so stop or extend time between collection cycles to smallholders while continuing with collection from their plantations.

Ijenda, which is only smallholders, the other four tea factories receive tea supplies from both plantations and smallholders. The chief player in Burundi's tea industry is the parastatal Office du Thé du Burundi (OTB), which owns and manages these five tea factories and handles estate production, marketing, and trade, as well as industry regulation.

The European Union is currently promoting development of a sixth tea area in the province of Mwaro. The project, PROTHEM (Promotion de la théiculture en province de Mwaro), began in 2002 at a cost of about 1 million euros. It covers 845 hectares and will involve some 6,540 tea growers with an average tea plot of 0.13 hectares. A private company is constructing a tea processing factory at Gisozi that is expected to be operational by September 2007. This private factory is expected to produce 1,000 tonnes of made tea during its first year of operations. The business plan calls for production of made tea to reach 2,000 tonnes in the fourth year of operations after expansion.

Growers sell their green leaf to the nearby tea factories at a price set by OTB. The price is pan territorial, the same for all smallholders in all five tea producing regions. Despite considerable fluctuations in the price received for its tea, OTB changes tea leaf prices infrequently, for example, during the period 1993 to 1999 they changed only twice. Over the last three years smallholders have received about one-third of the price Burundian tea fetched at the tea auction in Mombassa. Almost all (95 percent) of Burundian tea is exported, with 70 percent going through the Mombassa tea auction and the remaining marketed through direct sales, a practice followed by most African tea producing countries. Burundi's annual tea production of about 7,500 tonnes is negligible considering that global and African tea production during the period 2001 to 2005 averaged 3.01 and 0.46 million tons, respectively.

Despite changing world market conditions such as declining prices, demand for quality differentiation, and competition from man-made beverages (especially soft drinks), the structure of Burundi's tea industry has remained largely unchanged since its inception. The sector faces numerous constraints, including structural inefficiencies of the tea factories and plantations, poor incentives to smallholders and estate laborers, limited use of inputs and extension services, and non-existent research. These constraints have led to a considerable decline in the quality of tea and consequently the prices at which Burundian tea is sold at the Mombassa tea auction. If these constraints are not addressed, the sector will face even more difficulties that are likely to lead to its demise.

Past and Current Reforms

Prior to 1981, each tea factory was autonomous to the extent that it bought, processed, and sold its own tea. This situation guaranteed a considerable level of autonomy to each factory. In 1980/81, the Tora factory experienced serious financial difficulties. In a bid to save this factory, the Government decided to centralize management of all factories. This decision allowed any profitable factory to cover the losses of any unprofitable one. Since that time, each tea factory is no longer autonomous. OTB controls all finances, and requires all management decisions to pass through the head office, a situation that has led to a lack of responsibility among managers and reduced incentives for managers to improve factory management.

Policy reforms, including privatization of Burundi's agricultural sector were first contemplated in 1988 as a result of a perceived shift in the government's role from producer and marketer to regulator. However, progress was very slow initially because the Govern-

ment's view of reforms was very narrow, not extending beyond restructuring management of the parastatals.

Deeper reforms, including privatization of the parastatals, were to be undertaken four years later under the \$4.2 million Agribusiness Promotion Credit. In the tea sector, these reforms envisioned first breaking up the de facto monopoly of OTB in order to maximize returns of existing investments through: (a) better management of tea estates, including performance contracts; (b) developing contractual relations with smallholders and supporting development of associations; (c) reducing processing costs; (d) efficient management of the tea factories; and (e) improved marketing. Second a proposed study was to look at privatization of OTB as a whole or as individual factories, but because of the civil war, the reform process was derailed and the credit closed early, with only \$0.3 million disbursed out of the estimated donor funding of \$4.2 million.

Current Performance and Main Challenges

Burundi's tea industry is currently in a perilous state. A number of key pieces of equipment in all the factories are close to collapse and tea quality has declined dramatically since the early 1990s when Burundi received good prices. The average price received for Burundi tea at the auction in Mombassa was \$0.20/kg below the average price from 2000 to 2006, and from 2001 to 2006 was sold at a discount of \$0.25/kg to the average price of Rwandan tea, a country with very similar conditions.

Prosperity is more than natural resources—it also includes the enabling environment that provides the basis for a high level of productivity. When prosperity is considered in this broader context, it is useful to consider seven kinds of enabling capital that are intended, as Nobel Laureate Amartya Sen suggests,²³ “to give a better idea of a nation's ability to produce things in the future.” Of these seven forms of capital, the first three represent tangible, physical capital—natural resources, infrastructure, and financing. The last four constitute higher, social forms of capital, and while more difficult to measure, have the greatest effect in creating prosperity.

Natural Resources Are Favorable to Production of High-Quality Tea. However, in Burundi they are not being maximized due to low productivity, with no focus on quality throughout the supply chain (Table 4.1). The low productivity is caused by a lack of fertilizer and the long collection cycle, normally around 10 days, but in Burundi it has been extended to avoid an oversupply of green leaf. For example, in Rwegura the collection cycle has reached 18 days and in Buhoro collection is occasionally completely halted to enable the backlog of green leaf to be processed. The lack of focus on quality means that tea farmers and pluckers in the plantations receive the same prices for green leaf regardless of its quality, hence discouraging the extra care needed to ensure quality leaf.

Wooded areas are not being sufficiently replanted to keep up with demand and so the majority of tea factories will be reliant on expensive private suppliers of wood over the next few years. If the current rate of replanting continues, not only will the cost of wood for

23. Fairbanks, Michael. 2000. Changing the Mind of a Nation: Elements in a Process for Creating Prosperity. In *Culture Matters: How Values Shape Human Progress* (Lawrence Harrison and Samuel Huntington, eds.). New York: Basic Books.

factories increase, leading to further deterioration of factory profitability, but Burundi's tea industry will also become a considerable factor in deforestation, with all the implied negative consequences for the nation. This must be avoided at all costs.

