

1 Title: Pious pioneers: The expansion of Mennonite colonies in Latin America

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29 **Abstract**

30

31 Nearly one hundred years ago, a group of Mennonites left the prairies of Manitoba  
32 for the deserts of Northern Mexico. Since then, Mennonites have created over two  
33 hundred agricultural colonies across Latin America, spanning nine countries and  
34 seven biomes. In this paper, we provide the first continental-scale map and account  
35 of Mennonite expansion in Latin America over the last century. We show that  
36 Mennonite colonies today cover an area exceeding that of the Netherlands, having  
37 expanded mostly through the conversion of uncultivated land to agriculture in  
38 remote areas. We discuss the implications of Mennonite expansion for the study of  
39 frontier land-use change. We argue that Mennonite farmers differ from both peasant  
40 and capitalist farmers, two categories of agents commonly featured in studies of  
41 frontier land-use change, in ways that have made them more likely to take a  
42 pioneering role in agricultural frontiers. We finish by proposing some avenues for  
43 future research.

44

45

46 **Keywords**

47 Mennonites, Agricultural frontiers, migration, land-use change, Latin America,  
48 religion

49           **1. INTRODUCTION**

50

51   Over the last century, the global land area used for agriculture has increased  
52   massively (Foley et al., 2005), not least in Latin America, where staggering  
53   expansion rates have been reported for crop- and pasturelands in recent decades  
54   (Graesser et al., 2015). The appropriation of space for food, fiber, and fuel  
55   production has propelled agricultural frontiers in which uncultivated land is turned  
56   into croplands and pastures, thereby integrating remote areas into a national and  
57   global agricultural economy. In Latin America, increasing demand for agricultural  
58   commodities, pressure to accommodate growing rural populations, and state  
59   territorialisation efforts through frontier settlement, have all contributed to the  
60   conversion of millions of hectares of intact forests to agriculture (Gibbs et al.,  
61   2010).

62

63   To understand local dynamics of agricultural frontier expansion, it is necessary to  
64   examine the logic of the agents that drive them. Latin American agricultural  
65   frontiers have often been characterised as either populist frontiers (Browder &  
66   Godfrey, 1997; Pacheco, 2005), driven by small-scale peasant farmers, or  
67   corporatist (Browder & Godfrey, 1997), capitalist (Pacheco, 2005) or neoliberal  
68   frontiers (S. B. Hecht, 2005), driven by large-scale, capitalist farmers. Although  
69   both dynamics can be present in a given frontier (Barbier, 2012; Pacheco, 2012),  
70   peasant and capitalist farmers represent contrasting modes of decision-making.  
71   Peasant farmers typically respond to a logic centered around household

72 reproduction, expanding their cultivated area primarily in response to changing  
73 needs of the family unit, although some degree of market integration is common  
74 (Caldas et al., 2007; van der Ploeg, 2013). Capitalist farmers, on the other hand,  
75 seek to maximize return on capital through various means, including the capture of  
76 changing economic rents in remote and uncultivated areas (le Polain de Waroux et  
77 al., 2018).

78

79 In this paper, we turn our attention to a group of agents that seems to defy these  
80 categories and that, in spite of its disproportionate influence on agricultural  
81 expansion in several Latin American countries, has received relatively little  
82 scrutiny in studies of frontier land-use change. That group is Low German  
83 Mennonites, a socio-religious community tracing its origins back to 16<sup>th</sup>-century  
84 western Europe, which, since the migration of some of its members from Canada  
85 to Mexico and Paraguay almost a hundred years ago, has generated over 200 new  
86 agricultural settlements, or *colonies*, scattered across the continent. In what follows,  
87 after a brief summary of early Mennonite migrations, we review the expansion of  
88 Mennonite colonies in Latin America and discuss its implications for the  
89 understanding of frontier land-use change. In doing so, we aim to contribute to both  
90 the empirical and the conceptual basis for the study of agricultural frontiers.  
91 Empirically, we propose the first complete map, account, and family tree of the  
92 expansion of Mennonite colonies over their first hundred years in Latin America.  
93 Conceptually, we propose that these colonies form a distinct yet significant class of  
94 agents in the ‘frontier ecosystem,’ one that operates following a logic not quite like

95 that of either peasant or capitalist farmers, and which, given its influence in the  
96 development of Latin American agricultural frontiers, deserves to be better  
97 understood. We propose a research agenda to that effect at the end of this paper.

98

99 Our account of Mennonite colony expansion is based on a variety of sources  
100 including published academic literature, multiple books published within the  
101 Mennonite community (e.g., Bergen, 2017; Giesbrecht, 2018; Giesbrecht &  
102 Klassen, 2015; Penner, 2014; Schartner & Schartner, 2009), online sources (e.g.,  
103 <https://gameo.org/>), and a 16-year digital archive (2004 to 2020) of the  
104 *Mennonitische Post*, a bi-monthly German-language newspaper aimed at the Low  
105 German Mennonite diaspora in the Americas that carries news, travel reports, and  
106 reader letters from colonies across the region. Drawing on these sources, we  
107 identified every Mennonite colony in Latin America, its date of establishment, and  
108 the origins of its first settlers, and reconstituted, where possible, the history,  
109 motives, and mechanisms behind its creation. We produced a map of Mennonite  
110 colonies based on a combination of existing maps, textual information, and visual  
111 interpretation of satellite imagery. To do this we started by consolidating and  
112 digitizing maps published in various books and atlases (e.g., Giesbrecht, 2018;  
113 Penner, 2014; Schroeder & Huebert, 1996; Warkentin, 1987) and in the  
114 *Mennonitische Post*, as well as maps produced by colony administrations and  
115 knowledgeable individuals. We then used visual interpretation of satellite images  
116 to update or create polygons, combining the use of the history function in Google  
117 Earth Pro (which displays yearly Landsat mosaics from ~1984 to 2016 at a 30-m

118 resolution) with images from Planet Explorer (high-resolution image mosaics for  
119 2016-2020). We used expansion trends and settlement patterns to identify or update  
120 the boundaries of colonies (figure 1).

121

## 122 2. FROM THE LOW COUNTRIES TO CANADA

123

124 Mennonites have long been known as pioneer farmers. This Anabaptist Christian  
125 denomination, named after the Dutchman Menno Simmons (c. 1496-1561),  
126 emerged in the wake of the Protestant Reformation, coalescing around ideals of  
127 nonviolence, adult baptism, and separation from ‘the world.’ A strong attachment  
128 to land and farming also became a defining characteristic over the years, as did the  
129 use of Low German (*Plautdietsch*). The Mennonites’ early history in Europe was  
130 marked by a series of migrations. The trajectory of most relevance to this paper led  
131 a group to migrate from Flanders to Friesland, then to West Prussia in the 16<sup>th</sup>  
132 century (around the city of Gdańsk, then called Danzig), to the steppes of Ukraine  
133 in the late 18<sup>th</sup> and early 19<sup>th</sup> centuries, and finally to Canada in the late 19<sup>th</sup> century  
134 (Loewen & Nolt, 2012, pp. 5–7). Each of these migrations was driven in large part  
135 by the changing attitudes of national governments towards what came to be called  
136 the *Privilegium*: the demand for Mennonites to be exempted from military service,  
137 the swearing of civil oaths, and, increasingly over the years, national education.  
138 While these hard-working colonists were initially welcomed by states seeking to  
139 consolidate their sovereignty over remote territories, their demands for differential  
140 treatment grew increasingly intolerable as states moved from territorial

141 consolidation to nation-building (Cañás Bottos, 2008, pp. 68–69). Inevitably, the  
142 moment would come when these exemptions were revoked, forcing Mennonites to  
143 either assimilate or leave.

144

145 This cycle of settlement and uprooting continued after Mennonites had crossed the  
146 Atlantic Ocean. In 1919, amidst growing pressure to integrate English public  
147 schools and increasing suspicion towards the German-speaking Mennonites’  
148 exemption from military service in the wake of World War I, a group of  
149 conservative Mennonites decided that migration was “the only way out” (Gingrich,  
150 2014; Sawatzky, 1971, p. 27). Delegations were sent to Latin America, and Mexico  
151 and Paraguay, two countries whose presidents were willing to honour the  
152 *Privilegium*, were chosen as resettlement destinations. This led to a massive  
153 relocation in the 1920s. From then on, as will be described below, Low German  
154 Mennonites would expand not only within these countries but also into multiple  
155 others, forming an ever-increasing number of new colonies in remote agricultural  
156 frontiers.

157

### 158 **3. A CENTURY OF MENNONITE EXPANSION IN LATIN AMERICA**

159

160 Today, our data<sup>1</sup> indicate that 214 Mennonite colonies cover a total area of about  
161 3.9 million hectares in Latin America, more than the total land area of the  
162 Netherlands (figures 2 & 3, table 1; at least 14 additional colonies have been

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<sup>1</sup> The complete data (vector files of the complete map, table and family tree of all colonies) is available under the following link: <https://doi.org/10.5683/SP2/I4FEQZ>



163 dissolved). This estimate does not reflect land owned by Mennonites individually  
164 outside colonies, which in some areas like the Paraguayan Chaco represents another  
165 several hundred thousand hectares. In what follows, we attempt a brief country-by-  
166 country summary of the process of expansion that has led to this current state of  
167 affairs in Latin America. In that account, we necessarily simplify: we omit, for  
168 example, multiple failed attempts at creating new colonies, the constant back-and-  
169 forth of migrants between colonies after their creation, and the many thousands of  
170 Mennonites who have returned to Canada, particularly from Mexico and Paraguay  
171 (over 40,000 until 2004 (Janzen, 2004) and likely many more today). Discussing  
172 all these movements in one paper would be impossible, and as our interest lies in  
173 the process of expansion, we focus on events of colony creation.

