



FACTORIES IN THE FIELD:

Rural Transformation and the Organization of Work in Mozambique's Cashew Triangle



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Foreword

"The place for the factory is by the side of the farm." *Manufacturers' Record*, July 3, 1913

In 1979, João Mucusete Sekare inherited 120 cashew trees, and when he retired from teaching at a nearby mission school and returned home to Namaponda he began planting more trees every year. That was in 1993, and by 2008 he owned 2,500 trees in production and employed three farm laborers in addition to his own working family of eight. João now has 30 times the average number of trees owned by the more than 940,000 families that produce cashews in rural Mozambique.¹ His approach has been simple: "There is always a market for cashew nuts in Namaponda, so I decided to plant more trees every year," he explains.²

Almeida Dos Santos walks 1.3 miles every day to the Miranda Industrial cashew factory in Mogincual, where he works in the cutting room. From 6 in the morning until 2 in the afternoon, he operates a foot-pedal-powered machine that splits the shell in preparation for eventual drying, peeling, and grading. It is work that requires a delicate balance between yield and speed. He is new to cashew work and still considers himself a farmer, spending the balance of each day working his *machamba**. But since he started at the factory, Almeda's children now go to school, and he is better able to provide for his family. His hope now is to rebuild his home, which was destroyed by Cyclone Jokwe.³

Manuel Rafael spends his day shoveling raw cashew nuts into a raging oven. The heat in the roasting room can be intense, and the work is hard, but Manuel is a veteran of factory labor, and the wages he earns allow him to buy food and clothes for his wife and four kids. Manuel is also one of many workers in an emergent class of migrant cashew laborers who have moved with the industry from old factory towns such as Geba to new destinations such as Mogincual, Angoche, and Meconta.⁴

Life is changing in the cashew triangle. With manufacturing rebirth and the advent of a new model of cashew processing, some traditional subsistence communities are experiencing an influx of wealth and an attendant shift in social and economic relations. Since 2002, small-scale, labor-intensive factories have assumed a growing presence in

^{* &}quot;Machamba" (ma-shaam-ba) translates to "farm" or "farm plot."

¹ Interview with João Mucusete Sekare, May 1, 2008, Namaponda; Jake Walter, USAID Frontline Newsletter.

² Walter, USAID Frontline Newsletter.

³ Interview with workers in the Namige Factory Roasting Room, March 27, 2008, by Simba Siebo.

⁴ Interview with workers in the Namige Factory Roasting Room, March 27, 2008. Overall, 27% of workers sampled at the three Antonio Miranda-owned factories are originally from the town of Geba, with Namige and Meconta reporting 37% and 39%, respectively. Most significantly, however, these same workers represent 52% of the highest-productivity workers, <u>Comprehensive Survey of Cashew Factory Workers in Nampula</u>, in TechnoServe files.

Nampula's rural landscape. In 2007, Mozambique's factories and the informal sector combined to process over 60,000 tons of cashew nuts, 32,000 tons of raw nuts were exported, and the total value of all exports (processed and raw) exceeded \$40 million.⁵ The heavy infusion of cash wages, increased commercial development, and infrastructure improvements are among the clear markers of economic growth. Yet the arrival of industry has not singularly reconfigured communities; rather it has introduced material conditions that emergent and existing classes of people are defining, negotiating, and forging into something new. Specifically, this dynamic process is being driven by a set of distinct yet interdependent categories of economic producers: entrepreneurs, commercial farmers, smallholders, wage laborers, farmer-laborers, and a nascent merchant class.

Throughout the triangle, people are making their own history. History is not static and happens only as events and disruptions encounter work relationships, economic conditions, habits, customs, and social circumstances. The temptation and indeed the received wisdom of much of development work, however, is to interpret economic and social change by the balance sheet and by specific outputs, preconceived goals, or "measurables." Put differently, it is to view time and place in snapshot form. Such criteria are necessary and appropriate insofar as they capture the needs, interests, and requirements of donors and investors, but an alternative approach might be forwarded: In assessing economic growth, a sociohistorical reading of community trends, complexities, and subtleties can provide us with a more organic lens through which to view rural transformation and its meaning in people's lives. Situating the everyday stories of community and workplace within the larger economic narrative might also reveal something fundamental and useful about new markets, new money, and development. In our departure from the conventional approach, we might ask: How do people govern their daily affairs, and according to what values and economic considerations? And in what ways do traditional subsistence communities change or look different when modernized and viewed over time?

⁵ "Cashew Production Exceeds Target," *Agenicia de Informacao de Moçamique*, June 4, 2008.



Factories in the Field: The Social Geography of Production

In this study, by the term "factory" we mean a small-scale manufacturing facility engaged in cashew processing and located in rural areas. These factories are semimechanized and labor intensive and encompass the full production process from roasting to peeling to packing. For our purposes, "factory" frequently refers to a single building (typically either a large warehouse or converted colonial-period building or administrative post) as the point of production along with any related support infrastructure such as a canteen, changing rooms, day care, or health post. The physical dimensions of a factory are modest, ranging from as little as 10,000 square feet at the Meconta factory to upward of 75,000 square feet at the new plant in Anchillo.⁶ Perhaps most important, the facility is located close to cashew trees and orchards.⁷

In this study, the term "field" assumes and is given multiple meanings. For NGOs, the field is viewed as a nexus point of aid and development. It is common to hear aid workers and development specialists speak of "going to the field." In this case the field approximates something of an aid junction where services are delivered and social and economic investment is designed to be sustainable long after assistance retreats and the field returns to its own locally driven methods of self-organization. For nascent wage laborers, the field means a constantly shifting arena of work – or what American western historian Carlos Schwantes, in another context, has termed a "wage workers frontier."⁸ For budding entrepreneurs, the field represents a locus of investment, innovation, and opportunity. For smallholders and commercial farmers alike, the field means a *machamba*, an orchard, a nursery, or more typically just "home."

As such, the field is both a physical place – encompassing a specific geography and a complex and varied set of economic and social relations – and a construct given meaning by different actors and interests. Specific to cashew processing, we might describe the field as a very rural, localized, and constantly shifting sphere of economic activity within Nampula province. Here we witness small-scale manufacturing on the frontier, promoted by a fledging entrepreneurial class and sustained by access to fairly modest investment capital, active participation from NGOs and technical experts, and a flexible approach to machinery and fluid labor markets.

To the extent that this local approach to manufacturing functions within the broader context of a global market sharply delineated between a large African export market and a dominant Asian processing industry, such small-scale processing occupies the

⁶ Interview with Shakti Pal, May 3, 2008. Square footage of Nampula factories includes Meconta, estimated at 10,000; Namige, 30,000; Angoche, 44,000; Nametil, 59,000; and Anchillo, 75,000.

⁷ While cashew processing is not representative of a craft industry, in terms of small scale and localized production it shares much with the flexible-specialization emphasis present in the Third Italy model, M. Piore and C. Sabel, *The Second Industrial Divide* (New York, 1984).

⁸ Carlos Schwantes, "The Concept of the Wageworkers' Frontier: A Framework for Future Research," *Western Historical Quarterly* 18 (January 1987), 39-56.



boundary of what we might call a cashew core and periphery. Until 1977 Africa was the leading continent in cashew production, but in the years since, India has become the world's largest cashew producer, with Vietnam and Brazil the next two largest. Africa remains the largest exporter of raw nuts.⁹

As defined by its processing plants, the Nampula cashew triangle is bound to the west by Murrupula, to the east by Mogincual, with Moma and Manapo occupying the north and southern borders, respectively. Within the outlines of these rough borders are an estimated 18 million cashew trees, planted and harvested by commercial farmers and smallholders alike; 12 processing plants employing an estimated 5,000 workers; and numerous small-scale units or satellite factories, nurseries, small machine shops, and countless household producers who grow, barrel roast, shell, and sell their modest holdings along the roadside. In short, there exist within the triangle a traditional cashew economy and culture that the new model of industry has effectively harnessed and given specific commercial form. Efforts by such investors as Miranda Industries and Condor Caju represent the latest chapter in the region's long relationship with cashews.

⁹ Horus Enterprises, "Long Term Trends in the International Cashew Market and Strategic Implications for Sub-Saharan African Exporters: Final Report (Paris, June 2005).

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Map of Cashew Triangle



Why Cashews?

In spite of industrial momentum and urbanizing patterns of investment and growth, Mozambique remains overwhelmingly rural and agricultural. As new joint ventures and foreign investment in mining, shipping, oil pipelines and refining, energy, biodiesel, aluminum, and tourism are pursued, the vast rural stretches of the country continue to struggle with poverty and underdevelopment.¹⁰ Despite substantial growth rates and a reputation within the World Bank and IMF as an Africa success story, Mozambique remains one of the world's poorest countries, with over half the population living below the poverty line. Mozambique is ranked 168th of 177 countries by the UNDP Human Development Index, and among the poorest citizens, half of all children are malnourished and one in five dies before his or her fifth birthday.¹¹ In short, promising GDP growth rates have not resulted in adequate or widespread distribution of wealth.

At the same time, rural Mozambique presents great economic opportunities that often remain hidden from the received wisdom of investment choices. One need only drive down the dusty roads of Nampula and arrive at the factory gates to see how Antonio Miranda and other entrepreneurs have solved the riddle of profitable rural investment. Indeed, Mozambican president Armando Guebuza has cited the great importance of small-scale industrial enterprises to the government's goal of transforming rural districts into poles of development. Referring to the case of artisanal mining, Guebuza has praised the labor-intensive, small-scale nature of production and the "positive impact on communities when working families use income to improve the quality of their lives."¹²

The cashew industry seemingly replicates this stated Government of Mozambique model and in a few short years has begun to demonstrate that it is transforming the economic structure and health of small, rural areas of Mozambique. The cashew industry's dual effect of fostering commercial agriculture and increased wage-labor opportunities promises an alternative route for attacking poverty. Increasingly, in rural communities we are witnessing the potential of job creation as a development strategy. As Joseph Hanlon has succinctly observed, "jobs and cash are central to escaping poverty."¹³

Beginnings

The cashew, *anacardium occidental*, is native to South America and was imported to Mozambique from Brazil in the late 16th century. For centuries, traders planted the tree

¹⁰ *The Investor*, February 12, 2007, March 18, 2008, April 8, 2008.

