



Sustainable Cities

PROJECT SUMMARY:

ENHANCING SUSTAINABLE DAIRY PRODUCTION CAPACITY IN CUBA
October, 2005

Enhancing Sustainable Dairy Production Capacity in Cuba is a one-year demonstration project in Havana Province, Cuba, in which Canadian dairy farmers are sharing their experience in herd management with Cuban farmers to increase milk production from sustainable, pasture-based dairy units.

This project builds on the work of the Canada-Cuba Farmer to Farmer Project, a voluntary organization that has been in operation since 1999. This project has demonstrated that Canadian and Cuban farmers have much to learn from one another. Cuban farmers can teach Canadians a great deal about sustainable and organic crop production and urban farming, while learning a great deal about animal husbandry from Canada. This proposal is for an initial educational exchange and demonstration project in Cuba.

Prior to the collapse of the Soviet Union, Cuban agriculture was highly industrialized and dependent on chemical inputs and machinery. Since 1989, the loss of their major trading partner and the American embargo has forced Cuba to produce most of its food without the aid of chemical pesticides or fertilizers. In some instances this has been very successful (close to organic production for many field crops including potatoes, vegetables and tropical vegetables, citrus and tropical fruits), in others, Cuban farmers have fallen behind (livestock production).

A good example of this is Cuba's dairy sector. Cuba developed an ingenious intensive leguminous pasture management system to replace protein in the diet of dairy cows now that imported feed grains are no longer an option. Despite the success of this system, Cuba's milk production remains low - 5-7 litres per milking cow per day. This is insufficient to meet Cuba's nutritional targets of one litre of milk per child per day up to the age of 12. Since 80 per cent of Cuba's population is located in urban centres; this has the largest impact on urban youth.

Many Cuban farmers believe the lack of imported cattle feed is responsible for current low production levels. But after visiting their farms, Canadian farmers believe Cuba's

sustainable pasture management system is a good one that can support milk production increases of 2-3 times current levels if more attention is paid to issues such as herd management, calf rearing and insulation of electrical connections in and around milking sheds, all of which impact severely on milk production. Through the introduction of rotational grazing systems, the prevention of calf pneumonia, reduction in mastitis (although not observed when we tested) and elimination of tingle electricity in areas where cows are being milked, Canada's farmers feel they can boost Cuban dairy production to over 20 litres per cow.

Many dairy bloodlines in Cuba are traced back to animals purchased in Canada in the 1960's and '70's. Canadians are respected in the field of dairy management and the Canadians involved in the Farmer to Farmer project have been warmly welcomed. As such, a demonstration project in partnership with Canadian dairy farmers that concretely shows a significant boost in milk production is likely to have a significant impact on herd management practices throughout Cuba. This initial phase can then be expanded throughout the island.

Thanks to the support of Gallagher Canada and Gallagher New Zealand, this Project has also introduced to Cuba the use of solar-powered electric fencing to construct the 52 quarter-hectare micro-pastures that constitute the 16 hectare rotational pasture component of the Project. Given sufficient time to source materials, the Project team believes that most of these materials – with the exception of the solar fencers - can be economically sourced in Cuba.

This project has the potential to impact significantly on urban poverty through increased nutrition available to urban children, on rural poverty through increased income through greater milk production and less money spent on inputs, and can serve as a springboard for rural economic development when, after milk supply can meet basic demand, extra milk can be used to develop value-added products such as ice cream and cheese to meet growing local and tourist demand. In addition, this approach to improved milk production is environmentally and economically sustainable, relying on rotational pasture management practices not imported inputs.

This project brings together – in a farmer-to-farmer framework - the capacity to amplify and document a sustainable, pasture-based dairy production capacity that could serve as a model for Latin America, Africa and other temperate zoned countries.

Enhancing Sustainable Dairy Production Capacity in Cuba has developed in consultation with our Cuban partners (ANAP) over the last several years. The project has received the approval of the Cuban government (MINVEC), who has also approved ANAP as our NGO project partner. It is seen as a first step along the path of more meaningful farmer-to-farmer engagement that will have as its mandate the ethical sharing of capacity in support of sustainable farming communities, food security and the environment.

In-depth Project materials – including August 2005 Report - available by email on request.