

The Cooperative Brigadistas in Nicaragua

The 1990 electoral loss consummated the collapse of the Sandinista revolutionary regime in Nicaragua. Hailed as the first piece in the Central American revolutionary domino, the regime succumbed to economic depression and war. After a decade of dismal performance, its economic approach appeared destined for oblivion and its reputation as a radical Central American alternative shattered. As Damiani, writing in 1994, put it, “most of the literature on Nicaragua sees the Sandinista policies as an example of what should *not* be done to promote to promote economic and agricultural development” (italics mine, 3).

Yet, not all was lost after the painful defeat in 1990. Nor was Sandinismo the purely destructive, anti-capitalist ideology portrayed by the enemies of the regime. Contrary to popular lore, Sandinismo also played a remarkably constructive role in post-1990 Liberal Nicaragua, when conditions seemed most adverse for its proponents. As this chapter will argue, Sandinismo drove an industrial transformation among a number of Nicaraguan cheese processing rancher cooperatives. This industrial transformation delivered not only economic, but also social gains.

The industrial transformation unfolded in Nicaragua’s dry, impoverished, isolated and strongly conservative cattle ranching north central region. In this region, the revolutionary ideology spurred a team of foreign aid consultants, the Cooperative Brigadistas, to introduce an innovative production model and business strategy that turned a set of (non-processing) rancher associations⁷² into cheese processing rancher cooperatives. The Brigadistas’ efforts took place against a backdrop of post-civil war distress and economic recession, with a state struggling to recover from the decade-long conflict.

⁷² I will refer to non-processing rancher cooperatives as “rancher associations” to distinguish them from the cheese processing rancher cooperatives.

The organizational model they introduced set the newly formed cooperatives apart from the traditional Nicaraguan cheese processing approach and the multitude of rancher associations in the region. It also diverged from the model and strategy of more modern rural Salvadorian-owned processing plants located in the area. As they blossomed to become full-fledged processors, the transformed cooperatives introduced new technology, work organization and labor and employment practices. They included both medium- and small-sized ranchers, their economic benefits spilling to the most isolated and destitute corners of the region.

To account for how this seemingly revolutionary ideology explains an industrial transformation, this chapter reveals the process of translation from its principles to the value-rational actions of the Cooperative Brigadistas. I argue that Sandinismo spawned a distinct ideological interpretation, “Cooperative Developmentalism.” This interpretation most generally favored a mixed economy with broad popular organization and participation. It contrasted sharply with the now-infamous alternative interpretation, “Statist Developmentalism,” which shaped the Sandinistas’ strongly authoritarian and collectivist policies of the first half of the 1980s.

In the late 1980s, Cooperative Developmentalism garnered support among the Sandinista leadership and some of the European aid agencies active in revolutionary Nicaragua. These aid agencies, led by the Finnish International Development Agency (FINNIDA), organized teams of consultants to pursue economic change consistent with the tenets of this interpretation. Among them were the Cooperative Brigadistas. Acting as mentors and managers, they fostered the emergence and diffusion of the new model and strategy.

The Cooperative Brigadistas relied upon their consulting background, a “directly productive profession” (Lipset, 1967) comparable to the Apostles of Developments’ engineering background, in their developmentalist campaign. Consulting steered the

Brigadistas' transformative actions toward the business realm. It allowed them to enact the moral and political imperatives and aspirations of Cooperative Developmentalism, crafting concrete practices. As it complemented this ideological interpretation, consulting fostered a distinct moral-practical mindset among the Cooperative Brigadistas, the best practice approach to Cooperative Developmentalism.

Heavily reliant upon this moral-practical mindset, the Brigadistas began their transformative campaign by working at nine cooperatives and successfully creating the new production model and business strategy at two of them, Concepcion and San Cristobal. In the heels of this creative endeavor, they encouraged the diffusion of their new approach. Urged by Cooperative Developmentalism's emphasis on cooperation and rural development, they resorted to direct and indirect channels to spread their practices to other rancher associations (see Figure 4.1). As the new model and strategy diffused, a broad industrial transformation unfolded.

Figure 4.1 Sandinismo as an explanation for Industrial Transformation



Like the Guatemalan Apostles of Development, the Cooperative Brigadistas initially encountered some ideological opposition to their new approach, particularly among would-be allied ranchers. To overcome this opposition, they relied upon DiMaggio and Powell's "normative" channels of isomorphism: they deployed their professional networks and organizations to foster adoption among rancher associations. Consistent with predictions of the organizational ecology literature and the institutional literature on industrial relations and high performance work

organizations (HPWOs), these normative efforts encountered some managerial and administrative constraints at these rancher associations. These constraints limited the speed and extent of diffusion (Haveman, 1993). But despite these limitations, to a large extent, the Brigadistas succeeded in spurring isomorphism. They also effectively induced a significant change in the behavior of industry elites, encouraging them to share and cooperate, and to participate in cross-industry organizations.

This rest of this chapter is organized as follows: the next section describes the new production model and business strategy of the cheese processing rancher cooperatives, contrasting it with three alternative organizational models observed in the region. Section 3 traces the transformation of the cheese processing cooperatives. It describes the motivating ideology and moral-practical mindset of the Cooperative Brigadistas, and walks through the processes of neomorphism and isomorphism. The last section reviews and summarizes the findings.

Contrasting production models and business strategies

Between the late 1980s and the late 2000s, an industrial transformation unfolded in the conservative, cattle-ranching north central region of Nicaragua. This transformation produced a cottage industry of cheese processing rancher cooperatives. Through this transformation, these cooperatives adopted a production model and business strategy distinct from the region's rancher associations, traditional artisanal cheese processors and Salvadorian-owned cheese plants.

This section explores the characteristics of this new production model and business strategy. It contrasts it with these three alternative organizations along the four axes of comparison highlighted in this dissertation: production organization, work and employment practices, technology of production, and products and markets.

The production model and business strategy of the cheese processing rancher cooperatives

During their industrial transformation, the new cheese processing cooperatives introduced a distinct organization of production in ranches and processing plants. The medium- and small-sized cooperative ranchers closely follow health and safety standards, adopting ranch worker specialization, adequate milking facilities, pasture improvements, fencing and smaller corrals. In pursuing these improvements, they usually cooperate closely with each other. Cooperatives also offer them a range of extension, training, veterinary and social services, and, in an otherwise highly volatile market, guarantee relatively stable year-round prices for their raw milk. To collect this milk, ease delivery and ensure continued refrigeration, cooperatives rely on vast networks of cooling centers. In these cooling centers, technicians test the delivered milk for quality.

These innovations have intensified cattle ranching, at least doubling raw milk production per cow among processing cooperatives ranchers. Their cow productivity easily surpasses both the national average and the average at the largest rancher association (see Table 4.1). Cooperatives also dampen the year-round cyclicalness of raw milk production, increasingly stabilizing output through on-ranch interventions (Interview #44, 01/29/2013). Finally, cooperative ranchers have rapidly improved milk quality. For instance, Perez-Aleman (2011) reports that by 2004, 96% of the raw milk collected in her studied cooperative qualified as Grade A.

Table 4.1 Productivity and production comparison, 2012

	Liters of milk per cow	Raw milk production per day
Nicaraguan National Average	~3 – 4	~2,100,000 - 2,500,000
CENCOOPEL (association of cheese processing cooperatives) Average	~7 – 8	213,000
Momotombo (largest rancher association) Average	~4 ¹	55,000 – 70,000

Sources: Author with data from Banco Central de Nicaragua (2012), CENCOOPEL (2012), Personal interviews.

¹While productivity at this rancher association is similar to the Nicaraguan average, the quality of the association’s milk is significantly higher (Interview #62, 02/08/2013), at least in part because it provides members with a range of extension services and has set up a vast refrigerated collection network. According to Momotombo, 80% of its raw milk production qualifies as Grade A (Nicacetro, 2013).

The production organization innovations extend to the processing stage. On a daily basis year-round, trucks with refrigerated tanks transport the raw milk from the collection centers to cooperative cheese plants, where technicians test the milk a second time and separate it according to quality. Multi-functional workers, supervised by a robust bureaucracy of professionals, quickly process the different quality milk batches. They follow a set of standardized steps to produce a range of products.

This organization of production relies on a relatively sophisticated technological package. On ranches, processing cooperatives pursue genetic improvements to raise productivity, combining European and local cattle breeds through artificial insemination and select cattle purchase programs. They also favor a tropical cattle health program to control common diseases (e.g. mastitis) and enhance nutrition. Teams of veterinarians deliver these services to cooperative members, and cooperative-owned stores supply all necessary inputs.

Similarly, the collection and processing technology fosters high-quality, efficient production. Refrigeration tanks and labs at collection centers and plants guarantee high grade raw milk. In processing, pasteurization ensures compliance with domestic and foreign regulations. Imported processing equipment – at some plants, partly automated – allows them to produce a range of high standard dairy products.

A particular set of work and employment practices complements cooperatives' transformed organization of production and technology. On ranches, the increasing specialization of work tasks has triggered enhanced worker training in milking and cattle husbandry. Training emphasizes cattle herding, milking procedures, handling of raw milk, and the use of milking and storage equipment. With this increased specialization, observers described declining worker turnover and rising wages (Interview #36, 09/07/2012; Interview #78, 02/19/2013).

More notably, however, in a largely rural region marked by high poverty rates and low levels of education, cooperatives have invested heavily in training workers and managers at collection centers and processing plants. These training initiatives coach workers on the specifics of managing sophisticated processing equipment, clean manufacturing practices, laboratory testing and the production procedures for a variety of dairy products. The cooperatives also recruit professionals from national universities. As an Inter-American Development Bank study found, in cooperative plants “both workers and management possess a high level of technical ability” (Artola & Parrilli, 2006).

Given these investments in their labor force, the cooperatives value low turnover.⁷³ They offer their workers long-term written contracts. During the slow dry season months, rather than cutting their workforce, they encourage their personnel to use their vacation time. Cooperatives also furnish workers with wages in excess of the minimum wage, a full menu of benefits above those required by law, variation in

⁷³ The few workers who leave usually move either to multinational corporation subsidiaries in Managua or to higher positions in neighboring plants.

daily tasks and even job ladders. As a result, employment at these plants represents, in the words of an interviewed worker, “hands-down the best alternative in the region” (Interview #76, 02/19/2013). This view was shared by the local representative of the Ministry of Labor (Interview #79, 02/19/2013). Not surprisingly, all processing cooperatives visited store large datasets of job seekers avid for employment opportunities.

The transformed production model of these cooperatives is premised on a business strategy that prizes increasing product and market diversification and value-added. They manufacture pasteurized cheese, particularly the Salvadorian *morolique* cheese, and export it to other Central American countries, especially El Salvador and, increasingly, the high-standard United States. This latter market absorbed about 25% of their exports in 2012. Indeed, while they represent less than 20% of the total number of medium-sized exporting cheese plants in the country, by 2012 they accounted for almost 40% of the country’s cheese exports to the United States (Author, with data from Centro de Trámites de las Exportaciones (CETREX) (2013).

