



**FMNR**

# **1 BILLION HECTARES**

PHASE 1



## MESSAGE FROM CEO

Finding a solution to the world's biggest problem is the stuff dreams are made of, right?

This is no dream. World Vision has an astonishing solution to the climate problem, which is vital to improving the lives of children. It's easy, cost effective, and it works in the world's toughest climates.

It's an approach called FMNR, Farmer Managed Natural Regeneration. Its Australian pioneer, Tony Rinaudo, says it's "embarrassingly simple". But let me tell you – it's mind-blowingly effective.

Farmers learn the FMNR technique of pruning and nurturing existing shoots from tree stumps. With the right care and protection, these stumps grow back into trees. Farmers love it. They share the technique with neighbours so that everyone benefits. We already have the program in 29 countries. In Niger alone, 6 million hectares have been regenerated through FMNR – a green forest you can see from space.

This approach to regenerating degraded forests without planting a single tree is the simplest tool for "direct action" on climate change I've ever seen in more than 25 years as a humanitarian.

The clock is ticking, so we're not wasting time – and we're not being modest with our goals!

We plan to regenerate one billion hectares of bush and forest. This will extract up to 25 percent of carbon out of the atmosphere and slow the rate of climate change.

World Vision will focus initially on four key countries in Africa that have degraded land – Kenya, Uganda, Ethiopia and Zambia.

Forests are natural vacuum cleaners for carbon in the atmosphere. Together, we can regenerate entire forests and leave a better world for all children. It's how we'll crack the climate crisis and stop famine from happening at the same time.

"Saving the world" may be possible – but we can only do this with your help.

We need you. The climate – and the children who live in it – has never needed you more.

We've got a real shot at this. Let's make it happen.

**Daniel Wordsworth**  
CEO  
World Vision Australia



# HELP THE PLANET

# FIGHT BACK

Land degradation is among the most pressing of all environmental problems. It's a symptom and a cause of climate change. And it's pushing the most vulnerable communities deeper into poverty.

Amazingly, much of the world's degraded land contains invisible forests. Complex root systems hidden underground. With the potential to rapidly regenerate, heal the environment and help slow climate change.

World Vision is leading the charge to bring these invisible forests back to life. We're building a movement of businesses, governments, institutions and everyday people to unleash our powerful technique called Farmer Managed Natural Regeneration on a scale never seen before.

By regenerating a billion hectares of land we can remove up to 25 percent of carbon from the atmosphere, prevent species loss and end extreme poverty for millions of people.

An aerial photograph of a vast, arid landscape. A winding river flows through the center, surrounded by a strip of greener vegetation and trees. The surrounding land is dry, yellowish-brown, and sparsely covered with small shrubs and trees. The sky is clear and blue. A large, orange, hand-drawn outline is superimposed on the left side of the image, framing the text 'OUR VISION:'.

**OUR VISION:**

**RESTORE  
1 BILLION  
HECTARES OF  
DEGRADED  
LAND**

# THE WORLD NEEDS FORESTS NOW MORE THAN EVER



## ONE QUARTER OF PRODUCTIVE LAND IS DEGRADED



24%

**OF THE WORLD'S  
PRODUCTIVE LAND  
IS DEGRADED<sup>2</sup>**

This degradation is largely through deforestation and unsustainable farming practices. It's estimated that every minute, another 23 hectares is added to this total.<sup>1</sup>

Land degradation threatens the survival of the world's poorest people. They are increasingly suffering due to loss of soil fertility and erosion. More frequent and intense droughts and floods. More failed crops and starving livestock.

It's also a major contributor to climate change. More greenhouse gases are released into the atmosphere instead of being stored in trees and healthy soil.

We must act now to restore degraded land, stop climate change, and secure a liveable future for people and the planet.

Three billion hectares of degraded land can be restored. We must act now to restore degraded land, stop climate change, and secure a liveable future for people and the planet.



42%

**OF THE WORLD'S  
POOR DEPEND ON  
DEGRADED LAND FOR  
FOOD AND INCOME<sup>3</sup>**

1. <https://www.un.org/sustainabledevelopment/biodiversity/>  
2. <https://www.wfp.org/sustainable-livelihoods-and-ecosystems>  
3. *ibid*



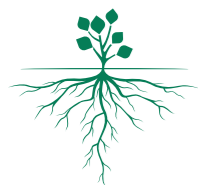
– Tony Rinaudo, the “Forest Maker”

# AN EMBARRASINGLY SIMPLE SOLUTION,

Farmer Managed Natural Regeneration, or FMNR is inspired by age-old practices. Now, in the 21st century it's one of the most powerful ways we have to tackle climate change from the ground up. And now, we're going to spread it across the world like never before.

