**Developmental Professionals, Industrial Transformation and Mutual Gains in Nicaragua’s Cheese-Processing Industry**

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**Abstract**

How might industrial transformations with mutual gains unfold in late-developer contexts devoid of the State’s helping hand or the pedagogical guidance of global value chain buyers? This article addresses this question through a case study of a set of cheese-processing cooperatives in Nicaragua’s northern agricultural frontier. It traces the cooperatives’ adoption of a new, upgraded “Gebhardian” organizational model – incorporating improvements in primary production and processing – to the actions of a team of “developmental professionals.” Drawing upon ideational accounts in political science and sociology, the article then suggests that two conditions set these professionals apart from other comparable actors: their adherence to a Revisionist Marxist ideology; and their base of expert knowledge. The article concludes with a discussion of the case’s implications for industrial transformation and ideational theories.

Keywords: Industrial change, ideology, mutual gains, Nicaragua, agriculture, foreign aid

**INTRODUCTION**

On March 9, 2012, Nicaragua’s peak exporter association, the Asociación de Productores y Exportadores de Nicaragua (APEN), recognized Masiguito as the country’s fastest growing exporter to the United States (Nicaragua Empresaria 2012). A twenty-two year old cooperative at the time of the APEN award, Masiguito was surprisingly owned not by large cattle ranchers from Nicaragua’s vibrant southern coast region, but by small- and medium-sized ranchers from the ostensibly stagnant and largely destitute northern agricultural frontier. It processed a range of dairy products, but specialized in Salvadorian cheeses for export to Central America and the United States. In fact, though still modest in size by world standards, Masiguito ranked among Nicaragua’s top dairy exporters (CETREX 2013, Banco de Nicaragua 2010).

Notwithstanding its remarkable success, however, Masiguito is only one case among a handful of similar export-oriented cheese-processing cooperatives that have recently emerged in Nicaragua’s northern agricultural frontier. This region represents a highly unlikely site for such a remarkable process of industrial transformation, bereft as it is of the ingredients associated with standard upgrading accounts (Perez-Aleman 2011). For one, wedged between the Caribbean Sea and Lake Nicaragua, the region’s arid pampas are sparsely populated, isolated and impoverished. Unlike the dynamic southern plains of the country, where the sugar, peanut and cattle industries flourish, the northern agricultural frontier region has largely remained beyond the reach of the national Managua-based Nicaraguan state and the multi-national corporations investing in the country (Dunkerley 1989). Even when the state has expressed interest – most recently, during the Sandinista Revolution of the 1980s – local inhabitants have usually resisted its modernizing attempts. Indeed, as modern-day cowboys long committed to traditional cattle ranching, the region’s inhabitants joined the counterrevolutionary Contra forces en masse during the 1980s, partly to resist the Sandinista state’s efforts to establish large, state-run cattle ranches in the region (Núñez 1998).

And yet, over the past two and a half decades, in the post-Sandinista era, this seemingly unchanging, remote, war-torn agricultural frontier has experienced an unprecedented industrial transformation. Despite lacking the type of state support and protection extolled in the industrial policy literature and observed across similarly dynamic dairy cooperatives in other small countries in Latin America, the Nicaraguan cooperatives have embraced a new business model focused on industrial cheese processing. And though bereft of the technological transfer highlighted in the global value chain literature (GVC) and enjoyed by the suppliers of global buyers in Latin America’s larger countries, they have introduced sophisticated processes and technologies in all stages of production.

As previous studies suggest, their new business model largely resembles the Finnish “Gebhardian” cooperative approach – named for Hannes Gebhard, founder of the Finnish cooperative movement (Seppaenen et al 2013). This model prioritizes processed dairy production, brings together small- and medium-sized ranchers, promotes cooperative provision of a variety of services for members, and emphasizes the modernization and industrialization of rural areas (ibid, Skurnik 2002). Surprisingly, its adoption has not only led to surging cooperative economic performance, benefiting small- and medium-sized ranchers. In spite of the absence of public or private regulation, it has also improved labor and employment conditions for ranch and processing-plant workers, thereby delivering “mutual gains” (Osterman 2000).

What conditions might elicit industrial transformations is a classic question of international development theory. How those transformations might deliver mutual gains is a necessary but more recent complement to that fundamental query. This article addresses these two related questions. Exploiting the case study’s research design, which deliberately narrows the role of prevailing industrial policy and GVC theories, it offers a novel explanation that draws heavily on ideational accounts from political science and sociology. These accounts assert that a variety of socio-economic and political processes and outcomes, including organizational changes, may be explained by actors’ ideologies. Most generally, those ideologies frame actors’ appraisals of different problems, and their consequent responses (Geertz 1973, Sewell 1985, Campbell 1998, Schmidt 2008).

This article redeploys and refines those ideational arguments to account for the industrial transformation with mutual gains of the Gebhardian cooperatives in Nicaragua. Relying upon process-tracing, and cross-case comparisons, it begins by revealing how distinct teams of professionals – labeled “developmental” for their transformative interventions – systematically and methodically worked with the ranchers of the northern agricultural frontier to diffuse the new model. Employed by the Finnish foreign aid agency FINNIDA, the Swedish aid agency SIDA, and the Italian Cooperation, these developmental professionals participated in one of three programs: FINNIDA’s 13-year Rural Livestock Development Program (PRODEGA), SIDA’s 10-year Agricultural Development Fund (FONDEAGRO), or the Italian Cooperation’s 10-year Rice Rehabilitation and Peasant Development Project (PRADC). In explaining the developmental professionals’ actions, this study suggests that they were profoundly influenced by a Revisionist Marxist ideology and informed by a base of expert knowledge borne by their experience and training. The two factors not only fueled and molded the professionals’ transformative mission. They also imprinted the high-road structures and practices of the organizations they created, fostering mutual gains.

In particular, as ideational accounts would predict, the Revisionist Marxist ideology offered the developmental professionals a distinct understanding of their surroundings, prioritized specific ends and aspirations, and identified associated cause-effect understandings. This ideology embraced social equality, opposed concentrated ownership, advocated and alliances with non-socialist forces. Most notably, it favored a gradual, democratic improvement in the conditions of the working class (Pipes 2003, Kolakowski 1978, Bernstein 1911).