Infrastructure has Deteriorated Such That it Could Collapse at any Moment. The original installed lines in Burundi's tea factories have never been replaced and some are now unusable and require urgent rehabilitation. Only 41 percent of the installed capacity is being utilized. Similarly, parts of the rural road network are at times impassable, leading to high costs for local transport, long delays, and lower quality green leaf. Due to the quality of the roads, smallholder plots a long way from the factory that produce very small quantities of green leaf (averaging 400 kg per year) are likely to be economically unviable for a private industry to collect.

Year	Teza	Rwegura	Tora	Ijenda	Buhoro	Total
1991	1,407	1,608	1,043	1,265	139	5,462
1992	1,392	1,995	1,063	1,451	48	5,949
1993	1,416	1,959	829	1,096	223	5,523
1994	1,647	2,313	1,052	1,480	372	6,864
1995	1,716	2,033	1,192	1,673	380	6,994
1996	998	1,761	1,128	1,712	116	5,715
1997	376	1,583	949	1,138	124	4,170
1998	1,378	2,081	1,183	1,628	399	6,669
1999	1,343	1,743	1,425	1,919	434	6,864
2000	1,403	2,213	1,447	1,589	467	7,119
2001	1,634	2,790	1,652	2,190	743	9,009
2002	1,603	1,789	1,156	1,485	604	6,637
2003	1,701	2,044	1,516	1,608	507	7,376
2004	1,759	2,140	1,516	1,544	711	7,670
2005	1,934	1,811	1,711	1,764	603	7,823
2006	1,593	1,704	1,109	1,521	435	6,362

Source: Office du Thé du Burundi

Transport of green leaf is expensive, irregular, and reduces quality. The transport of green leaf was privatized with the exception of Buhoro in 2004, but this has not improved efficiency. Trucks are regularly overloaded with resulting damage to green leaf from excessive pressure and factories have regularly interrupted the collection cycles so as not to receive a surplus of green leaf. Smallholders and the plantations do not continue to pluck leaves on a regular basis in order to maintain quality and apply the excess to the soil to trap humidity.

Electricity is a further problem with a lack of functioning generators and no use of invertors to reduce usage.

The Financial Position of OTB is Worsening and Smallholders Have Limited Access to Financing. The OTB faces large long-term debts in foreign currency, mainly attributed to the

two most inefficient factories, Buhoro and Ijenda. Between 2005 and 2006 these long-term debts increased by 14 percent, from Fbu 5.6 billion to Fbu 6.5 billion, with Buhoro responsible for 53 percent and Ijenda 35 percent of these debts. Local banks are unable to finance at the level necessary to build a tea factory, and smallholder farmers are unable to access credits due to a lack of formality and cooperation.

Not Only are Institutions Ineffective, but They Lack a Framework. The structure of the OTB is highly inefficient,²⁴ with no performance contracts for its managers, no targets against which to measure progress, and limited accountability for success or failure. The fixed price for green leaf reduces incentives for higher quality production. Other institutions are also ineffective. Tea farmers are not organized into associations and where these do exist they are weak. Only 29 percent of smallholders are party to associations. These associations are relatively new and do not have formalized legal status, hence they are unable to easily access financing and do not have strong systems of management or cooperation.

Furthermore, the formal private sector is of little help, especially with processing and marketing, however, the de facto liberalization of the tea industry will take place in 2007 without a regulatory body. The private tea factory in Gisozi will become operational in 2007 relying on production from new tea growers in the region, but also with the potential to process green leaf from Teza and Ijenda cultivation areas. This could result in conflicts if legal agreements are not reached before this date.

Technical and Market Knowledge is Lacking Throughout the Industry. Made tea yields of about 1,000 kg/ha are less than one-half that of well-run plantations and factories. The rate of transformation of green leaf into made tea of about 5:1 also highlights significant problems with factory processes. A normal transformation rate of 4.2:1 would reduce costs of green leaf purchases by almost 20 percent. All factories are using sub-standard practices and poorly maintained equipment, for example, if fire bars on the boilers were cleaned every half an hour instead of every week, productivity and life expectancy of the boilers should increase. The lack of such cleaning coupled with the lack of any simple tools for cleaning indicates a complete lack of knowledge of boiler maintenance.

Despite large numbers of extension workers (nine agronomists and 50 extension officers at Ijenda alone), limited training sessions are held each month with no visible impact on the quality or quantity of green leaf produced. No research is being funded to identify better varieties of tea or which fertilizers to use at what rate and at what time. Excellent research documents were produced by ISABU in the early 1990s about how to tend tea plants to maximize productivity and quality. Unfortunately OTB stopped funding this research after 2000 because they were dissatisfied and since 2004 no research has been conducted in the tea sector.

Knowledge of international buyers and their needs is also limited, with sales via the auction in Mombasa preferred to direct sales.

Availability of Plantation Workers is also a Problem. Plantations at Buhoro and Tora experience labor shortages, but there is a surplus of labor at the head office and in the factories (122 in the head office and 300 in Rwegura). An efficient factory processing 30,000 tonnes

24. Only 22 percent of stakeholders surveyed agreed that the OTB is efficient (OTF Group survey May 2007, n=84)

of green leaf per year (the total for the whole of Burundi in 2006) should use 100 workers, so there should be plenty of spare workers available from the factories. Low wages are the likely cause of labor shortages. The price paid to daily laborers in the factories and plantations is extremely low at FBu 350 for plantation laborers and FBu 400 for laborers on road maintenance. Pluckers generally do better because they receive on average FBu 900 per day (FBu 30/kg with an average of 30 kg plucked per day). Other causes include the dangers for women employees and the lack of available housing.²⁵

Prevailing Stakeholder Attitudes Are Not Aligned with Competitiveness. For example, only 77 percent of stakeholders believe the government should subsidize the profitability of tea factories. Furthermore, 55 percent believe that cheap labor and natural resources are the key to competitiveness. Finally, while 53 percent of stakeholders believe privatization is important to industry success, only 22 percent believe the government is ready to supervise such a process for the industry. However, stakeholders are ready to cooperate and compete with each other, which is a very positive sign. It is paramount that these attitudes are addressed if the tea industry is going to be successfully reformed and privatized in the future. Migration of the industry to a sustainable and competitive value model would require such a shift in mindsets.