In addition, because they collect close to 10% of the raw milk produced in the country, the cheese processing cooperatives supply all large industrial dairy plants – many of them owned by multinational corporation (MNC) subsidiaries – located in Managua. In these supply relationships, their diversified product market strengthens their bargaining power. It allows them to avoid the monopsonistic pressures exerted by these large dairy plants on other less diversified suppliers. Lastly, despite lacking the type of domestic market protection (e.g. tariffs) observed in other countries where such cooperatives flourish (e.g. Costa Rica, New Zealand), a growing number of these processing cooperatives sell a range of dairy products in national grocery stores. Their products include varied cheeses, cream and yogurt. Adopting sophisticated marketing schemes, their brand name products compete with imports and products from MNC subsidiaries.

Table 4.2 Products and markets of selected cooperative plants, 2013

Plant	Products	Markets
Mombacho	Raw milk, morolique cheese, Chihuahua cheese, fiesta cheese, Nicaraguan and Italian cheeses (e.g. mozzarella, fresco, quesillo), yogurt (10 flavors), cream, cuajada (Brand name: Papa Chente)	Nicaragua, El Salvador, United States
Concepcion	Raw milk, morolique cheese, Nicaraguan cheese, mozzarella, smoked cheese	Nicaragua, El Salvador, Guatemala, Honduras, Mexico, United States
Maderas	Raw milk, morolique cheese, Chihuahua cheese, cheddar cheese, Nicaraguan and Italian cheeses (e.g. criollo, mozzarella, quesillo), cream, butter (Brand name: Nicarao)	Nicaragua, El Salvador
San Cristobal	Raw, pasteurized and flavored milk, morolique cheese, Nicaraguan and Italian cheeses (e.g. criollo, mozzarella, quesillo), cream (Brand name: Camoapan)	Nicaragua, El Salvador, United States, Costa Rica

Sources: www.camoapan.com, www.coopConcepcion.worldpress.com, www.copanicarao.zz/org,
 Personal interviews

Alternative organizational forms: the traditional artisanal approach, the rancher associations and the Salvadorian plants

A growing institutional literature in industrial relations and HPWOs suggests that the same work can be performed in different ways and through different mixes of practices (Appelbaum & Batt, 1994; Osterman, 1994, 2000; Piore, 1990). Building on this finding, this literature makes three additional points. First, it recognizes that certain types of practices usually tend to cluster in internally consistent models, the two most common being the so-called “low-road” and “high-road” models. In these models, practices reinforce and complement each other. Second, different mixes of practices, though largely enabling similar work, entail sharply distinct consequences for workers. Only a few provide “mutual gains,” i.e. significant benefits for workers and employers. Third, firms with different mixes of practices can coexist in time and space, even when one mix proves more efficient than the other. Diffusion is thus anything but automatic (Kochan et al, 2013; Osterman, 2000).

To a large extent, the north-central region of Nicaragua confirms these findings. In the area, at least three competing organizational models coexist with the cheese processing rancher cooperatives. They involve distinct mixes of practices, and for the most part, fail to afford social gains for workers and producers comparable to cheese processing cooperatives’.

First, the transformed production model and business strategy of the cheese processing rancher cooperatives represents a significant break with the traditional artisanal cheese processing approach. While declining in importance, traditional producers continue to process a significant percentage of the country’s raw milk. These producers employ unpaid, unskilled family workers in cramped, fetid sheds. The workers process raw milk collected on site or in nearby ranches, especially during the abundant rainy season. Treating the milk in hollowed-out tree trunks and stirring it with wooden poles and paddles, they produce unpasteurized cheeses for sale in local or regional markets. Because they perform no tests on the raw milk, the bacterial content vastly exceeds the regulated limits, a problem exacerbated by the unhygienic processing conditions. The sheds also lack electricity, concrete floors and refrigeration facilities.

The cooperative cheese processing model and strategy also differs from the raw milk rancher associations. Like the processing cooperatives, the rancher associations value rancher cooperation, encourage inclusion of smaller ranchers, and, in a few cases, have built sophisticated raw milk collection networks. They also sell their raw milk to Managua-based industrial dairy plants. But they lack the processing stage, with its associated sophisticated technology, improved worker conditions, and additional benefits (e.g. independence from the large Managua dairy monopsony, raw milk price stability) for small- and medium-sized ranchers.

Finally, the cheese processing rancher cooperatives have also diverged from the lower-road model and strategy adopted by their main competitors, the Salvadorian-

owned cheese processing plants. Established between the late 1980s and the late 2000s by Salvadorian merchants, these plants produce a single product, the unpasteurized *quesillo salvadoreño*. They export over 90% of it to El Salvador and Honduras. The plants purchase their raw milk from independent ranchers through spot market transactions, prioritizing prices and disregarding the origin and production standards of the raw milk. As a result, raw milk quality varies significantly, as does year-round milk availability and price. The Salvadorian plants process the raw milk in linear fashion, with workers specializing in simple, repetitive tasks. Worker turnover remains high – largely as a consequence of the instability of the raw milk supply – and training limited. While wages usually match the legally set minimum, workers complain about their poor benefits and the unpredictability of wage payments, since plant owners often fail to pay workers on a timely basis.

Table 4.3 The three cheese processing production models and business strategies

	Traditional Artisanal	Salvadorians	Processing Cooperative
Labor and Employment Practices	On ranches, poorly trained, low paid workers; widespread family work; no written contracts In artisanal shops, unpaid, unskilled family workers; volatile employment	On ranches, poorly trained, low paid workers; widespread family work; no written contracts In processing plants, on the job training; volatile employment; limited mobility	On ranches, increasingly trained, higher paid cattle hands; stable employment In processing plants, year-round employment, numerous job classifications; extensive training; upward mobility linked to skills
Work Organization	On ranches, no worker specialization; poor milking standards In artisanal cheese shops, no worker specialization, professionalization; low quality production standards	On ranches, no worker specialization; poor milking standards In processing plants, specialized job positions with narrow tasks; thin crust of professional and administrative staff	On ranches, increasing employment of wage workers; growing task specialization; rising on-ranch milking, health standards In processing plants, specialized job positions with task variation; short job ladders; significant crust of administrative and professional staff
Technology	On ranches, milking in fields; no refrigeration, electricity; no raw milk testing In artisanal cheese plants, wooden tools; no pasteurization or refrigeration; production of a single cheese	On ranches, milking in fields; no refrigeration, electricity; limited raw milk testing (upon delivery at plant) In processing plants, locally made stainless steel equipment; refrigeration; production of a single cheese	On ranches, increasing use of veterinary services, specialized cattle breeds and grasses; milking stations; refrigeration; laboratories In processing plants, imported, turn-key, semi-automated imported equipment; refrigeration and pasteurization; production of a wide range of products
Products and Markets	Single cheese (Nicaraguan) production for local market	Single cheese (Salvadorian) production for export Salvadorian market	Raw milk for large Managua dairy plants; varied dairy products such as yogurts and mozzarella cheese for domestic Nicaraguan consumption; and export cheese for Central American and United States markets

Tracing the transformation

The industrial transformation of the Nicaraguan cheese rancher cooperatives, involving their adoption of the new production model and business strategy, poses a challenge to traditional accounts of agro-industrial transformation focused on the state or inter-firm collaboration. Building on studies from other regions and countries, explanations for industrial transformations among cooperatives usually emphasize state policies or multinational corporation (MNC) support. However, in contrast to countries like Costa Rica, Uruguay or New Zealand, where national states played a major role in promoting the development of local dairy and cheese cooperatives (Valliant, 1999; Zúñiga-Arias, 2011), in Nicaragua few state regulatory and industrial programs targeted dairy firms during the 1990s and 2000s. If anything, state officials championed MNC subsidiaries as engines of development for the sector, often obstructing rancher cooperative processing. Yet, despite state official hopes, MNC subsidiaries in Managua failed to trigger organizational upgrading among Nicaraguan ranchers. Indeed, as opposed to Argentina, Chile or Colombia, where MNCs fostered dairy ranch upgrading (Bravo-Ureta et al., 2008; Dirven & Ortega, 1998; Suarez-Gomez, 1999), no clear association exists between MNC sourcing and production model and business strategy innovations.⁷⁴

Thus, the question that arises is how we account for the industrial transformation of the Nicaraguan cheese processing rancher cooperatives. The evidence collected suggests that Sandinismo lies at the root of the widespread organizational changes. This radical political ideology ignited the transformational drive of a group of

⁷⁴ MNCs purchase raw milk from all types of producers, from processing cooperatives and rancher associations, to a few large Salvadorian firms. But I found no association between these sourcing relations and organizational changes. Eskola (2003) corroborates this finding, "The present government sees much of the achievement in milk production to have been due to PARMALAT, which serves as a good example of the benefits of attracting private foreign investment to the country. It should be noted, however, that PARMALAT only entered the market when much of the basic extension, organizational and infrastructure work had already been done..." (66)

ideological carriers, the Cooperative Brigadistas. Employed as consultants by foreign aid agencies, most notably by FINNIDA, these Brigadistas upgraded rancher associations into processing. Through mentoring and direct intervention, they created and diffused a new production model and business strategy.

In performing this role, the Brigadistas patterned their actions in accordance with Weber's concept of substantive rationality. Engaging in value-rational action, they directed their efforts toward the pursuit of the value-postulates of their ideology (Kalberg, 1980). Sandinismo shaped their behavior, influenced their decisions, and inspired their choice of business practices.

To the extent that a radical political ideology influenced the development and transformation of a cottage industry, the case of the Nicaraguan cheese processing cooperatives parallels the experience of the Italian producers in Emilia Romagna. In that region, Communism shaped the organization of production, technology and labor and employment practices of producers (Brusco & Pezzini, 1990; Piore & Sabel, 1984; Trigilia, 1990). For example, Criscuolo (2002) claims that the Communist ideology affected the "strategic approach to small business" by casting support for small producers as part of a "progressive fight against the monopoly of big business." In addition, the "idea that the competitive advantage of small business cannot rely on the exploitation of the workforce" inspired "constant pressure" to "introduce labor standards." This "preclusion for ideological reasons of a low-cost competitive strategy" forced firms to "seek alternative strategies: product and process innovation, the rationalization of the productive process, and the search for more lucrative markets became alternative sources of competitiveness." Lastly, "the creed of Communist economics that large firms would hinder the development of small businesses by exerting their oligopolistic power over the market" forced business associations to devise "highly developmental policies." For example, they

created consortia for the acquisition of raw materials,” and built “industrial sites for the relocation of clusters of artisanal firms” (39).⁷⁵

The case of the Nicaraguan cheese rancher cooperatives suggests a similar role for Sandinismo, an ideology in many ways parallel to Communism, in driving industrial transformation. But how exactly did Sandinismo, a preeminently revolutionary ideology, translate into the value-rational actions of the Brigadistas? After all, Sandinismo is best known for its role in the guerrilla movement of the 1970s and the statist and collectivist policies normally blamed for the decline of the Nicaraguan economy in the 1980s.

