

**Culture, Institutional Change, and Food Security:  
The Case of Three Mapuche Communities in Region IX, Chile**

Timothy David Clark  
Doctoral Candidate  
York University  
Toronto, Canada  
tdclark@yorku.ca

Paper prepared for presentation at the Annual Conference of the Canadian Political  
Science Association, Saskatoon, Saskatchewan, June 1, 2007

Since its violent neoliberal baptism in 1973, Chile has become the exemplar of market-led development in Latin America. Indeed, its rapid economic growth and macroeconomic stability since 1990 has no parallel in a region otherwise ridden by financial crises and political turmoil. But behind the curtain of statistical aggregates and “sound fundamentals”, a more nuanced and complex picture emerges. Marginalization of the most vulnerable has paralleled spectacular economic growth; and nowhere has this process been felt more acutely than in rural Mapuche communities. What is more, the economic decline of rural indigenous spaces has coincided paradoxically with the allocation of substantial resources to resolving the “indigenous problem”. So why has indigenous policy failed? Why has greater state investment only exacerbated economic marginalization and food insecurity in rural indigenous communities?

I have argued elsewhere that government intervention has undermined food security in rural indigenous areas because of the macro and micro-level imbalances produced by its economic and indigenous policies (Clark 2007). This paper, however, will focus on the micro imbalances, that is, the disequilibria produced by variance between the universal rationality presupposed by government programs and the institutionally-embedded rationality that guides the daily economic activities of rural households. State indigenous policy has failed because it is based upon what Polanyi called the “economistic fallacy”, whereby market rationality is projected transculturally and state policy is reduced to “getting the institutions right”, such as private property and credit systems. Such policies produce suboptimal results because they do not account for the institutional heterogeneity to which people respond when making decisions about household provisioning. In situations of significant institutional diversity, therefore, market-oriented policies may have perverse effects on livelihoods and food security.

### *Food Security, Institutions, and Economic Behaviour*

This paper rejects the definition of food security adopted by the World Food Summit (WFS), which disregards the social and ecological milieus that regulate relations of food security and insecurity across space and time. Instead, food security will be conceived as a social relationship that is produced and reproduced within a determinate institutional context. In this light, the distinction by Esteva between *comida* and *alimento* proves of analytical utility (1994).<sup>1</sup> Because it does not consider the wider socio-cultural context within which food security is embedded, the WFS definition reduces *comida*, a wide-ranging concept rooted in broader cultural and ecological systems, to *alimento*, a concept based upon scientific relations of production and consumption. What this conflation does is expel from consideration the diverse planetary systems of food production, distribution and consumption, and the diverse cultural and ecological structures within which food systems exist, focussing instead upon the attainment of an ideal or universal nutritional-caloric intake and mechanisms to control the technical variables that put such attainment at risk (such as average yields, education and market imperfections).

In order to operationalize this alternative conceptualization, the concept of food systems will be employed to link food security to the networks of social relations within which households obtain or fail to obtain food. A food system analysis consists not only

of the means by which food is produced, distributed, and consumed, but also of the wider institutional milieu within which food systems are situated. The food systems perspective therefore provides for the critical re-conceptualization of food security as the ability to obtain food within a particular food system or food systems, and refocuses the debate upon how households obtain and consume food through diverse institutional matrices. Put another way, rather than conceiving of food security as a technical problem of the economy, amenable to universal scientific solutions, the food systems approach conceives of food security and insecurity as institutionalized social relationships.

The examination of food security as an instituted relationship in turn requires an analytical framework to explain how institutions affect the economic behaviour of individuals.<sup>2</sup> Although similar in several regards to the Sustainable Livelihood Framework (SLF), the approach developed here seeks to overcome key weaknesses of the SLF, in particular with respect to the role of history and culture in the explanation of economic behaviour (Adato and Meinzen-Dick 2002). In this regard, the anthropological work of Karl Polanyi is of crucial importance. The central concern of Polanyi was the integration of the economy into society, that is, how human societies produce and reproduce their material existence: “the economic order is...a function of the social order” (Polanyi 2001: 74). In doing so, Polanyi rejected the analytical isolation of the economy as an autonomous sphere with discrete motives and institutional patterns that characterizes most approaches to the study of human economies, whether explicitly or implicitly. As such, Polanyi did not begin from the market economy and the problem of how it is or can be embedded in social relations, but from a society-centered perspective and the examination of the cultural principles through which economies are integrated and societies reproduced.

Based in the Aristotelian distinction between natural and unnatural exchange, Polanyi advanced a compound definition of the economy and delineated between its two antithetical components, the formal and the substantive. The formal definition is derived from neoclassical economics and comprehends the economy as the choice between scarce means and alternative ends. The substantivist definition, on the other hand, makes no such particularistic assumptions, defining the economy as “the institutionalized interaction between man and his environment, which results in the continuous supply of want-satisfying material means” (Polanyi 1977: 20). According to Polanyi, the conflation of the formal and substantive components is the crux of the economic fallacy, or the habit of “equating the human economy with its market form” (1977: 6).

The formal definition is fallacious because its rationality, which “does not refer either to ends or to means, but rather to the relating of means to ends”, presupposes the existence of a historically unique form of economic organization, the self-regulating market (Polanyi 1957: 245). Formalism thus tends to project utility maximization throughout space and time, regardless of institutional context. Substantivism, on the other hand, defines the economy as an instituted process to secure social reproduction. The “institutedness” of the economy refers to the other dimensions of human life within which the economy exists and it confirms the inherent sociality that gives the economic process its unity and stability:

The instituting of the economic process vests that process with unity and stability; it produces a structure with a definite function in society; it shifts the place of the

process in society, thus adding significance to its history; it centers interest on values, motives and policy. Unity and stability, structure and function, history and policy spell out operationally the content of our assertion that the human economy is an instituted process (Polanyi 1957: 250).

