



Agricultural co-operatives in Canada and Cuba: trends, prospects and ways forward

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Abstract

This concept paper builds on comparative work on sustainable agriculture in Canada and Cuba by exploring the role of agricultural co-operatives. Findings indicate that Canada and Cuba's agricultural co-operatives face the challenges of membership renewal and economic presence in their national economies. The paper argues that components of each agricultural co-operative system at the farm and tertiary levels could be adapted to the other nation's agricultural co-operatives in order to strengthen community control of local food systems. The paper further argues that a new approach to agricultural co-operatives must incorporate the state itself in any potential reform agenda in both countries. The paper calls for movement-to-movement contacts between the two countries, and the wider Americas.

Keywords Agricultural co-operatives · Sustainable agriculture · Canada · Cuba

1 Introduction

Building on earlier work published in this journal (Hiranandani 2010), this paper examines agricultural co-operatives in Canada and Cuba in relation to community development and sustainable agriculture. Following Hiranandani, we define sustainable agriculture as being about maximizing the productivity of labour while seeking to minimize damage to both natural assets (soils, water, air and biodiversity) and to human health (Hiranandani 2010: 764). There exists a literature on community development and agricultural sustainability in Canada and Cuba working with related concepts such as food sovereignty and

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agro-ecology (for definitions, see García 2002: 90; Wiebe and Wipf 2011: 4). However, it is the role of agricultural co-operatives in advancing community control and sustainable agriculture that is the focus of this paper. The international co-operative principles—voluntary and open membership, democratic member control, member economic participation, autonomy and independence, continual education, co-operative solidarity and concern for community—define a time-tested business model that today encompasses millions of members worldwide (ICA 2018). Indeed, sustainability has even been discussed as a possible eighth principle of the world co-operative movement.

When the General Assembly of the United Nations (UNGA) declared 2012 the International Year of the Co-operative to honour the centenary of the International Co-operative Alliance (ICA 2018), it urged governments to develop effective partnerships with their respective co-operative movements in order to address pressing social challenges such as the eradication of poverty, full and productive employment and women's empowerment (UNGA 2007). The ICA itself stresses the economic importance of agricultural co-operatives for countless farmers who are member owners (ICAO 2018). Critical here is the power of group action known as the 'co-operative effect', a concept which can encompass the economics of scale in buying and selling; value-added activities; the elimination of the middleman; enhanced control over prices and quality control; the pooling of investment; and technical specialization (Helm 1968: 21–22)—as well as community building and having a united political voice. To take some examples in agriculture, economies of scale could leverage watershed and wildlife preservation, carbon sequestration in soils, the undertaking of simple agricultural tasks, group farming, urban gardening, joint irrigation, machinery sharing, forest management, green energy projects and credit arrangements (Helm 1968; Hiranandani 2010: 764–765). This, then, may be a time for further reflection on a 150 plus year co-operative movement that increasingly interconnects the Global North and the Global South.

While the case for agricultural co-operatives is strong, is there any merit in making a comparison of agricultural co-operatives in Canada and Cuba? After all, the two movements are embedded in different economic systems in terms of farm scales, land tenure regimes and the degree of market integration. Canada, a 'G-7' country, is a member of the Organization for Economic Co-operation and Development (OECD) and, as a free market economy, is an integral part of the North American Free Trade Agreement (NAFTA) with the USA and Mexico, as well as the newly minted Canadian European Trade Agreement (CETA) with the European Union. Cuba, in contrast, is a less developed country (LDC) organized as a socialist planned economy and is a member of the Bolivarian Alliance for the Peoples of Our Americas (ALBA), a trade block based on state-led development. The ecological contexts also vary: tropical products characterize Cuban agriculture including coffee, tobacco, sugar, cassava and citrus fruits, while Canada's is based on temperate commodities such as grains, oilseeds, livestock and cold-climate root vegetables and fruits. There is also the sheer size of Canada and its diverse regions compared to the Caribbean island nation state of Cuba. On the surface, this would make strict comparisons difficult in terms of economic indicators, legal and regulatory regimes, political institutions, geography and the nature of agriculture itself.

If, however, the focus is on what each nation's agricultural co-operative movement could learn from the other so as to strengthen the community and environmental aspects of their respective systems, as well as the sustainability of the agricultural co-operatives themselves, then there are many valuable insights to be gained by doing so. This is especially the case because both countries have a long history of unbroken bilateral relations, Canada and Mexico being the only two countries in the Americas to maintain diplomatic relations

with the Castro government after the 1959 Cuban Revolution (GOC 2018). The Canadian government also played a role in the diplomatic détente between the US and Cuban governments in 2013/2014. As well, Canadian–Cuban trade approximated Cdn. \$800 million in 2016 (GOC 2018). Both countries are also directly (dis)connected to the US economy and exposed to the vagaries of US policy. Finally, both agricultural co-operative movements are undergoing greater integration into the world economy with implications for their community and environmental features. Below, we briefly review the contexts of Canadian and Cuban agriculture and policy within which agricultural co-operatives must operate.

