

Case Study: Farmer Managed Natural Regeneration (FMNR) in Senegal.

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The WV funded 'Beysatol' (Work the Land) project has realized the adoption of FMNR on over 50,000 hectares of farmland within a four year period. The project builds on the learnings and momentum gained during the first phase of the project named 'Senegal Food and Livelihood Enhancement Initiative' (SFLEI). The impetus for implementing this project came from:

- The responsibility to leave ADP communities with a sustainable resource base and income stream after WV phase out.
- Increasing levels of food insecurity and poverty linked to severe deforestation and resultant land degradation.
- The failure of conventional reforestation approaches despite great persistence and investment
- Hard experience gained in other regions where environmental degradation was ignored, resulting in abandonment on villages and land and therefore the abandonment of WV investment in infrastructure (schools, clinics, water towers). Acceptance by many farmers that yields and soil fertility were deteriorating under conventional approaches, sparking a willingness to innovate
- Evidence that those who practiced FMNR in the SFLEI project were realizing increased crop yields, sustainable wood and non timber tree resources harvests and greater resilient to weather extremes

Key elements contributing to rapid spread of FMNR and lessons learned

➤ ***The project was driven by skilled, committed, conscientious staff***

WV Project staff continuously investigated, negotiated and mediated how to best recruit new and support existing FMNR practitioners. The Base manager saw the potential of FMNR and championed it when few yet saw its potential. Strong interest, commitment and support was provided by the Australian Country Program Manager and senior WV Senegal leadership, starting from the National Director. Visits by senior staff to successful projects in Niger under climatic conditions much more hostile than in Senegal reinforced this commitment. **More than funding and techniques, committed and skilled staff, with support from top leadership are an important ingredient for successful spread of FMNR.**

➤ ***Farmers' perceived risks were offset with incentives***

Most farmers were uncomfortable with the idea of having trees in agricultural fields.

Reasons for this include:

- The fear of losing management rights over trees on their land. When tree regrowth is still small, the farmer can do what he wants with it, but when trees are large, in many countries they belong to the government and it is illegal to harvest them
- The fear of others stealing regenerated trees acted as a powerful disincentive against practising FMNR

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- Farmers' concerns that trees would reduce crop yields through competition and shading. Along with education, the project helped overcome farmers' fears with incentives in the inception period. For example, during the 2008 food crisis, 'food for work' programs were tied to farmers practising FMNR. As the food crisis subsided, 'food for work' was phased out and replaced with short term support for income generating activities. In time, farmers realized that crop yields were increasing when trees were left in their fields.

➤ ***Farmers received messaging from other farmers***

Before FMNR was introduced to the region, farmers (men and women) were sent on an experience sharing visit to Niger where they interacted with farmers applying FMNR in even harsher conditions than in Senegal. This exchange was key in convincing early adopters. Today, credible and experienced peer demonstrators can be found locally and Senegalese farmers are learning from farmers in their own neighbourhood. **Farmers believe farmers.**



Left and Right. Farmers became the greatest advocates for FMNR. This farmer erected a flag and a sign post on the roadside bordering a market road so that he could explain FMNR to curious passers-by.



➤ ***Women were recruited as well as men***

When women are not included in reforestation project plans, they may be accused of destroying the work in the process of collecting firewood. This was overcome by including women from the outset and by recruiting and training female FMNR champions as well as men. Women seem to network and talk to each other better than men do and they work hard. They are highly motivated to promote FMNR because they are the ones who suffer most when fuel wood is scarce. Now instead of working at cross purposes with each other, men and women work together to achieve the same goals. Often, women are more vigilant at promoting and coaching FMNR to their female peers than men are to theirs. **A good FMNR project will always engage female farmers and promoters.**



Left: Women FMNR champions promoting FMNR in a 'travelling road show'.

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➤ ***Time was invested in developing local tree-management agreements***

Much time was invested to understand laws and cultural standards for land and tree ownership and use and to then advocate for enabling laws and cultural norms for reforestation to occur. This culminated in binding agreements being negotiated with the government forestry department, communities and traditional leaders, ensuring:

- Farmers growing trees have clear rights to benefit from those trees, including the right to harvest them
- Legal and cultural recognition of trees as possessions of the land user and agreed and enforced consequences for stealing trees
- Improved land tenure rights where land is officially owned by the government or customary owners (e.g. the village chief)
- Traditional grazing corridors for nomadic herders are respected, and these herders are educated by authorities about the new regulations for tree cutting on farm land

In the original SFLEI project it took more than two years to reach clear decisions, contracts and actions agreed on by farmers, chiefs and local representatives of the Forestry Service. Given the strong uptake of FMNR, this is seen as a worthwhile investment of time.

