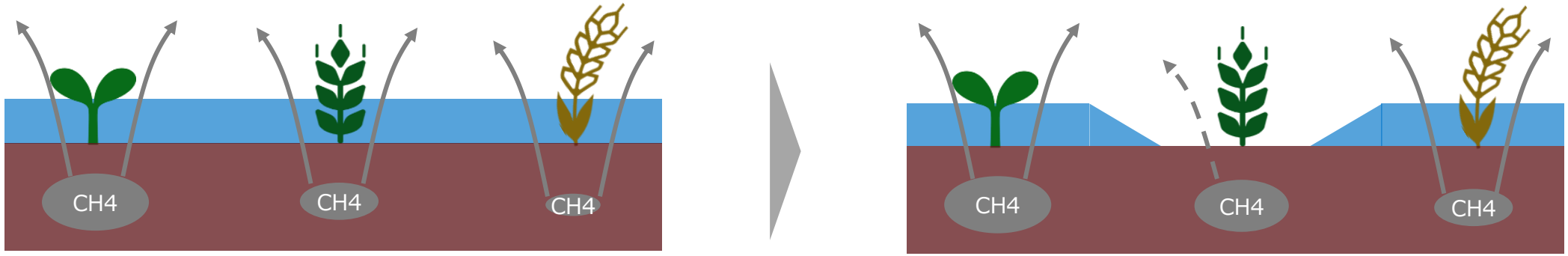
Establishment of Paddy Field JCM Consortium and Interim Analysis Report

FOUNDER AND SECRETARIAT: OSAKA GAS CO., LTD.

What is AWD

- AWD (Alternate Wetting and Drying) is a rice cultivation practice in which paddy fields are not kept continuously flooded; instead, periods of drying and flooding are alternated to reduce greenhouse gas (GHG) emissions.
- In addition to GHG mitigation, AWD is also said to offer various co-benefits, such as increased rice yields and reduced water use.