As the following section elaborates, Sandinismo spawned two distinct interpretations, each prioritizing different political and moral imperatives and aspirations, and providing contrasting causal maps and taxonomies. The first, radical and authoritarian “Statist Developmentalism” partly echoes the Leninist interpretation of Marxism. The second, more conservative “Cooperative Developmentalism,” stands closer to the “social evolution” view of Marxists such as Eduard Bernstein. Statist Developmentalism shaped most of the Sandinista policies of the early to mid 1980s. Cooperative Developmentalism, in turn, guided the Cooperative Brigadistas in their 1990s campaign to create and diffuse a new model and strategy at rancher associations.

Yet, the evidence also suggests that the observed translation required a practical, business-focused professional background among the Cooperative Brigadistas. Consulting for the Brigadistas played a role analogous to engineering for the Apostles of Development in Guatemala’s sugar industry. It directed their efforts toward the business realm. In this realm, much like the Apostles of Development, the Brigadistas drew upon the tools, practices and abstract knowledge supplied by

⁷⁵ Criscuolo argues that the support of the left-leaning artisan association CAN, and its three-pronged approach (i.e. formalization, upgrading and rationalization, and a “solid” system of industrial relations), explains, at least in part, the “brilliant” performance of small artisan firms in Emilia Romagna.

their shared professional background in their transformative endeavor. They relied upon them to mentor and lead the rancher associations. Only by deploying this professional background could they enact their ideological commitments into practices.

The ideology and its interpretations

As a revolutionary ideology, Sandinismo rejected the existing social, political and economic system, and pursued the construction of a new, revolutionary, socialist society. Influenced by Marxist thought, it embarked on a “conscious attempt to transform the superstructure” (Ryan 1995, 37). As Jaime Wheelock, one of the nine commanders of the Sandinista Revolution, put it, “we have pledged ourselves to a broad program of construction of a new society. Our aim is to integrate all sectors of the nation under revolutionary hegemony.” (Harnecker 1985, 133).

Under the umbrella of this overarching goal, Sandinismo embraced a set of five second-order principles. First, it endorsed vanguardism (Hodges, 1986). Introducing a “strong voluntarist and activist bent,” vanguardism extolled the actions of a small group of charismatic professional revolutionaries in bringing about the necessary changes. The vanguard would first lead the revolution and then transform society through its control of the state. Its actions proved especially necessary in “backward, underdeveloped” Nicaragua. The ideological and organizational capacity of the vanguard revolutionaries would compensate for the “weakness” of the working-class (Nolan 1984, 65). Yet, as Ryan (1995) has noted, this hierarchical scenario would only be temporary. The self-extinguishing vanguard remained necessary only as long as the “level of development” of the masses lagged behind.

Second, Sandinismo defended a model of independent economic development. Stimulating the production of foodstuffs and basic goods, ensuring sovereign exploitation of Nicaragua’s resources and emphasizing the development of the

“backward” countryside constituted central goals (FSLN, 1985; Harnecker, 1985).⁷⁶ In building this model, the Sandinistas looked to change Nicaragua’s role in the international division of labor, shifting from raw material to processed good exports (Enriquez, 2010).

The third second-order principle espoused the creation of a new man. This new man, an ascetic devoid of egoism, constituted the foundation of the ongoing transformation of society. His actions reflected his “love without humility, the disposition to sacrifice, the preferential option for the poor...” (Hodges 1986, 262) The new man combined a “sense of duty to the revolution” with “an epic and heroic sense of life” that drove him to sacrifice for a great cause (Hodges 1986, 180).

Fourth, the Sandinistas pursued popular democracy. They recognized the UN Human Rights Declaration’s individual rights, but emphasized the social and economic rights highlighted by Pope John XXIII in his Peace on Earth (*Pacem en Terris*) encyclical. This encyclical focused on “the right to work, the right to a decent wage in keeping with human dignity, and the right to shape the social system under which one lives” (Hodges 1986, 268). The pursuit of these rights called forth the creation of a new political party and a number of collective organizations to solve individual and common problems related to economic and social rights.

Lastly, and somewhat inconsistently given its concern with rural “backwardness,” Sandinismo venerated the rural lifestyle and its “patriotic producers.” It promoted policies aimed at ensuring the survival of some semblance of the rural way of life, with its ties to the land and its aversion to urbanization. As Sandinista leader Daniel Núñez put it, “the happiness of the Nicaraguan people is not going to lie in the cities. It is going to be in the countryside” (Nuñez 1985, 366).

⁷⁶ They would modernize the “considerable holdovers from the aristocratic economy of colonial origin,” most notably the “primitive cattle raising of the kind that dominates great expanses of land in the center of the country.” (Wheelock, cited in Harnecker 1983).

These Sandinista principles spawned at least two distinct interpretations (see Table 4.4). Each interpretation endowed the principles with contrasting and even contradictory meanings. They drew upon distinct diagnoses, prioritized varied moral imperatives, and inspired clashing visions of the ideal society. They offered different causal maps and taxonomies. Unsurprisingly, the two interpretations motivated divergent actions among ideological carriers, leading to sharply distinct outcomes.

The first, better-known interpretation, highlighted by the Reagan administration and the Contra army as evidence of the “communist” leanings of the Sandinista Revolution, encouraged “Statist Developmentalism.” This interpretation displayed prominent traces of Leninist thought. Founded on the premise that the “new man” should be a “conscious” proletariat willing to fight for the revolutionary project, it cast the peasant as an “anachronism.” Echoing Leninism, it also regarded petty bourgeois, including artisans and small proprietors, as “the principal enemy of socialism” (Lenin, 1902) and urged its elimination.⁷⁷ This interpretation, which held sway among the Sandinista leadership through most of the 1980s, extolled an autocratic vanguard in firm control of the state. Representing the popular will, this vanguard should develop a long-term, strongly centralized program to imbue the requisite revolutionary consciousness among the “new men” of the revolutionary society. For Statist Developmentalism, as for Lenin (1902), this task was crucial since “consciousness is something introduced into the proletarian class struggle from without and not something that arose within it spontaneously...”

In this revolutionary society, state capitalism would represent a fundamental intermediate step in the road to socialism. To some extent, the state assumed the leading economic role through direct ownership of production and financial organizations in early to mid 1980s Nicaragua. To modernize the “backward”

⁷⁷ As interviewees supportive and critical of the Sandinistas noted, Statist Developmentalists did not hesitate to follow Lenin (1918) suggestion to use “barbarous methods” in fighting “barbarism,” primarily in the country’s northern region. As Lenin (1902) would suggest, they were “imbued with intolerance against those who” retarded their revolution.

economic conditions of the country, particularly in rural areas, the vanguard created large scale, capital-intensive state-owned enterprises that employed the “conscious” proletariat.⁷⁸ The prevalent perspective built on Lenin’s (1918) view that “Socialism is inconceivable without large scale capitalist engineering based on the latest discoveries of modern science.”

Under this arrangement, the rural lifestyle acquired distinct characteristics. Rather than spatially dispersed private owners employing landless, migrant, “culturally backward” peasants, the state would concentrate the rural, socially undifferentiated proletariat in specific locations. It would also provide them with a range of social services.

However, an alternative interpretation, dismissed as reactionary or bourgeois by some Sandinista leaders, emerged alongside Statist Developmentalism. This interpretation, “Cooperative Developmentalism”, was infused with more democratic and reformist views reminiscent of Marxists such as Eduard Bernstein. It gained ascendancy in the last few years of the revolutionary regime. It adopted a broader understanding of the “new man,” including not only the urban and rural proletariat, but also people in the “middle class position” (Bernstein, 1897) such as “patriotic” peasants, self-employed artisans, shopkeepers and even small and medium-sized members of the “national bourgeoisie.”⁷⁹ Above all else, these new men shared the will to sacrifice for the socio-economic and political goals of the revolution. Cooperative Developmentalism also endorsed a more pluralist conception of popular democracy that, like Bernstein’s Social Democracy, recognized the importance of “conquering” the “bourgeois liberties.” While still emphasizing collective action, it supported numerous avenues of democratic popular representation beyond the state. These included community associations, labor and

⁷⁸ For example, in the dairy sector they founded the Empresa Nicaraguense de Lacteos (ENILAC), and thirteen massive cattle ranching projects (Interview #68, 02/15/2013). These public enterprises relied upon state of the art, imported technology to enable industrialization in the countryside.

⁷⁹ As Bernstein (1897) had argued, Marx and Engels “proclaimed that the Communists had to support the bourgeoisie wherever it acted as a revolutionary progressive class.”

peasant associations, and crucially, cooperatives of private owners known as Cooperativas de Creditos y Servicios (CCSs).⁸⁰

In opposition to Statist Developmentalism, Cooperative Developmentalism favored shorter interventions by the vanguard. Rather than single-handedly trying to transform the country through the policies of the state, the vanguard should raise the “cultural level” of the masses to create “new men,” and encourage their independent learning and action. At root lay a fundamental disagreement with Statist Developmentalism’s perception of the “people” and their abilities. For the Statist Developmentalists, “these [were] pusillanimous people. They [didn’t] have ideological substance, they [lacked] the required culture and education to... sustain an ideological position... Without a high degree of paternalism, the people are not ready anywhere in the world, not to say Nicaragua...” (Interview #68, 02/15/2013) This view mirrors Lenin’s (1902) belief that “there could not have been social democratic consciousness among the workers. It would have to be brought to them from without. The history of all countries shows that the working class, exclusively by its own effort, is able to deploy only trade union consciousness...”

In contrast, for Cooperative Developmentalists, this hierarchical perspective “was one of the great weaknesses of the Revolution.” Cooperative Developmentalists lamented that for most of the 1980s that “We did not believe in the people.” (Interview #32, 02/15/2013). They welcomed some bottom-up participation, departing from the disdain for “spontaneity” inherent in Leninism and Statist Developmentalism.

Accordingly, Cooperative Developmentalism favored a more decentralized, mixed economy. Like Bernstein's (1911) reading of Marxism, this interpretation proclaimed that rather than resulting from a collapse of the “bourgeois economy,”

⁸⁰ According to Damiani (1994), CCSs amalgamated 35 members on average, each holding an average of 17 manzanas of land. Most of these members had been landowners in the pre-revolutionary period.

the “social evolution” toward socialism would be long. The state would play a central, guiding role, directly controlling key industries. But other types of economic decision-makers, including a national bourgeoisie and private producers organized in cooperatives, would also support the national modernization and industrialization program. This did not entail an absence of state regulation and intervention. Controls to prevent the “exploiting tendencies of capital” would be necessary: heavily regulated by the state, these private agents, mostly small and medium-sized producers, would fulfill not only their profitability objectives, but also broader social goals associated with the revolution.⁸¹

In rural areas, the more decentralized, mixed economy entailed a distinct lifestyle. Drawing on the veneration of the peasant life captured in Sandino’s writings, Cooperative Developmentalism encouraged property owners and peasants to permanently settle on farms and ranches. It also supported the development of local economic activities by artisans, members of the industrial bourgeoisie and, to some extent, merchants.

