How Business Strategy is Transforming Rwanda

NEAL DONAHUE

"Hope is definitely not the same thing as optimism. 'It is not the conviction that something will turn out well, but the certainty that something makes sense, regardless of how it turns out."

—VÁCLAV HAVEL

In July 1994, forces of the Rwandan Patriotic Front (RPF) entered Kigali and ended a genocide that took the lives of 800,000 Tutsis and moderate Hutus. The military actions of the RPF, the creation of the government of national unity, and the assistance of international donors restored hope to Rwanda. Millions of displaced people returned to Rwanda and began the effort to rebuild their lives.

Over the past decade, Rwanda has used this hope to build a new society and create the foundation of a stable economy. Rwanda's economy grew steadily during the last decade, and the standard of living is slowly improving. The Government of Rwanda has set the target of achieving middle income status by 2020. To achieve this ambitious goal, Rwanda must have a GDP per capita of US$900/year. Assuming the population continues to grow at recent historic rates, Rwanda will have 16 million citizens in 2020. Taken together, that means that the economy of Rwanda must grow from its US$2 billion in 2000 to almost US$14.5 billion in 2020. What can Rwanda do to sustain a required growth rate of 8 percent per year?

A nation's standard of living is determined by its productivity—that is, how well its citizens work together to create value for foreign customers and for one another. Economist Paul Krugman writes, "A country's ability to improve its

Neal Donahue is a project leader for the On the Frontier Group and has focused on re-integrating post-conflict economies with global markets in countries including Afghanistan, Rwanda, and El Salvador.

standard of living over time depends almost entirely on its ability to raise output per worker."[1] Even taking into account all of the forces at play in the rapidly changing world economy, the only way a nation can generate a higher standard of living is to become more effective at satisfying the needs of demanding customers and partners.

Improving the productivity and competitiveness of coffee would significantly improve the overall economy in Rwanda, especially since it represents the country's major export. Coffee and other basic agricultural products are not typically seen as industries where competitive advantage can be sustained. Because there is often severe pricing pressure from other suppliers, there are subsequently intense demands to hold down increases in labor rates. However, Rwanda has found that enhancing its market position in coffee can be the first step to creating a competitive economy and a prosperous society.

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This article briefly lays out the historical actions that pushed the Rwandan coffee industry to the brink of destruction and describes how the principles of business strategy (applied at all levels of the industry and involving all key constituencies) produced an industry turnaround that has become both a model for the country's economy and a source of optimism for foreign investors considering investments in Rwanda.[2]

IN PURSUIT OF THE CENTRAL ECONOMIC GOAL

Countries and companies that export complex products generate profits that they can re-invest in higher compensation and worker training. Better-trained and motivated workers improve a nation's capacity to export increasingly complex products that can provide sustained increases in wealth for average citizens. For relatively small economies, the challenge is to create a "virtuous cycle" of investment in human capital; developing more highly sophisticated exports is a means to this end. In addition, there is a growing belief in social development literature that prosperity is linked to positive human values.[3]

Developing countries that rely on basic factor advantages such as cheap labor and sub-soil assets tend to export basic commodity products. Since competition in these exports is fierce and the products are largely undifferentiated, countries and firms typically compete on price: the lowest cost producer becomes the market leader. This dynamic is the principal cause of the steady decline in real prices of most major commodities over the last 150 years. In order to keep costs low, producers choose not to invest in human capital; they pay workers less money. As a result, competition in basic products can increase poverty and lead countries into a downward spiral of wealth destruction.

With the exception of Singapore, no economy has ever developed without an agricultural base. Why have some countries succeeded at moving beyond their agricultural roots to produce complex goods and services, while others have stagnated in an agricultural export economy, or worse, slid into a subsistence farming economy? To put it in stark terms, countries have a choice between strategy and poverty. When firms and industry clusters have strategies, they can embed their products with unique insights about customer needs, thereby lifting them out of the commodity trap. Countries with strategies can also take the rents they capture from their natural resources and low-wage labor and invest those rents in developing social capital in the form of educational institutions and improved governance. Over time, these institutions can support a higher skilled workforce that can produce more complex goods, allowing the country to migrate from exploitation to innovation.

The central economic goal for a nation is attaining an elevated and rising standard of living for all of its citizens. This is reflected in increased per capita income and high-paying, satisfying jobs for a large proportion of those who are able to work. Consequently, the pursuit of the central economic goal is driven by rising productivity, which is based on the nation's stock of the seven forms of capital: cultural, human, knowledge, institutional, financial, man-made, and natural endowments. Increasingly, growing economies rely heavily on the more complex advantages needed for innovation.