The focus of the substantive definition squarely on the role of the economy in the reproduction of society also requires an alternative set of concepts to those provided by conventional economics, what Polanyi called the “special toolbox” (1957: 250).

Polanyi laid out four integrative principles and their corresponding institutional patterns: reciprocity (symmetry), redistribution (centricity), householding (autarky) and exchange (market). It is important to note that reciprocity, redistribution and householding are not pre-capitalist principles. To the contrary, Polanyi is explicit that while one principle and institutional pattern is ascendant in any given social formation, it is never exclusive, that is, numerous principles and institutional patterns co-exist. Accordingly, social actors reproduce their livelihood and existence, responding not objectively to homogenous relations of production or exchange, but subjectively to a localized and heterogeneous set of *economic* and *non-economic* institutions. This is particularly the case in the Global South and its rural areas, where capitalist and non-capitalist institutions and behaviour intertwine and the “market is experienced differentially”, to borrow the phrase of Hewitt de Alcantará (1993: 5).

Conventional economic analyses and public policy have often misunderstood economic activity in rural areas because they have failed to situate the economic realities under question within the context of wider institutional nexuses, with distinct geographies and histories. The strength of the Polanyian framework is therefore that it pushes the social sciences and public policy towards an examination of motivational and institutional heterogeneity. Analytic primacy is given to the diversity of cultural principles and patterns of integration that regulate economic behaviour within a social formation and the interrelations between them in order to comprehend how economic decisions are made and how human societies reproduce themselves. Such an approach does not seek to displace behaviour and rationality in the study of economic life, but rather endeavours to make behaviour and rationality the object of empirical study. It is not enough simply to state that economic behaviour is rational; the point is to show why it is so (Wilk 1993: 205).

On a final, methodological, note, fieldwork in rural areas was carried out in three communities between 2002 and 2005. Thirty household heads participated in a short economic survey on household production, exchange, and consumption, and all willing household members over 18 were engaged in semi-structured interviews about social, political, and economic transformation. Two group conversations were organized in communities to discuss the issues addressed by the research in a less structured environment, as numerous participants felt more comfortable sharing information and experiences in the more informal group setting. Finally, the author engaged in informal conversations and participant observation during the time spent both living and travelling in participant communities.

## *The Origins of Institutional Heterogeneity in Rural Indigenous Communities*

Prior to military conquest, the economic organization of the Mapuche was rooted in a cosmovision that established the cultural parameters for the material and symbolic reproduction of the principal social unit, the *lof*.<sup>3</sup> The governing principles of economic integration were householding and reciprocity (Quidel and Jineo 1995: 154). On the one hand, the household was the day-to-day reproductive unit and the *lof* was divided into several extended families who managed their own parcel. On the other hand, land was held collectively by the lineage group and reciprocity (*ulmen*) was the integrative principle at the level of the *lof*, in the areas of production, exchange, and consumption (Vives 1980: 42). The foundation of the Mapuche society was thus not collectivism, as many have mistakenly assumed, but reciprocity between self-sufficient households.

The institutional and spatial origins of the contemporary indigenous community, however, changed dramatically in the wake of military defeat. Between 1883 and 1927, the conquered Mapuche peoples were allocated aptly named *reducciones* (literally reductions, but more commonly translated as reservations) by the Settlement Commission. Reservations were held collectively by kinship groups and were inalienable, with common ownership titles granted in the name of the chief (*longko*). Between 1884 and 1929, the Chilean state consigned 2,918 ownership titles totalling 510,386 hectares of land to 82,629 Mapuche, approximately 6.2 hectares per person and only 10 per cent of the land inhabited by the Mapuche at the time of Spanish arrival. Meanwhile, over 5,000,000 hectares were auctioned – at very favourable prices – or granted to foreign and Chilean colonists, averaging over 400 hectares per plot for foreigners and 40 hectares per plot for Chilean nationals, who received ample financial assistance and technical support (Aylwin 1995: 95).

The forcible confinement of the Mapuche people to reservations, what Vidal calls the “iron cages” (1999: 70), provoked significant transformations in the Mapuche social structure. Reservations were designed without consideration of the existing system of kinship organisation. Combined with the drastic loss of land that resulted from the military conquest, the reservation system eviscerated the ideational horizon of the *lof* and eroded many of its constitutive social relationships. The chief began to lose his authority in the community as property came to be regulated *de facto* by family units, initiating a nuclearization of relations within Mapuche communities that continues today. The institution of reciprocity (*ulmen*) was also undermined by shared poverty and social dislocation, and the wealthy individuals responsible for maintaining reciprocal resource flows (*ulmenche*) disappeared. Mapuche cattle holdings were also dramatically reduced, as land adjudicated by the Commission was generally inadequate to sustain a large livestock population.