¹¹ Joseph Hanlon, "Is Poverty Decreasing in Mozambique?" Paper presented at the Inaugural Conference of the Instituto de Estudos Socias e Economicos (IESE), Maputo, September 19, 2007, 6; UN Integrated Regional Information Networks, "Mozambique: Putting the Tourist Dollar in the Pockets of the Poor," June 3, 2008.

¹²*The Investor*, April 8, 2008, 87.

¹³ Joseph Hanlon, "Is Poverty Decreasing in Mozambique?" Paper presented at the Inaugural Conference of the Instituto de Estudos Socias e Economicos (IESE), Maputo, September 19, 2007, 11.



widely on the East African coast, including in Mozambique, Madagascar, Zanzibar, Tanzania, and Kenya. The Portuguese introduced the tree throughout Asia, especially in Sri Lanka, India, Indonesia, and the Philippines. In the late 19th century Portuguese *prazo* holders* and investment houses such as the Zambesia Company entered the *kachasu* business as producers of a potent alcoholic beverage brewed from the fruit of the cashew tree. Employing a simple press-and-still process, small manufacturing sites popped up throughout the country.¹⁴ In 1908, South Africa mining interests launched Niassa Consolidated, which infused the stalled Niassa Company with significant capital investment and the impetus to develop northern Mozambique's ports and interior markets¹⁵. These infrastructure improvements meant that harvesting and production could be designated for more advanced commercial development.

For much of the 20th century, Portuguese-run plantations made Mozambique the world's leading cashew producer. As late as the 1960s, Mozambique produced as much as half the world's cashews, with production peaking on the eve of independence at more than 200,000 tons per year.¹⁶ At the industry's peak, up to 17,000 workers were employed in 14 large mechanized factories. Taken together, the country's megaplantations and thriving domestic processing industry gave Mozambique a stellar reputation across the globe and supported a strong export market. But colonial production was achieved at great social costs as poor working conditions, forced cultivation, lack of mobility, and underdevelopment animated a painful counternarrative to one uncritically remembered and selectively measured by high outputs.¹⁷

Portuguese colonialism came to an end in 1975, and as the Liberation Front of Mozambique (*Frente de Libertação de Moçambique*, FRELIMO) moved to nationalize plantations and processing plants, many of the previous Portuguese owners and managers abandoned the industry and fled the country. Despite the FRELIMO government's policy design of protecting the industry through an export ban and price

^{*}Prazo means "period in time" and refers to the Portuguese system of awarding the settler population with tracts of land and the right to levy tribute from the indigenous population.

¹⁴ Leroy Vail and Landeg White, *Capitalism and Colonialism in Mozambique: A Study of Quelimane District* (University of Minnesota Press, 1980), 83, 116, 127.

¹⁵ Malyn Newitt, A History of Mozambique (C Hurst & Co Publishers Ltd, 1994).

¹⁶ Margaret McMillan, Karin Horn, and Dani Rodrik, "When Economic Reform Goes Wrong: Cashews in Mozambique," 2003, 4-6; Ditlev Schwanenflugel and Fernanda Marques Pinto, "Miranda Expansion Project: Building a World Class Cashew Industry in Mozambique," August 23, 2003, 12-13; John Paton, "Developing the Cashew Nut Industry in Mozambique: A Report for Africa Technical Families (Private Sector Development and SME Departments) World Bank and TechnoServe, Mozambique," June 2002, 3.1.

¹⁷ Olutayo Akingbe et al, "Cashew Nuts in Mozambique: Recommendations for Developing a Viable Sector," prepared for TechnoServe, Mozambique, Columbia University Graduate Student Workshop (May 2005), 2; on labor arrangements within the colonial plantation economy system, see Helena Dolny, "The Challenge of Agriculture," in John Saul, ed., *A Difficult Road: The Transition to Socialism in Mozambique* (New York, 1985), 214-223.

supports, the cumulative impact of decolonization and a devastating civil war brought production to a virtual standstill.¹⁸ The disruptive impact of the war can not be understated. For instance, between 1982 and 1989, delivery convoys and the roughly 1,000 workers at the Manapo processing plant required round-the-clock protection by 500 government soldiers against the threat of armed attacks. Farther south, in the coastal city of Angoche, cashew plants were the occasional target of Renamo rebel sabotage efforts.¹⁹

While cashew production modestly recovered from its all-time low in 1982, managing to track steadily upward from 1983 to 1988 and experience brief periods of growth in 1990-1991 and 1994-1995, the protracted war in the countryside dislocated much of the rural population and undercut the effective functioning of most industry.²⁰ Ultimately, whatever may or may not have been achieved in the transition from colonial production to Marxist policy will have to be consigned to a historical "what if" as Mozambique's brutal 17-year civil war largely rendered stillborn any experiments in agriculture and industrial reorganization.

With the end of the civil war, however, many farmers returned to their land, and with the subsequent privatization of major sectors of the economy, production levels slowly increased and eventually stabilized. But unlike the current model used in Nampula's cashew triangle, the attempted industrial recovery was driven by large factories and mechanized production. Additionally, to kick-start domestic processing, a high export tax on raw nuts was introduced. But the industry's brief renaissance came to an abrupt halt when the World Bank's "liberalization" policy demanded, in 1995, that the government remove protection from the industry – a move designed to bring cashew producers better prices while shifting export of raw nuts to India. The World Bank's argument that processing in Mozambique was unsustainable turned out to be something of a self-fulfilling prophecy as the bank's policy served only to compound an already severe lack of investment in new tree planting and clearing, rendering the domestic processing industry uncompetitive. The effect was devastating. By the late 1990s virtually all large, mechanized factories had closed down, and an estimated 7,000 to 10,000 workers found themselves out of a job.²¹

Hard Times

¹⁸ Vail and White, 397.

¹⁹ Interview with Carlos Costa, Maputo, June 18, June 20, 2008; on Mozambique's civil war, see William Finnegan, *A Complicated War: The Harrowing of Mozambique* (New York, 1993).

²⁰ Schwanenflugel, "Miranda Expansion Project,"13; Ditlev Schwanenflugel, "The Cashew Financing Institute: A New Approach to Private Sector Agribusiness Growth in Mozambique" (Center for the Promotion of Rural Financial Services, 2004), 3.

²¹ Joseph Hanlon, "Can Mozambique Make the World Bank Pay for Its Mistakes?" Africa Faith and Justice Network, October 26, 1997; McMillan, "When Economic Reform Goes Wrong: Cashews in Mozambique"; Akingbel, "Cashew Nuts in Mozambique: Recommendations for Developing a Viable Sector"; Melissa Hall, et al, "Benchmarking the Global Cashew Industry" (August 2007).

In rural Mozambique, economic diversification and employment opportunities represent critical pillars of a meaningful development strategy. By the same token, dramatic fluctuation or loss of these resources can spell severe hardship. The coastal town of Angoche was hit particularly hard by the cashew industry's collapse of the late 1990s when three processing plants closed on the heels of a fish-canning factory and rice-dehusking facility also shutting down. A walk through the streets of Angoche reveals an archaeology of neglect. Much of the colonial-period architecture that dominates the central city quietly rests in disrepair, abandoned or boarded up, and potholes and weeds punctuate the city squares and streets. The "reed town" suburbs are rife with inadequate housing, standing water, periodic electrical service, and few economic opportunities.²² In 2006, residents took to the street to demand that the factories reopen, claiming that workers thrown out of a job were never adequately compensated and remained dependent on fishing as a sole source of livelihood.²³ Two years prior to these demonstrations, Miranda Industries opened a new-model factory, currently employing over 700 workers, but the long-term effects of the closures are still clearly felt.

Certainly not all closures can be laid at the door of World Bank policy, but by the late 1990s the industry's overall health had been severely compromised. Two hundred miles up the coast from Angoche, closures in Manapo and the Memba district brought hard times to communities that had grown accustomed to factory income. At its productive peak the town of Geba featured cashew, salt, fiber, and cotton facilities, employed over 1,600 people, and was surrounded by coconut and cashew groves.²⁴ It possessed the aesthetic and feel of the quintessential colonial factory town. Worker housing was laid out in a grid pattern, a health post sat opposite the police station, and together the Brisa de Inverno disco and well-maintained dirt football field framed the town square. With a picturesque view of the sea, the village school, factory manager's house, and local government building sat atop a small hill overlooking the main residential area of Geba. Cashew, rice, and fiber facilities could be found a short walk outside the town center, and orchards and small farm plots formed the town's perimeter.

Geba also functioned as a host center for cultural production, including sporting events, civic associations, entertainment, and public-information campaigns addressing social and health issues.²⁵ In sum, the town was a self-contained economic and social hub, organized with the logic of modernist design and by the interests and impulses of

²² Angoche site visit and interviews with residents and factory managers, March 26, 2008.

²³ "Angoche Residents Demand Reopening of Factories," *Agenccia de Informação de Moçambique*, December 13, 2006.

²⁴ Interview with Shakti Pal, March 28, 2008.

²⁵ Interview with residents in Geba, March 28, 2008. Geba's football team, WW 210 (named for a high grade of cashew), is the stuff of local legend, having hosted on its finely graded dirt pitch several professional teams from nearby Necala, Manapo, and Meconta. Like any good sporting franchise, to stay competitive, the "best players held the best jobs" in the factory and were consequently afforded more time to hone their skills, interview with Shakti Pal, Geba, March 28, 2008.