FIGURE 1: THE SEVEN FORMS OF CAPITAL[4]

	Representative Elements	*Representative Examples*
Cultural	Tangible Articulations Norms *Mental Models*	Architecture, Music, Language Range of Acceptable Behaviors ***Trust, Wealth Creation Attitudes, Long -term Thinking***
Human	Health and Population Education and Training Attitudes and Motivation	Nutrition, Medical & Mental Health Primary & Secondary, Technical **Self-responsibility, action -orientation**
Knowledge	*Qualitative, Quantitative Data* *Frameworks and Concepts* ***Insight Generation***	*Statistics, Opinions, Records* *Theories, Processes, Procedures* *Universities, R&D, Market Learning*
Institutional	"Good, Clean Governance " Justice System ***Connective Organizations***	Transparency, No Hidden Costs Property Protection, Predictable Regulations *Chambers of Commerce, Unions*
Financial	Financial Systems ***Private Wealth*** ***Public Wealth***	Banks, Stock Markets *Bank Deposits* *Bank Reserves, Taxes, Duties, Macroeconomic Stability*
Man-Made	**Transportation, Communication** **Power** Water and Sewerage	Roads, Ports, Telephone Systems Electric Grids, Generation Capacity Pipelines, Pumping Stations
Natural Endowments	Environmental Issues ***Raw Materials*** ***Climate and Location***	Conservation, Restoration *Agricultural, Mineral, Petroleum* *Proximity to Markets*

PROSPERITY: GOVERNMENTS ENABLE IT, BUT ONLY FIRMS CREATE IT

Governments foster prosperity by directing long-term efforts to exploit physical capital and build social capital and by using lower forms of capital to support the development of higher forms of capital. The ability of Rwandese firms and clusters to compete—to produce products and services for which customers are willing to pay a premium—is based on the stocks and flows of the seven forms of capital. Mapping these stocks and flows allows one to better understand how the economic, social, and political forces of Rwanda shape the overall business environment.

The seven forms of capital describe the overall "enabling environment"; they give us the context and rules of the game by which firms must compete in order to generate wealth and prosperity. Firms create prosperity through a combination of strategic choice and operational efficiency. First, they make better choices about which customers to serve and what services to offer. To build and sustain a high standard of living, they must offer complex, high-value services to demanding customers. Second, they become more efficient in how they combine people and other resources to deliver their services to customers. It is not just about working harder and eliminating waste; it is also about working smarter and selecting more lucrative opportunities.

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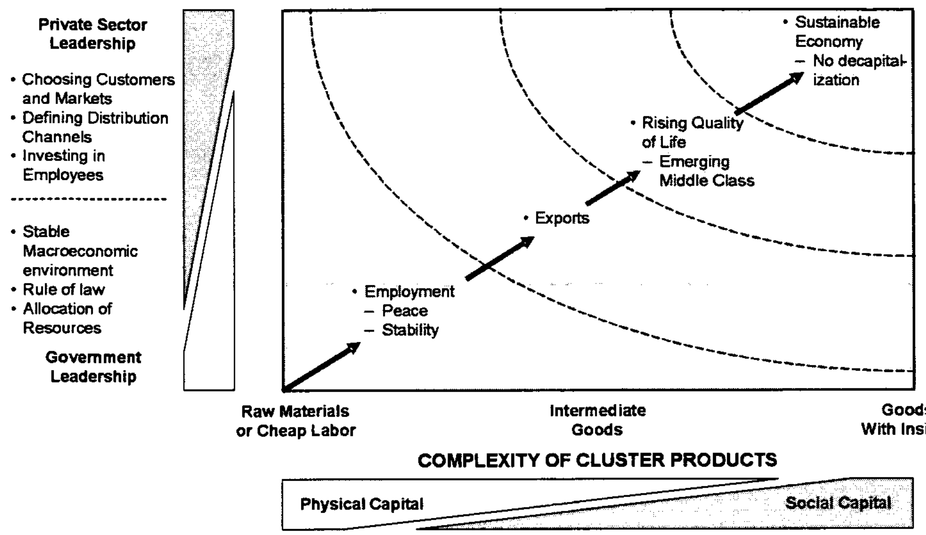
The challenges facing a developing country would be simpler if the roles of the government and the private sector were less murky. In reality, the roles of economic players begin to take shape only as the country and economy develop. In an economy's nascent stages, when limited capital is focused entirely on natural resources, infrastructure, and hard currency, the government must play a commanding role in allocating limited resources to create a stable macroeconomic environment, establishing a clear and transparent rule of law, and laying the groundwork for a private sector. The key objectives in this phase are peace and stability.

Once the foundation is set and the private sector begins to emerge, the government must begin handing off economic leadership to the private sector. Only the market forces of a free and unfettered private sector can direct investments toward creating the higher forms of capital a country needs. At this point, the government's role needs to shift from being a nurturing parent to being an impartial referee. Figure 2 highlights how the changing roles of leadership, along with the increasing investment in higher forms of capital, combine to create a more complex, secure and sustainable economy.

FIGURE 2: THE EVOLUTION OF A DEVELOPING ECONOMY[5]



Without this transition of leadership to guide the growth of the economy, the forces of paternalism and protectionism can undermine the economy's ability to move beyond simple exports to complex goods—goods that can grow and sustain an economy without decapitalizing the natural resources or exploiting low-cost labor.

