

Towards sustainable family farming and independent food co-operatives in Cuba?

Possible lessons from Norway¹

Abstract

In the Nordic countries, agricultural co-operatives were important when family farmers organised to get access to the quickly developing markets during industrialisation in the late 1800s and early 1900s. These co-operatives were organised both as credit, insurance, processing and marketing co-operatives. Spreading at first from Denmark to the rest of Northern Europe and later reaching the new settler continent in North America, farmers' co-operatives soon became a key element in private farming in market economies. As many co-operatives became large companies in the capitalist economies, they either became ordinary share companies, or retained their farmer-owned co-operative status like in Norway. After Marxist-inspired revolutions in Russia, China, Eastern Europe and later Vietnam and Cuba, state organised and government-controlled co-operatives were set up in socialist countries. Many of the old forms of agricultural co-operatives in the former Soviet Union and Eastern Europe collapsed when the centrally planned economies were abolished in the early 1990s. However, new forms of food production and distribution cooperation have emerged both in the capitalist and former socialist countries. These co-operatives were organised both among producers and consumers in order to meet the common needs of direct access to foods. While it is assumed that family farming and food markets will have to play a more important role in the Cuban food economy in the future, it will be interesting to see if small farmers in collaboration with wholesale co-operatives will be allowed to develop short and sustainable supply food chains, which could be competitive against state socialist and multinational capitalist agriculture. Cuban agricultural policy must be able to evolve along two strategies: a volume agriculture that delivers high-quality, durable basic foods to the predominantly urban population, but also delivers local traditional food with craftsmanship to tourists and a growing middle class. Both strategies will be necessary in order to address a historic challenge of the Cuban socio-economic development: to produce sufficient food and make it available to consumers at affordable prices, thus also saving scarce currency today spent on food imports.

Introduction

When alternative food movements - like organic food producers, or quality food producers selling directly to consumers and farmers' markets - appeared in Europe as well as in North America and Oceania in the 1980s and 1990s, both the producers themselves and the scholars studying these movements made a clear distinction from mainstream, industrialized agriculture (Goodman 2003; Van der Ploeg 2006; Marsden 2013). At the time, however, little scholarly attention was paid to older social movements among farmers, like agricultural co-operatives and peasant resistance to capitalization and industrialization. These provide an

interesting site of comparison for informing our current understanding of agricultural alternatives.

In classical linear Marxist theory, it was common to distinguish between the feudal, capitalist, socialist and communist stages of economic development (Kautsky 1899). In capitalism, the initial peasant economy with small farmers represented an archaic and disappearing form of production, transformed by the market economy into simple commodity production with family farmers. Family farming then would coexist for some time with capitalist enterprises in trade and industry within the capitalist mode of production. However, because of technological development and capitalism's inherent tendency towards capital accumulation, simple commodity production in agriculture would inevitably be swallowed up by capitalist large-scale operations (Bergmann 1977). Some of the farmers would be able to capitalize into large-scale operations, while the majority of farmers would disappear through proletarianization. It must be added that Marxists often disagreed on the role of petty bourgeois commodity production like family farming in socialist society. In USSR there was extensive discussion in the leadership about the role of the family farmer (kulak) in socialism, but after their success during the New Economic Policy (NEP) period (1921-1928), these farms were dissolved and the family farm class eliminated during the Stalinist oppression in the 1930s. If not already clear, this linear model of the development of capitalism into socialism was eventually confirmed to be wrong when the Soviet Union collapsed in 1991.

In socialist countries, as in in the former Soviet Union and their allied socialist countries, farmers' co-operatives and collectives of different types were developed in order to organize and modernize the agricultural production (Bergmann 1975). These co-operatives and collectives were in all cases subordinated to the state command economy under strict Communist Party control, without the ability or possibility to be autonomous economic units like in the market economies of capitalist countries such as Norway.

In socialist Cuba, starting with the second agrarian reform in 1963, farmers' co-operatives both in production, processing and distribution of food were part of the centrally-planned economy of credit, technology and other resources. These "collective co-operatives" were not allowed to pursue accumulation of capital (Bye 2019). After the Soviet bloc collapsed in the early 1990s, and particularly after Raúl Castro took over as President and introduced a significant economic reform programme, family farming has become more predominant and farmers' co-operatives have gained more space in the Cuban economy – but the State and Party is still very reluctant to relinquish its control.

One of the interesting questions in Cuba has been whether small farmers in cooperation with consumers would be allowed to develop short and sustainable supply food chains. In recent years, new forms of cooperation have also emerged in capitalist countries like Norway, and some of these co-operatives are organized by members of the new food movements, producing and marketing quality local foods or organic foods.

In this article we ask if there could be a convergence of these new types of co-operatives in Cuba and Norway and if there is something to learn from a comparison of how these two food regimes have developed. Will there be a hybridization between the previous and new modes of production, or will the previous vertical State and Party control still prevail? Alternatively, will the inroads of capital and extension of market relations lead to a full-scale industrialization and capitalization of Cuban agriculture?

When comparing agriculture in Cuba and Norway, it is important to keep in mind that gross national product per capita in Cuba in 2017 (US \$6580)², equals roughly the gross national product per capita in Norway in 1935 (55 000 NOK), which means that the years just before and after WWII are especially interesting for comparison.³ In addition, we know that the Cuban economy until the late 19th century was a sugar economy based on a large class of slaves. Even after the abolition of slavery in 1886, a very similar plantation production system, with sugar as the completely dominant economic sector, prevailed until the 1959 Revolution. The Revolution nationalized the sugar plantations and converted them to state ownership but did little to diversify agriculture. Norwegian farmers, on the other hand, became largely self-owners in the 19th century, after having maintained substantial self-ownership without an oppressive nobility throughout the Middle Ages.

A brief historical outline of agricultural cooperation in Norway

The spread of agricultural co-operatives was a key factor in the modernization and industrialization of Norwegian agriculture. Among farmer leaders during the 1900s, agricultural co-operation was seen as the best means of developing industry and winning a share of the growing food markets in the cities (Almås 2004). Co-operatives were built to defend the interests of small farmers, who did not have much economic power individually. During the first part of the 1900s the number of input and output co-operatives grew. The development of co-operatives in neighboring Denmark was seen as a model, where processing and sales co-operatives in meat and dairy production at local level were able to develop nationwide organizations with export branches at the turn of the 19th century.

Milk farmers were particularly efficient local organizers in Norway. The Norwegian Milk Producer Association - as an umbrella organization of dairies - was founded in 1881, but it was only through reorganization in 1921 that it became a real national organization of dairy co-operatives. Purchasing and slaughtering co-operatives emerged from local level activities between 1900 and 1920. In 1917 there were 800 purchasing pools with 26,650 members, and later these pools were merged into 7 regional purchasing co-operatives. A farmers' co-operative bank was also established in 1918. The co-operative committee of the Royal Norwegian Society for Development (Det Kgl. Selskap for Norges Vel) played an important role in the promotion of co-operatives, with idealistic co-operative consultants from the Society travelling throughout the country to set up new co-operatives.