However, to translate their ideology into practice, the developmental professionals also relied upon their expert knowledge. This expert knowledge afforded them indispensable resources for upgrading. It furnished them with a repertoire of organizational models – including the Gebhardian approach that they eventually chose – and dissemination strategies that they could deploy in accordance with their ideological orientations. It also bestowed a high degree of prestige upon them, which proved necessary to convince skeptical ranchers; and armed them with a deep understanding of both the inner workings of different practices and procedures, and the resource requirements of a variety of models (Johnson 2007, Galaskiewicz and Burt 1991, Tolbert et al 2011). Thus, though analytically distinct, ideology and expert knowledge jointly shaped the behavior of the developmental professionals in Nicaragua, and affected the outcomes of their actions.

To develop these arguments, the rest of this article is organized as follows. Section II briefly depicts the main features of the new Gebhardian model in Nicaragua before describing the research design and methods. Section III deploys process-tracing and cross-case comparisons to explain the Nicaraguan cheese processing cooperatives’ transformation during the 1990s and 2000s. Section IV concludes the article by offering a discussion of its contributions.

**RESEARCH DESIGN AND METHODS**

***Case Selection***

The new Gebhardian cooperative organizational model in Nicaragua’s northern agricultural frontier incorporates three critical components. First, at its core is an industrial facility, owned and managed by the cooperative, which produces processed dairy goods for domestic consumption and, especially, export. Second, the cooperative sources its raw milk from members and non-members through a refrigerated network that includes collection centers, quality testing labs, and specialized trucks to transport the cold milk. Lastly, the labor and supplier relations systems it relies upon have gradually improved conditions for workers and ranchers, through rising wages and benefits for the former; and steady milk prices and a series of on-ranch services (e.g. veterinary, pasture upgrades, artificial insemination) for the latter.

At least seven cooperatives in northern Nicaragua fully adopted this model during the 1990s and 2000s (see Table 1). With its adoption came remarkable improvements in the cooperatives’ raw milk productivity and quality (see Table 2), as well as worker and rancher conditions. Thus, for instance, at the two largest Gebhardian cooperatives, San Francisco de Asis and Masiguito, average individual supplier production grew by 20% between 1990 and 1997, while at Nicacentro, another leading cooperative, an evaluation concluded that ranchers have achieved “notable improvements in milk quality” (Seppanen et al 2013, Berra and Galetto 2010).

Table 1. The Gebhardian cooperatives of northern Nicaragua

|  |  |  |
| --- | --- | --- |
| **Name** | **Source of Foreign Aid Support** | **Location (department)** |
| Masiguito/La Embajada\* | Finland | Boaco |
| San Francisco de Asis | Finland | Boaco |
| San Felipe/Santiago\* | Finland | Chontales |
| COOPROLECHE | Italy | Rio San Juan |
| Nicacentro | Sweden | Matagalpa |

\*These are cases in which two original cooperatives have merged to supply a jointly owned processing plant.

Table 2: Productivity and production comparisons

|  |  |  |
| --- | --- | --- |
|  | **Raw milk per cow** **(liters)** | **Total raw milk production per day (liters)** |
| Nicaraguan National Average (2009)  | ~3 – 4 | 1,016,495 |
| CENCOOPEL (association of cheese processing cooperatives) Average (2011) | ~7 – 8 | 213,000 |

Source: Author with data from Berra and Galetto (2010), and CENCOOPEL (2011).

A similar positive pattern unfolded with regard to mutual gains. The sales revenues of medium- and small-sized supplying the cooperatives rose in tandem with improved ranch productivity and milk quality. Ranch workers received enhanced training in cattle herding and husbandry, milking procedures, raw milk handling, leading to lower turnover and rising wages (Fajardo et al 2006, Seppanen et al 2013). Workers in collection centers and processing plants have been similarly trained in the skills needed to manage the processing equipment, comply with clean manufacturing practices, produce a variety of dairy products, and conduct a full battery of laboratory tests on raw milk. Their “high level of technical ability” (Artola and Parrilli 2006) is compensated with long-term contracts, vacation time, wages in excess of the legal minimum, and a full menu of benefits above those required by law (e.g. transportation, access to some of the cooperatives’ social services) (Personal communications with cooperative employees, October 3, 2012, and February 18, 2013; with cooperative managers, October 3, 2012 and February 18, 2013).

The conventional wisdom offers two possible explanations for this industrial transformation with mutual gains. On the one hand, the industrial policy literature underscores the varied industrial and regulatory policies that the state may deploy to foster rapid change with mutual gains among domestic firms and industries (e.g. Amsden 2001, Rodrik 2004, Piore and Schrank 2008). This has, to some extent, been the case in the dairy industries of Costa Rica and Uruguay (Valliant 1999, Zúñiga-Arias 2011). On the other hand, Global Value Chain (GVC) accounts emphasize the support and normative mechanisms through which global buyers elicit learning and social upgrading among their suppliers (e.g. Bazan and Navas-Aleman 2004, Locke 2003, Barrientos et al 2011). Observers argue that, at least to some degree, this type of process explains the development of the dairy industries of Argentina, Chile and Colombia (Valliant 1999, Dirven 2001).

Yet, the design of this study deliberately narrows the explanatory potential of these two sets of arguments by focusing on Nicaragua’s isolated and impoverished northern agricultural frontier during the 1990s and early 2000s. For one, instead of exhibiting the type of active bureaucratic intervention that industrial policy accounts would predict, the area has lacked a significant presence of the Nicaraguan state. This was particularly evident during the early years of the period under study, when post-Sandinista Liberal governments abandoned most policies of economic support and regulation. Indeed, as the region’s first Gebhardian cooperatives flourished, the national state underwent a drastic neoliberal-inspired process of retrenchment that began with the Chamorro administration. The move to liberalize financial markets and trade was felt especially acutely in the specific case of agricultural cooperatives, as Enriquez (2010) and Damiani (1994) have convincingly shown.

If the post-Sandinista governments largely abandoned Sandinista industrial development plans, large dairy buyers in Managua – the “lead firms” of value chains – proved equally disinterested in spurring local development. GVC accounts would predict a mentoring and regulatory role for these lead firms. Instead, large dairy buyers, some of them subsidiaries of MNCs, extended their sourcing tentacles to Nicaragua’s northern region only after the emergence of the first cooperatives.[[1]](#footnote-1) And even when they did, they failed to establish mentorship relationships with supplier cooperatives. Rather, they pressured ranchers to lower raw milk prices, and often opposed cooperative processing because of its effects on two fronts: strengthened rancher bargaining power in raw-milk-price negotiations, and growing competition in the domestic processed dairy good market.