Vision of What the Sector Could Be in 10 Years

The pre-conditions for a turnaround of the Burundi tea industry are present. Tea stakeholders, the government, and the international community concur on the need for a different model. Burundi tea needs to regain its status as one of the world's highest quality teas. OTF Group believes this industry could achieve estimated revenues of over \$32 million per year by 2016. Such a metamorphosis would require targeted investments in factories and extension services, professional management, and a focus on quality throughout the value chain, coupled with a direct sales strategy. Figure 4.4 shows the potential impact of these key actions on tea industry revenues.

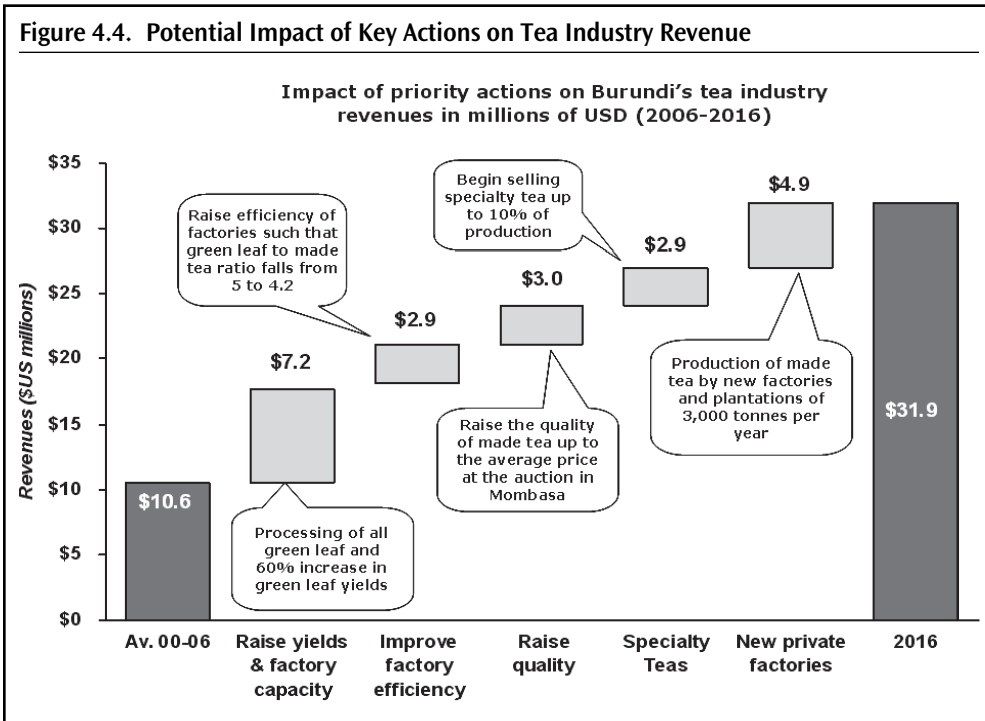
Changes in Production and Processing

Figure 4.5 highlights the 12 key turnaround activities required to enhance the competitiveness of the tea industry in Burundi.

Strategic Pillar 1—Improved production of green leaf requires efforts to raise both quantity and quality.

- *Restructure factories to provide workers for plantations and raise their wages.* This action should ensure greater productivity in the plantations, for example in Buhoro where currently only 65 percent of the green leaf can be collected.
- *Undertake research and provide financial support for effective application of fertilizer by tea farmers.* With the correct application of fertilizer, productivity should increase dramatically.

25. John Baffes, Burundi's Tea Sector, January 2007.



Source: Estimations based on OTF Group Analysis, May 2007

- Offer more regular and effective extension services on a local level. Smallholders require more and regular training in how to maximize both the output and quality of their tea bushes. Existing extension services are not effective.
- Ensure monitoring of quality and change the pricing system to provide the right incentives. Currently there are no incentives for either pluckers on plantations or smallholders to provide high-quality tea leaves to factories. By instigating a system with minimum standards whereby poor leaf could be rejected and high quality rewarded, the quality of green leaf should improve.

Strategic Pillar 2—Improved processing demands rehabilitation and better factory management.

- Privatizing factory management will be crucial to ensuring efficient and quality processing. Without a major shift in the mindset at the top of factories and plantations, other suggested actions in the industry will not be fruitful. The managers of the factories need to be professional, have performance contracts, and have incentives to raise output and quality.
- Repair old but serviceable machines and purchase new machines where necessary. A large portion of factory machinery is old but could be serviceable if better maintained and repaired. For example, four new boilers would be a very large expense, but the existing boilers that are already installed but not working would be relatively inexpensive to repair and could be effective for a number of years. The repair of these machines should go hand-in-hand with training in maintenance and much more regular maintenance.

Changes in Marketing

Strategic Pillar 3—Marketing should focus on quality, and eventually specialty tea markets through direct sales.

- *Establish quality control systems to improve value throughout the value chain.* Quality in the cup begins at the bush. History proves that Burundi is capable of producing some of the best teas in the world, but quality control must return to ensure that its tea regains its past quality.
- *Establish market links and information systems.* Marketing Burundi's tea will require not only a solid understanding of customer needs but also specific ways to react to such needs in a dynamic fashion. This often requires knowledge of demands and relationships with buyers.
- *Develop a complete competitive strategy for the Burundi tea industry.* Current attitudes and business models require a complete overhaul if the industry is going to migrate toward high quality and high value tea. Although this analysis provides initial priority initiatives, a full strategy is important to realize the vision.