Canadian farm productivity is very high based on technological innovation, fewer labour inputs, mechanization and more recently, automation and specialization (Dasgupta 1988: 53). Canadian farms are increasingly larger, fewer and export focused (larger farms are defined as gross farms receipts of Cdn. \$1,000,000 and over); 193,492 census farms were recorded in 2016, down 5.9% from the 2011 census (Statistics Canada 2016). Exports and imports are on the rise, with the USA being the market for over half of Canada's agribusiness imports and exports as part of NAFTA (AAFC 2016). Canadian agribusiness accounted for 6.6% of Canada's Gross Domestic Product (GDP) in 2014, key exports being grains (wheat, corn) and oilseeds (canola, soy), meat, and (processed) fruits and vegetables (see AAFC 2016). However, smaller farms struggle in the face of rising input costs, stagnant food prices, debt and concentration in both suppliers and retailers (AAFC 2016). Further, the farming community is growing older (average age 55 years), or increasingly forced to rely on off-farm income; there are a growing number of female operators, as well as farm incorporations (Statistics Canada 2016). Farmland has decreased 5% since 1971, and top-class soil is increasingly vulnerable to non-agricultural development (AAFC 2016; Connell et al. 2016). Canada's rural population stands at about 18.9% (Statistics Canada 2016). The federal and provincial/territorial governments are both responsible for agricultural policy through joint programme design and cost sharing. The recent policy, *Growing Forward 2* (GF2, 2013–2018), generally emphasized innovation, larger farms and export markets over domestic food systems, smaller farms and agricultural co-operatives. The prospects for the agricultural co-operatives may in fact dovetail with the future of the conventional family farm if current trends continue.

Cuba inherited a legacy of Spanish colonialism, a monocultural sugar economy, and a US blockade after the 1959 revolution, still ongoing. Post-revolutionary Cuba was economically dependent on the Soviet Union until the calamitous Special Period of the 1990s which saw a steep drop in GDP and a collapse of imports including agricultural inputs for its Soviet-type state farms. Since the 1990s, there are three administrative sectors of agricultural production: a) state farms and government-run farms; b) the non-state sector (including both co-operative and individual production); and c) joint ventures between the Cuban state and foreign capital (Schultz 2012: 130–131). Small-scale agro-ecology, chemical-intensive large-scale agriculture and genetically modified food projects characterize these sectors (Schultz 2012: 118). Agriculture represents around 4% of GDP, with 6,702 farms of all types (GOC 2017; Trading Economics 2016b). The rural population is at about 23% (Trading Economics 2016a). Cuba struggles to increase food production, importing around 60–80% of its food needs at a cost of about \$ US 2 billion per year, primarily for social protection programmes, the tourist sector and animal feed (Altieri and Funes-Monzote 2012: 4–5; Atwood 2017; WFP 2015). Since the Sixth Party Congress of the Communist Party of Cuba (CPC) in 2011, also known as the 'Update of the Cuban Socio-Economic Model', policymakers have sought to stimulate market forces within the state planning system, including in relation to the agricultural co-operatives (for urban co-operatives see DuRand 2017; Ludlam 2014: 147, 152; Schultz 2012) which were envisioned to

start forming tertiary-level co-operatives (Grade 2), as well as undertake bulk purchases and value-added processing, outside of state channels (CPC 2011). To date, these reforms have not been fully implemented. Cuba's agricultural co-operatives face an increasingly challenging policy environment.

This paper compares two dissimilar cases, Canada and Cuba, which share common concerns, namely community and environmental sustainability, as well as the sustainability of the agricultural co-operatives themselves. It speaks to those (agricultural) co-operative advocates who wish to see them strengthened.¹ Section 1 has made the case for the importance of agricultural co-operatives for community and environmental sustainability in Canada and Cuba, while noting the challenging contexts in which they must operate. Sections 2 and 3 provide an historical overview in order to contextualize the opportunities and challenges facing agricultural co-operatives in each country, including reference to agricultural co-operatives in the provinces of Nova Scotia and Cienfuegos, where the Canadian and Cuban authors are based. Section 4 discusses the strengths and weaknesses of each national movement and argues that components of each other's agricultural co-operative system at the farm and tertiary levels could be usefully adapted by the other. Section 4 further calls for 'bringing back the state' into (agricultural) co-operative reform debates in Canada and Cuba. The conclusion calls for greater mutual learning and dialogue among Canadian and Cuban co-operative specialists.

2 Canada's agricultural co-operatives

Historically, Canada's co-operatives were part of reform movements common across the Western world in the late nineteenth and early twentieth centuries: these included the trade unions, farmers' movements and the suffragettes (MacPherson 1979: 1). Canadian co-operation's origins are in Western Europe, primarily from England in the case of English-speaking Canada, with its consumer co-operatives, and Germany and France in the case of French-speaking Canada, with the credit unions (MacPherson 1979). With the 1917 Russian Revolution, and the subsequent founding of the Communist Party of Canada (CPC) in 1921, a socialist co-operative philosophy briefly made its presence felt in parts of industrial Canada pre-WW2 (MacPherson 1979: 187–188). Canada's agricultural co-operative experience varied regionally: between East and West, and Quebec; socially, between left and right populism; on the role of provincial and federal governments over time; as well as by organized opposition from private businesses (see Brym 1978; Laycock 1990; Lewis 2005). Below, we outline two regional examples of early agricultural co-operative social movements, followed by an overview of contemporary trends and current policy issues.

In the province of Nova Scotia in Eastern Canada, around 1928, there emerged the Antigonish Movement riding on a tide of discontent against poverty, external control and proletarianization (Sacouman 1977). During its heyday in the 1930s/1940s, Catholic reformers, in competition with the CPC in many instances, organized adult education study groups, and co-operatives, among fishers (credit unions, canning), coal miners (consumer co-operatives) and farmers (credit unions) (Sacouman 1977). While there were notable successes such as the credit unions, critically, the Catholic leadership neither promoted farming

¹ References to 'co-operative' as opposed to 'agricultural co-operative' refer to co-operatives in general.

