Coalition for African Rice Development (CARD)  
- Contribution toward a Green Revolution in Africa -
Current Situation of Agriculture in Africa

‘low-input low-output’, ‘small-scale multi-crop’ production system

- Growth of productivity per African farmer: Only 0.9% in past 25 years
- Irrigation: Only 4% (Asia 34%)
- Introduction of improved variety: Only 24% (Asia 75 ~ 85%)
- Fertilizer usage: 1.3kg/ha (Asia 100 ~ 200kg/ha)
- Domestic fertilizer production: Only 10% (the double price of imports)
- Low land productivity: 75% affected by environmental degradation problems (desertification, etc)
Production and Consumption of Major Grains in Africa

Rice (Milled)

Wheat

Maize

Sorghum

Widening Demand-supply Gap (Rice and Wheat)

World High Food Prices

Food Crisis

Productivity Improvement

“Green Revolution” in Africa
JICA’s Objectives for Agricultural and Rural Development in Africa

Overall goal: To alleviate hunger/poverty and ensure a better African food security through:

(1) Increased and sustainable agricultural production
(2) Stable supply of food
(3) Promotion of rural development
Japan’s Approach
1976 - 80’s

- Support for large-scale farmland development and modernization of agriculture led by the central government
  
e.g. Kilimanjaro agricultural development center project in Tanzania (1978-1986)

Japan’s Approach
1990’s - now

- Farmer-driven comprehensive rural development, targeting poverty reduction and sustainable development
- Development and extension of rice cultivation suitable for various agro-ecologies

  e.g.
  - Study on combating desertification in the south region of Segou in Mali (2000-2008)
  - Participatory village development in isolated areas in Zambia (2002-2009)
  - NERICA dissemination in Uganda (2004-2010)
Launch of CARD and its adoption in the TICAD IV Yokohama Deceleration

- In partnership with AGRA, JICA developed and launched the initiative “Coalition for African Rice Development (CARD)” during TICAD IV.
- The goal of the initiative: “Doubling rice production in Africa within 10 years” (adopted as one of the objectives in the Yokohama Deceleration)
**Why Rice in Africa?**

**Expanding Consumption of Rice**
- Rice is rapidly becoming the main staple food for urban and rural consumers alike.

**Potential of Productivity Improvement of Rice**
- Possibility to increase yield per unit with basic technology transfer and inputs such as fertilizer and improved seeds.
- Suitable weather since rice is a tropical crop originally. (Very limited area for wheat cultivation)
- Large availability of undeveloped wetlands.

### Potential for Asia/Africa Cooperation

**Possible participation of rice experts and research institutions from Asian countries.**
Rice Production and Consumption per Capita in Africa

West African Countries: Rice is staple food.

- Senegal 70kg
- Guinea 91kg
- Cote d’Ivoire 79kg

East African Countries: Rice is becoming major grain.

- Uganda 2.6kg (Yr.1990) → 6.7kg (Yr.2005)
- Mozambique 6.8kg (Yr.1990) → 23.1kg (Yr.2005)
- Madagascar 126kg

Rice Production Quantity (1000t)

- Red: More than 1000
- Orange: Between 500 and 1000
- Yellow: Between 100 and 500
- Green: Between 10 and 100

(Reference: Japan 63.8kg)
Production and Self-sufficiency Rate of Rice in Africa

![Graph showing production and self-sufficiency rates of rice in Africa for various countries.](image-url)
“Coalition for African Rice Development (CARD)”
- Essentials -

Goal
- Double rice harvest within 10 years (from the present production of 14 million tons to 28 million tons)

Approaches according to agro-ecology
- Irrigated Field
  Rehabilitation of Existing Irrigation Facilities, Strengthening of Water User’s Association
- Rainfed Lowland
  Establishment of Rice Development Model
- Rainfed Upland
  Expanding of NERICA Dissemination

About 10 Pilot Sites/Countries

Implementation Framework

Core Organizations
- AGRA, FARA, NEPAD, WARDA, IRRI, JIRCAS, JICA

Partners (Donors)
- WB, AfDB, FAO, IFAD, WFP, UNDP, USAID, etc
“Coalition for African Rice Development (CARD)”
- Schedule -

- TICAD Agriculture Experts’ Meeting: 26-27th March 2008, Tokyo
- CARD Launching Event: 29th May 2008 at TICADIV, Yokohama
- The Technical Level Meeting: 25-26th Sep 2008 at WARDA, Benin
- The 1st CARD General Meeting: from 28th to 31st Oct 2008, Kenya
- The 2nd CARD General Meeting: May 2009

In 2008, CARD will …..:
- Set up the Secretariat in AGRA-Kenya by early October
- Select pilot countries/sites in October
- Assist the pilot countries/sites in the preparation of the National Rice Development Strategy (NRDS)
- Dispatch joint missions to African pilot countries/sites to identify high rice potential area
- Harmonization of assistance and resource mobilization, sharing relevant information and proactive advocacy

… etc.
JICA’s Ongoing/Planned Projects in Rice Development

Senegal
- Project on Improvement of Productivity of Village Irrigation Scheme in the Valley of Senegal (plan)

Guinea
- Development Study for Sustainable Rural Development in Middle and Upper Guinea

Sierra Leone
- Agricultural Development Project in Kambia District

Ghana
- Project for Comprehensive Development for Promotion of Domestic Rice (plan)

Benin
- NERICA Experts in WARDA

Burkina Faso
- Project for Dissemination of Improved Seed

Uganda
- NERICA Dissemination Project
- Sustainable Irrigated Agriculture Development Project in Eastern Uganda

Tanzania
- Technical Cooperation for Supporting Service Delivery Systems of Irrigated Agriculture

Mozambique
- Integrated Agricultural Development Project for Small Scale Farmers in Chokwe irrigation Scheme

Type of technical cooperation projects classified by targeted rice production system:
- Irrigated Rice
- Rainfed Lowland Rice
- Rainfed Upland Rice
Case - 1

**NERICA Dissemination in Uganda**

- **Project Period**: 2004-2008 (Expert) / 2008-2010 (Technical Cooperation)
- **Project Outcome**:
  - Constant supply of foundation seed
  - Planted area: 6,000ha (2003) to 35,000ha (2007)
- **Success Factor**:
  - High government ownership
  - Research on suitable cultivation method
  - Continuous training to researchers, extension workers and farmers
  - Post harvest activities such as mobile mil
**Case - 2**

**Strengthening Farmers Training for Large-scale Irrigation Management**

*(Kilimanjaro Agric. Training Centre Phase 2 Project in Tanzania)*

- **Project Period**: 2001-2006
- **Project Outcome**:
  - Average rice yield per unit area of sample farmers in model sites increased by 54.6% from 2002 to 2005.
  - Net return rate from rice in all model sites increased from 60% in 2002 to 73% in 2005.
- **Success Factor**:
  - Training contained comprehensive rice techniques which were easily utilized by and little costly to farmers.
Case - 3

Post-harvest Handling and Marketing
(Study on the Reorganization of the Production of Rice in Senegal)

- **Study Period:** 2004-2006
- **Key Findings:**
  - Improved value-chain between producers and rice millers ensures quality control through process from paddy to milled rice.
  - Senegal river valley requires well-balanced development among paddy production, post-harvest and rice marketing.
  - The necessary conditions for high quality local rice:
    - Separate grains according to their size
    - Commercialize each variety separately, etc

- **Customers Examining Quality of Local Rice**
- **Rice-mill Introduced**
- **Workshop for Rice Farming Technique**
Thank you for your attention