Investment Requirements to Implement the Vision

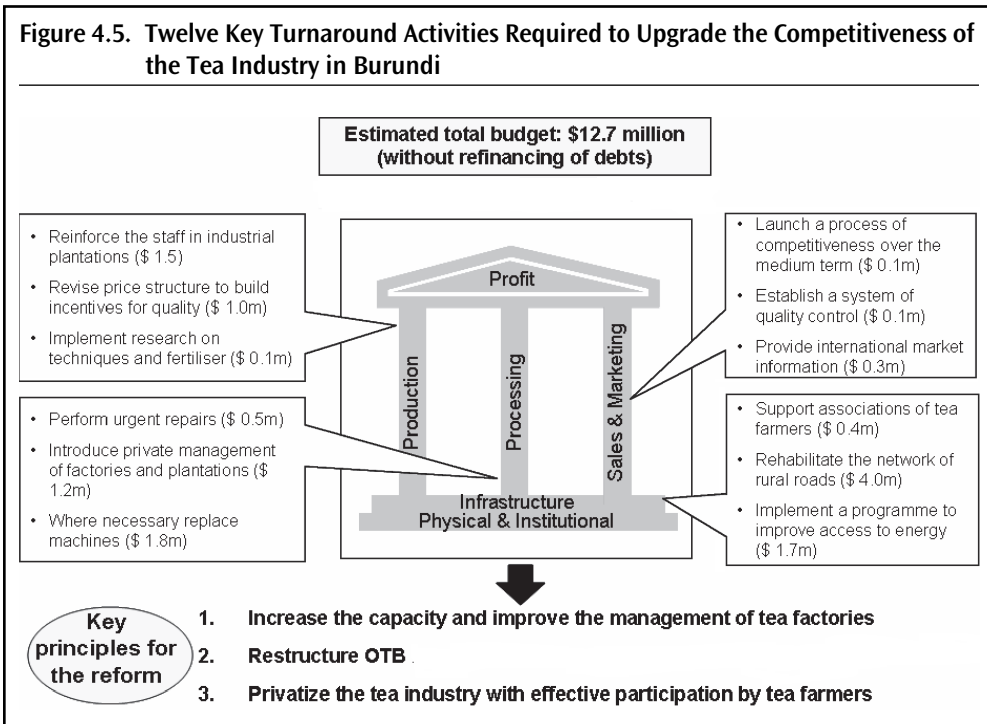
Privatization of the tea sector should attract investors with the pockets deep enough to undertake the changes in equipments, technologies and know how that are needed to unlock the sector's potential. As discussed previously, the sector needs substantial investments in processing, production and extension services. The radical changes required could discourage some potentially good investors, who would prefer entering easier sectors, regions or countries. In this context, it might make sense for government of Burundi to realize some limited investments to rehabilitate the basic equipment of the tea factories and develop some more production lines, which would enable processing more tea leaves. Large investments would be needed to improve infrastructure, especially rural roads and electricity supplies, including the need to assess the potential for micro-hydro plants. It is important to identify whether the state or the private sector would carry out these investments.

Figure 4.5 highlights how a 12.7 million budget could help put the tea sector back on the way for growth.

Policy Reforms and the Way Forward

Reforms in Burundi's tea industry must include its institutions, especially restructuring OTB, and privatization of factories after rehabilitation. These reforms form the fourth strategic pillar. Carrying out the activities set out above will require a new institutional structure—driven by the private sector, with regulation and support from the government. To achieve this new institutional structure, two aspects will be important: restructuring OTB; and creation of a more robust institutional framework. OTB currently monopolizes industry regulation, production, processing, and marketing—a situation clearly detrimental to the industry. It is critical that the mandate of OTB be redefined. An option could consist in refocusing OTB on regulation and support to smallholder farmers, but a newly created independent regulatory body could be just as effective. Second, to bridge the gap created by removing OTB from the

production, processing, and marketing links of the value chain, it will be important that the private sector and smallholder tea farmers develop in scope, skills, and reach. As demonstrated by current tea investors, it is possible to have entrepreneurs enter this industry if the right support, especially for financing, market access, and skills, is provided. As with smallholder tea farmers, the priority will be to provide these associations with much needed support.



Note: The budgets are estimates in \$ millions

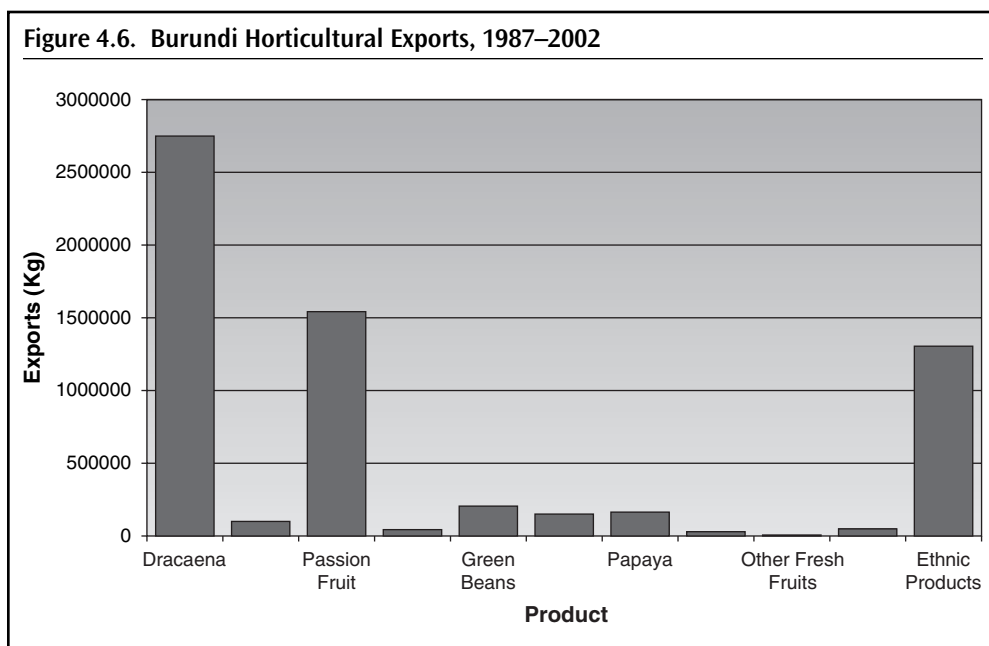
In parallel with the restructuring of OTB, it is paramount that the privatization process be implemented in a gradual fashion. The first stage would transfer existing factories to semi-autonomous private management contracts. These contracts will not only help speed up rehabilitation but also prepare the assets for sale. We envision this stage to last an estimated three years. This transitional period will be important to ensure that smallholder tea farmers organize in stronger and financially able associations. It will also build the necessary momentum to demonstrate the impact private management can have on the performance of the industry and reinforce private sector involvement.