Overview

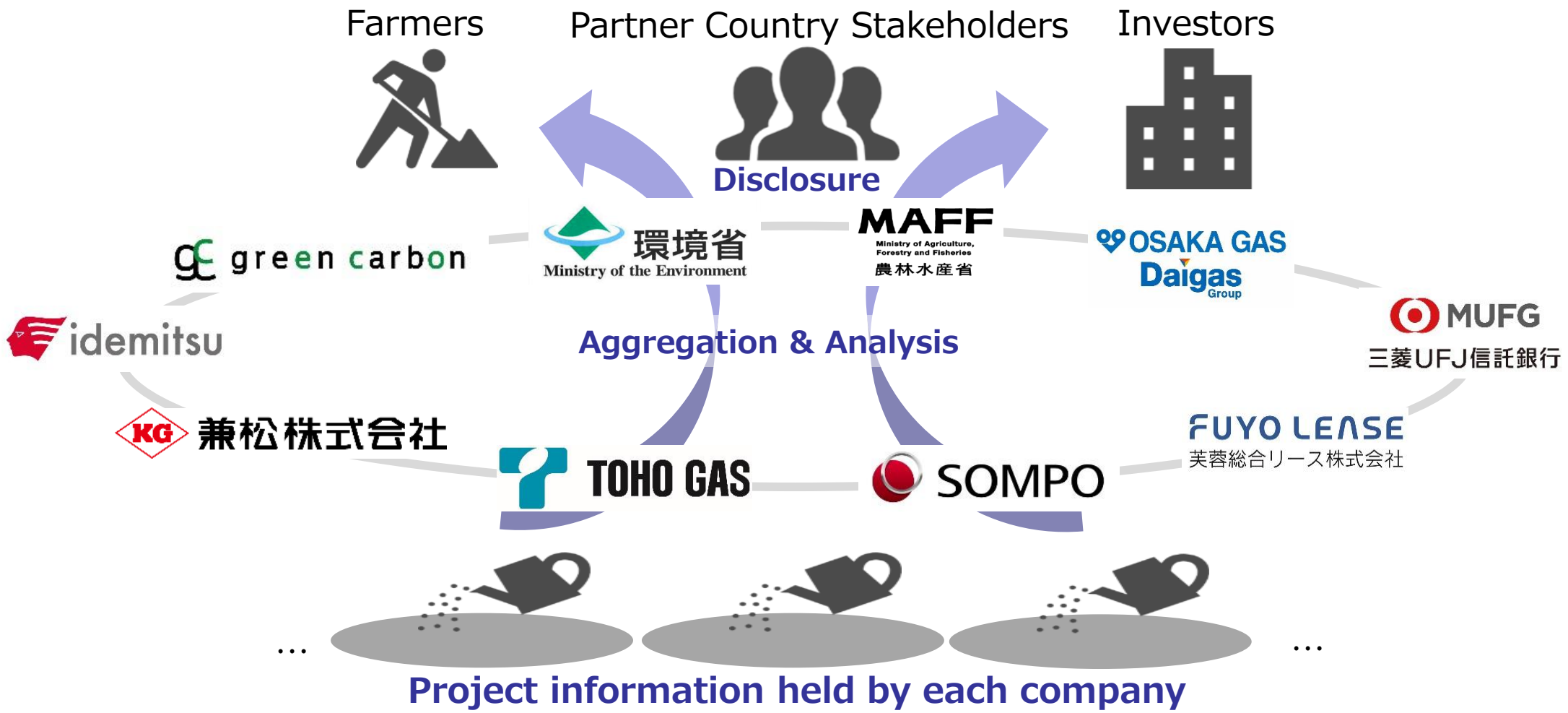


Benefits

- Reduction of methane emissions from soil
- Increased rice yields through enhanced root development
- Water savings / Reduced water use

Paddy Field JCM Consortium

- Osaka Gas launched this consortium on October 23, 2025, to analyze the complex benefits and risks of AWD based on actual JCM data and to disseminate findings in collaboration with government officials.
- Through AWD, we aim to collaborate with stakeholders in partner countries to maximize GHG reduction, increase rice yields, conserve water, and create shared value for both nations.



Current Initiatives

- We will analyze and disseminate information useful to AWD stakeholders based on actual JCM project data.