⁸¹ The position exhibits similarities with Bernstein’s (1911) view that “In all advanced countries we see the privileges of the capitalist bourgeoisie yielding step-by-step to democratic organizations... a social reaction has set in against the exploiting tendencies of capital... Factory legislation, the democratising of local government, and the extension of its area of work, the freeing of trade unions and systems of cooperative trading from legal restrictions, the consideration of standard conditions of labor in the work undertaken by public authorities – all these characterize this phase of the evolution.”

Table 4.4 Contrasting interpretations of Sandinismo

Sandinismo principles	Statist Developmentalism interpretation of principles	Cooperative Developmentalism interpretation of principles
The new man	Proletariat fully compliant with state directives	Various independent and revolutionary economic agents
Promotion of Popular Democracy	State represents the popular will	Pluralist representation
Leadership of vanguard	Long-lasting intervention through the state	Shorter-lived interventions through a variety of mechanisms
Pursuit of independent economic development	State-led economy supported by collectivized organizations	Mixed economy combining state, private and cooperative organizations
Veneration of the rural lifestyle	Concentration of rural proletariat in specific locations	Decentralized rural life involving a variety of economic agents

The Cooperative Brigadistas and the best practice approach to Cooperative Developmentalism

Toward the late 1980s, as the country’s political and economic circumstances eroded the legitimacy of Statist Developmentalism, the influence of Cooperative Developmentalism grew among leading Sandinista circles. The Sandinista newspaper Barricada revealed this shift, arguing that after 1985 the government “changed its development strategy,” replacing its overwhelming support for the “state sector” with a “strategic emphasis on small and medium farmers” (August 1986). With this change, the Cooperativas de Credito y Servicios (CCSs), endorsed by the Cooperative Developmentalism interpretation, garnered increasing approval among the vanguard.⁸² In contrast to previous collectivist projects (e.g. the Cooperativas Agrícolas Sandinistas, CASs), these new cooperatives brought together individual producers who cultivated their land independently (Damiani, 1994; Enriquez, 2000).

Cooperative Developmentalism, with its emphasis on the creation of a mixed economy and a pluralist popular democracy, drew significant international support

⁸² This support spurred their growth: by 1989 they accounted for 62% of all cooperative members in the country (Damiani, 1994).

from Canada and different Western European and Scandinavian countries. Its rise coincided with an international intellectual environment increasingly critical of the type of top-down, modernizing and paternalistic approaches to development of Statist Developmentalism.⁸³ Donor governments and their aid agencies welcomed the new “strategy” as a third way of development independent of the United States and the Soviet Union. They valued an interpretation that combined “social justice and economic growth with respect for the principles of economic pluralism, mixed economy, and non-alignment” (Barracough, Buren, Gariazzo, Sundaram, & Utting, 1988). This third way fit the donors’ changing priorities. As a Swedish agency representative put it, “the aims of the Nicaraguan government development policy coincide exactly with the principles upon which our policy is based...” (cited in Barracough, Buren, Gariazzo, Sundaram, & Utting, 1988).

Among those aid agencies, the Finnish agency FINNIDA emerged as a major supporter of the Revolution.⁸⁴ Like the Sandinistas, the agency emphasized the reduction of inequality both within and across countries.⁸⁵ In the aftermath of the revolution of 1979, it had selected Nicaragua as its sole Latin American “long-term partner.”⁸⁶ In 1983 it established its first project in the country, which drew heavily upon the modernizing Statist Developmentalism interpretation that prevailed at the time in both Sandinista circles and international development thinking. Through

⁸³ Writing in 1996, Koponen & Mattila-Wiro noted that “international development thinking has continued to evolve... Perhaps the main changes in development theory have been the abandonment of modernization thinking in favour of a direct poverty reduction approach; the triumph of the free market model over its state-centered challenger; an intensifying demand for ‘good governance’; the emergence of stress on sustainability both in an environmental sense and in the sense of the ability of the recipients to maintain the activities and benefits introduced by foreign aid; and increased attention to the role of women and gender in development” (13)

⁸⁴ As a Sandinista leader explained, FINNIDA came to Nicaragua “because they supported the Revolution. They came because they shared our political positions...” (Interview #88, 03/07/2013). In one of its reports, the Finnish government also recognized this ideological affinity, noting that the “context for the establishment of [the aid] relationship was the Nicaraguan revolution itself, which began in a phase of euphoria and optimism, and widespread approval in Europe...” (Caldecott, van Sluijs, Aguilar, & Lounela 2012, 50)

⁸⁵ Koponen & Mattila-Wiro (1996) explain that among the “underlying continuities in Finnish goals and aims” is “the stress on the reduction or elimination of discrepancies and inequalities in wealth and welfare between and within developing and developed countries...” (44)

⁸⁶ The other long-term partners were Tanzania, Mozambique, Zambia, Kenya, Egypt, Nepal and Vietnam (Koponen & Mattila-Wiro 1996).

this project, FINNIDA equipped four government-run industrial dairy plants with Finnish “stainless steel tanks and state-of-the-art (for the times) pasteurisation and refrigeration systems...” (Seppanen et al. 2013, 19) That project concluded in 1987.

Relations between the two countries grew even closer after a social-democrat became the Finnish Minister of Foreign Affairs in 1987. As the “ideological solidarity” between the Finnish and Nicaraguan governments deepened, a delegation headed by then-Nicaraguan Minister of Agriculture Jaime Wheelock visited Finland. The visit engendered the Rural Livestock Development Programme (PRODEGA) that would transform the cheese processing cooperatives in Nicaragua.⁸⁷ The project would draw on the Finns’ experience in agricultural aid to increase the country’s waning supply of raw milk. It would foster the development of the prevalently small- and medium-sized dairy ranchers through a long-lasting intervention involving mentoring and other forms of assistance (Seppanen et al., 2013). It would also reflect the changing objectives in both Sandinista and FINNIDA thinking, as a paternalistic, state-led approach gave way to a broader, more participatory exercise.

Originally called the Integrated Rural Development Programme (PIDR), PRODEGA took close to three years to set up. According to Seppanen et al. (2013), “Nicaragua assigned the Fifth Region (Region V) to Finland as a field of action... given that it was a cattle ranching area where the Sandinista Front did not have a strong traditional support... as it did in the coffee-growing areas to the North, and the revolutionary government wanted to strengthen its presence and reputation through cattle ranching cooperatives...” (20)

In this north-central region, the Finns would initially focus on the department of Boaco. This department proved ideal for the Sandinistas because they were already

⁸⁷ The delegation and their hosts also agreed that Finland would dedicate 80% of its aid to Nicaragua to the agricultural sector (Seppänen, Eriksson, Aguilar, Boman, & Pijnenburg, 2013).

working there to strengthen local production.⁸⁸ As the head of the Sandinista Empresa Nicaraguense de Lacteos (ENILAC) explained, “In 1988 I became involved with the [agrarian reform] project in Camoapa and Boaco. [The individuals responsible for the agrarian reform] were trying to strengthen [local ranchers], but there were a lot of problems... Because my go-to strategy is to call a team of experts and because the Finns and their social-democratic government supported us, I sold them the project of Camoapa and Boaco... I even traveled to Finland in 1989, before we lost the election, to make sure we kept the program...” (Interview #88, 03/07/2013) Furthermore, the Sandinista vanguard felt that they owed these ranchers. As Seppanen et al. (2013) explain, a project known as TECNOPLAN, proposed for Boaco and Camoapa in 1987, “did not prosper.” The Sandinista vanguard concluded that “the Finnish project was suitable for compensating that shortfall...” (23)

PRODEGA would focus on developing dairy production in two of the department’s municipalities, Boaco and Camoapa. It would promote the creation of the cooperatives known as CCSs among selected rancher associations. This type of cooperative, inspired by Cooperative Developmentalism, “was sufficiently “socialist” to make the Sandinistas happy, but sufficiently “capitalist”... given that it was based on private property” for the predominantly counterrevolutionary, or Contra, ranchers of the region (Seppanen et al. 2013, 24).⁸⁹ The emphasis was on “raising farm incomes and milk production” and fostering “milk and cheese processing

⁸⁸ According to CIPRES (2008), at least one rancher association held close ties to the Sandinista Union Nacional de Agricultores y Ganaderos (UNAG), which also sent a delegate in Wheelock’s mission to Finland. CIPRES further argues that after the bankruptcy of the Sandinista Empresa Cooperativa de Productores Agropecuarios (ECODEPA), UNAG saw the PRODEGA model as an alternative to face the growing political and economic crisis.

⁸⁹ Seppanen et al. (2013) argue that in bringing Sandinistas and Contras together, PRODEGA promoted reconciliation and pacification: “Another project impact in this initial phase was not planned: pacification or reconciliation. Following the demobilisation of the armed groups and the formation of the service cooperatives, the project was able to convince the area’s cattle ranchers that they had to forget about political rivalries and work together to improve the standard of living and increase milk production for the benefit of all.” They explain that in a 1993 meeting of PRODEGA’s board of directors “the producers thanked the Finnish government for the strong support and interest they have had towards the Boaco and Camoapa producers, proof of which is that all political tendencies were put aside, and work was carried out jointly, as in a large family” (27).

cooperatives, and rural self-help groups” (Eskola 2003, 61). Based on a study carried out by a Finnish delegation, activities would include “plant nurseries and reforestation for ecological reasons (soil and water source conservation) and to produce firewood; improvement of infrastructure (rural roads) and agricultural mechanization; agricultural extension services, improved feed for cattle, commercialization and processing of milk; genetic improvement of herds... [and] the improvement of the situation of women...” (Seppanen et al. 2013, 21).

At the same time, it is worth noting that fostering cooperatives represented a risky endeavor in Nicaragua. Their selection as the preferred organizational models thus suggests an ideological motivation. As much of the literature on dairy production around the world argues, because they often entail high transaction costs, few cooperatives survive without significant state protection and support (Dirven & Ortega, 1998; Valliant, 1999). Large-scale ranches and industrial plants often prove more efficient. Moreover, the domestic Nicaraguan context of civil war and a collapsing economy in the late 1980s challenged any type of business activity, whether cooperative or individually owned. But despite these risks, Sandinismo required that the PRODEGA project promote this type of organization.

It is also important to underscore that the promotion of cooperatives was not inherent to foreign aid projects. For example, during the 1990s and 2000s, the United States Agency for International Development (USAID) became the strongest international supporter of the post-Sandinista governments. In this position, it implemented at least one project to support dairy production in the north-central region (Financial Markets International, 2008). However, in contrast to PRODEGA, USAID targeted all types of firms, without distinction of organizational form. Moreover, it focused only on those firms already exporting to the United States, prioritizing compliance with the Food and Drug Administration’s (FDA) health and safety regulations (Financial Markets International, 2008). While this single project cannot be taken as proof of the overall approach of USAID, it highlights some central contrasts between the agency and its pro-Sandinista counterparts. Most evidently,

the USAID project favored well established and profitable organizations, as opposed to struggling associations of small- and medium-sized ranchers. It assumed that if it supported the more developed producers, benefits would trickle down to the rest. This USAID approach bears a striking resemblance to the agricultural policy – profoundly at odds with the Sandinista objectives – of the post-Revolutionary Liberal governments.⁹⁰ It sharply contrasts with the FINNIDA approach, further highlighting the important influence of ideology in PRODEGA.