RWANDAN COFFEE: CREATING PROSPERITY IN RWANDA

In terms of climate and other conditions, Rwanda is nearly a perfect environment for growing some of the highest quality coffees in the world. It is three degrees from the equator, and its high altitude brings warm sunny days and cool nights. It has consistent and appropriate volumes of rainfall to support coffee production. A controlled-environment greenhouse could only match what Rwanda possesses naturally.

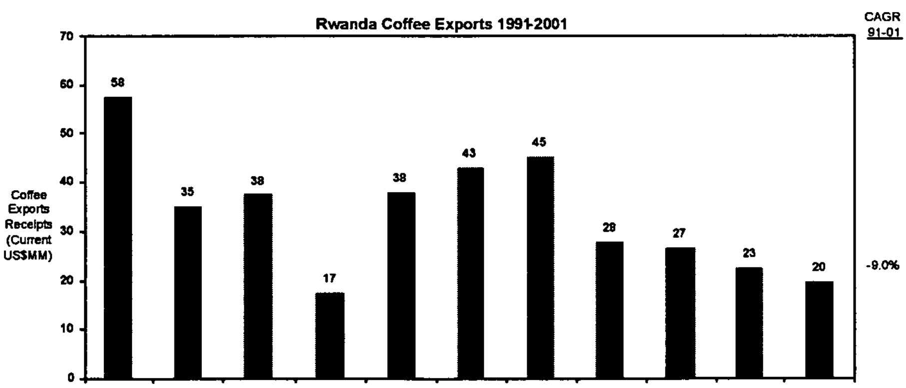
In spite of its natural attributes, Rwanda has historically produced only average grades of coffee. In fact, during the last decade, it has produced decreasing volumes of lower and lower grades of coffee. How can a country and an industry with so much potential perform so badly? As discussed earlier, Rwanda had two choices: strategy or poverty. A decade of war, instability, and mismanagement converged in the Rwandan coffee industry to create poverty.

In the early 1990s, under pressure from multilateral donors to implement macroeconomic reforms, the Rwandan coffee industry was liberalized, and state-owned assets were privatized. The effects were swift and harsh: the prices paid to farmers, which had historically been stable, began to fluctuate wildly, and asynchronous market information resulted in the exploitation of growers.

The 1994 war in Rwanda effectively brought coffee production to a halt. Coffee plants were abandoned, crops withered on the trees, and much of the already limited infrastructure was destroyed. As the industry began mobilizing to rebuild in the late 1990s, it faced fundamental problems. The most serious was that global supply of commodity coffee consistently exceeded demand, driving coffee prices below the cost of production in all but a few countries. For example, during this period Vietnam came online with vast new capacity to produce low-grade Robusta coffee, causing international prices to plummet. The countries that succeeded in producing commodity coffee had one thing in common: low wages. By 2000, low-grade commodity coffee was a cost-based game where the only major variable was labor rates. In effect, it was a contest to see which producing country could stay poor the longest by continuing to keep wages to farmers the lowest.

Under these conditions, Rwanda suffered greatly. In 1992, Rwandan coffee production accounted for $60 million and 60 percent of the country's exports. By 2001, coffee exports had dropped to $20 million, representing just 30 percent of total exports[6]. In every dimension that mattered—quantity, quality, and price—the Rwandan coffee industry was in rapid decline.

FIGURE 3: RWANDA COFFEE EXPORTS 1991-2001[7]

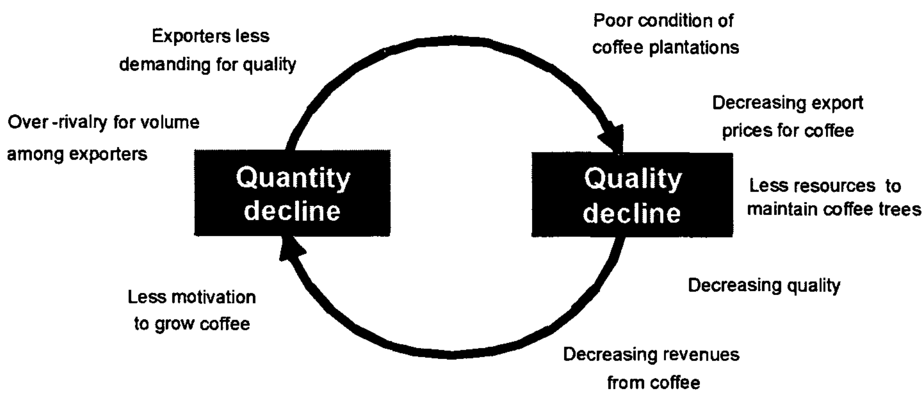


	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	CAGR 91-01
Percent of Exports	60%	51%	56%	54%	75%	70%	49%	40%	43%	34%	30%	-5.6%
Total Export (in Mio US$)	96	69	68	32	51	62	93	64	62	69	73	-2.7%

Rwanda's coffee industry was trapped in a low-quantity/low-quality loop—a vicious cycle in which declines in quality triggered declines in quantity and vice versa.