- We have started by analyzing rice yields and rainfall relationships, and plan to increase the sample size and analyze other factors in the future.

- Relationship between AWD and Rice Yield
  - Rice yield is the primary concern for farmers.
  - While multiple reports suggest that AWD increases or maintains yields, data based specifically on the JCM methodology had not yet been confirmed.

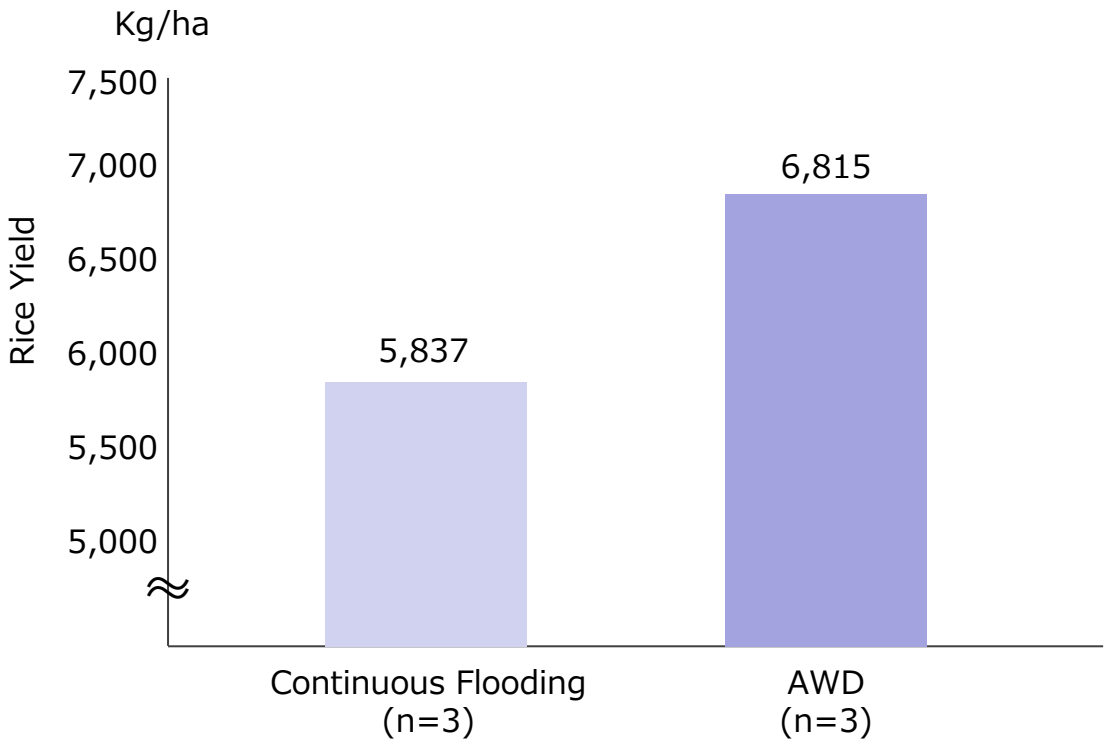
- Relationship between AWD and Rainfall
  - For project developers and investors, the impact of continuous rainfall and typhoons during the rainy season was an unknown factor regarding the sustainability of AWD projects.

