



CUBA: A CASE STUDY OF AGRICULTURAL CRISIS MANAGEMENT

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Having swung from being a lavish playground for the rich to a communist dictatorship Cuba is the kind of place that resists balanced analysis. As if to illustrate this point the WWF's flagship *Living Planet Report* in 2006 cited Cuba as the only country in the world to "meet minimum criteria for sustainable development". Yet a recent analysis in the *Economist* described it as a country with very low agricultural output that "imported 80% of the food it consumed [and has] repeatedly defaulted on foreign debt". The former implies stability and harmony while the latter suggests poverty and disorder – particularly with regard to its food systems. The only point about Cuba on which there seems to be general consensus is that it has done things differently.

In 1959 Fidel Castro ousted president and US ally Fulgencio Batista. This led to the installation of a communist political system, close allegiance with the USSR and severe trade embargoes from the world's primary capitalist economies. Between the 1960's and 1980's, backed by support from the USSR, Cuba moved to develop its already significant agricultural industries by increasing the use of synthetic inputs, mechanisation and irrigation. It also stepped in to forcibly reduce farm sizes in order to broaden access to agricultural

livelihoods. However, the collapse of the Soviet Union in the 1990's did not signal the end of communist rule in Cuba nor an end to the trade embargo by the west.

This left Cuban agriculture in a very tricky position; It had put in place the skills and hardware for a high-input to high-output export orientated food system but could no longer source the necessary inputs (primarily fuel and fertilisers) from its old trade partners nor access them from the West. Almost overnight Cubans lost not only their key trading partner but also the ability to fertilise their crops and run trucks and tractors. A national food crisis ensued which presented leadership with two options: Change the way it did politics in order to please the West or change the way it did agriculture. A rapid and profound restructuring of their agricultural systems followed which aimed to become as self-sufficient and oil free as possible.

The almost complete absence of fertilisers, pesticides and other synthetic inputs left no other option but to shift to organic, agroecological practices. The broader principles on how this could be achieved were fairly well understood at the time but there were (and remain) a number of practical knowledge gaps to be overcome. After all, never before had a near absolute transition to very low external input farming been attempted on a national scale – let alone under such challenging conditions. Cuba required not only new ways of farming but also new ways of learning how to farm.

One particularly successful change within the state's research programme has been the increasingly participatory approach it has taken to its research agenda. Instead of research being directed at 'solving farmers' problems for them', the emphasis has begun to shift to working with farmers to identify and prioritise problem areas, supporting them in the development of solutions and then facilitating the knowledge sharing and dissemination process to ensure that the impact of new solutions are maximised. "These participatory research methodologies involve farmers, researchers, policy-makers and stakeholders at local and national levels. They all participate in a continuous process that aims at increasing free access to a wide diversity of varieties, crops, knowledge and technologies, the interchange of successful experiences, local experimentation by farmers and introduction of the most locally adapted solutions" explains Sandra Lorigados, the co-coordinator for the Local Agricultural Innovation Programme with the National Institute for Agricultural Sciences. While this may seem like an obvious answer to many, it represents a significant departure from the traditional approach in which researchers identified a problem, developed a solution which they felt was most appropriate and then set about trying to market this to farmers.

As the sole supplier of agricultural inputs the state's role does not end with research. It strategically manages available synthetic inputs and also runs a wide network of outlets supplying natural inputs such as bio-pesticides, microbial stimulants, composts, etc.

However, the shortage of chemical inputs was not the only challenge the regime faced. An 80% reduction in oil imports in the early 1990s was crippling for agriculture and had a far more immediate effect on food security than the fertiliser shortage. Without oil, fields could neither be ploughed nor food transported across the 1000 km long country into the urban centers. Animal draft power provided a workable (although no doubt tedious) solution to the tractor problem given the relatively small farm sizes. The problem of transporting fresh produce over large distances in a hot climate elicited a more novel solution - moving farming to the cities.

Urban small holdings, or *Organiponicos* as they are known locally, have become an iconic symbol in Cuba's drive to achieve food security independently of oil. Following the food crisis these small urban farms have not only helped feed the urban population; they have also provided a means to efficiently recycle valuable nutrients from urban food-waste back into the food system.

"We grow about 25 different crops over the course of the year, and it's totally organic" one of the urban farmers in the centre of Havana tells me as he scans over his lettuce crop, picking off the odd caterpillar and squashing it under his boot. Havana alone has close to 200 of these well tended sites.

Twenty years after the crisis in the early 1990's food insecurity no longer features in Cubans' daily lives and the country has an average life expectancy on par with the USA.

Despite this it would be unfair to say that all is well in the eyes of many farmers. Primarily there is resentment at the high level of state control under which they have to operate. "This land is mine and I work it but everything I produce belongs to the government. These animals I feed everyday don't belong to me they belong to the state. If I slaughter that cow and get caught, I go to jail for up to 15 years. How can that be right?" asks Adela Sanchez (name changed) who runs a free range pig and cattle farm in a rural part of southern Cuba.

There are two sides to this coin however. The reason the state has more or less banned the local consumption of beef is that selling it to tourists at much higher prices brings in foreign currency. This is money state coffers desperately need in order to import the balance of its staple food requirements. These cattle are the Cuban equivalent of South Africa's uncut diamonds.

Some you ask will say that these restrictions are a worthwhile price to pay for a peaceful life in which healthcare and tertiary education are free, everyone is housed and nobody goes hungry. Others will say they would rather be free to determine their own paths and benefit proportionally to the work they put in. Coming from a continent where the majority of the population cannot afford to slaughter a cow to eat, being stuck eating pork while you question the ethics of a law prohibiting beef consumption does not seem like such a bad position to be in.

APPENDIX



Farm stall meets corner café. A small retail outlet conveniently situated on the doorstep of both the farmer and consumer



Not going hungry: customers line up for affordable produce from an *organiponico* in Cuba's capital