After this first stage set to last a maximum of three years, the tea factories will be fully privatized to attractive buyers. A small percentage of the shares could be earmarked for smallholder tea associations and factory personnel. We believe the upgraded factories stand a better chance of attracting the right kind of investors at a reasonable purchase price. Privatization should ultimately help the government pay off the existing debt of \$17.4 million and spread ownership to rural areas. The delay in privatization should also enable the country as a whole to stabilize.

Horticulture Subsector²⁶

During the post-conflict era Burundi has renewed efforts to strengthen horticulture by expanding fruit and vegetable value chains that serve both urban domestic markets and export markets (Figure 4.6). The country's long history of fruit and vegetable production for home consumption and local rural markets together are a vital foundation on which to launch future growth. While there is diverse horticultural production found on Burundi's 1.4 million smallholder farms, product quality as well as the on-farm mix of products is highly variable and almost always produced in small quantities.

Burundi's fresh vegetable production was estimated in 2005 at 250,000 tonnes, while fresh fruit production was estimated at 85,000 tonnes. Overall, horticulture products (excluding banana) are Burundi's fourth most valuable agricultural product, (more than \$60 million in 2005), surpassed in value only by banana (cooking and beer banana), dry bean, and sweet potato.



Performance of the Subsector and Main Advantages and Challenges

Trends and Current Indicators. Horticulture exports from Burundi date from the mid-1980s and picked up momentum into the 1990s, peaking in 1993 at approximately 1,100 tonnes. The subsequent civil war and the regional embargo imposed in 1996 quickly reversed that trend, reducing the country's exports to less than 100 tonnes annually. More recently, an analysis of 2006/07 data from phytosanitary certificates shows that there has been a small but steady stream of exports, predominantly flowers and ornamental plants

26. This section was written by Dan Clay (MSU) and Luis Flores (MSU).

(dracaena), mostly to the Netherlands. These listings also show exports of passion fruit and ethnic products (including manioc leaves and apple banana).

An analysis of more recent exports based on phytosanitary certificates shows a possible shift in product focus as more and more cut flowers (mostly roses) leave Burundi on a weekly basis. For instance, roses now constitute the country's highest value plant product for export. Dracaena exports are also significant, but exports of fruits and vegetables have not rebounded since the 1996 embargo.

Comparing Burundi's horticulture exports since 1990 to other East African countries reinforces Kenya's dominance with exports in the range of 10,000 tonnes per year in 2004 and growing rapidly. Uganda holds a distant second to Kenya, followed by Ethiopia and Tanzania. Rwanda and Burundi occupy the bottom position in the comparison, partly because of their smaller size but more importantly because both countries were torn apart by civil strife during this period. As a result, Burundi has not had the opportunity to make the necessary investments to benefit from its comparative advantages, subsequently putting its horticulture subsector on a path to growth.

Comparative Advantages. Emerging from over a decade of civil war, Burundi's horticulture producers and exporters share a guarded optimism that their horticulture exports can be profitable. Burundi has the potential to become a highly competitive player in these increasingly lucrative markets. A number of important basic conditions allow Burundi to make this case—broad agro-ecological diversity that enables a wide range of horticulture products from lowlands to highlands, abundant rainfall and water sources, a paved road network connecting all production areas with airport facilities, short internal distances to shipping points, farmer experience with flexible payment terms from buyers (coffee and tea), easy transition to organic and fair trade production (due to low use of inputs), preferential treatment for EU and US market access, and support as a part of the Lomé Convention and the Africa Growth and Opportunity Act (AGOA). Collectively these conditions constitute a sizable up-side for horticulture exports from Burundi.

Challenges. Understanding Burundi's potential for horticulture exports today differs from 10 to 15 years ago. Market opportunities and food procurement systems have changed radically during this period. Markets have become global and expanded regionally in Africa, just as they have in Latin America and Asia. Not only have these markets grown exponentially in volume over the past two decades, but they are more diverse both in consumer demand and sources of supply.

There are far more competitors, especially in developed markets. The same evolution can be expected before long from today's emerging markets. In the Middle East, formidable competitors such as South Africa, Morocco, Egypt, Kenya, and even geographically distant Thailand and the Philippines are evaluating their horticulture market expansion strategies relative to emerging markets. In the midst of this multi-country battle for horticulture market share, the advantages provided by market proximity and climate diversity help, but are not sufficient to consolidate market penetration. Burundi has fallen back over the past decade and now needs to move fast to recover lost ground.

Elevating the country's competitiveness in these markets requires broad-based changes at multiple levels. From production to marketing, changes will be required in how horticulture producers are organized, the technologies they use, as well as how logistics and transport

systems for horticulture’s highly perishable products. Another needed change is how marketing and market intelligence are conducted. This latter point is especially important given how radically fresh fruits and vegetable (FFV) markets have transformed over the past decade. An exclusive focus on European markets is no longer in Burundi’s best interest. Today’s FFV markets are bigger and more diversified geographically and in terms of products than ever before. In 10 years we can expect this market evolution to be even more pervasive. The demand for high value exotic tropicals—pre-washed, pre-cut, pre-packaged, ready-to-eat fresh fruits and vegetables—that we see now has just scratched the surface. They are on their way to becoming the mainstream for higher-end markets around the world. In light of these market dynamics, one of the steepest challenges facing Burundi’s horticulture subsector lies in its ability to break from the traditional mindset and position itself for the markets of today and tomorrow.

The single most serious and immediate challenge to Burundi’s horticulture exports can be described as a ‘chicken and egg’ dilemma of air transportation logistics. The dilemma must be solved before Burundi can become more than an occasional and small-time player in global markets for fruits, vegetables, flowers, and ornamental plants. The dilemma is that cargo space on passenger flights is limited and airlines will not make more space available because shipping volumes are low, but in turn, exporters and suppliers will not increase volumes because air cargo space is limited and carries the risks inherent in transporting perishable products on passenger flights.

