

Mountain Rain

Programme activities and funding needs in the Telica-Rota Protected Area, Department of León, Nicaragua.



Rain over Cerro Rota seen from the slopes of Volcán Telica

Programme Overview

Profile of the target area

For many rural communities in Western Nicaragua, access to water is a challenge. The problem is particularly acute for those communities located high up amongst the volcanic hills of the Telica-Rota Protected Area. With the nearest source more than 5 km away for some, these families face a daily four hour journey on foot or horseback to collect water to meet only the most basic needs, consuming time and energy to the detriment of farming and education. Environmental degradation of these hills over the last 50 years has resulted from mass deforestation through tree felling, slash and burn farming and widespread burning of hillsides to hunt and to harvest honey. This in turn has caused extensive soil erosion, increasing vulnerability to natural disasters such as landslides which have devastated other communities in this hurricane-prone part of Nicaragua. Previous attempts to attenuate environmental degradation have failed for lack of stakeholder participation, whilst families previously relocated in an attempt to reduce their vulnerability have all returned to their ancestral land. Most farmers grow only the most traditional crops such as corn and beans, primarily for subsistence, and very few are aware of alternatives which may be more profitable and which could better suit the environmental context in which they live.

The Mountain Rain programme to date

Nuevas Esperanzas has been working with communities in the highest parts of the protected area since 2005 and has established a close relationship with many farmers. This has presented the organisation with a unique opportunity to influence attitudes and practices and, in recognition of this opportunity, the Ministry of the Environment invited Nuevas Esperanzas to co-manage the protected area in 2008. Under a long-term and wide-ranging programme, Nuevas Esperanzas has begun to address the most urgent needs in these communities in a structured and integrated way. Nuevas Esperanzas is helping farmers in the Telica-Rota Protected Area construct domestic rainwater harvesting systems as well as protect springs in five dispersed communities. Access to the communities is being improved, both to facilitate construction and to give farmers better access to their land to take their produce to market. Extension workers are helping farmers diversify their farms, introducing more profitable and environmentally sustainable ways of using the natural resources of their land, such as beekeeping, agroforestry and fruit growing. Women are also being encouraged to realise their potential as producers through family gardens.

Development approach

The Mountain Rain programme is underpinned by a strong emphasis on community development, leadership, organisation and education. Lasting outcomes can only be achieved when the beneficiaries themselves commit to work together, look to the interests of others and invest in the future of their communities. Nuevas Esperanzas UK facilitates this process by addressing material and spiritual needs in a holistic manner, encouraging reconciliation where there is conflict and promoting ecumenical cooperation between faith groups.



Programme activities and funding needs

Since this programme began in 2008, Nuevas Esperanzas has successfully raised grants totalling nearly £150,000 to fund the construction of rainwater harvesting tanks, spring protection structures, a school and a road, as well as other activities which promote sustainable livelihoods such as beekeeping, organic gardening and reforestation. Further funding is needed to continue this work and to develop new programmes and activities as outlined below. Most projects can be scaled up or down according to the interests and budget of grant-making organisations, as indicated in the estimated project costs.

Harvesting rainwater

Total spent to date: £72,460
Project start: 2005

Rainwater harvesting, through the construction of large, closed ferrocement tanks, provides a sustainable, environmentally friendly, relatively simple and cost effective way of providing water of excellent quality for the whole of the dry season. A locally trained builder oversees the construction of the tanks with manual labour provided by community members. A total of 22 rainwater harvesting tanks have so far been built in these hillside communities and a further 47 in other parts of Western Nicaragua.

Priority next steps: To provide clean water for five communities through the construction of 50 more rainwater harvesting systems.

Funds needed for all communities: £140,000
Funds needed for a five water-tank project: £15,000
Project duration: 3 years



Protecting springs

Total spent to date: £4,280
Project start: 2011

Nuevas Esperanzas is improving the yield and hygiene of local springs in order that they provide a dependable and clean water supply through the construction of "spring boxes", which protect and store water from springs and control the flow to a collection point.

Priority next steps: To construct spring boxes in one community and repair existing structures in two other communities.