The 1930s was an especially hectic decade, when farm sales co-operatives were set up to stabilize the national food market under the Marketing Act. The background to these actions was the severe fall in producer income from meat, pork and dairy products during the depression in the late 1920s. World market prices also fell, partly because many countries dumped their surpluses. The price fall hit those farms hardest that were most integrated into the market economy. When their product prices fell, they produced more to get out of their debt squeeze. A tripling in the use of imported concentrated feed in the 1920s made it also possible for farmers to increase production without having more arable land available on their farms. There was also a revolution in transportation with better roads and gasoline cars opening access to city markets for farming communities. The purchasing power of the city

dwellers decreased, however, because of bankruptcies, high unemployment, lowering wages and labor conflicts in the 1920s and 1930s.

In 1929, the same year as the New York Stock Exchange crash, the Norwegian milk price fell dramatically to almost one third of the level of 1920. One reason for this severe fall was that most dairies tried to get their milk to town and sell it as fresh milk, which was better paid than butter and cheese. In response to this crisis farmers demanded organizational and political action. Mass meetings were held in the provinces where hundreds of farmers turned out to discuss collective action. Eventually, more and more support built for a joint proposal from the farmer leader Jon Sundby and a professor at the Agricultural University - Rasmus Mork. Their idea was simple but radical: regional milk pools should buy up all milk at a fixed price. The milk would then be sold to the dairies for processing at a higher price for those having the most profitable production (consumption milk) and at a lower price for those producing less profitable products (cheese, butter and dried milk powder). Consequently, competition on the sale of milk for fresh consumption in the largest and most attractive markets was eliminated, and payment to producers of milk was maintained at a common and higher level than would otherwise have been the case. A marketing fee on all milk sold to the pool was introduced to finance exports, information campaigns and issues relating to hygiene and milking equipment.

This Sundby-Mork plan won wide support in farmers' circles, and on June 6th, 1930 the Parliament passed the Marketing Act giving the co-operative pools quasi-public authority to administer the milk market and to impose a variable marketing fee on all milk products. A marketing council with representatives from producer co-operatives, retail business organizations and consumer organizations was set up to determine the marketing fees and to supervise the effects of the Marketing Act. Pool membership was voluntary. The plan won wide support in the Eastern Provinces in the late spring of 1930, and by January 1932 milk farmers in the whole country were organized into 8 milk pools under the reorganized Norwegian Milk Producers' Association.

The Marketing Act was the most important step to regulate Norwegian agricultural production in the 1930s, and markets were stabilized as a result of this new system. The Act self-evidently worked to stabilize markets, which gave legitimacy to the national co-operatives, as well as to market regulation of food production. The same story may be told for other products: pork was brought under the Act in 1931, sheep meat in 1934, and beef and veal in 1940. This co-operative marketing system was relatively efficient compared to other public Marketing Boards introduced in other countries at the same time. Giving the farmers responsibility through their co-operatives was very important, especially in times of overproduction. The main features of the Norwegian system of agricultural regulation, based on an alliance between the farmers' co-operatives and the Norwegian state, was consolidated and has survived until this day.

The Norwegian co-operative marketing system was created in an environment which provided numerous foreign examples. In the US, the 'Capper-Volstead Act' referred to as 'the Magna Carta of Co-operative Marketing', was enacted in 1922. The Capper-Volstead Act established the legality of co-operative marketing associations in the US, exempting them from prosecution under antitrust laws. However, the McNary-Haugen Farm Relief Bill⁴, which was designed to establish a mechanism to determine fair prices, was vetoed by President Calvin Coolidge. This bill, including the selling of the surplus abroad at world

prices, financed by an equalization fee to recoup any losses, was in principle close to the Norwegian Marketing Act. Despite attempts in 1924, 1926, 1927, and 1931 to pass the bill, it was vetoed, and not approved. Therefore, a regulatory system based on collaboration between the Government and agricultural co-operatives similar to the Norwegian model was never enacted in the US.

The success of farmer co-operatives in Norway is partly explained by the relatively high educational level of Norwegian farmers. In the late 1920s and early 1930s, most political parties, with the important exception of the Conservative Party, became supportive of co-operative organizations as a means to fight the farm crisis. This strong level of political acceptance was an important factor in obtaining a parliamentary majority for the Marketing Act of 1930. Another driving force was the growth in national food markets during industrialization. Meat and pork markets almost doubled between 1917 and 1939, and the market for fresh milk consumption almost tripled in the same period. After World War II, food markets rapidly expanded. Farmer-owned dairies, cheese factories and butcheries throughout the country were organized in regional co-operatives specialized for their markets (Almås 2002). Part of their strength was given to them by the quasi-public authority to regulate markets under the Marketing Act. This act has been continuously defended by center-left political parties, thus far surviving all attacks from neo-liberal politicians and international trade negotiators pushing for a more liberalized food market in Norway (Almås 2015).

Agricultural crisis and farmers between left and right

There was an intense political debate as to what to do in order to get farmers out of the debt squeeze in the 1930s. On the one side, the Farmers' Party and the Labor Party wanted to establish a State Lending Agency to assist indebted farmers with direct cash support and cheap loans. The Liberals and the Conservatives opposed the creation of a state institution, and favored public support to pay interest in addition to increased product prices. As the crises dragged on, a debt crisis response movement – *Bygdefolkets Krisehjelp* (The Rural Crisis Help) – emerged across the country. In some areas of the country, this organization was able to block forced sales, and militants from all political parties were recruited. This populist movement put pressure on the parties in Parliament, and in 1932, the Liberal Party switched sides and supported the formation of a State Lending Agency for Farmers.

The Labor Party was the big winner of the election campaign in 1933 under the slogan “Work for everybody”, and received 40 per cent of the votes. For the first time they won substantial support in rural areas, mainly among farm workers, farmers and fishermen. The new winning alliance between the Labor and Farmer parties agreed to increase the portfolio of the State Lending Agency for Farmers in 1934. After the completion of negotiations between the Farmer and Labor parties, crisis grants were given to agriculture, forestry and fishing, as well as to municipalities to fight off unemployment through road building and other public works. Against initial skepticism in the Labor Party, Labor leader Johan Nygaardsvold won majority support for the a historically decisive Crisis Settlement with the Farmers' party. This was one of the most important building blocks in the Norwegian case of the Nordic Model, establishing a social pact between capital and labor in the industrial sector. In 1935, Mr.

Nygaardsvold became the first Prime Minister in a Social Democratic Norwegian government, representing a political party that until 1923 had been campaigning for armed proletarian revolution.

Alliance building to fight the farm crisis was not only a Norwegian phenomenon at that time. In 1933 the Swedish Social Democrats struck a deal with the Farmers' Party, and in Denmark the Liberals and the Social Democrats struck an agreement on tariffs and trade policy in the same year. In essence, Social Democratic Party measures in Scandinavia to fight the crisis were of Keynesian type, spending public money to provide employment, keeping the economic wheels turning.

From being the most radical of the Nordic social democratic parties espousing highly revolutionary communist rhetoric, the Norwegian Labour Party became a pragmatic party running for office within the Parliamentary system while accepting the basics of a market economy. Many observers were astonished, as they chose for their first bedfellow the formerly most anti-socialist party: The Farmers' Party. The Crisis Agreement of 1935 was the most important political move in stopping the spread of right-wing populism in the Norwegian Nazi party among Norwegian farmers and the rural poor (Bjørngum, 1983). Under the slogan "Town and land, hand in hand", individuals from new social groups now came into Government positions, formerly mainly filled with people from the upper classes (Furre 2000). In addition to the symbolic function of the Crisis Agreement, a new agricultural regulation system now was in place.