The settlement process, however, did not destroy the reproductive capacity of the Mapuche society and its institutional foundations. On the contrary, the basic reproductive principles and logic remained intact, along with many of the traditional kinship relations and institutions, such as the extended family as householding unit and community labour pools (*mingako*). The principal difference was the loss of the *lof* as the ideational horizon and reproductive space. The *lof*, however, was replaced in its role as the key reproductive space by the “community”, based on the reservation system:

In spite of its strange and complex origins in the reservation system, the community became the social and territorial space of the Mapuche culture. There the borders with the *wingka* society were established; there the material space of cultural resistance was forged (Bengoa 2000: 369).<sup>4</sup>

While networks of patrilineal relations that transcended the narrow and artificial confines of the reservations continued to reproduce in partial form the historical *lof*, new institutional adaptations emerged within the reservation system and the community was incorporated into the ideational horizon of its members through “new networks of socio-economic, neighbour, kinship, and ceremonial relations” (Stuchlik 1999: 96).

In addition to reproducing the traditional social networks of the *lof* in the new reproductive space of the community, new institutional relationships also emerged. While the formal figure of the *ulmenche* was largely lost, wealthy families continued to finance community activities and celebrations and the principle of reciprocity institutionalized itself in the form of new socio-economic relations. One new institutional development was the inheritance of land through the female line, as young families with inadequate land were allowed to request land from the parents of the wife. Matrilateral relationships thus assumed greater import in the constitution of kinship and inter-familial relations. The sharecropping (*mediería*) system was incorporated from the Chilean estate system and reinterpreted to conform to values of Mapuche society. Instead of representing an exploitative form of labour organisation, as it did in the Chilean estates, sharecropping became a means through which Mapuche farmers could pool scarce resources for mutual benefit. Another institutional development was the labour exchange (*vuelta de mano*), whereby two people enter into agreement for the provision of mutual aid (Stuchlik 1999: 193-96). The reservation system disarticulated the traditional forms of social organisation, but the culturally-embedded principles of economic organization were reconstituted in new institutional spaces and forms.

Because of the slow growth of capitalist relations in the countryside, Chilean encroachment into Mapuche society did not seriously threaten the reproductive capacity of Mapuche communities until the 1970s (for example, Kay 1992; Carrasco 2004; Stuchlik 1999; Bengoa 1983).<sup>5</sup> But the rapid expansion of the commercial agriculture, forestry, and tourism sectors under the Pinochet dictatorship brought the “indigenous question” again to the political fore. Whereas previous indigenous policy had isolated indigenous peoples on reservations, the insatiable resource needs of the neoliberal model made a policy of isolation untenable. The solution proposed by the military regime was clear and unapologetic: the complete assimilation of the Mapuche.

The military government viewed the community and its common property titles as the principal barrier to the integration of the Mapuche into the system of market relations that was transforming the Chilean countryside. The legal foundations of the indigenous policy of the military government were laid out in the 1978 Decree Law 2.568, the intentions of which were clearly spelled out in its name: “Division and Liquidation of the Indigenous Community”. Decree Law 2.568 allowed for the division of Mapuche communities, upon request by only one occupant, who needed be neither Mapuche nor a landowner in the community, in the case of rental or sharecropping arrangements. Divided plots would cease to be considered indigenous, as would their owners. While some Mapuche favoured division, believing it would strengthen their ownership rights in

the face of usurpation attempts, the majority did not. Private property was nevertheless installed in virtually all Mapuche communities through a mix of financial incentives, intimidation, and violence (Vidal 1999: 86).

The return of formal democracy, however, brought hope for an alternative to the crude assimilationist agenda of the military regime. In October of 1993, the Congress approved Indigenous Law 19.253, without question the most progressive indigenous legislation in Chilean history. Law 19.253 prohibited discrimination against indigenous peoples; recognized indigenous communities as legal entities, ended the division of indigenous lands, and prohibited the sale of indigenous land to non-indigenous peoples; launched a fund for indigenous development to provide credits for production and soil recovery projects, and a fund for indigenous lands and water to facilitate the purchase of land and water rights for rural indigenous families and communities in need; and founded the National Commission for Indigenous Development (CONADI) to manage indigenous affairs and implement indigenous programs.

Unfortunately, indigenous policy since 1990 has fallen far short of expectations. First and foremost, government policy continued to be framed by the institutions of private property and market-based development. Thus in spite of the excellent intentions of many in government, indigenous policy remained trapped within the old paradigms. While indigenous ethnicity and culture were finally recognized, the latter, in the eyes of the state, played no fundamental role in the economic reproduction of Mapuche society. Instead, culture was reduced to a series of ceremonial traits, such as religious festivals and traditional dress and food. As such, the government continued to perceive the Mapuche “problem” as one of a backwards subsistence economy, with the government ascribed the role of the facilitating market opportunities within the institutional context of private property.

The centerpiece of the indigenous policy, the Indigenous Land and Water Fund, which provided finance for the purchase of land and water rights by indigenous persons or communities, demonstrated clearly the separation of culture and economy that characterized state policy. On the one hand, the program produced severe dislocation and disarticulation within Mapuche communities, because the government failed to consider the social and kinship relationships that existed among the Mapuche population and underpinned the community economy. An internal audit of the fund, for example, found that only 38 per cent of recipients who participated in religious or cultural activities in their former communities did so in their new locations, while noting “a degree of abandonment of traditional forms of interfamilial and community cooperation” and “signs of an emerging disaggregation of communities” (CONADI 1998: 9 and 41). The disarticulation of social relations within the communities generated by the fund also contributed to rising levels of intra-community conflict: “In practically all cases, doubts have manifested over the boundaries of acquired lands. This has generated a series of conflicts, many of which have endured for years and persist today” (CONADI 1998: 34).