174

175 Before we proceed, a few words about the nature of these colonies are in order.  
176 Mennonite colonies in Latin America are distinct from other settlements in their  
177 morphology and organization. Centered around a church and school, they typically  
178 take the form of one or several “street-villages” or *Straßendörfer*, consisting of a  
179 row of farmhouses evenly spaced on either side of a road, each housing one family  
180 (figure 4). Life revolves around mixed farming, the main livelihood for the large  
181 majority of the Mennonite population. Each village is headed by an elected leader  
182 called *Dorfschulze* (Village leader) who manages local affairs, while the colony is  
183 represented by one or more *Vorsteher* (Colony leader). Religious leaders called  
184 *Prediger*, *Diakone*, and *Ältester* (Preacher, Deacon, and Elder or Bishop), elected  
185 for life, exert important influence on colony affairs. Small colonies may have as

186 few as a dozen families organized along a single village, while larger colonies can  
187 reach several thousands of individuals in dozens of villages, with multiple schools,  
188 churches, and *Vorsteher*. Numerous colonies reject some modern technologies,  
189 which are seen as corrupting influences. The most conservative colonies reject the  
190 use of rubber tires on tractors and of telephones and the connection of houses to the  
191 electricity grid, among other things. Members of more progressive colonies find it  
192 normal to own smartphones or pick-up trucks and have TV. Diversity does not stop  
193 at technology adoption: colonies (and sometimes, villages within colonies) further  
194 differ in their positions towards education, labour, language, and more generally,  
195 relationships to the outside world.

196

### 197 **3.1 Mexico**

198 The first Mennonite colonies in Mexico were created in the 1920s by Canadian  
199 Mennonites fleeing what they perceived as a threat to their way of life, as the  
200 Canadian government reneged on its earlier promise of guaranteeing freedom of  
201 religion and education (Loewen, 2008; Sawatzky, 1971, p. 27). These colonies,  
202 founded in the desert lands of the northern states of Chihuahua (col. Manitoba,  
203 Santa Clara, Swift Current) in 1922 and Durango (col. Nuevo Ideal) in 1924,  
204 attracted an estimated 8,000 migrants between 1922 and 1929, or over 13% of the  
205 total Mennonite population in Canada at the time. Canadian Mennonites found in  
206 President Álvaro Obregón's post-revolutionary Mexico a government eager to  
207 develop agriculture and assert its territoriality in the North. Obregón was therefore  
208 willing to accommodate their demands for the privileges under threat in Canada in

209 exchange for a commitment to cultivating these marginal lands (Dormady, 2014).  
210 The first settlers acquired large extents of land for these original colonies and  
211 therefore had plenty of room to grow for the next quarter of a century. More  
212 Canadian Mennonites came in 1948, creating two more colonies in Chihuahua (col.  
213 Las Manzanillas and Los Jagueyes). However, after several years, land in the  
214 original colonies became scarce and the Manitoba colony, one of the three colonies  
215 established in 1922, created its first of many “daughter colonies” not far to the north  
216 (col. Ojo de la Yegua, also called Nordkolonie). From then on, almost all new  
217 colonies in the country would be the result of endogenous growth within Mexico  
218 (see family tree in SI1).

219

220 As population grew, the Chihuahua colonies generated numerous daughter  
221 colonies, first locally, then also in other states. Thirty-one Mennonite colonies now  
222 cover over 650,000 hectares in the state of Chihuahua, though not all of that is  
223 cultivated. By comparison, the total cultivated area in that state was 2.6 million  
224 hectares in 2017 (INEGI, 2017). Meanwhile the Nuevo Ideal colony in Durango  
225 expanded first by creating daughter colonies in the neighboring state of Zacatecas  
226 (col. La Batea and La Honda). Then, in the 1980s, agricultural extension agents  
227 visiting Nuevo Ideal reported that large quantities of land were for sale in the dry  
228 forests of the Yucatán peninsula, fifteen hundred kilometers to the south-east  
229 (Bergen, 2017, p. 8). Nuevo Ideal residents, facing increasing land scarcity, were  
230 eager to find new outlets for growth, so they went to see it for themselves and in  
231 1983 they created Nuevo Ideal’s first daughter colony in Yucatán, Yalnón. This

232 was followed by Chavi, a daughter colony of La Batea, in 1986. The move implied  
233 a drastic transition from a desert area receiving under 450 mm of rainfall per year,  
234 to one with over 1,000 mm/year (Karger et al., 2017). From these beginnings, the  
235 Yucatán peninsula became a major focal point of expansion, particularly for more  
236 conservative groups. In 2020, there were 22 colonies in the peninsula. In the state  
237 of Campeche alone, Mennonite colonies spanned close to 70,000 hectares, or about  
238 8.5% of the total area cultivated in that state in 2017 (INEGI, 2017). Mennonites  
239 are also said to have pioneered soybean agriculture in the region (Bergen, 2017, p.  
240 83).

241

242 As they created new colonies across the country, Mexican Mennonites also started  
243 expanding abroad (figure 5). Settlement in Mexico had never been without its  
244 challenges, particularly in the northern part of the country. In addition to land  
245 scarcity and rising land prices making it more difficult for young households to  
246 establish themselves as farmers, frequent and prolonged droughts (particularly  
247 acute in the 1950s) made rainfed farming unpredictable, which pushed farmers to  
248 adopt irrigation, a much more cost-intensive proposition. On top of that, there were  
249 recurrent signs that the tolerance of the Mexican government for the privileges  
250 granted by Obregón was wearing off. One of these was the threat of inclusion in the  
251 national social security system in 1955, which led to a first wave of migration to  
252 Belize. There was also growing pressure towards modernization and adoption of  
253 new technologies, decried by the more conservative elements in the colonies, and  
254 which itself partly emerged from pendulum migrations of Mexican Mennonites to

255 Canada and the US for work as a result of their difficulties in Mexico in the 1950s  
256 (Nobbs-Thiessen, 2020, p. 96). In the 1990s, the degradation of economic  
257 conditions for farmers under neo-liberal reforms added to these pressures  
258 (Dormady, 2014), all of which helped make Mexico into a major exporter of  
259 colonists to other countries. In addition to Belize, Mexican Mennonites moved in  
260 large numbers to Bolivia and Paraguay in the late 1960s and Argentina in the 1980s  
261 and 1990s (figure 5). In the 2000s, further droughts, groundwater scarcity, and the  
262 threat of narcotrafficking-related violence compounded these challenges in the  
263 northern Mexico colonies, leading to a new wave of land search and migration to  
264 Argentina, Brazil, and Colombia.

265

### 266 **3.2 Belize**

267 The first colonies in Belize were founded in 1958 by Mexican Mennonites from  
268 Chihuahua. The Belizean authorities, aware of the growing unease in Mexico, had  
269 invited a delegation in 1955 and later offered to grant incoming Mennonites the full  
270 privileges they were seeking (Plasil, 2017). This offer was welcomed by groups  
271 concerned that their negotiations with the Mexican government to be exempted  
272 from the social security system were stalling (Sawatzky, 1971, p. 334). Mennonites  
273 coming from the Chihuahuan desert built three new colonies (col. Shipyard,  
274 Spanish Lookout, and Blue Creek) in a moist tropical forest that received over 1,500  
275 mm of rain per year. The rain, while welcome, brought its own challenges. One  
276 colonist interviewed by Tanja Plasil and Carel Roessingh recounts: “We knew  
277 nothing, we came from a dry land – everything was different here... the horses

278 drowned in the mud” (Roessingh & Plasil, 2009, pp. 52–53). All subsequent  
279 colonies created in Belize were derived from these original ones, with the exception  
280 of a couple of very small settlements created by Canadian and American  
281 Mennonites, which have all but disappeared today.

282

283 Several of these daughter colonies were created by conservative dissidents  
284 dissatisfied with increasing modernization and adoption of technology in the  
285 mother colonies. This was the case of Barton Creek, created in the late 1960s, which  
286 became an outlet for the most conservative members of the core colonies and later  
287 generated its own daughter colonies (col. Springfield, Pine Hill, Bird Walk,  
288 Roseville, and Agua Viva) as a response to land shortage (Roessingh, 2007). Little  
289 Belize (est. 1979) and Indian Creek (est. 1988), served a similar purpose as an outlet  
290 for conservative Mennonites from the Shipyard colony (Roessingh & Boersma  
291 2011). This combination of land scarcity and an aversion to creeping modernization  
292 led some to emigrate internationally to Bolivia (forming col. Nueva Esperanza in  
293 1975), Paraguay, and recently (in 2017), Peru.