To staff the project, FINNIDA recruited the first Finnish and Nicaraguan consultants, the original Cooperative Brigadistas who would begin to mentor and assist the ranchers. These Brigadistas would change over time as the project, and Finland's international aid program more generally, was hampered by deep personnel cuts during the early 1990s, a relatively small bureaucracy, and the "persistent problem" of "a high rate of internal staff turnover" (Koponen & Mattila-Wiro, 1996). In Nicaragua, Cooperative Developmentalism and FINNIDA's deep commitment to agricultural development and inequality reduction guided the Brigadistas. They were closely monitored and supported by the Finnish Embassy in Nicaragua, which played a crucial role from the outset.⁹¹ In particular, the Finnish aid attaché and rural development counselors consistently intervened. On the ground, a Finnish Chief Technical Advisor (CTA) led the Brigadista team. The CTA changed with every phase of the project. Because PRODEGA extended over three phases, at least three different Finnish CTAs served during the project's thirteen years of operation.⁹² This individual supervised at least four Brigadistas – usually Nicaraguan-born – charged with farm improvement, cattle feed, farm mechanization, and project

⁹⁰ In fact, the absence of any USAID programs in the 1990s akin to PRODEGA (Finland), FondeAgro (Sweden) or PRADC (Italy) further corroborates the crucial role of the ideological interpretation.

⁹¹ The significant Embassy intervention probably responded to changing policies in FINNIDA. As Koponen & Mattila-Wilo (1996) explain, a "potentially important change in Finnida's modalities was the delegation of more authority to Finnish embassies in primary cooperation countries following the reorganization in 1991. The embassies no longer have to refer all major decisions concerning aid activities back to the responsible officer in Helsinki, but are now in charge of the implementation of the activities within the framework of agreed plans and budgets."

⁹² Rural sector counselors from the Embassy also changed quite often, as did the Nicaraguan staff. The longest serving staff member was the National Director of the program, a Nicaraguan who served for 10 years (Phases I and II of PRODEGA).

monitoring and safety. The CTA also received assistance from different Finnish consultants who spent shorter periods in the country.

In their mentoring campaign, the Brigadistas drew upon the practical guidance and vast experience supplied by their professional background as consultants. In translating from ideology to action, they introduced a much needed “business focus” (*enfoque empresarial*), contributing with essential managerial skills (Interview #67, 02/14/2013). They used their expertise in dairy cooperative organization and product marketing, as well as their access to financial resources, to advance their Cooperative Developmentalism interpretation of the main Sandinista principles. Acting as “knowledge brokers” (McKenna, 2010), they encouraged imitation of best practices and searched for options and markets unknown to their advisees. This consulting background complemented the Brigadistas’ Cooperative Developmentalism interpretation to spawn a particular moral-practical mindset, the best practice approach to Cooperative Developmentalism. As the following discussion shows, through this moral-practical mindset the Brigadistas devised the new production model and business strategy that came to characterize Nicaragua’s cheese processing cooperatives.

Neomorphism

On February 22, 1990, only three days before the unexpected Sandinista electoral loss, the Nicaraguan and Finnish governments officially launched PRODEGA. The electoral loss meant that, though created under the aegis of the Sandinistas, most of PRODEGA’s developmental activities took place under the Liberal governments of the 1990s and 2000s. These new Liberal regimes adopted policies antithetical to the general principles of Sandinismo. For instance, they favored large, independent producers and over the years withdrew almost all support for small producers and cooperatives.⁹³

⁹³ As Enriquez (2000) explains, with the governments of the 1990s came a significant drop in credit. In agriculture, credit available in 1996 was 51.5 percent of what it had been in 1992. Furthermore, the share of agricultural credit for small- and medium-sized producers dropped from 56% 1990 to

In the new, hostile Liberal environment of trickledown economics, privatization, deregulation and liberalization, the Brigadistas pursued their PRODEGA campaign. The government change led the Brigadistas to focus not only on promoting dairy production, but also more broadly on salvaging previous Sandinista gains (Caldecott et al., 2012). They arrived in the north-central Nicaraguan department of Boaco in early 1990.⁹⁴ Over the next thirteen years, numerous Brigadistas would work in the region, operating from their offices in the town of Boaco, and living in what came to be known as the town's "Finnish houses" neighborhood (Seppanen et al., 2013)

Originally, the project plan called for the development of the cooperatives known as CCSs in seven existing rancher associations, but the Brigadistas and the Embassy expanded this number to nine. Six were located in the municipality of Boaco (i.e. Cosiguina, Masaya, Cerro Negro, El Hoyo, Apoyeque, Telica, Isla Zapatera). Two operated in the neighboring municipality of Camoapa (i.e. San Cristobal, Concepcion).

At the time of the Brigadistas' arrival, the specter of bankruptcy haunted ranchers in these associations. Many had supplied either the Sandinista state-owned industrial dairy plants located in Managua, or the Nestle-owned PROLACSA industrial plant located in the neighboring department of Matagalpa. But with the collapse of the Sandinista economy, demand for their milk plummeted. In the midst of this firm-level shock, paralysis seemed to set in, as the ranchers and associations lacked a leadership versed in the required business knowledge and skills to find market alternatives.

Confirming Scott's (2008) insight and mirroring the experience in Guatemala's Tajumulco mill, both demand- and supply-side pressures played a role in driving the

29% in 1992, while the share of credit given to large producers grew from 31 to 71% during this same period.

⁹⁴ The first CTA, Jussi Ojala, arrived in January 1990 (Seppanen et al., 2013).

industrial transformation that the Brigadistas promoted, with varying degrees of success, at these associations. Influenced by their Cooperative Developmentalism interpretation, the Finnish-employed Cooperative Brigadistas set upon reorganizing them in PRODEGA's Phase I (1990-1993). In this campaign, they combined an emphasis on enhancing productivity, product quality, marketing capacity and profitability, with a moral duty to educate ranchers in cooperative work and social behavior, and empower and benefit the smaller producers. The country's poor economic conditions and the waning state support for small producers and cooperatives during most of the 1990s, in turn, spurred financially troubled ranchers to seek outside support, as their traditional models proved increasingly unprofitable.

The Brigadistas spent considerable time enacting the central tenets of Cooperative Developmentalism. As a FINNIDA evaluation explained, they emphasized "further entrepreneurial development among cooperatives, especially to avoid disadvantaging the small producers" (Eskola 2003, 61). The goal was to "maximize the amount of resources that reached producers, especially to benefit the smaller ones," in order to improve their living conditions (Interview #21, 01/19/2013). They also focused on promoting cooperation across ranchers (Gomez & Ravnborg, 2011). Cooperatives were as central to the Brigadista project as banks were to Gerschenkron's (1962) Saint Simonian socialism in France: they bore the "great task" of "organization and development of the economy" (Gerschenkron 1962, 23).

But establishing these cooperatives proved difficult, despite the ranchers' need for outside support. As Seppanen et al. (2013) explain, "the idea of cooperatives faced strong opposition from cattle ranchers given that the term cooperative in and of itself had been discredited by the experience of the previous decade when peasants had been forcefully "co-operativised"" (25). The concept also clashed with a prevalent individualist tradition in the region (Cody, 1986).

Creating the “new cooperative man” thus required “considerable investment in training in cooperative principles and business management...” (Eskola 2003, 62). Indeed, Seppanen et al (2013) argue that “The fact that the project set out to promote cooperatives... can be seen as a courageous decision in these circumstances, and great strength of conviction was needed, along with a little of blackmail, to convince the cattle ranchers of the area to create cooperatives (“or there are cooperatives or there is no project”, in the words of some of those interviewed)” (25). After much struggle, the Brigadistas officially created the first nine cooperatives in the second half of 1991.

Yet while Cooperative Developmentalism encouraged cooperativization and rural development, and extolled entrepreneurship among smaller ranchers, the Cooperative Brigadistas needed to translate these general goals and aspirations into firm-level practices. In this process of translation, the evidence suggests that their consulting background played a preeminent role. We can assess the importance of this professional background by drawing a comparison with other actors driven by Cooperative Developmentalism but bereft of the consulting tools and knowledge. Damiani (1994) offers one example. He reports that most of the cooperatives known as CCSs created by the Sandinistas in Nicaragua during the late 1980s, and therefore strongly supportive of Cooperative Developmentalism, encountered a mined economic terrain in the 1990s. He argues that because their leaders and members lacked the required “management skills” (7) to reorganize and adapt to the new neoliberal environment, many of them floundered, disbanded, and sold off their land.

A number of rancher associations in the north central region of Nicaragua corroborate this finding. Organized as CCSs, the associations upheld to the principles of Cooperative Developmentalism. Yet, deprived of the requisite practical business skills, the largely uneducated ranchers struggled to fully enact these moral tenets into the cheese processing rancher cooperative model and strategy. At best, some of these rancher associations succeeded in developing a sufficiently

sophisticated collection network and marketing strategy to sell their raw milk to Managua dairy plants. None moved into processing.⁹⁵

What set the Brigadistas apart from these ranchers was their consulting background. Consulting offered a set of tools, skills and abstract knowledge that allowed the Brigadistas to pursue the industrial transformation. At the same time, knowledge and skills alone were insufficient to account for the characteristics and extent of the changes they promoted. In fact, the creators of the lower road Salvadorian model and strategy, for example, benefited from a long experience as both merchants and producers. They marshaled an impressive arsenal of production and market knowledge specific to the dairy sector. However, lacking the moral imperatives, causal map and taxonomy provided by Cooperative Developmentalism, their production model and strategy lacked many of the redistributive features of the cheese processing rancher cooperatives (e.g. inclusion of smaller producers, improved conditions for workers). They could process cheeses, but the benefits often failed to “trickle down.”

Thus, it was the combination of their consulting background with their Cooperative Developmentalism interpretation that distinguished the Brigadistas. This combination offered the Brigadistas a distinct moral-practical mindset, the best practice approach to Cooperative Developmentalism. The Brigadistas relied upon this moral-practical mindset to foster an industrial transformation by devising practical, business-friendly solutions, and adapting the old structures unsuccessfully promoted by the Sandinistas to the new times and purposes.

For instance, in PRODEGA’s Phase I they strengthened the rancher associations’ raw milk production and collection by setting up a project-managed extension service. The service provided “technical assistance to the selected reference farms in the project area...” It transferred “relevant technology to the farmers, especially in the

⁹⁵ For a more detailed discussion of these comparisons, see Appendix 4.

areas of improved livestock nutrition, animal health and farm management” (Eskola 2003, 62). Those innovations reduced the need for transhumance and improved basic hygiene. The Brigadistas also introduced new cattle breeds through a genetic improvement program (Interview #66, 02/14/2013), as they looked to raise productivity at the farm level, particularly among the smaller producers. In addition, they built the first linkages of the collection network, installing four raw milk cooling stations and building over 450 kilometers of roads to connect some of the more isolated (and hence poorer) producers.⁹⁶ Spread across the territory, the new roads and cooling stations expedited raw milk delivery and assured refrigeration. The Brigadistas also organized cooperatives of truckers to transport the refrigerated raw milk from these cooling stations to larger collection centers located near the small town of Boaco (Interview #71, 02/18/2013).⁹⁷

In addition, the Cooperative Brigadistas developed a new business strategy. Given the dire market conditions of the late 1980s and early 1990s, immediate increases in rancher profitability became imperative.⁹⁸ The first, albeit not fully satisfying, opportunity to address this problem arose with the electoral defeat of the Sandinistas in 1990. Soon after assuming control of the executive, the new Liberal Chamorro government returned the handful of large industrial dairy plants in Managua to their pre-Revolution owners. The Brigadistas quickly offered to supply their raw milk demand. However, the arrangement proved disappointing. Because they enjoyed a monopsonistic position, the plants consistently varied prices and demand unilaterally in response to national raw milk availability.