The absence of these two driving forces of industrial change with mutual gains in the northern Nicaraguan frontier thus sets the stage for a detailed case study that accounts for the cooperatives’ success. That is the purpose of this article. The following section describes how I collected and analyzed the evidence for the study.

***Data collection and analysis***

To develop this case study, I collected evidence through fieldwork combining 60 interviews (see Table 3), archival research and site visits. Interviews with a wide range of informants lasted between 1 and 4 hours, and were usually recorded. I also conducted intensive archival research in government, university, industry and foreign aid agency offices and websites, analyzing the content of the industry-related material to corroborate or refute interviewee accounts. Lastly, I visited over ten production sites and collection centers to observe the production process and conditions of work.

Table 3. Interviewees, by category

|  |  |
| --- | --- |
| **Category of interviewee** | **Number of interviewees\*** |
| Industry firm owners/ managers | 18 |
| Consultants | 7 |
| Industry employees | 8 |
| Union/peasant organization members/ organizers | 3 |
| Trade association representatives | 5 |
| Government officials | 14 |
| Civil war veterans | 10 |
| NGO Employees | 2 |
| Academics | 9 |
| Businessmen from related activities | 2 |

\*Some interviewees straddle more than one category

To analyze the data, I relied upon process-tracing and cross-case comparisons. As George and Bennett (2005) explain, process tracing is “the only observational means of moving beyond covariation alone as a source of causal influence.” It is ideally suited for “how” questions, focusing on sequential processes within a particular historical case (Van Evra 1997, Mahoney 2010). Thus, using the abundant material collected, and drawing upon process-tracing methods, I not only developed narratives describing the historical trajectories of the seven successful Gebhardian cooperatives, but also achieved a clear understanding of the sequences of change of other cases of dairy producers from the region that adopted two alternative organizational approaches during the same period: the Sandinista Credit and Service Cooperatives (CCSs), and the family-owned processing plants. Using these overviews, I induced the explanatory role of the developmental professionals’ Revisionist Marxist ideology and expert knowledge to account for the industrial transformation with mutual gains.

In addition, I deployed the evidence collected to carry out comparisons that complemented the process-tracing analysis. Specifically, I contrasted the Gebhardian cooperatives, on the one hand, with the two alternative organizational forms in Nicaragua’s northern frontier, namely Sandinista Credit and Service Cooperatives (CCSs) and family-owned processing plants, on the other. As the following sections show, such comparisons allowed me to further corroborate the role of the two central explanatory variables.

**EMPIRICS**

How to account for the industrial transformation with mutual gains of the studied Gebhardian cooperatives in Nicaragua’s rural and isolated northern frontier?

This section offers a three-stage response to this question. First, it describes the two central explanatory variables. Second, it draws upon process-tracing to review the trajectory of change of the successful Gebhardian cooperatives, underscoring how the explanatory variables shaped the model’s selection and implementation. Finally, it relies upon cross-case comparisons with two other types of organizational models – Sandinista Credit and Service Cooperatives (CCSs) and family-owned processing plants – to test the proposed explanatory argument.

***The explanatory variables: the developmental professionals’ ideology and expert knowledge***

The evidence collected reveals that the seven successful Gebhardian cooperatives were created by teams of developmental professionals employed by three foreign aid agencies, the Finnish aid agency (FINNIDA), the Italian Cooperation, or the Swedish International Development Agency (SIDA); and their respective programs, the Rural Livestock Development Program (PRODEGA), the Agricultural Development Fund (FONDEAGRO), or the misnomer Rice Rehabilitation and Peasant Development Project (PRADC). In their transformative campaign, two central variables accounted for the actions of the teams of developmental professionals, and distinguished them from other comparable actors: their particular ideology, Revisionist Marxism, and their expert knowledge.

Ideologies have long received significant attention in the political science and sociology ideational literature. Geertz defines them as interpretive frameworks that render meaningful otherwise incomprehensible situations (Geertz 1973). They constrain certain actions by blocking out particular possibilities as inconceivable, and enable others by “ordering [actors’] understanding of the social world and of themselves, by constructing their identities, goals, aspirations, and by rendering certain issues significant or salient and others not” (Emirbayer and Goodwin 1994, 1441). Ideologies represent symbolic formations with “an internal logic and organization of their own” (ibid). They allow collectivities and individuals to understand their relations to one another (Guillen 1994, Silbey 1998), specify valued ends and interests, and offer cause-effect principles useful to elaborate “practical plans” (Sewell 1985).

Marxism represents a mainspring for various competing ideologies. It specifies a unifying, overarching, timeless end by enshrining a “kingdom of equality” free of alienation and dehumanization (Pipes 2001, 9). As Kolakowski (1978) explains, for Marx, humankind’s degradation has reached its lowest point in mature capitalist society. The cure is to remove the causes of alienation through “a total transformation of human existence, [and] the recovery by man of his species-essence” (147). In the utopian post-capitalist society, mankind will recover its humanity and attain emancipation through further technological progress and full command over the natural world.

At the same time, Marxism also allows for diverging cause-effect understandings and patterns of human action in the pursuit of this overarching end. It is these conflicting understandings and action paths that have inspired competing Marxist ideologies. Revisionism is one such ideology. Associated with the ideas of Eduard Bernstein and, before him, the British Fabians, it adopts a gradualist and pluralist approach to socialism that contrasts sharply with other, more radical Marxist ideologies such as Leninism - an ideology popular during the first few years of Nicaragua’s Sandinista Revolution, but largely out of favor by the late 1980s. Revisionism denies the widely held Marxist assumption that revolution and a cataclysmic final battle are inevitable. Rather, it encourages the Marxist movement to further the immediate interests of the working class by degrees, through democratic means and legislation (Bernstein 1911). Revisionism also welcomes alliances with non-socialists if they advance the interests of the working class. Furthermore, Revisionists support the right of trade organizations to control production, and claim that Marx explicitly fomented cooperative societies.[[2]](#footnote-2)

