



**Bureau d'analyses macro-économiques**  
*Institut sénégalais de recherches agricoles*



# Energetic crisis and space reconstruction in Senegal

## Traditional crops vs biofuels?



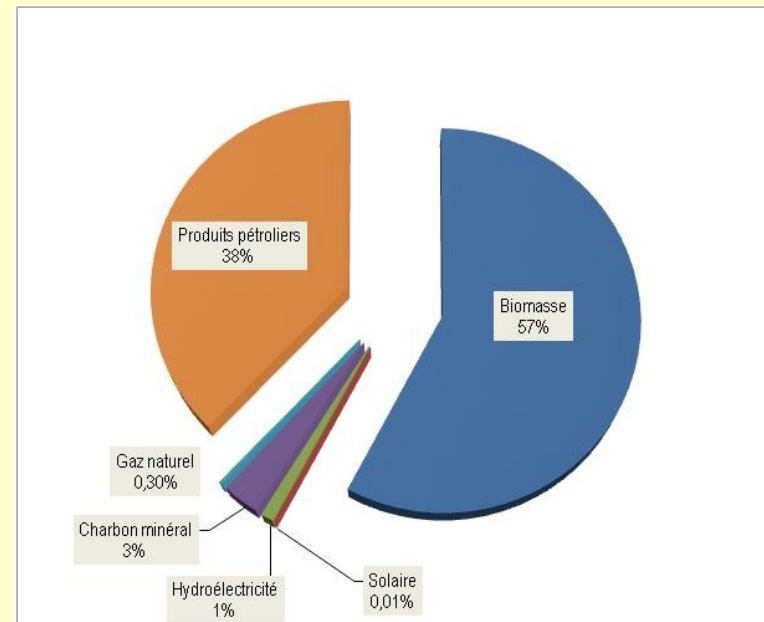
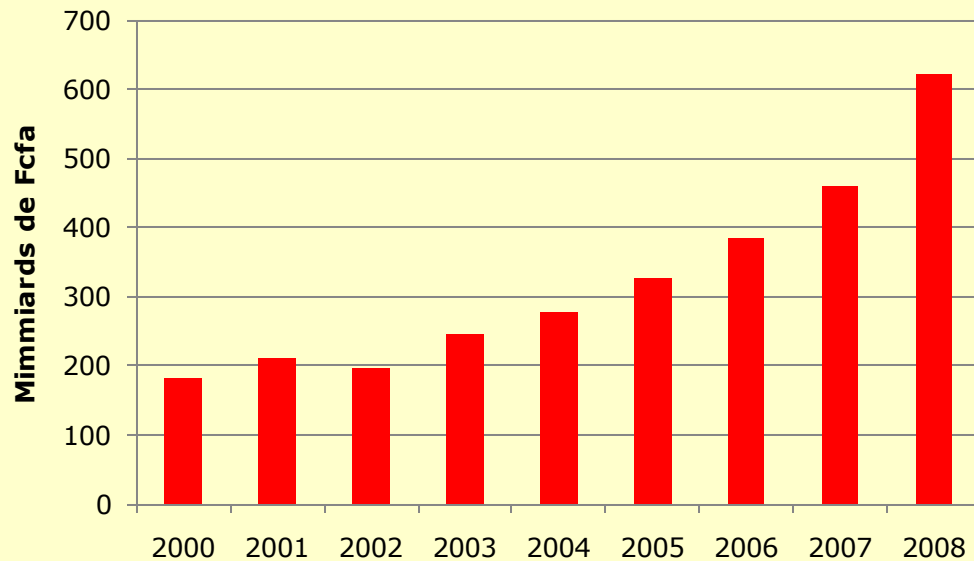
Djiby Dia  
Aminata Ndour  
Maam Suwadu Sakho-Jimbira  
Cheickh Sadibou Fall  
Papa Nouhine Dièye