In accordance with the Cooperative Developmentalism’s glorification of both industrial production of foodstuffs and a strengthened position of smaller producers

⁹⁶ At Concepcion alone they built over 50 kms. of road (Leguizamón et al., 2002)

⁹⁷ During this time, they also provided lines of credit for cooperative members to upgrade their ranch practices and facilities (Leguizamon et al., 2002).

⁹⁸ As Seppanen et al. (2013) explain, “upon the launch of PRODEGA there were many small producers that could not sell their milk, even to traditional cheese makers, but rather ended up throwing away the quantities which were not consumed by their families (in these cases, milk was an almost worthless sub-product)” (44).

vis-à-vis powerful interests, the PRODEGA plan called for the construction of a cheese plant in the community of Rancho Rojo, home to the San Cristobal cooperative. The plant would diversify ranchers' markets and overcome their dependence on large raw milk buyers. However, disagreements over the viability of the plant arose both among the Brigadistas and between them and cooperative members. On the one hand, the Finnish CTA worried that "the supply of milk did not allow for an industrialisation of the milk into cheese" (Seppanen et al. 2013, 26). Furthermore, Finnish aid budget cuts after a sudden devaluation of the country's currency in 1991,⁹⁹ and the decision to expand the number of associations served by PRODEGA from seven to nine, constrained the project's resources.

On the other hand, some of the Brigadistas, Embassy personnel¹⁰⁰ and leaders from the newly-formed Concepcion and San Cristobal cooperatives favored plant construction. These two cooperatives were already more consolidated than the other seven cooperatives originally targeted by PRODEGA. For them, the plant offered the opportunity to access urgently needed new markets.

The disagreements led to the construction of the plant in a contentious environment. The CTA sought to postpone construction in 1991 under PRODEGA. But the cooperative leaders, with support from their Brigadista and Finnish Embassy allies, obtained a loan from the World Food Program for a small plant. The two cooperatives built this plant, which lacked pasteurization capacity, in the early 1990s in Rancho Rojo.¹⁰¹

⁹⁹ In and of itself, FINNIDA's decision to continue the program for 13 years and spend almost \$20 million in the midst of a deep economic crisis in Finland and widespread budget cuts evinces the high priority the agency gave to Nicaragua and PRODEGA. This priority was evident from the outset: in its first mission to Nicaragua, FINNIDA sent Reino Uronen, Director of the Cabinet of the Ministry of Agriculture and Forestry. The future ambassador to Nicaragua, Kari Karanko, also joined the mission (Seppanen et al., 2013).

¹⁰⁰ The Embassy and some of leading Brigadistas often disagreed on the preferred course of action. As Seppanen et al. (2013) explain, "This clash, which at times became verbally violent, had its expression in the Embassy's intervention..." (27)

¹⁰¹ Concepcion and San Cristobal, both from the municipality of Camoapa, had become close partners early on in the project. As Seppanen et al. (2013) explain, in the early 1990s "[Concepcion] in Villa Revolución-La Calamidad was not connected to the national electric grid..." Aware of this problem,

This decision proved visionary. The plant initially produced different cheeses (e.g. *queso fresco*, *queso criollo*) and other dairy products (e.g. sour cream, butter) for domestic sale. But soon after its construction, a new market opportunity emerged: the Chamorro government opened the country's border to El Salvador and, reversing the policy of the Sandinista regime, withdrew from direct intervention in foreign trade. With expanding demand in El Salvador and the example of a growing number of Salvadorian merchants, the Concepcion and San Cristobal processing plant became the first cooperative firm, and one of the first cheese producers in the country, to export to the Salvadorian market (Gomez & Ravnborg, 2011; Leguizamón, Berríos, & Ayca, 2002).¹⁰² This new market, however, demanded widespread improvements in the production process to expand the scale of production and, later, fulfill Salvadorian health and safety standards.¹⁰³

Recognizing the opportunity (and perhaps also reflecting the first change in CTA), during PRODEGA's Phases II (1994-1998) and III (1998-2003) the Brigadistas promoted processing in two ways: they upgraded the facilities at the original plant, and provided processing equipment for at least two other well-performing cooperatives. At the original San Cristobal plant, and in two new plants at the Concepcion and Masaya cooperatives, the Brigadistas purchased sophisticated pasteurization equipment (i.e. rapid pasteurization technology) and imported processing machinery (e.g. cooling tanks, presses, refrigerated rooms, packaging machines). They also built large labs to test the raw milk. With these investments, the cooperatives could produce a variety of high quality, pasteurized dairy products.

the "[San Cristobal] Cooperative offered [Concepcion] a plot of land in Ranch Rojo to place its milk collection centre, given that Rancho Rojo was connected to the national electric grid; and since then both cooperatives coexist in harmony side by side..." (26)

¹⁰² Entering the Salvadorian market became a significant challenge for the processing cooperatives. They initially attempted to establish their own commercial offices in El Salvador, but after facing threats and robberies, they decided to employ Salvadorian merchants (Interview #71, 02/18/2013).

¹⁰³ For a description of these standards, see Perez-Aleman (2013).

In addition, the Brigadistas complemented the technology and work organization innovations with labor condition changes. They heavily trained workers in production practices, often sending them abroad for short courses in places like the Dalum College of Food and Technology, also known as the Danish “Harvard of Dairy.” In addition, they introduced a human resource arrangement that valued long-term contracts, constant skill upgrading and relatively high wages and benefits.

During these later PRODEGA phases, the Brigadistas also expanded activities that particularly benefited the smaller, less technified and more isolated producers: they trained workers on clean collection practices, advocated increased cattle-hand task specialization, introduced more efficient ways of dividing stables, improved and diversified ranch pastures, built on-ranch milking facilities, and provided veterinary services.¹⁰⁴ Furthermore, they expanded the collection area by installing three new cooling centers and adding collection routes. In addition, they added quality controls at cooling centers by setting up small labs to test the raw milk. Finally, they introduced “an important range of environmental conservation methods” that practically eliminated environmentally-harmful practices such as transhumance and controlled burning of pastures. In introducing these environmental methods, the Brigadistas couched their appeals in a message that, like Sandinismo, belittled “backward” attitudes and lauded modernization: they insisted “that modern men use modern techniques and that these are good for the environment” (Seppanen et al. 2013, 49).

These changes rapidly delivered results. Overall, between 1990 and 1997, a time when most Nicaraguan ranchers focused on growing the size of their herd but disregarded cow productivity, average production per cow/day among targeted producers rose from 3 to 6 liters (Seppanen et al. 2013). By 1997, argue Seppanen et al. (2013), the PRODEGA cooling centers were handling 30% of national milk

¹⁰⁴ During this period, the Brigadistas introduced a number of additional social services for local residents, including a gas station, a health clinic, funeral services, and a grocery store (Leguizamón et al., 2002; Núñez et al., 1998).

production. This was high quality milk: by 2013, 80% of all milk collected qualified as Grade A.

However, outcomes varied significantly across the cooperatives (see Table 4.5). On one hand, by the end of Phase II, some cooperatives had been disbanded (i.e. Apoyeque, Telica, Cosiguina and Isla Zapatera) while others faced mounting difficulties (i.e. El Hoyo, Cerro Negro). These cooperatives had lagged behind since the early stages of the program.¹⁰⁵

Table 4.5 Situation of the original PRODEGA cooperatives in 2003

Name	Municipality	Situation in 2003 (end of PRODEGA)
San Cristobal	Camoapa	Successful operation, processing cheese
Concepcion	Camoapa	Successful operation, processing cheese
Masaya	Boaco	Recovering operation, processing cheese
Cosiguina	Boaco	Still in existence, but only offers members credit
Cerro Negro	Boaco	Disbanded
El Hoyo	Boaco	Disbanded, some members joined Masaya
Apoyeque	Boaco	Disbanded
Telica	Boaco	Disbanded
Isla Zapatera	Boaco	Disbanded

Source: Seppanen et al., 2013

On the other hand, the San Cristobal and Concepcion experienced unprecedented growth (see Table 4.6). In these cooperatives, the average raw milk production per rancher rose from 15 to 18 gallons over the dry months, and 18 to 22 gallons in the rainy season. 70% of these producers were small. Furthermore, the average “calving interval” (i.e. the amount of time between births) decreased from 24 to 18 months

¹⁰⁵ The explanation for the varied success, with Boaco cooperatives largely failing and the ones in Camoapa expanding, lies outside the scope of this dissertation. However, Seppanen et al. (2013) offer two hypotheses: the shorter distances and better roads between cooperatives in Boaco increased competition; and in Boaco a more numerous contingent of artisan cheese manufacturers purchased most of the raw milk, limiting the appeal of cooperatives.

(Eskola, 2003). Lastly, Eskola (2003) and Seppanen et al. (2013) both report that raw milk prices for ranchers in these cooperatives increased and, more importantly, stabilized during this period. Remarkably, these changes took place as the two cooperatives rapidly enrolled new ranchers who lacked the original producers' on-ranch investments and thus lowered average yield and production measures. Concepcion, for instance, grew from an original 23 members in 1990 to 132 members and 768 independent suppliers in 2013. Similarly, San Cristobal, originally formed by 44 members, collected milk from 400 members in 2013.

The on-ranch production changes and growing membership raised the amount of raw milk collected and processed by the expanding cooperative cheese plants. Concepcion's collection, for example, grew tenfold in less than ten years, from 500 gallons of raw milk per day in 1994 to 5,000 in 2002 (Artola & Parrilli, 2006). By 2012, the plant collected close to 35,000 gallons per day (Interview #71, 02/18/2013). On that same year, San Cristobal collected almost 20,000 gallons per day.

While these two processing cooperatives continue to sell at least a quarter of their raw milk to the Managua dairy plants, they also process a significant portion. They market their brand-name dairy products domestically – especially San Cristobal, which processes 75% of its milk to produce its brand-name dairy products, placing them in grocery store chains across the country. They also sell abroad, positioning themselves among the country's leading exporters: by 2007 – the earliest year for which firm-level export figures are available – the two cooperatives were ranked as the third and fourth largest medium-sized cheese exporters in the country (CETREX, 2013).¹⁰⁶ They place their high quality processed products not only in other Central American markets but also, most impressively, in the high-standard United States market. In fact, in 2012 USAID recognized Concepcion as the fastest growing

¹⁰⁶ Since then, Concepcion's exports have continued to grow (it ranked 3rd in 2013) while San Cristobal has shifted its marketing focus to the domestic market, where it enjoys unparalleled success.