State regulation still has a leading role in the development of Norwegian agriculture. Compared to the deregulated capitalist agricultures of Australia and New Zealand on the one side and the classical socialist mode of production in the former Soviet bloc on the other, the Norwegian model of agriculture may be seen as a hybrid form of regulated market economy. Even though Norwegian farmers now have less influence in the market place because of the increasing power of the large retail chains (Bjørkhaug, Almås and Vik 2015), they do still have a voice. In the market, the farmer-owned agricultural co-operatives are still strong in the meat and milk sector. And the yearly Agricultural Agreement, negotiated between farmer organizations and the State, is still an important institution in the governance of Norwegian agriculture. However, this Norwegian blend of democracy and market economy is under pressure from neo-liberalism, partly because Norwegian politicians on the right are advocating on behalf of global market forces, and partly because Norway is increasingly bound by international agreements.

There has also been a shift from the productionist political orientation that dominated up to the early 1980s, to a sustainable agriculture orientation from the mid-1980s. The explanation for this shift away from productivism was that industrialized agriculture - with its extensive use of fertilizers and pesticides - was faced with increasing criticism for polluting the environment and destroying biodiversity. As we will see below, governmental support for new agri-food movements - like organic farming and the sale of quality foods directly to local consumers - grew from the 1990s onwards.

The role of the new agri-food movements in Norway.

As a reaction to the industrialization of Western agriculture - with increased use of chemicals and fertilizers and associated contamination - an agricultural production crisis emerged in European and other advanced capitalist countries (Ploeg, 2006). Out of this agricultural production crisis, an alternative food movement towards organic agriculture and local food distribution emerged in the 1960s and 1970s. Due to increasingly dominant food chains, there was also a demand for alternatives to bulk commercial products with unclear origin of production: “food from nowhere” (McMichael 2005, Campbell 2009). Initially, this alternative food movement was dispersed, disorganized and very diverse with very low market share. However, the alternative food movement grew and increased its market share in the 1980s and 1990s. This transition process was described by Goodman (2003) as a paradigmatic change - a shift from productivism to post-productivism.

According to Marsden (2013), “Transitions may be viewed temporally as periods in which opportunity for change opens up within a system (i.e. a socio-technical regime made up of dominant economic, industrial, political and scientific rules and assumptions) to produce something disconnected to earlier supporting structures, as the dominant system struggles to respond to surrounding pressures”. Following Marsden’s approach, Manniche and Sæther (2017) claim that “...transition theories include three interacting societal levels; **production niches (1)** which are the nexus for innovations and new technologies, and the **socio-technical regime (2)** including the dominating technologies, practices and policies, which determine a certain field of social activity. The third level is the **socio-technical landscape (3)** which is the exogenous context including cultures changing only slowly”.

When the new agri-food movement like organic farming and farmer’s markets appeared in the US and Europe in the 1970s, it did not initially spread much to Norway. Norwegian farmers were mainly skeptical, as they were pleased to be served by the well-organized Norwegian agricultural system. Due to low drug use, good animal welfare on mainly small and medium-sized farms and high confidence that Norwegian-produced food was ‘clean’, there has been low demand for organic and alternative food in Norway. Norwegian production of these products has exceeded demand with the exception of vegetables and fruit. However, Norwegian consumers asked for more variety in shop shelves and organic farmers pressured to get more support from the agricultural authorities.

In Norway, the new social movements around local and organic food have played an important role in the agricultural development over the last three decades. These farmer-led social movements have developed closer and direct relationships with consumer groups and at first the traditional agricultural cooperatives like *Tine* and *Nortura* were skeptical, partly because they were afraid of losing market share (Almås 2015). However, later on this skepticism has diminished as it turns out that the development of organic food, locality food, artisanal food, and short-supply food chains to a small extent are in competition with the volume products. In Norway, there are now a number of examples of cooperation between the new forms of agricultural cooperation and the established agricultural cooperatives (Bjørkhaug et al 2015).

As Stræte (2008) has shown, the qualities of food are constructed in relations between different participants along the supply chain, consumers included. Comparative studies in different European countries shows that the development of specialty food chains needs new food networks in order to create other modes of quality than the standard (Stræte 2008). When producers of organic products and local foods of special qualities need to scale up because they achieve increased demand for their products, it is especially important to maintain and strengthen the quality of their products to achieve distinctiveness in more competitive markets. While local food producers are growing, they tend to converge either towards niche markets or mainstream commodity markets, and in the last case they may sacrifice higher quality and value (Münchhausen et al 2017). The most important quality that contributes to distinctiveness and increased value seems to be the traditional handicraft production processes (Kvam et al 2014).

Internationalization of Norwegian agriculture

At the turn of the 20th century, Norwegian agriculture was increasingly internationalized. This internationalization has been a long process, from mechanization in the 1950s, via industrialization and environmentalisation in the 1980s, to liberalization and deregulation pressure from the World Trade Organization (WTO) in the 1990s. Norwegian agriculture is shaped by its ecological, cultural and socio-political environment, which has unique qualities. Without the catch from fishing and hunting, without the lumber from the forests, without the system of pluri-activity, securing livelihoods from the scarce resources of arable lands, farming for a living in Norway would have been impossible. Grain imports, still necessary in this country despite decades of increasing yields, had to be financed by foreign trade.

Paradoxically, there are both reasons for protection and for keeping an open Norwegian economy. There is a delicate balance in Norwegian politics between those forces, and to date no Government has sold out agricultural interests. A strong co-operative movement and strong farmers' unions may explain why agricultural interests are still influential. It is also important to note that the self-sufficiency of land-based food in Norway is less than 50 percent. However, the level of self-sufficiency is still significantly higher in Norway than in Cuba (now about 30 percent), which is a great paradox, if we compare the respective climate and land resources.

Political regulations have played and are playing an important role in Norwegian agriculture since WWII, including when it comes to the organic food and farmers' markets. These new agri-food movements draw political support from across the whole spectrum of political parties. So far the institutional robustness of the agricultural sector has provided a protective cocoon against further liberalization. At the rural grass roots, as well as in the Norwegian public, there is still broad popular support for a small-scale, multifunctional agriculture all over the county.

The formula of multifunctional agriculture (Almås 2015), which is emphasizing non-trade functions like cultural landscape, biodiversity and rural employment, may not be enough to secure Norwegian farmers a competitive capacity on the home market. Farm subsidies are

maintained at a high level and import restrictions with relatively high tariffs are still in place. Despite the highly regulated and subsidized Norwegian agriculture, the number of farms is decreasing by two to three percent each year. Even though the remaining farmers are better off than before, they are worse off than the majority of the population. Despite diversification into niche markets, with local quality foods and export strategies for special products, the home market for standard meat and milk products is essential for Norwegian farmers. The outcome of the present trade negotiations with the Latin-American trading bloc MERCOSUR pushing for agricultural exports of grains and meat, may be the toughest test for Norwegian agriculture so far.