**ISRA-BAME**

Dakar AGRODEP Meeting, June 7 2011

# Senegal: Energy context

## ■ Strong dependence vis-à-vis oil imports



## ■ Demand

## ■ Troubles in domestic supply, industrial & other business Sectors

**Supply**

# Energy policy in Senegal: main features

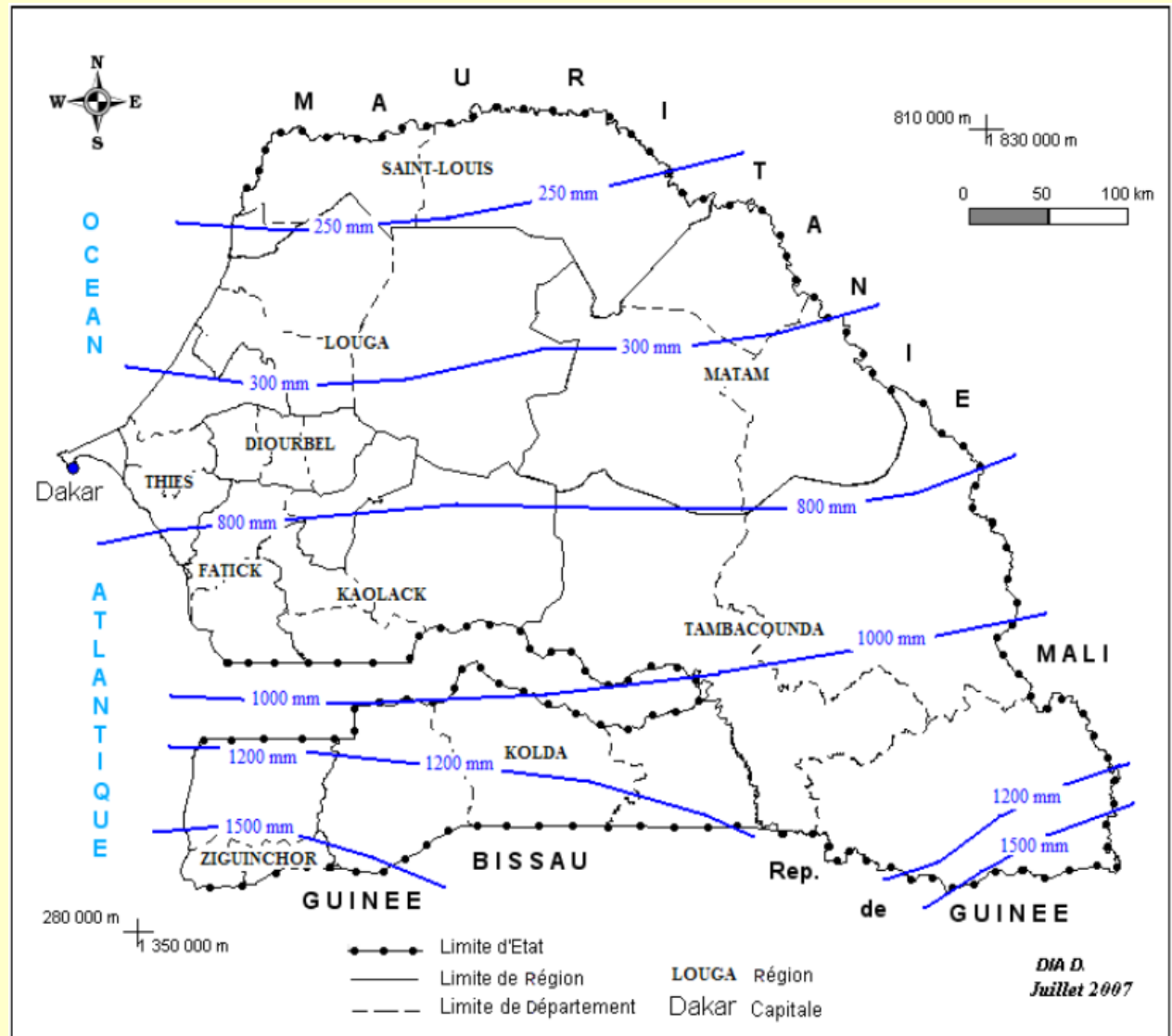
---

- **Letter of development policy of the Energy Sector (LPDSE) (1997 & 2003)**
  - Eliminate inefficiencies
  - Reduce supply costs supported by consumers
  - Promote the investment and the development of the sector
  - Restructure Electricity sub-sector & Gouvernement disengagement
  - Strengthen competition conditions in hydrocarbons
  - Consolidate management of ligneous resources and role of local communities
- **Biofuel Special Program(2006)**
  - 321,000 ha of Jatropha to be sown between 2007-2012
  - 1,000 ha/ rural community
  - Cost estimated at approximately 65 billion of FCFA (approx. 130 millions U.S. dollar)
- **LPDSE, 2008**
  - An energy supply of quality, sustainable and less expensive
  - Promote the access to modern energy services to populations
  - Reduce vulnerability vis-à-vis global oil market

