

RESTORING AFRICA'S DRYLANDS
ACCELERATING ACTION ON THE GROUND



RELEASING THE UNDERGROUND FOREST

Launchpad Session

#GLFAfrica

White paper prepared by



WHITE PAPER

The Farmer Managed Natural Regeneration (FMNR) Hub within World Vision Australia's Food Security and Natural Resources team leads and fosters the development of FMNR globally through coordination, communication, collaboration, technical support, building scientific credibility, advocacy and project fundraising.

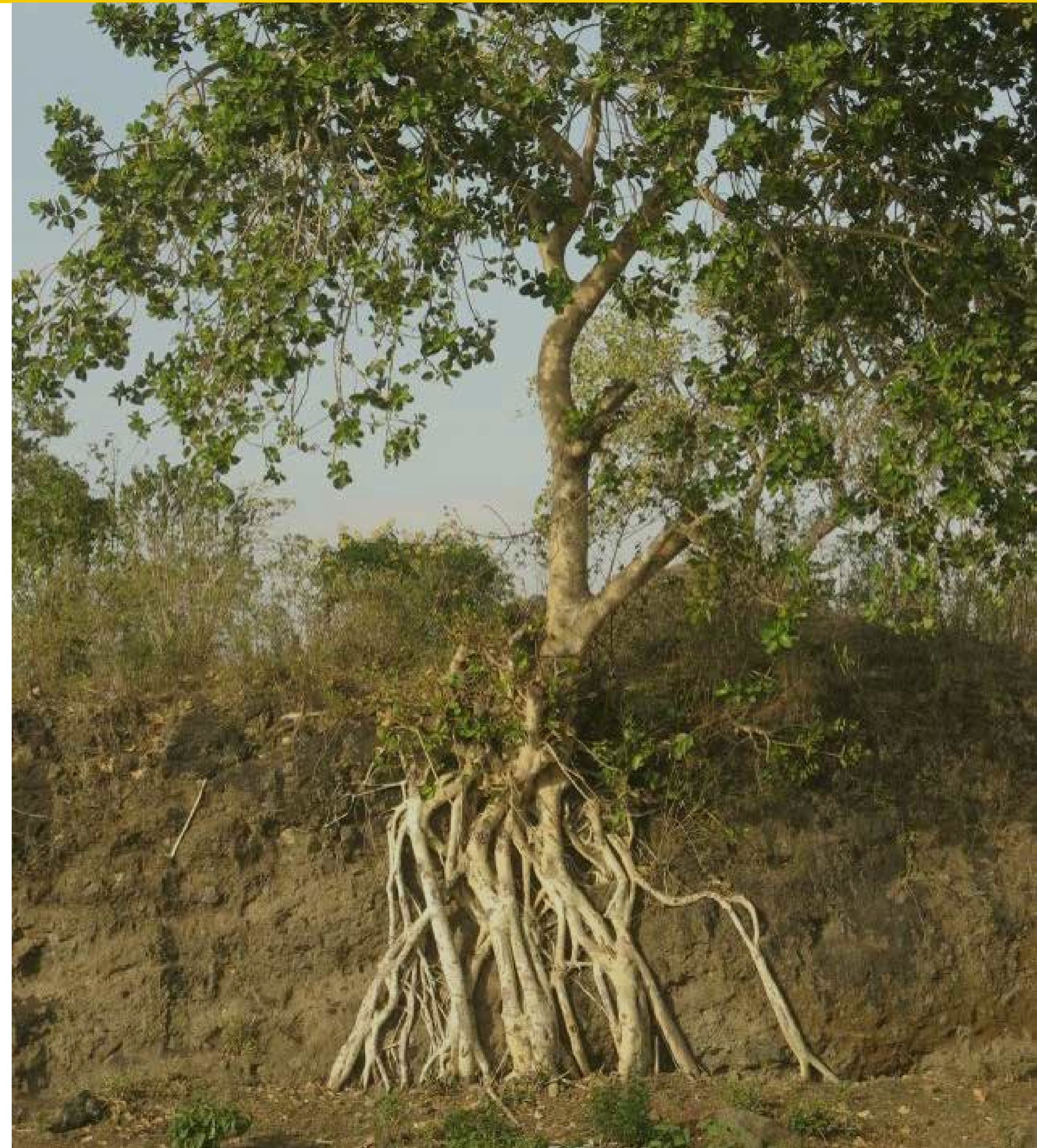
The Hub is led by World Vision Australia's Natural Resource Management Advisor, **Tony Rinaudo**, who pioneered FMNR in Niger during the 1983 famine and is regarded as the leading expert in FMNR worldwide.

