

## Green Innovation Centres (GIC) for agri-food sector Mali component



**Regional Conference : 18 - 20 October, Tunis**  
**Innovations disseminated in the rice value-chain**  
**in Mali in 2015/2016**

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- 1. Background information on rice value-chain**
- 2. Innovations disseminated in 2015/2016**
  - ✓ **Intensive rice production system (IRPS) + related technologies**
  - ✓ **Improved rice parboiling kit (Rice-kit 180)**

# Background



- Production: 2,167,000 Tons in 2014/2015
- Fully growing national market (7.5%/year)
- Rate of coverage of the country's needs: 85%
- Untapped production potential



- Lack of technical support
- Low mechanization level
- Poor control of post-harvest processes :  
low quality of processed rice (husked or  
parboiled)
- Lack of working capital





**Production costs: 86 Euro/ Ton vs 145  
Euro in standard practice**

## Pros:

Saving seeds, water and fertilizers,  
shorter production cycle

## Dissemination through the GIC:

- ✓ 1300 producers trained in 2015
- ✓ 3400 being trained
- ✓ 1200 ha planted

## Results achieved in 2015:

- ✓ Output: + 38 to 50%
- ✓ Profit margin: + 37 to 47%





# In-depth application of urea (DAU)

**Common method:** Broadcast application of powdery urea



## Advantages of DAU

Reduced losses related to evaporation, water run-off, etc.; at least, 65% of urea saved

**Cost: 200 Euro/ha**



## Dissemination through the GIC:

Coupled with IRPS

## Results achieved:

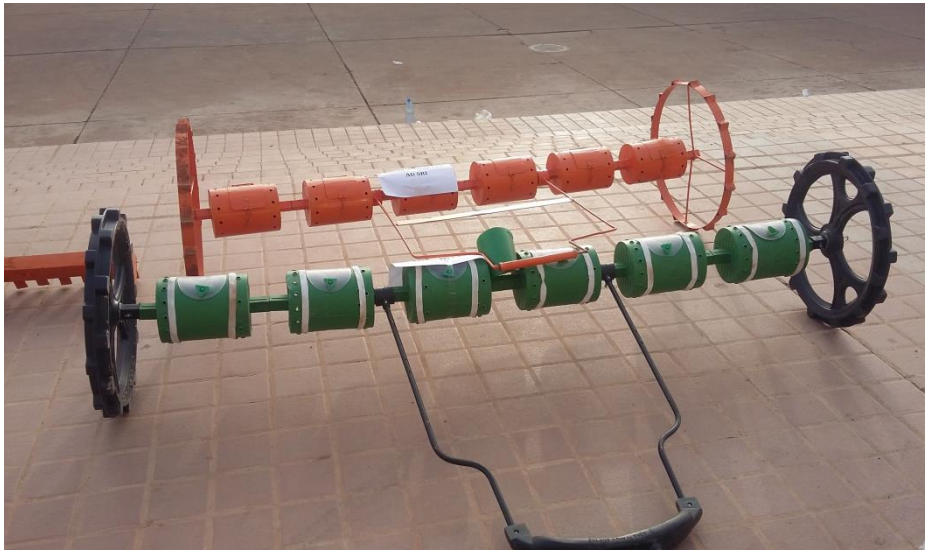
Output and production: + 30%

Urea related expenses: - 36%

Gross margin: + 50%

# SOCAFON 6-row metal seeder

**Common method:** Planting manually + transplantation



**Pros:** Less difficult planting, saving of 50% of seeds, time-saving, less labour, increase of production areas

Selling price: 175,000 FCFA/260 Euro  
Cost of labour/hectare



**Activities:** Provision of seeders to the youth - support for the establishment of service provision micro-businesses



- ✓ Training of technical bodies
- ✓ Capacity building for on-going training centres
- ✓ Support to interprofessional organizations in the rice sector

- ✓ Establishment of business linkages between input suppliers and producers
- ✓ Establishment of multi-service kiosks



- ✓ Locally produced machinery
- ✓ Service provision micro-centres (seedlings, urea granulation, etc.)
- ✓ Mechanization strategy

- ✓ Reinforcement in post-production processes (mini rice mills, parboiled rice)



