

**STRATEGY FOR THE RICE MECHANISATION
IN MADAGASCAR**
(Accra, 6th General Meeting of CARD)

OUTLINE OF THE PRESENTATION

- ◆ MECHANISATION STATUS
- ◆ POLITICAL AND STRATEGIC FRAMEWORK
- ◆ PROCESS AND METHODOLOGY FOR ELABORATION OF THE RICE MECHANISATION STRATEGY
- ◆ NATIONAL RICE MECHANISATION STRATEGY
- ◆ PRIORITY PROJECTS

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STATUS OF MECHANISATION (1/2)

1. CURRENT STATUS

The adoption rate of equipment among rice farmers in Madagascar is low

Type of equipment	Percentage of equipment (%)	Type of equipment	Percentage of equipment (%)
Tractor with accessories	0,2	Rotary hoe / weeder	14,4
Powertiller with accessories	0,1	Sprayer	3,5
Cart	26,4	Angady/shovel/pickaxe	97,3
Ox plough	33,0	Sickle/ machete	92,0
Ox drawn harrow	28,8		

Source : Enquête Filière Riz FAO/UPDR 2000

STATUS OF MECHANISATION (Cont... 2/2)

2. SWOT ANALYSIS (STRENGTHS– WEAKNESSES – OPPORTUNITIES – THREATS)

STRENGTHS

- Important position of rice in the country's economy
- Existence of **NRDS**
- Emphasis on mechanisation in **PSAEP/CAADP**

OPPORTUNITIES

- **Active private sectors** during the development of this strategy
- **Tax exemption** for imported agricultural equipment

WEAKNESSES

- Absence of an **approved strategy** in the area of mechanisation
- Absence of an institutional structure enabling **coordination**
- Inadequate **data and information**
- Insufficient technical **knowhow**

THREATS

- Climate change
- Accelerating degradation of the environment
- Low levels of education
- Risk of theft of oxen
- Land-related constraints (narrow plots and farms, topography)

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POLITICAL AND STRATEGIC FRAMEWORK

- **AT THE LEVEL OF AGRICULTURE SECTOR**
- Policy Letter for Development of Watersheds and Irrigated Areas
 - National Strategy for the Development of Fertilizer Use
 - National Seed Strategy Document
 - National Strategy for Agricultural and Rural Training
 - Agricultural Services Strategy
 - National Rural Financing Strategy
- **AT THE LEVEL OF THE RICE SECTOR**
 - Rice Development Policy
 - National Rice Development Strategy
- **OTHER REFERENCE DOCUMENTS**
 - National Agricultural Mechanisation Strategy (provisional version - 2010)
 - Agriculture Sector Programme (under development)

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PROCESS AND METHODOLOGY OF ELABORATING THE RICE MECHANISATION STRATEGY

ONGOING PROCESS WITH THE SUPPORT OF THE CARD SECRETARIAT

1. Inception Workshop for the development of the rice mechanization strategy bringing together different actors in the chain
2. Constitution of an expanded Task force composed of all the private and public sector stakeholders for brainstorming sessions on the strategy: weekly meeting
3. Participation in regional CARD workshops to obtain technical and policy directions
4. Interviews and meetings with local actors
5. Analysis and consideration of comments made by local actors and the CARD Secretariat on the NRMS draft
6. National strategy validation workshop
7. Preparation of the draft Strategy by a drafting committee
8. Presentation during the Governmental Council

METHODOLOGY

9. ***Participatory***: through the involvement of members of the expanded Task Force in the periodic meetings
10. ***Consultative*** : interviews with other mechanization stakeholders.
11. ***Directed/focused*** : driven by the demand, the supply of agricultural mechanization and institutional support

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RICE MECHANISATION STRATEGY

◆ THE STRATEGY

- ◆ VISION
- ◆ GENERAL OBJECTIVES
- ◆ SPECIFIC OBJECTIVES AND EXPECTED RESULTS
- ◆ FUTURE OUTLOOK
- ◆ STRATEGIC PRINCIPLES
- ◆ ROLES OF STAKEHOLDERS
- ◆ IMPLEMENTATION, MONITORING AND EVALUATION

THE MECHANISATION STRATEGY (1/10)

1. VISION

“ A modern and efficiently productive rice sector in Madagascar, through rice mechanization, along with public-private partnership and good coordination”

2. GENERAL OBJECTIVES

- To contribute to doubling rice production by 2020 ((NRDS target)
- To contribute to the qualitative improvement of living conditions and incomes of private rice mechanisation stakeholders.
- To contribute to the sustainable management of natural resources (soil conservation)

THE MECHANISATION STRATEGY (Cont... 2/10)

3. SPECIFIC OBJECTIVES AND EXPECTED RESULTS

S.O 1: To improve the rate of farm machinery adoption by rice producers

Expected result: Machinery is available in adequate quantities and quality meeting needs of farmers, taking into account socio-economic and environmental conditions

S.O 2: To strengthen the private sector in the entire rice mechanisation chain.