The introduction of socialist agriculture in Cuba

After Marxist-inspired revolutions in Russia, China, Eastern Europe and later Vietnam and Cuba, state-organized and government-controlled co-operatives were set up in all socialist countries (Bergmann 1985). In Cuba, the traditional family farming sector, which had existed in parallel to plantation agriculture, was diminished by political force after the revolution in 1959. The large-scale sugar plantations and coffee production units were taken over by the state. Tobacco growing remained predominantly in private hands, while marketing and export fell under state control.

Satisfaction of domestic food consumption was among the main objectives of Cuba's 1959 Agrarian Reform Law (Alvarez 2004). This law, and the discussions leading up to it, was considered a pivotal element in the early days of the Cuban Revolution, under heavy influence of Che Guevara. It was based on a recognition that: "[T]he peasants who belonged to our first guerrilla armies came from that section of that social class which most strongly shows love for the land and the possession of it; that is to say, which most perfectly demonstrates the petty-bourgeois spirit. The peasants fought because they wanted land for themselves and their children, to manage and sell it and to enrich themselves through their labor."⁵

This first agrarian reform in Cuba was therefore quite moderate compared to the restrictions in private property in other socialist countries. According to the French socialist agro-economist René Dumont, however, incentives even in this phase were not based on relative performance efficiency but on purely ideological criteria (Dumont, 1970 p. 29-31; p. 50-51), providing little incentive for expanded agricultural production. Dumont criticized the Castro-led Government's intention to create large state farms for the entirety of agriculture production and claimed that Castro was excessively influenced by the Soviet *sovkhosy* system of state agricultural property (Thomas, 1971 p. 548).

However, the agriculture policy was soon further radicalized for two main reasons. First, that many private farmers and the rural bourgeoisie were supporting the armed counterrevolutionary forces operating in the country at the time, supported by the CIA and Cuban exiles in Miami. Second, because large farmers were decapitalizing their holdings, probably fearing their potential expropriation by the state (Bye 2019). Therefore, when revolutionary Cuba's agrarian policy entered a second phase with the 1963 Agrarian Reform, it had a much clearer anti-private and pro-collective character.⁶ The land of most farmers with more than 67 hectares was expropriated, giving the State control over 70% of the land. This particularly affected medium-sized farmers.

Gradually the remaining private peasants and farmers were organized — under quite heavy pressure—into co-operatives with limited autonomy with the purpose of socializing their holdings. Agricultural Production Co-operatives (CPAs) were explicitly based on collective production, whereas Co-operatives of Credit and Services (CCSs) were based on individual property or tenure, with collective access to irrigation, services (including transport) and credits. Neither of these co-operative forms, and not even the remaining individual farmers and peasants, normally had the freedom to decide which crops to produce. In Cuba’s centrally planned economy such decisions were taken by the agricultural bureaucracy, which also established production quotas and prices (typically quite low) for sale to the monopoly state purchase agency, *Centro de Acopio*. There were exceptional ‘genuine co-operatives’, but even CCSs would normally be put under strict state and bureaucratic control.⁷

There was a clear tendency that the more collective forms of production received preference (in the following order: state, CPA, CCS, private). The peasants were also—as with other interest groups in Cuba—organized under central and vertical Communist Party control, through the National Association of Small Agriculturalists (ANAP). Fidel Castro later emphasized the importance of promoting “superior forms of production for land socialization”, with the final goal of no longer having any independent peasants (Pampín Balado & Trujillo Rodríguez, n.d). Che Guevara’s promise to the peasants that had fought for the Revolution that they and their children would manage their own land, gradually lost its value (Bye 2019).

The transition of socialist agriculture in Cuba

After the collapse of the Soviet Union in 1991, Cuba lost its barter trade market for sugar with the former Eastern Bloc, which was a large shock to the Cuban economy. Imports from the former Soviet Union of oil, cars, tractors, machines and spare parts in exchange for Cuban sugar vanished. Because the sugar industry had problems competing in the world market with low prices due to dumping by the EU and the US, as well as the completely obsolete state of the sugar mills, Cuba had to rely more on their own resources for food and industrial products.

After many years of hardships and adaptation to the new situation, the Cuban economy started a slow recovery. In 2007-2008, further reform of the command economy was initiated in order to open up to more market mechanisms. The opening up of agriculture to allow more private initiatives has been seen as one of the most crucial aspects of the Cuban economic reforms, also in terms of potential political effects. It is not without reason that Fukuyama (2011) puts a primary emphasis on the role of peasants in his metaphor of “*getting to Denmark*”. The economic and social reform *Guidelines* approved by the 6th Party Congress (2011), established the goal (in point 177): “...achieve that this sector (agriculture) will progressively contribute to the country’s balance of payments, in order to cease being a net importer of food”. This goal can be traced all the way back to the early days of the Cuban revolution, when Fidel Castro, in a September 1959 speech, announced the intention of achieving alimentary independence, going in detail through a long list of agricultural products and specifying what quantities had to be produced and how much this would represent in monetary savings.⁸

This goal was never reached. When Raúl Castro initiated his reforms, Cuba was still importing 60-70% of its food, spending up to 2 billion USD annually of its very scarce foreign currency on this, without ever getting rid of chronic food shortages and prices that were far above the purchasing power of ordinary salaries. As argued by most Cuban agricultural economists (García Álvarez & Nova Gonzáles 2013), only by allowing private peasants and farmers more autonomy to produce and commercialize their products will agricultural productivity rise.

The structural changes in agriculture needed, according to these experts, to include property or user rights, access to production implements and credit, transport, and, not least, freedom to sell products in an open market—wholesale or directly to consumers including to hotels and restaurants (state as well as private). The potential option to venture into industrial processing of food products—for instance through second-degree co-operatives – would give the peasants an extra incentive. This would imply a dramatic shift from state control to market conditions under state regulation, a shift that would also unavoidably have repercussions on the general balance between plan and market in the economy at large.

Most of these criteria were at least partly covered by the Reform Guidelines, but were only half-heartedly implemented. Some important steps have been taken towards more autonomy for agricultural producers. But the evolution of policies has not been very clear and there is no real land reform aimed at extensive privatization of land in view.

The most important change took place in the land tenure structure. Private farmers were allowed to rent land in order to produce and sell food products, both to the state and to consumers. The non-state share of land tenure increased dramatically from under 20% to around 50% of agricultural land from 2007 to 2012, before it started falling again to around 40% in 2016.⁹ This land is managed by family farmers, either from service and credit co-operatives (CCS), the surviving private peasants, or by peasants leasing land from the state (through what is called *usufructo*). In most cases, all these groups are now organized into CCS. Crops may include all grains, grasses for their milk or meat animals and fruits and vegetables.

The market reforms also resulted in a growing share of *reported* production being sold outside of state channels. The *Acopio* structure, infamous for its inefficiency, was gradually and significantly scaled down (it was actually at one point expected to vanish completely), and the percentage *reported* to be sold through the state fell from about 80% before the reforms were introduced to about 50%, the rest going through non-state channels (Frank, 2013 p. 270).

