Vulnerability and Agriculture Among Old Colony Mennonites in Quintana Roo, Mexico: A Research Note

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Introduction¹

Our investigation describes and analyzes the physical, socio-cultural, political and economic elements that permit access to natural resources in the Mennonite *ejido*, or community, of Salamanca in Quintana Roo in Southern Mexico. It further considers how this relationship between society and nature has led to the production and reproduction of the Mennonite agricultural system on a family and community scale. Our ultimate goal is to understand the 'social vulnerability' of this *ejido* by employing the theory of Piers Blaikie's "access to resources model." We conducted research over the years 2015-2016 in which we sought a closer understanding of the factors that promoted the establishment of Mennonite colonies on the southern frontier of Mexico at the beginning of the twenty-first century. These include the social and physical mechanisms that have incentivized the Mennonites' agri-

cultural settlement, farming being their principal means of earning a living. Finally, a close examination of this condition of social vulnerability allows us to identify and understand the determinants that motivate conservative communities, such as the Old Colony Mennonites, to change locations with the goal of perpetuating their socio-cultural organization.

Salamanca: A Mennonite Farming Colony in Quintana Roo

Currently the state of Quintana Roo is among the principal states in Southern Mexico that is home to Mennonite communities (INEGI, 2011). Their arrival was motivated by the same factors that led the Mennonites to disperse throughout the Americas: finding adequate farm land for their socio-cultural and economic reproduction. The *ejido* of Salamanca, encompassing five thousand hectares, is located in the municipality of Bacalar, in the state of Quintana Roo. It is 48 kilometers from the city of Chetumal, the state capital, and 5 kilometers from the town of Bacalar, the municipal seat. Currently the colony supports approximately 250 families and consists of 30 legally constituted *ejiditarios*, technically making them residents of a land holding commune.

An *ejido* and its residents are a legal entity with self-governance. It is a system that allows residents to operate in accordance with its internal laws, but also according to rules set by the Agrarian National Registry. For the use of ejiditorial lands, it is necessary to establish beforehand how labour will be organized and how resources will be used. Further, the *ejido* must provide capital reserves and systems of welfare and social service that draw from common funds.

The establishment of these *ejidos* arose from the land needs of the Old Colony Mennonite communities living in northern Belize. As a result, in 2000, the Mennonites of Little Belize and Shipyard colonies established networks of support with other Mennonites living in the state of Campeche (in Mexico). Through this relationship they received legal advice and, as such, help in the process of obtaining productive lands.

Because the Salamanca property belonged to the *ejido* Bacalar, it was necessary not only to pay the cost of the land as set by the residents, but also to legally comply with Mexican law as established by the National Agrarian Registry. Beginning in 2001 the first families who acquired lands on the Salamanca property began to settle, and then clear land at Kilometer Ten, a space located on

the road to the town of Reforma in Bacalar. Nevertheless, it took until 2005 to formalize ownership of the property. The cost of land was six million pesos (about \$320,000 USD) and was paid with the assistance of a loan from the Bank of Belize. Owing to the high interest rate, the Mennonites decided to pay off the first loan with a second, this time assisted financially by their family members living in the colonies of Little Belize and Shipyard. As such, the first Mennonite families to acquire lands, paid approximately \$35,000 pesos (\$1,900 USD) for a parcel of eleven hectares.

Environmental Considerations

In 2003, as formal preparations for establishing the first four villages was taking shape it became necessary to clear the existing jungle. To comply with environmental regulations a technical study was required. The Mennonites in charge of the land purchase hired the company, Specialized Consultants in Environmental Ecology and Forestry, based in the city of Chetumal. This company helped them prepare a document titled, "Change to 960 ha of forestry land by the Mennonite Community of Salamanca of the *Ejido* Bacalar" in which the Mennonites requested permission to change the land use designation from forest to farmland. With that process they complied with the demands of the General Law of Sustainable Forestry Development and thus gained the authorization to change land use for the agricultural labor of the Mennonite colony.

The Mennonites then requested permission to clear an additional 2,500 hectares of land. In 2004, government approval was received subject to a condition: an additional payment of 25,000 pesos. This counter proposal was ultimately rejected by the colony owing to the increased cost. However, further land was cleared in an illicit manner through a relationship with a member of the *ejido*, who, unlike the Mennonites, had land rights distinct from the new colonists.

During the first years that the land was being prepared, the Mennonites took advantage of the felled trees to produce charcoal. This activity became a source of an immediate income for the families as they prepared the land for agriculture. This sale of charcoal was made possible by state regulations associated with the exploitation of timber resources. Nevertheless, a few years later, production ceased as Mennonites would not pay the increased fees associated with the license renewal and did not want to adhere to

additional environmental requirements. At present the newly felled trees that could provide building material in another locale are burned, as lumber is of little value to Mennonites whose houses are made of cement or tin.

