



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

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FIRST FIVE HOUSES COMPLETED

Completing the prototype house (see last Bulletin) convinced five families that they wanted to start work on their own new houses. Five have now been finished, an 'inauguration' was held on 24 May, and we are now planning further houses to start when the rainy season ends in December.



The five families have been working hard to build new houses to replace ones like that on the left. All five families are large and they wanted houses which in some cases were bigger than the prototype. For most the work has taken between 4-5 weeks, with the families themselves erecting the walls of straw bales, and using skilled labour for the foundations, floors and rendering of the walls. All have opted for corrugated iron roofs as these are a cost-effective and popular roof material - although far from ideal as to some extent the heat from the roof negates the cooling effect of the highly-insulating straw bales. The search is still on for a better alternative!

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An important improvement compared with the prototype has been the use of stronger 'wire netting' to contain the straw bales and provide a straighter line for the walls. This is slightly more expensive but all five houses now look better than the prototype. It is no longer obvious what their form of construction is! The netting is fixed to vertical wooden posts in the walls but the straw bales themselves still carry the weight of the roof.



The training that took place while the prototype house was built proved valuable as there are now several people with straw-building skills, women as well as men. One important advantage of straw bales compared to concrete – that they enable people to be able to build their own houses – has worked in practice.

The cost of the houses has proved to be at least one third cheaper than conventional concrete construction. We have not quite achieved the ideal of a 'one thousand pound house', but the smallest of the five came within this figure. Expressed in U.S. dollars, the costs range from \$1800-2500, depending on the size of the house and their distance from the main road (which can mean higher transport costs).

A typical family, repaying the cost of the house over eight years, will have to set aside about \$20 per month. All are agreed that this is a big commitment, but worth it.



One striking aspect on any visit to the new houses is the size of the families. In one case there are nine members of the family living in one house, in another eleven. As yet the houses, though large by Nicaraguan standards (typical size 7m by 9m), are undivided inside to save on the cost of further materials. This is something that the families will have to take on themselves at a later stage.

have at least 15 requests to start building at the end of the year. The next stage of the project will need more resources, as we are planning a trial in which the houses are also equipped with a basic solar panel system to serve 2-3 light bulbs and a radio.

Having tackled the water supply problems with the earlier 'water cisterns' project, we now want to look at alternative ways of providing energy.

All five families came to the inauguration on 24 May (see photo below), and now we



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).