

Adaptation to Coastal Erosion in Vulnerable Areas

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Director, GREEN Sénégal**

Who are we?

GREEN Senegal is present in:

Urban Environment:

- ✓ sanitation and household waste management,
- ✓ organization and strengthening of organizational dynamics;
- ✓ Communications at the local , national and regional levels.

and.....

Rural Environment:

- ✓ establishment of social enterprises (processing post-harvest products)
- ✓ agricultural diversification with TIPA, seed multiplication, processing and packaging;
- ✓ support to farmers on resources, capacity building and production needs;
- ✓ Agroforestry and natural regeneration;
- ✓ water control;
- ✓ fight against land salinity with retaining dyke, enhancement of rice production, applied research with research centers, and halophytes species.



What are GREEN SENEGAL's Actions in Adaptation to Climate Change?

- ✓ 2008 – implementation of the project « Infoclim » a participative platform to provide information on the adaptation of vulnerable communities to climate change, done in partnership with CSE, Laboratoire de Physique de l'Atmosphère et de l'Océan Siméon Fongang, Laboratoire Genre et Recherche Scientifique (sis à l'IFAN) and Agence Nationale de la Météorologie du Sénégal;
- ✓ 2009 : opening of new department in Dakar to deal with issues related to marine and coastal environment in Dakar;
- ✓ 2009 – implementation of a project on environmental monitoring and management of fisheries in the cities of Joal, Soumbédioune, Yoff, Kayar, and Rufisque with funding from the Netherlands and UICN;
- ✓ 2010 - implementation by GREEN SENEGAL of the global project on adaptation to climate change

Implementing the Project

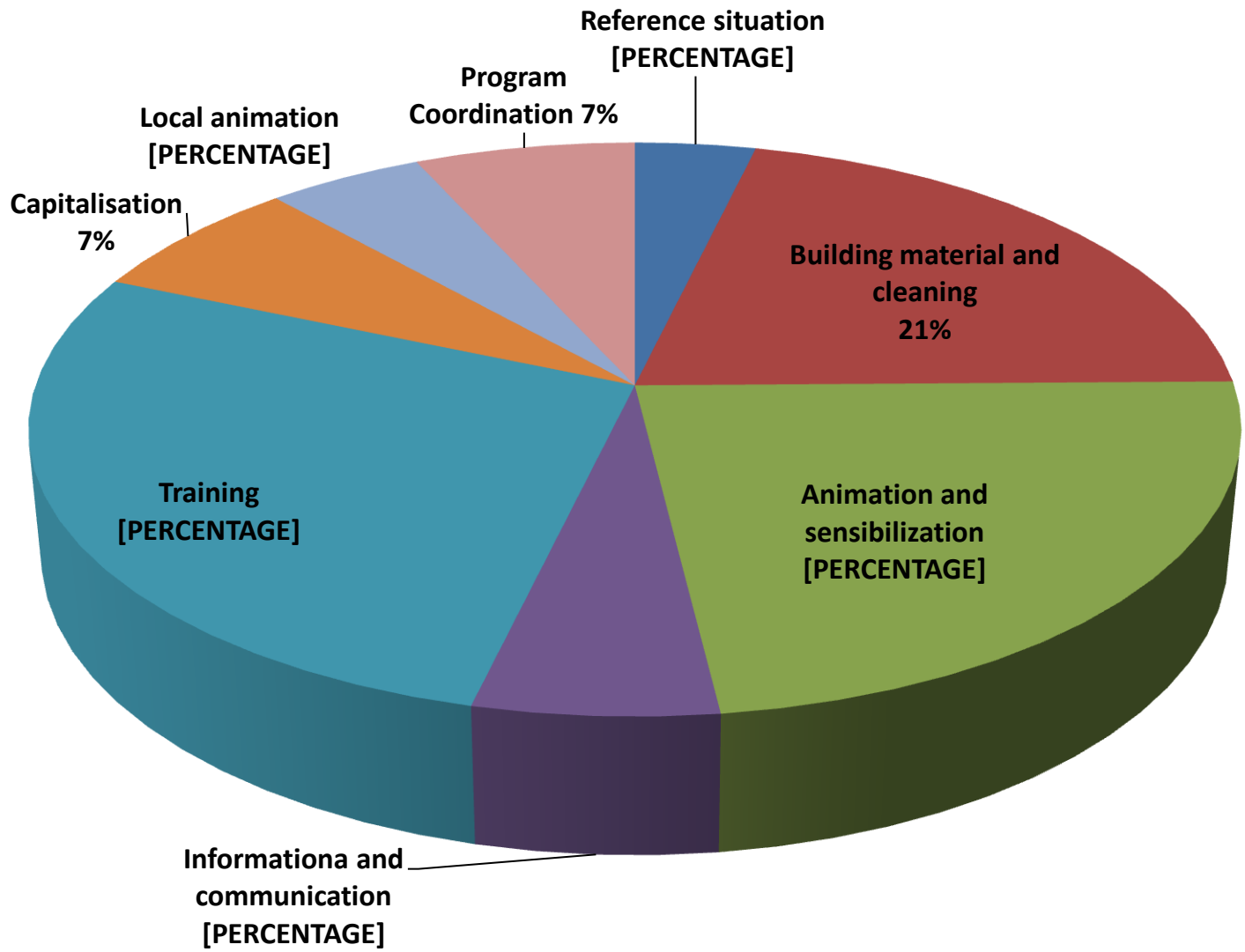
Adaptation to Coastal Erosion in Vulnerable Areas