DEGRADED LANDSCAPES THREATEN COMMUNITIES AND ECOSYSTEMS

Throughout the developing world, huge tracts of farm lands, grazing lands and forests have become degraded to the point they are barely productive. When trees and land are overused, soil loses its fertility and ability to sustain life, leading to erosion, destructive winds, droughts, flooding and a loss of biodiversity and consequently, suffering for the world's poorest people.

A CATALYST FOR SUSTAINABLE DEVELOPMENT

The Farmer Managed Natural Regeneration (FMNR) approach involves systematic regeneration, management and regrowth of trees and shrubs from felled tree stumps, roots and seedlings. Communities discover how the simple act of pruning can release the untapped energy of deep, underground root systems, rapidly turning shrubs and stumps into mature trees and forests in a matter of years, completely transforming the world around them. The method is a farmer-driven catalyst for sustainable development, impacting current and future generations. The tangible outcomes benefit not just the environment, but the communities who rely on it for survival. Integrated farmers can increase their food and timber production, their resilience to climate extremes, put more food on the table, earn and save more income, build better homes, and focus on providing a brighter future for their children – helping to break the cycle of poverty.

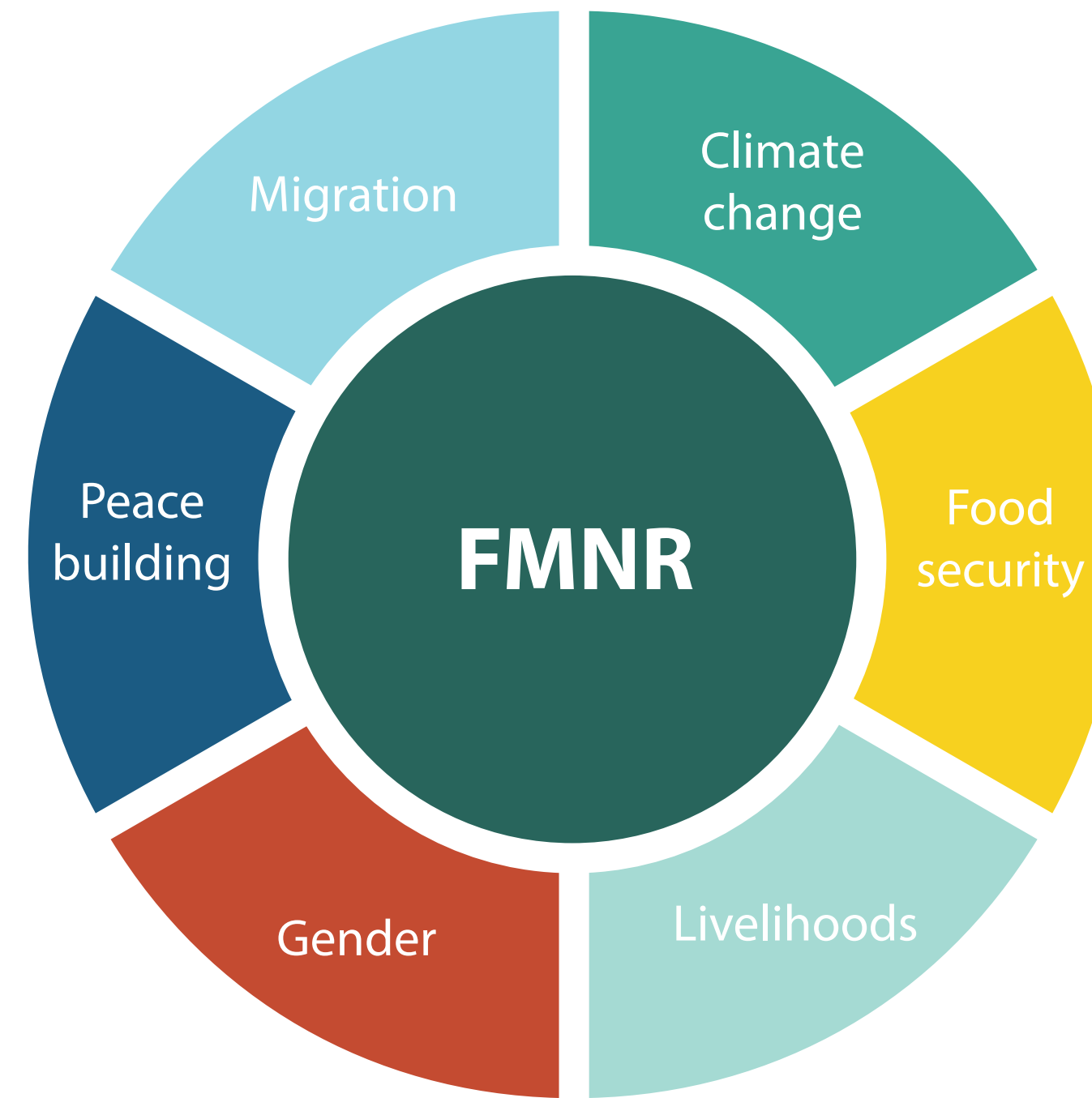


WHEN THE ENVIRONMENT THRIVES, THE COMMUNITY THRIVES

Research shows that FMNR has a range of direct and indirect benefits, including climate-change adaptation and mitigation, improved food security, increased household income, improved and equitable gender relations. It also addresses the root causes of irregular migration and supports peacebuilding efforts by bringing communities together to agree on solutions to shared problems.

World Vision has developed an integrated approach to FMNR, including:

- Coaching communities to advocate for improved environmental policy
- Mobilizing, empowering and enabling communities to take action on environment and development issues
- Training farmers in complementary sustainable agricultural practices, water and livestock management
- Linking farmers to economic services such as savings groups and markets
- Reaching marginalized people who may not be involved in other agricultural projects
- Empowering communities in conflict-sensitive natural resource management and peacebuilding
- Enhancing participation by women and youth in restoration activities
- Strengthening farmers' capacity in adaptation and mitigation efforts
- Enhancing abilities to deal with threats including fire, livestock and tree theft.



“ Without a healthy, functioning ecosystem, and in the face of cyclical patterns of droughts and floods, rural communities will be perpetually in survival mode. The risks of farming in their environments are so great that there is little incentive to invest in the necessary improvements that drive productivity gains and economic development. FMNR develops community capacity to restore the land, make it productive again, and builds community resilience and opportunity. ”