Nicaraguan exporter to the United States (Consejo Superior de la Empresa Privada (COSEP), 2012).

Table 4.6 PRODEGA cheese processing cooperatives descriptive measures

Name	Milk collection per day (liters)			Number of producers (2013)	Liters/day/producer (2013)
	1991	2003	2013		
San Cristobal	4,000	30,000	40,000	400	N/A
Concepcion	2,000	20,000	100,000	768	~143

Source: Seppanen et al. (2013) and personal interviews

In building these cooperatives, the Cooperative Brigadistas diligently pursued the moral guidelines, political aspirations and causal maps delineated by their ideological interpretation. They cultivated a “new man” by encouraging cooperation and a concern for the collectivity.¹⁰⁷ They also promoted the participation of a diverse range of individuals in the cooperatives, including both smaller, isolated producers and medium-sized ranchers. By eventually introducing sophisticated processing facilities, the Brigadistas strengthened coop members’ economic capacity and bargaining power vis-à-vis large multinational subsidiaries. In addition, they continually strove to transfer capacities to cooperative members. Indeed, after 13 years, the Brigadistas withdrew entirely from the two cooperatives.

Their endeavors often conflicted with the ideological position of the Liberal governments of the 1990s. Premised “on the idea that wealth created in pre-selected clusters of private companies in locations with optimal conditions for their performance [i.e. urban areas] would inevitably ‘trickle down’ to the poor” (Caldecott et al., 2012), these Liberal ideological commitments sharply contrasted with the tenets of Cooperative Developmentalism. As Damiani (1994) describes, the Liberal governments of the 1990s often viewed associations and cooperatives as “political adversaries” and “inefficient producers,” and tailored their policies to

¹⁰⁷ From the beginning, PRODEGA included a “women’s development and gender issues awareness” component that “engaged in some gender training activities and achieved some success in improving the lives of local women...” (Eskola 2003)

individual farmers instead. Yet, despite this environment, the Brigadistas found sufficient latitude to carry forward their transformational campaign.

Isomorphism

Notwithstanding the mixed results of PRODEGA as a whole, Concepcion and San Cristobal's stellar performance during the 1990s enticed a few other ranchers. For example, in the mid 1990s ranchers from the neighboring department of Chontales approached the Brigadistas to inquire about the possibility of extending the program to their area (Eskola 2003). And in the nearby RAAS region, a different group of ranchers suggested that rather than initiating a planned roots and tubers development program, the Italian aid agency should focus on promoting milk and dairy production (Interview #73, 02/18/2013).

However, as the literatures on organizations, and industrial relations and HPWOs would predict, diffusion of the Brigadista practices encountered obstacles, despite these early signs of interest. From the outset, the contention and legitimacy constraints underscored by the neoinstitutional literature curbed diffusion (Paul DiMaggio & Powell, 1983; Ingram & Rao, 2004; Meyer & Rowan, 1977). In a parallel to Guatemala's conservative sugar mill owners and managers, many ranchers in the north central region distrusted the new model and strategy. Openly supportive of the counterrevolutionary Contra during the 1980s, they associated the cooperative organizational form with Sandinismo, and particularly with the Statist Developmentalism interpretation. With memories of the recent Sandinista-Contra war still fresh, and despite the growing presence of Sandinista ranchers in the region, this association between cooperativism and Sandinismo generated a deep, visceral reaction.

The cooperative organizational form also clashed with the region's cattle rancher tradition of private ownership, masculinity and individual autonomy. As an interviewee explained, "all these ranchers are agricultural frontier peasants with a sense of identity as peasants. The large landowners expelled them, but they've

moved to the agricultural frontier to continue as peasants. For them, the dream is to own more land, milk and cattle... And the imposition of the cooperative with its emphasis on the collective threatens that dream..." (Interview #93, 03/22/2013) In other words, the region's "tradition of individualism, personal independence and cowboy bravura" limited the appeal of this new organizational form (Cody, 1986).

This resistance would abate in the mid to late 1990s, when the accelerated entry of new organizations to the "established organizational field" (Stinchcombe, 1965) of the region's ranches triggered a hegemonic crisis. This hegemonic crisis challenged the ranchers' ascendancy as local elites and, coupled with the exemplary performance of Concepcion and San Cristobal, softened their opposition to the Brigadista model. The crisis originated with the rapid expansion of collection networks established by the privatized Managua industrial dairy plants. In a context of post-war ranch resettlement and growing raw milk production, these plants increasingly enjoyed a monopsonistic position, especially in their interactions with the smaller, independent ranchers. This position allowed them to fully control prices and demand, quashing any attempt by ranchers to exert their independence and undermining their position as local leaders.

The burgeoning presence of Salvadorian-owned cheese processing plants further hastened the erosion of the ranchers' local privileged position. Founded by a growing stream of Salvadorian cheese merchants, these plants focused on export cheese production.¹⁰⁸ Perhaps inevitably, given the Salvadorian model's reliance on spot market raw milk purchases, confrontations soon emerged between the merchants-turned-processors and the ranchers. Because, like the Managua large dairy plants, they enjoyed a monopsonistic position, the Salvadorians often gained the upper hand in these struggles. The constant defeats acutely reminded ranchers of their fading power and the inherent limitations of their models and strategies.

¹⁰⁸ Initially, the Salvadorian merchants that flowed into the region in the 1990s sought to buy local cheeses for export to El Salvador. But not finding an adequate supply, they eventually established their own cheese processing plants.

This hegemonic crisis called the traditional rancher model into question and, to some extent, blocked the “low road” represented by the traditional approach. In a Gramscian turn, the ranchers, as a “traditional ruling class,” increasingly explored the possibility of changing their organizational model to recover their lost position. Their decision seemed to set the stage for straightforward imitation, or “mimetic isomorphism” (DiMaggio & Powell 1983) in the organizational literature jargon, of the Concepcion and San Cristobal model and strategy.

However, in trying to imitate the Brigadista model and strategy, most rancher associations ran into a seemingly insurmountable constraint: the dearth of indispensable managerial and administrative resources. As the institutional literature on industrial relations and HPWOs suggests, adoption of new, more sophisticated practices requires managerial knowledge. A firm’s managerial staff must understand the new practices, their interrelations, and their organizational and technological demands for mimetic isomorphism to occur.¹⁰⁹ But the cattle ranchers of the Nicaraguan north central region, deprived of such professional skills, could not absorb the lessons from Concepcion and San Cristobal. Lacking mentoring by Brigadistas, paralysis prevailed and mimetic isomorphism stalled.

Insofar as it sheds light on the resource constraints to diffusion, this finding also echoes the organizational ecology literature. That literature suggests that as a new type of organization emerges, the conflicting forces of legitimacy and resource competition will define its rate of diffusion (Carroll & Hannan, 1989; Haveman, 1993). On the one hand, as the novel organizational form becomes legitimate among likely adopters, its diffusion will accelerate. But on the other hand, the form’s new requirements often produce resource scarcities, triggering competition and restraining dissemination. Skilled labor may become a scarce resource in such

¹⁰⁹ From Japan’s modernizers (Westney, 1987) to Massachusetts’ railroad firms (Dobbin & Dowd, 2000), professionals (e.g. managers, engineers) played a fundamental role in imitation. Even in Guatemala’s sugar mills, engineers and managers from other mills actively borrowed from Tajumulco.

circumstances. Such was the case of Nicaragua's central northern region, where the limited number of professionals stymied the initial diffusion of the increasingly legitimized Brigadista model and strategy.

Yet, imitation is not the only channel of diffusion, and scarce resources are not fixed. In this discouraging context, the Cooperative Brigadistas mounted a dissemination campaign. They began with direct interventions, personally introducing innovations in a few rancher associations to overcome the knowledge constraints. But aware of their time and financial constraints, they also employed normative avenues that exploited their professional contacts. The Brigadistas enlisted a growing number of allies, many of them foreign aid consultants, on a campaign to expand the scope of diffusion. The campaign, as DiMaggio and Powell (1983) would predict, rested on the shared educational base of the allied consultants and professionals, and on their networks. In a manner akin to the Apostles of Development in Guatemala, ideology colored the interests and actions of the Cooperative Brigadistas, energizing their effort to diffuse their model and strategy in Nicaragua. Moreover, their professional background largely affected the normative avenues they chose to travel.

This diffusion initiative began with PRODEGA's Phase III. The Brigadistas pursued the goals of "raising milk quality at the farm level," improving "productivity of agricultural cooperative members," and facilitating the "adoption of an adequate organization" among "agricultural cooperatives." In this pursuit, they expanded their area of focus. At the behest of the Nicaraguan government and local ranchers, they included four additional municipalities in the dry zone of the neighboring department of Chontales: Acoyapa, Cuapa, Juigalpa and Comalapa. In accordance with their Cooperative Developmentalism ideological interpretation, they targeted struggling small- and medium-sized rancher associations in these municipalities. Deploying their consulting expertise, the Brigadistas focused on strengthening these associations by developing extension services, building cooling centers and introducing farm-level innovations to raise milk output and productivity. Their mentoring also extended to include "improved marketing systems" that bolstered

cooperative bargaining positions with their main raw milk buyers, the large Managua dairy plants (Eskola, 2003).

Nonetheless, PRODEGA's conclusion in 2003 cut short the full transformation of these rancher associations into cheese processing cooperatives. The Brigadistas left behind organizations capable of supplying high quality milk to a growing number of industrial dairy plants in Managua. But the latecomers did not upgrade into processing. As interviewees explained, even after four years of support, association members lacked the necessary professional skills for this final step. For example, the leader of the Apoyo rancher association in Juigalpa argued that, "[the Brigadistas] worked and supported the people of [Concepcion and San Cristobal] for over twelve years. With us, they only came for four years. So the problem was that their mentoring was too short... Even if they'd only been with us one more year, we would have been able to reach the point where we could add value to the raw material, which is what we're missing..." (Interview #92, 03/20/2013)

Despite failing to complete the full transformation at these particular rancher associations, the Finnish Cooperative Brigadistas ensured continued diffusion through three normative channels constituting an apparatus of diffusion. First, they shared their experiences with other aid agencies. Second, they indoctrinated cheese processing cooperative members and their professional staff, the "new men," on the need to cooperate. And third, they promoted the creation of cross-cooperative associations.

In describing normative "pressures," DiMaggio and Powell (1983) recognize the role of "professional networks that span organizations and across which new models diffuse rapidly." In these networks, professionals will often share the same views, policies, procedures and structures, make similar decisions and favor comparable approaches. In Nicaragua, the FINNIDA Cooperative Brigadistas availed themselves of their agency's position as a leading coordinator of donor activities to exploit the

network of international aid agencies and consultants.¹¹⁰ Through this network, they shared their approach with other donors. Employing discussions, presentations and visits, the experiences at Concepcion and San Cristobal soon became templates for future interventions by other donor agencies. As the final report of the project noted, “PRODEGA was the precursor of a more extensive intervention of international cooperation in the dairy sector; and its experiences and methodology have inspired subsequent interventions in other areas, in one form or another” (Seppanen et al., 2013). In fact, even the Nicaraguan government tried to apply the “PRODEGA model” in other regions.