In Nicaragua, Revisionist Marxism both enabled and constrained the actions of the developmental professionals that transformed the dairy industry. From the beginning, these professionals focused on improving Nicaraguans’ standard of living, “and that of peasants and small and medium-sized farmers… ” (Eskola 2003, 61). For instance, as the Finnish Embassy, which worked closely with its aid agency’s developmental professionals, made clear, the plan was not to aid “the largest” and “most privileged” farmers who concentrated land ownership, but to “[mitigate] poverty” and “[generate] permanent improvements to the standard of living of families that grow agricultural products on a small scale, particularly, but not exclusively, cattle owners (Seppanen et al 2013).” Similarly, for SIDA, the “main objective [was] poverty reduction of small and medium sized… dairy producers…” (Fajardo et al 2006, 5). Thus, the ideology permeating the actions of the developmental professionals shared a close affinity with the Revisionism that, though out of favor by the 1990s, dominated the latter years of the Sandinista regime in Nicaragua. Indeed, the ideological solidarity between the Sandinistas and FINNIDA, SIDA and the Italian Cooperation had been evident during the 1980s, when the three agencies supported the Revolutionary government.[[3]](#footnote-3)

Not only did the developmental professionals in Nicaragua share this ideology, but they also drew upon the expertise furnished by their professional knowledge. Expert knowledge armed the developmental professionals with organizational repertoires (Johnson 2007), allowing them to distill the abstract ideological principles, terminology and concepts of Revisionist Marxism into Sewell’s (1985) “practical plans.” These repertoires contained different organizational models, procedures and practices. Expert knowledge also clarified what kinds of environmental resources the different models required, and the social consequences they might entail; and endowed the developmental professionals with prestige among authorities and ranchers.

The developmental professionals – all specialists in engineering and consulting – had acquired this expert knowledge through training and experience. In a manner that evokes the behavior of the entrepreneurs studied by the “Stanford project on emerging companies” (Baron et al 1999, Burton 2001), they could draw upon their organizational repertoire as they diffused the new organizational model. Indeed, as the following description of the transformation process reveals, their expertise proved indispensable in the northern agricultural frontier.

***Tracing the process of transformation: Ideology, expert knowledge and the adoption of the Gebhardian cooperative model***

In early 1990, as the Sandinista Revolution drew to a close, the first team of developmental professionals, supported by the Finnish aid agency (FINNIDA), launched the Rural Livestock Investment Program (PRODEGA) (1990 – 2003). The product of an agreement following the 1987 state visit by Sandinista Minister of Agriculture Jaime Wheelock, this Program was intended to raise farm incomes, expand the country’s waning milk production, and foster milk and cheese processing in Nicaragua’s northern agricultural frontier – an area known for its anti-Sandinista cattle ranchers (Eskola 2003). However, the original agreement included little regarding implementation, leaving decisions on issues such as the favored dairy-production organizational model to the program’s developmental professionals.

Much the same occurred with the Italian Cooperation and Swedish International Development Agency (SIDA) dairy programs, which would follow PRODEGA. The former agency, under the aegis of its Rice Rehabilitation and Peasant Development Project (PRADC) (1997 – 2006), first approached the cattle ranchers of the region of Nueva Guinea, Rio San Juan, who would soon form the successful COOPROLECHE cooperative, in the late 1990s. As COOPROLECHE’s president retells it, these Italian developmental professionals expressed interest in supporting ranchers in their activities. But in the initial stages of the aid program, which was the smallest of the three, they also remained undecided about the specifics of implementation (Personal communications, February 18, 2013).

That description echoes the events unfolding in SIDA’s Agricultural Development Fund (FONDEAGRO) (2001 – 2010) in the northern department of Matagalpa. FONDEAGRO similarly included initial directives that eschewed a predetermined organizational model. Indeed, as its first evaluation recognizes, the program pursued what was perhaps the most gradual and experimental process of implementation. It muddled through the different stages of implementation as its developmental professionals worked with ranchers in Matagalpa’s so-called “Milky Way” to raise incomes (Fajardo et al 2006, Prins et al 2008).

This lack of a predetermined organizational approach in the initial stages of the three programs, however, should not conceal the general ideological agreement and expertise among all of their developmental professionals. For, as a review of their activities reveals, they all shared a Revisionist Marxist ideology, and could draw from well-established organizational repertoires provided by their professional training. That combination emerges most clearly from FINNIDA’s PRODEGA experience. Drawing upon the Revisionist ideology and a well-stocked organizational repertoire, PRODEGA’s developmental professionals soon began assessing different organizational models. The Program’s records show that they considered at least two before selecting the Gebhardian cooperative approach.

First, they explored the possibility of upgrading the so-called Sandinista Agricultural Cooperatives (CAS). A creation of the Sandinista agrarian reform, the CAS were consistent with Revisionist Marxism, bringing together former hacienda workers who jointly owned and managed expropriated hacienda land. However, during the Revolution, efficient CAS production had remained elusive. Moreover, the FINNIDA developmental professionals soon realized that changing political conditions in the country eroded the necessary environmental resources for CAS upgrading: the unexpected electoral loss of the Sandinistas in February 1990 elicited relentless opposition by the newly elected, anti-Sandinista Liberal government, which refused to offer any support for the highly vulnerable CAS (Caldecott et al 2012).

Given this changing context, the FINNIDA developmental professionals evaluated a second possible organizational approach: the model farm. They considered creating ten model farms, which would serve as points of dissemination and centers for agricultural extension. The presence of large farms in the frontier area suited the technical demands of this approach. The model also fulfilled the preferences of both anti-Sandinista ranchers in the area, and post-Sandinista Liberal governments. As one of the program’s reports argues, the new government favored “the idea that wealth created in pre-selected clusters of private companies in locations with optimal conditions for their performance would inevitably ‘trickle down’ to the poor” (ibid, 76). Yet, the model encountered an insurmountable obstacle: the developmental professionals’ ideological opposition to excessive inequality of income and concentration of ownership. As the program’s final evaluation matter-of-factly explains, they abandoned the plan because “the ten model farms were obviously among the largest, and as such, most privileged from the start…” (Seppanen et al 2013, 6)

Only then did the FINNIDA developmental professionals turn to the Gebhardian cooperative form. The model brought together small- and medium-sized private ranchers to produce processed dairy products. Ideologically, it was consistent with their Revisionism. Hannes Gebhard, the inspirational figure behind this organizational model, had opposed unrestrained competition, which he believed engendered excessive egoism, undermined solidarity and alienated people. He also feared revolutionary and state socialism, however. That is why he supported “the cooperation of those with small means… trade unions and cooperative societies” (cited in Skurnik 2002, 107).