Table 1 Co-operatives by Volume of Business in Millions of Cdn. \$ 2000 and 2012. *Source:* Co-operatives Secretariat (2002, 2012)

Year	BC	Alta.	Sask.	Man.	Ont.	Quebec	NB	NS	PEI	NL.	National
2012	1388.6	4832.2	12,048.5	2584.2	1569.4	6864.5	921.8	197.0	121.0	82.4	30,609.6
2000	973.6	3261.1	4654.5	4085.9	1878.3	5147.1	421.0	626.8	199.3	144.5	21,392.1

Note that total figures exclude the northern territories of Yukon, Northwest Territories and Nunavut as well as federally registered co-operatives which carry on their business in two or more provinces as stipulated under the Canada Co-operatives Act (1998)

production co-operatives² nor challenged the dominance of provincial political elites. The Antigonish Movement went into decline in the 1950s, having failed to transcend the regional political economy that had spawned it (Welton 2001: 260). In Western Canada, the economic gains for farmers were more profound. Both left- (social democratic) and right-wing parties supported co-operatives to varying degrees, being seen as one tool for addressing some of the inequities of the emerging industrial economy. The formation of marketing co-operatives in Western Canada, in particular, saw farmers receive a fairer and stable return on grain prices (MacPherson 1979).

During the post-war era (agricultural), co-operatives became increasingly reformist as mass consumerism, the Keynesian welfare state and state regulation of agriculture locked in. From the 1950s onwards, most agricultural co-operatives slowly lost interest in broader rural issues and/or the wider co-operative movement in favour of commodity and institutional concerns. Factors contributing to these shifts included growing farm differentiation, rural community decline, the internationalization of the agro-food industries and the emergence of a more conservative co-operative leadership (MacPherson 2008). In some cases, agricultural marketing co-operatives were more focused on the profitability of the members' farming operations than on community or environmental issues (Jacobs 2006). The grain pools themselves saw a post-war decline in membership, growing financial pressure, the adoption of orthodox business strategies and questionable investment decisions; they were converted to IOFs by the 2000s (Fulton and Larson 2009). Many (agricultural) co-operatives ended up caught between the profit-driven business model and member-based democratic control, an 'iron cage' to use Diamantopoulos' evocative metaphor, such that many societies atrophied through declining member participation, demutualization, sub-sector mergers and intra-movement divisions (2012: 200–203).

Nevertheless, agricultural co-operatives remain resilient, continuing to supply energy (strong Western Canada), telecommunications, agricultural inputs and supplies (Federated Co-operatives Ltd. in Saskatchewan), as well as processing, marketing and natural resources (fisheries in Atlantic Canada) (see Co-operatives Secretariat 2012). Table 1 shows the volume of business in 2000 and 2012 by province for non-financial co-operatives, including the sub-sectors of agriculture/natural resources and wholesale/retail trade.

The business volumes to 2012 point to the steady presence of agricultural co-operatives in the Canadian economy. As well, the total number of reporting non-financial co-operatives saw only a modest drop from 5732 to 5043 (Quebec and NS saw increases) between 2003 and 2012; assets of Cdn. \$ 2.5 billion, and over 18,853 employees, and

² Perhaps akin to pre-WW2 Italy where the Catholic Church preferred individual land tenure to the collective agrarian program of the Italian Communist Party (Sargent 1982: 44).

70,903 members were also reported (see Co-operatives Secretariat 2012: 12, 16; CURA 2015). The province of Quebec is Canada's agricultural co-operative powerhouse. Its 126 co-operatives accounted for 77% of the total business volume of the agriculture and natural resources sub-sector (Ontario being second), the presence largely attributable to the giant supply co-operative, *La Coop Fédérée*, the second largest non-financial co-operative in Canada, with Cdn. \$4.4 billion in total business volume (Co-operatives Secretariat 2012). Quebec's distinctiveness as a French-speaking nation within Canada, and its social democratic political culture, may explain the strength of agricultural co-operatives in its rural fabric.

More recently, however, the overall picture is not at all clear due to the dearth of data. In 2012, during the International Year of Co-operatives, an austerity-centric conservative government drastically cut staff and services, including to annual data collection, to the Rural and Co-operatives Secretariat (housed in the AAFC), the government's only national body devoted to co-operatives (Balkan 2012; HOC 2012).³ Indicators are that agricultural co-operatives continue to respond to economic trends through export opportunities in meat processing, dairy products and value-added niche markets (e.g. Quebec's *Citadelle* maple syrup co-operative), or initiate co-operative mergers like what Quebec-based AGROPUR did with Nova Scotia-based Farmers and Scotsburn dairy co-operatives in 2013 and 2017, respectively, and which now comprises 3290 dairy farmers (AGROPUR 2018). At the same time and in the same eastern region, however, the agricultural co-operatives received a body blow when the giant supply co-operative, New Brunswick-based Co-op Atlantic, established in 1927, sold off its core businesses to an IOF-owned grocery retailer in 2016.