Early in 2016, however, an anti-market reversal kicked in, supposedly in order to reduce speculation and the black-market economy. Efforts commenced to restore price controls on most basic products, and to restrict the distribution and sale of food products. Privately owned lorries were ordered to unload at state markets instead of retail outlets, and most street vendors – which had become an important market outlet – lost their licenses or were scared off the street (Wig, 2020). The state's official share of food sales returned to its previous level or even higher. The main effect of these restrictions may have been the consolidation of two parallel market segments, particularly in Havana: the relatively better off plus private restaurants would find markets where price controls were not respected—in spite of the frequent presence of inspectors—and good quality products were available; whereas lower-income groups could find some basic products at other markets where supply was limited and quality was lower.

The flip-flopping policies in relation to wholesale markets are quite illustrative of how complicated the issue of food sales channels has been, and how difficult it has been to

implement this part of the 2011 Guidelines. The first legal and official non-state wholesale markets were opened in 2014, but closed again after a couple of years after heavy criticism in the official press for “legal violations, bad management, corruption, lack of control”.¹⁰ With new restrictions against self-employment being announced in 2017 and 2018, a decision was taken that no new permits would be given to sell agricultural products in either wholesale or retail markets.

The lack of wholesale access for agricultural implements represents an even more serious problem. Access to transport has also been a critical factor for non-state producers, going through much of the same zigzagging movement. As a result of all these shortcomings, it has been documented that a significant proportion of agricultural production never reaches the markets: food products are often simply left to rot at the farms.¹¹

While action was never taken on decisive parts of the reform agenda referred to above, and in first-half 2020 appear to be further away from implementation than ever, things are happening in the *informal Cuban reality*, fast outdistancing legality. Production goods and implements are stolen from the state and traded on the black market; food products are being increasingly sold outside of official state and other legal channels, e.g. to hotels and restaurants (notably to private restaurants, *paladares*). Although the state in most of the country maintains a formal monopoly, informal private wholesale markets have emerged around major urban areas.¹² Credit in convertible currency is being frequently obtained by private producers (e.g. through family remittances from relatives abroad), thus permitting farming on a much larger scale than one could expect from formal regulation.

Towards a dual-track system of Cuban agriculture

“Capital accumulation” and “concentration of wealth” have been prohibited in Cuba for ideological reasons. With the new 2019 Constitution, more emphasis will be on re-distribution through taxation. Yet, there is no doubt that many successful private farmers have managed to accumulate considerable amounts of cash—even in convertible currency—but without the means to convert it to productive purposes.

The government was unwilling to allow more independent and autonomous forms of organization among peasants and farmers, still depending on a highly centralized and strongly Party-loyal ANAP. The reluctance of ANAP to support opportunities for individual farmers was again confirmed when the Obama administration - during the bilateral US-Cuban talks for normalizing relations - opened up the US market for the import of privately-produced coffee and other products. This ideological resistance has also made it impossible for co-operatives to achieve real independence from state and party. Fear of losing political control has effectively impeded the agency of farmers to push the political agenda towards reforms that give them more autonomy and economic opportunities.

On a more general level, it may seem that Cuban agriculture is moving towards a dual-track system: food for the domestic market is increasingly produced on middle-size family farms. The plantation and agro-export economy (historically completely dominated by sugar, later with an important citrus component) is still dominated by large state farms - some of which is under military corporation management - has drastically reduced in importance: sugar production is reduced to under 20% of historic level. There has been an ambition to attract foreign investment to the agro-export sector and/or combining it with bio-energy production; so far with limited success. The exception to this pattern is the production of two export

products- coffee and particularly tobacco - both now mostly in the hands of private farmers, while the entire export chain is tightly controlled by the state.

As we have seen, the relatively independent producers dominated by small-scale land holdings increased quite dramatically in relative importance during the first years of the Raúl Castro era (although it dropped again during the last couple of years), also reflecting a strengthening of family farming at the expense of large-scale cash crop production. The continued state resistance to providing agricultural producers with more autonomy and incentives, however, has not permitted family farming to exploit its comparative advantages to drastically increase Cuba's food self-sufficiency, particularly of staple goods.

Cuba is still far from meeting market conditions in agriculture, and the latest statistical information confirms that the modest program of agricultural reforms has failed to boost production. The overall trend during the Raúl Castro era is that levels of production of beans and corn have increased significantly; potatoes, tomatoes and onions have failed miserably; while production levels of rice, milk, cattle meat and egg have been more or less static (Bye 2019, p.159).

The following conclusion is unavoidable: Cuban agriculture never took off to reach self-sufficiency before the Raúl Castro reform era, and the last decade of reforms has also failed despite their intentions to take the decisive step toward feeding the Cuban people based on domestic production.

A similarly disappointing trend is that the production failure also has led to constantly rising food prices. It was reported towards the end of 2015 that the price for a basket of the most common food products had increased by 49 per cent between 2010 and early 2015,¹³ to levels that only the new groups of affluent Cubans could afford. Then-economy Minister Murillo claimed early in 2016—hardly exaggerating—that low income Cubans spend 75% of their salary on food.¹⁴

It is quite telling that the World Food Programme (WFP), during 2015-2018 has operated a program benefitting 900,000 persons in 43 municipalities and six provinces around Cuba.¹⁵ These negative production and price figures must be very disappointing for the government. This stands in stark contrast to China and Vietnam, where far more consistent market reforms in agriculture have led to impressive success in increasing production.

The amount of hard currency spent on food imports has fluctuated between 1.7 and 2 billion USD, practically at the same level as before the reforms were launched. Up to 70% of domestic food consumption is imported (or, in other words, self-sufficiency stands at only 30%).¹⁶ It must therefore be concluded that Cuba's dependence on food imports and the amount the country is spending on these imports, have hardly been reduced during the reform period.

This fact becomes particularly paradoxical if we compare the prices paid by the state to what the state has to pay when importing the same products: when taking the distorted Cuban currency rates into account, the state pays the domestic producers only around 45% of the price for imported beans, 30% for rice and 20% for milk.¹⁷ *So the big question is: why is the state not willing to pay better prices to domestic producers, and generally incentivize domestic production more, when such huge amounts of foreign currency are spent on food imports?*

In a situation where state-controlled agriculture has failed, and the government maintains its extreme caution against a too far-reaching privatization of the economy, one should think that a robust cooperative sector would be an attractive intermediate alternative, particularly if

successful experiences from other countries may be documented. The other intermediate alternative, *usufructo*, also needs to be beefed up with more long-term (inter-generational) security, production autonomy and direct market access for the production to grow.¹⁸ In both cases, the control mania of Party and bureaucracy represents a barrier against the liberalization of productive forces in the agriculture. Access to re-invest profits in mechanization and improved production equipment is as another challenge for Cuban farmers in the present agriculture structure.

A comparative analysis of agricultural cooperation in Norway and Cuba

In Norway, agricultural co-operatives have developed in four waves. In the first wave in the late 1800s and early 1900s, farmers established small dairies and butcheries in their communities. In the late 1920s and early 1930s, during the big economic crisis in Norway and elsewhere in the capitalist world, milk and meat prices fell very significantly, many fell into debt and the number of bankruptcies in agriculture increased dramatically. As a political solution to that income and debt crisis in agriculture, the farmer-controlled co-operatives organized national co-operative pools which were given quasi-public authority under governmental law to regulate food markets. During this second wave, most agricultural products were brought under state regulation, and prices to farmers were stabilized.

