



Sharing of Key Updates/Priorities for **Japanese** Rice Sector Development



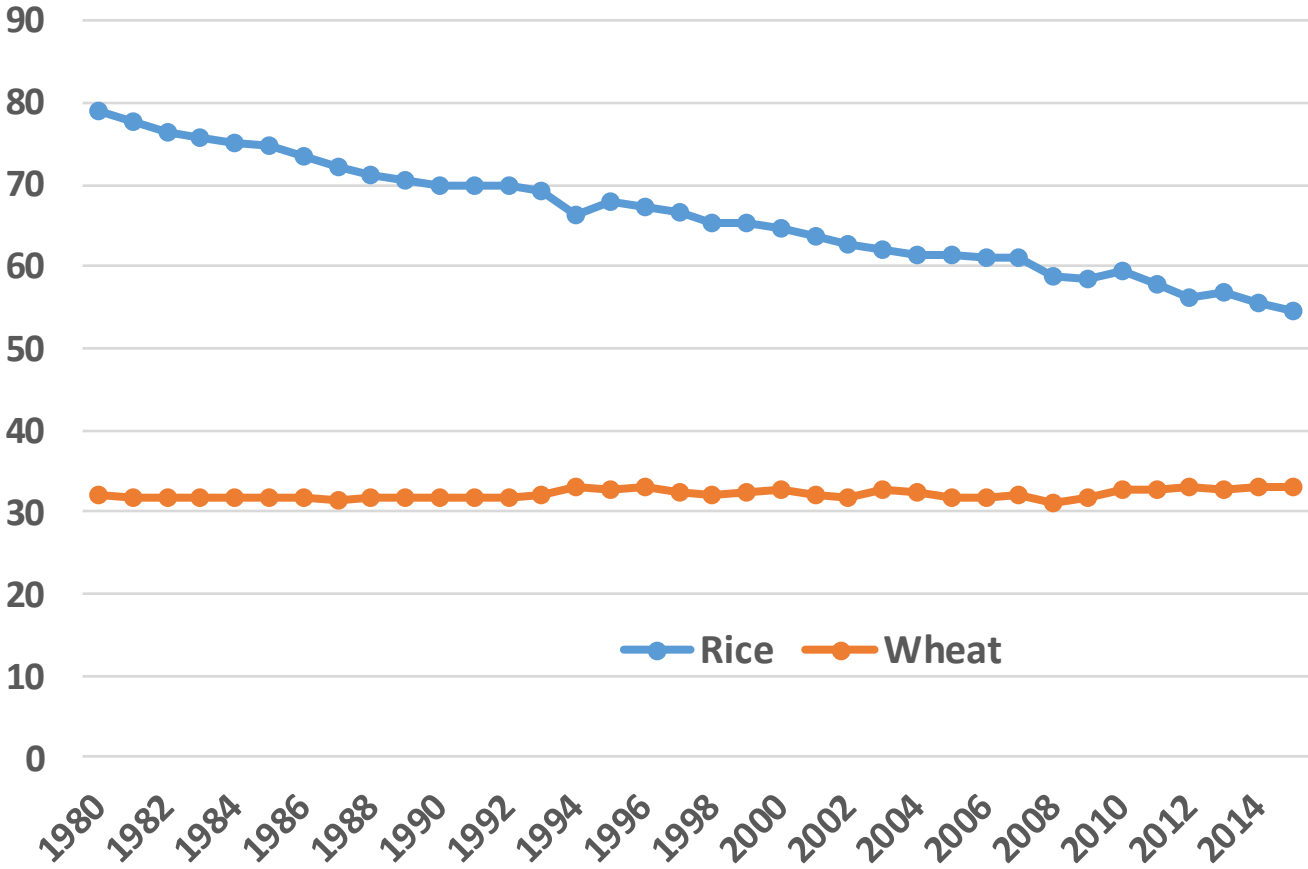
Osamu Koyama
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Agricultural Sciences (JIRCAS)