Dairy co-operatives remain financially viable because of the supply management system. The chicken, dairy, egg and turkey industries operate under national supply management systems controlled by federal agencies working with provincial commodity marketing boards. Established in the 1970s, supply management is based on three pillars: the control of prices; the control of supply; and protection from foreign competition (see Library of Parliament 2015). The Canadian dairy industry (comprising around 12,000 dairy farms at its core) generates approximately 117,000 direct jobs in production, processing, distribution, retailing and catering across all of Canada's provinces and rural communities (BCG 2016: 5). But even in supply management, there are challenges. Despite strict production quotas and guaranteed prices, dairy farms decreased by 13.4% from 2011 to 2016 (Statistics Canada 2016: 7). Moreover, foreign and domestic 'free trade' interests are relentless in seeking to pry open Canada's supply-managed sectors, posing a grave threat to farm viability and rural community health. For the time being, government support for supply management is firm, even as its constant pursuit of 'free trade' pacts raises concerns for supply management's future.

Recent years have also witnessed the emergence of community-oriented food co-operatives taking the form of community-supported agriculture (CSA), farmers markets, grazing commons, machine sharing, community land trusts (CLTs) and community economic development investment funds (CCA 2011). These, and other related food co-operatives, are generally geared towards mixed farming, biodiversity, local markets, reduced meat consumption and grass-roots democracy (CCA 2011; Lewis and Conaty 2012: 2; Vieta 2010). British Columbia, for instance, has a significant number of intentional communities that

³ Co-operative policy is now with the Department of Innovation, Science and Economic Development Canada. There are some recent data up to 2016 on total registrations of non-financial co-operatives but these lack a break-down of sub-sectors or business volume (ISED 2018).

include rural-based communes (Scott 2017). The food co-operatives, critical to community and environmental concerns, appear to have growing public support, but within Canada's larger agrarian picture, remain localized in both number and business volume (Cameron and Hanavan 2014: 32; Co-operatives Secretariat 2012).

Canada's co-operative leaders struggle to find a broad-based response to these trends. Co-operatives and Mutuals Canada (CMC) and the Canadian Co-operative Alliance (CCA) are in place but cover the national and international spheres, respectively, for all co-operative sub-types. Similarly, the provincial co-operative councils (Grade 2) focus on their jurisdictions across all co-operative sub-types (see CMC 2018; NS Co-operative Council 2018). The institutional lacunae in Canada's co-operative sector lie in the absence of a national apex to address the advocacy and lobbying needs of Canada's agricultural co-operatives (CCA 2011; CCA 2009: 3, 15). National food security organizations do advocate to the public and lobby the government to shift more policy attention to local food systems, one example being the call for enhanced new entrant programs; however, the lens of the 'co-operative effect' is lacking in policy recommendations (Food Secure Canada 2017: 15). The major farmers' groups, the Canadian Federation of Agriculture and the National Farmers Union, generally support co-operatives, but their ideological visions dramatically diverge in regard to agricultural policy (CFA 2018; NFU 2018). Indicators are that the new agricultural policy framework, the *Canadian Agricultural Partnership* (CAP), successor to *GF2*, which came into force 1 April 2018, will continue, despite some targeted community and environmental programs, to focus on trade and market expansion rather than on national food self-reliance, co-operative development, and localized and sustainable agriculture (AAFC 2018; GOC 2018).

We have seen that the classical agricultural co-operative social movements of the early twentieth century had reached their nadir by WW2, either fizzling out or getting accommodated to post-war agricultural policy. The subsequent internationalization of the 1980s impacted agricultural co-operatives unevenly. For some, there were opportunities opened up in export markets, but other societies oriented to the domestic market faced increased food imports. A stronger strategic 'agricultural co-operative lens' is required not only in the co-operative sector, but also in the perspectives of urban and rural civil society actors. Government priorities, generally speaking, appear to be set on the same policy pathways as previous frameworks. There is a need to more directly link the agricultural co-operative sector to the food base in ways that present new life cycle possibilities for them. Cuba's experience could point the way to a policy revamping of the community and environmental roles of agricultural co-operatives in Canada.

3 Cuba's agricultural co-operatives

Before the Cuban Revolution of 1959, Cuba had no law for co-operatives, only associations (González 2013: 279). After the revolution, co-operative property was constitutionally recognized for its advanced form and socialist production characteristics (GOC 2002: 13–14), a clear distinction from the dominant co-operative business school that prevailed in Canada after the Cold War. The Cuban agricultural sector currently has five legal categories: State farms—*Finca Pública*; Credit and Service Co-operatives—*Cooperativas de Créditos y Servicios* (CCS); Agricultural Production Co-operatives—*Cooperativas de Producción Agropecuaria* (CPA); Basic Units of Co-operative Production—*Unidad Básica de Producción Cooperativa* (UBPC); and private farms—*Parcelinos*. To date, the evolution in rural

Table 2 Agricultural co-operatives by legal registration

Year	National	Companies and farms	UBPC	CPA	CCS	Other
2016	6702	1874	1629	879	1224	1096
2009	n/a	n/a	2283	1078	3037	n/a

GOC (2017: 11)

González (2013: 286). Figures for national, companies and farms and other are not listed

No monetary values are available in either data sets for the co-operatives

institutional forms has seen incremental liberalization away from state farms, through to co-operatives and, more recently, to private farms. Below, we provide an overview of these four agricultural co-operative forms, before turning to their production performance and current policy issues.

In the 1960s the CCS were formed on a voluntary basis by farmers who had received land through the two agrarian reforms of 1959 and 1963. These farmers joined together to get access to loans, technology and marketing, while retaining their private plots (González 2013). By 1998, the CCS were the most common form of non-state land tenure. Further, approximately 200,000 private farms were also established outside of the agricultural co-operatives in the aftermath of the second agrarian reform and were linked straight to the state (Schultz 2012: 126).