After World War II, because of new transport and cooling technology and increasing urbanization, there was a third wave of agricultural co-operation, where local dairies and butcheries merged into larger, regional units. During this third phase of co-operative development, most farmers all over the country joined milk, meat, input and sales co-operatives at the regional level. In the 1990s, the Norwegian agricultural co-operative movement went through a fourth wave of organizational and industrial development, where the regional co-operatives were merged into national units which developed their own market brands. The large Norwegian co-operatives in dairy and meat (*Tine* and *Nortura*) are now some of the largest food companies in Norway still controlled by family farmers through democratic procedures. *Tine* has a market share of 85 percent of the total dairy product market, while *Nortura* has an average market share of 56 percent of the meat markets.¹⁹

If we compare the Cuban situation with the transformation of Norwegian agricultural co-operatives from local via regional to national food companies, there are four factors to be observed:

1. According to the first principle of co-operativism²⁰, which states that membership in a co-operative is open and voluntary, farmers in Norway were allowed to form co-operatives without governmental interference (Almås 2004).
2. Norwegian agricultural co-operation was built stone by stone from the local to national level, with many setbacks. The financial settlement to farmers for their delivered products took the form of a yearly dividend paid to the members in relation to their sales. This principle was important to retain the farmers' loyalty to the co-operatives.
3. The co-operative principle of one-farm-one-vote was maintained. In the 1990s, two votes were given to each farm so that the women had the right to vote alongside men.
4. As the Norwegian economy developed into a full scale industrial and later service capitalist economy, the original local co-operatives developed into second-order nationwide co-operatives.

The state's involvement in the establishment and operation of the co-operatives in Cuba has delayed the development of cooperatives as an independent economic sector in Cuba. Co-operatives have largely been considered to be part of the centrally planned state economy, under strict political control by the Communist Party. While the economic reform programme of 2011 seemed to identify more co-operative independence (with second degree co-operatives, non-state wholesales, new urban co-operatives) as a crucial part of economic rehabilitation, this principle was never really implemented. The international co-operativist principles were for the first time introduced in a training manual authorized by the Ministry of Agriculture in 2013, prepared by UNDP and financed by the EU.²¹ But resistance against its active use proved too strong, in spite of the obvious success of the more independent-minded co-operatives²². In 2020, "co-operatives" are still seen by most Cubans as just another form of state property, although there are recent signals that a comprehensive and more far-reaching co-operative law will finally be introduced.

Likely transitions in Cuban politics and agriculture

Cuba has had its first post-Castro President since April 2018. Miguel Díaz-Canel is a 59-year old civilian with a life-long career climbing through the Communist Party structure from local and provincial to central level. He had a record as a rather liberal and popular leader, but in his new position he has so far vowed to stick faithfully to the old line. Raúl Castro continues as Party leader, and the Politburo is still dominated by men in their eighties: the generation that made the Revolution in 1959 and the hardliners behind the counter-reforms. Díaz-Canel has hardly any power base on his own, independent from the old men that handpicked him. The inevitable generational change has only carefully started, supposedly to culminate with the 2021 Party Congress when the old guard – many of whom are approaching 90 years of age – has no other alternative than leaving all formal positions to party apparatchiks of Díaz-Canel's generation. Cuba now finds itself in a *critical juncture*, with a deep economic crisis and a political crisis of legitimacy, further aggravated by the crisis in Venezuela and the Trump administration's appetite to finish off the Cuban revolution as a by-product of regime change in Venezuela (see Bye 2019ⁱⁱ). Sooner rather than later, a change of paradigm will have to take place, probably starting with the economy but probably also with political impacts.

Given the critical state of food provisions and the bleeding effect this has on foreign currency, agricultural policies may become a starting point for deeper economic and political reforms. There is reason to believe that this situation will only strengthen the need to return to Raúl Castro's original reform agenda, and perhaps bring it several steps further. That would imply giving the peasants and farmers more autonomy and participation in decision-making over the entire production-distribution-sales cycle in agriculture, pulling the state out of wholesale on the input as well as the output side and opening this space for non-state actors, allowing producers to organize as an interest group independent of state and party control, and not least giving the co-operatives real autonomy and a strong say in agricultural markets including through second-degree co-operatives.

When Cuba comes to this turning point, we suggest that the historical evolution of agricultural policies in Norway may become a very interesting reference case, as an example of a socialist-capitalist compromise. Compared to its pre-revolutionary agricultural structure, there is today no landowner class in Cuba, the plantation economy is radically reduced, and most producers are peasants and small farmers. Cuba's agriculture is increasingly dominated by

what we may call family farmers producing staple food for the domestic market, with a potential and indeed a need to increase productivity quite dramatically. This is quite similar to the situation in Norway one hundred years ago. We imagine that Cuban agriculture could have a lot to learn from the Norwegian experiences when it comes to how family farmers started to cooperate along the value chain in the late 1800s and first half of the 1900s. Also experiences from recent development of value chains of local, regional and organic food production may be helpful in the present modernization of Cuban agriculture, perhaps in this case with a particular view to selling to the tourist market as well as export market niches for instance among the Cuban diaspora in Europe and North America.

The sticking point is obviously political. The Leninist linear ideological heritage retains a deep concern about independent farmers constituting some kind of a counter-revolutionary *kulak* class. With reasonable public policies and regulation and given the class composition of the present agricultural population, this danger will in our view be minimal. One could rather imagine that the danger would be to push the rural population towards reactionary positions if they continue to experience the complete exercise of control by the agricultural bureaucracy and centralist political power. By allowing co-operatives real autonomy, and not least by building second degree structures as permitted in the 2011 Guidelines, the agricultural economy could become a pioneer in the development of a strong mixed economy, and as a basis for the rehabilitation of a welfare state. Not least, a strong co-operative sector could allow for a more efficient wholesale function for implements as well as food products, and even for a certain level of industrialization of agricultural products. It would also be a laboratory for democratic practices in the country.

A major challenge is that the food distribution system in Cuba is mostly local and outdated. There is no cooling chain from producer to consumer and logistics are hampered by a lack of storage facilities and effective means of transportation. There are no formal wholesale dealers and the retail sector is mostly run by the state or private dealers selling what they produce themselves on the street (Bye & Hoel 2014).

Cuba's low self-sufficiency level can be seen in contrast to expectations in the early days of the Revolution. The French rural development economist Rene Dumont assumed then that Cuban natural resources should be sufficient to feed four times the present population of 11,5 million people (Bergmann 1975).

The major part of the agricultural production in Cuba may be called organic (Carolan 2016), mostly because fertilizers and pesticides are in short supply. However, Cuban consumers do not appreciate the social status of organic food, only segments of foreign eco-tourists do. Farmers and farmers' co-operatives in Cuba are currently producing "organic food", but these foods are not certified as organic. However, all kinds of tourism have increased rapidly in Cuba during the last years, and eco-tourism to rural mountainous and coastal areas are no exception.