On the other hand, the market bias of the land program also contributed to the concentration of land ownership within and between indigenous communities. As the internal audit shows, in 1995 50 per cent of the lands purchased with subsidies from the fund were indigenous lands, a number that increased to 66 per cent in 1996. Between 1993 and 1996, moreover, 85 per cent of the beneficiaries of the land program were families with over eight hectares of land who purchased an average of 15.88 additional

hectares (CONADI 1998: 39-40).<sup>6</sup> Yet census data show that only 18 per cent of Mapuche rural families owned over eight hectares of land prior to program implementation. Moreover, beneficiaries of the land program are much more likely to use chemical inputs and agricultural machinery (CONADI 1998: 41). Thus in spite of the declared objective of the fund to expand the landholdings of those families with the greatest need, it favoured those families with the largest landholdings and the greatest commercial potential. What this suggests is that the government, in accordance with its policy of supporting only “viable” peasant producers, used the land program to create a class of commercial agricultural producers within the Mapuche communities.

Given the persistence of Mapuche cultural principles and institutions, what state policy produced was a high degree of institutional heterogeneity within rural indigenous spaces, whereby householding and reciprocity existed in a complex relationship to individual gain and its institutional melange of private property, modern agricultural techniques, and capitalist markets. Individual behaviour was therefore structured by a variety of complementary and contradictory forces. As one activist from Ayllarewe explained, “It’s like there are two societies within our communities. There’s the Mapuche society and there’s the individualistic Chilean society. When there’s conflict or *nguillatun* [Mapuche New Year celebration], everyone is Mapuche. But in everyday life, people think more and more for themselves” (Quidel 2004).

Institutional heterogeneity created a complex and contradictory environment in which both market-based development and household and community reproduction undermined each other and government intervention was plagued by perverse outcomes. In the area of production, for instance, the use hybridized seeds by INDAP undermined the practice of seeds saving and sharing, generated a greater dependence upon chemical inputs, and reduced local crop and genetic diversity, all of which weakened the subsistence economy and engendered a heightened reliance upon market transactions and monetary incomes (González 2004). Commercialization loans, moreover, produced equally deleterious outcomes. For example, 87 per cent of INDAP loans to Mapuche farmers were used by recipients for seeds and other inputs for crops not destined for commercial sale but for household consumption (Bengoa 2001, 101).<sup>7</sup> Because the credit did not generate cash income, however, agricultural loans resulted in the de-capitalisation of the household economy via forfeiture of collateral or the exclusion of rural households from future credit.

Government programs in the area of exchange suffered from similar contradictions. Commercialization programs normally begin with government officials selecting a small group of individuals to participate in commercial ventures on the basis of ability to compete in commercial markets. However, state intervention produced two unintended consequences. First, non participants often felt jealousy and resentment towards program beneficiaries, which weakened intra-community relations. And second, program participants often partially redirected state resources towards community activities in order to diffuse intra-community tension (Rivas 2004). One of the main reasons commercialization projects failed, therefore, is they sought to direct all household resources towards commercial markets in sectors where such behaviour is fundamentally irrational. Put another way, rather than recognize the institutional heterogeneity of rural indigenous communities and designing programs accordingly, to use the market as complement to the subsistence economy, government programs presumed a rationality of



profit maximization and capital accumulation that not only did not exist, but also ran contrary to the institutional structures that regulated economic decision-making.

A lack of attention to gender relations also resulted in adverse outcomes. For instance, during the 1990s the government intervened extensively through credit and subsidy programs to direct agriculture towards vegetable production for national markets. But rather than fortify the household economy, commercialization programs undermined it, because, unbeknownst to state officials, the cultivation of vegetables is the responsibility of women. As a result, vegetable commercialization inadvertently generated doubly perverse outcomes: first, an excessive female burden that resulted in the inability to commercialize production adequately and the partial diversion of funds to subsistence activities and household consumption; and second, the loss of the family vegetable plot, a key source of food variety and security, as female labour was re-directed towards commercial production (González 2004).

State interventions, moreover, targeted patterns of consumption. A key program affecting rural consumption was the School-Lunch Program (PAE), which provided daily meals to rural Mapuche children. At first glance, the program appears positive, and particularly so from a food-security perspective. But while the PAE was regulated by the government, it was administered and provisioned by the agro-business firms that dominated the processed food industry in Chile. Moreover, parents were allowed no input into the PAE diet, and the school menu was dominated by non-tradition foods. From the perspective of rural households, the problem is that the PAE inculcated young children with preferences for foods that not only substituted for rural staples, such as maize and potatoes, but also could not be produced on the farm. Indeed, one frustration recounted by adults in the sector was adjusting patterns of household production and consumption to the changing food preferences of children that resulted from the school-lunch program.

At issue is the relation between culture and economy emphasized by Polanyi so many years ago. Because the government separates culture and economy into discreet spheres, it commits the economic fallacy of projecting capitalist rationality to all places and times. The objective of state policy is thus reduced to ensuring the institution of private property and facilitating integration into exchange markets via credit and commercialization programs. But there is nothing about private property per se that would bring about a capitalist form of rationality (Brenner 1986). Only when capitalist *relations of property* prevail, that is, an institutional pattern in which direct producers are separated from the means of subsistence, can capitalist rationality be expected. Where non-capitalist relations of property predominate, economic behaviour can be expected to adhere to alternative cultural principles and institutional patterns.

