

DIRECTION DES EAUX-FORETS,  
CHASSES ET CONSERVATION DES  
SOLS

DIRECTION DES  
HYDROCARBURES

**Sustainable Forestry: Providing Clean Energy and Gender-  
Sensitive Development  
EXPERIENCES OF PROGEDE2**

**UNFCC: COP21**

Paris, 05 Décembre 2015

**Présenté par : Colonel Alassane NGOM**



# SENEGAL: Situation



# SENEGAL: administratives, sociodémographique and environnementale data

## ADMINISTRATIVES DATA



- ❑ **Official name** : République du Sénégal
- ❑ **area** : 196 722 Km<sup>2</sup>
- ❑ **Political régime** : République
- ❑ **Capital** : Dakar
- ❑ **Principal cities** : Thiès, Kaolack, Ziguinchor, Saint-Louis, Touba
- ❑ **Official language** : French
- ❑ **Principal local language** : Wolof, Diola, Puular, Sérère et Soninké



## SOCIODÉMOGRAPHIC DATA



- ❑ **Population** : 13 508 715 Resident
- ❑ **Less than 25 of age** : 62%
- ❑ **More than 60 of age** : 5,2 %
- ❑ **Growth of population** : 2,5%
- ❑ **Density** : 69 habitants/km<sup>2</sup>
- ❑ **Growth or urbanization** : 44 %
- ❑ **Taux d'alphabétisation** : 52 %
- ❑ **HDI** : 163<sup>e</sup> sur 187 pays (PNUD, 2013)



## ENVIRONNEMENTALE DATA



- ❑ **Length of oceanic coast** : 700 Km
- ❑ **Climat type** : sahélien
- ❑ **hydrographic** : fleuve Sénégal (1 770 km), fleuve Gambie (1 150 km), lac de Guiers (600 millions m<sup>3</sup>)
- ❑ **Emission Gaz à Effet de Serre (2000)** : 7 525 Gg ECO<sub>2</sub>
- ❑ **Emission Gaz à Effet de Serre (2005)** : 11 825 Gg ECO<sub>2</sub>

# PRESENTATION OF PROGEDE 2

## TITRE DU PROJET

**SECOND SUSTAINABLE AND PARTICIPATORY ENERGY MANAGEMENT (PROGEDE II)**

## DÉVELOPPEMENT OBJECTIVE

**Contribute to increase the availability of diversified household fuels in a sustainable and gender equitable way, and to contribute to increase the income of participating communities while preserving the forest ecosystems.**

## FINANCE :

- Crédit N°4759 IDA : 15 000 000 US\$**
- Don NDF: 3 000 000 Euro**
- Contrepartie ETAT DU SENEGAL: 2 127 200 US\$ (2011-2015)**

## COMPONENTS

**Component I: The Reforms of the Charcoal Value Chain**  
**Component II: The Sustainable Wood fuels Supply Management**  
**Component III: The Promotion and Diversification of Modern Household Energy**  
**Component IV: The Institutional Arrangements for Project Management**

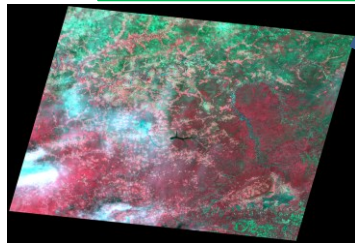
## BENEFICIAIRES

**Rural peoples; local Collectivities; Economic operators in the household energy sector; DEFCCS & DH; Technical services .**

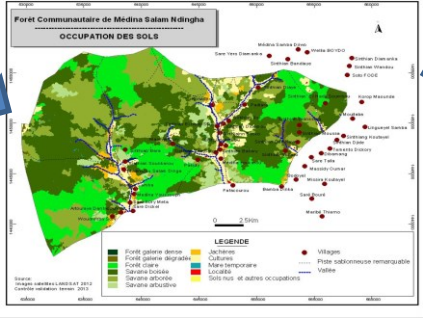


# SUSTAINABLE FORESTRY: Process and achievements

1 Acquiring & processing satellite images



Mapping land use land cover



2 Forest inventory



23 forest covering 997,263ha

3 Processing and analysing inventory datas

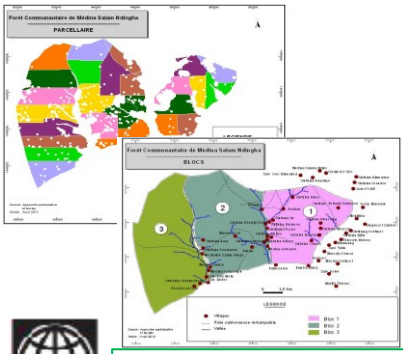


Tec. & Soc. Validation

5 Acting the forest allocation



6 Exploitation



4 Forest zoning



7



Regénération





# SUSTAINABLE FORESTRY: Process and achievements

## EMISSIONS REDUCTION OF GHG

### Respect of cutting standards :

- **Cutting height:** ensures the regeneration of stem
- **Respect of forest possibilities:** to sustain the soil protection functions and habitats of wildlife ecosystems