294

### 295 **3.3 Paraguay**

296 The same outmigration of Canadian Mennonites that originally led to the creation  
297 of the first colonies in Mexico also resulted in the birth of the first Mennonite colony  
298 in South America. In 1926, col. Menno was established in the Paraguayan Dry  
299 Chaco, in an area characterized by dry woodlands and savannahs and rainfall  
300 typically around 900 mm/year, more than 400 km away from the capital city

301 Asunción, with no road connecting the two and barely any settlements in-between.  
302 The creation of Menno was followed by that of Fernheim nearby in 1930 by a group  
303 of Russian Mennonite refugees fleeing persecution from the Soviet Union. The two  
304 groups were quite different in multiple respects: while the Menno settlers, a  
305 conservative group, were in search of greater religious purity, the Fernheim group  
306 had left a prosperous life behind against their will and “interpreted their flight and  
307 resettlement as a tragedy” (Eicher, 2019, p. 130). The hardships of the early days  
308 led many families to return to Canada over the years (M. W. Friesen, 2009). Some  
309 members of Fernheim, discouraged by the hostile environment of the Dry Chaco,  
310 turned to the more amicable climate of Eastern Paraguay, between the Humid  
311 Chaco and the Atlantic Forest, where they created the Friesland colony in 1937.  
312 Russian Mennonite refugees would form two more colonies in 1947, one in the  
313 Chaco (col. Neuland) and one in the East (col. Voldendam). New groups of  
314 Canadian Mennonites seeking to escape modernization joined them soon after,  
315 creating the colonies Bergthal and Sommerfeld in 1948. After a twenty-year hiatus,  
316 a new wave of colony creation in Eastern Paraguay was spurred by Mexican  
317 Mennonites responding to land scarcity, rising land prices, and perceived threats to  
318 their way of life in Mexico (Penner, 2014). Four colonies were founded from the  
319 late 1960s onwards by Mennonites from Chihuahua, and one by Mennonites from  
320 Durango. A final group of migrants to Paraguay were conservative Old Colony and  
321 Amish Mennonites from the United States and Belize, who created five small and  
322 isolated settlements in Eastern Paraguay in the 1960s and 1970s, two of which have  
323 since been dissolved.

324

325 Because land was abundant in Paraguay, these colonies mostly expanded locally  
326 through land acquisitions, rather than by creating daughter colonies in other  
327 regions. The Chaco region, in particular, had plenty of land for sale at low prices.  
328 As a result, the Chaco colonies were able to grow massively – Menno, for example,  
329 grew from about 55,000 hectares in 1926 (Kleinpenning, 2009, p. 5) to 420,000 ha  
330 in 1995 (Schroeder & Huebert, 1996, p. 150) and 700,000 ha in 2007 (U. Friesen,  
331 2007). Some local daughter colonies, however, were created in Eastern Paraguay  
332 near but separate from the mother colonies, Bergthal (1989), Río Verde (2006), and  
333 Sommerfeld (2010). In the 2010s, two Eastern Paraguay colonies (Nueva Durango  
334 and Rio Verde), unable to expand locally, generated two new daughter colonies in  
335 the far reaches of the Chaco, towards the Bolivian border (SI2).

336

337 The Mennonite colonies of Paraguay were instrumental in the development of the  
338 country's agricultural sector. In addition to becoming the country's major producers  
339 of dairy products after a road to the capital city was completed (A. Hecht, 1975),  
340 their expansion in the Chaco in particular paved the way for later investors –  
341 Europeans, Brazilians, Argentines, and others – whom Mennonites provided with  
342 know-how, infrastructure, and services (Vázquez, 2013, pp. 112–122). Mennonites  
343 were also active participants in the country's soy boom in the 1990s and 2000s  
344 (Correia, 2019). Altogether, our map suggests Mennonite colonies today control  
345 about 1.8 million hectares in Paraguay, or 4.5% of the national territory. To this  
346 must be added the hundreds of thousands of hectares of land owned privately by



347 Mennonites outside the colonies, which in 2010 already brought that number closer  
348 to 8% (Giesbrecht & Klassen, 2015, p. 157). Since Mennonites constitute 0.45% of  
349 the population of Paraguay, they thus control close to twenty times more land than  
350 average Paraguayans.

351

352 Paraguayan colonies also produced their share of dissidents, following the familiar  
353 pattern of modernization and differentiation common throughout Low German  
354 Mennonite society (Cañas Bottos, 2008, pp. 71–77). Many of these would move to  
355 Bolivia, where they became participants in the prodigious expansion of Mennonite  
356 colonies into the country’s lowlands.

357

### 358 **3.4 Bolivia**

359 Bolivia, the “refuge of conservative Mennonites” (Schartner & Schartner, 2009),  
360 hosts the most Low German Mennonite colonies in Latin America – close to one  
361 hundred today – with new ones appearing each year. These colonies have been  
362 major contributors to the expansion of agricultural frontiers into the Eastern  
363 Lowlands (see map in SI3), an area that sits at the limit of the Dry Chaco and the  
364 Chiquitano dry forests and is characterized by relatively abundant rainfall (around  
365 1,200 mm/y) that decreases east- and southwards.

366

367 A first and relatively minor wave of Mennonite migration to Bolivia was initiated  
368 by dissidents from the Chaco colonies in Paraguay (Menno and Fernheim)  
369 concerned with changes in education (Giesbrecht, 2018, p. 143) and frustrated with

370 “a rigid cooperative system” (Nobbs-Thiessen, 2020, p. 89). They were joined by a  
371 few Canadian families from northern Alberta fleeing modernization and  
372 worldliness (Bowen, 2001). These people formed five colonies around the regional  
373 capital Santa Cruz de la Sierra between 1954 and 1967, four of which were later  
374 dissolved as members moved on to other colonies or returned home.

375

376 The real impulse for Mennonite expansion in Bolivia came later from Mexico.  
377 Having heard of a few groups of Paraguayan Mennonites settling successfully in  
378 Bolivia, and aware that the president was keen to attract foreign farmers, the  
379 Chihuahua colonies sent delegations to negotiate conditions of establishment with  
380 the Bolivian government. Their agreement resulted in the creation of four major  
381 colonies in 1967-8, covering over fifty thousand hectares of land (col. Riva  
382 Palacios, Santa Rita, Sommerfeld, and Swift Current). Immigration from Mexico  
383 continued after that, with new colonies created by Mexican Mennonites at a pace  
384 of about two colonies per decade. Almost all of these immigrants came from  
385 Chihuahua, with the exception of one colony formed in 1996 by Mennonites from  
386 La Batea (Zacatecas). Most of them were formed in the area east of Santa Cruz.

387

388 Paraguayan Mennonites made a return to Bolivia in the mid-1990s, when  
389 conservative members from eastern Paraguay seeking an escape from  
390 modernization and land scarcity at home created a first colony in the lowlands (col.  
391 Hohenau), followed by several more during the next decade. Most of these colonies  
392 were created in the area east of Santa Cruz de la Sierra, with the exception of three

393 colonies created by people from Nueva Durango in the more isolated Chaco region.  
394 Other, more modest contributors to Mennonite expansion in Bolivia were Canada,  
395 with three small colonies (two of them now dissolved); Argentina, with one colony  
396 in the Chaco; and Belize, with two colonies (col. Nueva Esperanza and Belize) in  
397 the Lowlands. The first of these two, Nueva Esperanza, is remarkable for its initial  
398 degree of isolation: when it was established in 1975, the colony was 250 kilometers  
399 away from the nearest developed agricultural areas. It wasn't until the 2000s that  
400 other farmers came to cultivate surrounding areas.

401

402 A look at the map (figure 2 & SI3) suggests four broad directions of expansion  
403 within Bolivia. The main trend has been an eastward expansion, fuelled both by  
404 migrants from other countries – notably from Belize in the case of Nueva Esperanza  
405 – and by endogenous growth, the latter being responsible for the more recent  
406 developments toward the Brazilian border. A second trend is represented by  
407 southward expansion toward the dry Chaco, which started with daughter colonies  
408 of the Bolivian Riva Palacios colony (col. Pinondi) but soon involved colonies  
409 created by groups of migrants from Eastern Paraguay, Argentina, and Northern  
410 Mexico. These colonies have recently started generating their own daughter  
411 colonies locally, expanding south- and eastward into the Dry Chaco woodlands. A  
412 third trend is represented by a cluster of daughter colonies emanating from the  
413 original Bolivian colonies, which started to develop in 2005 in the area of Santa  
414 Rosa de la Roca, in the northeastern Chiquitania region. A final trend is one of  
415 expansion into the tropical grasslands and forests north of Santa Cruz, as far as 700

416 kilometers away from the original colonies. With a couple of exceptions, that  
417 expansion was the result of endogenous growth.

418

419 Altogether, Bolivian Mennonites today farm upwards of one million hectares in the  
420 Bolivian lowlands, mainly in the department of Santa Cruz (about 875,000 ha).

421 Besides this tremendous spatial footprint, Mennonites were also a major force  
422 behind the rise of soybean farming, which has become the most important crop in  
423 the lowlands (Nobbs-Thiessen, 2020, p. 212).

424

### 425 **3.5 Argentina**

426 The relatively few Argentine Mennonite colonies in existence today all have their  
427 origin in Mexico. Nueva Esperanza, was created in 1986 in the semiarid Espinal  
428 shrublands of La Pampa province by migrants from the states of Chihuahua and  
429 Zacatecas. Cañas Bottos (2008) explains that wariness about growing educational  
430 and military demands from the Mexican state played a role in this migration, as did  
431 land scarcity, difficulties with irrigated agriculture due to the rising price of fuel,  
432 and, in La Honda (Zacatecas), modernization. As Nueva Esperanza's population  
433 grew beyond its capacity to expand in area, younger households moved north and  
434 created two daughter colonies in Santiago del Estero province in the Dry Chaco,  
435 where migrants from Nuevo Ideal (Durango) had created another colony in 1996.  
436 More recently, land scarcity in Northern Mexico, water issues, and narcotrafficking  
437 violence have prompted Mexican Mennonites to consider Argentina once again as  
438 a potential destination. A group from Chihuahua founded a new colony (El Tupá)

439 in the province of San Luís in 2014, and as of early 2020, another group was about  
440 to set up another one nearby. With about 55,000 hectares altogether, Mennonites  
441 still only have a very modest footprint for a country as large as Argentina's. The  
442 same is true of Brazil and Uruguay.

