



WORLD CONFERENCE AND EXHIBITION ON BIOMASS
FOR ENERGY, INDUSTRY AND CLIMATE CHANGE
PROTECTION

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**Conference Related Event: Latin America Thematic Network on
Bioenergy – LAMNET**

**PROGEDE: A Biomass Energy Project for Rural
Development in Senegal**

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Presented by:

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Demand Component**



INTRODUCTION : APPROACH AND CONTEXT

- **REPORT:** We have attended to a shocking downgrading state of the standard of living of the African populations in general and the Senegalese in particular :



INTRODUCTION : APPROACH AND CONTEXT

- Increase in population growth ;
- Runaway urbanization ;
- Poverty increase in urban as well as rural areas;
- Environmental problems;
- Damage of natural resources ;



INTRODUCTION : APPROACH AND CONTEXT

- **DIAGNOSIS:** Economic policies have not given the expected results in spite of the increase found in most of African countries. The wealths are not evenly given out and the vulnerable populations have been let to themselves.



INTRODUCTION : APPROACH AND CONTEXT

- **A WILLINGNESS TO CHANGE** : Overall mobilization of the International Community :
 - Objectives of the millenium
 - WSSD
 - WEHAB/UN
 - EU INITIATIVE
- ⇒ **In Senegal the DSPR in partnership with the World Bank and the UNDP to fight against poverty**



THE SPEM (PROGEDE) PRELUDE TO THE FIGHT AGAINST POVERTY

- **Fighting against poverty means creation of wealth, improvement of living conditions, preservation of natural resources that and nourish us.**
- **The SPEM** which has been fighting against deforestation (47,000 are destroyed every year). It also helps populations to take care of themselves has been subscribed itself in fight against poverty dynamics with a multisector approach for a long time.



PRESENTATION OF THE SPEMP

- **SPEMP**= Sustainable and Participatory Energy Management Project
- **WHO WE ARE ?**

SPEMP is a project which is financed by the World Bank, the Netherlands Kingdom, The World Environmental Fund and the Senegalese Government (20 millions US dollars for 7 years). It is under the tutelage of the Ministry of Environment – Protection of Nature and the Ministry of Mines, Energy and Hydraulics.



Objectives

- **To provide a lasting and regular household fuel supply while preserving the Environment.**
- **To contribute to the safeguarding of the Environment by shooting pressure on woody resources.**



Mission

- **To supply a technical ; institutional and financial support to the structures, Non – Government Organizations(NGO) and the private sector.**
- **To promote the collaboration of country people to the development by means of rural development Management Committees (RDMC)**
- **To promote income-generating activities.**



Managerial staff : A multidisciplinary equipe

About ten executives :

- **Foresters ;**
- **Energy specialists ;**
- **Agricultural economists;**
- **Pastoralists ;**
- **Statistician – economists**

The SPEMP is really a multidisciplinary structure.



Intervention areas

**Supply Regulation component or
Supply or Supply Component :**

Region of Tambacounda and Kolda

**Demand Management component or
Demand component :**

**At the national level with particular
emphasis in Dakar**



Recipients

- . Craftsmen or groups of craftsmen ;**
- . Countrymen ;**
- . Forest operators ;**
- . Groups, women associations ;**
- . Individual economic operators or groups ;**
- . Industrialists ;**
- . Waters, Forests offices**
- . Energy office, institutional reinforcement,
farming, ranching and educational offices ;
NGO...**



Supporting means to recipients

- **Supporting funds (revolving credits) of 1 million US dollars for the Demand Component ;**
- **Subsidy funds of 1 million US dollars for support to the participatory approach to the Supply Component.**



Main activities : at the Supply Regulation Component level :

SETTING UP OF AN FOREST-PASTORAL ECOLOGICAL INFORMATION SYSTEM

- Ø **Elevated photography to the 25,000 th on 1,300,000 hectares ;**
- Ø **Digital interpretation, mapping of the 1,100 orthophotographs ;**
- Ø **Exhibition of maps reflecting lands and vegetation occupation on the aimed area ;**
- Ø **Forest and ecological inventory of 840,000 hectares through 1,380 samples ;**