Policy and Institutional Environment

Establishing a supportive business climate for horticulture exports is one of the areas where the Government can be proactive in strengthening the potential for growth in the subsector. Establishing an appropriate policy and regulatory environment is an important first step, including actions to address the need for financing horticulture investments at all levels. Improvements are also needed in critical publicly-financed support institutions for research, extension services, and establishing a pipeline of skilled technicians and managers required for proper functioning of the subsector.

Business Services. There is a need for business development services (some of which have been proposed by STABEX) that will include training farmers in how to export, taking them on field trips, organizing meetings with buyers, etc. These are much needed services in Burundi. Beyond such services is the establishment of a managerial and operational framework for exports—there needs to be a team of experienced professionals from field technicians to packing plant managers to organize and supervise production and export processes.

SPS Management Services. Looking to the future, the Government must be committed to build capacity for SPS needs identified by stakeholders in the sector. Achieving this objective will require strengthening at several levels, including: (a) a basic public awareness campaign aimed at building a ‘culture of quality and safety’ among horticulture stakeholders and understanding the requirements that are imposed on exporting countries if they are to become preferred trading partners; (b) promotion of Good Agricultural Practices (GAP) among producer groups and others in the value chain as they relate to plant health, especially pests and pesticides; and (c) developing a regulatory framework and system for imple-

mentation, including the capacity for in-plant risk analysis, surveillance, diagnostic services (pests, diseases, soils), quarantine and emergency management, all areas that will enable horticulture producer groups and agribusinesses to be successful in today's highly competitive export markets.

Vocational Training. Supporting infrastructure and services for export requires a steady pipeline of mechanics, greenhouse builders, carpenters, welders, refrigeration technicians, and an array of people with different vocational skills. They are frontline workers who will keep seedling production, packing, cooling, and other export facilities in serviceable condition.

Extension Services. A serious gap in the current extension system for horticulture and other new high-value products for export is a mechanism for compiling and disseminating information on markets, certification, new production, and post-harvest technologies (e.g., packaging and labeling), financing, and other business services. There has been little demand for these services in the past and as a result the government extension service is not well prepared to provide them to producers and associations eager to engage in these exports. Burundi must take action to ensure delivery of agricultural services, technologies, and improved practices not only for traditional food crops but for a very different set of high-value products for export. A high-value export orientation will undeniably require a delivery platform that will be responsive and effective and learn from the very best systems around the world. Alternative models for reaching producer groups and rural enterprises for horticulture and other high-value markets should be reviewed.

Research Services. Horticultural research is minimal and concentrated at ISABU, Burundi's primary agricultural research institution. Such research activities have been limited in Burundi due mostly to limited budgets. Research supplies and equipment are hard to come by and there is a need to train additional researchers. Presently, ISABU's researchers concentrate mostly on selecting good cultivars for targeted fruits and vegetables. They also participate in efforts to produce and distribute plant propagation material. Horticulture crops targeted by ISABU include passion fruit, apple banana, mango, and papaya. One of the top priorities is access to new plant material.

There is little available for producers in terms of demonstration plots, farmer field schools, and the like. One possibility for jumpstarting the horticulture subsector is to lease out some fraction of unused land at the five ISABU research stations to 'model farmers' as demonstration fields for designated horticultural crops.

Vision of Horticulture Subsector Potential in the Medium-term

Enormous benefits have accrued to countries that have embraced global food and agricultural markets and made the investments necessary to be successful. In the horticulture arena, Morocco, Egypt, Nicaragua, and Vietnam are good examples of countries that have recently and successfully entered global fruit and vegetable markets, competing head-to-head with countries with more than 20 years of experience in successful FFV market penetration such as Kenya, South Africa, Chile, Brazil, Mexico, Guatemala, and Peru. Burundi's producers and exporters hold a vision for becoming an emerging market player in the medium term.

Elevating Burundi's horticulture exports over the next 10–15 years so they can compete will require: (a) sustained investment in building market relationships and intelligence on those value chains where Burundi's production conditions provide the highest probability of success; (b) improving critical points in these key horticulture product value chains to meet increasingly stringent private standards for quality, cost, safety, volume, and reliability of fruit/vegetable production and processing; and (c) creating an environment supportive of exports in terms of government policy, SPS, and other regulatory systems, and strong support institutions for research, extension, and human capital.

Recent experience in other countries has proven that while working with small-scale farmers in developing the horticulture value chain can be difficult, successful and sustainable export initiatives can be achieved when appropriate steps are taken in the critical areas mentioned above. Burundi holds strong potential to achieve the same degree of success if strategic development planning in the horticulture subsector is endorsed at all levels and the investments required to implement that plan are put in place. In the medium term, Burundi has the potential to become a highly competitive player in these increasingly lucrative markets, ultimately competing head-to-head with rival Uganda and even with regional giant Kenya in the longer term.

Interventions Needed to Realize the Vision: An Action Approach

Overcoming the 'Logistical Gridlock.' For Burundi's exports to grow and achieve competitive volumes and economies of scale, it is first necessary to break the 'logistical gridlock' due to limited and inflexible cargo space and low shipping volumes. Information gathered in Burundi from freight forwarders, airlines, and exporters shows projections on the cost of chartering planes of different capacities (planes readily available in the chartering market), and compares the cost per kilogram of chartering vs. regularly scheduled passenger flights (assuming no back-haul leverage; Tables 4.2 and 4.3). These figures indicate that chartering is, by far, a more cost-effective solution for Burundi's exporters than shipping on regularly scheduled passenger flights. In effect, chartering has a significant potential to increase the competitive position and 'staying-in-the-market capacity' of exporters in Burundi. It would allow them to remain profitable even as product prices decline or to realize greater profits when prices remain steady.