20th Annual Meeting of the Council for Partnerships on Rice Research in Asia

25-26 October 2016

Central Park Hotel Songdo Seoul, South Korea

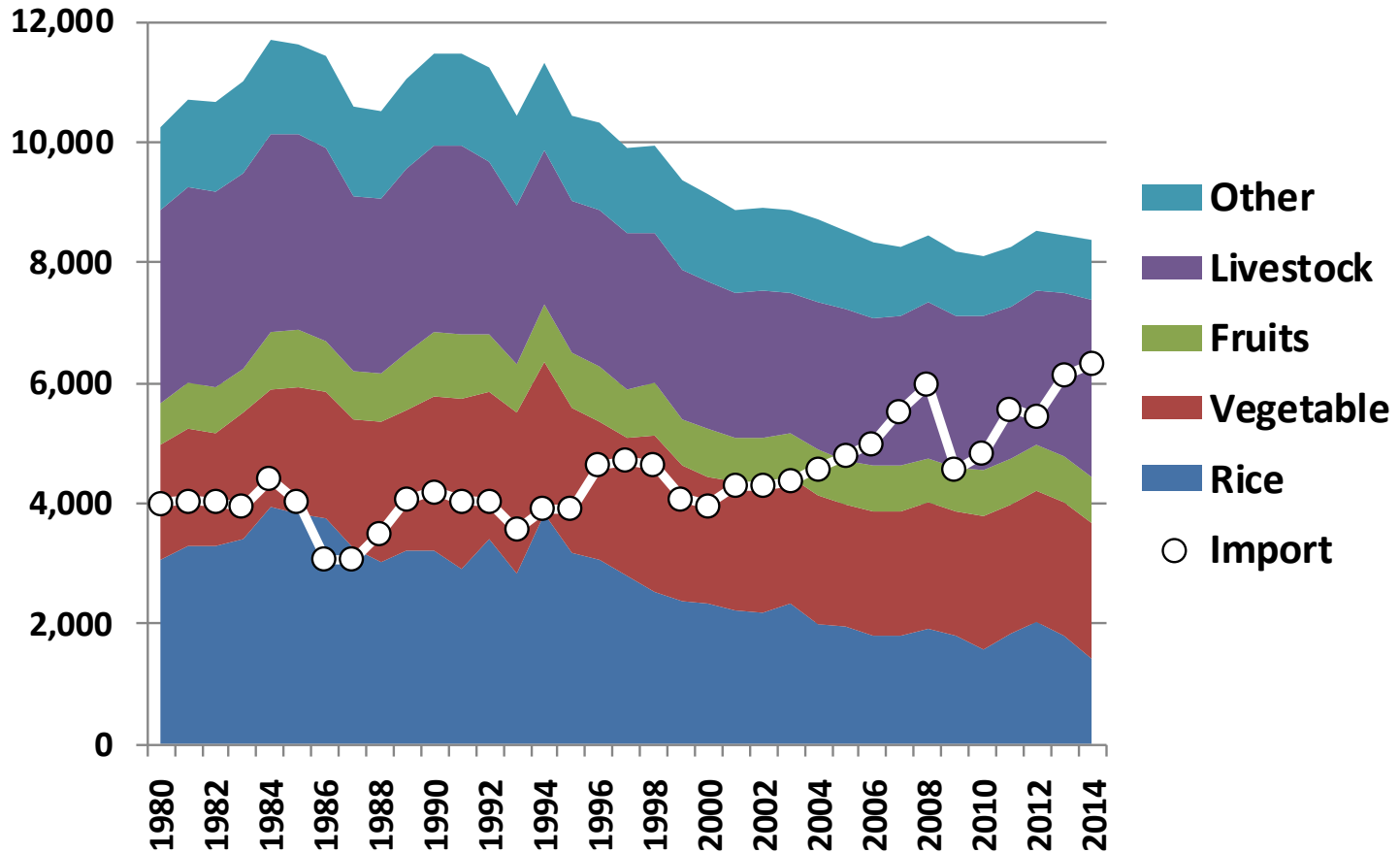
Declining Rice Consumption (kg/person/year)