Main activities : At the Supply Regulation Component

- Ø Organization of the populations in management and development country committees ;
- Ø Participatory installations of 300,000 hectares natural forests for the production of wood and various products ;
- Ø Creation of small-sized companies (Carbonization units) ;
- Ø Training of the populations to agricultural, pastoral and forest production technics ;
- Ø Funding of rural small- sized micro-entreprises through a subsidy fund ;
- Ø Introducing of the environmental education in primary schools program



Main activities : At the Supply regulation Component

- Ø Biological diversity Management in the buffer state of the National park of Niokolokoba through :
 - The heightening awareness of the causes and effects of the biodiversity loss ;
 - The ecosystems re-establishment by putting in position communal reserves ;
 - The fight against poverty by promoting **AGR**
 - And many other activities...

Main activities: At the Supply Component

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- **And many other activities :**

Main activities : At the Supply Regulation component

Biological diversity management zone of Dialamakhhan





Main activities : At the Demand Component

- **Modernisation of the fuel and Energy Shop Channels ;**
- **Reconversion of forest operators ;**
- **Kerosene promotion as a household fuel and oil stove distribution ;**
- **Production and distribution of household fuel (Diambar, Sakkanal...) ;**
- **Improvement of the distribution line of butane ;**
- **And lots more activities...**



SOME RESULTS : At the Supply component

- **Forest activities :**
 - **Production of firewood (50,000 T) ;**
 - **Lot of plantings : 850 hectares ;**
 - **Linear plantings : 170 kilometres**
 - **250,000 hectares of managed forests ;**
 - **Biodiversity mangement : setting of 2 communal biodiversity reserves of 20,000 hectares in the periphery of the Niokolo Koba National park.**



SOME RESULTS : At the Supply Component

- **Agricultural activities**
 - * **Farming,**
 - * **Intensification,**
 - * **Fruit growing,**
 - * **Fodder crops,**
 - * **Production of seeds,**
 - * **Fruits and vegetables conservation**



SOME RESULTS : At the Supply Component

- **Pastoral activities**
 - * ***Poultry Farming,***
 - * ***Beekeeping,***
 - * ***Cattle farming,***
 - * ***Artificial insemination,***
 - * ***Animal health,***
 - * ***Hydraulic programme.***

SOME RESULTS : At the Demand Component

- A beginning of modernisation of charcoal with the reception of 3 energy shops in kaolack and Dakar ;
- 83, 000 improved stoves produced by craftsmen;
- A standard kerosene stove (a number of 11,000 units) ;
- An introduction of technics using modern biomass
- Briquetting of rice hulls with a pilot unit
- A bank of constituted projects (30)

And many other realisations

ILLUSTRATIVE PHOTOGRAPHS : BIGEN AND MBANA STOVE (LOCAL MANUFACTURING)