Family farming and local food markets play an important role in the Cuban food economy today, and it will be interesting to see if the government will allow the small farmers to develop sustainable food supply chains together with urban consumers. However, the state socialist sector is still controlling most of the formal investment opportunities and the government controls all food imports (as well as exports).

The government also decides internal consumer prices in local Cuban peso (CUP). Many necessary staple food articles, like milk and grains, are rationed and the consumer prices on these products are set to a low, subsidized price. The major part of products from private farmers must be sold to the state at a fixed price. However, the farmers may sell surplus out of

a fixed quota directly to consumers in Cuban convertible peso (CUC), which is twenty-four times more valuable than the CUP. In reality, the black market plays a much more dominant role than what official statistics tell.

The future potential of cooperation to contribute to modernization and change in the agricultural sector

According to Nova (2006) the officially defined agricultural sector provides approximately 35 to 40 percent of calories and 35 to 37 percent of total daily protein consumed by the Cuban population. Agriculture employs close to one-fifth of the economically active population (ONEI, 2017), and it is estimated that four million Cubans depend directly on agricultural activity to maintain their standard of living (Nova, 2008).

The agricultural co-operatives in Cuba cannot exploit their full productive and innovative potential unless they are given greater freedom to design their own development. They must be ensured stable and predictable access to credit and the opportunity to set aside funds for further development. Co-operatives must also be able to access – and not least to prepare the heavily *marabú*-infested agricultural land in their vicinity so that they can expand their production. They must also be ensured delivery of spare parts and machinery and equipment from the state sector or via imports.

In Norway, new forms of agricultural co-operation have been established in the last ten to fifteen years within local food production and farmers' markets. These are smaller co-operatives originating among small-scale producers who have established direct sales to consumers or grocery chains. These farmers and food manufacturers often build on local traditional foods or raw materials of special geographical origin. Especially when it comes to cheese making, Norwegian small-scale cheese producers have won international fame in recent years with the title “the world’s best cheese” in two of the last three years.²³ Some of those producers prefer to be independent, while others take part in new forms of co-operatives to exchange skills, build logistics chains and market their products. Co-operation with the tourist industry is also prevalent among Norwegian local food producers.

In Cuba we also see that local producer and service co-operatives start developing local food products and serve them along with entertainment for tourists. As Nova and Galia show, Cuban agriculture has great potential for producing organic and agro-ecological products. “However, because of limited supply, demand continues to be unmet, and this has prevented the emergence of a domestic market for organic and/or agro-ecological production” (Nova & Galia 2018 p. 11). So far, agro-ecological products have mostly emerged as a spontaneous and unintended consequence of economic hardship and lack of access to agrochemicals. The high environmental and climate consciousness among Cubans – due to the country’s heavy climatic vulnerability – could be turned into more systematic policies in this direction, in production as well as marketing, towards foreign tourists as well as international markets. But this requires a stable delivery capacity that second-degree cooperatives could provide.

From the literature linking the food sovereignty movement and agroecology with family farming and the development of cooperatives within Latin American countries (Altieri 1999), several lessons can be drawn that are valid for Cuba. According to Altieri (2009), “the science of agroecology—the application of ecological concepts and principles to the design and management of sustainable agricultural ecosystems—provides a framework to assess the complexity of agroecosystems”. In an assessment of various grassroots initiatives in Latin America, Altieri and Toledo (2011) shows that the application of the agro-ecological paradigm can bring significant environmental, economic and political benefits to small farmers and rural communities as well as urban populations in the region. They argue that “an emerging threefold ‘agro-ecological revolution’, namely, epistemological, technical and social, is creating new and unexpected changes directed at restoring local self-reliance, conserving and regenerating natural resource agrobiodiversity, producing healthy foods with low inputs, and empowering peasant organizations” (Altieri and Toledo 2011).

According to Rosset et al (2011) agroecology played a key role in helping Cuba survive the crisis caused by the collapse of the socialist bloc in Europe and the tightening of the US trade embargo. “Cuban peasants were able to boost food production without scarce and expensive imported agricultural chemicals by first substituting more ecological inputs for the no longer available imports, and then by making a transition to more agro-ecologically integrated and diverse farming systems. This was possible.... because of the Campesino-a-Campesino (CAC) social process methodology that the National Association of Small Farmers (ANAP) used to build a grassroots agroecology movement” (Rosset et al 2011). As described by Rosset et al the spread of agroecology was rapid, largely due to the social process methodology and social movement dynamics which enabled the farmers to contribute significantly to increased production by the peasant sector. However, as Loconto and Fouilleux (2019) point out, based on experiences from the Global Dialogue on Agroecology directed by UN Food and Agriculture Organization (FAO) in different cities around the world, the spread of agroecology must be influenced by local civil society actors as ‘experts’ in order to institutionalize agroecology.

It may also be the case that small farms are more resilient to climate change than larger private enterprises and state farms. Many rural communities and traditional farming households seem able to cope with climatic extremes despite weather fluctuations. Many farmers “...prepare for climate change, minimizing crop failure through increased use of drought tolerant local varieties, water harvesting, extensive planting, mixed cropping, agroforestry, opportunistic weeding, wild plant gathering, and a series of other traditional farming system techniques” (Altieri 2009).

As the demand for local products with special origins and organic products grows in Cuba, we see an increasing need for training, consulting and supply of funds such as cooling technology and capital. It can even open up opportunities for export of organic products for obtaining hard-currency income from international markets. However, new forms of co-operative and private initiatives are hampered by a lack of resources and support from public officials at local and regional level. A key issue is the separation of government’s state functions from business functions (Mulet Concepción, 2015). As proposed by Nova & Galia, the creation of producer associations could be a way of promoting interaction among local production

entities (CCSs, CPAs, UBPCs, small farms and new landholders with usufruct rights). In the present political situation, these are in reality completely state-controlled. “New forms of inter-cooperation are needed that can function independently of the Ministry of Agriculture’s top-down system of relations.... producers’ associations.... would promote horizontal relations of economic collaboration (and) could be an important step in the process of separating state management from strictly business management” (Nova & Galia, 2018, p 10).

Conclusions

Family farming and independent co-operatives and second level co-operative associations will need to play an increasing role in the Cuban food production in the years to come. Small farmers are developing organic farming, local processing and short supply food chains at a slow pace, mostly because they lack capital for their investments and reliable logistics and a well-functioning cold chain. The main problem in Cuban agriculture is that too little food is produced for its own population, considering the country's resources. In addition, the produced food does not come to the consumers as fresh and good as it should have been. As Nova & Galia (2018, p 7) writes: “Despite the measures implemented since 2007, agricultural production output is insufficient..., showing that the productive forces (meaning the means of production plus human labor) in that sector remain at a standstill”. Agricultural co-operatives, both existing and new forms of cooperation, could to a large extent contribute to solving the challenges in food production, given that they were "released" in the sense that they were given the opportunity to function as a real third sector in addition to the state sector and the private sector.