Access and Use of Water

Another element affecting social vulnerability that was considered in the establishment of the Mennonite colony is access to water. The region is located in Basin 33A of the Chetumal's Bay and on the aquifer of the Yucatan Peninsulas where free use of ground water is granted by a concession owing to the great availability of water. The water table on the ejidal land varies, however, drilled wells provide evidence that water can be found at a depth between five and thirty meters. Using ground water for agricultural purposes requires use-rights as set in Article 192-D and 221, Section 1 of the Federal Law of Water Usage that establishes the freedom from payment for those who dedicate themselves to farming activities in rural areas with less than 2,500 inhabitants for both domestic and agricultural use.

Water usage rights in ejidos can be applied for by individuals, groups or by an entire *ejido*. In the case of the Mennonites, only thirty individuals registered by presenting a certificate for their rights over the land with an ejiditario legally granting the use of their name. Once permission was obtained from the state water agency, CONAGUA, it was also easier to access public resources for the purchase of irrigation system equipment.

In the colony, drip irrigation is often used during the dry season for certain delicate vegetable crops that are grown in an area of between half and one hectare of land. Careful irrigation is thus conducted using wells that are designed for domestic use. Whatever the means of access to well water, irrigation highlights the skill by which residents make use of water resources and represents a strategy that combines common and private initiative. In contrast with access to land, concessions for water usage have been taken out individually because if done collectively the residents would have to comply with the stipulations in Article 5 of the General Law of Ecological Balance and Environmental Protection which would force them to present an Environmental Impact Study, a stipulation for any water use on over one hundred hectares of agricultural land.

Although access to water for crop irrigation is relatively simple, the majority of farmers opt for seasonal rains to water their crops because of the high costs association with the installation of irrigation systems. In fact, only three large producers employ irrigation systems. Mennonites, who at one point adopted irrigation systems, now consider this form of cultivation unviable. Less expensive systems of conventional irrigation that rely on electricity cannot be used as this contravenes the life-style principles of the more traditional Old Colony Mennonites. The reason that the majority of Mennonites have unused irrigation wells is that they need generators – diesel or gasoline – to pump the water, which are too costly. It is estimated that an investment of \$18,000 USD is required to irrigate 50 hectares of land.

Farming

It is estimated that 3000 hectares of land are dedicated to farming in Salamanca. The farms are owned and operated by Mennonite families, supported by credit and grants from government programs. The harvest of grains such as soy, sorghum and chia seed – and on a smaller scale, such crops as beans, corn and peanuts – forms part of the traditional production of the colony. Nevertheless some produce such as cilantro, habanero peppers, watermelon and tomato also figure among the products that generate household income.

The Mennonite colony also has created an extensive marketing system. It includes a commodity storage facility that enables production and marketing; these installations include three silos, two with a capacity for 1,200 tons and one with 250 tons. They also include a grain elevator and dryer. The acquisition of this equipment was made possible in great part through the financial support offered by the El Fideiscomiso Risk Management Agency (de Riesgo Compartido), or FIRCO, in 2007; its support represented 75 percent of the investment, while Mennonites offered the remaining 25 percent through manual labor in the construction of the facility. With the passage of time, Mennonites have organized the following five cooperatives as a means to obtain public resources: 1) Agroforestry Producers of the Ejido of Salamanca; 2) the David Guenther Cooperative; 3) Schmitt Quality Grain of Salamanca; 4) Ejido Salamanca; 5) the Redekop-Banman Granos de Calidad and Salamanca and Cultivos (Crops).

The Mennonites of Salamanca have developed an efficient system of production. They have learned a seasonal system of agricultural rotation with planting techniques very similar to any other small-holding farmer. The first step is to turn over the fallow land (deep plough) more or less one month before planting so that the land can aerate and acquire nutrients, after this, and a few days before planting, the land is ploughed to open up rows for the seed. Production in the Mennonite fields is characterized by a wide use of technological inputs, including the planting of genetically modified seeds and fertilization using a wide variety of agro-chemicals. This diversified use of technology serves to highlight (by juxtaposition) the steel wheels of the tractors that comply with religious teachings.