In a market where all farmers received the same basic price for their coffee regardless of the quality, no one was motivated to invest in the maintenance of their plantations or to become selective about picking only the ripe coffee cherries. Without incentives, quality gets worse and the entire industry is soon hit with a price discount on its already-low commodity price. This effect was reinforced by the intense rivalry among the coffee exporters to increase volume in order to cover their fixed costs (a nearly impossible task given the significant surplus in local processing capacity). Ironically, however, Rwandan exporters were paying growers higher and higher prices for lower and lower grades of beans, even as global market prices fell to historic levels. Rwandan coffee exporters had attributed the decline in commodity prices to cyclicality; they hoped to outlast their competitors and enjoy market dominance when coffee prices rebounded.

FIGURE 4: RWANDA'S COFFEE INDUSTRY TRAPPED IN A LOW QUALITY – LOW QUANTITY LOOP [8]



Even without the market price inversions set off by the exporters, there were a number of disturbing signs that the industry was headed for hard times. A lack of available long-term financing meant that there were only four coffee washing stations in the entire county, compared to more than 2,000 washing stations in Kenya. The dearth of washing stations prevented the vast majority of Rwanda's coffee from being processed into high quality beans and hampered the development of quality control systems since production could not be aggregated until the coffee was long out of the hands of farmers.

Also disconcerting was the poor condition of Rwanda's plant stock. Many of the coffee trees were abandoned during and after the genocide, resulting in a lack of care and pruning. When attention was paid to the coffee trees, the cost of fertilizer and pesticides and the lack of extension services limited farmers' efforts. More than 25 percent of Rwandan coffee trees were at least 30 years old, and most trees were varieties that produced relatively small amounts of coffee.

Rwanda averaged only 350 grams of coffee per tree versus more than 1.5 kilograms per tree in Costa Rica.[9] Moreover, in a country as small and densely populated as Rwanda, there was little available land to expand coffee cultivation.

UNLEASHING RWANDA'S COFFEE POTENTIAL

If Rwanda was going to have a prosperous future in coffee, the only realistic option was to migrate the country's production into high-quality Arabica coffee that could be sold into the specialty coffee market. To begin with, there are natural barriers to producing high-quality Arabica coffees, and the specialty market is the only coffee segment showing projected growth both in volume of demand and price per kilo.

To make coffee a cornerstone of the economy, the industry needed to answer four critical questions: 1) Is the high-quality coffee (specialty coffee) market attractive? 2) Could Rwanda produce a high-quality coffee product for this segment? 3) Could it satisfy customer needs? 4) Were Rwandan coffee operators ready to make the required attitudinal changes?

1) The Attractiveness of the High-Quality Arabica Coffee Market

Although overall growth of coffee demand is projected to be modest through at least 2007, there is one bright spot: the high-quality Arabica segment has sustained growth rates of more than 15 percent per year, and it captures price premiums of 50 percent or more over the price of commodity coffee.[10] (In dollar terms, this premium ranges from 20 cents to several dollars per pound of green coffee.) In the United States, this segment represents only 15 percent of the volume of coffee, but it captures 40 percent of the value.[11]

On the production side, the market for high-quality coffee also contains two niche segments: 1) appellation coffees, which benefit from a brand recognition associated with the region, origin, or estate of production (e.g., Hawaiian Kona or Kenya AA); and 2) sustainable coffees, which have secondary attributes that can justify a price premium from socially conscious coffee buyers (e.g., organic, shade-grown, or Fair Trade™). Although these niches often receive significant attention, it is important to keep their value and size (and the difficulty in serving them) in perspective.

Appellation coffee—where coffee producers are able to sell brand-name products to consumers—is the most sustainable and defensible niche in high-grade Arabica coffee. Producers are able to achieve success only by delivering consistency in quality and quantity over time, which gives intermediaries the confidence to invest in downstream branding. Sustainable coffees can offer growers modest price premiums over other high-quality Arabica, but those premiums often come at the cost of lower yields. Out of all high-quality Arabica, sustainable coffees account for substantially less than 10 percent of the overall segment, according to most market analysis.[12]

The historical and continued growth of the high-quality Arabica segment can be attributed to three factors. First, in the United States, Europe, and Asia, consumers are willing to pay significant premiums for a "coffee experience" where atmosphere and setting are roughly as important as the taste and quality of the coffee itself. If Starbucks Coffee didn't invent the coffee experience, it certainly made a success from capitalizing on it. In 1990, Starbucks had 84 retail locations in the U.S. As of early 2004, the chain had 7,569 stores (a compound annual growth rate of nearly 38 percent).[13]

Second, in addition to the larger coffee chains, there has been an explosion of small and micro-specialty coffee roasters during the last decade. This movement originated in the U.S., where in less than 20 years the number of micro-roasters has grown from fewer than 100 to more than a 1,000.[14] Typically, small roasters have integrated retail facilities where they produce high coffee quality based on rigorous selection and small-batch roasting.