### Energy Efficiency :

- Using more efficient Kiln ( Meule Casamance) 37% VS 18% ( traditional kiln)
- Air pollution reduction

### Bush Fires Control:

- Opening manual and mechanical firewall
- Setting up local committees to fight against fire bush

### Capacity building of local communities by training in :

- Improved cutting technics
- Efficient carbonization technics
- Forest supervising technics and bush fire fighting

## CARBONE SEQUESTRATION

### Ensuring sustainability :

- Bunday marking and signing of managed community forest
- Acting the allocation of forest by local governement
- Legal recognition of local committees
- Forestry code reform

### Reforestation:

- Planting in forest plot exploited ,
- planting in mangrove ecosystem
- planting in degraded forest

### Other activities in forest management plans :

- Protection of fragile ecosystèmes
- Carbon Monitoring
- Watershed management
- Fruit farming and garderning to diversifie revenue sources

# CARBON MONITORING

## Setting up Carbon Monitoring System:

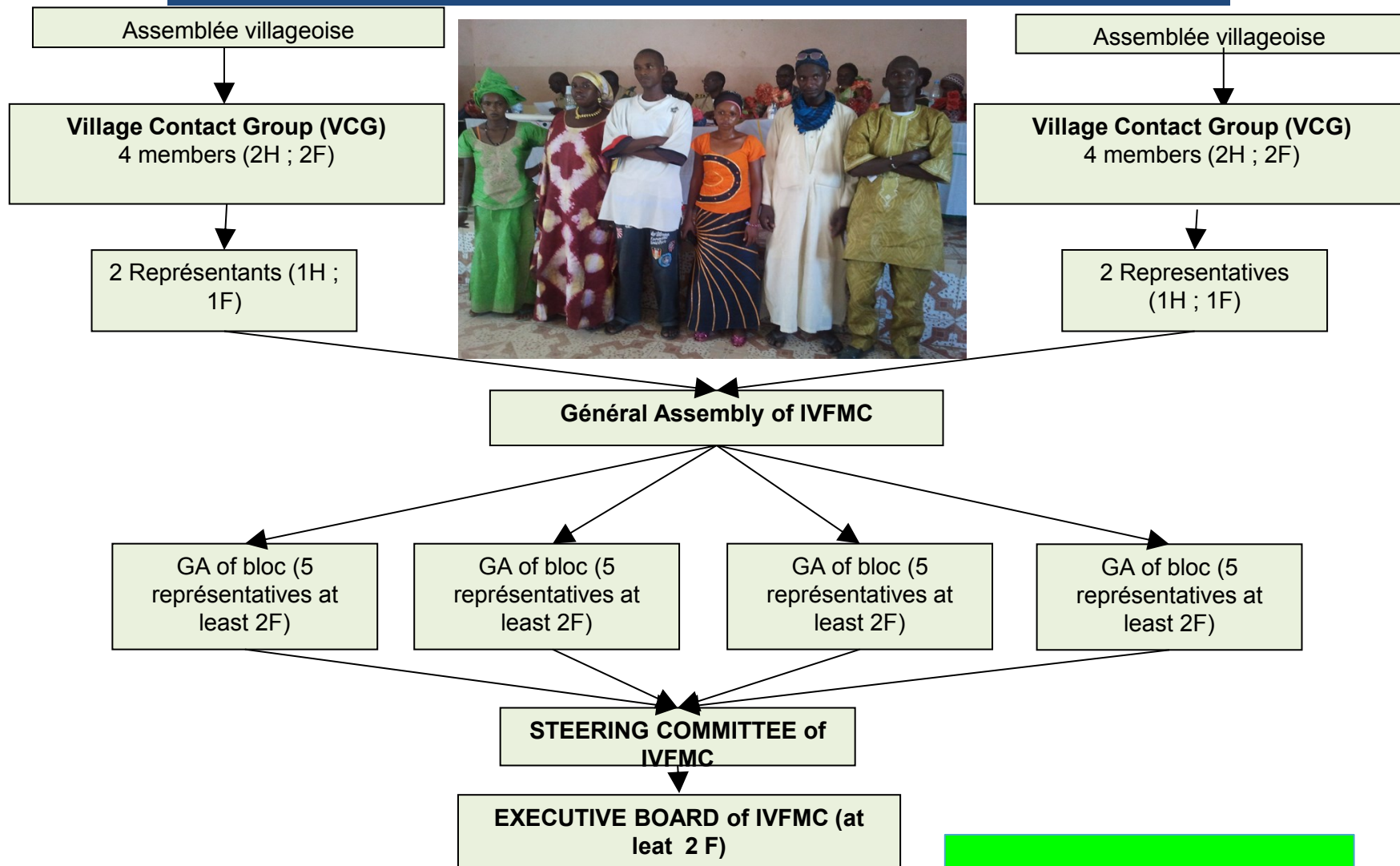
- Elaborating a carbon monitoring plan
- MOU with ISE (university),
- Validating a national inventory protocol for assessing forest carbon stocks
- capacity building

