



Questionnaire for the participants – Technical aspects

**1. Names of the agricultural equipment intend for the rice and which:**

I. Can be manufactured on a large scale in your country and that in 3 years:

a) for land preparation operation :

- Plough
- harrows
- line marker
- land leveler








### Questionnaire for the participants - Technical aspects

#### 1. Names of the agricultural equipment intend for the rice and which:

I. Can be manufactured on a large scale in your country and that in 3 years:

b) for sowings operation:



### Questionnaire for the participants - Technical aspects

#### 1. Names of the agricultural equipment intend for the rice and which:

I. Can be manufactured on a large scale in your country and that in 3 years:

c) for maintenance operation:





### Questionnaire for the participants - Technical aspects

#### 1. Names of the agricultural equipment intend for the rice and which:

I. Can be manufactured on a large scale in your country and that in 3 years:

d) for harvest and post-harvest operation:

- sickles



- thresher



- winnower



- metal silo



- wheelbarrow

- trailer

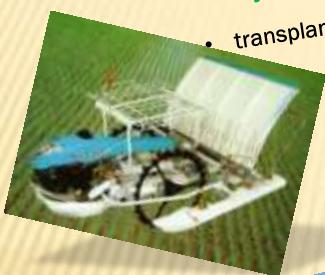


### Questionnaire for the participants - Technical aspects

#### 1. Names of the agricultural equipment intend for the rice and which:

II. Can be manufactured on a large scale in your country and that in 10 years:  
by setting up assembly lines

- transplanters



- hand tractors



- mowers



- tractors





### Questionnaire for the participants - Technical aspects

#### **1. Names of the agricultural equipment intend for the rice and which:**

III. Cannot be manufactured on a large scale in your country and that after more than 10 years from now:

- combine harvester



### Questionnaire for the participants - Technical aspects

#### **2. Do you think that the culture of rice can become more advantageous with the introduction of the agricultural equipment?**

**yes**, the introduction of the agricultural equipment is essential.

Ex:

The use of the harvest and post harvest equipment reduce the losses from 25% to 1%.

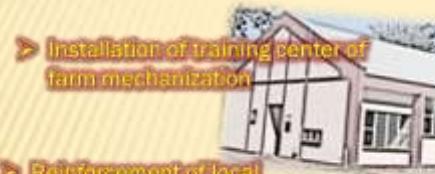




### Questionnaire for the participants - Technical aspects

#### 3. Which is the most significant factor which allow durable use of the agricultural equipment intended for rice production and that without financial assistance of the government?

- Installation of training center of farm mechanization



- Installation of hiring center with maintenance workshop financed by the government at the beginning but managed by the private ones thereafter.

- Reinforcement of local artisan's capacities about the respect of standard and quality.



- Emergence of small proximity workshops.



- Setting of availability on the markets of materials of work, accessible to the manufacturers purchasing power.



### Questionnaire for the participants - Technical aspects

#### 4. Specifications of the name of the agricultural equipment adapted for each following rice grower:

**Small scale:**

Small producers who cultivate rice like culture of subsistence with a weakness in terms of risk, of use of the input and of strategy of productivity.

- materials using the man power: Angady (spade), weeder, sickle, pedal threshers, winnowing...
- harnessed cultures using oxen or apes: plough, harrows, carts for transport
- ...

**Medium scale:**

Small producers who more and more cultivates rice like culture of revenue:

Line marker, weeder, cultures harnessed such as plough, harrows, threshing-machine and winnowing actuated by engines with small power and power tiller.

**Large scale:**

Large producers who cultivate rice at commercial purposes:

average or high power tractors also with the adequate accompaniment equipment, transplanters, the more complex equipment of maintenance such disc harrows with slope, combine harvester.



## Questionnaire for the participants - Technical aspects

### 5. Why the specifications of the agricultural equipment are different from one equipment to another?

- ✓ according to the size of the surface used, the type of culture, the nature of the soil and the nature of the operation

- ✓ according to their origin:  
country, factory or mark



- ✓ according to their power (the choice is a function of the exploitation size)



## Questionnaire for the participants - Technical aspects

### 6. Which is the process of finalization of the list of the recommended agricultural equipment? Who should one imply with each stage of the process?

Count the existing equipment with their technical specifications,  
Put in priority the operations requiring the introduction of equipment .

→ Specialized technicians in mechanization, users, decider



Categorize the equipment according to the size of the exploitations and the topography of the area:

- Equipment using the man power: manual, with pedal
  - Harnessed Equipment
  - Motorized Equipment
- Specialized technicians in mechanization



Evaluation or test of these equipment for certification, the specialists in agricultural mechanization working in a center in tests and certification (organization of state or semi-state)



### Questionnaire for the participants - Technical aspects

#### 7. How to make sure that the agricultural types of recommended equipment are used with the field? Or how to prevent the introduction of the inappropriate agricultural equipment?

✓ Installation of structure decentralized like rural advisers of development (CDR) installed in the communes. Follow-up of the use of the equipment by the agricultural advisers or the animators.