Source: MAFF

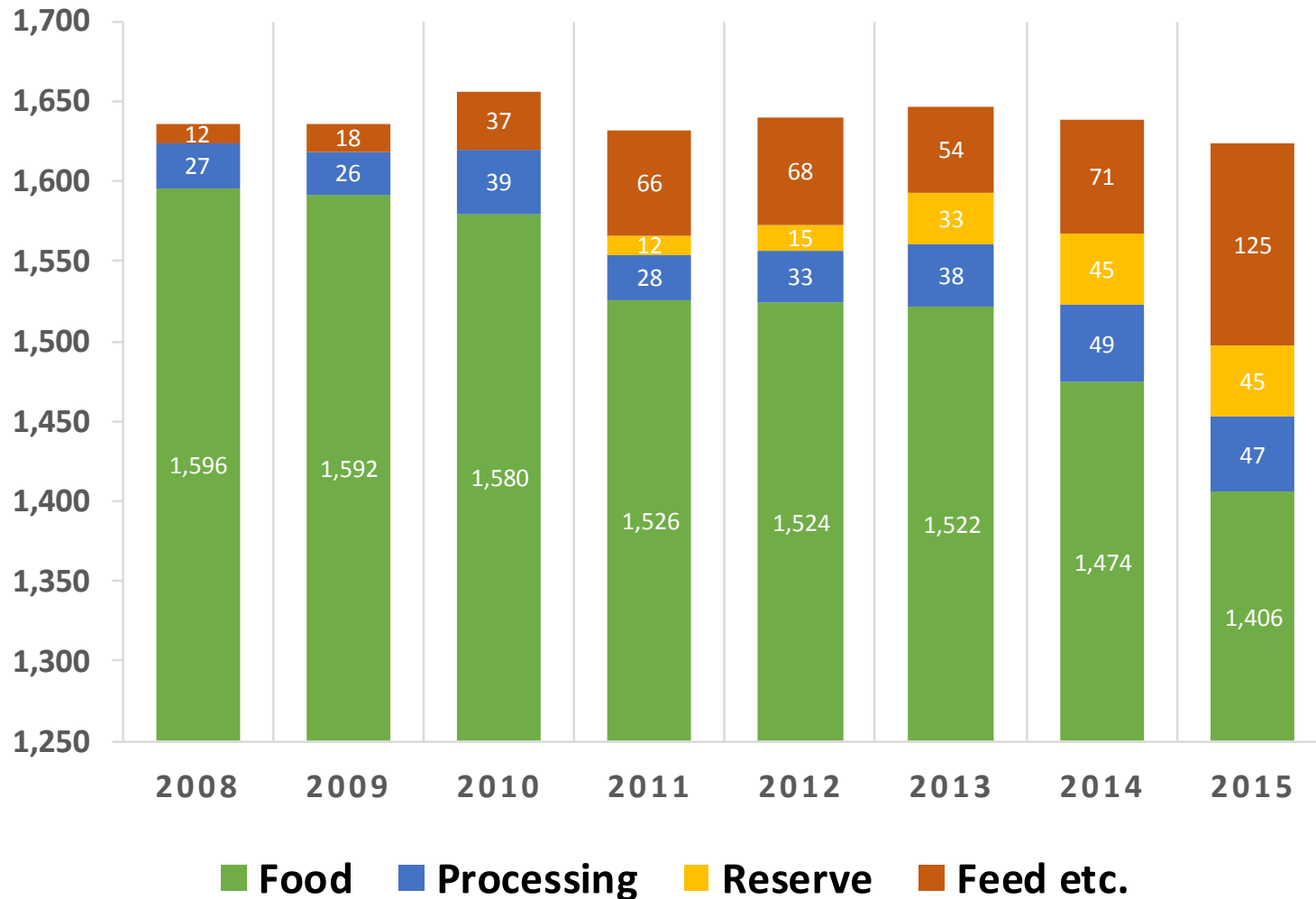
Japanese Agriculture – Production and Import