The CPA came into being in 1975 where at the first Congress of the Cuban Communist Party, the decision was made to support farmer beneficiaries of the agrarian reforms through more advanced forms of communal production (Harnecker 2013). Unlike the CCS, CPAs were made up of private farmers who sold their land and equipment voluntarily to their co-operative, received payment for them and then became collective owners and workers. From the mid-1980s to early 1990s, the CPAs witnessed declines in their memberships, but made a comeback when new members with diverse backgrounds joined, drawn to farming by the advantages of rural life with respect to income, affordable food and housing (Martin 2002: 61). The CPAs are smaller in scale and make better use of natural resources than the state farms. CPAs are strongly represented in Holguin and Granma provinces (Alvarez 2002: 73; GOC 2017: 11). Issues currently facing the CPAs include capitalization of equipment, and still, in many instances, member renewal.

With the Special Period came Cuba's third land reform. In 1993, the UBPCs were created on the back of the break-up of many Soviet-era state farms. The state farms had been characterized by highly mechanized inputs, centralized management and agrochemicals, initially in the sugar cane sector (representing upwards of 70% of national exports) (Perez and Echevarría 2002). The UBPC's purpose was to increase co-operative managerial autonomy and to tighten the link between income and production. In setting up the UBPCs, workers of the former state enterprises were allocated parcels of land with limitless usufruct rights, rent-free, and sold other working equipment through soft loans. By 1997, they occupied approximately 40% of Cuba's agricultural land (Martin 2002). The UBPCs still face the challenge of lack of autonomy throughout the supply and marketing chain (González 2013).

The CPA, UBPC and CCS have to comply with the contracts they have with the various agencies. After production plans are established, contracts are worked out through determining the amount and price of production, credit, crop insurance, social security and

other factors. Loans are received through the National Bank of Cuba. The state distribution enterprise, *Acopio*, which has come under criticism for its inflexibility and inefficiencies, buys the produce for export, or for the rationing system (Schultz 2012: 125). The surplus of CPA, UBPC and CCS is sold privately in farmers markets at the going market rate.⁴

By 1999, the UBPC, CPA and CCS had increased co-operative land to 70%, from 15% in 1989 (González 2013: 285). However, Table 2 shows a decline in all agricultural co-operative sub-types between 2009 and 2016. There would also appear to be a decline in land use in the UBPC and CPA sub-sectors, though the data here are unclear (González 2013: 286; GOC 2017: 10).

Regardless of these trends, Table 2 also highlights the still-important presence of agricultural co-operatives in the socialist countryside. In 2006, for example, peasant agriculture produced 57% of the country's food output on less than a quarter of the land with 72% fewer chemicals than in 1988, most of this by agricultural co-operatives (Altieri and Funes-Monzote 2012). This output included meeting 56% of milk and 50% of cattle livestock demand which, together with increases in vegetables, beans, tubers and root crops, considerably advanced Cuba's sustainable agriculture profile (Altieri and Funes-Monzote 2012; González 2013: 286–287; Ludlam 2014: 141). And around half a million Cubans still work in the agricultural co-operatives (Ludlam 2014: 147). Generally speaking, the CCS and private farms have better production results (González 2013: 286). Not surprisingly, land has increasingly been allocated to individual farmers in usufruct through a series of decrees including Act 300 passed in 2013 (Schultz 2012: 130–131). And high import dependency remains in key commodities such as cooking oil, cereals, legumes, rice and wheat for human consumption, and corn and soybeans for livestock (Altieri and Funes-Monzote 2012: 4; GOC 2017). Overall, the 2016 census indicates that the national Cuban economy remains heavily import dependent on key commodities.

What is critical to remember is that the 2011 reforms have yet to be fully implemented in the agricultural co-operative sector. This became further evident when in December 2015, the authors conducted a rapid appraisal of family farms (3), a CPA (1) and UBPCs (2) in Cienfuegos Province (population approximately 400,000). The visits revealed significant achievements in the reclaiming of unproductive land and enhanced biodiversity of the farming systems, as called for in the 2011 reforms (Cameron and Rosado 2016). The CPA, for example, had a robust mixed crop farming system and employed bio-pesticides and small-scale irrigation. The two UBPCs (both over 1500 ha.) achieved production gains in milk and sugar, while expanding their acreage of rice and citrus fruit. But no co-operative enterprise visited mentioned having started their own independent Grade 2 co-operative for supply and marketing. Enterprise members opined that production performance would improve once the enterprises had greater domestic market autonomy, as well as more opportunities to import key technologies (artificial insemination of dairy cows was mentioned), and to make international farmer-to-farmer linkages (Cameron and Rosado 2016).

The National Association of Small Farmers, *Asociación Nacional de Pequeños Agricultores* (ANAP), established in 1961, represents the CPA and CCS sectors, as well as individual farmers (ANAP 1986; Peiso 2013). ANAP encourages agro-ecological farming and provides training of trainer extension services, but does not appear to lobby the government to push for reforms in liberalizing input and marketing channels, or forming independent Grade 2 co-operatives. The Cuban government exercises firm control over ANAP

⁴ Correspondence with Y.A. Morales, 10 February 2017.

