

Mr Tony—turning deserts into food bowls

by Rob Francis, World Vision Australia

For the last three years, the Australian Government has supported Farmer Managed Natural Regeneration work in West Africa through its contributions to World Vision Australia projects.

Across the Sahel region of Africa they call him Mr Tony—a gently-spoken, gracious and religious man who has devoted his entire adult life to helping the poor grow enough food to feed themselves and have some left over to earn a living. From Senegal to Niger, from Uganda to Ethiopia and beyond, he is greeted with huge hugs of affection everywhere he goes.

Mr Tony is Tony Rinaudo, the Natural Resources Research and Development Advisor at World Vision Australia. He is also a pioneer. Twenty-five years ago he invented a conservation farming system called Farmer Managed Natural Regeneration and it is now spreading across the globe.

In Niger alone, it has transformed five million hectares of degraded cropping and grazing lands where crops failed three years in five leading to massive famine and loss of life. It has multiplied yields by up to five times, producing an extra 500,000 tonnes of grain annually, feeding an extra 2.5 million people, and doubling farmers' incomes. As a bonus, it has turned the desert into farmland again; some native wildlife and plant life have returned, water tables are back up to old levels, and it has helped communities deal with climate change.

The Sahel is a band of marginal savannah land that runs across the African continent immediately south of the Sahara Desert. It encompasses parts of Senegal, Mali, Burkina Faso, Niger, Chad, Sudan and Ethiopia. Most of its



people are subsistence farmers and it is not an easy place to live. Poverty and poor farming practices have turned productive land to desert leading to the erroneous, yet nevertheless apt, description that 'the sands of the Sahara are moving south'. Armed with a Bachelor of Rural Science, Tony arrived in the parched farmlands of Niger in 1981. The country was besieged by drought and famine. Tony soon assessed that a lack of trees was the problem. Trees are the glue that holds the land together; trees shade the soil and grazing animals from fierce heat, and they help keep it fertile.

So he started planting, but the trees kept dying. Then one day he noticed

tufts of growth here and there pushing through the baked croplands. On further investigation, he found it was re-growth from tree stumps and by pruning them back to a couple of stems, the trees would flourish. In fact, what Tony found was 'an underground forest' just waiting to bounce back to life.

The secret to Farmer Managed Natural Regeneration is to select the strongest stems and prune the rest of the bushy tufts away, which immediately adds organic matter to the soil. With a small amount of care—pruning off low branches a couple of times a year—these stems soon grow into trunks with branches full of foliage, which can be



'If you work with nature instead of fighting against it all the time, nature will work for you.'

Tony Rinaudo

used for shade, animal fodder, or it can be harvested for timber.

Called coppicing and pollarding, this time-old tradition has been around for centuries, but poverty, poor farming practices, and a lack of legal ownership of trees had led people to forget.



One of the great benefits of this method is its adaptability. In the Sahel, an eight-month dry season can mean pastures are completely depleted, but by having trees, grazing animals can make it through by feeding on leaves and pods at a time when no other food is available. It can be used to combat deforestation and can help empower communities as it creates social cohesion, helps establish user rights through work with local government and regulatory bodies, and develops beneficial business models.

Farmer Managed Natural Regeneration lends itself to sustainability—it is low-cost, rapid, not dependant on external inputs, and easily replicated. In fact, some would consider it a mystery as to how more than 50 per cent of Niger's farmlands became reforested over 20 years without government support, minimal NGO intervention, and the absence of a master plan or even budget.

But Rinaudo argues that it is no mystery at all: 'Farmers simply did what they have done for generations—they just looked over the farm fence at what their neighbours were doing and talked about it. And when farmers are on to a good thing there is no holding them back.'

Even so, there are a few foundation stones that greatly enhance the sustainability of this method and the main

one is user rights, or ownership, so that farmers can be confident they will benefit from the trees they nurture.

Farmer Managed Natural Regeneration is about winning hearts and minds because at its core it is an affront to both traditional and modern land management. 'Everybody knows that trees compete with crops and pastures and therefore must be removed,' chants Mr Tony, tongue firmly in cheek. 'And so starting a Farmer Managed Natural Regeneration movement is about winning credibility, tactfully challenging long-accepted practices, and creating an environment in which it's okay to experiment together, make mistakes, learn together and implement change.'

Although there are challenges, millions of hectares have been transformed through Farmer Managed Natural Regeneration. It is low-cost and it is being driven by the farmers themselves. It is creating social cohesion, offering new business structures, building resilience against food shortages and prices, and creating an environment that will withstand climate change. No wonder they hug Mr Tony whenever they meet him.

ABOVE LEFT: Hailidou Gangara inspects his garden after Farmer Managed Natural Regeneration.

ABOVE RIGHT: Tony Rinaudo prunes a tree.

Photos: World Vision Australia