The Gebhardian cooperative model also offered promising economic and social gains. In Finland, these cooperatives accounted for 97% of the country’s total dairy production by the early 1990s (Bager and Michelsen 1994). Additionally, according to Finnish historiography, the model had contributed to national integration by “tying rural folk and occupations to… rapid industrialisation,” and wedding the countryside to the “embryonic industrial-commercial market” (Skurnik 2002, 121). The developmental professionals hoped it would play much the same role in Nicaragua’s northern agricultural frontier. Lastly, it provided an ideal compromise that could garner the necessary legitimacy in Nicaragua’s turbulent context, being “sufficiently ‘socialist’ to make the Sandinistas happy, but sufficiently ‘capitalist’ so that the former ‘contras’ – and the new Government – could accept it…” (Seppanen et al 2013, 24).

Although such a discussion on the chosen organizational model occurred most prominently in FINNIDA’s PRODEGA experience, the evidence suggests that similar debates unfolded in the Italian Cooperation PRADC and SIDA FONDEAGRO programs that succeeded PRODEGA (see Table 4). And though the routes they took to reach the final organizational model differed somewhat from PRODEGA’s path, the role of ideology and expert knowledge proved equally important in the final determination. Take the example of SIDA’s FONDEAGRO program in the department of Matagalpa. In that case, the debate centered on whether to pursue one of two models: a supply chain approach that placed rancher cooperatives as prime raw milk suppliers to large domestic and international processors, such as Parmalat or Eskimo; or a Gebhardian alternative that moved ranchers into manufacturing of processed dairy goods.

Table 4. Organizational models considered by the teams of developmental professionals

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | Sandinista Agricultural Cooperative | Non-processing rancher cooperative | Non-processing rancher association | Model Farm | Gebhardian processing cooperative |
| PRODEGA (Finland) | X |  |  | X | X |
| PRADC (Italy) |  | X | X |  | X |
| FONDEAGRO (Sweden) |  | X |  |  | X |

As in PRODEGA, FONDEAGRO’s developmental professionals assessed these options on the grounds of ideology – particularly emphasizing poverty reduction among small and medium producers, and buy-in by Liberal state authorities, whom they considered to be necessary allies. They also surmised the different models’ resource demands, even undertaking a “technical study” to evaluate the feasibility of building a processing plant (Berra and Galetto 2010, Prins et al 2008, Fajardo et al 2006). Finally, whereas the PRODEGA developmental professionals looked back home for examples of the Gebhardian model’s economic and mutual gains, at FONDEAGRO they had only to look at the experience of the trailblazing Finnish project. In fact, as PRODEGA’s final evaluation noted, “PRODEGA was one of the earliest stakeholders in a more extensive intervention of international cooperation in the dairy sector; its experiences and manner of working have inspired other subsequent interventions in other areas, in one way or another. One of them has been the FondeAgro programme, funded by Sweden…” (Seppanen et al 2013). Thus, after varied internal debates, the Finnish, Italian and Swedish developmental professionals all settled on the same Gebhardian approach.

Model selection, however, represented only the first step in a drawn-out process. For, once they settled on the Gebhardian alternative, the developmental professionals moved on to implementation, a stage in which they encountered two significant obstacles. First, brandishing a clamorous anti-Sandinista discourse, the Liberal authorities, particularly those that governed during the 1990s, downplayed the overarching goal of building a “kingdom of equality” and questioned the desirability and economic viability of producer cooperatives. Instead, these authorities espoused large private producers as a boon to national economic development (Enriquez 2000). Second, most of the prevalently anti-Sandinista ranchers of the northern frontier joined the governments of the 1990s in opposition to cooperative production. For them, the planned Gebhardian cooperative organizational form evoked the reviled specter of Sandinista collectivization campaigns and clashed with a long-held view of themselves as independent and self-sufficient.

In this adverse context, ideology certainly fueled the developmental professionals’ transformative process.[[4]](#footnote-4) Indeed, despite the opposition, they stubbornly persisted in their efforts motivated by their ideological commitments. However, such ideological moorings should not minimize the crucial role of their expert knowledge. In addition to playing a central role during the model selection stage by offering an organizational repertoire, and allowing them to assess the environmental fit of different models, expert knowledge served two purposes during the implementation stage. For one, the prestige it bestowed upon the professionals was instrumental in overcoming opposition and laying the groundwork for the industrial transformation. Developmental professionals’ training and knowledge assuaged reticent ranchers’ concerns. Contrary to Sandinista authorities, viewed by ranchers as inexperienced novices, or worse, haughty enemies, the developmental professionals deployed a business-oriented approach offering both improved ranch performance (i.e. raw milk quantity and quality) and higher profits.[[5]](#footnote-5)

In addition, expert knowledge endowed the developmental professionals with a deep understanding of the different building blocks of the Gebhardian cooperative model, allowing them to deftly and swiftly introduce various modernizing practices and processes across the cooperatives they formed. PRODEGA, which unfolded in three phases, offers a first illustration. In Phase I (1990-1993), the professionals focused on raising production and productivity in nine small- and medium-sized producer cooperatives – all of them located in the Departments of Boaco and Chontales. After forming those cooperatives, the professionals established a generous extension service, introduced new cattle breeds through a genetic modification program, installed four raw-milk cooling stations, built a road network of over 450 kilometers, and set up a transportation system (Eskola 2003, Caldecott et al 2012, Seppanen et al 2013).

To complement these investments, the professionals supported the construction of the first cooperative cheese processing plant, and devised a new marketing strategy. Built with partial funding from the World Food Program, the processing plant was owned jointly by two of the PRODEGA cooperatives – Masiguito and San Francisco de Asis. It engendered a novel commercialization strategy that combined the sale of raw milk to large Managua-based dairy plants, with manufacturing of different cheese (e.g. *queso fresco, queso criollo*) and other dairy products (e.g. sour cream, butter) for domestic and, later, Salvadorian consumption. This strategy proved remarkably successful, in part because Salvadorian demand for cheese was expanding rapidly at the time (ibid).

During PRODEGA Phases II (1994-1998) and III (1998-2003), the developmental professionals upgraded the facilities at the original plant, by then managed independently by San Francisco de Asis. They also built two more plants at the successful Masiguito and San Felipe cooperatives. The three plants were equipped with pasteurization, testing, processing and refrigeration facilities. The professionals trained cooperative leaders on management and accounting procedures, and plant workers on production practices. They paired their capacity-building initiative with a human resource approach that valued long-term contracts, constant skill upgrading, high wages and benefits. During these later phases of the program, they also expanded activities of particular use for small, traditional and isolated ranchers, such as diversified pastures, veterinary services, and an extension of the raw milk collection network (ibid).

