CUBA:
ENHANCING CUBA'S PRODUCTION

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Farmers in Canada are used to dealing with delays – in planting, in harvest, in new quota transfer policies, in action by politicians.

You work around it. But it puts you behind.

No different in Cuba. Except there, the issue is materials. And putting you behind can easily cost you a crop year.

Although much closer to the equator, Cuba still has distinct seasons.

The onset of the rainy season and warmer temperatures in April wake up dormant pastures that continue to grow lush and green thru the hurricane season, which run into October. November ushers in Cuba's cooler dry winter, which lasts until April.

Miss the season lose a year.

Had we been able to simply whistle up supplies as we would in Canada, our farmer-led pilot project Enhancing Sustainable Dairy Production Capacity in Cuba would be complete by now.

But the delays have been a learning process, and in the end, both the project and we will be better for it. (Though it of course it didn't always seem that way at the time!)

Although milk production has tripled, production levels are half that our farmers feel we will get when the model is up and running.

To date, most of the increase is due to improved pastures.

But skills training is well advanced and considerable on-farm capacity has been created: 30 ha irrigated rotational pastures built with solar powered electric fencing, three ha irrigated grass/legume hi-density rotational pastures, 100 HP vertical shaft turbine for irrigation of ration crops, used hammer mill.

The CPA has constructed a new worm humus production facility (an important source of soil micro-nutrients) and has a new milk tank at the ready.

Once the dots are connected, we expect over 20 litres of milk per cow with existing genetics. More if genetic improvements are made.

A steering committee comprised of the Canadian and Cuban farmers and the Cuban Institute for Pastures and Forages is now working together to resolve the outstanding roadblocks and complete the Project in a two-year time frame.

What's holding us up? Bureaucracy? No. Politics? No. Weather? No. The only things holding us back are wire fencing, grass seed and irrigation pipes!

To construct Cuba's hi-density "Los Pedestales" rotational grazing system, a hectare is divided into 24 long narrow pasture strips by rows of legumes. A five-foot high triangle-shaped trellis made of wire fencing covers each row of legumes – 25 in all. The legumes grow up through the trellis to become the side walls of the long, narrow pastures. Finally, the 2,400-metre strip pastures are bisected to create 48 50-metre strip pastures. High lactating cows eat the grass and munch the legumes back to the wire. One strip a day on a 48-day rotation.

We have constructed three hectares of pedestals. Problem is, the wire fencing originally ordered to create the five foot trellises was the wrong

specifications and so our standing legume walls are a mere three feet high, significantly reducing available nutrients. Additional wire fencing has been on order since January. We are promised it by the fall.

Because the grasses the Cuban farmers have been trying to sow in the aisles of the Pedestals have not established well (chronic problems with seed germination – perhaps a shipping storage temperature/time issue), King grass was planted, a tall, woody, unpalatable and low-nutrition (but always germinates) variety that must now be removed and replaced with more palatable, nutritious, tender and shorter growing varieties.

Top Cuban scientist Aurelio Alvaro Mendez at Cuba's Institute for Pastures and Forages has made our CPA an experimental farm of the Institute. This is a wonderful development because now the CPA will receive intensive and ongoing extension support to establish the proper grasses.

Our new, 100 HP vertical turbine is installed and the used hammer mill set up and functioning, but because the irrigation pipes have not yet arrived to bring the water from the pump to the fields, the CPA is not yet able to grow the ration crops needed to formulate rations for its calves, heifers, cows, bulls and water buffalo.

This reduces nutrition and has delayed changes to calf rearing practices. Further, since all feed protein must be purchased by the CPA and since Cuba's source of feed protein is corn gluten from the U.S. ethanol and sweetening industry, the need to source feed protein off-farm creates significant economic and environmental costs.

The irrigation pipes have been ordered and again we anticipate their arrival at the CPA in the fall. The Cuban Institute for Pastures and Forages is working with the CPA to establish the correct pasture grasses. Once we have the wire fencing and irrigation materials, we should be good-to-go to connect the dots to complete this sustainable milk production model over the next two years.

In the process, we will refurbish an old building on the CPA - once home to Cuban hero Jose Marti's physician — to create a farmer-to-farmer training centre. All of us — the farmers, myself — are volunteers. This work has been undertaken through the Canadian NGO International Centre for Sustainable Cities and funded through the generosity of Canadians ($150,000) and the Canadian International Development Agency ($75,000).

Last May, 16 students from Canada, the United States, Korea, Japan, China, Guatemala, Brazil and Kurdistan took my three-week, Cuba-based, University of British Columbia accredited course AGSC 302 Field Studies in Sustainable Agriculture Cuba. It was — again — too much fun and has turned May into my favourite month of the year!

The Farmer to Farmer Tours of course continue. Last winter's delegation brought to 432 the number of Canadian farmers who have visited Cuba through the Project.

Peak Oil, Peak Food, Slow Food, Food Miles, Food Sovereignty. Food Security. Urban farming. Community gardens, Food Democracy. All terms regularly found in any newspaper today that five years ago were off the radar.

— Wendy Holm