World Food Programme

Potential of the rice value chain to increase resilient food systems in Madagascar

WFP Madagascar

Context

LOW PRODUCTIVITY.
LIMITED AGRICULTURAL DIVERSIFICATION
LACK OF INFRASTRUCTURE AND ACCESS TO BASIC SOCIAL SERVICES

HIGH FOOD INSECURITY RANK
119 OUT 121 GLOBAL HUNGER INDEX
2022 10
million food insecure

HIGHLY VULNERABLE TO CLIMATE CHANGE INCREASING FREQUENCY AND INTENSITY OF NATURAL HAZARDS
CYCLONE, STORMS, SANDSTORMs, FLOODING, DESERTIFICATION

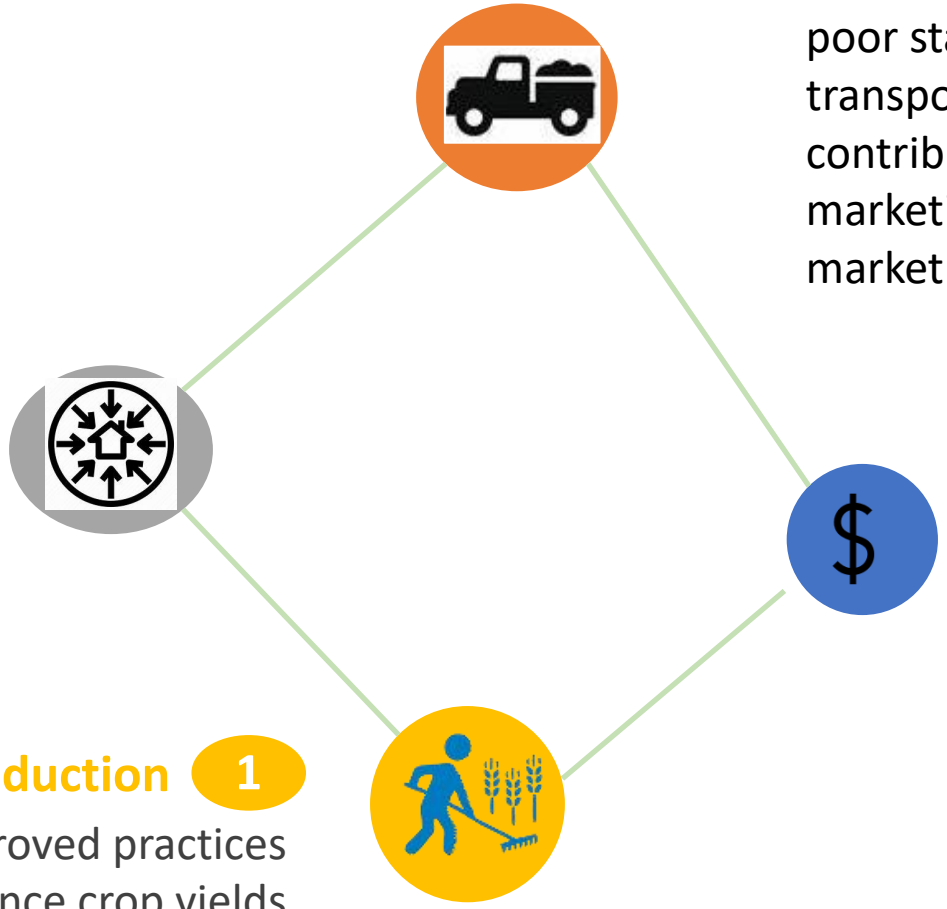
GLOBAL FOOD CRISIS
INFLATION: FOOD >14.2%
FUEL >40%

GDP CONTRACTION OF 7% IN 2020 (COVID)

RAPID POPULATION GROWTH – 3%.
FROM 29 MILLION TO
59 MILLION BY 2050

GENDER **INEQUALITIES**
2021 GENDER INEQUALITY INDEX
143 OUT OF 170 COUNTRIES

Snapshot of Madagascar rice value chain



Lack of Infrastructure 3

poor state of rural roads, remoteness of farmers, high transportation and a lack of regional rice mills – contribute to the connectivity challenges to long marketing chains and inefficiencies in the domestic market.

Heavy reliance on Imports 2

20% of the rice grown in Madagascar is marketed for cash and the rest is consumed by households

Low market prices 4

Efforts to address market inefficiencies through access to information. Even in areas close to main national roads, farmers and sub-collectors have little knowledge of crop prices, buyer preferences, or market opportunities outside their immediate area of operation and so have little to no way of making informed production decisions and negotiating competitive prices.