The disconnection between government agents and Mapuche households is therefore over cultural meaning, as interpreted by the principles of integration that regulate economic reproduction. When the two parties talk about “agricultural production”, they attributed dramatically different meanings to the term. For the government, agricultural production is a purely scientific and commercial process, stripped of its local ecological and socio-cultural contexts, existing for no other reason than to maximize output for market sale and monetary income. For much of the rural Mapuche population, on the other hand, agricultural production is situated within a more complex livelihood strategy. Its objective is not to maximize income but to reproduce

household and community relations. Capitalist markets represent only one of many institutional channels through which households meet their economic needs. Government initiatives are therefore reinterpreted and reconfigured by the dominant principles and institutional patterns that governed economic decision-making in Mapuche communities, householding and reciprocity, all of which result in perverse outcomes and the continued erosion of the reproductive bases of households and communities.

Over the past forty years, state interventions and institutional heterogeneity also brought about significant transformations in the local system of food production and consumption. First and foremost, the variety of and area devoted to crops planted for subsistence shrunk significantly. The area planted with wheat declined from over two hectares per family in the 1970s (Bengoa 1983: 136) to well under one hectare in most cases. Related to the decline of crops planted for household subsistence was the growing inability of subsistence agriculture to provide sufficient supplies of basic staples throughout the year. With the exception of a small number of commercially-oriented producers with 8-10 hectares or more, no family interviewed in the sector during 2003-05 produced sufficient supplies of wheat to feed the family during the entire year. Even more disconcerting was the number of families who planted wheat but relied upon flour purchased in the urban markets for most of their annual consumption. The declining area devoted to other traditional staple crops, including potatoes and beans, similarly resulted in families relying more and more upon alternative sources of carbohydrates purchased in local markets. Even families oriented primarily towards agricultural production for household consumption relied heavily upon purchased food supplies, whether substitutes for traditional crops or traditional crops themselves.

The decline in local food sources and locally-provisioned food items heightened the reliance of rural households upon foods purchased in urban centres. While in the early-twentieth century it was taboo in many places to consume *wingka* foods (Carrasco 2004: 33), such foods came to comprise a significant portion of the total food consumed in the sector.<sup>8</sup> Noodles and rice in particular gained a prominent place in the household diet, complemented by sugar, oil, salt, and tea. As mentioned above, urban foods are problematic because, while they substitute for Mapuche crops, they cannot be produced locally. Shifting food preferences, therefore, can have significant implications for long-term food security.

The preparation and consumption of food in the communities also underwent significant modification. In the pre-conquest period, food preparation and consumption had an explicitly social dimension, integrating the lineage group and reproducing the reciprocal relations of the Mapuche society. But as the nuclearization and commodification of households and resource management intensified, the preparation and consumption of food fell more and more into the domain of the nuclear family. The trend towards the isolation of food preparation and consumption from intra-community networks is furthered by the rising consumption of food outside the community, particularly by children in school and wage labourers in urban areas. The result was the increasing disarticulation of food production and consumption from the reproduction of community life through the extended family and kinship-friendship networks.

## *Livelihoods and Food Security in Ayllarewe*

Rural communities are highly heterogeneous. Actors pursue multiple and diverse livelihood strategies and experience institutions differentially across time and space. In outlining the basic features of the livelihood strategies of Ayllarewe and their implications for household food security, this paper will separate the households in question into three basic categories to highlight differentiated responses of households to institutional heterogeneity: commercial, subsistence, and wage-labour.<sup>9</sup> The first group was the commercial households, who made up 6 of the 30 surveyed families. Commercial households consisted primarily of families with access to relatively large tracts of land of 10 hectares or more. The extended family was the predominant form of familial organisation, though the tendency towards nuclearization and neo-local settlement was evident. Commercial crops accounted for over half the agricultural land. Commercial strategists in all cases held livestock (any combination of one horse, three to five cows, and seven to ten sheep), which were divided between commercialization and domestic consumption. In addition to commercial production, this group was also the most likely to be self-sufficient in wheat, planting 1-2 hectares of wheat for domestic consumption.

Commercial strategists also participated in external labour markets. Due to the high demand for labour on the farm, labour force participation primarily took the form of seasonal labour in the northern fruit plantations for 2-3 months. Women did not participate in labour markets, assuming instead responsibility for the harvesting and commercialization of vegetable crops, in addition to their numerous domestic responsibilities. In nearly all cases, however, women produced and sold traditional Mapuche garments – sweaters, ponchos, and blankets – during the winter months to generate additional income for the household.

The commercial strategists were the most food secure group. No family in the category reported significant food shortages at any time or a persistent lack of food during the year. The food security of the commercial strategists was bolstered by the greater availability of family labour, the diversity of income sources, which included various agricultural products, livestock, artisan goods, seasonal wage labour and the existence of livestock reserves that could be sold in the case of extreme shortage. The primary reason for greater food security, therefore, was not commercial orientation but access to land, upon which all the food-security assets of commercial strategists rested. Moreover, several aspects of the livelihood strategy represented important risk factors and all commercial strategists reported having to reduce food consumption during the late-winter and spring months, when supplies of basic staples ran low and significant monetary expenses were required to purchase inputs for the spring planting.

First, commercial strategists had very high monetary expenses, in the form of fixed production costs and consumption. The vegetable crops promoted by state programs relied heavily upon purchased agricultural inputs and irrigation, which involved paying for pesticides, herbicides and water rights. But while agriculture was selected as the most significant expense, food ranked second, owing to the low orientation towards production for household consumption and the concomitant dependency upon purchased foodstuffs. Commercial households also incurred a wide range of significant monetary

expenditures, in part due to the increased contact with urban areas, including transportation, clothing, and television.