Aircraft	Pallets ^a	Tonnes	Total US\$	US\$/kg
B747-400F/ERF (main deck)	30	149.5	120,000	0.803
DC 8	13	64.8	70,000	1.081
B727-200F	12	59.8	60,000	1.003

a. 1 pallet = 4,983 kg payload

Aircraft	Charter	Regular	Difference
B747-400F/ERF (main deck)	0.803	N/A	N/A
DC 8	1.081	1.80–2.00	0.72–0.92
B727-200F	1.003	1.80–2.00	0.80–1.00

Chartering is, by far, a more cost-effective solution for Burundi's exporters than shipping on regularly scheduled passenger flights. In effect, chartering has a significant potential to increase the competitive position and 'staying-in-the-market capacity' of exporters in Burundi. It would allow them to remain profitable even as product prices decline or to realize greater profits when prices remain steady.

Once this logistical gridlock is overcome, the export flood gates will open, further lowering shipping costs as economies of scale are created with increasingly large export

volumes. Investors will respond by initiating or increasing capital inflows into Burundi. A carefully implemented program of charter flights aimed at reducing the risk for producers, exporters, and freight forwarders is the fastest and most realistic strategy for breaking this logistical dilemma. This solution will result in the movement of horticultural products directly and quickly to targeted markets.

Identifying Potential Markets. The traditional thinking in a number of developing economies looking to expand their horticulture export markets has focused on developed economy markets such as North America or Western Europe, which were historically the only markets for high-value FFV exports. Such an approach may represent great opportunities, but at the same time it also brings special challenges and, in fact, may be a result of ignorance of the realities of today's global markets. Table 4.4 breaks out the major constraints and opportunities of developed economy markets, particularly European Union markets and emerging/regional markets, devoting special attention to potential market opportunities for Burundi in the Middle East. Its aim is to 'remove the blinders' and entertain a broader range of market opportunities for FFV exports from Burundi.

The recent wave of globalization for horticultural products was characterized by the commoditization of former niche products. Once products become commodities, consumption growth rates tend to stabilize or decrease at the expense of the growth of other niche products such as exotic tropical fruits and vegetables. However, it is difficult to develop an ambitious horticulture export strategy solely on niche products because volumes may only be supplied by a limited number of growers. A combination of medium-volume niche markets and careful selection of niche products that can quickly grow in volume in the near future is necessary. Using the specialty fruit category as an example, apple bananas or tree-ripened mangoes could stand out on supermarket shelves as a novelty item compared to the traditional bananas and hot-water-treated mangoes. At the same time, other lower-volume fruits such as cherimoya or Peruvian gooseberries could be promoted while volumes of the latter catch up and involve more farmers. Table 4.5 summarizes the advantages and disadvantages of targeting mainstream products vs. niche products as part of the Burundi horticulture expansion strategy.

Identifying Potential Market Initiators. A number of products can be identified as potential market initiators, or probable winners, for Burundi. They are identified based on: (a) volume potential of each product; (b) the degree of production experience already gained over the years by Burundi's producers; (c) the feasibility of transporting product to market by air within acceptable profitability thresholds; and (d) the immediate availability of targeted crops due to a short production cycle or available start-up volume already in the fields. Promising 'start up' products include:

- *Specialty vegetables* from temperate micro-climates such as green podded peas, baby vegetables (mini broccoli, baby and Chinese eggplants, carrots, cauliflower, sunburst, baby zucchini, etc.), leafy greens, and selected roots and tubers; and
- *Specialty fruits* such as apple bananas for export to Europe and the Middle East (Dubai); passion fruit to Uganda and elsewhere in the region and Europe; cherimoya for market window production in European and Middle East markets.

Action Plan. An action plan designed to jumpstart horticulture value chains in Burundi will include a broad range of steps and investments with special attention to the following.

Table 4.4. Markets, Constraints, and Opportunities for Burundi

Market	Constraints for Burundi	Opportunities for Burundi
Developed economy markets (particularly European Union)	<p>Low tolerance for failure to compete on cost, quality, volume, timing, and flexibility</p> <p>Longer travel distance; requires higher standards for quality, safety, and packaging materials.</p> <p>EU markets are stricter on environmental regulations regarding packaging materials.</p> <p>Commoditization of mainstream horticulture products, e.g., mangoes, papayas</p> <p>High-quality standards difficult for Burundi to meet in the short term (e.g., Eurep-GAP regulations)</p> <p>Shrinking market windows for exporting countries of the same products</p>	<p>Massive market of millions of consumers.</p> <p>Large ethnic populations with higher demand for exotic goods.</p> <p>Organic and environmentally friendly products in high demand.</p> <p>Capacity to customize production of small orders (by comparison to other products) of specialties</p> <p>Retail industry organization highly focused on category management. This means preferring suppliers who provide several or all products under the same category (e.g. tropicals or leafy greens) as opposed to just one</p> <p>Direct access to supermarkets and major wholesalers</p>
Emerging/regional markets (surrounding countries)	<p>Cost-driven markets</p> <p>Feeder roads to trunk roads in Burundi are limited to gather/consolidate product across different production areas.</p> <p>Trucking availability is also limited, especially reefer containers necessary to reach sizable markets 2–10 days away such as Kigali, Mombassa, Kampala, Nairobi, etc.</p> <p>Products may compete with local production if no quality differentiation is attained</p>	<p>Relatively short travel distances within the country favor transportation of perishable products</p> <p>Higher tolerance for lower quality, volume, timing and flexibility</p> <p>The rise of supermarkets in several neighboring countries such as Kenya represents an incipient opportunity to establish long-term supply contracts.</p> <p>Incipient category management criteria</p>
Emerging markets, the Middle East countries oriented toward free trade (Bahrain, Kuwait, Oman, Qatar and the United Arab Emirates)	<p>Increasingly demanding on cost</p> <p>Sales programs must include supplying several products under one category as opposed to only one or two products</p> <p>Direct transport services lacking</p> <p>Difficult to negotiate pricing</p> <p>High quality demanded</p> <p>Buyers may not be trustworthy, requiring very close supervision and intensive management of accounts</p> <p>Difficult to find consistent wholesalers</p> <p>Neighboring countries such as Kenya have already started to develop these markets for temperate and tropical products. Afghanistan, with USAID support, has started an aggressive program exporting specialty vegetables and leafy greens</p>	<p>High potential to establish category management supply programs with supermarkets and the hospitality business sector</p> <p>Shorter flying time than to EU markets</p> <p>Food products face no quantitative restrictions on tariff or non-tariff barriers except for vegetable oils</p> <p>These countries import 90 percent of their food needs</p> <p>One-stop redistribution hub (Dubai) to other Middle Eastern nations</p> <p>More tolerance to quality, food safety, and packaging standards</p> <p>Payments are upon arrival and acceptance of shipments</p> <p>High demand for tropical and semi-tropical products</p> <p>Prices higher than in European markets</p>