Low production 1

Low uptake of improved practices to enhance crop yields

Source World Bank

Madagascar's Government vision

VISION Food self-sufficiency though the acceleration of reform and transformation of the agricultural sector

OBJECTIVE To increase food security by doubling productivity; improving diversification of food crops by improving the competitiveness of export products

GOAL/BUT: In order to achieve self-sufficiency in rice by 2024, the Government has set itself the goal of increasing local production by 6.000 tonnes and increase production by 10% per year until 2027 for greater exportation

National Strategy of Rice Development

Objectives

Doubling efficiency 5T/Ha

600.000T additional for self-sufficiency in 2024

Increase production by 10%/year
Export from 2027
Source of rice procurement for the Indian ocean in 2028

Key expected results by 2028

- 125 339 Ha new irrigated perimeters
- 521 011 Ha rehabilitated irrigated perimeters
- 23 Regional hydro-agricultural network maintenance fund established and abundant
- 20 revitalizing seed multiplier centres

	Total (USD) to be invested
Development of rice cultivation	2,606,317,000
Construction and rehabilitation	2,026,117,000
Protection of BVs and rehabilitation of service roads	442,400,000
Strengthening seed systems	32,100,000
Rice intensification action	64,000
Promotion of agricultural mechanization	43,700,000

WFP Improved smallholder rice production initiative Tameantsoa

- Since 2018, WFP initiated to rehabilitate 30 years abandoned and degraded rice productive asset set up by the Government in 1964 in the Commune de resilience of Tameantsoa

Context

-Population: 13,336 inhabitants
-Livelihoods: small scale agricultural production and livestock
- Degraded environment and assets

Rehabilitation

-Rehabilitation of irrigation canals &166ha of productive paddy fields
-Rehabilitation and opening of rural feeding roads
-Rehabilitation of 02 dike (Onilahy and Bemoky rivers)
-Strengthening smallholders' skills in agricultural production
- Number of rice producer supported: 1,760

Now

Rice-growing perimeter before WFP intervention

Rice-growing perimeter after WFP Intervention

Now

Irrigation canal before the construction

Irrigation canal after WFP investment in construction

Now

Protective dike before WFP Intervention

Protective dike after WFP construction/intervention

Results in Tameantsoa

	Before the project	To date
Irrigated surface	**187 Ha**	**+353 Ha**
Rice yield/harvest	**1,5-2 T/Ha**	**3,5 T/Ha**
Number of harvests/year	**1**	**2**
Rice production/year	**200 Tons**	**1300 Tons**

Rice fortification pilot in Madagascar

- Two different models for introducing fortified rice into school canteen piloted to understand options for rice fortification
- **“Tambatra”** project has shown that the fortification of local rice poses a number of operational and financial challenges for the small rice farmers of Madagascar.
- **“IFNA”** project has demonstrated the efficiency and rationality of importing rice already fortified. Advantages: less handling; economies of scale by international suppliers specialized in the supply of fortified rice → significant cost savings.
- So, importing fortified rice is a critical first step to maximize cost-effectiveness and nutritional value.
- In parallel, and as the local rice value chain develops, technical assistance is needed for rice fortification as the production apparatus of the rice millers develops.
- The lessons learned from these two projects will contribute to a national reflection for the sustainability of rice fortification at a national scale to combat micronutrient deficiencies in Madagascar.

WFP local purchase of rice

	2019	2020	2021	2022	Planned 2023
Rice procured (MT)	3,256	31	29,156	22,007	15,033

Opportunities for the private sector, farmers, and smallholder farmers in Madagascar

Land

222 000 Ha of State land identified for agricultural zones and 68 945 Ha of private land to be used

Agribiologic

110 000 ha are suitable for the establishment o territories with a vocati for organic farming

Irrigated perimeter development

240 000 Ha of newly developed areas identified

Private Sector

Growing interest to invest in agricultural sector

Policies

Existence of national strategies and plans

- **Demonstration sites for good practices**
- **Improve labour productivity through mechanization**
- **Advanced irrigation systems enabling production during lean season**
- **Development of inclusive value chains**
- **Improve access to markets, including institutional markets (Home-Grown School Feeding)**

Thank you!

WFP
World Food Programme