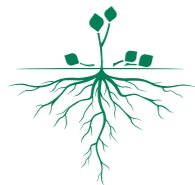
FMNR regenerates entire forests in an accelerated way. It involves regrowing trees from stumps with living root systems through careful pruning and protection. Combined with other land restoration techniques, it's far more effective than planting trees, and it works in the world's toughest climates.

## HOW FMNR WORKS



### FIND

Identify indigenous shrubs with extensive root systems.



### PRUNE

Selectively prune everything but the best shoot. This funnels all the nutrients into one spot.



### PROTECT

Ensure your shoots are protected from livestock and wildlife as they grow.



### GROW

Continue to monitor and prune your tree as it grows.



### UTILISE

Harvest edible fruits and leaves and use pruned stems and branches for animal fodder, building poles and firewood.

## RESULTS OF FMNR

### CLIMATE CHANGE MITIGATION

Increases capture and storage of carbon dioxide by trees, plants and soil, removing greenhouse gasses from the atmosphere.

### MORE FIREWOOD, TIMBER AND WILD FOODS

Forest products such as firewood, timber and edible fruits become more available which families can use or sell for income.

### MORE FOOD FOR LIVESTOCK

Increased tree and shrub cover and better grass growth mean healthier animals and more valuable assets for families.

### BIGGER, BETTER CROPS

Improves soil fertility for crop production so farmers can grow more food for their children.

### BETTER INCOMES AND QUALITY OF LIFE

Farmers can develop new income streams and better provide for their children.

### INCREASED RESILIENCE

Restoring the natural environment reduces the severity and impacts of disasters like droughts and floods.



2010

2016

# “IF YOU WORK WITH NATURE, MIRACLES ARE POSSIBLE”

– Tony Rinaudo, the “Forest Maker”



FMNR was rediscovered decades ago in Niger by a young Australian aid worker called Tony Rinaudo. Today, Tony is World Vision Australia’s Principal Climate Action Advisor.

In the decades since, Tony and his team have helped to introduce and spread FMNR in 29 countries across Africa and Asia, contributing to the regeneration of millions of hectares of land.

Known as the “Forest Maker”, Tony is widely acclaimed for his work. He’s a Right Livelihood (Alternative Nobel) award winner and subject of a 2022 documentary by Oscar-winning German director Volker Schlöndorff. He’s also recently authored an inspiring autobiography, *The Forest Underground*.

**In Niger alone,  
6 million hectares  
have been reforested  
through FMNR – impact  
you can see from space<sup>1</sup>.**

**Per hectare, FMNR can be up to  
36 times cheaper  
than tree planting<sup>2</sup>.**

**One tree can absorb up to  
10kg of carbon  
dioxide per year<sup>3</sup>.**

1. Pers. Comm. Gray Tappan, US Geological Survey, 2016

2. This is a conservative estimate based on calculations made by World Vision Australia’s Climate Action and Resilience Team.

3. <https://onetreepanted.org/blogs/stories/how-much-co2-does-tree-absorb>

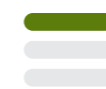


# HOW WE'LL RESTORE 1 BILLION HECTARES

We'll combine forces with tens of thousands of people, communities, governments, institutions, businesses and NGOs to build a movement that generates momentum and catalyses change on a global scale.

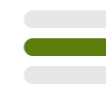


## MOVEMENT BUILDING PRINCIPLES



### PEOPLE POWER

Over a million people around the world have already learned how to regenerate forests with FMNR. We will further unleash its unique power to spread rapidly and organically from farmer to farmer and person to person.



### PARTNERSHIP

We will mobilise and unite a global and diverse partnership of forest makers to amplify our collective impact.



### INNOVATION

We will embrace new ideas and innovations and adapt our approach as we go to achieve our bold ambition.

