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GROWING GREEN PEARLS IN HAITI: SAFE, THRIVING AND EMPOWERED COMMUNITIES LIVING IN HARMONY WITH THE ENVIRONMENT

NATURE IN ACTION: NATURE-BASED SOLUTIONS
IN HUMANITARIAN CONTEXTS

The International Federation of Red Cross and Red Crescent Societies (IFRC) is the world’s largest humanitarian network, with 192 National Red Cross and Red Crescent Societies and around 14 million volunteers. Our volunteers are present in communities before, during and after a crisis or disaster. We work in the most hard to reach and complex settings in the world, saving lives and promoting human dignity. We support communities to become stronger and more resilient places where people can live safe and healthy lives, and have opportunities to thrive.

Nature-based Solutions

Nature-based Solutions (NbS) are actions to protect, sustainably manage and restore natural or modified ecosystems that address societal challenges effectively and adaptively, simultaneously providing human well-being and biodiversity benefits (IUCN, 2020). NbS are an institutional priority for the IFRC network – recognized in its Plan and Budget 2021– 2025; the Global Climate Resilience Programme of the IFRC; and the Climate and Environment Charter for Humanitarian Organizations. IFRC builds on its decades of expertise in community-based disaster risk reduction as a unique entry point for community-led NbS, focused on disaster risk reduction and climate change adaptation. IFRC has already applied NbS in various contexts, as showcased in this case study – and is actively capturing lessons learned as a basis for scaling up its work and partnerships in this area.

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BACKGROUND

Once called the 'Green Pearl of the Caribbean', Haiti was renowned for its great natural wealth and lush tropical forests. Today, that nickname seems mostly a distant memory as only 2% of the original forest remains due to deforestation and overgrazing. Nearly half of Haiti's population live in rural areas and agriculture is the source of income for two-thirds of the islanders. There is an undeniable link between poverty and ecosystem degradation. Bare hillsides and a lack of vegetation mean once resilient natural infrastructure is now unable to protect island inhabitants from landslides and crop failures. Deforested mountain slopes also cause destructive sedimentation in the coastal mangrove forests that sustain local and commercial fisheries. Furthermore, hurricanes, floods, and earthquakes all regularly strike the country. These hazards make one of the world's poorest nations even more disaster-prone, reinforcing a cycle of vulnerability and poverty.

Against this backdrop, the Green Pearl Programme was launched. It is an initiative of the Netherlands Red Cross (NLRC) Princess Margriet Fund. The Haitian Red Cross is the NLRC's most important partner for implementation. Other project collaborators include Commonland (a landscape restoration organization), The Nature Conservancy, Haitian-based organizations LEOS Foundation, and Aquadev. This broad partner base brings a wide range of skills and expertise to the project and provides access to an extensive volunteer network from the Haitian Red Cross.

THE GREEN PEARL PROGRAMME

The goal of the program is to support local communities in becoming 'green pearls' by breaking the vicious cycle of vulnerability and poverty in Haiti. Each 'green pearl' is a safe and thriving community supported by a healthy balance between human needs, natural resources, and livelihood needs. Over twenty years, the Red Cross and its partners aim to support thirty Haitian communities in becoming more resilient to climate change and natural hazards, restoring their hope for the future.

The program began in 2019 and the first phase continues until 2024. The first pearl is in La Vallée-de-Jacmel in southern South East Region of Haiti, and a second pearl began in Corail in Grand Anse Region of Haiti in 2022. Phase one will serve as the foundation and inspiration for thirty pearls to be created by 2039. Each site was chosen based on a number of criteria, including having a high degree of hazard risk, pre-existing relationships with authorities, and being in alignment with National Society priorities.

INFORMED BY SCALE: TAKING A LANDSCAPE APPROACH

The Green Pearl Programme applies a landscape approach, meaning that it considers social, economic and natural factors from the wider landscape to address risks faced by communities. By assessing interlinkages between ecosystems, communities, and economic development, durable nature-based solutions that complement other risk-reduction interventions can be identified. Such an approach involves: putting communities at the centre of decision making; taking a long-term perspective; managing trade-offs; and, examining the entire landscape to understand where risk originate. Landscape restoration such as reforestation of eroded slopes is a key component of the project and is being done in collaboration with local populations and experts.

Previous projects in Haiti reveal the success of this approach. In one of these, a project in Côtes-de-Fer, a system of check dams in steep and narrow mountain ravines protected communities from Hurricane Matthew's landslides and mudflows in 2016. In addition, this system allowed rainwater to better infiltrate, which in turn increased agricultural yields. The situation in Côtes-de-Fer has improved as a result to the extent that people who previously moved to urban areas have returned.

PILLARS OF RESILIENCE

The Green Pearl programme features three operational pillars: healthy ecosystems, resilient communities, and economically empowered people. These three pillars are synergetic and cover the complexity and key issues that the people of Haiti face in reducing risk and building resilience.



