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“Food and nutrition security and its resilience
to global crises”

Lets Make the Desert Green..

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Abstract

Desertification and soil degradation are two of the biggest threats to environmental health in the Sahel region. As a part of the Great Green Wall project, Entrepreneurs without Frontiers, a Belgian non-profit organisation, has performed a number of reforestation projects in Burkina Faso (10,000 ha between 2009 and 2018) and Senegal (250 ha since 2019).

In Burkina Faso, reforestation was planned and executed in collaboration with local communities. The Vallerani method was used to prepare degraded soils. Half-moon shaped pits (demi-lunes) were dug using a Delfino plough in order to harvest and store water during the rainy season, and provide it to seedlings and later on plants growing in the pits during subsequent years. The project uses local tree species because they are well-adapted to local conditions and appreciated by the local populations. Overall, 5 *Acacia* species, *Balanites aegyptiaca* (L.) and *Ziziphus mauritiana* (Lam.) were the main tree species selected. Seeds were mixed with sand and scarified through crushing before sowing. This resulted in an average planting density of 450 trees/ha (ca. 2 trees per crescent). Together with trees, herbs and grasses are sown to provide cattle feed especially in the dry season that is either used direct, or else harvested and sold. The assumption is that extra forage leads to fatter animals with a higher market price which results in higher incomes. Our experience shows that this type of plantation increases both floral and faunal biodiversity. At least 32 bird, 8 mammal, and 1 reptile species were observed between 2012 and 2014 in the forests (observed by Saidou Kalaga). Gender equality is a key component of project rationale. Women are paid to collect seeds and sow plots, providing them with an income of their own. This approach, developed and tested in Burkina Faso, is being applied since 2018 in similar reforestation projects in Senegal (Sahel region).

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