Finally, the premium quality coffee segment dominated by large commercial roasters with brands such as Millstone (U.S.) and Dahlmayr (Europe) continues to grow. Even though these companies do not purchase the highest-quality Arabica, they offer growers consistent premiums of 15 to 20 cents per pound of green coffee and represent an attractive bridge segment where producers can still get a premium for coffee that fails to meet the highest standards.[15]

2) Rwanda's Potential to Produce High-Quality Arabica Coffee

As previously noted, Rwanda is endowed with all the natural conditions to grow a high-quality Arabica coffee, and these conditions form entry barriers that less fortunate coffee-producing countries cannot overcome. However, beyond the natural growing environment, it is important to have high quality standards, which require attention and screening once the coffee cherries are harvested from the trees. In addition, coffee washing stations are essential for processing coffee cherries into high-quality green coffee beans.[16] The washing stations are a natural point of aggregation for coffee cherries; this permits quality control to be applied early in the value chain, allowing farmers to receive immediate feedback.

In the coffee industry, quality is judged entirely on the results of sophisticated cupping tests: how identically prepared cups of coffee are rated by tasting experts who are trained to smell and taste samples to identify defects (i.e., beans not picked at the correct time or mold) that affect coffee quality. In early 2002, Rwanda received highly encouraging coffee cupping test results from two major American specialty coffee roasters/importers (Green Mountain Coffee and

Sustainable Harvest). Fully-washed coffee from the Maraba pilot washing station in southern Rwanda outscored competing high-quality coffees from Guatemala and Mexico with an average score of 80 out of a possible 100 points (above 75 points qualifies as specialty coffee); and fully-washed coffee from Gisenyi in North Western Rwanda scored 85 points. These results demonstrated that impressive product quality could be achieved with the right infrastructure, minimal additional inputs, and improved education and training. Natural conditions are of course essential, but Rwanda needs to develop other forms of capital, knowledge, human resources, institutions, culture, infrastructure, and finance in order to build a competitive coffee cluster and to ensure high product quality on a permanent basis.

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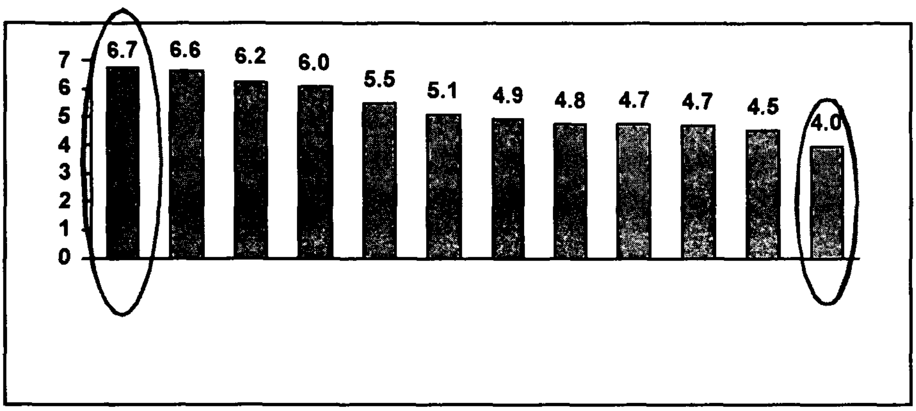
3) Rwanda's ability to satisfy the needs of the most demanding customers

Coffee quality by itself is not sufficient to satisfy the needs of importers and roasters of high-quality coffee. A 2000 survey found that while many importers/roasters who, knew Rwandan coffee did not perceive it as a quality product, more than 60 percent of the surveyed importers/roasters were not familiar with Rwandan quality coffee.[17] This provided coffee operators with a new group to introduce to Rwandan coffee and an opportunity to make their first impressions strong. Roasters/importers seek out stories about high-quality coffee from up-and-coming regions in order to differentiate their offerings in end-consumer markets; many of them signaled a strong interest in testing Rwandan coffee.

While quality determines the initial admission into the high-quality coffee industry, coffee suppliers need to satisfy other customer expectations such as consistency and reliability to win the game. The exhibit below highlights the product and supplier criteria that Rwanda needed to address to enter the specialty coffee market. Most importantly, Rwanda coffee producers, in their migration from a commodity to a specialty focus, needed to make a fundamental shift in the importance they gave to price and quality.

FIGURE 5: CLASSIFICATION OF PRODUCT SELECTION CRITERIA FOR HIGH QUALITY ARABICA COFFEE[18]



Note: 0 = not at all important; 7 = very important

4) Readiness to make the required attitudinal changes

The three hurdles we have discussed involved the market potential and the physical constraints facing Rwanda in its effort to produce and export high-quality Arabica coffee. The fourth hurdle is the willingness of Rwandan producers to take the necessary risks. In Rwanda, the attitudinal change has been shaped by five conditions: tension, receptivity to change, moral purpose, knowledge, and leadership.

