INTRODUCTION

As the impact of climate change is felt all around the world, conventional methods of building, planting, irrigating, or harvesting are proving inadequate, while communities and landscapes are increasingly more prone to disasters. Humanitarian relief and human survival instantly operate in emergency mode and, without thoughtful design, can leave people vulnerable to food insecurity, alienation, and further displacement, and environments depleted or destroyed.

Integrative and regenerative responses are grounded in nature and work with life-affirming design principles to reduce risk, drawing on a range of nature-based solutions and agroecological principles.

On this poster, a number of integrated, nature-based and regenerative solutions to disaster displacement and development are explored. You can visualise more on a map here, and see how they can help to achieve the sustainable development goals. [bit.ly/re-alliance-systemic]

PROVIDING FOOD FOR DISPLACED PEOPLE IN WAYS THAT REPLENISH NATURAL ENVIRONMENTS AND MARKETS

In emergency response, traditional wisdom and culturally significant foods and practices can be overlooked in order to feed populations in a hurry. The introduction of Agroecology and Permaculture ensures long-term local nutritious food supplies as well as building ecological health. Permaculture works in harmony with nature by training waste to compost and grow food themselves, in ways that re-wild soils and biodiversity protect ecosystems from further damage, and use natural water flows or recycled water for irrigation. Agroecology and Agroforestry emphasise the need to rapidly restore forests and lost vegetation, enabling food sovereignty by empowering small-scale and peasant farmers in local markets, as well as traditional and culturally significant crops.

Displaced communities and development workers can create nature-inspired settlement designs which mimic the natural flows of water, landscapes, and people maximising opportunities to preserve waterways and grow food in a settlement environment while building resilience to floods and droughts.

Read more here about how the Kanyasa village in South Sudan used agroecological design principles to establish a kitchen garden capable of feeding themselves, and how it is possible to build resilient food systems.

A WHOLE-SYSTEMS, NATURE-BASED APPROACH TO WASH.

WASH (water, sanitation, and hygiene) is a core area of importance within humanitarian landscapes but conventional practices are often unsustainable and damaging to the environment. For example, borehole drilling for groundwater is potentially hazardous for groundwater levels if these are not replenished.

An integrative approach to WASH includes recycling and harvesting of water and the integration of compost toilets which feed directly into food trees (named Treebogs) systems. Inspired by natural cycles of decomposition, turning human waste into compost more than doubles the productivity of crops and ensures over 60% lower water usage through a closed-loop system.

Read more here about how the Kanyasa village in South Sudan created Treebog compost toilets, producing over three times more biomass in trees located next to the compost toilets.

Mobilising Community Support

Local communities hold deep knowledge of their environments and can be mobilised to work with or in advance of relief-response teams. There are many approaches to communicating ecological and crisis-response messages such as creating songs to be sung around the neighborhood, or using puppetry or comic posters in villages and schools. The Alliance member IDEP developed a series of short puppetry plays for communities across the island to encourage ecological care and reinforce messages about preparedness, specifically for earthquakes, volcanic eruptions, and landslides. IDEP distributed these at short film festivals and schools in communities in high-risk areas, and through public performance and discussions. Using creativity to spread information among communities can enable them to mobilise quickly, lowering the need for external interventions.

Read more here about how IDEP quickly reached over 1300 people with simple, creative messaging about ecological health and disaster preparedness.

CRISIS: A CRY & AN OPPORTUNITY FOR NATURE-BASED & SYSTEMIC SOLUTIONS

Crisis is itself an indicator of damaged systems and an opportunity for change. These reappraisal and crisis need first to save lives but also to be mindful of the quality of the lives they are saving to ensure resilience to future crises and reduce this further human and environmental damage that might bring. Such crises are a warning sign that people cannot continue to build, produce, feed, use water, and resources in the same ways as they have done in the past.

Crisis response has to include the restoration and conservation of landscapes, forests and other terrestrial ecosystems, the restoration and conservation of water resources and in support for food systems that replenish land and prevent further loss of biodiversity.

+ 40%

Farmers using agroecological methods in areas affected by natural disasters such as hurricanes have 40% more topsoil post-disaster, greater soil moisture and water retention, and less economic loss.

- Giminez, 2000