These various physical factors affect the social viability of the Mennonite communities but so do some social factors such as their relationship to their neighbours. Currently some factors produce tension between the Mennonite community and their neighbours, be they Mayans or Mestizos. Environmentalist groups also challenge Mennonites, mostly because of threats of their agriculture to the subsoil of the region; their system of agriculture transports pollutants to different water sources, which in turn results in serious health issues for the residents. The indiscriminate clearing of the forest by Mennonites is another factor that keeps conservationist groups on the alert. However, it is the use of genetically modified seeds that represents the greater risk for the Mennonite agricultural system. This social vulnerability arises because Mayan honey producing communities have seen their products contaminated with the pollen of these plants, principally soybeans. Currently, a government restriction regulates the use of these seeds. Mennonites, however, have continued to use the seeds and have attempted to keep this a secret from the authorities.

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tural system. This social vulnerabilty arises because Mayan honey producing communities have seen their products contaminated with the pollen of these plants, principally soybeans. Currently, a government restriction regulates the use of these seeds. Mennonites, however, have continued to use the seeds while the authorities have not enforced the law.

In conclusion, perhaps the greatest factor affecting social vulnerability is that Mennonite migration has become a permanent condition due to the lack of land for social and economic reproduction of the colony. Sixteen years after their settlement in Quintana Roo, the colony of Salamanca has surpassed its population capacity. It is possible that the Salamanca people will move to yet another part of Quintana Roo or to a country in South America. Just which country they will choose will depend in large part on the political and economic conditions they will find there. Ultimately those conditions will need to address the perennial question of social vulnerability.

References

Blaikie, Piers, et. al. *Vulnerabilidad: el entorno social, político y económico de los desastres.* Translation by Tercer Mundo Editores. La RED, Red de Estudios Sociales en Prevención de Desastres en América Latina, 1996, pp. 52-78.

Appendix: Ethnography

Three research techniques were used to obtain data that illustrate the traits that characterize the vulnerability of the Mennonite agricultural system. The interviews with personnel at government agencies in the city of Chetumal and with Mennonite colonists were conducted during a stay in the Salamanca ejido, Campeche. In total, Carolina Vargas spent fifty days in three geographic locations in Mexico and two in Belize, the latter in collaboration with the supervisor of this Master's thesis (Martha García), to identify and document those aspects, relationships and practices within the sociocultural organization at the family and community levels that related to the Mennonites' agricultural system.

1. Participant observation: was used to understand the sociocultural, physical, political and economic elements of family organization and community dynamics. During the first 29 days of my

(Vargas) stay in the ejido Salamanca I was welcomed by two homes, the first by the family of the colony governor (the Vorsteher) and the second by the Germán and Caterina (Herman and Katherina) a Wiens family. Living with the family of Vorsteher Jorge Niekoley enabled access to information related to the colony organization, and facilitated the socialization with the people within the community. Notable among these was the person in charge of the Juan Wall warehouse. In the family, my role was shaped according to gender and age, so my presence signified that of another daughter. Living with the Wiens couple, also allowed for contact with different families, several of them with heads of families who at the time served as "presidents" of the ejidal commissariat, the colony governors (Vorstehers) and managers of agricultural warehouses. The two-week stay with this household made it possible to identify and identify the intra-community differences among households associated with income and work performance. At the community level, several people were involved in their work, for example in harvesting habanero chile, serving customers in the store, gathering chicken eggs, producing cheese, cleaning the school houses, preparing the seed beds for coriander, producing carpets, providing medical consultation, and marketing chemicals. It should be noted that because not all members of the community have a command of the Spanish language, it was necessary to learn basic Low German words to achieve an understanding among the parties. The second stay of six days was with the Wiens couple. I (Vargas) accompanied them in their daily activities, including visits with neighbours and family meals, as well there was more time to spend time with those in charge of the sale of chemicals and grains.

- 2. In-depth interviews: allowed me (Vargas) to enter into dialogue with the ex-community leaders in order to understand the history of land appropriation, as well as the effect the colony organization. Also the current leaders shared their personal and community experience regarding the operation of the internal agricultural system.
- 3. Semi-structured interviews: the use of this methodological tool allowed us to know the form and public-political processes in which the community accesses physical resources. It required an approach to government entities such as CONAGUA, RAN (Registro Agrario Nacional) and the Agrarian Attorney's Office. The semi-structured interviews were also carried out with the officials from a variety of agencies that are related to the agricultural sector: SAGARPA (Secretaría de Agricultura, Ganadería, Desarrollo

Rural, Pesca y Alimentación), SEDARU (Secretaría de Desarrollo Agropecuario y Rural), FIRA (Fideicomisos Instituidos en Relación con la Agricultura) and INIFAP (Instituto Nacional de Investigaciones Forestales, Agrícolas y Pecuarias), which will be understood as the social structures in the present study. The objective was to know the political resources available to the Mennonite producers and to understand the functioning of the mechanisms for economic access that drives agricultural production.

Notes

This article was translated from the original Spanish to English by Ben Nobbs-Thiessen.