443

444

### 445 **3.6 Brazil and Uruguay**

446 The history of Brazil and Uruguay's Mennonite colonies is distinct from that of  
447 most other Latin American countries. The first wave of migration was one of  
448 Russian Mennonite refugees who founded a series of settlements in the Krauel river  
449 valley, west of the German town of Blumenau in the state of Santa Catarina.  
450 Witmarsum, the name of one of the settlements, came to be used as the name for  
451 the area as well. This settlement had difficulties from the start, being remote and  
452 hard to clear (Schroeder 1996), and people soon moved out. Many of them moved  
453 to the city of Curitiba, and some to two new colonies – (Neu) Witmarsum, close to  
454 Curitiba, and Colônia Nova in Rio Grande do Sul. There were several attempts to  
455 expand and create new colonies, but these failed, and Brazil never experienced the  
456 sort of Mennonite expansion seen in Bolivia or Paraguay.

457

458 The same is true of Uruguay, where three small colonies were created in the early  
459 1950s by Russian Mennonite refugees, but never produced any daughter colonies.  
460 Recently, however, Mennonites from Chihuahua, in their search for new  
461 opportunities, re-ignited interest in Brazil, and created a first new colony in 2015

462 in the state of Bahia (California). It is too early to tell whether this colony will be  
463 successful and incentivize other movements to the region, but as of 2020, reports  
464 were positive.

465

### 466 **3.7 Peru and Colombia**

467 This panorama wouldn't be complete without including very recent yet significant  
468 developments in Peru and Colombia. Mennonite colonies were absent from  
469 Colombia until recently. Delegations of people from the Chihuahua colonies started  
470 visiting the country in search of land around 2014, and after surveying multiple  
471 areas, they settled on a location in the department of Meta, in the wet Llanos  
472 savannah. The first families moved in 2016 close to the town of Puerto Gaitán and  
473 formed the Liviney colony. This colony had promising beginnings, and three more  
474 colonies have been created since, for a total of over 28,000 ha. These are relatively  
475 progressive migrants, driven out of northern Mexico by a combination of land  
476 scarcity, increasing difficulties with irrigation, and search for new opportunities.  
477 Untypically, the land they purchased was already developed farmland, although  
478 they had to build new roads to connect it.

479

480 By contrast, the new Mennonite colonies that have appeared in the tropical  
481 rainforest of Peru in recent years (Sierra Praeli, 2020) were created by conservative  
482 groups from Bolivia and Belize seeking isolation from worldly influences and  
483 modernization, as attested by their choice to relocate to the remotest corners of the  
484 country. After a failed attempt in 2014 that forced them to relocate, families from

485 the Bolivian colony of El Cerro founded three colonies in 2017 – one south of the  
486 Amazonian city of Pucallpa (col. Masisea), and two further to the north (col.  
487 Vanderland and Österreich). In parallel, Belizean Mennonites from the colony of  
488 Little Belize moved near the latter two, forming a colony simply known as Belize.  
489 As of early 2020, two more Amazonian colonies were planned by people from  
490 Belize and Mexico. As with Brazil, it is impossible to tell whether new settlements  
491 in Peru and Colombia will be successful in the long run and provoke the arrival of  
492 more colonists. If recent history is any guide, however, it seems very reasonable to  
493 assume they will.

494

#### 495 **4. FACTORS IN THE CREATION OF NEW MENNONITE COLONIES**

496

497 Let us turn to a brief exploration of the causes of Mennonite migrations and colony  
498 establishment. Starting with factors that drive Mennonites *out* of existing colonies,  
499 the role of population growth and land scarcity cannot be understated. High fertility  
500 rates – large families are the norm – combined with small land parcels and a strong  
501 attachment to farming as a livelihood have inevitably led to land shortages, making  
502 it hard for young households to establish themselves as farmers within the colonies.  
503 This issue is sometimes resolved locally by acquiring new land close to the colony,  
504 as in the Paraguayan Chaco. Where local expansion is not feasible, Mennonites  
505 have often resorted to the creation of new colonies further afield. When doing so,  
506 because they almost always move in groups, Mennonites usually seek large blocks  
507 of land. In the first migrations to Mexico in 1922, for example, an important factor

508 was the availability of large extents of land that *latifundistas* facing expropriation  
509 after the revolution were eager to sell (Will, 1997).

510

511 Other pressures on farming include structural factors influencing the viability of  
512 agriculture, such as changes in commodity prices or in other conditions of  
513 production. In Mexico, for example, multiple colonies in the state of Chihuahua  
514 have been facing water shortages, adverse agricultural policies, and severe droughts  
515 (Dormady, 2014; Gingrich & Preibisch, 2010), while farmers moving in recent  
516 years to Colombia invoked the high costs of irrigation as one of the reasons for their  
517 move (“La poderosa congregación,” 2018). Some have also cited soil exhaustion,  
518 particularly in Bolivia, where it is blamed on the rejection of modern agricultural  
519 technology in conservative communities (Kopp, 2015; Loewen & Nobbs-Thiessen,  
520 2018).

521

522 Another frequently invoked reason is the existence of real or perceived threats to  
523 identity and cultural persistence. Such threats may come from changing attitudes of  
524 national governments towards Mennonite demands for separate treatment – the  
525 *Privilegium* or, where no *Privilegium* has been officially granted (e.g. in Argentina,  
526 Brazil, Peru, and Colombia), the informal promises made by some governments to  
527 respect Mennonite ways. This was the case with the migration from Canada to  
528 Mexico, but also with that of Mexican Mennonites to Belize, which as mentioned  
529 above was triggered by the threat of being incorporated into the Mexican social  
530 security system (Plasil, 2017; Roessingh & Boersma, 2011). Similarly, people



531 leaving Mexico for Bolivia in the late 1960s and for Argentina in the late 1980s did  
532 so in part out of concern for the state’s increasing military and educational demands,  
533 and when Argentina decided that children born in the country had to be taught in  
534 Spanish using material provided by the state, several families moved to Bolivia  
535 (Cañas Bottos, 2008). Because of the national reach of these threats, resulting  
536 migration tends to be international.

537

538 Threats to cultural persistence also arise locally. Colonies are often located so as to  
539 minimize exposure to worldly influences (SI4), “close enough so as not to make  
540 their products unmarketable due to transport costs, but far enough in order to attain  
541 a level of isolation that would restrict everyday travel to town, especially for  
542 youngsters” (Cañas Bottos, 2008, p. 72). Over time, however, the surroundings of  
543 most colonies end up developing, partly as a result of the Mennonites’ own  
544 activities, which undermines their attempts to remain separated from the world.  
545 Early migrants from Canada to Mexico, for example, were concerned about  
546 “everything turning English” around their Canadian colonies (Bowen, 2001, p.  
547 467). Those who later migrated from Mexico to Bolivia and Argentina reported that  
548 Mexican Mennonites’ “acceptance of pick-up trucks, cars, electricity and other  
549 aspects of modern life had breached the practice of separation from the world”  
550 (Cañas Bottos, 2008, p. 220). This apparent paradox of Mennonites as settlers in  
551 search of isolation and as engines of modernization and frontier development has  
552 been raised repeatedly in the literature (e.g., Goossen, 2016).

553

554 The adoption of technologies deemed unacceptable by the more conservative  
555 members of a community, such as rubber tires on tractors (as opposed to steel  
556 wheels), is a recurrent theme. Rubber tires make it easier to use tractors to travel to  
557 nearby towns, increasing the risk of exposure to external influences (car ownership  
558 is banned in conservative colonies). Loewen and Nobbs-Thiessen recount a  
559 conversation with a man who moved in 1967 from Mexico to Bolivia: “The religion  
560 we have is that you don’t work with rubber tires,” he says, “and the people started  
561 to work with them, and everything fell apart and we left” (Loewen & Nobbs-  
562 Thiessen, 2018, p. 177). In Belize, Roessingh and Bovenberg report that a conflict  
563 over the adoption of mechanical agricultural equipment in the colony of Spanish  
564 Lookout led to the departure of 30 conservative members of the community in 1966  
565 (Roessingh & Bovenberg, 2018). In Bolivia, most colonies created by international  
566 migrants were (at least partly) the result of such disagreements (SI5).

567

568 Finally, the increasing threat of violence has emerged in recent years as an  
569 important driver of migration out of Northern Mexico (Gingrich & Preibisch,  
570 2010). Although violent episodes in Mexico had contributed to migrations before,  
571 for example to Nova Scotia (Canada) in the 1980s (Pauls, 2004), a burst in  
572 narcotrafficking-related violence since the mid-2000s has become a ubiquitous  
573 concern for Chihuahuan Mennonites.

574

575

576

577           **5. DISCUSSION AND CONCLUSION**

578

579 Mennonite colonies have expanded dramatically in Latin America over the last  
580 century. In some regions, like the Paraguayan Chaco, the Chihuahuan desert, or the  
581 Bolivian lowlands, they have become a major influence on the development of  
582 agricultural frontiers, not only because of their direct spatial footprint, but also  
583 because of their influence on the subsequent development of these regions’  
584 agriculture. Indeed, Mennonites have frequently taken the role of pioneers,  
585 spearheading agricultural development in remote uncultivated regions, sometimes  
586 on their own, and sometimes alongside other colonist farmers. This, incidentally,  
587 frequently put them in situations of territorial conflict with the indigenous peoples  
588 inhabiting those areas (e.g., Loewen, 2016, pp. 180–181).

589

590 This tendency to settle remote areas, we argue, is related in part to the particular set  
591 of constraints and preferences shared by Low German Mennonites, which makes  
592 them somewhat different from both peasants and capitalist farmers, the typical  
593 agents of frontier land-use change. Indeed, while some can undoubtedly be  
594 characterized as successful capitalist farmers (e.g., in older Mexican or Paraguayan  
595 colonies) or as peasant colonists (e.g., in the new Peruvian colonies), these labels  
596 fail to capture some important dynamics, especially in terms of how and where new  
597 colonies are created. First and perhaps most evident is the prevalence of religious  
598 principles not only in decisions to migrate but also in the choice of where to settle.  
599 This characteristic has interesting implications for how we understand frontier

600 dynamics. Rent-based frameworks normally assume that land-use agents – large or  
601 small – seek to minimize distance to markets. But here is one class of agents that  
602 seeks out remoteness, or at least enough remoteness to keep outside influences at  
603 bay.