Second, although income diversity was a food security asset for the group, two of the sources, wage labour and artisan production, were not reliable year-to-year, and only livestock could generate income in the short-term, in the case of an external shock in the market. Commercial households were therefore acutely vulnerable to fluctuations in the market economy because beyond wheat they did not plant other subsistence crops. Moreover, commercial households were the least likely to be involved in reciprocal economic relationships, such as sharecropping and labour exchanges, which would have enabled them to access more diversified sources of income and production.

Third, commercial strategists were more likely to have incurred significant debts with INDAP. Over the course of the 1990s, INDAP targeted these families for vegetable commercialization. However, participants in all cases had used only part of the credit for vegetable production. The rest had been dedicated to purchase inputs for wheat, a subsistence crop, household expenditures, and community labour and religious activities. As a result, all commercial households were in arrears with INDAP, which meant either asset forfeiture or refusal of future credit. In the context of high and fixed expenditures and dependence upon purchased food supplies, cash shortages could translate easily into food shortages.

It would be a mistake, moreover, to characterize the behaviour of commercial strategists as irrational. While in conversations all commercial strategists demonstrated a marked preference for technical assistance and greater market opportunities instead of fortifying production for household consumption, in no instance could one characterize the behaviour of commercial households as capitalist, that is, maximization and accumulation. On the contrary, the objective of commercialization was not to generate *capital* for reinvestment, but to make *money* to meet household needs and community responsibilities. Put another way, commercialization was not a strategy of capital accumulation but a strategy of householding and reciprocity, designed to achieve family and community reproduction.

Subsistence households comprised the numerically most significant component of the survey group, accounting for 16 of the 30 respondents. Subsistence strategists held under six hectares of land, with most owning less than four. Highly decomposed extended families and nuclear families predominated. As the name of the group suggests, most agricultural production was dedicated to family subsistence. Only a small portion of the agricultural output was commercialized. In most cases, families commercialized small parts of a subsistence crop, such as beans, or other staple crops were divided between commercialization and household consumption, such as peas. In certain instances, subsistence strategists had incorporated one or two purely commercial crops, usually fruit or vegetables. However, most of the agricultural land in all cases was devoted to household consumption.

The majority of families owned no livestock, and those who did held sheep and pigs, due to their smaller land demands. Sheep, ranging from 3 to 10 animals, were used for wool and for commercial sale, though at times they were consumed for meat. A small number of pigs, between two and three, were allocated to family subsistence. Families in the subsistence strategy group also showed higher reliance upon state subsidies and social assistance. Subsistence strategists worked from time to time in Temuco as temporary

labourers in the construction and domestic-service industries, though the incidence of wage-labour was lower than was the case for either commercial or wage-labour strategists. Stable employment opportunities are few and far between for this group, due to the lower educational levels that result from the extreme financial restrictions of the household and the nuclearization of the family structure, which reduces the surplus labour pool available to seek urban employment.

Subsistence strategists were the most food insecure group. 10 of the 16 families reported persistent food shortages throughout the year, with several families confiding that they had sought food supplies from church organisations. Families in this category obtained food supplies through an eclectic and unreliable mix of strategies. The main source of food, household production, was being undermined by government interventions. On the one hand, subsistence strategists relied heavily upon purchased agricultural inputs, in the form of seeds and fertilizers. This dependence on purchased inputs was a direct result of INDAP programs of agricultural modernization, which introduced hybridized crops – which produce less reliable seeds and require more inputs – into Mapuche communities. On the other hand, 8 of the 16 households had received small commercialization credits from INDAP. However, in all cases but one funds were partially or wholly used for the purchase of subsistence inputs, with two results. First, the inputs required for commercial crops could not be purchased, which meant low yields, and second, all but one of the eight households were in arrears.

Reciprocal relations were another source of food and income among subsistence strategists. Several cases of sharecropping were found, in agricultural production and in sheep rearing. In one community comprised exclusively of subsistence strategists, an area of common pasture also remained, though the general lack of livestock in the community restricted its economic utility. Relations of institutionalized reciprocity, however, were inadequate and declining. Numerous households remarked upon the decline of reciprocal relations in the area, a phenomena confirmed by CES (2002), with the two most common reasons being the lack of resources to be shared, and the rise of institutions to facilitate market production, such as private property and agricultural technology and techniques. As one resident observed in a group meeting, “Before we could go out freely to get firewood, use pasture, and collect what was needed. Now you can’t go out for firewood or to use pasture in other areas. People say why don’t you use your own plot?”

Finally, in spite of the subsistence agricultural base, dependency on purchased foodstuffs was high. Indeed, food was the single most significant family expenditure in all cases except the two households with tracts of land over five hectares, in which case agriculture was the primary expenditure. High dependency on purchased food was the result of two interrelated tendencies: first, the weakening of the material and social bases of the subsistence economy and second the inculcation of urban-based patterns of food consumption via the school-lunch program. In several cases, households claimed to have switched part of the domestic production to commercial agriculture in order to generate the cash income needed to purchase urban foods (noodles, rice, and milk) because of the preferences of children. Moreover, the partial switch to commercial crops and purchased foodstuffs represents a risk factor because, while the real producer prices for fruits and vegetables fell over the past twenty years, the real consumer prices for noodles, rice and milk rose sharply (Clark 2007: 28).