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corporate paternalism.²⁶ But this paternalist ethos cut both ways, and when the João Ferrera Dos Santos Company (JFS) – one of only two factories that remained in private hands during the nationalization period – closed in 2002, Geba was thrust into economic crisis. Town residents and former workers recount the deep sense of despair that hung over the town in the aftermath. "We were lost," observed one former factory employee.²⁷ On at least one occasion the anxiety associated with the sudden lack of livelihood options in one of the province's most food-insecure areas boiled over into dramatic labor and community action. Angry over the lack of severance and pension pay they claimed they were promised and entitled to, workers locked a company official in the factory for several days until police arrived and defused the situation. Negotiations ensued, redundancy payments were offered, and the police escorted the official to safety. To date, workers claim they have never been paid.²⁸

Industrial Rebirth: First Generation of the New-Model Factories

Whatever the fragile state of the industry at the close of the decade, the cashew culture of Nampula remained unbowed. After all, irrespective of investment patterns, cashew trees will continue to grow, and household producers will continue to participate in informal economies. In fact, with the end of one era of cashew production, a new set of conditions and possibilities for rebirth had emerged. Industry architect Shakti Pal is fond of saying that as long as there is resale value to an enterprise, "failure" in business "simply means another opportunity."²⁹ Indeed, the Namige factory started as a simple cement-block building. Antonio Miranda had recently retired from Coca-Cola and was looking for a new challenge. In 2001, he approached Carlos Costa, the then deputy director of TechnoServe, who pointed to a recently completed study on cashews that suggested they could be a sound business investment. TechnoServe arranged a visit to Shakti Pal, manager of JFS's operations in Geba from 1997 to 2001.³⁰ The meeting was fortuitous as Miranda and TechnoServe's approach meshed well with Pal's energy and eagerness to reimagine the cashew industry.

Pal, a proven innovator in the industry, recalls that Miranda had "no real money but an idea," and each man was immediately impressed with the other. They decided to proceed, and TechnoServe hired Pal to train Miranda on cashews. Pal observes that "people [still] don't believe in the model, which is why we target people who know nothing about cashews." In fact, only two of TechnoServe's 26 clients had any background in cashews. Preferred were small-scale investors (\$40,000 to \$50,000) who embraced opportunity and a pioneering spirit of the type that took hold in the village of

²⁶ Themes of economic regimentation, modernist design and social engineering, and industrialization in rural settings are explored in James C. Scott, *Seeing Like a State: How Certain Schemes to Improve the Human Condition Have Failed* (New Haven, 1998); Jacquelyn Dowd Hall et al, *Like a Family: The Making of a Southern Cotton Mill World* (Chapel Hill, 1987).

²⁷ Interview with residents in Geba, March 28, 2008.

²⁸ Interview with Francisco Jaime, Nampula, March 29, 2008.

²⁹ Interview with Shakti Pal, March 28, 2008.

³⁰ Interview with Jake Walter, Maputo, May 8, 2008.

Namige. Here, a do-it-yourself ethic prevailed as Miranda welded, Pal designed, and the factory was built entirely by local workers using local materials. Starting from scratch and rolling up their collective sleeves, Miranda, Pal, and the workers cleared the bush, slept in tents, and poured their sweat into something that "didn't look like a factory." "It was ugly," Pal remembers.³¹ Perhaps, but it worked. In 2002, Miranda opened the first of his three factories, and on the opening day of business over 1,000 people showed up for 64 jobs.³² Two years later Miranda Caju was operating at a capacity of 1,500 tons and employing over 400 workers.³³ Miranda's success proved an effective blueprint, and within six years of the Namige opening, 24 new-model factories were in operation throughout Mozambique, half in the cashew triangle. Some, such as the Condor factory in Nametil, had to overcome start-up challenges, such as operating its first 18 months without electricity, but the scale and flexibility contained in the new model bear witness to its uniqueness and durability.³⁴

³¹ Interview with Shakti Pal, March 25, 26, 2008; for a groundbreaking study on the interplay of physical environment and the requirements of agroindustry, see Walter Rodney, *A History of the Guyanese Working People, 1881-1905* (Baltimore, 1981).

³² Interview with Shakti Pal, March 25, 2008.

³³ Luis Artur and Nazneen Kanji, "Satellites and Subsidies: Learning from Experience in Cashew Processing in Northern Mozambique," November 2005, 9.

³⁴ Geert Poppe, "The Cashew Project," manuscript in TECHNOSERVE files.

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Table of Nampula's Cashew-Processing Plants

Name of factory	Location	Year founded	Number of employees
Miranda Industrial 1	Namige	2002	
Miranda Industrial 2	Angoche	2004	1,493
Miranda Industrial 3	Meconta	2004	
Africaju Lda.	Namialo	2003	210
IPCCM	Murrupula	2003	223
Moma Caju	Mecone, Moma	2004	112
Alexim Lda.	Luluti	2004	203
Condorcaju 1	Nametil	2005	1,088
Condorcaju 2	Anchilo	(2008)	TBD
Mauricaju	Napaco	2005	-
Olam	Monapo	2005	1,095
Gan Lda.	Mecua	(2008)	TBD

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From Field to Factory: The Organization of Work

Before I joined the company I used to go to the farm because I'm a peasant.³⁵ -Geremais Feleciano, Namige

*On Sunday, I grab my hoe and make my way to the farm.*³⁶ -Angela Assani, Namige

Communities in the cashew triangle organize economic production according to the work rhythms of agriculture: dawn to dusk and the natural rhythms of farming. Work and life are intermingled in task orientation with little conflict between the two. Subsistence farming and the household mode of production mean that production and consumption exist within one economic unit and under one roof. Moreover, physical labor and distribution are dictated by nonmarket relations and stand in sharp contrast to impulses of selling of one's labor power to a factory. Not surprisingly, it is farming obligations, particularly during planting and harvest seasons, that account for an almost 30% industry-wide absentee rate. As Carlos Costa, chairman of the Mozambique Cashew Processors Association and the African Cashew Alliance, observed "the rural mind is not industrial."³⁷ In his classic study of early industrialization in England, historian E.P. Thompson writes that wage laborers who transition from farm to factory "experience a distinction between their employer's time and their "own time." And the employer must use the time of his labor, and see it is not wasted: not the task but the value of time when reduced to money is dominant.³⁸

Transitioning from a production process driven by nature and agrarian concerns to one governed by time, repetition, and wage relationships is a tricky business. Commenting some 20 years ago on the lack of industrial discipline hindering the country's efforts to modernize, former Mozambique president Samora Machel lamented that too many workers were "using their machines for pillows."³⁹ And with only 14% of the workers in Angoche, Namige, and Mecota reporting any industrial work experience, one of the industry's paramount challenges is successfully recruiting labor and instilling a factory time-and-work ethic.⁴⁰

From interviews with workers, farmers, traders, and community members, a picture emerges as to how and why people beat a path to the factory gate. Not surprisingly, given the agricultural underpinnings of the region, individuals often first seek factory work when a particular set of economic needs requires an immediate cash solution.

³⁵ Interview with Geremais Feleciano, April 30, 2008, Namige, by Belchion Mario.

³⁶ Interview with Angela Assani, April 30, 2008, Namige, by Belchion Mario.

³⁷ Interview with Carlos Costa, June 20, 2008.

³⁸ E.P. Thompson, "Time, Work-Discipline and Industrial Capitalism," *Past and Present*, 38 (1971).

³⁹ Barry Munslow, ed., *Samora Machel: An African Revolutionary, Selected Speeches and Writings*(London, 1985), 117.

⁴⁰ <u>TechnoServe Comprehensive Survey of Cashew Factory Workers in Nampula</u>, in TechnoServe files.



Perhaps they have bills to pay, household goods to purchase, or the need for new farming tools or seed. Here work choices are viewed as casual, transitory, and a complement, not a substitute, to agricultural labor.⁴¹

Moreover, the lack of access to fertile land and markets and the impact of drought, natural disasters, and disease often conspire to force other economic practices and drive agricultural households to factory work. According to one study, Nampula province ranks highest in Mozambique for the percentage of households (20 to 30%) that supplement their subsistence livelihood with casual labor (*ganho-ganho*).⁴² Within Nampula, the northern coastal stretches of the province occupy a particularly important subzone for tracking the links between food insecurity and labor migration. This area represents one of the most food-insecure areas of the region, and poor households have a tradition of seeking outside employment in both normal and bad harvest years.⁴³

Migration strategies, of course, occupy an important chapter in Mozambique's labor history, especially when considered against the backdrop of the country's long relationship with the South African mines. Beginning in the late 19th century, an average of over 100,000 Mozambicans annually migrated to work in the gold mines and sugar-cane fields of South Africa. Unlike cashew labor, which tends to be secured through familial networks or, in the case of residents of Geba, through direct relationships and history with the industry, labor migration to South Africa was formal state policy. Although not the responsibility of the state, labor recruitment was carried out by the Witwatersrand Native Labor Association in tight coordination with the Portuguese colonial administration. By achieving its annual recruitment quota, the Portuguese administration was guaranteed foreign exchange in the form of South African gold and the use of Mozambique's ports and rail system for gold routing.⁴⁴

⁴¹ Interview with Novais Manuel, peeling-section supervisor, Meconta factory, April 30, 2008; interview with Mariamo Rassul, deshelling-section supervisor, Meconta factory, April 30, 2008; interview with Shakti Pal, March 25, 2008. For a brilliant recounting of the seasonal rhythms of agricultural work in southern Africa during the 20th century and a view to how smallholders, sharecroppers, and tenant farmers have historically sought wage labor as a necessary supplement to farm income and livelihood, see Charles Van Onselen, *The Seed is Mine: The Life of Kas Maine, A South African Sharecropper, 1894-1985* (New York, 1996).