Billions JPY



Source: MAFF

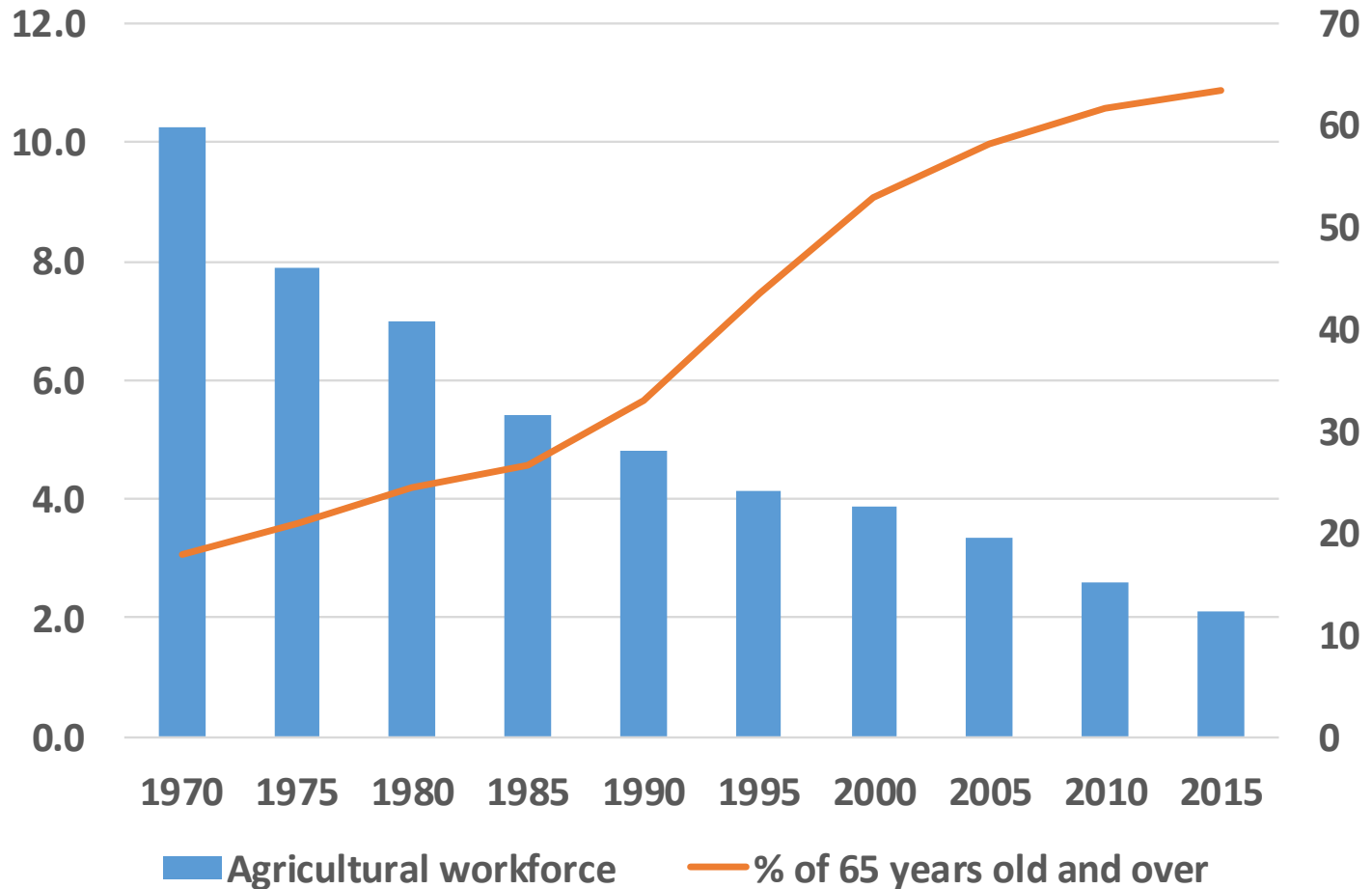
Planted Area of Rice by Use (1,000ha, including for WCS)