A lack of trust and a reluctance to cooperate within the coffee industry are common characteristics in coffee-producing countries where success has long been based on controlling costs and asynchronous information. Typically, either a handful of exporters or a strong national coffee board exercises control over the industry. If Rwanda had attempted to move from commercial to specialty coffee during the late 1990s, large coffee operators probably would have resisted. However, the global coffee crisis that nearly destroyed the industry also created a heightened degree of *tension* among the industry leaders, which helped bring them together to discuss the problems. At the end of 2001, the tension in the coffee industry was palpable. Every firm in the entire coffee production chain was suffering operating losses.

Leadership could only emerge once the other four conditions for change—tension, receptivity to change, moral purpose, and knowledge—came together.

The coffee industry's *receptivity* to change came about only when the tension was transformed into openness for concrete action. Firms had entered the strategy development process highly focused on their own self interest and with low levels of trust. But for the first time, they recognized that the health of the industry was as important as their own immediate needs. Continuous cooperation among cluster members, together with a clear understanding of the individual benefits they might gain from such cooperation, helped them overcome the barrier. Among the participants there had been a longstanding perception that cooperation and competition could not coexist. However, the tone of the conversation changed as people expanded the discussion to include consideration of accurate data.

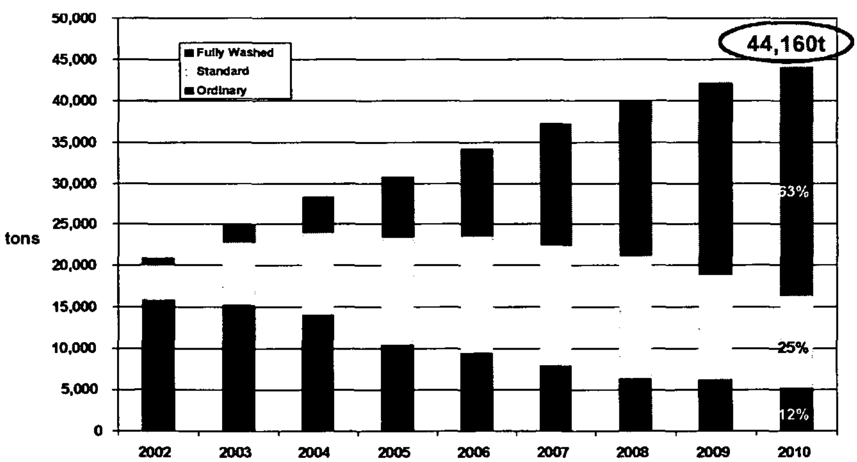
The willingness of the members of the coffee cluster to aim for prosperity and equitable growth can be credited to a growing sense of *moral purpose.* Given Rwanda's recent history, the public sector leaders were intent on achieving economic growth and transformation. This motivation was not as strong in the private sector, particularly among exporters who had traditionally viewed other members of the value chain (i.e., intermediaries and farmers) as costs to manage rather than resources for investment. According to one exporter, low coffee prices for Rwanda's approximately 500,000 coffee-growing families was not really a problem: "In reality these farmers do not have any real costs in growing 100 coffee trees in their backyard, and therefore even 12 cents/lb is pure profit."[19]

Knowledge comes from many sources and develops over time. In the coffee industry, relevant market information could be shared. On the product side, expertise in the form of technical assistance could be brought in where needed. To enter the high-quality Arabica coffee market, Rwanda needed to build and operate coffee washing stations; but, very little expertise for such an endeavor existed within the country. Rwanda also needed to learn from other countries that had attempted to produce high-quality coffee. For example, Burundi had built more than 100 washing stations, with support from the World Bank, in an attempt to upgrade its coffee quality and earn price premiums. However, despite the new infrastructure, Burundi failed to transform its coffee industry. The washing stations alone were not sufficient to achieve the gains it sought. Without professionalism at every point in the coffee value chain, Rwanda risked similar disappointment.

Success demanded collective *leadership* from both the public and private sectors, and it had to be motivated by a common vision. Leadership could only emerge once the other four conditions for change—tension, receptivity to change, moral purpose, and knowledge—came together. Every endeavor depended on the work of early-adopters to create examples and successes to help bring the rest of the group along.

