

Turning Typha into durable wealth

GRET's pilot programme aims to transform an aggressive wetland plant called Typha that grows abundantly all along the Senegal River corridor into sustainable 'green' charcoal for cooking. This insightful idea tackles a variety of challenges simultaneously, limiting the proliferation of the invasive reed, reducing deforestation and pollution by traditional charcoal production methods and creating new economic opportunities and income for local communities. We are supporting GRET's initiative to establish six Typha charcoal production units in the Richard Toll district of northern Senegal, improving the livelihoods of 200 small artisans and indirectly benefitting over 3,000 people.

DURATION: 2016-2018

CHALLENGE: Responsible management of natural resources

COUNTRY: Senegal

PARTNER: GRET



CONTEXT

At least half of Senegal's population of 13 million relies on wood and charcoal for household fuel, which accounts for 2.5 million trees cut down every year nationwide. This deforestation contributes to increased desertification, causing severe degradation of the vegetation cover, greater soil erosion and diminished soil fertility in a country where 65% of the population depends on the agricultural sector, either directly or indirectly.

Alongside this pressing environmental challenge, another major problem looms on the horizon: the uncontrolled spread of Typha Australis, an invasive weed that overgrows the Senegal River's banks causing major damage. It chokes waterways, diminishes biodiversity, contributes to the spread of water-borne diseases that result from stagnant water, impedes fishing and agriculture and displaces entire populations dependent on river-related activities.

ACTION

To meet the dual challenge of fighting deforestation and simultaneously limiting Typha proliferation by putting it to effective use, GRET's pilot programme intends to set up small enterprises for the production of Typha charcoal in six targeted villages of the Richard Toll region in north-western Senegal.

Once the Typha weed is harvested, it is carbonised and compressed into briquettes of "green charcoal". The briquettes are then used for cooking and other household necessities.

- In environmental terms, consuming Typha charcoal relieves pressures on the Senegal River as well as on forests. For every ton of typha charcoal produced, seven tons of wood are saved from logging. The impact in terms of greenhouse gas is also significant since Typha is a plant that grows very quickly.
- In economic terms, using Typha to produce charcoal creates new job opportunities and additional revenues, strengthening the autonomy of the inhabitants of the six villages concerned.

EXPECTED RESULTS

- 6 small Typha charcoal rural production units are established and running, managed by local workers.
- A network is established, supporting the process from the production of Typha charcoal through to market uptake, and an effective resource management strategy is in place.
- 200 individuals benefit directly from this economic activity in terms of jobs and complementary incomes (cutting, drying, mixing and briquetting). Indirectly, 5,000 people - women in particular - benefit from the use of a cleaner energy source for cooking.
- The energy autonomy of the region is increased thanks to the adoption of the new fuel by at least 50% of households.
- 6 villages regain access to water for their agricultural and pastoral activities.

LONG-TERM STRATEGY

GRET's pilot initiative in Senegal builds on the success of a very similar programme conducted in Mauritania between 2011 and 2016 in partnership with the Higher Institute of Technological Studies (ISET) and the Diawling National Park. The programme brought together groups of rural women who now produce charcoal, use it at home and sell some (at competitive prices) in their local communities. Producing Typha charcoal has become a financially sustainable activity for riparian cooperatives and small private operators.

The introduction of Typha charcoal production in Senegal could lead to an entirely eco-friendly manufacturing sector. GRET is implementing the programme in collaboration with all the relevant local and technical stakeholders, including ISET, the Gaston Berger University in Saint Louis and the Djoudj National Bird Sanctuary.