

PfR Nicaragua country factsheet



Map RAAN:

http://www.vmapas.com/Americas/Nicaragua/Atlantico_Norte_RAAN/RAAN_Political_Map.jpg/maps-en.html?map_viewMap=1

Country: Nicaragua

Project Area: RAAN (Región Autónoma del Atlántico Norte)

Organization(s): NLRC, NRC, Wetlands International

Key data about the project area (area of the beneficiaries):

Population: Total population for RAAN in 2005 was 314,130.

Geography: The geographic position of Nicaragua makes it highly vulnerable to recurring disasters like earthquakes, floods, landslides, hurricanes, droughts, tsunamis and volcanic eruptions. It is estimated that over the last four decades the country lost around four billion dollars due to disasters.ⁱ Hardly any losses due to disasters are covered by insurance. It is estimated that only 10% of the population in Central America has access to the credit, and an even lower proportion to insurance.ⁱⁱ

Main livelihood sectors: In 2012, an important aspect was the emigration of whole families of the project communities to the coffee harvest in search of better economic returns. In general; about 90% of the families in the river basin of the river Coco live in the rural areas, cultivating staples such as corn, sorghum and beans. Some areas produce pineapple, yucca, cactus fruit, sugar cane and vegetables. At higher altitude, coffee and tobacco are grown. The services and manufacturing are underdeveloped. Livestock farming has diminished considerably. Cutting and selling of firewood is an important activity.

Beneficiaries

Beneficiary groups: indigenous communities. special emphasis on women, traditionally responsible for their household's food security, and youth, who have shown to be very receptive to solutions to reduce the risk of disasters.

What types of hazards occur in project site?

heavy rains, tropical storms The geographic position of Nicaragua makes it highly vulnerable to recurring disasters like earthquakes, floods, landslides, hurricanes, droughts, tsunamis and volcanic eruptions.

Over the period 1980-2008, 46 disasters were reported of which about 70 per cent were climate related: hurricanes, floods, droughts and wildfire. About 100,000 people per year are affected and an average of 143 is killed. The climate displays extremes in both rainfall and droughts. The tropical cyclones that every year cross the country from the Atlantic provoke extensive floods and landslides. Hurricane Mitch (1998) and Hurricane Felix (2007) caused heavy losses in human lives and damaged infrastructure and the environment. The population at risk of hurricanes and tropical storms is 25.4% equalling approx. 1.5 million people, while droughts affect almost 45% of the population.ⁱⁱⁱ

How are these hazards exacerbated?

By human activity? (ecosystems degradation)

The agriculture sector, in which about 40% of the labour force is employed, is vulnerable due to its extensive use of traditional methods, its low productivity and its high dependency to rainfall.

high poverty rate in rural areas;

lack of community know-how for proper management of natural resources in the current context of accelerated degradation; lack of community know-how for reducing risks of multiple natural hazards; falling water tables which leave many communities without adequate access to drinking water; inadequate health services; increasing deforestation and ecological fragility, including desertification in some areas; lack of awareness on the impact of climate change; gender inequality, which hampers women's space to improve their livelihoods;

Over the last 300 years, 85 % of the dry tropical forests and 65 % of the humid forests have disappeared. Nicaragua loses around 75,000 hectares of forest every year due to illegal logging, in addition to 40,000 hectares due to wildfires and slash and burn practices. This has resulted in soil degradation, reduced availability of water and increased vulnerability to climate change. The high dependency on firewood as the first energy source and harmful extensive agricultural methods are major threats to forests and biodiversity.

Increasing poverty leads the rural population to do further damage to the ecosystem for their survival. Over the last 16 years damage has been done to more than 70% of the natural ecosystems in the Pacific region and up to 50% in the Atlantic region.^{iv} Hill-slope ecosystems are particularly vulnerable and their condition is a serious threat to livelihoods.

(?) Politics?

general lack of focus of poverty reduction programmes on strengthening communities' capacities;

There have been elections in 2011 and municipal elections are taking place in 2011, impacting on the implementation of the program due to safety issues.

(?) Economics?

Climate change?

Projected changes for Central America show that unusually warm days and nights are likely to increase while unusually cold days and nights are likely to decrease. Heat waves and heat spells are also likely to be more frequent and longer in most of the region. Projections show 0.6 to 2.7°C increase in average annual temperature by the 2060s and a 1.2 to 4.5°C increase by the 2090s.

Models vary in their projections of how rainfall will change, ranging from a 63% increase and 16% decrease by the 2090s. The middle of all models shows a decrease of 8 to 21%. The season most likely to have the strongest decrease in rainfall is June-August. Tropical cyclone intensity is expected to increase.

Also, sea-level rise is expected to increase by 0.13 to 0.51m on the Pacific coastline and by 0.18 to 0.56m on the Atlantic coastline by 2090 (relative to 1980-1999 sea level). However, several other models suggest global sea level could rise by as much as one meter.

How are people's livelihoods affected?

Human

Climate change is likely to impact health negatively due to an increase in the intensity of tropical cyclones and a decrease in water availability. In times of drought, water quality can decrease, causing diarrhoea. Lack of access to adequate amounts of water for personal hygiene can cause diarrhoeal disease, intestinal worms and trachoma. People may be more likely to store water around the home during dry periods which can provide breeding grounds for mosquitoes carrying dengue.^v After flood events, diarrhoeal diseases and vector-borne diseases are more common due to mixing of human waste and drinking water.^{vi} Hurricanes can cause death

and injury. There are 18 deaths per 100,000 people from diarrhoeal disease annually.^{vii} Inadequate water and sanitation infrastructure coverage and poor knowledge of hygiene increase the risk of diarrhoeal disease.

Social

Physical

Financial

It is estimated that over the last four decades the country lost around four billion dollars due to disasters. Hardly any losses due to disasters are covered by insurance. It is estimated that only 10% of the population in Central America has access to the credit, and an even lower proportion to insurance. Micro-finance, and micro-insurance for disasters have great potential to increase people's resilience. limited access to micro-credit leading to increases vulnerability to natural hazards;

Fragile livelihoods leading to an increase in poverty levels due to the impact of disasters;

Natural

What are the solutions offered by the alliance?

Preparedness

Early warning

Mitigation

Micro-finance, and micro-insurance for disasters have great potential to increase people's resilience

development