Table 4.5. Advantages and Disadvantages of Mainstream and Niche Markets

Market	Constraints	Opportunities
Main stream markets	Require large volumes of product; more quality, food safety and packaging awareness; lower pricing; demand large and very efficient packing facilities; require high-capacity hard infrastructure for shipping and logistics such as large roads, ports, airports, electricity and water, communications, etc.	Movement of large volumes rapidly to achieve dimension, economies of scale, and lower cost
Niche markets	Usually low-volume transition markets; specialized requirements for production, post-harvest, shipping, and distribution demanding higher technology levels along the supply chain	High demand for exotic, organic, environmentally friendly, Fair Trade products; higher prices

Horticulture subsector development strategy. Key to the strategy will be engagement of stakeholders including producer groups, exporters, freight forwarders, government officials, donors, and relevant support institutions that will provide research, extension, and business services. The strategy will enable progress in an organized step-by-step fashion and with the consensus and ownership of the stakeholders. Buy-in at all levels will be essential. The strategy will also identify specific markets and products that will serve as the target for stakeholder actions and investments. Another important component of the strategy will be elucidation of a collective vision for growth in the medium term.

Competitiveness assessment. A second immediate-term investment that will be instrumental to the development of a horticulture strategy for Burundi is implementation of a competitiveness assessment based on profitability thresholds in promising markets. The competitiveness assessment will serve as a component part of a platform from which to launch Burundi's export industry. It will focus not only on high-potential products recommended as 'market initiators' or probable winners, but also on fresh products with fast-growing demand, emphasizing high-value specialty fruits and vegetables and organic and fair trade products that bring additional benefits to Burundi.

Once a well thought out strategy and path to growth is in place, efforts can be focused without delay on breaking the existing transportation-production gridlock. This step will open the door to larger quantities of horticulture exports at competitive costs, particularly for products already established in Burundi and with secured external markets.

Horticulture production actions. Ramping up production to fill higher volume market demands, particularly as charter flights are initiated, will require a field-based supply program for targeted fruits, vegetables, flowers, and ornamental plants. This program will spearhead the export development effort through the following practical steps:

- Provide technical assistance aimed at the increasing volume of horticulture products for export and improving their quality and safety;
- Strengthen SPS management capacity;
- Develop management capacity of targeted producer cooperatives and horticulture exports enterprises; and

- Establish a small investment fund (SIF) to address producer/exporter ‘seed capital’ needs and lower risks associated with an emerging horticulture subsector.

Horticulture supply chain actions. Burundi presently faces a great challenge in the development of efficient supply chains that will connect the market with the production base through the smooth flow of horticulture products to regional and global distribution centers. Specific practical solutions to the most immediate challenges that will support and complement steps to break the transportation-production dilemma are:

- *Post-harvest, logistics, and transportation infrastructure.* Key steps include: (a) increased cold storage capacity at the airport by adding at least one 40-foot reefer container. This action will facilitate loading/servicing of aircraft supplying the increased cargo space by expanding a needed suitable staging area that will protect the shelf life of fresh products being exported. (b) Construct at least two product gathering/packing facilities that comply with IPPC SPS standards. One facility should be located in the highlands to service temperate products and the other in the lowland plains along Lake Tanganyika to service warm temperature products.
- *Agricultural inputs and packaging material availability.* Steps include: (a) use of charters flying (back-haul) to Burundi to transport sufficient quantities of agricultural inputs and packaging materials; (b) tapping regionally available but competitive sources of inputs (Kenya, Middle East); and (c) expanding and improving the existing plant propagation material handling and distribution effort to match market needs for crops and varieties and reach more farmers engaged in production for export.
- *Enabling environment for policies and institutions.* Actions are needed to create a favorable business climate that will facilitate and catalyze horticulture value chains. Initial actions to improve Burundi’s export environment include: (a) improving SPS management systems aimed at instilling confidence in trading partners that products from Burundi are free of insect pests, diseases, and pesticide residues; (b) implementing export policy and export incentives (e.g., lower air freight landing costs, grant import tax relief on export-related inputs); (c) making more business services available through mechanisms such as the *Maison de l’Hortofruticulture* (STABEX initiative); (d) developing a pool of trained horticulture export managers; (e) strengthening horticulture support institutions (ISABU, extension system, etc.); and (f) strengthening credit markets and lowering the cost of financing.

Field-based value chain development program. Actions addressing many of these immediate and near-term needs can be implemented through a field-based program designed to make Burundi’s horticulture exports a success story in the coming years. This is a program that must address the major elements of the horticulture strategy and action plan. Needed most is a market-led program that will provide market access to small- and medium-scale farmers and forge alliances with private sector companies in and outside of Burundi, producer groups, cooperatives, NGOs, government agencies, and international donors.

Essential components of the field-based program include: (a) a market-oriented export promotion framework; (b) a committed presence in the field to help growers and exporters; (c) a wide spectrum of horticulture products offered to local, regional, and export markets

based on sound business opportunity assessments; (d) customized training and capacity building on market penetration and supply chain development; (e) extensive alliances with different stakeholders involved in horticulture exports, including large multinational companies and regional supermarkets that are in a position to leverage resources, experience, and know-how; and (f) a small investment fund (SIF) that allows for risk sharing with producers and exporters, creating de facto commercial partnerships with the program.