The final group was the wage-labour strategists who made up 8 of 30 respondents. Evidence suggests that the numbers of this group will increase as the subsistence strategists are progressively undermined and marginalized and migrants return to rural communities to seek refuge, either on the family plot or on purchased land (Bengoa 1996: 15). Wage-labour strategists managed very small plots of land, typically under two hectares. Young nuclear families and unconventional household units – in one case, a single mother, in another, a married couple with a daughter, a brother of the husband, and the mother of the wife – preponderated. Minimal agricultural production was undertaken, owing to the lack of land, financial resources and household labour. In most cases, however, small family plots were planted, with beans, potatoes, peas, and herbs, devoted exclusively to household consumption.

The bulk of household income came from wage labour. The education levels of males and females were generally higher among the wage labour strategists than among other household groups. Males worked in Temuco as temporary labourers, in a variety of trades, ranging from janitors to construction workers. Women worked as domestic servants or as caregivers for children. In virtually all cases, household members worked as unskilled labourers. In the cases where women did not work in the urban areas, they produced and sold artisan products, the extent of which depended on the ability of the family to purchase wool.

Wage-labour strategists reported less food insecurity than subsistence strategists, but more than commercial strategists, with respondents registering in 3 of the 8 cases a lack of food throughout the year, and all but two reducing food consumption during the spring months. Beyond regional economic decline and the instability of the positions occupied by rural Mapuche workers in the local labour markets, the most serious threat to household food security was the lack of stable and reciprocal relations within the community. The reason wage-labour households on balance lacked such relations is that most were from urban areas and purchased their land with subsidies from the government. Extended family and reciprocal relations are of great import to wage-labour households because the availability of community members to care for children is crucial to allow young females to seek urban employment, which in the case of single mothers was the difference between subsistence and destitution. The meagre subsistence base, weak reciprocal economic networks, and relatively high monetary expenditures (transportation, clothing, and education) situated wage-labour strategists in a unique position with respect to food security. The strengths of the wage-labour strategy were simultaneously its greatest weakness, and the households comprising the group included both the most food secure in the previous year and the most food insecure.

Given the previous discussion, it is no surprise that food insecurity was endemic in the communities examined: 13 of the 30 participants reported persistent shortages of food throughout the year and 28 of the 30 households recounted significant reductions in food consumption during the late-winter and spring months. The objective of this paper, however, is not simply to state the existence of food insecurity but to show how it was produced and reproduced by state policy within the context institutional heterogeneity. At the general level, government intervention weakened the household economy and food security because it was based upon a rationality that did not correspond to an environment where economic behaviour was governed by a diversity of cultural principles and institutional patterns. The results were perverse outcomes, persistent

livelihood deterioration and chronic food insecurity. State intervention and local markets, moreover, are experienced differentially according to the livelihood strategy pursued by each household. As a result, the policy challenge is not merely to fortify the subsistence economy, but to design and implement policies that take into consideration the diversity of motives and institutions that prevail in rural indigenous communities and accommodate the multiplicity of livelihood strategies actually pursued.

### *Conclusion: The Micro-Politics of Food Security*

In spite of all the good intentions, state indigenous policy consistently undermined the rural economy and household food security. It is the claim of this paper, moreover, that policy failure was intimately related to the transcultural projection of market principles to areas where the institutional configurations produced much more complex economic behaviour. Restrictive assumptions may help produce event regularity in the econometric models that inform macroeconomic policy, but they have the opposite effect where the principles and institutional patterns of the capitalist market do not govern economic decision-making. The rural indigenous communities examined here were governed by a diversity of cultural principles and institutional patterns of integration, in which the principle of individual gain and its market pattern played a secondary role. Consequently, economic behaviour was shaped by a complex of economic and non-economic considerations, all of which must be accounted for in the design and implementation of state interventions.

The challenge of Chilean policy-makers is thus two-fold. The first and most fundamental obstacle relates to the conceptualization of the economy that prevails among the technocratic elite. The analytical separation of the economy and the imputation of transhistorical and transcultural principles of economic integration based on the institutionalized relations of the capitalist market must be rejected as inappropriate to rural indigenous communities. Policy makers must recognize not only the existence of institutional heterogeneity but also its repercussions with regards to economic behaviour and policy. The market must be seen not as the universal solution to economic backwardness but as a complement to livelihood strategies based on distinct cultural principles and institutional patterns of integration. Second, there must be a considerable decentralization in the design and implementation of indigenous policy, a difficult task given the long history of administrative centralization in Chile. It is wholly inadequate for policy to be designed by technocrats in Santiago and then implemented by “facilitators” in the indigenous branches of the state apparatus. Rather, rural indigenous communities must be granted the autonomy and resources with which to shape local reproductive institutions and set the terms of their participation in the broader Chilean society.

---

### NOTES

<sup>1</sup> There is no adequate distinction in the English language to express the difference between *comida* and *alimento*.

---

<sup>2</sup> Institutions are defined as “systems of social rules and conventions that structure social interaction” (Hodgson 2001, 294).

<sup>3</sup> The *lof* was the traditional, patrilineal-territorial unit of socio-economic organization that preceded the “pacification”, as it is referred to in Chile.

<sup>4</sup> *Wingka* is the Mapuche Word for foreigner, whether Chilean or otherwise. Literally, it means “usurper”.

<sup>5</sup> This is further evidenced by the fact that ethnicity did not become politically salient until the 1970s.

<sup>6</sup> Unfortunately, it is impossible to find information after 1996, as CONADI cancelled the internal audit program.