⁴² Technical Secretariat for Food Security and Nutrition Vulnerability Analysis Group, "Baseline Survey of Food Security and Nutrition in Mozambique" (Maputo, December 2006), 23-24, 37.

⁴³ FEWS NET and Ministry of Agriculture and Rural Development, "Food Economy Profile Baseline and Current Year: Coastal Nampula and Southern Cabo Delgado (2002)," 2-5.

⁴⁴ Helena Dolny, "The Challenge of Agriculture," in John Saul, ed., *A Difficult Road: The Transition to Socialism in Mozambique* (New York, 1985), 214-223; on Mozambican migrant labor in the South African mines, see Jonathan Crush, David Yudelman, and Alan Jeeves, *South Africa's Labor Empire: A History of Black Migrancy to the Gold Mines* (Boulder, 1991); Alan Jeeves, *Migrant Labour in South Africa's Mining Economy: The Struggle for the Gold Mines Labour Supply*, *1890-1920* (London, 1962); Charles Van Onselen, *Studies in the Social and Economic History of the Witwatersrand*, *1886-1914* (London, 1982); Ruth First, *Black Gold: The Mozambican Miner, Proletarian and Peasant* (New York, 1983); Patrick Harries, *Work, Culture and Identity: Migrant Laborers in Mozambique and South Africa*,

TechnoServe



Inside the Factory

The machine is impersonal, it takes the pride away from a piece of work, the individual merits and defects that go along with all work that is not done by a machine—which is to say, its little bit of humanity. - Friedrich Nietzsche

To curb the machine and limit art to handicraft is a denial of opportunity. - Lewis Mumford

The new model of cashew processing strikes a balance between labor power and technology in a manner well suited to Mozambican conditions. While mechanized innovations are showing great promise, the industry's emphasis on promoting domestic processing and achieving high-quality outputs suggests that superior results, particularly in the task area of shelling, can best be achieved through manual labor.⁴⁵ However, the use of machines or hand labor can just as often be determined at turns by access to capital, pace of technology, strength or weakness of unions, and availability of cheap labor. Moreover, workers and management alike often possess surprising and conflicted relationships with machinery. For example, in the early days of the new model, many workers resisted the shift from machine to manual technology, equating the adaptation of semimechanical cutting to "loss of status." For their part, some processors viewed the move toward semimechanization as a path toward deindustrialization.

But with the launch of the new model, questions regarding the extent to which machinery should be used in processing and how a factory should be best organized for production have, momentarily at least, been answered. In Taylor-like fashion, each element of processing has been streamlined, timed and measured out, and accordingly fitted to labor and production requirements.⁴⁷ Unlike farming, the mass-produced and regimented nature of factory work allows for little autonomy or control at point of

ca. 1860-1910 (Hienemenn, 1994); on the experience of rural to urban migration in the Zambian Copperbelt, see James Ferguson, *Expectations of Modernity: Myths and Meanings of Urban Life on the Zambian Copperbelt* (Berkeley, 1999).

⁴⁵ Ditlev Schwanenflugel and Fernanda Marques Pinto, "Miranda Expansion Project: Building a World Class Cashew Industry in Mozambique," August 23, 2002, 19; Peter Jaeger, "The Global Market for Cashew Nuts: A Position Paper" (Accord Associates, 1999), 4-5.

⁴⁶ (Abt), 4.5.1 Health Care Issues: Hand Care, pp 4.9-4.10.

⁴⁷ "Taylorism" refers to the application of scientific-management principles to factory organization. These management and organizational theories are most often associated with Frederick Winslow Taylor, an American engineer and leading voice in the "efficiency movement" of the early 20th century. Under scientific management, work methods, planning, and factory organization are based on time and motion studies of specific tasks, F.W. Taylor, *The Principles of Scientific Management* (New York, 1914). For an examination of Taylorism and workers' response in the United States, see David Montgomery, *Workers' Control in America: Studies in the History of Work, Technology, and Labor Struggles* (New York, 1979); Adrian Peace's study of Nigerian factory workers also provides insightful analysis of workplace organization, see Peace, *Choice, Class and Conflict: Study of Southern Nigerian Factory Workers* (Harvester, 1979).

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production. Cashew workers are not craftsmen in any traditional sense but rather what we might term "hand operatives." That is, they do not own their own tools and machinery, nor do they engage in any specialized production. To a modest degree peelers and graders help determine quality output and therefore occupy a certain skill strata, but workers are otherwise largely divorced from any real command over their trade.⁴⁸

In considering factory organization, however, little has been written about the conditions and characteristics of cashew work itself. Beyond a standard demographic profile or basic description of a worker's particular niche in the production process, we know little of the men who sweat in the factory roasting rooms, the women who spend their days peeling and grading the commodity, or the workers who operate the cutting machinery with metronome-like precision. What are their work experiences? What are the habits, thoughts, and home life of factory employees? Exploring some of these questions is essential if we are to understand the changing nature of life and work in the cashew triangle.

On the Cutting-Room Floor

In a dimly lit room of an old converted warehouse, approximately 100 young men with castor-oil-lathered hands and largely stoic expressions pass the workday removing the shell of the cashew nut with a simple motion they repeat up to 5,000 times a day. At an individual worker's cutting station, he grabs a shell from the large pile on the table and places it between two blades, which are then brought together by a foot pedal and hand lever. After cracking the nut with the machine, most workers remove the kernel from its shell by hand while others use a small boring knife. Pump the pedal, crack, toss in bucket. When a bucket is full, the worker takes it to be weighed. This is repeated over and over until the daily minimum standard of 77 pounds has been met. For this effort, a full-time worker earns approximately 1,200 meticais (\$48) per month.⁴⁹

Even as most workers generally lack factory experience, the simplicity and genius of the cutting-machine design allow for a fairly predictable level of output. But while cutting machines are a bargain at \$90per table, they are not self-acting, and it is labor power that ultimately drives and determines productivity in the current calculus of cutting-room operations. As Raphael Samuel observed in his study of Britain's 19th-

⁴⁸ For a classic study of the historic relationship between technology and workers, see Raphael Samuel, "Workshops of the World: Steam Power and Hand Technology in Mid-Victorian Britain," *History Workshop Journal*, No. 3 (Spring 1977), 6-72; on craft control, management, and factory organization,

see Jeffrey Haydu, Between Craft and Class: Skilled Workers and Factory Politics in the United States and Britain, 1890-1922 (Berkeley, 1988).

⁴⁹ Peter Jaeger, "*The Global Market for Cashew Nuts: A Position Paper*," (Accord Associates, 1999), 4-5; on May 2 the government announced a 13% increase in the minimum wage of industrial workers and an 11.5% hike for the agricultural sector. Under the new minimum-wage agreement, cashew workers are classified as agricultural workers and will now earn a minimum monthly wage of 1,350 meticais (\$55), Mozambique News Agency Reports No. 320, "New Minimum Wage Adopted," May 16, 2008.

century industrial workers, the labor process is "dependent on the strength, skill, quickness and sureness of touch of the individual worker rather than upon the simultaneous and repetitive operations of the machine."⁵⁰ The cutting room is staffed almost exclusively by men; only the factory in Manapo, operated by transnational Olam, reverses this general shop-floor organization pattern. At Olam, women account for 82% of the cutting-section workforce and use a two-foot-pedal sit-down cutting machine, replicating the Indian model of production.⁵¹

The Boiler Room

Before the nuts arrive in the cutting room, they must be roasted to make the shell brittle enough to crack and remove. Rodrigues Abakar moved to Namige from Geba to work at the factory. On weekends he takes his hoe and heads to the farm to grow peanuts, cassava, maize, and sweet potatoes, but the rest of the week sees him working in the roasting room at Miranda Industries. Abakar arrives at work early in the morning, typically at 5:30, to start the roasting-room fire. Next, he and his coworkers load the cashew nuts into an industrial-sized steam pot where they will cook for up to one hour before being removed and left to cool. Except for a lunch break, this work continues late into the afternoon.

On a busy day, workers roast upward of four tons; on a quiet day, half that amount. In exchange for their labor, roasting-room workers on average are compensated 42 meticais per day or approximately 1,200 meticais per month (\$1.60 per day and \$48 per month). The company provides masks, boots, and gloves as well as milk to ease the effects of smoke.⁵² Roasting is a critical step in the process and requires some degree of monitoring and training, but it is a relatively tested method. The principal challenge faced by workers in the boiler and roasting rooms lies in accommodating the extreme heat, the heavy smoke, and the physically taxing labor of constant shoveling or lifting of 175 pound bags for up to eight hours.⁵³

While steam-roasting the nuts prepares them for cutting, it fails to remove the cashew nut shell liquid (CNSL), a dark reddish-brown viscous liquid that can aggravate workers' hands.⁵⁴ Prolonged contact can cause burning, changes in skin color, and ruptures, and workers across the industry, particularly at Inducaju, a factory in the

⁵⁰ Samuel, "Workshops of the World," 44.

⁵¹ Site visit to Nametil, Angoche, Angoche-Napaco, and Namige Mogincual factories, field notes, March 25-27, 2008; interview with T. Cropinath, Olam Industries, Manapo, April 1, 2008.

⁵² Interview with Rodrigues Abacar conducted by Belchion Marion, Namige, April 30, 2008.

⁵³ Site visit to Nametil, Angoche, and Namige factories, March 27-29; interview with Augusto Zacaria by Simba Siebo, Namige, March 28, 2008.

