



Agrovivienda – A Housing Project for Small Farmers in Masaya, Nicaragua

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FIVE FARMERS BUILD WATER CISTERNS

Prior to the housing project, work is taking place to install water cisterns in the farms, to enable them to be more productive during the dry season. We are starting with a pilot project with five farmers, for which funds were raised by the Leicester-Masaya Link Group – including several generous readers of these bulletins. Bulletin no.3 reports what happened.

The water cisterns are open-topped tanks built of concrete blocks and concrete, set partly into the ground, and are typically about 2m x 2m square and one metre or more deep. They store mains water (and possibly rainwater); the mains supply is only intermittent (perhaps once a week for a few hours) and otherwise is unreliable as a way of watering crops.

Two groups of farmers in two different areas were chosen as being particularly in need of an improved water supply. They came together in a meeting on 4 April to discuss the project. We had calculated a budget of \$386 (about £240) for each cistern, and at that point we judged we had enough money to build five. Having established that everyone was enthusiastically in favour of going ahead, we asked the farmers to meet in their two groups and decide which of the ten families represented would get the first cisterns, how they would save on the planned budget, and how the work would be organised. It was also agreed that the cost of materials would be repaid, and we asked them to decide the time period and suggest uses for the fund that the repayments would create.

Knowing that the farmers had several years experience of joint working, I was optimistic that this set of challenges would be met. Even so, I was surprised by the outcome. At the second meeting, on 9 April, the five initial beneficiaries had been chosen, and each came forward with his or her planned savings on the budget. Collectively, they had managed to get the total down from \$1930 to \$1365, through contributing their own labour, materials or transport. By the third meeting, on 23 April, to plan the works, costs had fallen even further to a forecast \$1059. Materials would be bought on 5 May, and all the cisterns would be completed by 19 May.



Maria de la Cruz (pictured left in her farm with one of her two children) is a single parent farmer living on a steeply sloping piece of land in the attractive area known as La Poma, where there are still many big forest trees, the land is higher and the climate fresher. She describes the water cistern as 'her dream'. Her daughter had asked why they were building it rather than improving their house, and she replied 'first things first'. She already has plans for the plant nursery she wants to maintain now

there is a regular water supply from the finished cistern (right – the cover of palm leaves was removed for the photo).

The second farmer to benefit in La Poma, Jose Noel Lopez, has already established a nursery of fruit trees and rose plants which he plans to sell. He can now expand this part of his farming activity with his secure water supply.



The other area with new cisterns, Las Flores, is a complete contrast. Arid, low-lying and largely treeless, the shortage of water is much more obvious. Enrique Barcian and Maria Flores collaborated to build their two cisterns, in part because Maria does not have water at all so relies on Enrique's supply. She has an oil drum mounted on a cart to transport it several hundred metres to her farm.

The five cisterns that have been built are all beautifully finished, each with their owner's personal touch (Enrique has written on his 'With thanks to God, 10 May 2003'). When we assess the costs again, taking into account the materials which the



Maria Flores and her husband with their water cistern (above) and their water carrier (below)



farmers bought themselves, the budget has fallen still further to just \$771, less than half the amount forecast at the start. The farmers have agreed to repay the costs of materials at \$10 per month, which means costs will be repaid in seven to fourteen months (as each borrowed different amounts). We have agreed with them that the fund thus created will be used partly to build more cisterns, and partly for technical help with new crops.

This has been a pilot project to gain experience of working with the farmers, judge our capacity to organise a building project, and start to help them raise their income levels to enable them to repay the costs of new houses.

We now have a plan for a larger project of at least 25 cisterns, and we have applied for co-finance from the British Embassy to enable this to go ahead. We should get a reply later this month. Further funding will be provided by the Leicester-Masaya Link

Group, which is now raising the funds, and which plans to use the material on the project and the families involved in its development education work with schools in Leicester.

Agrovivienda is a project supported by the Chartered Institute of Housing and the Leicester Masaya Link Group, to improve housing and living conditions amongst subsistence farmers in the region of Masaya, Nicaragua. For more information, visit www.cih.org/nicaragua/index.htm or contact John Perry, project co-ordinator (jperry@ibw.com.ni).

For information on how to make a financial contribution, contact Claire Plumb at 0116 223 2272 or email (leicester@masaya.fsworld.co.uk).