PILLAR 1: RESTORING AND MANAGING HEALTHY ECOSYSTEMS

In La Vallée-de-Jacmel, improved ecosystem management and revegetation activities are helping to restore hillsides. This allows water to be absorbed into the soil rather than washing down the hillside. Preventing erosion will create the conditions for additional restoration activities.



Technical knowledge from local agronomist and three field technicians and local knowledge from the Haitian Red Cross, local authorities and the community, was used to select suitable locations for sustainable reforestation. Plant species selected for landscape restoration include Indigenous forest and fruit species and those that naturally attract pollinators. To develop these activities a community nursery is constructed for growing forest and fruit trees, verified as good for the landscape. All identified vulnerable households receive training on good agricultural practices under “farm plan” materials for local farmers and agronomists, agroforestry, plantation techniques, cattle ship control, etc.



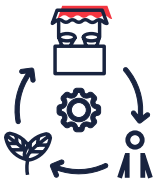
Environmental education awareness that promotes the project vision within the national context is delivered through trainings for Community-based Organizations, radio sensitization, and advocacy with local leaders. Showcasing sustainable land management results, such as increased crop yields, is proving key to helping with community sensitization, but also takes time.



PILLAR 2: BUILDING RESILIENT COMMUNITIES

A series of actions, including nature-based solutions, are undertaken to foster community climate resilience by strengthening disaster risk management and coping capacities. For example, regenerative and sustainable agriculture is being implemented through anti-erosive crop production measures like terracing and live barriers. Traditional permaculture methods, such as ‘jardin lakou’ (backyard gardens) are being promoted to increase food security. Trainings on climate- and environmentally-sensitive farming techniques are being delivered. As vegetable growing is traditionally women’s work, gender equality is promoted across these efforts. Improved watershed management practices such as revegetating catchment areas and promoting hybrid green/grey infrastructure is helping to improve water management and sanitation. Disaster risk reduction and preparedness is delivered in partnership with the civil protection actors and the Haitian Red Cross and includes early warning and hurricane season preparation, through community demonstrations and radio emissions.





PILLAR 3: ECONOMICALLY EMPOWERING PEOPLE

Restoring ecosystems creates space for new businesses and value chains, helping to promote a self-sufficient economy. In La Vallée-de-Jacmel, the NLRC supports households to increase and diversify agricultural production while also supporting CBOs to implement collective income-generating activities to diversify incomes. In the meantime, the project's local business partner LEOS is working to promote apiculture value chain opportunities that promote honey sustainable livelihoods, implementing based on the results of market study. In Corail, the Red Cross receives technical guidance from The Nature Conservancy and is collaborating with local organization Aquadev, who bring expertise on working with fishery groups. Activities here include restoring mangrove and coral ecosystems that bolster fishery-related livelihoods while also providing protection from sea level rise and storm surge.



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LESSONS LEARNED

1. Actively **engaging local communities** in co-designing the programme is important for inspiring longer-term sustainable involvement and management.
2. **Ensuring livelihoods** are a key project pillar addresses the link between ecosystem degradation and poverty and helps meet short-term food security needs.
3. Involving **local experts and the community** is as important as having technical data and expertise. Their insights and knowledge of the region and the context helps significantly in shaping project design and site selection.
4. Building on existing relationships and engaging with **government** helps advance integrated risk management through ecosystem restoration.
5. Taking a **landscape-scale approach** meant assessing interactions between people, the economy, and ecosystems. This helped to identify risks and design durable solutions.
6. A **holistic** approach that includes '**soft**' **resilience strategies**, like trainings and sensitization programs, that compliment '**hard**' **strategies**, like retaining walls, is critical for reducing disaster risk and preventing environmental degradation.
7. (Additional) Considering planting **species** that are climate resilient, support biodiversity, and provide benefits that, over time, **replacing environmentally harmful livelihoods** such as charcoal production.

CONCLUSION

The Green Pearls programme demonstrates that nature-based solutions can provide multiple economic, social, and environmental benefits to vulnerable communities. It shows that Haitians can make their country more resilient through reversing environmental degradation and that healthy, vegetated landscapes are the right environment for socio-economic development. By initiating a holistic restoration strategy, the Green Pearl Programme gives people the tools to restore Haiti's ecosystems and provide reliable and resilient economies.

BACKGROUND INFO AND DOCUMENTS

- [Commonland](#) and [4 Returns](#) Green Pearl Programme and websites.
- An overview of the Green Pearl Programme can be found on [The Netherlands Red Cross](#) website
- The Partners for Resilience [Ecosystem-based Disaster Risk Reduction \(Eco-DRR\)](#) project highlights interventions in 3 municipalities: Chardonnières, Les Anglais, and Tiburon in Haiti. It includes a [case study](#) and [cost benefit analysis](#).

FOR FURTHER INFORMATION ON NATURE-BASED SOLUTIONS

- <https://preparecenter.org/site/nbs/>