⁵⁴There exists a CNSL market, particularly in South Africa, South Korea, and Japan, for its application in the chemical industries. Mozambique's cashew industry is exploring the development of this niche market, which would require fairly modest investment and scaling up of existing factory operations, Schwanenflugel and Pinto, "Miranda Expansion Project: Building a World Class Cashew Industry in Mozambique," 47-48.

Necala corridor "with a history of labor problems," had long complained about sores developing on their hands.⁵⁵ The industry responded with a solution when it introduced the use of castor oil, which when applied to the hands protects them from the effects of CNSL. Now, in almost all Mozambican processing units, workers apply a layer every 30 minutes or so to create a barrier between the skin and CSNL. Castor oil is resistant to acids and contains special additives that reduce skin irritation. Essentially, the application works like a liquid glove.⁵⁶

Making the Grade

In contrast to the cutting and roasting rooms' being almost exclusively worked by men, the peeling section is typically staffed by women. Women occupy approximately one-third of the jobs within the industry but constitute a majority in the peeling section. The work Teresa Maida performs is straightforward. Once the kernels have been roasted, cut, and dried, the outer skin must be removed with a small knife. Peeling requires some dexterity, and each worker develops his or her own approach and rhythm, but, as with deshelling, its defining feature rests on a machine-like repetition and fairly standardized motion.⁵⁷ On average, a worker can peel between 130 and 200 pounds per week and earn up to 60 meticais per day.⁵⁸ While there are several promising mechanical innovations being developed to achieve this result, Nampula's factories currently rely on the hand labor of people like Theresa, a 35-year-old single mother of three. Each morning she leaves her children behind at her "dull" house and goes to work so she might earn "enough to buy flour." She's been working at the factory for three years and sees little change in her life. When she isn't working she tends to the children, cultivates a small farm plot, or, if she finds unexpected free time, goes to a movie or listens to the radio.⁵⁹

Grading is the last stage before packing and involves selection of some 26 categories of nuts, with *180, 210, 240, 320,* and *450* being the dominant varieties. *W320* commands the greatest price on the international market and represents 30 to 40% of Mozambique's kernel exports though Global Trading, a Dutch-based importer.⁶⁰ The industry has made great strides in improving overall quality by providing technical assistance and holding training academies for growers. As a result, higher-quality grades are now arriving at the factory door.

 ⁵⁵ Abt. Associates, "Assessment of the Status of Competitiveness and Employment in the Cashew Processing Industry in Mozambique, 4.5.1 Health Care Issues: Hand Care, pp 4.9" (November 1999).
⁵⁶ Rakesh Gupta, *Improving Workers Safety with Better Production Process in the Cashew Processing*

Plants of Mozambique (TechnoServe, Mozambique, May 22, 2006).

 ⁵⁷ Peter Jaeger, "*The Global Market for Cashew Nuts: A Position Paper*" (Accord Associates, 1999), 5.
⁵⁸ Interview with Amade Dos Santos Oscar and Momade Abakar by Belchion Mario, Namige, April 30, 2008.

⁵⁹ Interview with Teresa Maida by Belchion Mario, Namige, April 30, 2008.

⁶⁰ Akingbe et al, "Cashew Nuts in Mozambique: Recommendations for Developing a Viable Sector," 2.

In the grading section, workers sit at tables piled high with kernels and sort by hand, dividing the various grades into individual stainless-steel trays. Once a tray is full, it is carried to a weigh station for inspection and credit. The work is monotonous, but grading requires a good eye and involves some investment in training from the company. Normally, a worker in the grading section sorts approximately 220 pounds per week at a rate of 45 meticais per day (roughly \$1.75 per day).⁶¹ Once weighed and approved for market quality, the kernels are ready for packaging. Preparing the cashews for shipment is a simple process, but it demands a fairly significant per-unit investment in technology and machinery. A typical packing room necessitates an electric generator and a packing machine, which together cost more than \$20,000. With this technology, the graded cashew kernels are dumped into a cylindrical bin, CO₂-flushed, and vacuum sealed in 55-pound packages.⁶² On average, a worker such as Jose Rock packages 24 to 32 boxes per day, for which he earns 1,200 meticais per month (\$48). Rock, a married father of one child, sold fish in Nampula before taking a job in the factory. He is happy with his colleagues and generally satisfied with his job, but he struggles to get by on his wages.⁶³

"Six Years of Xima"

Jose Rock's dilemma provides an important window into the region's fast-changing economic and social life. Among workers in the cashew triangle there exists a complex and often conflicted relationship with the industry. Workers and community members almost universally offer that life is better since the arrival of industry, frequently citing the "beautiful new homes" and increased economic opportunities.⁶⁴ At the Namige factory, one cutting-room employee wished to "thank God for Antonio Miranda building the factory in Namige," and a chorus of others expressed appreciation for the "great benefits to the community."⁶⁵ Workers recount how Namige has been transformed from the "bush" to a "lively" town where jobs and wages have afforded new opportunities. Parents recount how they now have money to buy school clothes, supplies, and books for their children and materials to build or improve their homes and that they can even indulge in an occasional luxury item, such as a radio, at one of the town's several new shops.

At the same time, workers harbor no shortage of workplace grievances. Currents of anger and appreciation compete as workers consider their everyday lives as factory employees. In the cutting, peeling, and grading sections of the Angoche, Namige, and Meconta plants, 44% of workers questioned believed they should be making higher

⁶² United States Agency for International Development, "Cashew Quality Standards," Cashew Development Project , p. di Schwarzenflugel and Pinte, "Missinda Europeiant Project: Puilding a W

⁶¹ Interview with Angela Assani by Belchion Mario, Namige, April 30, 2008.

Development Project, n.d; Schwanenflugel and Pinto, "Miranda Expansion Project: Building a World Class Cashew Industry in Mozambique," 19.

⁶³ Interview with Jose Rock by Belchion Mario, Namige, April 30, 2008.

⁶⁴ Interviews with Angela Assani, Geremias Feleciano, Jose Rock, Momade Abakar, Namige, April 30-May 1, 2008.

⁶⁵ Ibid.



wages, offering that the small salary paid by the factory generated "little motivation" and provided only enough support to meet their most basic needs. An additional 20% named better food as the number-one area for improved workplace satisfaction.⁶⁶ Complained one veteran worker, "I've been coming here since the factory opened, and every day we eat the same thing, xima and beans. Xima and beans. At the factory, it has been six years of xima."⁶⁷

On the health front, workers cite relatively few direct workplace injuries but express dissatisfaction with what they perceive as a lack of company support for their overall well-being. "They don't care about us," one worker said. A frequent complaint revolved around the lack of adequate maternity leave; women are generally given two to three months of unpaid leave.⁶⁸ Additionally, workers point to a lack of general health information and resources, particularly about HIV/AIDS and malaria. Finally, workers cite a range of health issues that may or may not be industry-specific, mainly chest pain, headache, back and leg pain, and hand burns. These complaints, however, showed a large degree of variation in terms of frequency, work area, and specific factory and necessitate further research.⁶⁹

How do we make sense of the love-hate relationship workers seem to have developed with the industry? These competing tensions and contradictions can be viewed as the product of an emergent wage-worker identity even as most factory hands ultimately continue to view themselves as farmers. Most workers, it appears, originally sought cashew work to provide for basic and immediate expenses. As tenure accumulates and as the nuances of wage work become more commonplace, workers have started to view themselves as part of the factory system. Furthermore, these new wage earners and the community at large are creating and becoming integrated into a fledgling consumer- and cash-based economy.

In short, farmers are becoming workers, and farming communities are market towns. But this is a process, not an event. As such, workplace grievances and the explanations of persistent poverty are often cast in a more traditional manner or in the local idiom of a "good harvest" that has not been shared equally. Using anthropologist James Scott's conception of a "community subsistence ethic" as a guide, it may be reasonable to suggest that at given moments farming communities imagine and translate the practices and relationships governing agricultural life to manufacturing settings. That is, workers, especially those accustomed to farming first for family, then community, and only then

⁶⁶ <u>TechnoServe Comprehensive Survey of Cashew Factory Workers in Nampula,</u> in TechnoServe files; interview with workers in the cutting section of Namige factory, April 30, 2008.

⁶⁷ Interviews with Angela Assani, Geremias Feleciano, Amade dos Santos Oscar, Jose Rock, Namige, April 30, 2008.

⁶⁸ Interviews with workers in the peeling and grading sections of Namige factory and the Meconta factory, April 30-May 1, 2008.

⁶⁹ <u>TechnoServe Comprehensive Survey of Cashew Factory Workers in Nampula.</u>



for market, may view wealth resulting from increased tonnage at the factory as something that logically ought to be distributed more widely.

Yet customary beliefs regarding wealth distribution and specific workplace grievances are often subsumed to a general acceptance of the positive role the factory has played in the larger community's development. When workers parade under the factory banner on May Day, they are expressing the seemingly conflicted identities of conscious worker and loyal employee. And with labor unions (*sindicatos*) occupying a relatively weak position within the industry, worker identities are forged not through institutions but through personal and informal networks far removed from the point of production. As a result, strikes or formal grievance procedures are rare, and workplace dissatisfaction is often expressed through slowdowns or absenteeism - a highly dubious strategy given the potential income loss - or more subtle forms of job action such as eating on the job.⁷⁰ For its part, the industry offers that it wants strong unions to serve as equal partners. In the industry's reasoning, vibrant unions mean a stable workforce and industrial discipline, and their presence and advocacy can help move the government toward a greater investment in what workers desire, such as community health and pension supports.⁷¹

Rural Transformation: From Farm Town to Market Town

The road linking Nampula to Mogincual is a bumpy and, depending on the season, dusty or muddy route. The landscape is dominated by scattered traditional huts, *machambas,* the province's unique volcanic rock formations, and the ubiquitous cashew tree. This view is interrupted only by an occasional sawmill and, every 30 miles or so, a small town - specifically a trading and administrative hub - such as Corrane or Liupo. A "typical" town includes a few colonial-period buildings, a small shop or two, and a school often named for a hero or significant date in the struggle against Portuguese rule.