The same expertise shaped the developmental professional interventions as part of both Italy’s PRADC and Sweden’s FONDEAGRO. In the case of PRADC, an initial consultation round in 1997 was followed by the creation of COOPROLECHE, construction of fourteen collection centers, and provision of a variety of extension and technical services for ranchers. As the president of COOPROLECHE explained, between 1998 and 2004, the program employed a veterinarian, two extension technicians, several economists and specialists in raw milk management, and even Italian cheese production experts. These latter experts prepared the cooperative for its transition to manufacturing, as the program built the cheese processing plant between 2004 and 2006 (Personal communications, February 18, 2013).

Sweden’s FONDEAGRO, for its part, pursued three phases that mirrored PRODEGA’s. In Phase I (2001 – 2003), the professionals focused on organizing three cooperatives, building some of their first collection centers, offering extension services to raise productivity and raw milk quality, and broadening cooperative membership. In Phase II (2004 – 2007), they continued with the same activities, but also added two new cooperatives, and began planning for a processing plant. Toward the end of Phase II, and throughout Phase III (2008 – 2010), the processing plant, owned and managed by one of the cooperatives, Nicacentro, was built at the community of Caño de Agua (Berra and Galetto 2010, Prins et al 2008, Fajardo et al 2006).

It was in this manner that these three long-term interventions by ideologically-guided and expert developmental professionals produced the seven successful Gebhardian cooperatives in Nicaragua’s northern region. By the end of the studied period, those cooperatives not only produced processed goods for export. They also offered small and medium-sized ranches, and ranch and manufacturing plant workers, mutual gains.

***The comparative perspective: assessing the argument, and revealing the enabling role of ranchers’ pre-Revolution commercialization experience***

As the foregoing section argues, the developmental professionals drew upon their ideology and expertise to select the Gebhardian alternative from the models available in their organizational repertoires, and then effectively implement it. Yet, while this model emerged as their favored organizational approach, it was by no means the inevitable choice in northern Nicaragua. In fact, at least two other organizational models, the family-owned processing plant and the so-called Credit and Service Cooperative (CCS), were implemented in the region’s dairy industry during the same period of time.

The simultaneous adoption of these two alternative organizational models offers an ideal opportunity to deploy cross-case comparisons to further evaluate the proposed ideational account for the industrial transformation of the Gebhardian cooperatives. That is because two different groups of organizational entrepreneurs with contrasting ideologies and bases of expertise selected and implemented these approaches. First, a group of professional Salvadorian entrepreneurs and merchants set up the family-owned processing plants. And second, a group of Nicaraguan peasants established the CCSs (see Chart 1).

Chart 1. Comparing organizational models in Nicaragua’s dairy industry: the role of ideology and expert knowledge

|  |  |  |
| --- | --- | --- |
|  |  | **Revisionist Marxist Ideology** |
|  |  | Yes | No |
| **Expert Knowledge** | Yes | Gebhardian processing cooperative (Finnish, Italian and Swedish developmental professionals) | Family-owned processing plant (Salvadorian professionals) |
| No | Sandinista Credit and Service Cooperative (Nicaraguan peasants) | Traditional transhumance-based ranching (Nicaraguan ranchers) |

The relevance of the developmental professionals’ Revisionist Marxist ideology may be gleaned most clearly when they are set side-by-side with the professional Salvadorian entrepreneurs and cheese merchants who, though sharing their expertise, were bereft of their ideological orientation. During the 1990s, these professionals had migrated to Northern Nicaragua, founding family-owned processing plants, sourcing their raw milk from the same type of anti-Sandinista ranchers, and rapidly increasing the country’s export cheese production (Artola and Parrilli 2006). Given their expertise, they proved highly competent in implementing their organizational designs. In fact, their processing plants thrived in the resource environment of northern Nicaragua.

Yet, because they lacked the Revisionist Marxist ideology of the developmental professionals, the organizations these professional Salvadorian entrepreneurs and merchants created failed to advance the “kingdom of equality.” In fact, these processing plants usually aggressively negotiated down wages and raw milk prices in a bid to cut costs and raise their profits. Thus, rather than supporting smaller, more vulnerable agricultural producers, or improving the conditions of workers, the organizational model they selected and enacted only enhanced the position of processing plant owners.

While this comparison with the Salvadorian professionals corroborates the claim that the developmental professionals’ Revisionist Marxist ideology played a central role in shaping their organizational choice, the contrast with the peasants responsible for establishing the Sandinista Credit and Service Cooperatives (CCS) similarly supports the argument that expert knowledge proved indispensable for its effective translation into practice. As Damiani (1994) describes, CCSs brought together individual producers – many of them Agrarian Reform beneficiaries – who owned their land independently (Damiani 1994, Enriquez 2010). Some of their cooperatives were located in the northern region, where they produced raw milk. Influenced by late Sandinismo’s Revisionist Marxism, these producers sought to cooperate to not only strengthen their market power, but also upgrade into primary product processing.

However, in the post-Sandinista period, almost all of the CCSs floundered, disbanded, and sold off their land. Though sharing a common ideology with the foreign aid developmental professionals, their organizers and leaders lacked the required “management skills,” as Damiani (1994) puts it, to reorganize and adapt to the new environment. Deprived of this requisite expert knowledge, they struggled to implement their ideological principles into a successful cheese processing rancher cooperative model. At best, some of these CCSs succeeded in developing a sufficiently sophisticated collection network and marketing strategy to sell their raw milk to Managua dairy plants. None, however, moved into processing.

Such comparisons thus reinforce the explanatory argument borne by the detailed discussion of the successful Gebhardian cooperatives’ experience. Where professionals, such as the Salvadorian entrepreneurs and merchants, lacked the Revisionist Marxist ideology, the organizational models they adopted may have flourished, but they also failed to improve the conditions for the poorest. And where organizational entrepreneurs shared the Revisionist ideology but were deprived of expert knowledge, their transformative efforts usually ended in implementation failure.

**DISCUSSION AND CONCLUSION**

The foregoing empirical discussion furnishes two sets of theoretical insights of interest to students of industrial development and ideology in the Global South. First, and most prominently, by stressing the explanatory role of developmental professionals’ ideology and expert knowledge, the evidence offers an alternative ideational account to well-established state- and GVC-based explanations of industrial transformation with mutual gains. Second, in revealing how ideology translates into the actions of the development professionals by interacting with their expert knowledge, the empirical discussion sharpens our understanding of ideologically-motivated human behavior, including processes of industrial change. The following sections address each of these contributions in turn.