Tony Rinaudo
World Vision

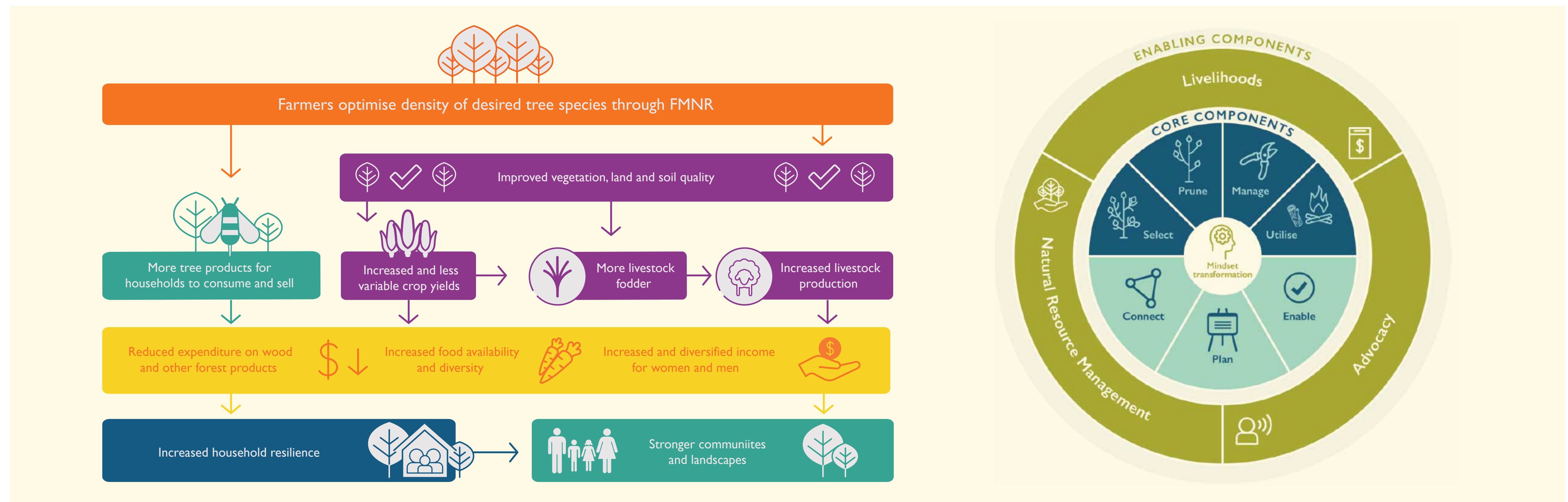