604

605 Along with this comes a high tolerance for sacrifice and hard work (or *drudgery* in  
606 Chayanovian terms (van der Ploeg, 2013)), which are arguably elevated to a value  
607 in and of themselves (Loewen, 2008). These two characteristics taken together  
608 mean that Mennonites have had a propensity to create colonies in remote, hard-to-  
609 settle regions. In doing so, they change the conditions for other actors. Successful  
610 colonies provide proof to other farmers that agriculture is possible in remote  
611 regions, and they create roads and provide services where there were none (many  
612 colonies have good mechanics and some Mennonites advise outsiders on their  
613 farms). This makes the prospect of agriculture more attractive around them, and  
614 consequently, colonies seldom remain self-contained islands for very long.

615

616 In other ways, though, Mennonites appear more like a hybrid between peasant and  
617 capitalist farmers. A concern for social reproduction over capital accumulation, as  
618 well as small average farm sizes, situates them closer to peasant farmers (although  
619 capital accumulation and increasing land holdings have become more prevalent  
620 among older and more progressive colonies of Mexico and Paraguay). So does a  
621 focus on mixed farming systems managed at the family level. As organizations,  
622 however, Mennonite colonies operate much like transnational capitalist farms,

623 negotiating access to large tracts of land, building their own roads, and transferring  
624 large amounts of capital as well as considerable know-how to their new locations.  
625 Additionally, Mennonites form a transnational network that differentiates them  
626 from most peasants in Latin America. This network can open up employment  
627 opportunities, e.g. for Mexican Mennonites traveling to Canada to work seasonally  
628 in Mennonite-owned farms and businesses (Gingrich & Preibisch, 2010). It also  
629 facilitates migrations and colony creation, by enhancing the awareness of  
630 conditions in potential destinations and offering support to candidate migrants.  
631 *Mennonitische Post* readers, for example, frequently comment on the creation of  
632 new colonies in other countries, offering opinions and advice, and newly  
633 established colonists send reports on harvests, weather, and other local conditions.  
634 Delegations sent to find new land in a country or region where colonies exist find  
635 help and advice in these colonies, similar to the network effects described in le  
636 Polain de Waroux (2019) for large capitalist farms.

637

638 This particular blend of characteristics has arguably made Mennonite farmers into  
639 “perfect colonists” in Latin America, a role that has unquestionably led them to  
640 become major agents of land-use change. Based on this observation, we propose  
641 seven lines of inquiry for future research. First, while it seems evident that  
642 Mennonite colonies have played an important role in the development of  
643 agricultural frontiers, questions remain about the nature and extent of that role. How  
644 exactly did Mennonite colonies in remote areas influence the subsequent  
645 development of these frontiers? Through what mechanisms might these colonies

646 have incentivized the arrival of other actors at the frontier? Second, and relatedly,  
647 what has been the overall influence of these colonies on regional land-use change,  
648 agricultural production, and economic growth, but also on environmental  
649 sustainability? Third, what is the influence of their surroundings on Mennonite  
650 colonies? For example, do colonies absorb agricultural practices emanating from  
651 their neighbors? Fourth, while some colonies, like the ones in the Paraguayan  
652 Chaco, have become immensely successful, multiple others never grew much  
653 beyond their original size, and some were dissolved after just a few years. What  
654 explains the fact that some colonies have thrived over time while others stagnated  
655 or even collapsed? Fifth, how does the embeddedness of Mennonite colonists in a  
656 broader transnational network of colonies influence their land use – the search for  
657 land, the development of farming technology, investments in infrastructure? Sixth,  
658 Mennonites are a diverse group, particularly with respect to levels of religious  
659 conservatism. How do differences in beliefs shape land-use decisions, particularly  
660 with respect to the choice of locations for new colonies and of crops to cultivate?  
661 Do farmers in more progressive colonies align more with capitalist motives than  
662 those in conservative ones? Finally, the prominence of religious motives in land-  
663 use decisions puts some of the limitations of common frameworks used to  
664 understand frontier expansion into relief. What does the role of religion in  
665 Mennonites' land-use decisions mean for how we understand frontier land-use  
666 change, particularly for the role of non-economic motives in this process? This is  
667 an ambitious agenda, but one we believe has the potential to yield important insights  
668 for the study of land-use change in Latin America and beyond.

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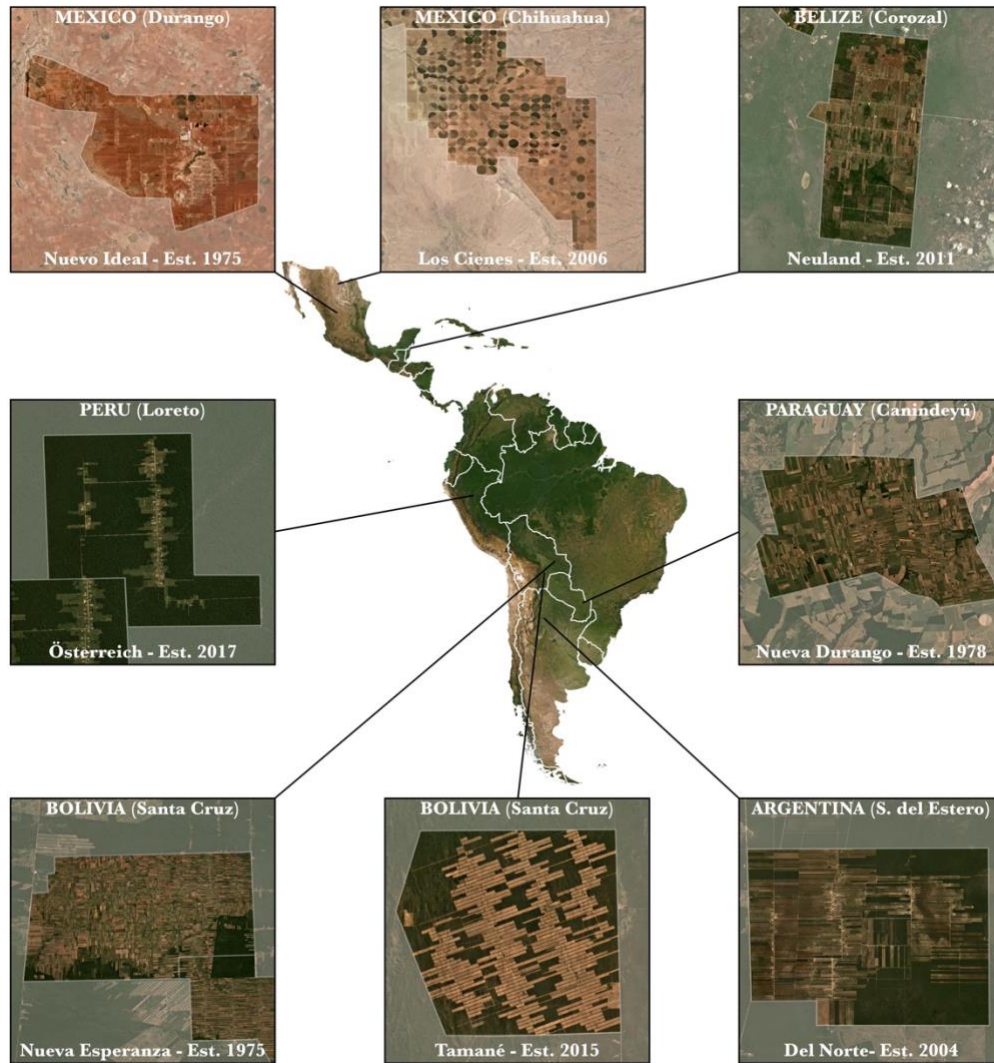
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817 **Figure 1.** Land-use patterns of select Mennonite colonies across Latin America.  
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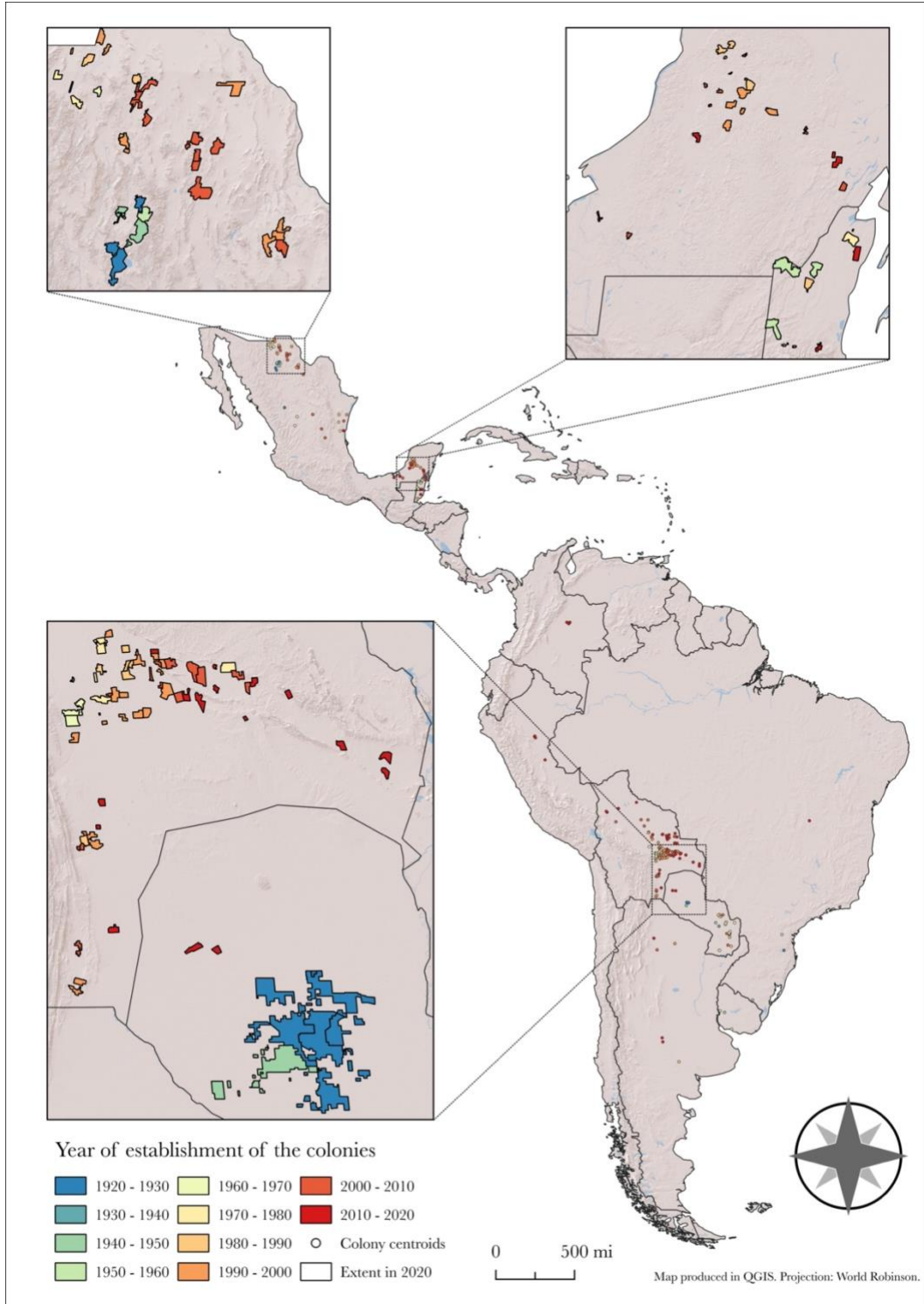