Source: MAFF

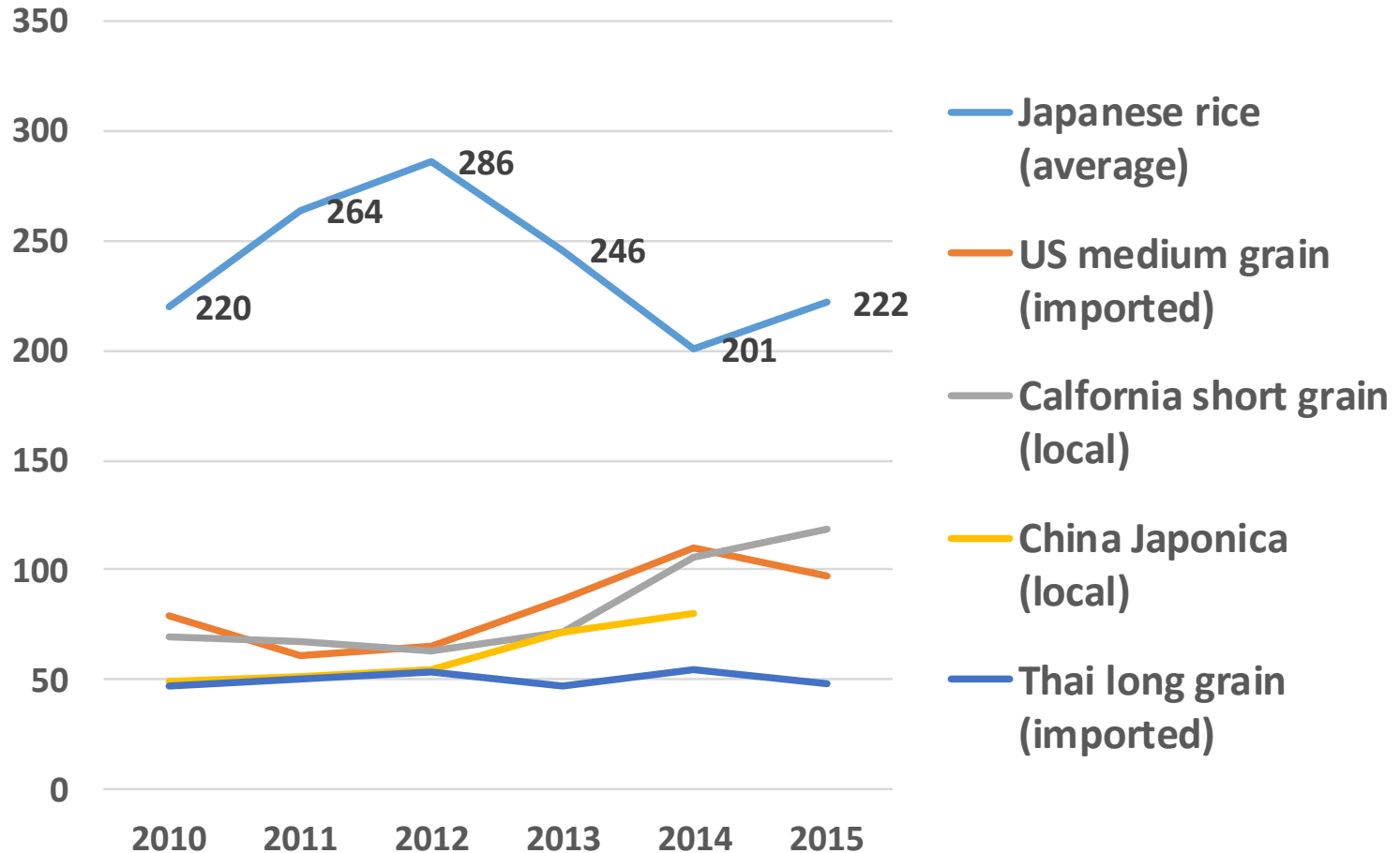
Ageing Agricultural Workforce

(million people, % of 65 years old and over)



Source: MAFF

Difference in Rice Prices (JPY/kg, milled rice equivalent)



Source: MAFF

Rice Sector Development Priorities

Basic Plan for Food, Agriculture and Rural Areas
(Mar. 2015- for about 10 years)

- **Income stabilization**
 - Direct payment for key farmers
- **Supply structure reform**
 - Exploitation of paddy field use
 - Rice for animal feed, traceability
- **Technological innovation**
 - Cost reduction, high value products

Rice Research & Development Priorities

Basic plan for Agriculture, Forestry and Fisheries Research (Mar. 2015- for about 10 years)

- **Rice paddy farming system**
 - Direct seeding, rotational cropping
 - 40% reduction of production/distribution cost
- **Rice for animal feed**
 - High-yielding varieties (10t brown rice/ha)
 - Whole crop silage (WCS) rice
- **Functionality, processing and safety**
 - High value products, rice for flour, arsenic/cadmium concentration reduction
- **Environment and resource management**
 - Heat tolerant rice, ICT based infrastructure

Rice Research & Development Challenges

Rice sector

- **Decreasing rice demand (55kg/person, yearly)**
 - Feed rice is to increase 10 times (-> 1.1 million ton in 2024)
- **Ageing rural society, high production cost**
 - Labor/cost saving technologies, accumulation of farm land

Research system

- **Management system and technology transfer**
 - Strategy setting with industry and academia
 - Platform for multi-stakeholders' collaboration
- **Research environment for diverse knowledge**
 - Human resource development
 - Participation in global research networks

Priorities for Collaboration with Partners

Priorities in JIRCAS

- **Development of Stress-tolerant Rice**
 - Heat, drought, P deficiency and N/P use efficiency
- **Climate change issues**
 - Mitigation (AWD), adaptation (insurance, ICT utilization)
- **Establishment of effective food value chains**
 - Rediscovery of high value rice products

Participation in “Rice” CRP (2017-)

- Flagship project **2**: Upgrading rice value chains
- Flagship project **3**: Sustainable farming system
- Flagship project **5**: New rice varieties