# Case of the dissemination of the Kit-Rice 180 to 12 women's groups in 3 regions



- Increasing demand for parboiled rice
- Activity dominated by women

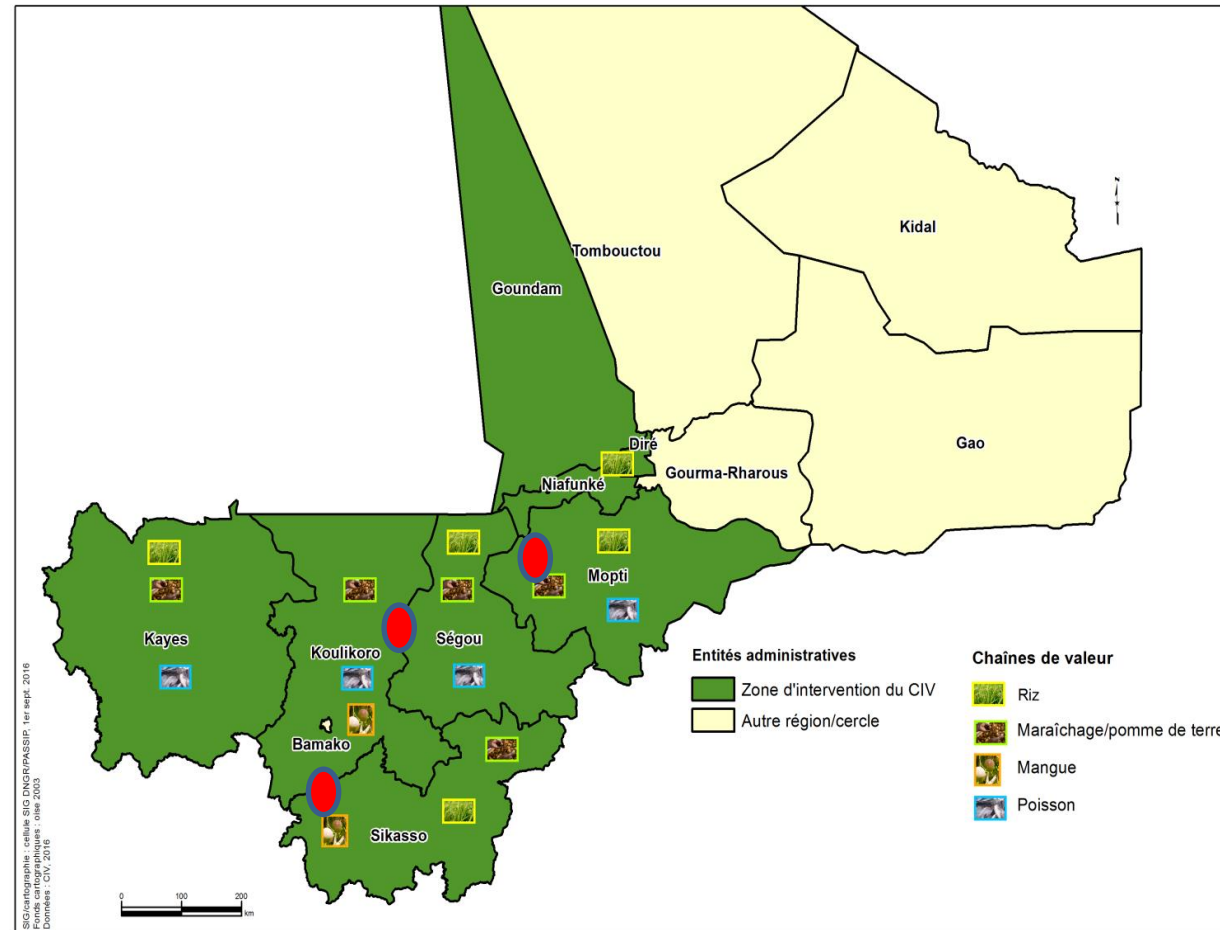


## Constraints

- Low processing capacities: 55% of women parboilers produce between 0.5 to 1 t of rice/year, processing centres : about 11 t/year.
- Working capital issues / access to paddy rice
- Marketing difficulties
- Low profit margin
- Poor knowledge of preventive measures that ensure quality products.
- Skill deficiency of best practices in hygiene and parboiled rice
- Product poorly presented



# Innovation: Parboiled Rice Kit 180





# Local production



Pool of 30 artisans  
trained in the  
production of the kit





# Training of women parboilers



**12 women's groups provided with kits**  
**120 women trained**

- on how to use the Rice Kit 180
- on hygienic good practices in rice parboiling





# Strengths of the Rice Kit 180

- Better rust-proof steaming tank,
- Production of big quantities of parboiled rice (720kg/day)
- Saves wood (20%) and water





# Comparison between common practice / rice- kit 180

	Existing kit	Rice Kit 180
<b>Artisans</b>		
<b>Capacity of the equipment</b>	33 kg	180 kg
<b>Production time frame</b>	2 days	3 days
<b>Job creation</b>	2 people	4 people
<b>Artisan's profit margin</b>	25,000 CFAF	+ 75,000 CFA F (+66%)
<b>Women rice parboilers</b>		
<b>Production</b>	200 kg/day	720 kg/day
<b>Wood consumption</b>	2 000 CFAF	2 500 CFAF
<b>Job creation</b>	1	5
<b>Profit per 50kg bag</b>	1,350 CFAF	2 400 CFA F (+77%)
<b>360 kg (1/2 maximal production)</b>		17 280 CFA F/day 4 320 CFA F/woman/day

## ➤ Local Artisans

- Marketing problems (lack of promotion, high price)
- High cost price



## ➤ Women rice processors

- Difficult to handle because of the size of the equipment (1.6m)
- Unsuitable parboiling workshop
- Lack of market opportunities





- Local production of the kit
- Market
- Availability of paddy
- Working capital

## Craftsmen

- Modify the 15 kits and manufacture 15 new kits
- Display the kits at the National Rice Fair
- Linking up between craftsmen and groups of women rice parboilers
- SME-Business-Loop

## Groups of rice parboilers

- Endowments for 12 groups concerning a revolving fund for the acquisition of paddy
- Reinforcement of capacities of groups of women rice parboilers in quality management, entrepreneurship etc.
- Establishment of parboiled rice outlets in urban areas



# Thank you for your attention!