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Map produced in QGIS using an ESRI Satellite mosaic (continental map) and Planet monthly mosaics for May 2020 (inserts).

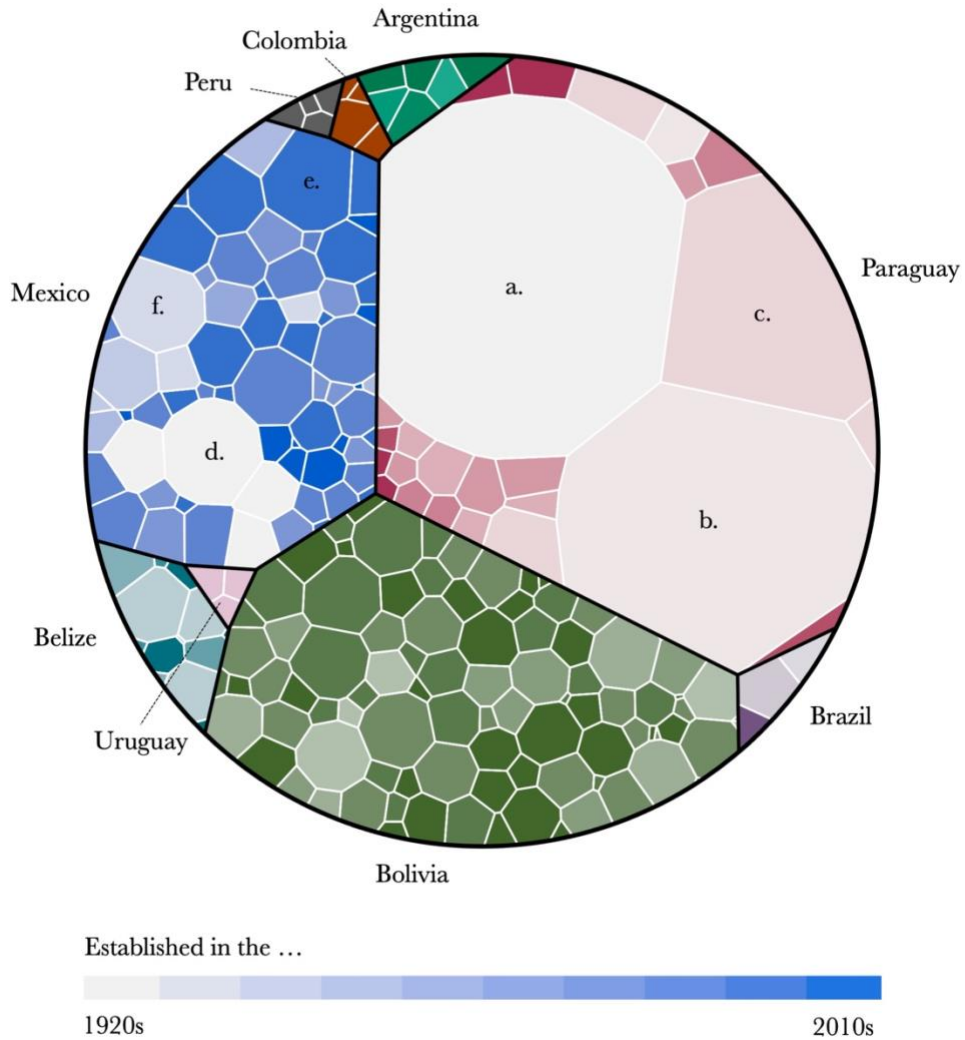
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**Figure 2.** Map of Latin America Mennonite colonies.



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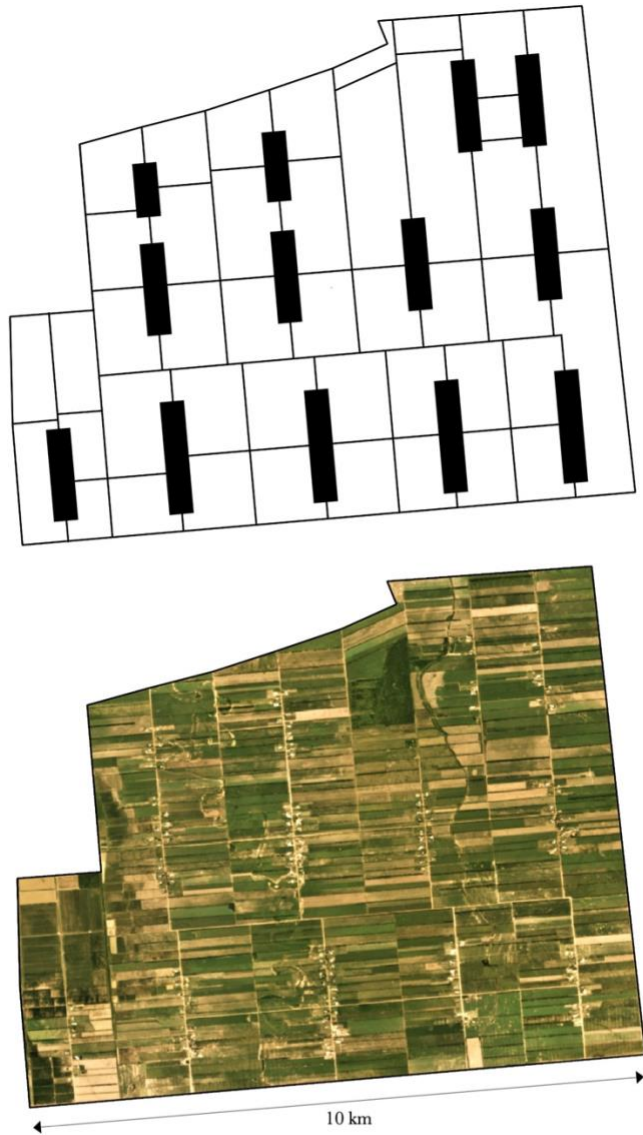
825 **Figure 3.** Land area of the colonies, by country. Each bubble is a colony. The  
 826 total land area of the colonies is ~39,000 km<sup>2</sup>. Letters designate colonies with an  
 827 area greater than 500 km<sup>2</sup>: Menno (a), Fernheim (b), and Neuland (c) in Paraguay,  
 828 and Manitoba (d), Los Reyes (e), and Ojo de la Yegua (f) in Mexico. The figure  
 829 was created using the package ‘voronoiTreemap’ 0.2.0 in R.  
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834 **Figure 4.** Typical structure of a colony (col. Yanahigua, Bolivia). Evenly-spaced,  
835 linear “street-villages” are connected by a grid of country roads, with narrow  
836 agricultural plots extending outward from each village.  
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**Yanahigua colony**