✓ Identification of real needs and see the adequacy need-availability

✓ Strict Inspection of the imported equipment



MINISTERE DE L'AGRICULTURE

## ASPECT POLITIQUE DE LA MECANISATION AGRICOLE A MADAGACAR

**DEFINITION**



**Potentiels physiques**

- \*Superficie totale Madagascar: 58 704 000 ha
- \*Superficie physique des EA: 2 083 590 ha
- \*Superficie terres cultivables: 8 000 000 ha
- \*Superficie agricole potentielle: 35 000 000 ha

**PERSPECTIVES**



**Atouts climatiques**  
Gamme de climats allant du tempéré au subdésertique

**PRESENTATION**

**Objectifs**

**Objectifs Globaux**

Contribuer à la sécurité alimentaire dans toutes les régions  
Améliorer les revenus et la situation des acteurs de la filière.

**Objectifs Spécifiques**

Favoriser l'utilisation rationnelle de matériels et équipements  
Professionnaliser les acteurs de la filière p

# PRESENTATION

## ETAT DES LIEUX

Faiblesse de la contribution de la mécanisation agricole à la productivité et à la modernisation du secteur:



- 1/4 des EA possède une charrue et 1/5 une herse.
- 1 200 tracteurs et motoculteurs en tout en 2005
- Insécurité en milieu rural
- Insuffisance de centres de dressage

# PRESENTATION

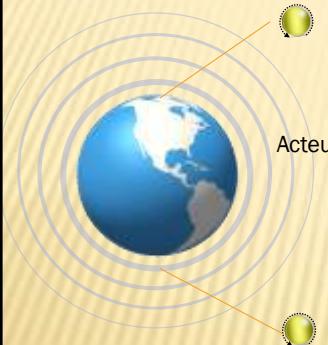
## ETAT DES LIEUX



- Faiblesse du pouvoir d'achat des agriculteurs
- Coût élevé des matériels agricoles.
- Faible fertilité des sols
- Coût des facteurs de production élevé
- Faible niveau d'équipement des producteurs
- Grande disparité régionale
- Difficulté d'accès au crédit
- Financement des PME insuffisant et difficile

# PRESENTATION

## ETAT DES LIEUX



Acteurs de la filière professionnalisés

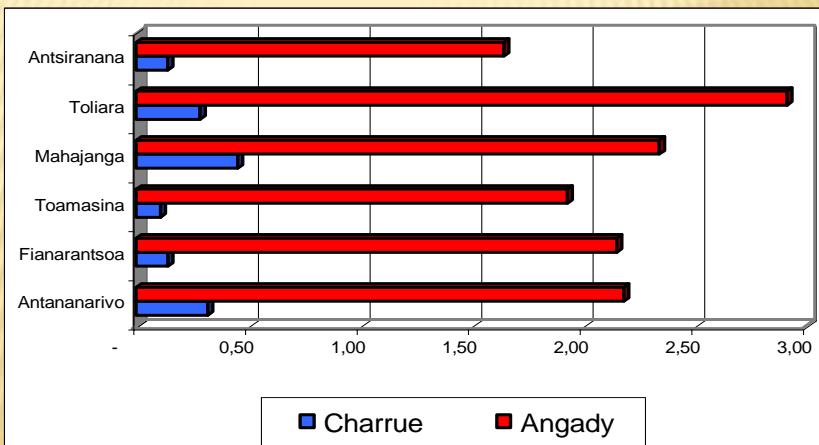
L'insuffisance d'une politique d'  
augmentation des terrains de culture,  
d'accès de pionniers ou opérateurs privés  
aux terrains domaniaux

l'Insuffisance de techniciens spécialisés  
=> déficit d'information/formation pour

- Fabricants
- Paysans utilisateurs
- Innovation technologique (recherche)

# PRESENTATION

## NOMBRE MOYEN D'ANGADY ET DE CHARRUE/EA EN 2005



## PRESENTATION

### EFFECTIF DES MATÉRIELS DE LABOUR À TRACTION ANIMALE

<b>Ex-Province</b>	<b>Herse à bœuf</b>	<b>Charrue à bœuf</b>	<b>Exploitation</b>
Antananarivo	190 177	193 864	604 815
Fianarantsoa	41 967	76 999	541 957
Toamasina	44 960	37 123	343 390
Mahajanga	95 673	141 289	311 066
Toliara	31 842	116 711	407 323
Antsiranana	13 956	26 021	183 980
<b>MADAGASCAR</b>	<b>418 576</b>	<b>592 008</b>	<b>2 392 531</b>

## “PRESENTATION

### EFFECTIF GROS MATÉRIELS

<b>Ex-Province</b>	<b>tracteur</b>	<b>motoculteur</b>	<b>charrette</b>
Antananarivo	155	123	63 024
Fianarantsoa	18	11	2 618
Toamasina	166	481	3 855
Mahajanga	33	37	35 530
Toliara	44	20	63 399
Antsiranana	133	26	4 316
<b>MADAGASCAR</b>	<b>550</b>	<b>698</b>	<b>172 742</b>