# WHERE WE WILL START

We will leverage World Vision's global footprint and expertise to rapidly expand FMNR across four catalyst countries. These countries were selected because they have:

- extensive areas of degraded land and arid land
- high levels of multi-dimensional poverty
- national governments with a demonstrated commitment to landscape restoration
- World Vision offices with the experience and capacity to build national movements

**OUR GOAL IS TO REGENERATE UP TO 20 PERCENT OF ALL DEGRADED LAND IN EACH OF THESE COUNTRIES BY 2030.**



## ETHIOPIA

Degraded land:  
32.7 million hectares  
Restoration goal:  
6.5 million hectares

## UGANDA

Degraded land:  
4.4 million hectares  
Restoration goal:  
882,288 hectares

## KENYA

Degraded land:  
22.7 million hectares  
Restoration goal:  
4.5 million hectares

## ZAMBIA

Degraded land:  
5.2 million hectares  
Restoration goal:  
1.04 million hectares



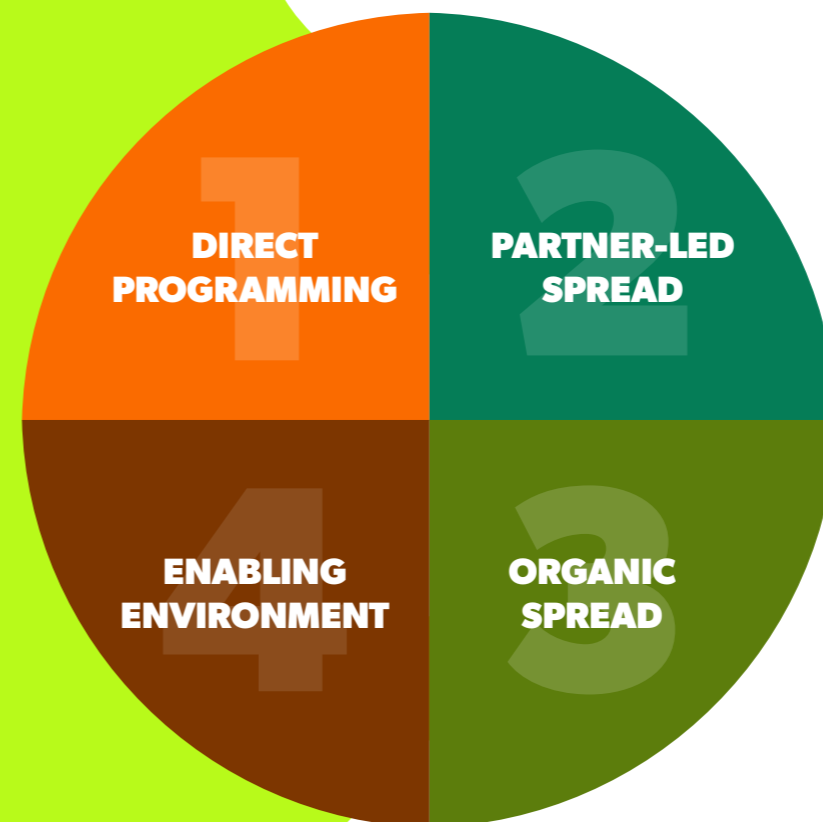


# WHAT IS OUR APPROACH?

We have developed four scaling pathways to achieve our ambitious land restoration target. These pathways and their related tactics draw on what we know works based on decades of experience.

Simultaneously pursuing these pathways over a period of time can unlock the power of FMNR to take root in the hearts and minds of individual farmers, communities and organisations, and across entire countries.

So, rather than taking decades to achieve the same degree of scale up that we saw in Niger over 30 years, we expect to see rapid take up in our catalyst countries over a much shorter timeframe.



## 1. DIRECT PROGRAMMING

Directly support communities to adopt FMNR through World Vision projects and programs.

## 2. PARTNER-LED SPREAD

Mobilise and empower partners like governments, donors and other NGOs to spread FMNR independent of World Vision.

## 3. ORGANIC SPREAD

Catalyse the widespread adoption and person-to-person spread of FMNR at community level.

## 4. ENABLING ENVIRONMENT

Create an environment that incentivises FMNR adoption and spread by responding to context-specific barriers, and opportunities.

# MEASUREMENT AND EVALUATION

Monitoring and evaluation activities will focus on how projects in each of the four catalytic countries are contributing to changes in key social, economic and environmental performance indicators, as well as understanding how these projects are operating.

Each project will have a monitoring and evaluation plan that includes key performance indicators and a data collection framework so that project activities can be tracked and we can gain an understanding of how they are contributing to longer term outcomes.