Today's agriculture in Cuba faces two basic challenges: How can this country that is so rich in resources produce more food for its own population to reduce some of its imports and how can the alternative food networks, which also have some advantages with today's low consumption of fertilizers and pesticides, be developed to meet the demand that largely comes from tourists (and international markets)?. Cuban agricultural policy must be able to evolve along two strategies that are in part different: a volume agriculture that delivers high-quality, durable basic foods to the predominantly urban population, but also delivers local traditional food with craftsmanship to tourists and a growing Cuban middle class. The first strategy requires significant state effort with capital, transport, technology, training and guidance for family farmers and genuine cooperatives who want to develop their food business. The second strategy calls for the release of farmers and cooperatives that supply local food markets and foreign tourists traveling around Cuba. Both strategies require that the pricing mechanism be used flexibly to give farmers and cooperatives incentives to produce more of what is demanded, as we see today in China and Vietnam. This may be called a hybrid state-family farmer model, which could be a convergence of the Norwegian co-operative model and Cuban state controlled model. However, it is still unclear whether today's Cuban authorities are willing to and dare to take this middle route between command economy and state-regulated market economy.

As the old guard revolutionary leaders soon will disappear from decision-making positions, there is reason to hope that pragmatism gradually will trump ideology. Business as usual is no longer an option for a Cuban society in a deep economic crisis and with the legitimacy of the Castro generation gone. A new Constitution maintaining the overall Leninist political structure but with interesting reform potential in some aspects was approved in 2019.

However, there is not yet any willingness to let go of the old ideological dogmas of a vertical and centralist society, representing the structural impediment for the emergence of more horizontal economic and social structures like an autonomous co-operative movement. The agricultural economy may become a decisive arena for the necessary paradigmatic disruption of these dogmas.

Since 2012, Cuba also started experimentation with non-agricultural co-operatives (CNAs). It was widely believed that the co-operative sector could become a leading economic force, binding rural and urban economies together. Ritter (2016) speculated that this sector could employ as much as one third of Cuba's workforce, in a scenario he termed a "*mixed economy with intensified cooperativization*". This would imply permitting co-operatives in all areas, including professional activities; encouraging grass-roots, bottom-up ventures; providing import and export rights; and improving credit and wholesaling systems for coops. So far, however, the government has been over-cautious with the approval of CNAs, leaving them to struggle with similar problems as the rest of the non-state economy (lack of access to implements and marketing channels, lack of horizontal representation, etc.), and so far providing very little employment (Piñeiro & Ojeda 2017). The work of getting a non-agricultural co-operative approved is laborious and unnecessarily complicated: "Before a proposal for a co-operative can be approved, it must be submitted to both the municipal and provincial bodies of the People's Power, to the Central State Administration body that corresponds to the co-operative's proposed activities, and to the Standing Committee for the Implementation and Development of "*Los Lineamientos*" (Nova & Galia 2018, p 4).

As Cuba is going through its critical juncture, the main economic challenge is to provide people with livable employment, food on the table and a revival of what used to be Latin America's only welfare state. Deng Xiaoping understood when he started the dramatic post-Mao turnaround, that the survival of the Chinese revolution "would depend on legitimacy, which could no longer rest on ideology but would be based on their (the leaders') performance in governing the country" (Fukuyama 2014 p. 383). The same will soon have to be realized among the younger Cuban leaders. A strong and independent co-operative sector, in agriculture as well as the urban economy, may be a crucial tool to achieve this.

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¹ This article is based on research done in Cuba by Vegard Bye over several decades and presented in his PhD (2019) and the research of Reidar Almås on agricultural history and farmers' co-operatives in Norway

² GDP Cuba (according to World Bank estimate): <https://www.worldometers.info/gdp/cuba-gdp/>

³ GDP Norway: See <https://www.ssb.no/a/histstat/aarbok/ht-0901-bnp.html>

⁴ Hardly a coincidence that the bill was co-sponsored by a son of a Norwegian immigrant: Gilbert N. Haugen (R-Iowa)

⁵ Speech by Che Guevara on 9 April 1961: Cuba: Historical Exception or Vanguard in the Anticolonial Struggle?: <https://www.marxists.org/archive/guevara/1961/04/09.htm>

⁶ Ibid

⁷ René Dumont, generally very critical of the centralist and collective-oriented policy, praised some examples of such 'genuine co-operatives', where presidents were apparently freely elected, and elected councils could freely establish production plans.

⁸ "Premier seeks Mobilization of Savings by Cubans to Insure Growth", *New York Times*, 19.09.59.

⁹ What we mean by «non-state share» here includes credit and service co-operatives (CCS), land in usufruct (leased by the state) plus privately-owned land. Directly state-controlled co-operatives (CPAs and UBPCs) are not included (ref. Bye 2020, Table 6.1)

¹⁰ 14ymedio, 16.05.16, quoting Cuba debate.

¹¹ See for instance reports by the well-informed Uruguayan journalist Fernando Ravsberg, who has been living in Cuba for several decades: "What Cuba Loses Because of its Incompetent Farm Bureaucracy", *Cartas desde Cuba*, 19.10.17: <http://cartasdesdecuba.com/what-cuba-loses-because-of-its-incompetent-farm-bureaucracy/>

¹² These dynamics have been studied on the ground and described in detail in a forthcoming PhD dissertation (Wig, 2020)

¹³ According to an article in the official newspaper *Juventud Rebelde*, quoted by Marc Frank in a *Reuters* article right after the 7th Party Congress in April 2016.

¹⁴ Information based on news cable from *Thomsonreuter*, Havana, 21 January 2016: "In a reversal, Cuba tries price controls to tame food inflation."

¹⁵ *Prensa Latina*, 27.01.18.

¹⁶ *ONEI* 2016, Table 8.10 for the period 2011-2016; for 2017: Omar Everlenny Pérez: "Retos y resultados para Cuba desde 2017", *Pregreso Semanal Weekly* 5.01.18, reprinted in *AsceNews* No. 786). For 2017, it is estimated that the value of food imports will ascend to 2 billion USD, and food is representing an increasing share of Cuba's total import value—17.3% in 2016 (Armando Nova: "La alimentación en Cuba una variable estratégica no resuelta. El pronosticado estancamiento de la producción agropecuaria al finalizar 2017 tendrá un impacto desfavorable en la economía nacional", in *Camino al andar*, 13.11.17)

¹⁷ Nova (2013i:152), Table 5.

¹⁸ In most cases, *usufructuarios* are organized in cooperatives. So these two forms overlap.

¹⁹ Mat og industri Norsk institutt for bioøkonomi (NIBIO) 2018 https://www.nibio.no/nyheter/tretti-prosent-av-norske-industriinvesteringer-bygger-pa-tillit-til-norsk-matpolitikk/_attachment/inline/81ba0ffb-3515-4d87-816a-4c6c2576fe9b:40740fb310f1b5ebb54c6586f2679d60b6619dab/Mat%20og%20industri%202018%20presentasjon%20i%20pdf.pdf

²⁰ The seven principles of co-operation, see: <https://www.ica.coop/en/co-operatives/co-operative-identity#co-operative-principles>

²¹ Ministerio de Agricultura (2013): *Gestión Integral Cooperativa: Guía para formadores y facilitadores* (La Habana)

²² Fernando Ravsberg's blog www.cartasdesdecuba.com, 13.07.17: «Peligro! Las cooperativas son demasiado eficientes»

²³ <https://gff.co.uk/norwegian-gouda-named-2018-world-cheese-awards-champion/>