Expected result: Active private sector and assurance of their development

S.O 3: To create a conducive and enabling environment for the development of rice mechanisation

Expected result: The government plays guiding, supporting, facilitation, advisory and monitoring roles.

THE MECHANISATION STRATEGY (Cont... 3/10)

4 . FUTURE OUTLOOK

SMALL-SCALE MECHANISATION



Promotion of the use of manual, animal-drawn/motorised implements (*small-scale mechanisation*)

For medium-sized family farms (<1 ha)

THE MECHANISATION STRATEGY (Cont... 4/10)

4. FUTURE OUTLOOK

MEDIUM-SCALE MECHANISATION



Increased use of powertillers and mini-tractors (*intermediate mechanisation*), processing machinery (threshers and hullers) and water equipment (pedal pumps and motorised pumps)

For medium-sized farms of 10 to 20 ha

THE MECHANISATION STRATEGY (Cont... 5/10)

FUTURE OUTLOOK

LARGE-SCALE MECANISATION



Increased use of tractors, combined harvester, etc. (*large-scale mechanisation*)

For producers who have an acreage that justifies such equipment (market-oriented agriculture)

THE MECHANISATION STRATEGY (Cont... 6/10)

5. STRATEGIC PILLARS

- ✦ **STRAT. PILLAR 1:** Improvement of users' access to agricultural machinery
- ✦ **STRAT. PILLAR 2:** Strengthening private sector operating in rice mechanization.
- ✦ **STRAT. PILLAR 3:** Institutional and socio-economic support from the State.

THE MECHANISATION STRATEGY (Cont... 7/10)

➤ STRATEGIC PILLAR 1: Improvement of users' access to agricultural machinery

GOAL

Facilitate access to agricultural machinery, taking into account the socio-economic situation of the users.

EXPECTED RESULT

Machinery available in sufficient quantity and quality meeting the needs of farmers taking into account socio-economic conditions.

MAIN ACTIVITIES

- Facilitating access to credit and financing
- Promoting user associations for leasing or purchasing of agricultural machinery
- Designing and implementing an adequate subsidy system
- Promoting the leasing of agricultural machinery
- Ensuring the dissemination of agricultural materials

THE MECHANISATION STRATEGY (Cont... 8/10)

➤ STRATEGIC PILLAR 2: Strengthening of the private sector operating in rice mechanisation

OBJECTIVE

Private sector procurement services can meet the needs of agricultural equipment users in terms of quality and quantity

EXPECTED RESULT

Very active private sector, their development is assured

MAIN ACTIVITIES

- Reducing the cost of manufacturing agricultural machines
- Facilitating access to financial resources
- Promoting the emergence of distributors to ensure national coverage
- Revitalizing the network of manufacturers and service providers
- Professionalising the processors' network

THE MECHANISATION STRATEGY (Cont... 9/10)

➤ STRATEGIC PILLAR 3: Institutional and socio-economic support from the State

OBJECTIVE

To provide stakeholders in the value chain with a conducive institutional and socio-economic environment for development.

EXPECTED RESULT

Public sector is able to effectively play its guiding, supporting, facilitating, advising and monitoring roles

MAIN ACTIVITIES

CONT..1/2

- To match agricultural equipment with farm size, soil conditions, climate, socio-economic, environmental conditions
- Establish a coordination mechanism for relevant activities, information system, internal monitoring and evaluation related to agricultural mechanization
- Expanding and strengthening the mandates of existing structures in order to assure quality control, certification, approval and development of standards for agricultural equipment

THE MECHANISATION STRATEGY (Cont... 10/10)

➤ STRATEGIC PILLAR 3: Institutional and socio-economic support from the State

MAIN ACTIVITIES (CONT..2/2)

- Promoting the entry of private agricultural operators to ensure the growth of market-oriented mechanized agriculture
- Reviewing and implementing coherent fiscal support measures for each category of value chain players
- Developing a system of applied research in agricultural machinery
- Strengthening the capacity of all players in the value chain, in terms of training, human resources and infrastructure
- Ensuring that the rice mechanization sector is integrated into the existing agriculture Fund
- Support State structures in the monitoring and evaluation of the implementation of the strategy.
 - *Enhance security of land tenure*
 - *Ensure rural security*

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 **PRIORITY PROJECTS**

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- Ensuring suitability of agricultural equipment
- Establishment of a testing and certification centre
- Project to support access to agricultural equipment
- Project to support the introduction of agricultural mechanization service providers in the rice production hubs
- Project to promote post-harvest equipment in rice production hubs
- Establishment and strengthening of professional training centres in agricultural machineries
- Development and review the rules and regulations governing the agricultural mechanisation sector

ACHIEVEMENTS TO DATE

- Funding for mechanisation support
- Promotion of animal plough (NGO)
- Establishment of an agricultural machinery hiring service in 2 future projects in the Ministry of Agriculture

Thank you