## IMPACT INDICATORS

**60 MILLION PEOPLE BENEFITING FROM IMPROVED ACCESS TO ECOSYSTEM SERVICES BY 2030**

**13 MILLION HECTARES OF LAND UNDER RESTORATION ACROSS FOUR CATALYTIC COUNTRIES BY 2030**

**6.3 BILLION TONNES OF CO<sup>2</sup> REMOVED FROM THE ATMPOHERE BY 2050**



# HOW WE'LL TRACK PROGRESS



**Progress on key indicators will be documented** through comprehensive baseline, midline and end-of project evaluations. The end-of-project evaluation will assess social and economic impacts at household and community levels, comparing results for key performance indicators against baseline values. Ongoing monitoring throughout project implementation will inform continuous improvement and adaptation of project activities. Project activity progress reports will be generated and reviewed every six months and an annual report on total hectares under restoration through catalyst project activities developed.

**Mobile data collection tools** will be used to map the location of FMNR sites and produce in-depth data on tree numbers and species. Tree growth rates from sample sites will be used to estimate total carbon sequestered. Tree cover changes and evidence of restoration outcomes will also be assessed through remote sensing, aerial photography and satellite image analysis.

**Project scaling partners will be encouraged and supported to map and share data** about their FMNR project sites via platforms such as Restor (a digital platform that uses satellite imagery). This will contribute to a **national FMNR Impact Dashboard** to monitor, manage and aggregate data from sites under restoration across catalyst project areas and beyond. In this way, total hectares of land reported to be under restoration will include both World Vision-led dissemination activities as well as partner-led dissemination and evidence of organic spread.

**Action on national restoration commitments will be tracked** via monitoring and reports on changes in policies, funding and technical capacity. FMNR tracking capacity will be built in partner organisations through the provision of training, resources and guidance. Scaling partners' engagement in alliances will be monitored through annual workplans, reflections and Partnership Health Assessments.



## ETHIOPIA CASE STUDY

# LETTING NATURE RESTORE ITSELF

“THE ISSUE OF ENVIRONMENTAL PROTECTION HAS BECOME AN ISSUE OF LIFE AND DEATH,” SAYS TEWOLDE, A FARMER FROM NORTHERN ETHIOPIA.

Tewolde knows this is true from bitter firsthand experience. Over the years, he'd watched as many of the hills surrounding his village were stripped bare of vegetation for crop farming, animal grazing and firewood. As a result, farmers were plagued year after year by soil erosion, devastating floods and worsening droughts.

Tewolde and his neighbours had reached breaking point when they joined the local government and World Vision in a plan to repair the land. They learned how to practise FMNR to regenerate trees and shrubs from the ground up.

Despite their doubts, the farmers set about protecting the hills around their village from humans and animals to give the trees a chance to regrow. They also dug deep trenches to capture rainwater that would stream down the bare slopes during heavy downpours.

And then things began to change. The flooding slowed and natural underground springs started popping up instead.

“Some years after we started this environmental protection work, the soil fertility and land productivity have improved. I started to get triple times the harvest I got in the past. We also produce fruits like guava, mango, orange, papaya and avocados using irrigation,” Tewolde explains.

“What we most like about FMNR is that it does not require much effort, tree seedlings or water, which is a scarce resource in our place. We just need to close [the land] from human and animal touch and the natural vegetation under the soil regenerates by itself.”

Tewolde can now produce enough food to feed his family year round and there's excess to sell which helps him pay for his children's education. “Our life has improved a lot,” he says.



**“ I NOW HARVEST TWICE A YEAR. AND I GET TRIPLE TIMES THE HARVEST I USED TO GET BEFORE. ”**

– Tewolde, a farmer from northern Ethiopia.



2019

2022

# INVEST IN A SOLUTION TO CLIMATE CHANGE AND POVERTY



One million people around the world are already trained how to practise FMNR. They're getting on with the job of restoring ecosystems, reducing carbon and putting food on the table for their children. Now, it's time to scale up.

We will grow these foundations in four catalytic countries and spark a global movement that will spread FMNR to 100 countries by 2030.

To reach this ambitious goal we need philanthropists, businesses, governments, NGOs and everyday people to join us. You can be part of this historic movement to enable families around the world to revive the land and secure their children's future.

Your investment can help spread this powerful solution to poverty and climate change across the world.





# JOIN THE UPRISING

Together we can help nature fight back against climate change and lift millions of people out of poverty at the same time.

We invite you to invest your passion, resources and influence to transform a billion hectares of degraded land into liveable ecosystems by 2030.