Table 3 Summary of agricultural co-operative systems in Canada and Cuba

Characteristics	Canada	Cuba
Political system	Pluralist liberal	Single-party socialist
Motor of development	Investor-owned firms	State enterprises
Dominant co-operative school	Rochdale business school	Socialist transition school
Co-operative tertiary level	National interest groups/provincial councils	Centralized corporatist body/regional sections
Primary agricultural co-operative scale	Auxiliary/supply and marketing	Production/farm level
Co-operative origins	England, France, Germany	Spain, USSR (after 1959)

nationally, and agricultural co-operatives act as individual subjects under state enterprises (Peiso 2013: 325, 338–339). The Seventh Party Congress of the CPC in 2016 did recognize the need to follow through on the 2011 reform lines on agricultural co-operatives (Diaz 2015).

Cuba's agricultural co-operatives have a shorter history than in Canada, introduced after the Cuban Revolution of 1959 into a socialist system that came under stress with the collapse of the Soviet bloc in the 1990s. Since the Special Period, there has been an incremental liberalization of the Cuban countryside from state farms to agricultural co-operatives to family farms. Productivity in labour and land, as well as efficient resource use, is still required in the Cuban agricultural co-operative sector, areas that Canadian agricultural co-operatives could share in relation to self-organization, secondary marketing and supply and technology diffusion.

4 Contrasting Canadian and Cuban agricultural co-operatives: a discussion

Canada and Cuba's agricultural co-operatives have storied histories and significant achievements. Yet as Canadian and Cuban theorists themselves point out, co-operative movements in the twentieth century worldwide accommodated themselves, or were co-opted by, centrally planned economies, monopoly capitalism, or the global post-Fordist production system, or were simply relegated to small-scale agriculture or economically marginalized (Harnecker 2013; Vieta 2010). The Canadian and Cuban cases are no exceptions.

Increasingly, the detritus of the post-WW2 Keynesian era litters the Canadian countryside (e.g. grain elevators, railway tracks, dairy depots, local tractor stations, co-operative grocery stores). Canada's conventional agricultural co-operatives appear stalled in regard to registrations and market share, while the new food co-operatives have yet to become widespread. Canadian federal and provincial policy is clearly not moving in the direction called for by the ICA and the UNGA to build effective government-co-operative partnerships.

Cuba's 2011 reforms are also stalled in relation to the agricultural co-operatives. Cuba is beholden to the external environment more than Canada. For example, US agribusiness would be more inclined to partner with the Cuban private sector than the (agricultural) co-operatives (Hiranandani 2010: 771; Schultz 2012: 119). This, while a key ALBA ally, socialist Venezuela, grapples with the collapse of world oil prices. Cuban co-operative specialists, however, have cautioned against centring the 2011 national reform process too much on the labour-exploiting private sector (Reyes and Harnecker 2013). More broadly

speaking, the CPC may not wish to relinquish state control of the economy for reasons having to do with maintaining revolutionary gains as well as not ceding too much bureaucratic power to autonomous societal actors (Petras and Veltmyer 2011: 259–260).

In sum, if many Canadian agricultural co-operatives are caught in an ‘iron cage’ between the IOF sector and democratic co-operative member control, Cuba’s agricultural co-operatives appear ‘hemmed in’ between state socialism and a burgeoning private sector.

As can be seen in Table 3, conceptions of democracy, the balance between state and market and the role of co-operatives are clearly divergent. The agricultural co-operative systems themselves would also appear to be inverse to one another: in Canada the auxiliary sphere—marketing and supply—predominates, whereas in Cuba it is at the production level, excluding the CCS sub-sector. Each movement, then, could potentially learn from, and adapt to, the experience of the other in relation to these different co-operative scales.

Yet while sharing a disquiet over current trends away from community control and agricultural sustainability, Canadian and Cuban co-operators have different starting points, theoretical traditions and historical influences which illuminate some opportunities while obscuring others. This is reflected in recent literature on co-operatives and sustainability in each country, which we highlight below.

Canadian co-operative thinkers socialized in liberalism and social democracy appear averse to a stronger state, calling instead for a ‘Third Way’ co-operative economy (see Novkovic and Webb 2014). Yet as the historical record in Canada suggests, this is a tall historical order in an IOF-dominated economy. Similarly, Restakis cautions against ‘the extremes of market rejection on the one hand (as in the case of Marxism) and the unbridled power of capital as expressed in neo-liberalism on the other’. (2010: 3). Among a potpourri of case studies, there is neither a mention of Cuba’s co-operatives, nor the broader ALBA region in South America, except to dismiss the democratically elected socialist government of Venezuela as a ‘new form of authoritarianism’ (Restakis 2010: 47). This is perhaps too stark a perspective.⁵ Some writings on Cuban agricultural co-operatives can certainly be formulaic of the status quo there, having limited cross-fertilization with international cases such as Mondragon, Argentina and Venezuela (Harnecker 2013). However, this does not preclude democratically managed co-operatives (without employing labour), grounded in the community and provided with rigorous government oversight, from flourishing in socialist Cuba with the appropriate reforms (Harnecker 2013: 3). In sum, these different emphases and perspectives can lead to fruitful dialogue and the re-imagining of alternative pathways if and when ideological silos are reduced.

A new strategy for agricultural co-operation may then be as much about (a) what farm level practices could be adapted by the other national movement?; (b) how best to re-conceptualize existing state policies and practices?; and (c) how to proceed when co-operative theorist and activists are themselves divided? Below, we explore some possible synergies between the two cases.

What can Canadian co-operative advocates learn from Cuba? Three key lessons are: (a) advancing sustainable agriculture and small farms; (b) the ‘co-operative effect’ of farming production co-operatives; and (c) the role of a developmental state in effecting strategic policy reform.