Regrowth preserved for FMNR is now marked with bright paint or a ribbon. This gives a regenerated tree equal ownership status to a planted orchard tree. Identifying FMNR trees in this way also prevented wood harvesters from claiming that they did not know the farmer was practising FMNR.



The project worked with farmers, chiefs and the Forestry Service to '**geo-reference**' (perform GIS mapping of) each farmer's current fields. The supporting documentation provided a strong basis for agreement on land tenure from all parties, greatly increasing security of land tenure. Once land possession is documented by all four parties (household, government ministry and chief), it is difficult for any one of those authorities to override it to seize the land for other purposes.

Above: Cement marker placed on field border.

Trees are a long-term investment. It is irrational for farmers to invest in trees and soil quality unless the legal processes provide confidence that the trees and the land will remain in their possession long enough to benefit from that investment. **Taking time to sort out tree and land tenure issues is a good investment of time.**

➤ ***Multiple behaviour change communication approaches were applied***

Training events such as workshops are useful first steps towards behaviour change. They introduced new ideas to people, but actually changing routines is a gradual process requiring many inputs.

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The project design and subsequent practices created numerous different pathways for project messaging to reach people. **Government forestry service staff** no longer perceived as tree police, but as support agents to farmers, visiting farms, sharing ideas and lessons, and helping protect farmers' trees. **Environmental education and FMNR were taught in the local school curriculum**, so children could discuss new ideas with their parents and know what to do when helping prepare the fields. **Radio programs** interviewed experts and practitioners and promoted FMNR. **Imams and pastors** held discussions about their role in promoting good stewardship of God's Creation. **Women, as well as men**, were involved. **Local leaders** were engaged in discussions and negotiations. **Exchange visits** to meet other practitioners were facilitated. **Promotional 'caravans'** (travelling road shows) entertained and informed villages using music, drama, interviews and interactive discussions. **FMNR champions** regularly visited farmers in their own fields to encourage them, discuss on-site potential, and help trouble-shoot any difficulties. The legal and cultural tenure systems were analysed and renegotiated.

Multiple and varied messaging over time, and an enabling environment created by the project helped environmental restoration and FMNR adoption become a movement.

➤ ***Faith engaged as a development medium***

In design and practice, the project made a concerted effort to engage with Muslim and Christian leaders, who previously had not been engaged in discussions about the environment: God's Creation. The project formed an alliance with a nationally recognized and respected Muslim cleric who was passionate about environmental stewardship. The project supported him to facilitate discussions with hundreds of religious leaders in the region and to explore environmental responsibility from a scriptural basis. Many of these local religious leaders also became enthused and active in promoting environmental stewardship. **Spiritual leaders are highly influential in forming farmers' world views. They have been powerful project allies in winning hearts and minds of the farmers.**

➤ ***The project invested in an army of farmer FMNR champions***

Regular follow-up with farmers in their fields greatly motivates and builds confidence of farmers to adopt FMNR. This follow up was and is enacted by the forestry agents and farmers themselves.

The Forest Service officers have become experts and champions of FMNR. When they visit farms, they are no longer the feared arm-of-the-law, but are advisors helping farmers make decisions about tree selection, location, pruning etc. In addition, a corps of farmer FMNR champions was developed. Each village nominated one dynamic early FMNR adopter as their own FMNR champion. Champions were then given in-depth training and were assisted with a motorbike and a monthly payment to compensate them for the time they give to the project. They had to reach agreed work targets in order to continue receiving benefits. Each village nominated one dynamic early FMNR adopter as their own FMNR champion. Champions were then given in-depth training and were assisted with a motorbike and a monthly payment to compensate them for the time they give to the project. They must reach agreed work targets in order to continue receiving benefits.

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Like the Forest Service officers, they spent time each week with farmers, providing encouragement, updated information, and advice on FMNR. They are known and trusted locally.

Regular follow-up is the key for many or most farmers commencing and establishing FMNR. Most World Vision projects rely on one or two project staff, occasional sub-contracted trainers and community volunteers. Compensated village-level FMNR champions are a rare WV inclusion which has contributed significantly to mainstreaming FMNR into farming practice.

Questions:

1. What were the key initial incentives used in this project?
2. What types of incentives and how much can be used for an FMNR project?
3. How long should incentives be used for?
4. Why are different forms of messaging from multiple sources important to FMNR adoption?
5. Why were women such powerful proponents of FMNR?
6. What should the role of spiritual leaders be in FMNR projects?
7. Why is it a good investment of time to understand and address tree and land tenure issues?
8. Why are farmers more likely to listen to other farmers?
- 9.

Acknowledgement: The bulk of the information presented in this document was drawn from: Lessons Pete Learned for FMNR: Observations of the reasons for success of the Beysatol Environmental and Economic Project. April, 2011.