In 2007, an estimated 131,561 people lived in Mogincual district with over 90% of the active population engaged in some form of agriculture, forestry, or fishing.⁷² Overall, employment opportunities are scarce and the constraints on food production significant as subsistence households are forced to eke out a living from the sandy coastal dunes and swampy soil that characterize the landscape. In Mogincual the average household owns less than two acres of land, and over 40% of the area's families earn below \$60

⁷⁰ Abt. Associates, Assessment of the Status of Competitiveness and Employment in the Cashew Processing Industry in Mozambique, 4.5.4; Non-Salary Incentives and Labor Relations, pp. 4.11-4.12 ; eating on the job can reflect not only obvious hunger but also a form of resistance to factory time-work discipline, management, and work rules. For a revealing study on the hidden forms of protest in agricultural societies, see James C. Scott, *Domination and the Arts of Resistance: Hidden Transcripts* (New Haven, 1992).

⁷¹ Interview with Carlos Costa, Maputo, June 20, 2008.

⁷² "Populataçao por Distro e Provincia, 2007," Instituto Nacional de Estatistica; Republica de Moçambique, Ministerio da Administraçao Estatal, *Perfil do Distrito Mogincual Provinica de Nampula, Edição 2005*, 9.



per month. These families spend on average 69% of their limited income on food. Within the household unit and marketplace, cassava is the major crop of production and consumption. Other chief crops include corn, rice, and bananas.⁷³ The most recent data we have show that in 2003, Mogincual's farmers produced 1.886 tons of rice and 1.893 tons of maize and planted 33,332 acres of cassava with a returning yield of 68 tons.⁷⁴

Food insecurity in Nampula is driven by both lack of access to markets and lack of purchasing power.⁷⁵ Within the province, the coastal areas have the poorest soil and lowest rainfall, and residents depend heavily on cassava as both a staple food and an occasional cash crop. Throughout the province, crop yields are typically 30% lower than in neighboring countries due to lack of fertilizer and the use of slash-and-burn farming techniques to maintain production and soil fertility.⁷⁶

In subsistence areas, cash-crop production is more often than not an unexpected windfall. In the first few seasons following planting, farmers simply hope to have enough food for home use. With more mature ground to work and a higher yield, communications with merchants might eventually be established. But small farmers, whose success already depends on a delicate combination of time, weather, hard labor, and luck, are not inclined to risk or accommodate participation in mass markets. Moreover, raising cash crops such as cotton typically requires a full season of labor just to get the land cleared and in proper condition. In the case of cotton, such production has a powerful hold on the collective memory of many Mozambicans. During the colonial period the Portuguese state forced peasants to grow cotton at the expense of subsistence production or the pursuit of other livelihoods. Poverty, hardship, brutality, and famine were the cruel legacies of this colonial policy.⁷⁷

Ultimately, the oral history of farming communities is recorded and remembered according to good and bad seasons. As James Scott observed in his study of subsistence producers in Southeast Asia, peasant farmers "prefer to minimize the probability of disaster rather than to maximize his average return."⁷⁸ Such considerations and economic forces inform the basic template of life and work in rural Nampula.

⁷³ FEWS NET and Ministry of Agriculture and Rural Development, "Food Economy Profile Baseline and Current Year: Costal Nampula and Southern Cabo Delgado (2002), 1-4.

⁷⁴ Republica de Moçambique, Ministerio da Administração Estatal, *Perfil do Distrito Mogincual Provinica de Nampula, Edição 2005*, 9; Save the Children-US, "Nampula Province Details, District Characteristics."

⁷⁵ M.S. Chaiken, Wealth, Inequality, Vulnerability and Coping Strategies: Conditions of Hunger and Food Security in Nampula Province, 2007.

⁷⁶ Ministry of Agriculture, Prioridades de Desenvolvimento Agrario, 2006-2009

⁷⁷ On the forced cultivation of cotton during the colonial period, see Allen Isaacman, *Cotton is the Mother of Poverty: Peasants, Work, and Rural Struggle in Colonial Mozambique, 1938-1961* (Heinemann, 1996).

⁷⁸ James Scott, *The Moral Economy of the Peasant: Rebellion and Subsistence in Southeast Asia* (New Haven, 1976), 7, 35-90.



Yet, against the received wisdom of a subsistence community, the village of Namige has experienced rapid and differentiated growth since the cashew factory arrived. Since 2002, the number of vendors in the central market has more than tripled, a new eightroom hotel recently began operations, and the ironically named Hideaway Bar bustles with activity. There's even talk of a second disco opening soon. Chasing opportunity, migrants from Geba, Zambezia, Niassa, and Cabo Delgado have settled in Namige, helping to account for the 15% population increase in Mogincual district over the last three years alone.⁷⁹

Namige primary-school headmaster Armindo Emilio calls the cashew factory an "instrument in the fight against poverty." Armindo, a married father of nine, remembers a time when residents' career choices were limited to fishing, farming, and (for the lucky few) teaching. But beyond new jobs and expanded opportunities, he senses an overall change in economic behavior as the presence of monthly salaries has led some to save and invest in new ventures. Specifically, Armindo points to something of a mini-boom in the construction of new homes, small shops, and accommodation houses.⁸⁰ Similarly, the town's growth has sparked newfound interest in Namige among teachers, nurses, and government workers as well as entrepreneurs such as Fatima Sualehe, a bar owner from Namialo, who spent the May Day holiday visiting her sister-in-law and exploring what type of business she might introduce to Namige.⁸¹

Class, Custom, and Time

The data demonstrate that throughout Nampula province roughly 2% of the population works in salaried or wage-labor positions, while the lion's share of people are engaged in some form of agriculture or fishing. This is undoubtedly true insofar as capturing the economic basis and livelihood profile of the province. But the organization of work often evades and resists statistical form. That is, the formal record can obscure as much as it defines, particularly when people try to understand the multiple and nuanced relationships of exchange that run throughout an economy. At minimum we know that districts, and particularly towns, with cashew factories have a higher percentage of workers, typically between 5 and 8%, engaged in wage and salaried positions than does the province as a whole.⁸² And while the industry faces high rates of absenteeism due to the planting and harvest season, we also know from analysis conducted in 2002 that the growth and sustainability of the Mogincual-Namige factory would translate to as much as \$500,000 generated annually in the form of worker salaries.⁸³ Taken together, such a

⁷⁹ Interview with Ossufo Antonio by Belchion Mario, Namige, May 1, 2008; "Populataçao por Distro e Provincia, 2007," Instituto Nacional de Estatistica; Republica de Moçambique, Ministerio da Administração Estatal, *Perfil do Distrito Mogincual Provinica de Nampula, Edição 2005*, 9.

⁸⁰ Interview with Armindo Emilio by Belchion Mario, May 1, 2008.

⁸¹ Interview with Ossufo Antonio; interview with Fatima Sualehe by Belchion Mario, May 1, 2008.

⁸² Save the Children-US, Nampula Province Details, District Characteristics.

⁸³ Correspondence re: "Miranda Expansion Plan," Ditlev Schwanenflugel to Jake Walter, August 6, 2002.



cash infusion wrought by even a small percentage of a community's workforce can have a significant impact on a much wider number of households, including those that otherwise self-identify as engaged in fishing, agriculture, or both.

There exist in the cashew triangle at least five categories of economic producers that are central to explaining rural transformation. These categories are not static: (1) commercial farmers, (2) subsistence farmers, (3) wage laborers, (4) farmer-laborers, or people who work in some combination of subsistence farming and wage labor and (5) self-employed (shopkeepers, merchant and traders). Fishermen essentially occupy the same functional economic strata and role as subsistence farmers and might be included in the farmer-laborer category.

Wage Laborers

Thirty-one percent of those surveyed at the Angoche, Namige, and Meconta processing factories draw their income exclusively from industrial work. They best represent the permanent, fixed manufacturing workforce, an emergent industrial wage-labor class that has grown in the last half decade. Momade Abakar is from Namige and has worked at the factory for three years. With the wages he earns, it is difficult to fully care for the needs of his wife and child, but he feels that life has changed for the better in the community. After starting work at the factory he was able to buy a mosquito net and bed, but now he must use his wages to rebuild his modest seven-by-four home, which was destroyed by Cyclone Jokwe. On weekends he plays football with a youth group and tends to a small plot of peanuts, cassava, and some maize. But for Momade, these represent side activities. Come Monday morning h walks the six miles from home to work because that is his job. He is a cashew worker.⁸⁴

Indeed, in the world of semipermanent and permanent wage laborers it is perceived job security and elevated status that appear to be among the most significant determinants in shaping worker aspirations. To reduce absenteeism, workers suggest incentive programs, improved working conditions, transportation assistance, enhanced social services, and job security through a long-term commitment from the industry.⁸⁵ A study of Condor Caju workers indicates steady increases in productivity among workers who remained on the job after six months.⁸⁶ Status plays a role, too, and while some workers strive to be supervisors of their factory section, others view the most desirable jobs as those not tied directly to the production process. Rather many workers want to be drivers, clerks, maintenance workers, or security guards.⁸⁷

⁸⁴ Interview with Momade Abakar by Belchion Mario, Namige, April 30, 2008.

⁸⁵ "Analysis of the Costs of Labor in Mozambique's Cashew Processing Industry: Update for Irish Aid, November 2006," 17.

⁸⁶ "Analysis of the Costs of Labor in Mozambique's Cashew Processing Industry," 47.