**New Strategy including biofuels and renewable energy**

# Biofuels : favorable physical factors

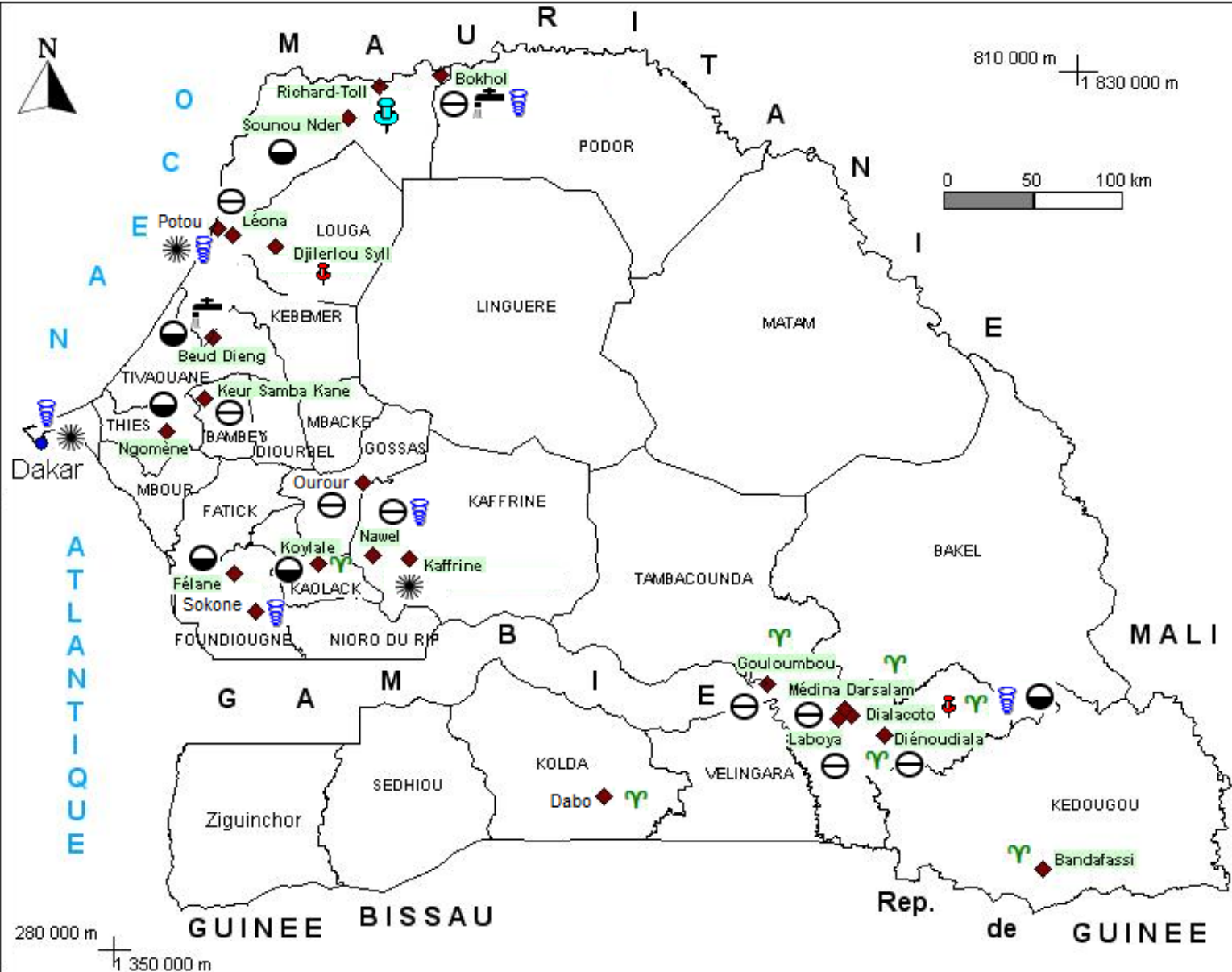
- Tropical Climate
- Temperatures
- Precipitations



# Biofuels *vs* traditional crops?

---

- ***Jatropha*, (field boundaries, quickset hedge)**
  - Preventing social conflict
  - Crop protection
- ***Jatropha*, Exclusive plantations**
  - In the jatropha special program, this layout was intended for degraded lands
  - Currently, the inventory of degraded lands does not seem to have been conducted throughout the country
  - Space recomposition with private investors
- ***Jatropha* in association with other crops**
  - Since the begining, Gouvernement distributes seedlings and seeds to incite farmers to plant *Jatropha*



- |  |   |  |   |
|--|---|--|---|
|  | Jatropha en culture irriguée            |  | Sites de recherche expérimentale                              |
|  | Jatropha en culture pure                |  | Jatropha comme haie vive et limite pour les champs            |
|  | Association Jatropha-cultures vivrières |  | Transformation artisanale du Jatropha en biodiesel            |
|  | Sites de production de pépinière        |  | Transformation industrielle de la canne à sucre en bioéthanol |

D. Dia  
Isra-Bame  
Août 2009

# Biofuels *vs* traditional crops?

---

- ❑ **Rate of projet execution: 1.6% between 2008-2009**
- ❑ **Heavy Investments too expensive for local producers**
  - Private farm holders with enough financial means have relative success
  - Association or competition between crops depends on the economic interest
    - ❑ Biofuels vs Traditional food crops do not seem to arise yet.
    - ❑ Risk of competition in the medium and long run
    - ❑ Risk of cash monocrop : food insecurity, rising prices.



# Thank you for your attention

□ [www.bameinfopol.info](http://www.bameinfopol.info)