By engaging in productive dialogue that relied on data rather than opinion, the Rwandan coffee cluster was able to form the "Coffee Cluster Working Group." Comprised of leaders and representatives of growers, cooperatives, intermediaries, processors, and exporters, the working group was mandated to develop a strategy to rebuild the coffee industry that would be accepted and implemented by both the public and private sectors. The Coffee Cluster Working Group developed an ambitious goal: increasing annual production from 19,000 tons of coffee in 2001 to 45,000 tons by 2010. By 2010, 60 percent of Rwanda's production would be fully washed Arabica coffee that would generate a premium price on the international market. If achieved, this output would produce export earnings of at least $120 million/year by 2010. Achieving this objective would also mean higher earnings and profits for all cluster members in the coffee value chain. The Coffee Cluster Working Group's analysis showed that their strategy would yield a positive net present value of $63 million.[20] In terms of prosperity creation, the integrated coffee strategy was projected to increase farmer income six-fold, from an average of 150 Rwandan Francs (FRW) per day ($0.30) to 900 FRW per day ($1.80).[21] Furthermore, if coffee grower associations were able to join together with investors to build and operate washing stations collectively, the profits from these investments could become an additional source of wealth for growers and other cluster members. In a nutshell, the sharp increase in export earnings would put everyone in the coffee cluster in a better financial position, and coffee would become a major economic engine helping Rwanda alleviate rural poverty.

FIGURE 6: RWANDA COFFEE PROJECTIONS[22]



	2002	2003	2004	2005	2006	2007	2008	2009	2010
# of Washing Stations	6	12	20	31	43	58	73	90	107
Yield per tree in kg/tree	0.35	0.42	0.47	0.51	0.57	0.62	0.67	0.70	0.74
Revenue (in mio US$)	22.0	33.1	41.2	54.3	65.5	74.9	89.1	104.5	117.1

Aspirations and targets are an important first step in industrial development, but the failure of Burundi to grow exports after significant investment underlines the importance of careful and realistic planning: Rwanda needed a clear long-term plan with identified actions and assigned responsibilities. Failure to coordinate the right actions and investments could have destroyed the potential value. Based on this awareness, the Rwandan coffee cluster developed a set of action guidelines to unleash Rwanda's coffee potential on a national scale. Cluster members assumed responsibility for making changes that no single company, cooperative, or government office could achieve on its own. The action guidelines were divided into three major areas outlined below: product development, marketing & promotion, and institutionalization.

Product Development

In order to achieve its strategic objectives, the coffee cluster strategy required four product development initiatives: building coffee washing stations, improved agronomist support to coffee farmers, the replacement of aging tree stocks, and the development of local coffee cupping expertise.

Rwanda is building the first few of a planned 100 coffee washing stations to be completed by 2010. To be valuable, these stations must be located close enough to farmers to allow them to bring their cherries for processing, and they must be located on hillsides with sufficient fresh water and electricity to operate the facilities. Rwanda used geographic information systems (GIS) data from the National University of Rwanda to overlay farm locations, hydrology data, topographical data and a map of the nation's electrical grid to select the locations of these facilities.

OCIR Café, the government agency which supports the coffee industry, is improving the technical assistance it provides to coffee associations and farmers by upgrading communications technology to allow the field agronomists to more quickly respond to requests for services. Additionally, the coffee washing stations will serve as both technical libraries and community centers to allow farmers to share information and advice on best practices.

The coffee associations and farmers are working with OCIR Café to identify coffee tree varietals that are best suited to produce premium coffee under Rwanda's climate conditions. This replacement of the stock is slowed not only by the initial cost of replacing the trees, but the lost production while the tree matures, and the need to control against cross-fertilization.

OCIR Café is developing cupping expertise and implementing quality check points throughout the coffee production process. This oversight by a government agency is a short-term solution to bring the expertise in country and will be quickly substituted by the private sector expertise of specialty coffee exporters who find cupping expertise to be a significant competitive advantage.

Marketing & Promotion

Producing quality coffee is only half of the story. The coffee associations and farmers also need access to accurate local and international market prices to ensure that they capture the appropriate value for their product. Coffee farmers and associations are developing, testing, and implementing innovative promotional activities, both locally and abroad, to build the various Rwandan coffee brands by establishing partnerships with hotels/airlines, launching marketing initiatives abroad at fairs and events, and leveraging the East African Fine Coffee Association, an institution which promotes the production and sales of specialty coffee in East Africa. Locally, the cluster is working to create a coffee-consumption culture by introducing people to the taste of high-quality coffee

Institutionalization

To represent the ongoing interests of all coffee operators, from the farmers to the exporters, Rwanda is building the "Intercoffee Association" which will facilitate further coordination and planning of cluster strategies. As one of their first coordination efforts, this association is creating a website to provide market information and technical information to the washing stations and coffee associations. Individually, coffee associations and farmers are working with Rwandan financial institutions to ensure that microcredit products and services are available to finance the coffee-growing season.

