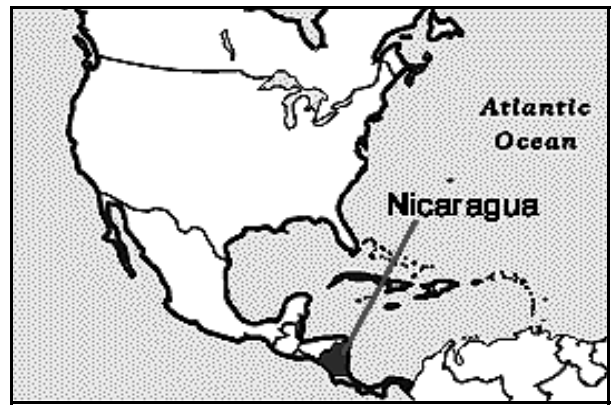


# Kitchen Gardens in Nicaragua

## Growing Solutions to Food Security: Kitchen Gardens in Nicaragua



It is 3:30 in the morning in the small Nicaraguan community of Matazano and Doña Maria Hernandez has just risen in the obscurity of darkness to get the fire going in her mudbrick oven. She has a lot of work ahead of her as she hurriedly grabs her 20 litre bucket and begins the winding and slippery trek down to the local water reservoir. She knows she is lucky as she is one of the 12 families who has been given access to this water, while the rest have to try their luck at the polluted stream that winds through the community much further down. As she reaches the reservoir, she gets in line behind the other women already lined up there – all are fervently hoping that there will be enough water to get them through their tasks for today. Once filled, she slowly lifts the heavy water bucket onto her head and begins the precarious journey back up hill. The art of balance is key so as not to spill a drop, but Maria is well practiced as she began hauling water by the time she was 8 years old. Twice more she makes the journey before the lock is firmly placed on the water tap at the reservoir until the next morning.

By now her eldest daughter has risen and begun helping her make the tortillas, first cooking the corn over the hot fire and then grinding them down into a thick paste. Quickly they begin pounding out the round tortillas with their fists, which will be their sustenance for morning, noon and night. Maria knows that the rest of her 5 children will soon be rising with her husband and she must have some food prepared to send her husband away to the field and her children off to school. She has been so worried lately, this is the second year in a row they lost almost 90% of their crop of corn and beans due to massive drought. It is their only means of food and income and now she just doesn't know if she can continue sending her children to school with only tortillas and a bit of salt in their stomachs. The teacher has been complaining that they are belligerent, too lazy to work. She is embarrassed, and knows it is because they are just too hungry to think. Perhaps it will just be best to keep them home from now on.....

Maria's story is not unique, it is a situation faced by tens of thousands of rural farmers living in northern Nicaragua, a region known as the "tropico-seco", or tropical-dry area. These are farmers who have traditionally relied on the production of only corn, beans and occasionally coffee. They are entirely dependant on rainfall and, for two years in a row now, have lost the majority of their crops due to drought. It is a region that was largely deforested 30 years ago by a foreign company who did not stick around to replant what they took after they reaped their profits. This has been further compounded by agricultural expansion into forest areas. Over time, the rivers that once were the life blood of the communities slowly dried up. The water tables have dropped considerably meaning wells must be dug to an impossible depth of at least 50 or 80 meters. Many communities walk up to 3 km each way to carry water back to their homes. Soil erosion has so compacted the earth that Hurricane Mitch was able to rip through this area 3 years ago, destroying communities and lives, as if it were in a bowling alley with a slick playing surface and nothing in the way to stop it.



It is within this context that the Kitchen Garden project came to life within 6 rural communities and with members of a local landmine survivor organization. The aim is to raise the basic nutritional and health levels in some of the poorest communities in order to form the most basic building block of food security for children. 44 women and their families, including Maria, began cultivating a diversity of organic vegetables and medicinal plants in the area immediately surrounding their home known as the "patio". Due to high levels of soil degradation and lack of access to water, the gardens are being cultivated in raised garden beds, constructed of a variety of materials usually considered throw-away items, that allow them to control soil quality through organic composting and require little water to maintain their humidity.

For most, this is the first experience they have had with growing vegetables. They will soon be incorporating small nurseries to plant fruit, medicinal and nut trees around their patio area and local water sources. Chickens and/or rabbits will also become a part of the integral system so that there is production and access to protein, while the manure can be used in the composting.

The Kitchen Gardens reduce the vulnerability faced by these families by allowing them to cultivate “a little bit of everything, all year round”, as opposed to being solely dependent on the harvest of one or two crops and sporadic rainfall. With a small amount of water they are able to maintain production in their Kitchen Gardens and increase the bio-diversity in their area. They are glad that they can cultivate outside their own back door, instead of making a grueling journey into the next largest town only to be given a prescription with no way of buying the medicine. The same plants are also used to apply natural insecticides on their vegetables and plants so as not to damage their bodies and the earth with chemicals.

Much like our “backyards” in Canada, Nicaraguans have typically maintained their patio area “clean and swept”, the equivalent to our neatly manicured lawns, except with dirt. However, with the Kitchen Gardens project, the women are developing a new vision for this underutilized area: one that is ripe with food production and diversity to raise their basic levels of nutrition and health while contributing to socio-economic and environmental stability within their community. Often, because the context is so extremely different from our own (such as walking 3 km each way to haul water), we fail to see the connections between the crises faced in southern countries and our own.

Yet, we too are faced with deforestation and massive land clearings dedicated to single-crop industrial agriculture. The effects of which lead to water shortages, contaminated water sources, loss of ecological diversity and species extinction, and increasing economic difficulties for small scale agricultural producers and woodlot owners. However, the lessons that can be shared between what these women are doing in their rural communities in Nicaragua and what we are doing in our rural Canadian communities are immense.

Whether in Canada or Nicaragua, we all make decisions about lifestyle choices. Although our options may be greater in Canada, it was by no means an easy decision for these 22 women to take on their Kitchen Gardens and change their daily actions, even to believe that they could make a difference within

their families and communities. But as I left a community meeting in Matazano where the community and project participants evaluated their progress and pitfalls to date, where they presented poems, songs and skits about their work - I truly got the sense that it has been more than just vegetables that has been planted in these communities, but seeds of unity and hope for a different future for their children. To me, that doesn't sound so different from our own desires in Canada.

### Suggested Small Projects for Teachers and Students:

1. Redesign your own backyards with a different vision whether it involves composting, small-scale organic farming, or a small backyard nursery.
2. Develop an Edible Schoolyard or a Community Garden.
3. Fundraise to support a Nicaraguan family to begin their own Kitchen Garden.

Perhaps start one of your own and exchange photos and success stories with them.

4. Buy from and support your local organic farmers instead of buying imported and pesticide-laden produce from the supermarket.



Successful Kitchen Gardens:  
Doña Maria Hernandez, with two of her children, proudly harvests vegetables from her Raised Garden Bed