## Inventory:

- 600.000 ha covered
- 56 418 778 t eq CO<sub>2</sub>



## ORGANIZING POPULATIONS INTO INTER-VILLAGE FOREST MANAGEMENT COMMITTEE (IVFMC)



**23 IVFMC set up**



## ORGANIZING LOCAL PRODUCERS

### National Network of local charcoal producers of Sénégal

Regional Federation of local producers

Regional Federation of local producers

Union EIG Forest\_1

Union EIG Forest\_2

Région\_2

EIG Bloc\_1

EIG Bloc\_2

EIG Bloc\_1

GIE Bloc\_2

Union EIG Forest\_1

Union EIG Forest\_2

EIG Bloc\_3

GIE Bloc\_4

EIG Bloc\_3

EIG Bloc\_1

EIG Bloc\_2

EIG Bloc\_1

EIG Bloc\_2

GIE Bloc\_5

EIG Bloc\_3

GIE Bloc\_4

EIG Bloc\_3

Union EIG Forest\_3

EIG Bloc\_1

EIG Bloc\_2

EIG Bloc\_3

EIG Bloc\_4

Région\_1

112 EIG, 26 Unions of EIG et 4 Regional Federation set up

# IMPACTS OF GENDER MAINSTREAMING

## BASELINE : Gender assessment of PROGEDE1

**Weakness of gender dimensions (objectives and indicators not gender sensitive)**

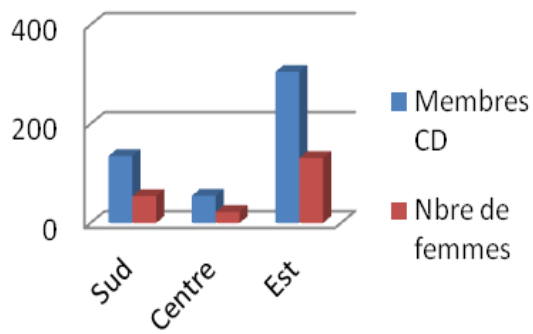
**Low representation of women in forest management bodies**

**Low income share for women and vulnerable groups**

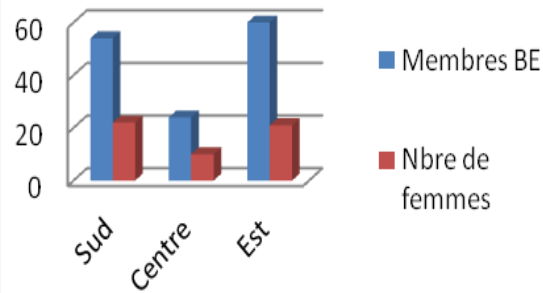
**Confinement of women for only gardening activities**