⁸⁷ Interview with Shakti Pal, March 28, 2008; interview with Angela Assani, conducted by Belchion Mario, Namige, April 30, 2008; interview with workers in the roasting room at Namige factory, March 27, 2008, interview by Simba Siebo.

In Momade Abakar's reasoning, the rapid pace of Namige's development is due to "people coming from other places" to find work in the factory. Indeed, among full-time wage earners, research indicates that the most productive are internal migrant laborers coming from Nampula's most food-insecure areas.⁸⁸ In fact, an estimated 35% of the workforce in three Miranda-owned factories comes from the former factory town of Geba. Absent the obligations of farm labor, these wage workers are able to be trained and relied on as a stable force within factory organizations. Moreover, in the case of workers coming from Geba, most bring factory experience. Yet, for workers, permanency doesn't necessarily equate with prosperity. Rather, theirs is often a world of balancing absence from home with remittance obligations - a world of hard work, little pay, and an uncertain future. Labor migrants claim that the remittances sent are typically not enough to sustain a household for long, and some male workers worry that leaving their wife at home is wrought with "danger" as the "hardship of life leaves some to take another man."⁸⁹ Leaving families behind can not only involve special hardship for workers but also raise serious public-health concerns. Many cashew workers visit home only once a year, and while 93% of workers recently surveyed have some knowledge of HIV/AIDS, close to one-third of these do not know how it is transmitted.⁹⁰

From an industry standpoint, migrant workers present a favorable target for laborrecruitment strategies, particularly as seasonal harvest and machamba requirements drive high rates of absenteeism among locally hired workers. The recruitment of migrant laborers would also seemingly suggest some basic obligation of service delivery, however. Migrant workers in the cashew triangle seldom return home - save for roughly two weeks during the holidays - citing time constraints and prohibitive transportation costs.⁹¹ As such, the provision of food, basic health services, and transportation, and facilitating of remittances are among the formal and informal offerings the industry must seemingly consider in developing contract arrangements.

Farmer-Laborers

At the same time, as the number of people engaged in factory work has increased in recent years, 63% of workers in these same factories and as many as 83% in the case of Namige-Mogincual also wear some form of a farmer's cap. That is, they are engaged in an agrarian lifestyle that either supplements their factory wages or serves as a household's primary livelihood.⁹² To be sure, land tenure can also serve as a key

⁸⁸ <u>TechnoServe Comprehensive Survey of Cashew Factory Workers in Nampula.</u>

⁸⁹ Interview with Francisco Jaime, Nampula, April 1, 2008; interview with Rodrigues Abakar and Augusto Zacaria, Namige, by Simba Siebo, Namige, March 27, 2008.

⁹⁰ <u>TechnoServe Comprehensive Survey of Cashew Factory Workers in Nampula.</u>

⁹¹ Interview with Francisco Jaime by Simba Siebo, Nampula, April 1, 2008; interview with Teresa Maida, Namige, April 30, 2008.

⁹² <u>TechnoServe Comprehensive Survey of Cashew Factory Workers in Nampula</u>.

determinant in asset control and shaping work choices. Jolle Plumerel's study of cashew trees and livelihoods in northern Mozambique identifies social hierarchy and gender as key elements in land allocation as captured in the Mecua saying "luck follows lineage."⁹³ Among factory workers surveyed in Angoche, Namige, and Meconta, 79% reported ownership of or access to land. Of these, 47% gained land use via inheritance and 11% through purchase. An additional 14% cited loan of land, typically indicating a one-year tenancy arrangement or some form of in-kind payment or sharecropping agreement. The balance cited the government or "other forms" as their source of land-use rights. Twenty-one percent cited no land tenure, perhaps reflecting the motivations and economic choices governing the industry's full- time wage earners.⁹⁴

Smallholders

Thirty-five percent of Mozambican farmers grow cashews, but the average smallholder produces only 440 pounds a year. A smallholder's annual income from cashew sales ranges from \$40 to \$140 with additional income drawn from the sale of a home-brewed alcohol made from the false fruit that surrounds the nut.⁹⁵ A 2003 TechnoServe report noted that among those "who are engaged in subsistence farming, the primary source of cash income is the sale of cashew nuts." Indeed, an estimated 80% of Nampula's cashew-producing households market at least a portion of their annual harvest. ⁹⁶ Most smallholders and farmer-laborers, however, lack adequate cash flow and secure channels to make sound investments. Consequently, "smallholders don't see themselves as part of the cashew business."

In the absence of a nearby factory or satellite plant, small farmers typically sell their cashews to rural shops and itinerant traders. Some small-scale producers also set up temporary locations, or *postos de venda*, during the harvest season.⁹⁸ But with the new model of localized production and close proximity to fields and orchards, Mozambican smallholders have in recent years witnessed growing demand from processors. Several Namige smallholders report that they are now able to sell directly to the factory rather than to merchants based in Nampula city, where distance and poor road conditions helped dictate the low prices they typically received.⁹⁹ Moreover, as processors have invested in training commercial farmers to improve quality and yields, raw nuts are

⁹³ Tese Jolle Plumerel, "Trees, Tenures and Livelihoods: A Case Study of Cashew Trees in Northern Mozambique," MA thesis, University of East Anglia (2003), 17.

⁹⁴ <u>TechnoServe Comprehensive Survey of Cashew Factory Workers in Nampula.</u>

⁹⁵ Laura Hildner and Shakti Pal, "Analysis of the Costs of Labor in Mozambique's Cashew Processing Industry: Update for Irish Aid," November 2006," 33; interview with Carlos Costa, Maputo, June 18, 2008.

⁹⁶ TechnoServe, *TechnoServe in Mozambique*, September 2003, 9; a study conducted in 2002 estimates that 80% of cashew-producing households market part of their harvest, Paton, "Developing the Cashew Nut Industry in Mozambique," 5.1.

⁹⁷ Melissa Hall et al, "Benchmarking the Global Cashew Industry," 2007, 22.

⁹⁸ Paton, "Developing the Cashew Nut Industry in Mozambique," 5.2.

⁹⁹ Interview with Ossufo Antonio by Belchion Mario, Namige, May 1, 2008.



being purchased at 10 to 16% above market price.¹⁰⁰ Market research suggests that that there are greater opportunities to harness this trend and develop interest among smallholders and for farmer-laborers to reinvest savings, wages, or both into cashew-tree planting.

Commercial Farmers

Karl Marx observed that "nature does not trouble herself about commerce." Indeed, precarious weather conditions, including cyclones, combined with disease and lack of access to start-up capital or credit for the purchase of tools or pesticides are just a few of the constraints on commercial farmers in Nampula.¹⁰¹ That being said, a cashew orchard's capital requirements are fairly modest - just a tractor and some chemical-spraying supplies for periodic weeding and disease fighting. Beginning as early as three years after initial planting, a cashew tree generally produces for up to 60 years. New trees are planted at about 150 per acre; roughly 15% of saplings ultimately need replacement. Throughout the year orchards are weeded either manually or with the use of a tractor, and, depending on the weather, a farmer will need to apply three or four pesticide sprayings per season. In October raw nuts and cashew apples are harvested.¹⁰² When the cashew apple is ripe, it falls to the ground, where workers collect and dry it in direct sunlight. Next, the nuts are graded into standard or under grade and stored in 175-pound jute bags before being shipped to the processing plant.¹⁰³

Commercial farmer João Sekare has been planting and harvesting cashews for close to 30 years. In a good year he produces four tons; in a bad year, roughly half that amount. He has been in the business long enough to understand the vagaries of the market but believes the training he received in quality control and the close proximity of field to factory, where he sells direct, has been an enormous boost to his operations. Joao's chief concern is an overall lack of buyers, which lowers the price farmers are able to command. But cashews have allowed him to diversify his investments. In addition to his sizable cashew orchard, he owns six bulls and grows oranges and peanuts. Clearly,

¹⁰⁰ Interview with Shakti Pal, March 26, 2008; "Analysis of the Costs of Labor in Mozambique's Cashew Processing Industry," 35-36.

¹⁰¹ The cashew industry took a major hit on March 8^t, 2008, when Cyclone Jokwe raced through Nampula province, leaving four dead in Mogincual and one in Angoche. The storm, which packed winds in excess of 160 km, inflicted major structural damage to both of Antonio Miranda's processing factories, uprooted 20,000 of his cashew trees, and destroyed or severely damaged most workers' homes. Down the road in Namaponda, commercial grower João Sekare lost 750 trees, roughly one-fourth of his holdings. Site visit to Angoche and Mogincual, March 26-27, 2008; interview with workers and managers at Angoch and Mogincual factories, March 26-27, 2008; "Mozambique: Jokwe Death Toll Rises to Six, "*Agenccia de Informaçao de Moçambique*, March 10, 2008, "Mozambique: Cashew Nut Harvest to Exceed 85,000 Tonnes This Year," *Agenccia de Informaçao de Moçambique*, April 4, 2008; interview with João Sekare, May 1, 2008, Namaponda.

¹⁰² Schwanenflugel and Pinto, "Miranda Expansion Project: Building a World Class Cashew Industry in Mozambique," 28; interview with Joao Sekare, May 1, 2008, Namopanda.

¹⁰³ United States Agency for International Development, "Cashew Quality Standards," Cashew Development Project, n.d.



João Sekare is a busy man and a ubiquitous presence in the town of Namaponda. He serves as president of the Cashew Nut Producers Association, owns and operates the popular Good Friendship *barraca* in the town center, and has recently drawn up plans to open a driving school.

