

The Sahelian "bocage": a solution for the fight against climate change

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The problems / issues:

- climatic disturbances materialized by pockets of drought more or less long and unpredictable;
- heavy rainfall in a few hours resulting in severe erosion of the upper soil layer;
- strong winds at the beginning and at the end of the rainy season, carrying the fine elements and part of the soil organic matter
- rainfall may be sufficient, but a large part of the water is lost by runoff.

The solutions:

- 1- Transform farms into a "bocage", i.e. setting up of planted hedges and anti-erosion bunds, trenches to recover the water and for the planting of life-hedges, ponds to collect fields' surplus water, fences to protect the hedged area)
- 2- Development of efficient agricultural techniques to enhance the value of the bocage (Subsoiling and Zaï technique to increase the infiltration of rainwater, planting trees along the axis of the fields, crop rotation, grazed fallows with electric fence, sowing under cover, etc.

The obtained results:

- 1,261 hectares of farms converted into bocage for 438 agricultural households;
- all rainwater is captured inside the perimeter of the bocage's hedges, which makes it possible to cope with pockets of prolonged drought during the rainy season;
- trees grow more easily;
- the bocage perimeter also favors the recolonization of the environment by extinct endemic species;
- an increase of more than 100% in agricultural yields of cereals;
- greater availability of organic matter on the ground;
- greater availability of feed for animals.