

## ***Fidel and Food: Cuba's Organic Revolution***

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Achieving a sustainable agriculture that can ensure food security is recognised internationally as one of the most serious challenges we face. In 1992, for example, the Rio Earth Summit identified environmental degradation arising from industrial farming methods as one of the world's most significant environmental problems. A decade later, achieving sustainable agriculture remains one of our greatest challenges, and to give some scale to this problem, in Australia alone land degradation is currently estimated to cost over \$2.1 billion each year.

Around the world, solutions to this problem already exist, and alternative models for an ecological agriculture continue to grow. The Cuban Organic Revolution that has occurred over the last decade or so following the collapse of the Soviet Union and the tightening of the unjust US trade embargo – referred to as the Special Period – is an inspiring example of the possibilities that exist for developing socially just and environmentally responsible food systems. During this period, Cubans have transformed their landscapes into diverse polycultures, which make a vital contribution towards meeting local food needs. In the city of Havana, for example, over 80% of food consumed is produced locally within the province. A significant philosophy driving this transformation in food systems was the de-centralisation of production and consumption, while concurrently building local self-sufficiency. These twin goals have shaped the nature of food and agriculture resistance movements that have developed in Cuba.

The Government's strategy to de-centralise agriculture was achieved in large part through a land reform program that dismantled large state-run farms that were established to produce export crops, including sugar, tobacco and pineapple. In their place, small scale, ecologically managed farms located in close proximity to both urban and rural populations were established. A central feature of this model of food production was its independence from fossil fuels for the production and distribution of food, and for transport to reach outlets where food was distributed. This transformation was not only a crucial prerequisite for achieving a sustainable agriculture, it was also necessary following the Special Period, which removed access to markets supplying petroleum, machinery and equipment.

The success of Cuba's transformation in systems of agricultural production is evident in the emergence of significant numbers of small scale farms, managed under a range of land tenure structures. In Havana alone, there are over 1300 distribution outlets for locally grown fresh fruit, vegetables and medicinal plants. These high numbers illustrate the vital role local food production now plays in ensuring secure access to food in Cuba. The formation of independent and co-operatively managed farms has also provided employment for many Cubans, and has assisted in shifting farmers from a marginal status, to a well respected and highly paid employment opportunity. Additionally, the redistribution of land into the hands of small scale farmers has also increased rates of food productivity – similar to the rest of the world, where smaller farms also produce much more per unit than larger farms – and thus assisted in achieving local food security (Rosset, 1999). Increased income security for farmers, alongside close access to fresh food, have also enabled farmers to become increasingly independent, while communities have become self-sufficient.

In addition to increasing secure access to food grown in close proximity to where people live, the systems of agriculture that have emerged in response to the Special Period are recognised internationally to be at the forefront of agro-ecological farming (Funes et al, 2001). This has been made possible by government research in this area – including ecological pest management, intercropping and organic soil management – over at least the last 30 years, combined with the extensive experience of local farmers. The contributions of government science in particular – directed towards public good research rather than science for profit (illustrated, for example, in the push to commercialise genetically engineered seed) – have played an important role in building knowledge to develop balanced ecological agriculture systems. This agro-ecological knowledge generated by both farmers and scientists is openly

shared in Cuba, contrasting starkly with privatisation and commercialisation of agricultural knowledge claims that frequently occurs in capitalist economies.

In further contrast with capitalist industrial agriculture, largely reliant upon agri-chemicals and input intensive machinery, Cuban agriculture utilises inter-cropping, biological pest controls, composts and human labour, to manage farms. Mixed plantings provide habitats for predator insects, as well as repelling pest species and reducing the risk of crop loss from climate fluctuations, while biological inputs – including compost and worm castings – can assist to build soil health. Small scale landholdings have thus become vibrant sites for the production of diverse food, fibre and medicinal polycultures. An urban farm we visited in Havana in June this year as part of the Food First scientific delegation, produces 191 species of plants and animals, including guava, passionfruit, custard apple, peaches and cherries. In addition to food, meat, eggs and dairy products, this farm also produces over 12 tonnes of worm humus each year, which is all used on the farm! This inspiring example of a successful agro-ecological farm, has been built on an abandoned plot of only 3200m<sup>2</sup>. It illustrates the effectiveness of small scale farming in ensuring local people can gain access not just to adequate quantities of food, but also diverse varieties of food produced in environmentally responsible ways.

The Cuban story paints a powerful picture of a reality that can spread to other parts of the world. The Cuban Organic Revolution shows that not only is another world possible, but that this world is already happening. Cuba is practicing, and continues to develop knowledge about agro-ecological models of agriculture. At the basis of this transformation have been a number of core values, including self-sufficiency and de-centralisation. These values have shaped the formation of the alternative agriculture resistance movement, and in less than ten years, this movement has largely achieved food security in Cuba.

Notes: Please see the Food First website at [www.foodfirst.org/cuba/](http://www.foodfirst.org/cuba/) for more information on the Scientific Delegation that visited Cuba, and for more information on food politics in Cuba.

#### References:

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