# PRESENTATION

l'existence de textes ne correspondant pas aux réalités et fiscalité changeante

l'inexistence de norme et d'organe de contrôle concernant les matériels agricoles

la mécanisation ne fait pas partie des composantes des projets ou programmes

Environnement juridique incertain et méconnu par les opérateurs

## ETAT DES LIEUX

l'insuffisance de la recherche-développement , les travaux des métaux et les constructions mécaniques sont insuffisamment développés

# PRESENTATION

## AXES STRATEGIQUES

### Axe stratégique 1

création d'un environnement politique et économique favorable

### Axe stratégique 2

Professionnalisation des acteurs de la filière mécanisation agricole

### Axe stratégique 3

Promotion de la recherche, du transfert, de la diffusion de technologies et renforcement des capacités

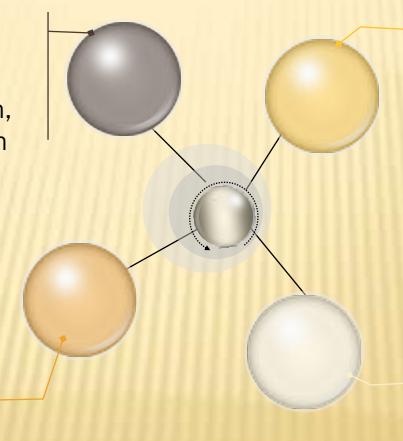
# PRESENTATION



# PRESENTATION

## ARRANGEMENTS INSTITUTIONNELS

Renforcement des capacités des fabricants et des utilisateurs : formation, vulgarisation, diffusion

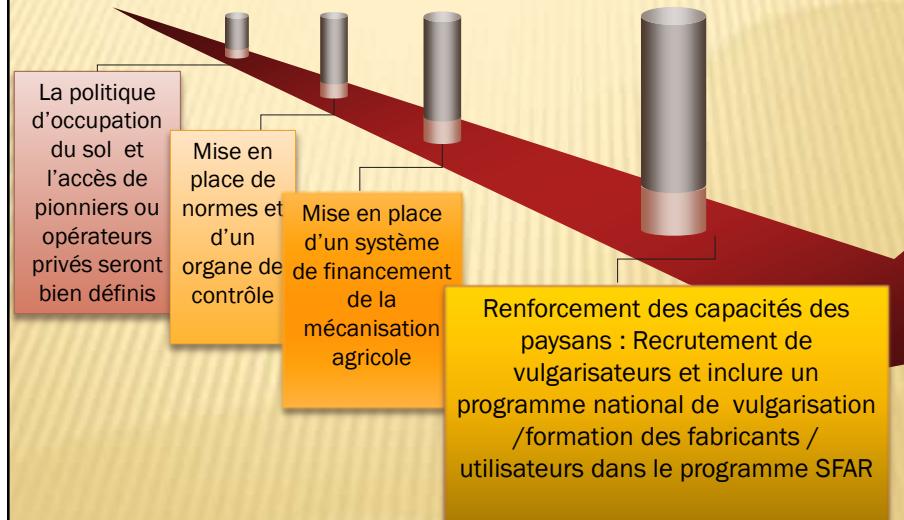


Appui financier pour la recherche ou création d'un département de la recherche sur la mécanisation au sein des Instituts existant

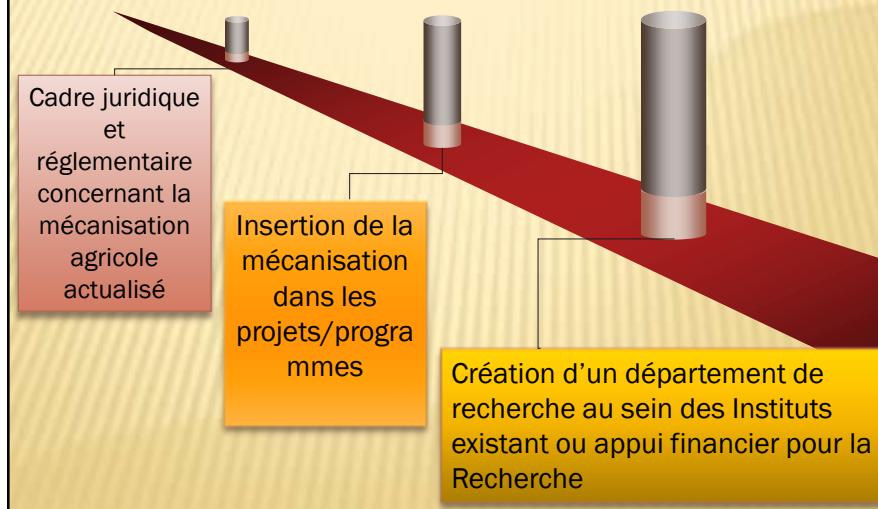
Actualisation des textes juridique et réglementaire

Mise en place de la politique de la mécanisation agricole

## CHANGEMENTS A SUGGERER



## CHANGEMENTS A SUGGERER (suite)





MINISTÈRE DE L'AGRICULTURE

**MERCI DE VOTRE  
ATTENTION**



**MADAGASCAR**

MISAOTRA TOMPOKO

ASANTE SANA

ARIGATO  
GOZAIMASHITA

THANK YOU