## CURRENT SITUATION

### Femmes dans les CD



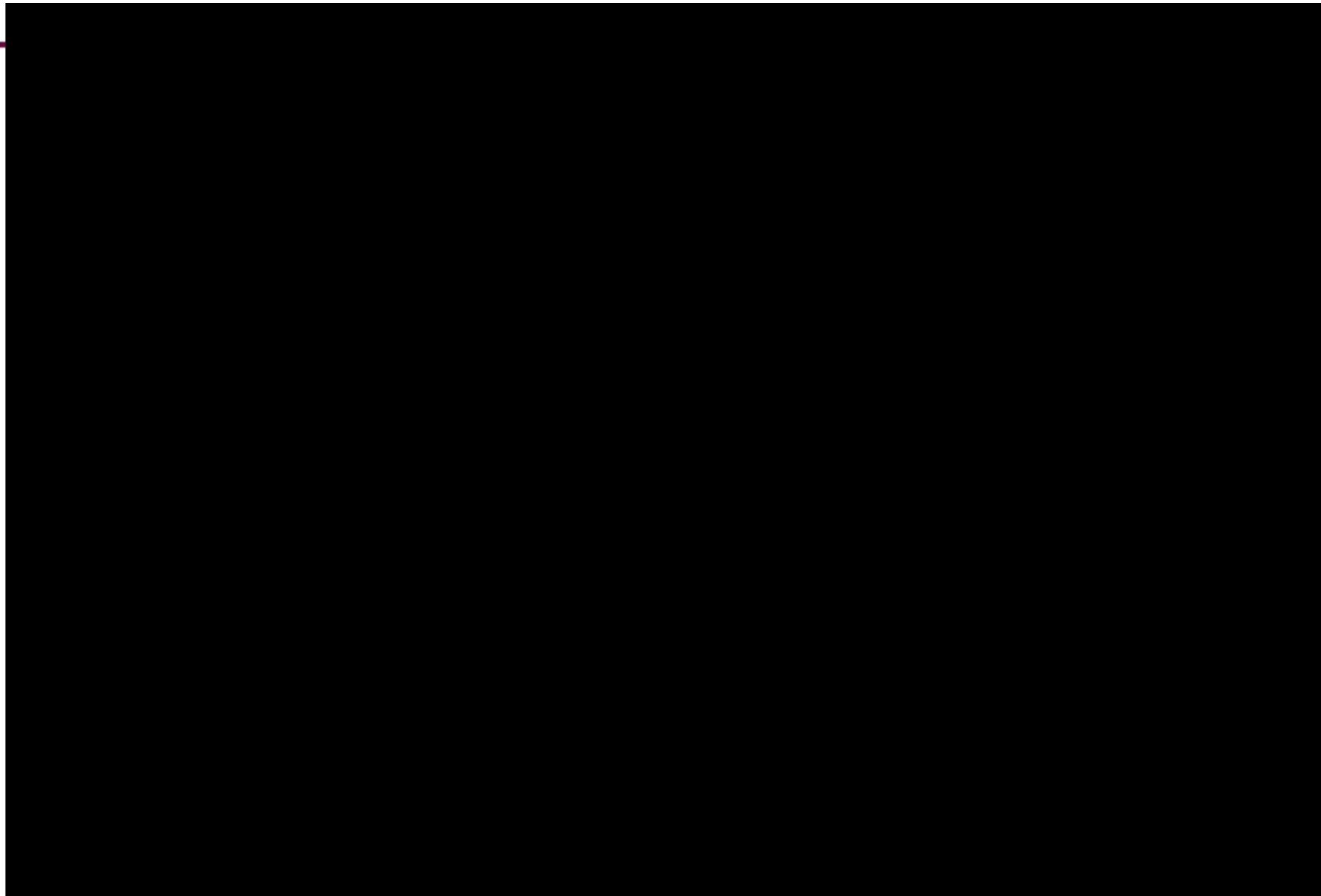
### Femmes dans les BE



**Increase in women's income from 3% to 12% from 2009 to 2013**

**Emerging female charcoal producers (from 0 to 1018 women);**

**Involvement of women in technical training session (from 0 to 1018)**



# ENERGY EFFICIENCY AND ALTERNATIVE ENERGY SOURCES



- Grant 16 production and dissemination improved stoves projects corresponding to **113 300 units/year production capacity**
- biomasse saved estimated is 28 951 tonnes/ year

## Production and dissemination of Improved Stoves



Biogas

- Promotion of biogas as a clean cooking energy
- More healthy for women and children while cooking
- Gives Lighting at the evening for the education of children
- Wood energy saving
- provide strong natural Fertilizer to increase the soil productivity



Biocharbon

- Transformation of agricultural waste into biochar
- wood energy saving

**Target : 420 000 Improved Stoves disseminated by the end of 2016, corresponding to 413 900 tonnes of wood energy saving.**





THANK YOU FOR  
YOUR ATTENTION

# PROCEDE 2