First funding from the Adaptation Fund. It is implemented in Joal, Saly and Rufisque by the Direction de l'Environnement et des Etablissements Classés (DEEC), GREEN SENEGAL and l'Association Dynamique Femmes in partnership with the Centre de Suivi Ecologique.

Total cost: US\$ 8.619.000\$ shared among partners:

- DEEC: 6.635.000 \$
- CSE: 564.000 \$
- Dynamique Femme: 1.750.000\$
- GREEN Sénégal: 670.000 \$ (soit 7,8% du total)

Budget Repartition Based on Activities



Project Context

The Atlantic Ocean swallowed on average one to two meters of beach per year
...resulting in coastal erosion, one of the most important risk factors
.....leading for ecological disaster and slow economic development in Senegal

Coastal erosion as a consequence of climate change with impact on:

- ✓ Tourism – hotels on coast
- ✓ Living areas – coastal populations losing houses
- ✓ Fisheries – coastal infrastructure
- ✓ Agriculture – salt water invading arable lands

Threats:

- ✓ Rising sea level, Increased wave height, Sea water warming

Consequences:

- ✓ Erosion, Floods, Salinization of water and soil
- ✓ Loss of arable land and play areas along the beaches
- ✓ Destruction and reduction in mangrove areas
- ✓ Change in marine biodiversity (fish, birds, phytoplankton)

Some solutions with GREEN Senegal



 REPUBLIQUE DU SENEGAL UN PEUPLE-UN BUT-UNE FOI MINISTERE DE L'ENVIRONNEMENT ET DE LA PROTECTION DE LA NATURE 	
PROJET:	ADAPTATION A L'EROSION COTIERE DANS LES ZONES VULNERABLES REHABILITATION DU MARCHE AUX POISSONS DE SALY COULANG
FINANCEMENT:	FONDS D'ADAPTATION AUX CHANGEMENTS CLIMATIQUES 
BENEFICIAIRE	COMMUNE DE SALY
MAITRE D'OUVRAGES	DIRECTION DE L'ENVIRONNEMENT ET DES ETABLISSEMENTS CLASSES  ONG GREEN SENEGAL 
ENTITE DE MISE EN ŒUVRE	CENTRE DE SUIVI ECOLOGIQUE 
ENTREPRISE	GREEN GC Bp 45 241, Sud Foire Dakar tél. 33 867 52 00
Délai des Travaux	Trois (3) mois



Some solutions with GREEN Senegal

Infrastructure

Rehabilitation of the Saly Koulang fish market co-managed by communities and women fish processors with drying area of fishery products, solar electrification; construction of bathrooms; protection of the site with the building of a retaining wall used as dyke against the erosion.

Building of the Joal Dyke, one of the most important achievements of the project, control structures, replanting of vetiver and other halophilic species along the dyke to strengthen its steadiness and contribute to its sustainability and reclaiming of land to help restore rice production activities.



Some solutions with GREEN Senegal

Capacity Building

Training for 40,000 including women's groups, local elected officials, neighborhood committees, socio-professional organizations and community on organizational dynamics, coastal erosion, NAPA, climate change and fisheries and restoration of degraded land.



Establishment of a coastal network - a coalition of the different stakeholders sensitive to coastal erosion made up of fishermen, women fish processors, local safety committees, ecological monitoring committees and elected officials.



Knowledge exchanges in various locations to brainstorm on: land reclaiming; rice production; stocks and seeds conservation; awareness and capacity building of stakeholders; creation of local committees on land management: definition of the rules for

Some solutions with GREEN Senegal

Communication and social mobilisation

✓ **weekly radio shows on the two stations of Sud FM in Mbour and Djiokko in Rufisque**, with a total audience of over one million; awareness building in schools and competition/award; distribution of cleaning and waste management equipment;

✓ **community-driven development committee** created gathering technical services, local groups, grassroots organizations and implementing agencies;



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Communication and social mobilisation

- ✓ **home visits** crucial to build awareness, discuss project objectives and agree on the best behavior of the coastal populations that will ensure sustainability of the activities;
- ✓ **creation of a socio-economic database of households** with a baseline that allowed an assessment of the present situation in terms of level of erosion, system organization of actors, resource mobilization, collective business initiatives and involvement of authorities.