ILLUSTRATIVE PHOTOGRAPHS: AMUL AND FAYIDA VULGARISED STOVES



PROSPECTS : MULTISECTOR DYNAMICS AND A POVERTY REDUCTION CONTRIBUTION

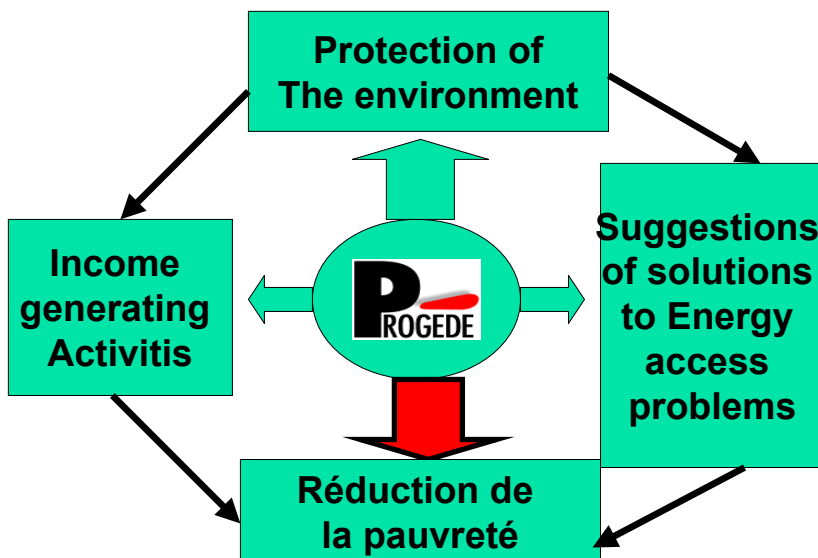
- Great deal of production in converted areas in terms of project of 860,000 tonnes of wood for making charcoal with **16,400 US dollars** in terms of turnover.
- The expected results for the agricultural and pastoral activities is k approximately **300,000 US dollars (in 2003)**.
- The multisector activities should enable to generate a global turnover of **16,207,900 US dollars** in a space of 300,000 hedares where live 45,000 people in 250 villages.

PROSPECTS : MULTISECTOR DYNAMICS AND A POVERTY REDUCTION CONTRIBUTION

Regarding the 2004 working plan, the **SPEMP** aims to :

- Proceed to dig thirty (30) wells in converted areas as well as distribution of ten or so sunmills. With pastoral activities, producing more than 15,000 litres of milk and doubling honey production to more than 7,000 litres (traditional and kenyan hives).
- Promoting modern use of energy by putting in position round targeted gas- producer villages by all types of biomass for the production of cold and the development of engine forces as well as the use of solar Energy : pumping, lighting, grinding.

PLATFORM-ARCHITECTURE OF PROGEDE : ACTIVITIES ILLUSTRATION





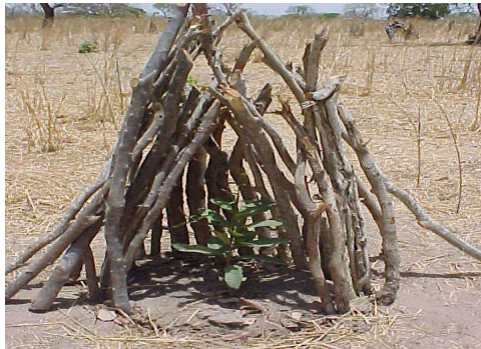
PROTECTION OF THE ENVIRONMENT

- **Forest surveying**



PROTECTION OF ENVIRONMENT

- **Planting and preserving trees**





PROTECTION OF THE ENVIRONMENT

- Fighting bush fires



PROTECTION OF THE ENVIRONMENT

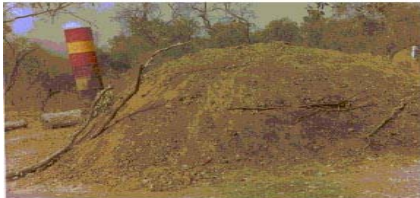
- Naked firebreak and green firebreak to stop bush fires





INCOME GENERATING ACTIVITIES

- **Forest activities :**
local production of charcoal



INCOME GENERATING ACTIVITIES

- **Agricultural activities : Farming**



INCOME GENERATING ACTIVITIES

- Guinea fowl breeding, apiculture and candle manufacturing made of wax



INCOME GENERATING ACTIVITIES

- Derived products : tamarind juice, spud marmalade and canned vegetables



OUR SOLUTIONS TO ENERGY PROBLEMS

- **Energy-Shop**



OUR SOLUTIONS TO ENERGY PROBLEMS : ECONOMICAL STOVES

- **Oil stove, diambar and fuelgel stove**



RICE HULLS BRIQUETTING



THANKS YOU FOR YOUR ATTENTION