***Industrial Transformation with Mutual Gains: An alternative account***

Scholars have long recognized that firms can perform the same work by deploying different organizational models, and that those models can have contrasting outcomes for a variety of stakeholders. Though initially addressed in the industrial relations literature on high-performance work organizations (Appelbaum & Batt, 1993; Osterman, 1994), this understanding has also been embraced by development scholars focused both on “high-” versus “low-road” approaches (Piore and Sabel 1984, Pires 2008), and on “economic and social upgrading” occurring among suppliers in global value chains (Barrientos et al 2011; Gereffi and Lee 2016). The implication of these arguments is that only some organizational models will, if adopted, offer the valuable combination of industrial transformation with “mutual gains” (Osterman 2000).

Such a conclusion emerges clearly from the comparison of two types of processing plants in Nicaragua’s export cheese industry: the studied Gebhardian cooperatives and the previously described Salvadorian family-owned processors. Emerging in the 1990s and ushering in an industrial transformation, both types of plants have proven equally successful at manufacturing the same cheeses for the Central and North American markets. Yet, their organizational models diverge, with remarkably different consequences for workers and ranchers. The Salvadorian family-owned plants rely on a cost-cutting approach that involves aggressive negotiations to lower raw milk prices, and worker wages and conditions. By contrast, the Gebhardian cooperative model offers mutual gains.

To explain how organizational models such as the latter might be established and diffused, prevailing arguments highlight the causal role of mentoring and regulatory mechanisms instituted by the state (Piore and Schrank 2008, Pires 2008), global value chain lead buyers (Anner 2000, Rodriguez-Garavito 2005), or a combination of both (Locke 2013). This article does not challenge the importance of these useful explanatory mechanisms. Rather, it looks within firms to offer an alternative, complementary account centered on the ideology and expert knowledge of a particular type of organizational founder, the “developmental professional.”

The proposed ideational argument for industrial transformation with mutual gains shows how these two variables played a central role in both the selection and implementation of the new model. Thus, in Nicaragua, the Gebhardian model fell at the intersection of the organizational repertoire offered by developmental professionals’ expert knowledge and the guiding principles and cause-effect understandings of their Revisionist Marxist ideology. Its selection was largely based on its ideological implications and resource demands. Furthermore, the Nicaraguan case also shows that at the implementation stage, ideological motivations ensured continued support among developmental professionals for the selected Gebherdian model, despite forceful opposition by Liberal governments and anti-Sandinista ranchers. Likewise, their expert knowledge supplied the required skills to effectively enact the model’s different components, and also gain the trust of cooperative members.

To make this argument, the empirical discussion of Nicaragua’s Gebhardian cooperatives relies not only on a narrative, informed by process-tracing, but also on a comparison with the Salvadorian family-owned processing plants and the Sandinista Service and Credit Cooperatives (CCSs). The organizational founders of the former shared the expert knowledge with the developmental professionals, and were thus able to turn to a well-stocked organizational repertoire, assessing their options based on resource demands and ideological consistency, and implementing their choice with comparable effectiveness. Because their ideology diverged from developmental professionals’, however, the choice of model differed, leading to transformational changes without mutual gains. In the case of the peasants responsible for the CCSs, they may have shared the Revisionist Marxist ideology of developmental professionals, but deprived of the expert knowledge, their organizational repertoire proved limited, as did their understanding of their chosen model’s resource demands and their capacity to implement it.

Insofar as ideologies and expert knowledge may explain the organizational characteristics of newly adopted business models, the findings of this study have broader implications for scholars interested in industrial transformations with mutual gains across other regions. In fact, other scholars have unearthed similar findings. For example, in Italy a number of studies have documented the motivating role of Communism among the small artisanal producers in the Italian region of Emilia Romagna, renowned for their remarkable clusters (Criscuolo 2002, Brusco and Pezzini 1999). As Criscuolo (2002) argues, this Communist ideology influenced the industry’s association, its firms and artisans in their “fight against the monopoly of big business;” their “idea that the competitive advantage of small businesses cannot rely on the exploitation of the workforce;” and their “preclusion for ideological reasons of a low-cost competitive strategy.” (36).

Similarly, in Guatemala, a location much closer to Nicaragua, Fuentes (2014) credits the transformative actions of a group of engineers influenced by a Catholic Social Doctrine ideology for creating and diffusing the sugar industry’s new organizational model. Much as in Nicaragua’s cheese industry, the case illustrates how these engineers assessed different organizational models on the basis of their ideology before eventually settling on the favored approach. Furthermore, in line with their ideological orientation, their favored model not only raised the industry’s economic performance, but also delivered mutual gains.

Notably, these illustrative studies share a crucial scope condition with the argument proposed to account for the transformation of Nicaragua’s Gebhardian cooperatives: the industries undergoing the changes were initially devoid of professional intervention, and far from the production possibilities frontier. That is, in Italy, Guatemala and Nicaragua, the pre-transformation industries were composed of small firms, operating at the margins of their national economies, and relying upon rudimentary technology and simple processes to produce low quality goods. This common pattern is not entirely surprising. After all, it is difficult to envision a comparable impact by developmental professionals in larger, more developed and professionalized organizations with revered and firmly rooted bureaucratized procedures and practices. Indeed, it was the underdeveloped context of these industries that offered ideal circumstances for their developmental transformations.

***Developmental Professionals and the translation of ideology into action***

Though this article’s ideational argument linking ideology and expert knowledge to industrial transformations with mutual gains is novel, the more general assumption that ideological motivations impinge upon processes of industrialization and modernization is not. Indeed, since at least the middle of the twentieth century, Weberian-inspired authors have pointed to different ideologies as galvanizing forces for change.[[6]](#footnote-6) To give but one example, in his *Peddlers and Princes*, Geertz focused on the contrasting ways in which two groups of Indonesian entrepreneurs solved critical organizational problems, including worker training and marketing. In shaping their organizations, Geertz showed how the entrepreneurs’ distinct religious ideologies took center stage.