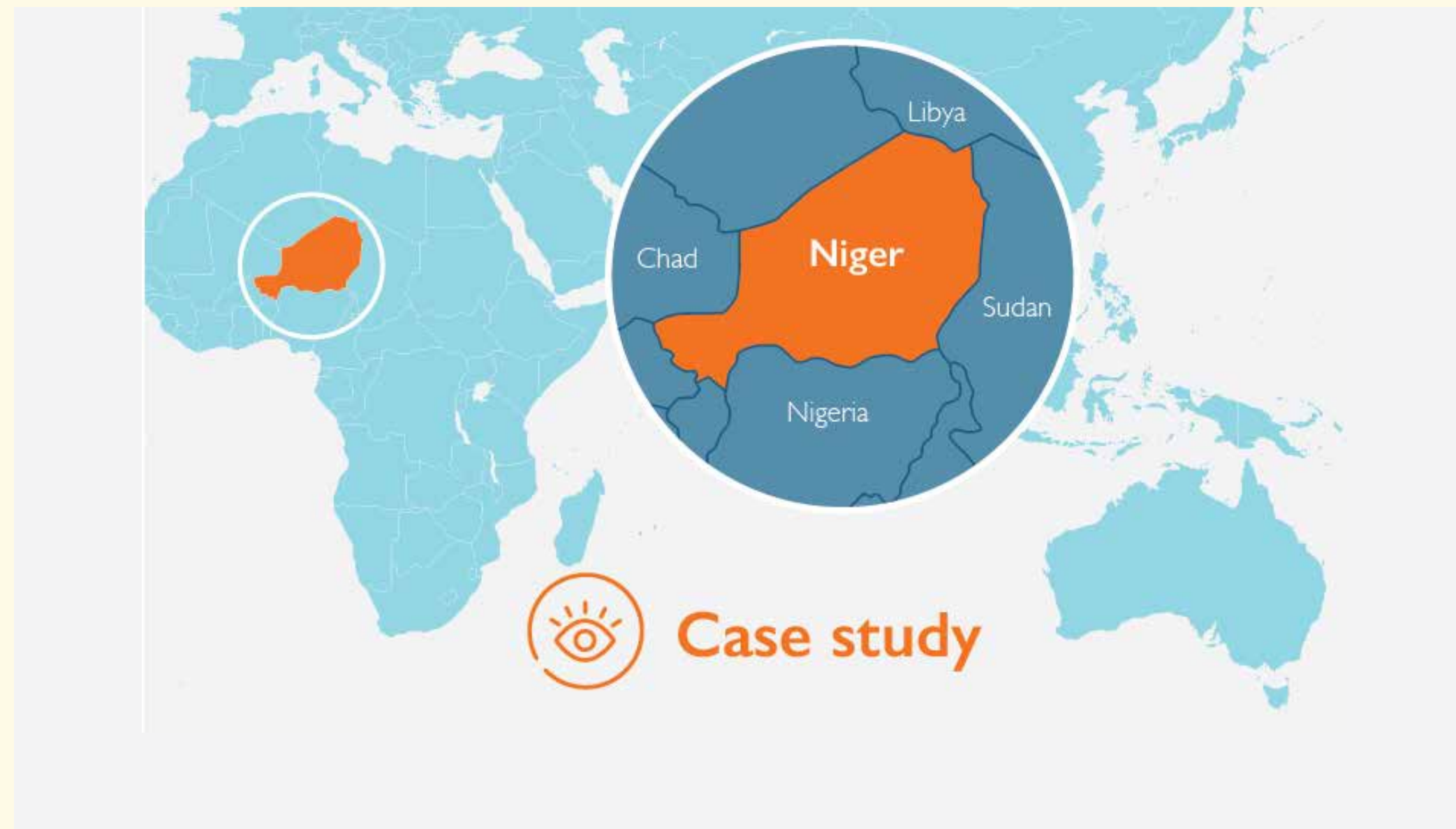
FMNR – HOW DOES IT WORK?