MOVING FROM PLANS TO ACTION

As of March 2004, the Rwandan coffee cluster has made significant progress toward its goals for 2010. The industry has struggled to make the necessary changes to shift its production and adopt a new structure of cooperation. There has already been a significant and measurable increase in the volume of high-grade Arabica coffee. For farmers participating in early efforts, the signs of increased wealth are already appearing at the local level. For example, Marcella Mukamazimpaka tends 500 coffee trees near the Maraba washing station. She bought a cow and a goat with her share of the profits from last year's harvest, and her investments are helping to improve both her nutrition and her standard of living.[23]

There is no doubt that transforming the Rwandan coffee industry is a long-term undertaking, but the opportunity exists for positive impact throughout Rwandan society, especially at the lowest levels. The Government has endorsed the New High Quality Coffee Policy at the Cabinet level, and it has committed its limited resources to appropriate infrastructure improvements in roads, water, and electricity.

All members in the Rwandan coffee cluster have embraced the fundamental idea that there is no such a thing as a free lunch. Indeed, the estimated budget for implementing this national coffee strategy is $70 million. These investments will need to be borne equally by the public sector, donors/NGOs, and the private sector. It is precisely this form of serious cooperation among different groups that has allowed the Rwandan coffee industry to begin differentiating itself from competitors and to enter the high-grade Arabica coffee market.

Although Rwanda may never reach a point where it is exclusively producing high-quality Arabica, it is leveraging its potential to become competitive in valuable market segments. The strategy recognizes that coffee is only the first step in a long-term migration effort to redirect the economy from subsistence farming to the export of complex goods. Yet, it is a very positive first step. Rwanda has clearly demonstrated the will and perseverance to turn around an industry that only a year ago one coffee operator characterized as an industry that caused "bankruptcy at the top and misery at the bottom." Rwandan coffee has turned a corner: coffee exports worth $20 million in 2001 are expected to reach up to $120 million in 2010.[24] This would represent a compound annual growth rate of more than 21percent. With only a few cornerstone industries to drive economic growth, Rwanda's vision for achieving middle-income status by 2020 looks to be within reach.

There is no doubt that transforming the Rwandan coffee industry is a long-term undertaking, but the opportunity exists for positive impact throughout Rwandan society, especially at the lowest levels.

Two years ago, Rwanda was losing hope—the coffee industry was in decline, and it threatened to bring down the financial markets if the industry defaulted on its debt. This year, production is up, quality is improving, export revenues have grown, and market forces are rewarding all participants in the coffee industry. The industry has not only regained hope, it has also promoted optimism throughout the countryside. ■

NOTES

1 Paul Krugman, *The Age of Diminished Expectations* (Cambridge, Massachusetts: The MIT Press, 1994), 9.

2 The strategy of the Rwandan Coffee Cluster developed over two years and represents significant primary research as well as ongoing efforts to use discrete distribution channels to target the most demanding and rewarding customers. Much of the data and the specific choices of the industry are proprietary and therefore cannot be revealed.

3 One example of the nexus of economics and anthropology is the Harvard Symposium, which produced "Culture Matters: How Values Change Human Progress" (Basic Books, 2000); a book in which more than 20 authors published scholarly articles on the links between culture and prosperity. These authors included noted anthropologists and economists such as Francis Fukuyama, Lawrence Harrison, Samuel Huntington, Ronald Inglehart, David Landes, Michael Porter and Jeffrey Sachs.

4 Michael Fairbanks, "Changing The Mind of a Nation: Elements in a Process for Creating Prosperity," in Lawrence Harrison and Samuel Huntington, eds., *Culture Matters: How Values Shape Human Progress*, (New York: Basic Books, 2000), 268-281.

5 Neal Donahue and Michael Fairbanks, Seminar Entitled "Building The Competitive Advantage of Afghanistan", Kabul, Afghanistan, October 2003.

6 Rwanda Ministry of Finance and Economic Planning; National Bank of Rwanda; OCIR Café; World Bank Development Indicators, 2001; OTF Group Analysis.
7 Ibid.
8 Analysis of Rwandan Coffee Industry Decline, 2002, OTF Group.
9 Specialty Coffee Association of America.
10 The standard price of commodity coffee is the New York Board of Trade Coffee "C" contract price based on a trading unit of 37,500 lbs (approximately 250 bags).
11 Specialty Coffee Association of America.
12 Specialty Coffee Association of America, Sustainable Coffee Survey of North American Specialty Coffee Industry 2001, OTF Group analysis
13 Starbucks Corporation, company website <www.starbucks.com> (accessed May 5, 2004).
14 Specialty Coffee Association of America.
15 Global Coffee Importer / Roaster Survey, 2002, OTF Group.
16 Ethiopia is one country able to produce consistently high-quality unwashed Arabicas.
17 Global Coffee Importer / Roaster Survey, 2002, OTF Group.
18 Ibid.
19 Interviews with Rwandan Coffee Exporters, OTF Group, Kigali, Rwanda, 2002.
20 Rwanda Coffee Cash Flow Model, 2002, OTF Group.
21 Ibid.
22 Ibid.
23 "Rwandan Coffee Farms Brew Success", Carter Dougherty, *The Washington Times*, January 23, 2003.
24 Rwanda Coffee Cash Flow Model, 2002, OTF Group.