

# Senegal Sustainable & Participatory Energy Management Program

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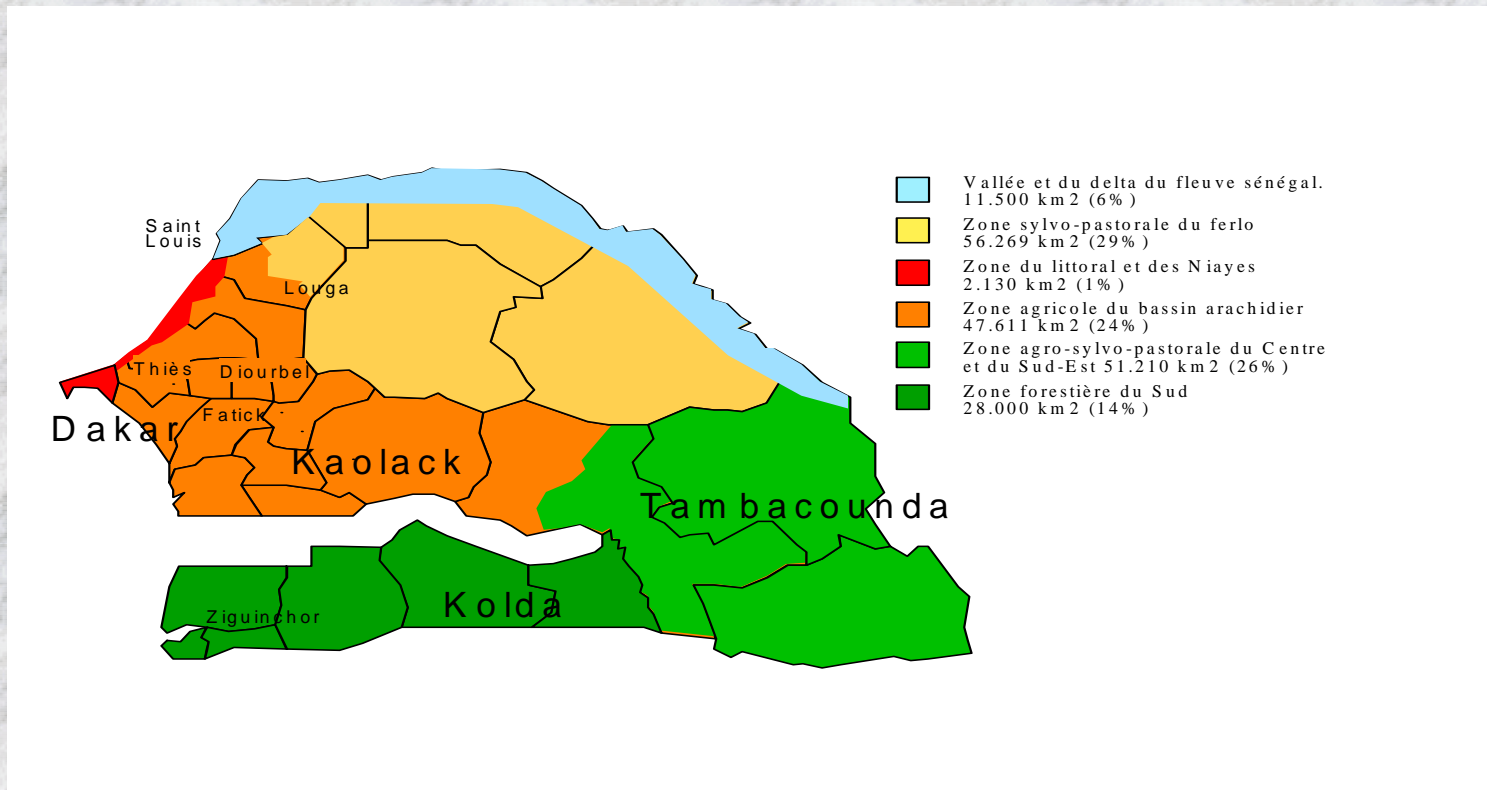




# Program Objectives

- Strengthening of institutions in charge of the management and operation of the sector
- Community-based forest management of 300,000 hectares in the regions of Tambacounda and Kolda
- Promotion of private sector and NGO inter-fuel substitution and improved stoves initiatives

# Sénégal



# Preparatory and Support Activities

- ⇒ capacity development activities
- ⇒ elaboration of technical studies
- ⇒ assessment of the vegetation cover to generate technical data for forest management plans
- ⇒ design of a communication strategy
- ⇒ participatory rural appraisals
- ⇒ design of monitoring and evaluation systems

# **Sustainable woodfuels supply management**

- ⇒ implementation of forest management systems
- ⇒ national dead wood assessment and management
- ⇒ implementation of woodfuels communication strategy
- ⇒ support for the establishment of rural micro-enterprises

## **Demand management and interfuel substitution**

- ⇒ support to modernization of the charcoal trade
- ⇒ support to diversification of charcoal traders activities
- ⇒ support to promotion of improved wood and charcoal stoves, and adapted LPG and kerosene stoves

## Program Financing

	<u>US \$ million</u>
■ Government of Senegal.....	1.2
■ GEF.....	4.7
■ IDA .....	5.2
■ Dutch Cooperation.....	8.8
<b>Total.....</b>	<b>19.9</b>

# Implementation Constraints

- First disbursement was late
- Slow understanding of procurement procedures
- Logistics problems (offices, vehicles, ...)
- Management issues
- Institutional issues (central and regional levels)
- Change of program coordinator and relocation of the program coordination unit to Tambacounda

⇒ about 6 months of delay

# Achievements

## ■ Capacity Development

⇒at the level of program staff and staff from directorates of energy and environment (planning tools, mapping techniques, aerial photo interpretations and analysis, communication, procurement, ...)

⇒at the level of beneficiaries (forest management techniques, charcoal production, gardening, nurseries, honey production, cattle fattening, poultry farms, ...)



# ASSEMBLEE DU C.V.G.D. DE NETEBOULOU



# Achievements

## ■ Woodfuels supply management

⇒ aerial photography completed/ good progress on forest inventory

⇒ about 145 km of fire breaks completed

⇒ about 105 villages serviced by program

⇒ about 100,000 hectares under management

⇒ trade of dead wood and charcoal from the managed zones

⇒ diversification of income generating activities

⇒ slight increase of taxation on forest products



# Achievements

## ■ Demand Management

- ⇒ Technical and feasibility studies completed
- ⇒ Laboratory tests of kerosene and improved wood and charcoal stoves completed
- ⇒ All 10 regions of the country are sensitized about energy efficiency issues
- ⇒ Opening of demonstration energy boutiques
- ⇒ Collaborative activities with NGOs, private sector, and local artisans
- ⇒ Reduction of about 40% of Government subsidies on LPG





**BOUTIQUE ENERGIE**

**Foyer Amélioré - Fourneau Diambar**





Réchaud à pétrole - Mottoset



Réchaud à pétrole - Fayda



Réchaud à pétrole - Amul



Réchaud à pétrole - Biguen



# Lessons Learned

- Capacity and institutional development are required for successful program implementation and sustainability
- Rural needs are multiple and best addressed simultaneously
- Incentives are necessary for the effective participation of rural communities
- Community development programs are key to the materialization of decentralization