Emulating FINNIDA, these agencies organized their own teams of Cooperative Brigadistas. The new Brigadistas became “champions” of the processing cooperative model and strategy, spearheading the “promotion of the new structure” (Tolbert & Zucker, 1996). They replicated the interventions at other cooperatives, including the Italian-supported Mombacho and the ongoing Swede FondeAgro project at Momotombo (Perez-Aleman 2013, Nicacentro 2013, Seppanen et al., 2013, Personal Interviews).

As replication proceeded, the steps of the transformation reached Tolbert & Zucker’s (1996) stage of “objectification”: a “degree of social consensus” arose “among organizational decision-makers concerning the value of a structure” (182). This growing consensus allowed the new Brigadistas to institute the new practices. First, they organized ranchers and introduced a number of on-ranch innovations to boost productivity and product quality. Second, they built a milk collection network to test the milk and maintain refrigeration. Only after completing these first two steps did the new Brigadistas build processing plants.

¹¹⁰ Finland participated in a number of thematic and sectoral funds, as well as European Union and Nordic+ meetings with aid agencies from countries such as the Netherlands, Sweden and Italy (Caldecott et al., 2012).

We should note, however, that in each stage the new Brigadistas introduced bundles of practices that jointly delivered substantial economic benefits. Their introduction of these bundles helped overcome the disappointing results that the institutional literature on industrial relations and HPWOs associates with piecemeal adoption. As this literature explains, piecemeal adoption and its disappointing results can often derail diffusion of new production models (Kochan et al, 2013; Ichniowski, Shaw & Pernusshi, 1997).

Yet, beyond its specific characteristics, the diffusion process to other cooperatives pursued by the new Brigadistas proves puzzling from the perspective of materialist accounts. Most importantly, as the PRODEGA experience clearly suggested, cooperative organization entailed significant risks. While Concepcion and San Cristobal emerged as examples of success, six out of the nine original PRODEGA cooperatives disbanded before the end of the program. The remaining cooperative, Masaya, struggled to survive.

In addition, the north central region of Nicaragua offered donors other more cost-effective alternatives to promote industrial transformations and economic development. For example, by the late 1990s, a number of rural independent cheese processing plants modeled on the Salvadorian approach were exporting cheeses to El Salvador. Armed with the generic goal of promoting rural development, the aid agencies could have easily focused on these more established plants. They could have instituted upgrading projects with benefits trickling down – a central goal of the Liberal Nicaraguan governments of the 1990s and early 2000s – to the local economy.¹¹¹ In fact, the previously mentioned United States Agency for International Development (USAID) project followed this approach (Financial Markets International, 2008).

¹¹¹ Another alternative was to strengthen rancher production. In fact, a report prepared for the Swedish aid agency counseled against building a processing plant at Nicacentro. The report, which is reminiscent of PRODEGA's first CTA perspective, argued that the rancher association lacked the required milk quality, capital, organization and administrative and managerial capacity (Galletto, 2012). Yet despite this warning, Nicacentro is currently concluding construction of a cheese plant.

However, the new Brigadistas embarked upon the much costlier and, in a low tariff and increasingly competitive domestic dairy market, highly uncertain route of spurring transformations in the cheese processing rancher cooperatives. This decision reveals the central role of ideology. The taxonomic priorities of the Cooperative Developmentalism interpretation of Sandinismo, which these aid agencies shared, defined the scope of action. They targeted only struggling associations of impoverished small- and medium-sized ranchers.

Like the original FINNIDA Cooperative Brigadistas, the new Brigadistas organized their targeted ranchers into blossoming associations. They introduced innovations to raise on-ranch productivity and milk quality. They developed sophisticated marketing systems for their raw milk and, later, processed dairy products. They overcame knowledge constraints by guiding the associations as they upgraded into processing, and providing the specifications and funding for processing capital. Finally, the new Brigadistas trained the workforce and promoted improved labor and employment practices.

The second channel through which the FINNIDA Cooperative Brigadistas fostered diffusion of their model and strategy and a broad industrial transformation was their socialization program for the “new man.” In essence, they impressed the importance of cooperation with other ranchers upon processing rancher cooperative members and their growing professional staff. In a surprising twist, akin to the decision by Tajumulco sugar mill managers in Guatemala to share their practices with other mills, cooperative members from Concepcion and San Cristobal encouraged diffusion. They organized visits to their production facilities for other ranchers, provided technical support as these associations built processing plants, and most importantly, offered marketing guidance to their budding processing

peers.¹¹² Their decision to share challenges some of the fundamental assumptions of the strategy literature, with its emphasis on differentiation and monopolistic rents (Porter, 1980; Teece et al., 1997; Wernderfelt, 1984).

Among the “new men” at Concepcion and San Cristobal, the need to share has become a matter of fact. For instance, the general manager of Concepcion characterized such cooperation as “common.” For him, it was the foundation of “the spirit of cooperativism” that lifted all boats (Interview #71, 02/18/2013). Seppanen et al., (2013) also found that “all individuals interviewed explained technical and financial assistance” to other cooperatives “in terms of solidarity between cooperatives” (37). Once seen as a sign of “communism” in this strongly individualistic region, cooperation was now taken for granted. As other cooperatives developed, they too celebrated sharing.¹¹³

Remarkably, through these sharing initiatives, a handful of rancher associations succeeded in developing processing capabilities despite lacking international donor support. In these rare cases, a crust of homegrown professionals set these associations apart from comparable organizations. For instance, the Maderas cooperative benefited from a professional leadership supportive of Cooperative Developmentalism, and a membership of mostly university graduates (Interview #54, 10/10/2012).¹¹⁴ Located in the Pacific coast, this association learned from the San Cristobal and Concepcion experience and transformed its model and strategy. Sharing the best practice approach to Cooperative Developmentalism, the Maderas

¹¹² Seppanen et al. (2013) describe the experience of the San Felipe cooperative as an example: “The San Felipe Cooperative in Boaco, which had declined, finds itself in the process of recovery with support from the [Concepcion] Cooperative. Following an internal crisis due to poor management and the lack of trust of the members, the San Felipe Cooperative turned to [Concepcion] to request technical assistance, and the Camoapa Cooperative granted it a significant loan free of interest. San Felipe was able to reimburse the loan in less than two years and renewed its operational systems, currently finding itself in a strong boom” (37).

¹¹³ The experience is not unique to Concepcion and San Cristobal. Latecomers, such as Mombacho and Momotombo, also aided neighboring associations.

¹¹⁴ The president, for example, directed a government dairy plant during the 1980s and then worked in the Managua dairy plant Eskimo before turning his attention to Nicaragua. (Interview #54, 10/10/2012)

ranchers could closely follow the Cooperative Brigadistas' lead. Their case illustrates a larger point: Nicaraguans unrelated to the donor agencies could still play a role as Brigadistas as long as they combined a business-oriented profession with the Cooperative Developmentalism interpretation.¹¹⁵

The last mechanism the FINNIDA Cooperative Brigadistas used to catalyze diffusion of their model and strategy and promote industrial transformation was an umbrella association. While their initial effort to create the association – the Alianza Amerrisque – capsized with the end of the PRODEGA project,¹¹⁶ it laid the foundation for the more successful Central de Cooperativas Lacteas R.L. (CENCOOPEL), founded in 2007. Currently, CENCOOPEL coordinates the joint activities of eleven cheese processing rancher cooperatives.¹¹⁷ Managed by a professional staff, it acts as a “developmental association” (Schneider & Doner 2000, 274), offering a range of services for members: it organizes forums and training activities, provides access to credit and technical assistance, and negotiates bulk prices for inputs (e.g. salt, rennet, packaging). In addition, CENCOOPEL is developing a project to build a pasteurized milk plant to compete with the Managua dairy plants. The large industrial plant, tentatively located near the San Cristobal and Concepcion plants in Boaco, would collect raw milk from all member cooperatives and produce primarily for the domestic market.

Through these three normative channels, the FINNIDA Cooperative Brigadistas promoted the diffusion of their model and strategy, and the industrial

¹¹⁵ Damiani (1994) corroborates this point. In his study on Nicaraguan cooperatives, he argues that those CCSs that succeeded in reorganizing and adapting to the 1990s economy received substantial guidance and support from well-staffed and professionalized Nicaraguan agencies, such as the strongly Sandinista National Federation of Cooperatives (FENACOOPEL). In addition, they benefited from leaders who, having served in political positions during the Sandinista government, participated in courses on “organizational and management techniques” (Damiani 1994, 22). FENACOOPEL and these leaders shared the professional background and ideological interpretation to transform these CCSs.

¹¹⁶ They also contributed to the creation of a dairy sector umbrella association, CANISLAC, which includes representatives from rancher associations, large industrial plants, independently-owned Salvadorian plants, artisanal plants and cooperatives (Seppanen et al., 2013).

¹¹⁷ The cooperatives participating in CENCOOPEL are Concepcion, San Cristobal, Nicarao, COOPAGROS, Alianza Nova, COOPROLECHE, San Felipe, Tioyaca, COOPAC, Quebrar and El Congo.

transformation of the cheese processing cooperatives. To varying degrees, the CENCOOPEL member cooperatives have all adopted their practices, raising product quality and productivity, processing their raw milk, and developing marketing schemes that benefit both small- and medium-sized producers. Yet, despite the growing number of professionals in Nicaragua, their scarcity continues to hamper a more rapid process of isomorphism in the north central region. As a result, in contrast to Guatemala's sugar mills, diffusion across Nicaraguan rancher associations has only been partial. Many continue to focus on raw milk production rather than processing.

Summary

Like the Guatemalan sugar industry, the Nicaraguan cheese processing rancher cooperative case reveals the explanatory role of ideology for industrial transformation. This chapter shows how Sandinismo, a political ideology, drove the transformative actions of a team of top firm decision-makers, the Cooperative Brigadistas. In particular, Cooperative Developmentalism, an interpretation of Sandinismo, motivated and guided the Brigadistas. Yet, in enacting Cooperative Developmentalism's moral and political imperatives and aspirations, the Brigadistas also drew upon their professional background as consultants. The merger of their Cooperative Developmentalism interpretation and professional background as consultants engendered a moral-practical mindset among the Brigadistas that I call the best practice approach to Cooperative Developmentalism.

Through this moral-practical mindset, the Brigadistas engaged in the sequential processes of neomorphism and isomorphism. Closely mentoring rancher associations in the department of Boaco, they first created a transformative production model and business strategy that upgraded two rancher associations, San Cristobal and Concepcion, into processing. The practices of these newly formed cheese processing cooperatives set them apart from most other cheese producers in the country and allowed them to become one of the first Nicaraguan cheese

exporters. They also offered social gains, benefitting smaller producers and workers. After this experience, the Cooperative Brigadistas, motivated by their Cooperative Developmentalism interpretation, actively diffused the model and strategy to other rancher associations in the region. In this pursuit, they built an apparatus of diffusion to overcome barriers to dissemination, and trigger a remarkable industrial transformation.