Yet, if such traditional Weberian-inspired ideational arguments for industrial modernization have a long record, so too do their critiques, which have proven largely effective in discrediting their central claims. Two have been particularly influential. First, authors such as Tilly (2005) or Swidler (1986) observe that often a single ideology elicits varied patterns of action. As Swidler explains, “People may share common aspirations, while remaining profoundly different in the way culture organizes their overall pattern of behavior” (275). To illustrate her point, she offers the example of Weber’s doctrine of predestination. For Weber, she explains, “the consequences of Calvinism flowed from its doctrine, operating on believers’ overwhelming psychological interest in salvation.” But, she argues, even Weber was “hard pressed to explain why the doctrines of predestination and proof produced the rationalized, ascetic conduct of the saint” and not “fatalistic resignation, or even hedonism” (280). The upshot was that, insofar as these patterns of behavior were at odds with each other, ideology’s explanatory role was called into question.

Campbell (1998) and Schmidt (2008) offer a second, more recent critique that draws attention to the limited room that ideational arguments leave for actor agency. That is because in traditional Weberian-inspired ideational arguments, ideologies assume the status of structures, with actors portrayed as ideological carriers devoid of discretion and blindly following pre-established scripts or blueprints. Again, Weber’s *The Protestant Ethic and the Spirit of Capitalism* provides an example, since the Calvinist doctrine of predestination demanded both an ascetic lifestyle and an unflagging work ethic among its followers. This combination inevitably instilled in them a new spirit, the “spirit of capitalism.” Acting as a structural variable, the doctrine of predestination left no room for agency. Indeed, to the extent that Calvinists were single-mindedly concerned with salvation, the spirit of capitalism arose as an unintended consequence. The argument implies that wherever a similar doctrine, demanding asceticism and industriousness, takes hold, the same spirit will deterministically follow.

In this article, I draw a middle path between traditional Weberian-inspired ideational arguments and their critics. The article retains a central explanatory role for ideology in industrial change. But it also revisits the mechanism through which ideology translates into action, thereby addressing the two critiques. In particular, by recognizing that the selection and implementation of developmental professionals’ Gebhardian model in Nicaragua hinged just as crucially on their expert knowledge, the proposed account offers both a compelling explanation for why multiple patterns of action might be associated with a single ideology; and a credible portrayal of actors enjoying a degree of agency.

With regard to the former critique, the proposed middle-road alternative may be most clearly illustrated with the evidence from Nicaragua’s studied industry. According to the traditional Weberian-based ideational accounts, Revisionist Marxism, as the sole explanatory variable, should have elicited common patterns of action and organizational models among the two groups sharing the ideology: developmental professionals and the peasants of the CCSs. That such commonalities did not arise in practice – given the divergence between their respective models – would seem to support the first critique of these arguments: that since Revisionism is associated with both successful Gebhardian cooperatives and failed CCSs, its explanatory potential is limited.

However, by considering how expert knowledge intervened in the process of translation from Revisionist ideology to organizational practice, this article clarifies the observed divergence. While the developmental professionals and Sandinista peasants indeed converged on their ideology, they varied in terms of the organizational repertoires, prestige, and understanding of the implementation requirements and tasks associated with different models. That variation in expertise explains why, despite their shared ideology, they pursued such distinct paths.

Much the same middle-road perspective proves helpful with regard to the second critique. In this latter case, the issue is one of determinism: the view that, in traditional Weberian-inspired accounts, ideology emerges as an iron law-like factor, implausibly precluding all actor agency. This article softens the grip of ideology in two ways. First, it adopts a “Sewellian” lens, reconceiving ideology as comprising both a general set of valued ends or interests, as well as distinct understandings of collective relations and cause-effect principles useful to elaborate practical plans. Not included in this definition is the expectation that ideology provides a concrete script for action.

Second, in accounting for the emergence of such a script, the proposed account supports constrained agency, as actors deploy their expert knowledge under the general guidance of their ideologies. In particular, it affords actors a degree of discretion, within the bounds imposed by their ideology in the selection of their favored models; the evaluation of their resource environments; and the processes of model implementation. Thus, in Nicaragua, the developmental professionals considered the ideological consistency as well as the contextual suitability of several other models (e.g. the model farm, the CAS) before settling on the Gebhardian approach. Moreover, they assessed the viability of continuing with their approach in the face of growing opposition among constituents and host governments; and devised effective strategies to convince skeptics. In all this process, ideology certainly provided significant direction. But in no way did it deterministically define the outcome. Rather, it interacted with the developmental professionals’ base of expert knowledge.

In this way, then, the theoretical argument proposed in this article offers a new perspective on ideologically-motivated action, one that avoids the pitfalls of under-specification and/or excessive determinism associated with traditional, Weberian-inspired ideational approaches. Such an argument could be used to explore a range of social, economic and political areas in which ideology may play an explanatory role, including those already examined in established Weberian accounts (e.g. Bendix’s (1963) comparative study on entrepreneurial ideology and industrial organization, Dobbin’s (1994) work on industrial and economic policy-making). It could also be deployed in other contexts to corroborate and refine the central thesis of this article, with its explanation for a valued end among students of development in the Global South: that of industrial transformations with mutual gains.

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1. For instance, though cooperatives like Masiguito were created in the early 1990s, Parmalat, the first major global buyer to arrive, did not begin to source its raw milk from the region until the late 1990s (Perez-Aleman 2013). [↑](#footnote-ref-1)
2. The contrast with Leninism proves enlightening. Leninism emphasized a cataclysmic anti-capitalist revolution through a strongly hierarchical and uncompromising approach that dismissed the working class’ spontaneous revolutionary potential, and called instead for leadership by a vanguard party. This vanguard would unilaterally take control of the state, using it to combat all non-socialists and advance state capitalism (Lenin 1972 [1918]). [↑](#footnote-ref-2)
3. For instance, FINNIDA professionals had collaborated significantly with Sandinista authorities in a project to refurbish four large milk-processing plants in Managua during the early 1980s (Eskola 2003, Seppanen et al 2013). [↑](#footnote-ref-3)
4. In the case of PRODEGA, the Finnish Embassy even voiced its explicit support for the program’s approach as part of its broader mission to salvage some of the previous Sandinista gains (Caldecott et al 2012). [↑](#footnote-ref-4)
5. In addition, the professionals often lived in the area, building even closer contacts with ranchers. The developmental professionals of Finland’s PRODEGA, for instance, operated from their offices in the town of Boaco, lived in a neighborhood popularly known as the “Finnish houses,” (Seppanen et al 2013) and impressed locals with their knowledge of cattle and dairy production. [↑](#footnote-ref-5)
6. There are many authors espousing this type of argument, including Bendix (1963), Parsons and Shils (1951), or more recently, Guillen (1998) and Adler (1988). [↑](#footnote-ref-6)