Funds needed for all communities: £12,000
Funds needed for one community: £4,000
Project duration: 1 year

Building latrines and promoting hygiene

Total spent to date: £4,170
Project start: 2009

Only 20% of households have a latrine, which was been raised as a key priority by women in the seven communities in the Mountain Rain programme. This project focuses on the construction, as far as possible by women, of ventilated pit latrines. The introduction of latrines is also supported by a health/hygiene education programme.

Priority next steps: To construct around 150 latrines and promote good hygiene practices in six communities.

Funds needed for all communities: £18,000
Funds needed for a 10 latrine project: £1,500
Project duration: 2 years





Building schools

Total spent to date: £13,360
Project start: 2010

Improvements to the quality of primary school and pre-school buildings are a high priority for parents. Around 30 children benefit from the school building project in El Ojochal del Listón.

Priority next steps: To construct three schools of two classrooms each to improve conditions for pre-school and primary education, as well as providing a community space for adult education, meetings and events.

Funds needed for all communities: £36,000
Funds needed for one school: £12,000
Project duration: 2 years

Improving access

Total spent to date: £21,880
Project start: 2008

Until 2009, none of the seven communities in the programme area was accessible by vehicle. Work to widen paths, pave steep inclines and introduce structures to divert water has greatly improved access to one community, reducing journey times and enabling transport of produce to market with an ox and cart.

Priority next steps: To improve access to five further communities and develop community organisation and leadership to ensure future maintenance.

Funds needed for all communities: £45,000
E.g. El Najo (2.1 km) £7,000
Agua Fría (4.1 km) £17,000
Project duration: 2 years



Restoring forests

Total spent to date: £10,140
Project start: 2010

To reverse the trend of deforestation, Nuevas Esperanzas began with a pilot project planting native species for reforestation as well as productive fruit trees.

Priority next steps: To develop a forestry carbon project to provide payment for ecosystems services through the sale of certified carbon credits in the international voluntary carbon market. This project requires 'seed funding' for initial investment including accreditation, after which it will become self-funding.

Funds needed for whole project: £28,000
Project duration: 5 years

Keeping bees

Total spent to date: £12,540
Project start: 2010

This project has so far established 15 hives in four apiaries in the protected area, training 20 participants in four communities. This project needs further development and upscaling for it to provide a viable alternative livelihood.

Priority next steps: To establish training apiaries in three more communities, to increase the number of trained beekeepers to 50 and to develop the commercial aspects of honey production through the establishment of a cooperative.

Funds needed for whole project: £60,000
Project duration: 5 years





Growing family gardens

Total spent to date: £6,950
 Project start: 2009

A pilot project has trained 15 women to grow vegetables in small gardens close to their houses, providing a more diverse diet for their families and an opportunity to generate income. Training has been provided in composting, drip irrigation, mulching, organic fertilisers, and pest control.

Priority next steps: To diversify the vegetables grown and extend the project to women in six other communities.

Funds needed for all communities: £45,000
 Annual funds needed: £15,000
 Project duration: 3 years

Generating income from avocado

Total spent to date: £490
 Project start: 2010

Around half the farmers in El Ojochal de Listón have avocado trees, yet avocado production is less than 40% of its full potential. Nuevas Esperanzas has undertaken extensive research with communities on potential markets and techniques for harvesting, handling and transporting to local and national markets.

Priority next steps: To invest in equipment and establish a cooperative to arrange collective harvesting, transportation, marketing and ongoing investment in avocado production.

Funds needed for pilot project: £8,000
 Project duration: 1 year



Equipping communities for development

Total spent to date: £21,920
 Project start: 2008

For most communities this programme provides opportunities for families to work together for the first time. In parallel with other projects outlined above, significant investment is being made in promoting participation and strengthening leadership and organisation.

Priority next steps: To facilitate the formation of community leadership committees in each of the seven communities and provide regular opportunities for learning and reflection.

Funds needed for all communities: £35,000
 Annual funds needed: £7,000
 Project duration: 5 years

Further information

For detailed proposals, budgets or other information regarding any of these projects, please contact:

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