First, Cuba shows the viability of domestic smallholder and low-input farm production as an alternative to export agriculture and large intensive private farms (Rossett and

⁵ Hugo Chavez himself had stressed the importance of co-operatives being connected to community rather than being just a group of profit-oriented members (Harnecker 2009).

Bourque 2002). Certainly, Cuba's agro-ecological practices are still more often than not pragmatic administrative decisions due to the lack of inputs since the Special Period (Nelson et al. 2009: 241). Yet in terms of thinking holistically about food systems, small-scale farms and co-operative-driven sustainability, the island nation has much to offer Canada where farms are getting bigger, more input intensive and generally less sustainable. Canadian agriculture, for instance, is responsible for roughly 10% of the country's GHG emissions (AAFC 2016). Cuba's repositioning of agriculture away from chemical inputs has been groundbreaking, and sustainable agriculture is now institutionalized there despite national food production bottlenecks. Cuba's agrarian co-operative focus (e.g. González 2013; Martin 2002) also redirects attention to twenty-first century rural Canada where there is a dearth of recent research on agricultural co-operatives and sustainable rural development.

Second, Cuba's CPAs and UBPCs have demonstrated a strong commitment to form groups around common interests (economy, ideology, community, family bonds) while making collective farming work. Farming production co-operatives—going beyond joint activities of marketing, supply, credit to co-operativize the land—are usually led by people with strong economic, religious and/or a high political consciousness (Helm 1968: 112). Canada's farming production co-operatives are mainly relegated to common pastures, machine sharing and, less frequently, community land trusts (Cameron and Hanavan 2014). With an appropriate mix of programs (e.g. new entrants) and regulatory reforms, the 'co-operative effect' of farming production co-operatives could strengthen sub-sectors sidelined by current policy such as vegetable and fruits, organic produce, greenhouses, humane livestock keeping, irrigation, renewable energy and retailing and wholesaling (for details on these sub-sectors, see AAFC 2016). Taking a longer view, farming production co-operatives on a generalized scale could bolster national food self-reliance. For as Canadian agribusiness ever extends itself globally, 'policy uncertainties' loom: slower global growth, rising economic powers, the emergence of right-wing populism and US neo-mercantilism (UN/DESA 2017: ix), not to mention geopolitical 'hotspots', and other potential man-made and/or natural 'shocks' that could impact the global agricultural system. Cuba's experience with farming production co-operatives may thus be instructive to those policy communities, social groups and organizations committed to the reassertion of community control of Canada's food systems.

Most critically, perhaps, Cuba illuminates the transformational capacity of a developmental state. Cuba's national-level transition towards a low-input agricultural model during the Special Period illustrates the importance of a supportive policy environment that would have otherwise seen low-input smallholder initiatives localized or abandoned altogether (Hiranandani 2010: 768; Nelson et al. 2009: 235).⁶ A Canadian developmental state, thus restructured could, for example, override short-term market signals, rearticulate domestic markets with mass demand, implement social cost accounting and enhanced planning, cancel corporate-centric 'free trade' pacts, undertake fair and supplementary trade, facilitate worker and community control and resolve indigenous land rights claims (Cameron 2009; Loxley 2007). Potentially, agricultural co-operatives could then benefit from the *expansion*

⁶ This lesson has been lost in many instances outside of Cuba. To take an example from a high profile conference, a keynote speaker and food activist, in lauding Cuba's sustainable agriculture model and urging OECD countries to emulate it, neglected to mention the corollary role played by the Cuban state in effecting this shift. 'Food Sovereignty: A Critical Dialogue' conference, Yale University, New Haven, Conn. USA. 14–15 September 2013.

of supply management, sustained programming support for the fledgling food co-operatives, a legislatively backed national food strategy, reconstituted provincial and federal line departments and so forth. To point out the obvious, a developmental state in Canada would require a *political* process, an issue Canadian co-operative theorists have been reticent to address. Certainly, Diamantopoulos' call for institutional intermediaries, educational and cultural interventions and social movement renewal of Canada's (agricultural) co-operatives is an important one (2012: 211). However, in order to transition to a popularly controlled co-operative economy, social movements would need to be part and parcel of a left-of-centre political coalition (in line with electoral reform to proportional representation) that would supplant the pro-big business conservatives and liberal parties in control of the federal government (and most provincial governments) since 1867. The Cuban experience directs us towards an activist state, a systemic critique of capitalism, macro-level transition and the place of agricultural co-operatives in it.

What can Cuban co-operators learn from their Canadian counterparts? The three primary lessons are: (a) technical and business 'best practices'; (b) tight legal and cultural adherence to the universal co-operative principles; and (c) a culture of pluralism in national politics.

First, the Canadian agricultural co-operative experience speaks to 'best practices' in the areas of business management and technology diffusion. This would include value-added processing, packaging, labelling, marketing and export promotion including biotechnology (Cameron and Rosado 2016; Hiranandani 2010: 771). An example of this possibility presented itself during a visit to an agricultural research centre, called Perennia, in Truro Nova Scotia in October 2014, where the Cuban authors discussed with Canadian staff the feasibility of setting up incubator technologies and portable trailers on UBPC farms for the production of canned juice from citrus fruits (Cameron and Rosado 2016). Further, in terms of organizational innovation, Canada has a strong background in the formation of commodity agricultural co-operatives at the tertiary level (Grade 2). AGROPUR, for instance, highlights the achievements made in value-added processing. Cuba's 2011 reforms envisioned that Grade 2 co-operatives would improve flexibility around contracts, remove constraints on product diversification, and strengthen membership autonomy, especially in the UBPCs (Ludlam 2014: 133–134; Schultz 2012: 127). Cuban co-operative specialists have themselves stressed the importance of private partnerships and direct sales for the agricultural co-operatives (González 2013: 289–290; Reyes and Harnecker 2013). The Canadian experience with co-operative councils, autonomous supply and marketing channels and product innovation could point the way to greater lobbying of government, production cycle autonomy, technology diffusion and mutually beneficial foreign partnerships in Cuba's unfolding reform scenario.