Farmer Managed Natural Regeneration (FMNR) is both a **technical practice** and **community development approach** for mobilizing and empowering local communities to restore their natural environment through the systematic regrowth and management of existing trees and shrubs from tree stumps, sprouting root systems or wild seeds on diverse landscapes. The approach builds on traditional/Indigenous knowledge of tree management; hence, it is easily adaptable by many farmers.

Technical practice: As a technical practice, FMNR includes the selection of trees, regular pruning of selected stems and side branches (to allow maximum growth of desired stems) and protection of selected trees and shrubs from potential threats (e.g. livestock, fire). It also includes utilization of the by-products from pruning as well as certain species (e.g. medical plants) for fodder, firewood, wild fruits, gums and resins. To adopt FMNR, community members are trained in technical knowledge and skills. This includes the identification and training of FMNR Champions, who actively work to enhance the spread and adoption of FMNR in their communities.

Community development: The adoption of FMNR also requires and enables community members to connect and plan as a group concerning the definition of a common goal and strategy for landscape restoration within the community. The adoption of FMNR implies a mindset transformation at the individual and community level associated with a shift in attitudes and agency towards addressing the causes and consequences of environmental degradation.





In the 1980s, Niger was devastated by drought. The almost total destruction of trees and shrubs intensified the impact of strong winds, drought, high temperatures and infertile soils, contributing to chronic hunger and periodic, acute famine. The country was in a state of severe environmental degradation. Women had to walk for miles to collect small branches and cattle and goat manure was used for fuel.

Without protection from trees, crops were hit by 60-70 km/hour winds that damaged crops. Farmers often had to replant crops up to eight times in a single season. When FMNR was adopted, for the first time, whole communities were growing trees on their farms.

FMNR became a standard practice and over a 20-year period, the approach spread from farmer to farmer until five million hectares of farmland was regenerated through the hard work of communities, giving hope that environmental restoration could provide farmers with a brighter future.

US\$900 million per year estimated gross income from FMNR technology in Niger alone.

YAOUZA'S STORY

After implementing FMNR on his five hectares of land, Yaouza Harouna, father of six, can now fully provide for his family. He has increased the productive capacity of his land and has become a sustainable farmer. He has regrown 310 new trees, including 60 Sahel apple trees, as well as 450 kilograms of peanuts, 250 kilograms of cowpeas, 375 kilograms of sorghum, 2,000 watermelons and 833 kilograms of Sahel apples from his new trees. With his increased income, Yaouza has provided his household with sustainable food and firewood, put his children in private school, supported relatives, employed staff and branched out into additional income-generating activities.

“ I have no shortage of fuel wood, my annual crop yield has increased ... even in drought years, trees tend to keep producing when annual crops fail. Since adopting FMNR ... I have peace of mind. I have no appropriate words that can express my recognition and thankfulness to World Vision. May God bless World Vision. ”



Yaouza Harouna showing his millet stock in the village of Tambara-Sofoua Yahaya.



For more details visit the following links:

FMNR Hub & Resources

- [FMNR Hub](#)
- [FMNR Manual](#)
- [FMNR Research and Reports](#)

FMNR – Educational videos & resources

- [FMNR case study & tutorial videos](#)
- [FMNR video on Kenya case study](#)
with focus on link between land degradation and peacebuilding
- NEW: [Educational Movie on FMNR](#)
sponsored by the German Federal Ministry for Economic Cooperation and Development (BMZ)
assisted by the German Corporation for International Cooperation (GIZ)

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GLOBAL LANDSCAPES FORUM

The Global Landscapes Forum (GLF) is the world's largest knowledge-led platform on integrated land use, dedicated to achieving the Sustainable Development Goals and Paris Climate Agreement. The Forum takes a holistic approach to create sustainable landscapes that are productive, prosperous, equitable and resilient and considers five cohesive themes of food and livelihoods, landscape restoration, rights, finance and measuring progress. It is led by the Center for International Forestry Research (CIFOR), in collaboration with its co-founders UNEP and the World Bank and Charter Members.

Charter Members: CIAT, CIFOR, CIRAD, Climate Focus, Conservation International, Crop Trust, EcoAgriculture Partners, EFI, Evergreen Agriculture, FSC, GEF, GIZ, ICIMOD, IFOAM - Organics International, ILRI, INBAR, IPMG, IUFRO, Rainforest Alliance, Rare, RRI, SAN, TMG - Think Tank for Sustainability, UNEP, Wageningen Centre for Development Innovation, part of Wageningen Research, WFO, World Agroforestry, World Bank Group, WRI, WWF International, Youth in Landscapes Initiative



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