<sup>7</sup> The National Institute for Agricultural Development (INDAP) is the principal provider of finance for agricultural extension programs for peasant producers (under twelve hectares).

<sup>8</sup> *Wingka* is the term used by the Mapuche to describe all non-Mapuche. The literal translation is usurper.

<sup>9</sup> This categorization of households and their relative statistical distribution is supported empirically by the baseline study of 174 families in the sector carried out by the CES (2002).



## References

Adato, M. and R. Meinzen-Dick. 2002. *Assessing the Impact of Agricultural Research on Poverty Using the Sustainable Livelihoods Framework*. FCND Discussion Paper 128. Washington: IFPRI.

Aylwin O., José. 1995. “Antecedentes Histórico-Legislativos Para El Estudio de Comunidades Reduccionales Mapuche,” *Pentukun* 4: 85-104.

Bengoa, José y Eduardo Valenzuela. 1983. *Economía Mapuche: Pobreza y Subsistencia en la Sociedad Mapuche Contemporánea*. Santiago: PAS.

Bengoa, José. 1996. “Población, Familia, y Migración Mapuche: Los Impactos de la Modernización en la Sociedad Mapuche, 1982-1995.” *Pentukun* 6: 1-18.

Bengoa, José. 2000. *Historia del Pueblo Mapuche: Siglo XIX y XX*. Santiago: LOM Ediciones.

Bengoa, José. 2001. “Políticas Públicas y Comunidades Mapuches: Del Indigenismo a la Autogestión.” In *Políticas Públicas y Pueblo Mapuche*, ed. José Aylwin. Temuco: Instituto de Estudios Indígenas.

Brenner, Robert. 1986. “The Social Basis of Economic Development.” In *Analytical Marxism*, ed. John Roemer. Cambridge: Cambridge University Press.

Carrasco, Noelia H. 2004. “Antropología de los Problemas Alimentarios Contemporáneos. Etnografía de la Intervención Alimentaria en la Región de la Araucanía, Chile”. Doctoral dissertation, Universitat Autònoma de Barcelona, Barcelona, Spain.

CES (Centro de Estudios Socioculturales). 2002. *Plan de Desarrollo Endógeno Mapuche en Comunidades Indígenas, Sector Truf-Truf, Padre Las Casas y Vilcún*. Temuco: Centro de Estudios Socioculturales.

Clark, Timothy David. 2007. “La Economía Política de la Seguridad Alimentaria en una Comunidades Mapuches.” *Cultura, Hombre, Sociedad* 10: 14-31.

CONADI (Corporación Nacional de Desarrollo Indígena). 1998. *Evaluación y Propuesta Al Programa Subsidio Para la Adquisición de Tierras por Indígenas*. Temuco: Corporación Nacional de Desarrollo Indígena.

Esteva, Gustavo. 1994. “Re-embedding Food in Agriculture.” *Culture and Agriculture* 48: 2-12.

González, Pablo. Personal Interview. 31 January 2004.

Hewitt de Alcántara, Cynthia. 1993. "Introduction: Markets in Principle and Practice." In *Real Markets: Social and Political Issues of Food Policy Reform*, edited by Cynthia Hewitt de Alcántara. London: Frank Cass.

Hodgson, Geoffrey M. 2001. *How Economics Forgot History: The Problem of Historical Specificity in Social Science*. New York: Routledge.

Kay, Cristóbal. 1992. "Political Economy, Class Alliances, and Agrarian Change." In *Development and Social Change in the Chilean Countryside: From the Pre-Land Reform Period to the Democratic Transition*, ed. Cristóbal Kay and Patricio Silva. Amsterdam: CEDLA.

Polanyi, Karl. 1957. "The Economy as an Instituted Process." In *Trade and Market in the Early Empires*, ed. Karl Polanyi, Conrad M. Arensberg, and Harry W. Pearson. New York: The Free Press.

Polanyi, Karl. 1977. *The Livelihood of Man*, ed. Harry W. Pearson. New York: Academic Press.

Polanyi, Karl. 2001. *The Great Transformation: The Political and Economic Origins of Our Times*. Boston: Beacon Press.

Quidel, José y Fernando Jineo. 1995. "Los Raíces Para Nuestro Cultivo." *Modernización o Sabiduría en Tierra Mapuche?*, ed. Ricardo Salas, Cristián Parker, y Alejandro Saavedra. Santiago: San Pablo.

Quidel, Javier. Personal Interview. 21 February 2004.

Rivas, Mario. Personal Interview. 29 January 2004.

Stuchlik, Milan. 1999. *La Vida en Mediería: Mecanismos de Reclutamiento Social de los Mapuches*, translated by Fresia Salinas and Teresa Gottlieb. Santiago: Ediciones Soles.

Vidal, Aldo. 1999. "Políticas Legislativas en Chile. El Caso de las Tierras y Territorios Mapuches," *Cultura, Hombre, Sociedad: Volumen Especial – Legislación Indígena, Tierras y Pueblo Mapuche* 2: 70-94.

Vives, Cristian. 1980. "Consideraciones Sobre la Realidad Mapuche en la Actualidad." In *Desarrollo Capitalista y Campesinado*. Santiago: Facultad Latinoamericana de Ciencias Sociales.

Wilk, Richard. 1993. "Altruism and Self-Interest: Towards an Anthropological Theory of Decision Making." In *Research in Economic Anthropology*, edited by Barry L. Isaac. Greenwich: JAI Press.