Second, Canadian (agricultural) co-operatives have a tight legal and cultural adherence to the international co-operative principles in its policy, laws and society by-laws. In contrast, Cuba's agricultural co-operative culture has been characterized as one of 'formalism' and 'pragmatism' rather than one of a genuine commitment to co-operative self-management (Ludlam 2014: 140, 150; Schultz 2012: 134). Cuba's Soviet-era period certainly contributed to the low consciousness of the international co-operative principles among co-operative members and officials alike, compounded by lack of co-operative education. The imperative to conduct co-operative training was not great given that co-operatives neither had the legal right to have independent associations, nor sole legal registration and supervisory systems (Holm 2012: 20–22; Ludlam 2014: 151; Peiso 2013). The situation appears to be changing. Line 200 of the 2011 reforms stresses the need for comprehensive training not just in technical fields such as agronomy and food technologies, but also in

co-operative management (CPC 2011). Canada's track record could be instructive in terms of legal reform, co-operative training and the actualization of the international co-operative principles in the (rural) Cuban context.

The other potential contribution of Canadian (agricultural) co-operatives to the dialogue might include comparisons of experience regarding diversity and pluralism (linguistic, political/ideological, cultural, race, ethnicity, etc.). Related to this are the history and significance of immigration for Canadian agriculture (e.g. the Dutch in the Eastern Canada and their role in dairy co-operatives; Ukrainians and other immigrants to Western Canada), and recent efforts around indigenous peoples and agriculture (Morrison 2011). The Canadian experience could be useful to Cuba's (agricultural) co-operatives. This is because Cuban co-operative philosophy is frequently framed within Marxist–Leninist orthodoxy (Lorenzo 2013) which, while theoretically very important, is often a reaffirmation of socialist first principles rather than applied to an 'Update of Socialism' itself. Cuba's geopolitical alliance with the former Soviet Union may account for its more insular perspective on co-operativism. Canada's political culture and civil society traditions could potentially stimulate further reflection on the relationship between agricultural co-operatives, community and worker democracy and an enhanced pluralistic governance model grounded in Cuba's history and political traditions.

The areas suggested above are exploratory and require further elaboration. The issue then becomes how to proceed when co-operative theorists and activists are themselves divided. Discussion of how to best put co-operative principles into practice in these different contexts could be a good place to begin. There are also real-world examples by which to build on such as the case studies that Canadian and Cuban co-operative scholars, reviewed here, mutually cited, these being the Argentina factory recovery movement of worker co-operatives, and Canada's multi-stakeholder co-operatives (Diamantopoulos 2012: 211; Restakis 2010; Reyes and Harnecker 2013: 30). Potential inter-sectoral and rural–urban synergies also present themselves, say, with CSAs and retail food co-operatives in Canada, or with the world famous urban gardens (*organopónicos*) in Cuba. Critically, in neither country is there a national-level and independent body representing agricultural co-operatives, an institutional lacuna that both national sectors could strategically address. Finally, while the lobbying of the respective national governments remains important in the short term, a strategic orientation should address the state itself as part of Canada and Cuba's (agricultural) co-operative reform process. Critical here is the formation of broader alliances.

5 Conclusion

Canada and Cuba's agricultural co-operatives have storied histories and significant achievements that still endure, but that must now face the challenges of this era. Aspects of each national context could strengthen the agricultural co-operatives of the other. Certainly, important exchanges are ongoing in both Canada and Cuba, as well as in the wider Latin America region; and there are educational institutions imparting co-operative education (Schultz 2012: 136; Ludlam 2014: 150), though the pedagogy and content may vary. In fact, some of the authors cited in this paper have dialogued face-to-face in Havana and continued on with follow-up efforts in Canada (Holm 2012). Such initiatives are to be welcomed in the spirit of moving beyond the North–South relationship and directly addressing

transformative strategies for *both* national (agricultural) co-operative sectors. After all, both Canadian and Cuba authors surveyed generally seek transformatory strategies.

Oddly, in both countries, there is little attention to generalized co-operative education and awareness raising in the broader society. Canada suffers from a real lack of understanding of the co-operative model in the public school system, higher education, government departments, the farming community, and among policymakers who by and large see IOFs as the main economic driver (Cameron and Hanavan 2014). There are also serious gaps in Cuba. As Harnecker states: 'If a desire really exists to promote the expansion of these organizations in Cuba, then the education system, non-formal channels, and the mass media, should play a fundamental role in educating Cubans about their special characteristics and advantages'. (2013: 19). There is still much work to be done in Canada and Cuba whereby agricultural co-operatives become a linchpin of sustainable development.

This paper concludes by calling for information exchange and movement-to-movement contacts (farmers' organizations, agricultural co-operatives, co-operative councils, educational institutions) between the two countries, and the wider Americas, while working towards strengthening the community and environmental aspects of the agricultural co-operatives. A first step would be to adopt a more integrative comparative perspective on co-operativism and rural transformation.

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