Married with eight children and seven grandchildren, he owes his success to imagination, good partnerships, and the fact that he "never stops working."¹⁰⁴ To help manage his growing portfolio of investments, João has hired three farmer-laborers who assist with tree pruning, pesticide application, and transportation. The most important task in his enterprise, however, might fall to Mussa Momade. He works as a guard of the cashew trees and describes his role simply: When "I catch somebody stealing, I tie him up and take him to my boss."¹⁰⁵ Working with João has given these laborers the opportunity to learn the business, and, motivated by a desire "to make it in life," each has started to plant cashew trees on his own *machamaba*.

Merchants and Traders

A 2002 social-impact assessment conducted by Ditlev Schwanenflugel reported that "pilot operations at Namige have been very well received by the local community, and are already perceived to have brought tangible benefits in the shape of increased wealth and opportunity." Schwanenflugel further projected that by 2005 expansion of the business would mean "in excess of 1,200 employees and pump \$2 million annually into the local economy" in the form of raw nut purchases, salaries, and capital expenses. His report concluded that such projected growth would "constitute a major boost to the Mogincual area, where there is currently very little activity beyond subsistence fishing and farming."¹⁰⁶

While business operations have not expanded at quite the breakneck pace Schwanenflugel's study predicted, the affiliated impact on the area has been pronounced. Artur Jose, a former fisherman, gave up a life at sea and opened a *barraca* shortly after Miranda Industrial came to town. He sells soft drinks, bottled water, beer, and the occasional tin of sardines or fresh fish. Artur made the career move after he reasoned that there was plenty of new money circulating in the local economy. So far, his gamble has paid off. Bar Escondodinho regularly bustles with activity, and Jose has developed a system of credit for factory employees and their families. His dream is to increase the number of items he offers and expand his establishment. His immediate goal, however, is to purchase a car, which he hopes to use to reduce transport costs.¹⁰⁷

¹⁰⁴ Interview with João Sekare by Belchion Mario, Namaponda, May 1, 2008.

¹⁰⁵ Interview with Vincente Mateus by Belchion Marion; interview with Mussa Momade by Belchio Mario, Namaponda, May 1, 2008.

¹⁰⁶ Ditlev Schwanenflugel to Jake Walter, "Miranda Expansion Plan," August 6, 2002, in TechnoServe files.

¹⁰⁷ Interview with Artur Jose by Belchion Mario, Namige, April 30-May 1, 2008.

Namige native Salimo Mecura has perhaps most directly linked his investment gamble to the factory, operating a hotel less than 500 yards from the gates of Miranda Industries. Opened in 2006, the eight-room Compolexo SaMe targets visitors to the factory and the growing presence of other business travelers in Mogincual district. Mecura works as a mechanic at Nampula city's central hospital, so he leaves the daily management to family members back in Namige. He frequently returns home on weekends, however, and has drawn up plans to add more rooms, a disco, and a bar to the hotel complex.¹⁰⁸

Fisherman Ossufo Antonio was born and raised in Namige but, like many area residents, fled to the safer environs of Angoche during the war. He returned to Namige in 1993 and has remained. It is home. Ossufo is well positioned to witness the dramatic changes of the last five years. "Until recently, Namige village was a bush, and the people were disconnected from modern life. I can give an example; after the end of the war until now, you couldn't find people moving around the village after 4 PM, but now you see children out of their houses past 5:30 PM. It just shows that we know modern life," reasons Ossufo.¹⁰⁹

Perhaps the Namige central marketplace best shows this shift toward "modern life." At minimum, the market serves as something of an informal institution that helps define and give form to village economic and social life. Before the factory was built, "there was nothing in Namige," and the area that now occupies the marketplace was home to but a small handful of merchants and traders. Over the last six years, a marketplace infrastructure has evolved, vendors have concentrated and centralized their operations, and specialized market niches have developed. Approximately 30 operators now conduct business within the narrow alleyways and dusty interior corners of the Namige marketplace.¹¹⁰ Loosely organized according to commodity grouping, it has basic foodstuffs such as rice, flour, cooking oil, bread, and tomatoes. Small fish, juice, and piri piri are generally clustered under or near the covered area, and nonfood items such as blue jeans, capulanas, bags, school supplies, cigarettes, and a modest array of electronics are featured in the market's front stalls or ringing the immediate exterior. A larger submarket composed entirely of fish is located 100 yards from the main collection of booths.¹¹¹

The market, of course, also functions as a social center and informational clearinghouse. Bar Escondodinho is home to many fierce afternoon chess matches among fishermen biding time before heading out for the evening catch. Since the Oceano Disco was severely damaged and subsequently closed as a result of Cyclone Jokwe, Bar Escondodinho has doubled as an informal dance hall. In recent days, factory workers,

¹⁰⁸ Interview with Complexo Same staff, Namige, May 1, 2008.

¹⁰⁹ Interview with Ossufo Antonio by Belchion Mario, Namige, April 30, 2008.

¹¹⁰ Interview with Mekusete Musa, market chief of Namige, by Laura Cordero, June 25, 2008.

¹¹¹ Site visit to Namige marketplace, April 1, April 30, May 1, 2008.



fellow merchants, and town residents have been congregating in evenings around the bar and dancing to the house DJ's offerings of reggae, marrabenta, passada, rumba, and chimarenga music.¹¹² Soccer, too, remains a passion in town, and featured international matches are made available for viewing at Clube Mabote. For the price of five meticais, you can join dozens of hard-core fans and squeeze into a small house just off the central square, fixing your eyes on the small car-battery-operated television carrying the big event.¹¹³

The Namige market provides the glue by which formal and informal town planning and growth proceed. As both a commercial and a social space, the market serves as a community hub for the nearby hospital, district administrative post, school, and residential areas. Almost certainly, as more money circulates through the local economy, existing merchants will look to expand their operations, and outside business persons will continue to descend on Namige in search of investment opportunities. Two miles outside the town center, the cashew factory will continue to hum away, providing the spark for this fluid process.

¹¹² Ibid.

¹¹³ Site visit to Namige, April 30, 2008.

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Map of Cashew Factory Town





Markets and Modernity

What is clear from the whirlwind of change in Namige is that people are diversifying their agrarian lifestyle and that the area's job growth and fledgling entrepreneurial spirit have introduced new money and new markets. People in Namige generally accept these changes as positive and do not view the introduction of industry as a threat to their way of life. Yet civic boosters should not read this gradual transformation from farming community to market town as an unmitigated success story. To be sure, there are more bikes on the road, increased activity among village traders, hundreds of workers earning wages for the first time, and an improved market for smallholders and household producers.

But these undeniably positive trends conceal some economic and social indicators that are more problematic. Incomplete evidence indicates that since 2002, mean household income has shown significant increases in the cashew triangle and self-employment income has similarly increased substantially, but median income has dropped rather dramatically in some communities. The shift from crop and fishing sources of income toward a labor market defined by many more people working at minimum wage helps explain much of this. But while total income drawn from wages has increased by an average of 164%, median income has dropped in these same places by an average of 25%, suggesting that a smaller percentage of the population is disproportionately benefiting from growth.¹¹⁴ Moreover, the newly diversified consumer economy hasn't reached many. Bicycles and radio sales have shown increases, and there is a much wider variety of goods available in the market, but for many workers these remain luxury items out of the reach of their modest salaries.¹¹⁵

With wage labor and rural manufacturing mingled with agrarian rhythms and traditional market and nonmarket relations, how can manufacturing best coexist with subsistence communities? Can a full-time wage-earning force be generated without undercutting the culture and efficacy of small-holder production? What happens to workers and communities when labor-saving machines seduce managers, owners, and investors? Balancing these considerations and harmonizing innovation and entrepreneurial designs with what historians in a variety of contexts have termed a moral economy of customary roles and practices appears to be the fundamental historic challenge facing the industry. Insofar as cashews serve the role of development, the particulars of the new model of industry hold promise. The diversification of rural economies through job creation and increased market access for both commercial farmers and smallholders represent the industry's most compelling contributions to date. Moreover, new investment opportunities have become available to entrepreneurs who possess modest capital, and a

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¹¹⁴ National Agricultural Surveys 2002 and 2005, Table 1-1, 1-2, 1-3.

¹¹⁵ National Agricultural Surveys 2002 and 2005, Table 1-4, 1.5; interview with workers at Miranda Industries, Namige, April 30, 2008. The factory at Namige includes a bicycle shop where workers can buy on credit. The average bike costs 1,900 meticais (\$78), or a little more than a month and half of salary for a typical full-time worker.



dynamic merchant class is materializing in cashew communities. Finally, household and commercial production and market and nonmarket relationships are finding a balance in towns such as Namige. Taken as a whole, it seems that cashews can continue to serve the development of rural Nampula, perhaps achieving in the process what we might call moral economies of scale.¹¹⁶

In the end, markets represent many kinds of exchange, expressed at turns by cash, wages, speculation, and barter. Some exchanges are commercial in nature, some social. Custom, tradition, social norms and obligations, familial networks, and reciprocity might also dictate the specific context of the marketplace. No matter the particular local dynamics, we can safely state that labor and commodity markets alike function in both an economic and a social arena. This is evident in a village such as Namige where a simple commodity, the cashew, has started to transform everyday life and furnish us with a vehicle to better understand people and their choices. When the complex layers of business plans, investment decisions, labor markets, and development models are peeled away, we are left with people. Life in the cashew triangle is ultimately a human story, a story that revolves around dreams and disappointments, success and failure, risk and opportunity, responsibilities and obligations.

¹¹⁶ The term "moral economy" refers to historian E.P. Thompson's conception, which is not to assign moral judgments or values to market relations but rather ascribe "ideal roles and economic models which endorse customary practice in balance of class and social forces." In the case of subsistence communities, this includes access to land, custom of land use, and entitlement to its produce, Thompson, "The Moral Economy of the English Crowd in the Eighteenth Century," *Past and Present*, 50 (1971), Thompson, *Customs in Common: Studies in Traditional Popular Culture* (New Press, New York, 1993), 339-341.