Country: Bolivia

Established 1991

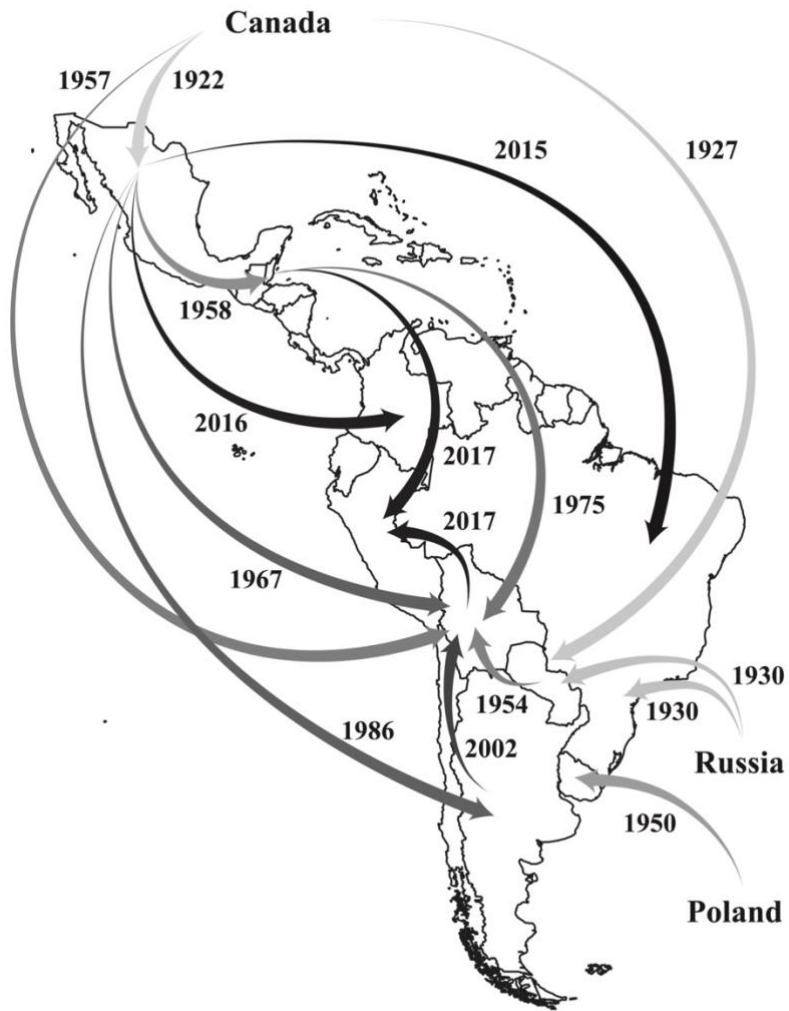
Area: 10,000 hectares

Population: 1,200 inhabitants

■ = Villages

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840 **Figure 5.** Main international migration flows of Mennonites in Latin America.  
841 Darker colours represent more recent migrations.  
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845 **Table 1.** Summary of Mennonite colonies by country.  
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<b>Country</b>	<b># Colonies in existence</b>	<b>Total area in thousand hectares (min, max)</b>	<b>First colony established in</b>	<b>Average establishment year</b>
Argentina	6	60 (8, 14)	1986	2006
Belize	14	71 (0.3, 19)	1958	1983
Bolivia	90	1017 (0.1, 37)	1954	1999
Brazil	3	9 (1, 5)	1930	1961
Colombia	4	28 (2, 16)	2016	2018
Mexico	65	833 (0.2, 67)	1922	1990
Paraguay	25	1830 (0.3, 764)	1927	1974
Peru	4	12 (1.7, 3.4)	2017	2017
Uruguay	3	4 (1, 2)	1950	1952

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849 **Supporting Information for the article “Pious**  
850 **Pioneers: The expansion of Mennonite colonies in**  
851 **Latin America”**

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858 Yann le Polain de Waroux<sup>1,2,\*</sup>, Janice Neumann<sup>1</sup>, Anna

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O’Driscoll<sup>1</sup> & Kerstin Schreiber<sup>1</sup>.

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871 The complete data for this paper (vector files of the complete  
872 map, table, and family tree of all colonies) is available under  
873 the following link: <https://doi.org/10.5683/SP2/I4FEQZ>

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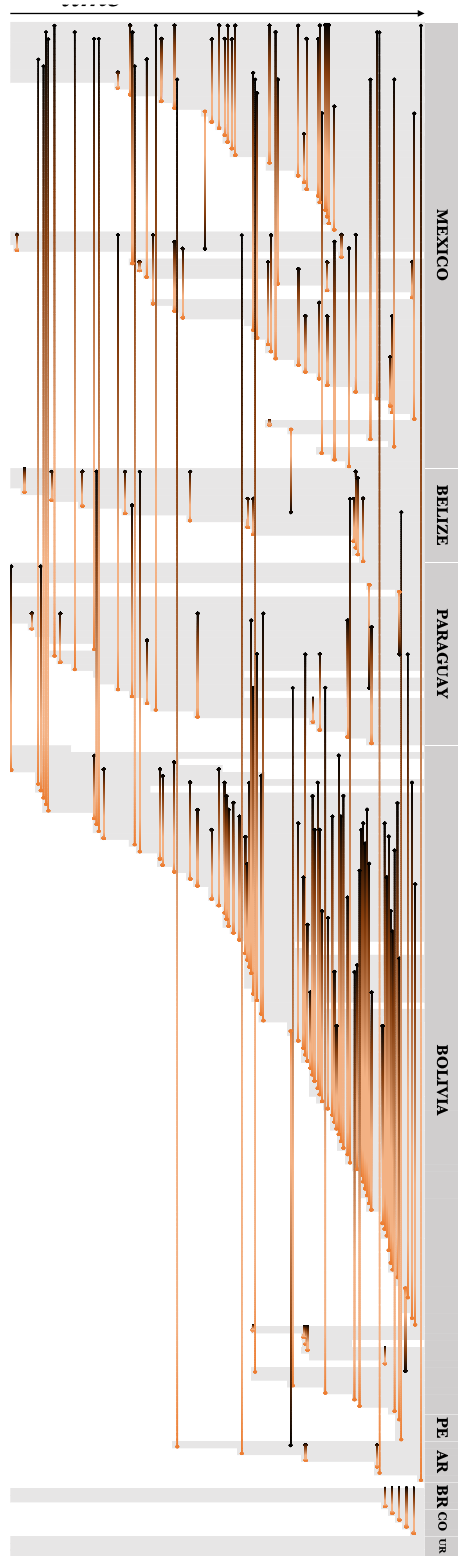
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**SI1: Family tree of Latin American Mennonite colonies**

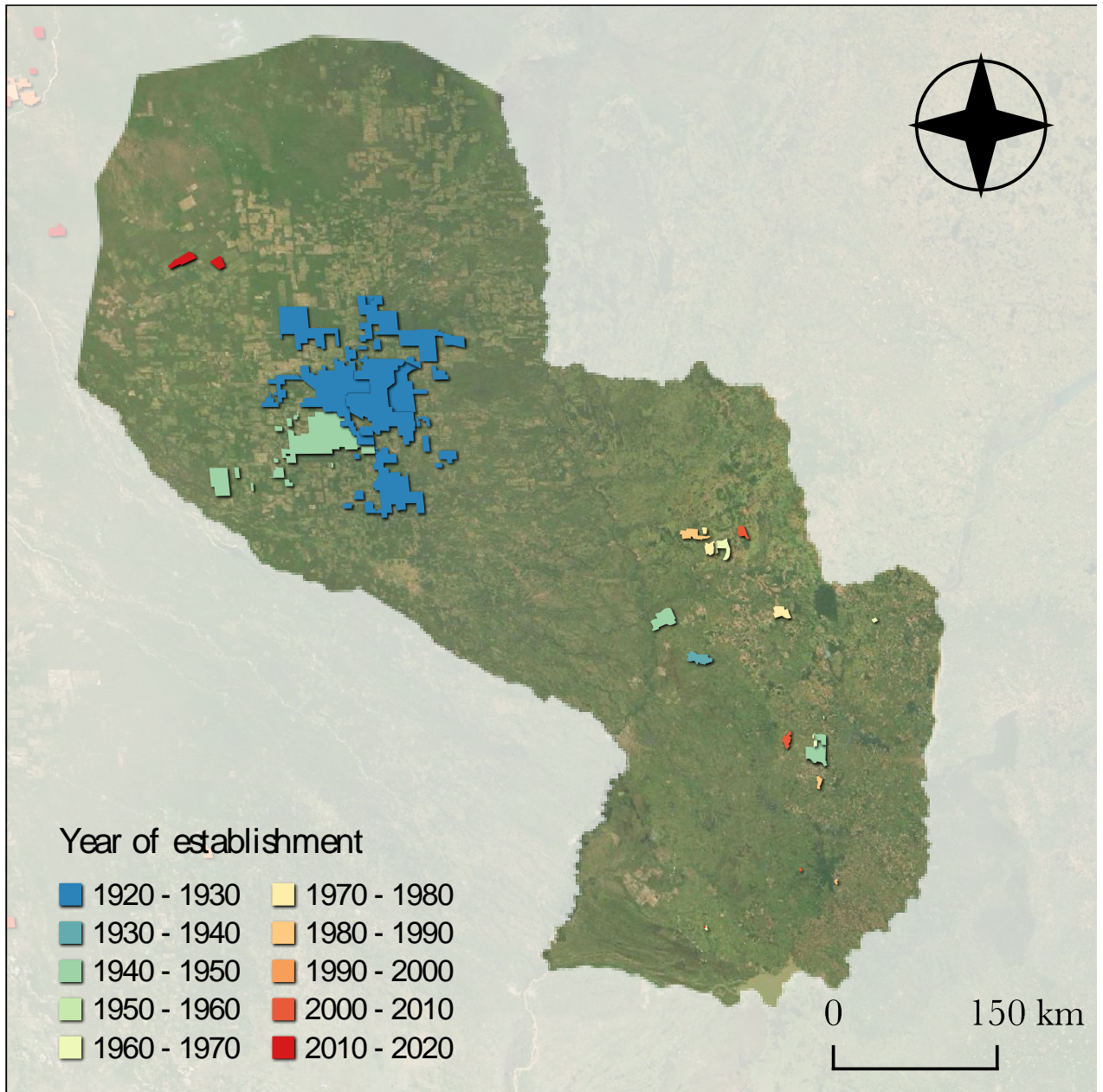


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881 **Caption:** Simplified family tree of Latin American Mennonite colonies. Each grey  
882 column represents the duration of existence of a colony, and each line represents a  
883 foundational link between a “mother” colony (dark end) and a “daughter” colony  
884 (light end). A higher-resolution version of this image as well as a complete  
885 searchable family tree with colony names and greater detail are available for  
886 download under the following link: <https://doi.org/10.5683/SP2/I4FEQZ>

887 **SI2: Expansion of Mennonite colonies in Paraguay**

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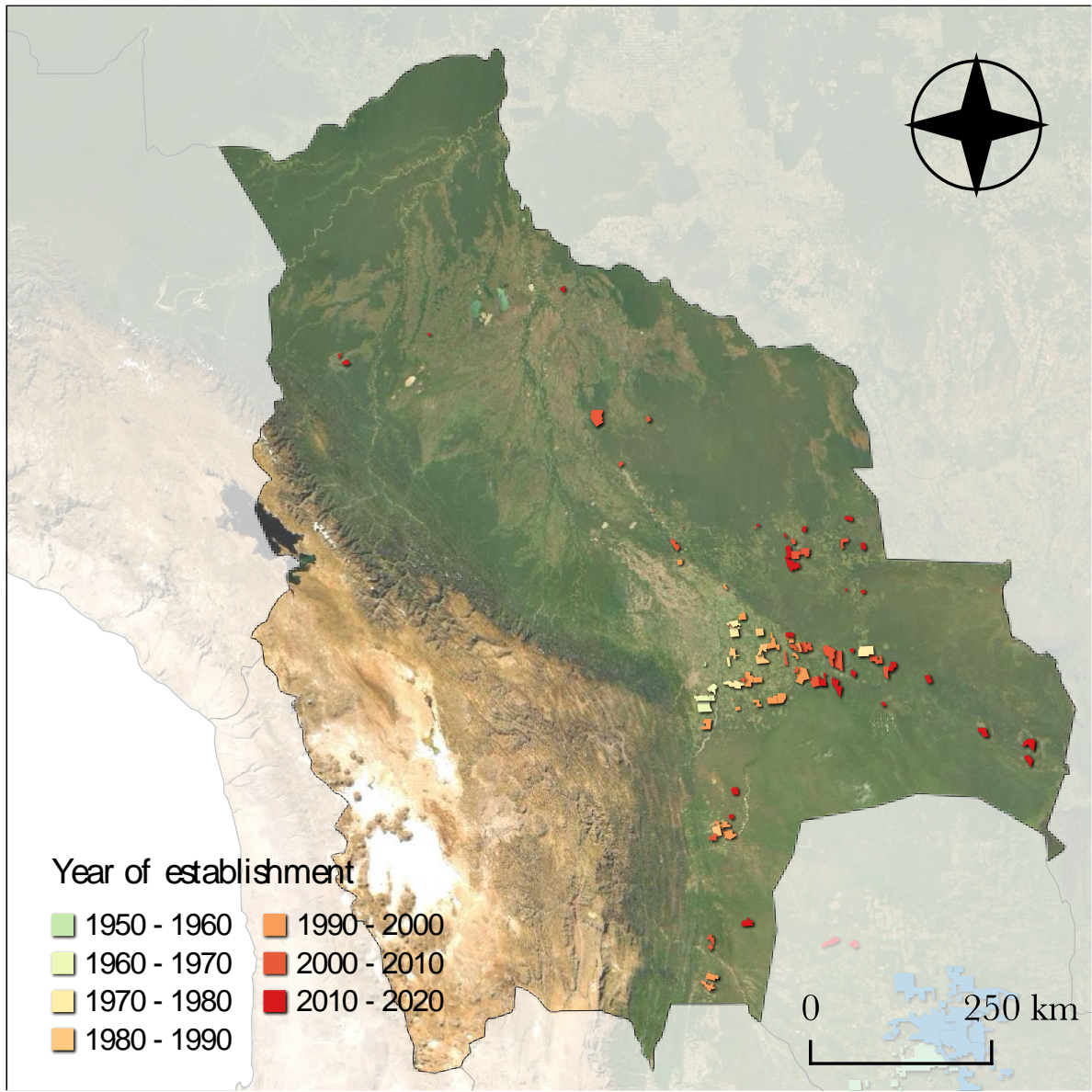
891 **Caption:** Mennonite colonies in Paraguay (Projection: World Robinson). The  
892 complete dataset of Latin American Mennonite colonies is available under the  
893 following link: <https://doi.org/10.5683/SP2/I4FEQZ>

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**SI3: Expansion of Mennonite colonies in Bolivia**



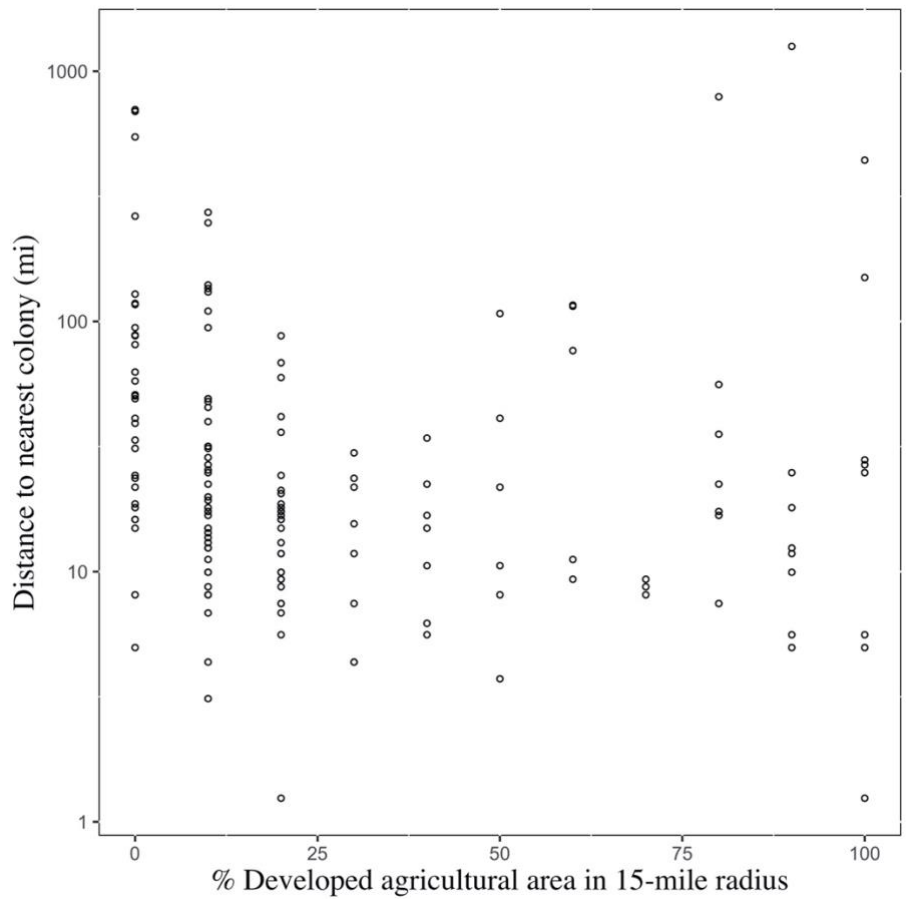
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**Caption:** Mennonite colonies in Bolivia (Projection: World Robinson). The complete dataset of Latin American Mennonite colonies is available under the following link: <https://doi.org/10.5683/SP2/I4FEQZ>



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**SI4: Location choices of Mennonite colonies**



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**Caption:** Location choices of Mennonite colonies with respect to agricultural areas and other colonies since 1985. To create this plot, we first used the centroids of the colony polygons, created yearly layers of existing colonies and reported the distance of each new colony to the nearest one in the corresponding year. Second, we used the history function in Google Earth Pro to visually identify the approximate percentage of the land within a 25-km buffer covered by agriculture (rounded to the next ten), interpreted as clearings (in forests) and/or patterns and color differences clearly indicative of pastures or fields. We differentiated between agricultural land within and outside Mennonite colonies. Because of limits in the availability of images this variable was only calculated for 1985 to 2016. The clustering of colonies on the left shows a tendency to create colonies in areas with very little agricultural development.

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**SI5: A closer look at Bolivia**

Information compiled by envoys of the Mennonite Central Committee, a global non-profit organization, offers some insights into the causes behind the creation of new colonies in Bolivia. In a book published in 2009, Sieghard and Sylvia Schartner (2009) relied on accounts of colony leaders to write portraits of all existing Bolivian colonies at the time, including the reason for their creation. This information was later updated by Isbrand and Martha Hiebert, also MCC envoys, for recent colonies. The causes mentioned in these accounts align with those expected from the literature: on the one hand are cultural or religious factors, such as disagreements over aspects of modernization like the adoption of rubber tires, connection to the national electricity grid, or changes to education. On the other hand, are land scarcity – by far the most common explanation – and other issues with production, such as a dissatisfaction with local agronomic conditions. Interestingly, the causes invoked vary both over time and between colonies involving international vs. internal migrations: eighty-five percent of colonies initiated by international migrants were reportedly created at least partly for cultural or religious reasons, whereas only 13 percent of those created by Bolivian Mennonites were. Conversely, land scarcity weighed more for daughter colonies of Bolivian colonies (83 percent) than for colonies created by international migrants (38 percent). Because internal expansion increased in importance over the years, this also means that the balance between cultural-religious reasons and land scarcity has steadily shifted in favor of the latter.

**Reference:** Schartner, Sieghard, and Sylvia Schartner. *Bolivien: Zufluchtsort Der Konservativen Mennoniten*. Santa Cruz, Bolivia: Editorial Litocolor S.A., 2009.