In both areas,
we are now obtaining data that provides interesting insights.

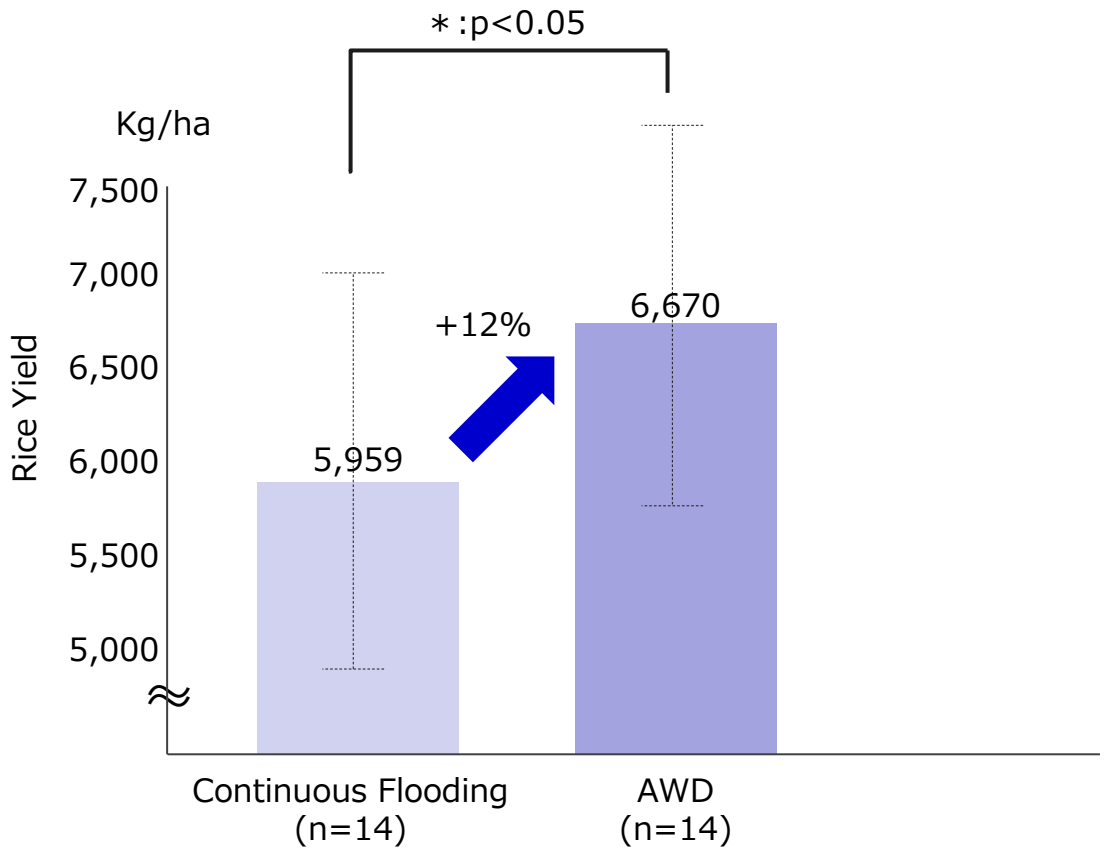
Rice Yield Analysis

- Analyzing results from multiple regions in the Philippines.
- Average yields increased with AWD in both the FY24 rainy season and FY25 dry season.
- A statistically significant increase in yield due to AWD was observed in the FY25 rainy season. (FY24 data showed no statistical significance due to small sample size.)

FY24 Rainy Season (Reference)



FY25 Dry Season

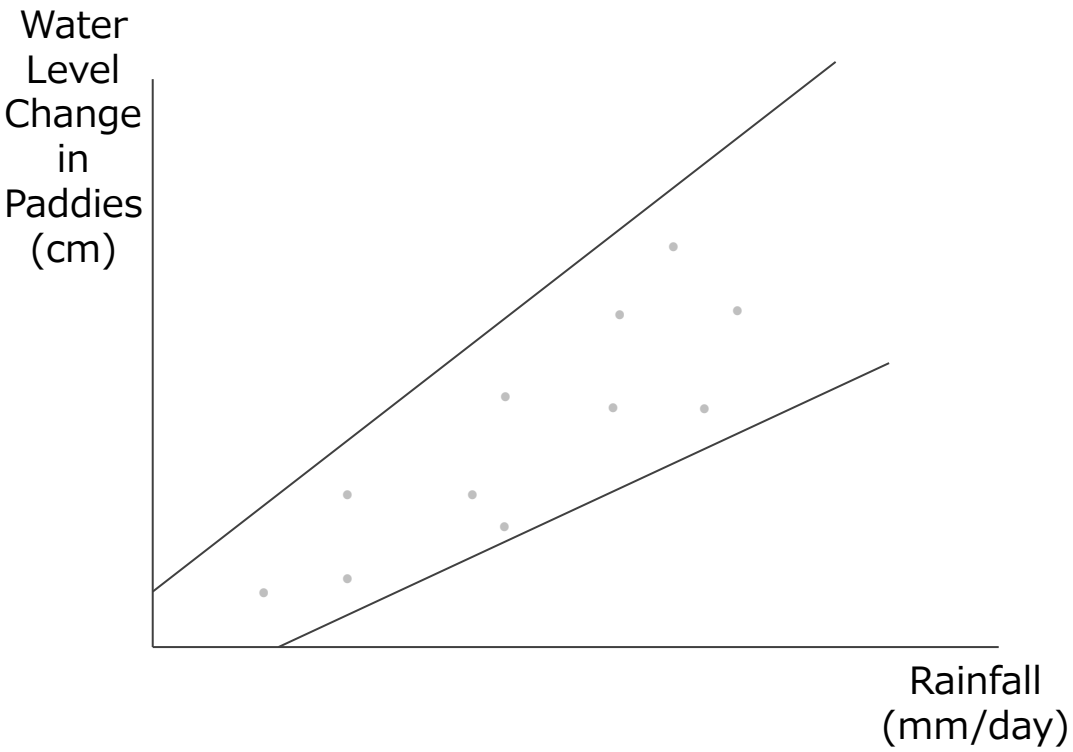


Analysis conducted at the city level within project areas.

Weather Analysis

- Analyzing rainfall and water level changes in paddies.
- Initially, we assumed a correlation between rainfall volume and water level rise, making AWD more difficult in the rainy season compared to the dry season. However, analysis results suggesting a different, positive outcome are emerging.
- We plan to report the findings once the analysis is complete.

Initial Assumption



Interim Analysis Image

Summary / Conclusion

- Management aligned with JCM methodology has resulted in statistically significant increases in rice yields, demonstrating effects beyond GHG reduction.

- Positive results are emerging regarding weather risks for AWD implementation in the rainy season. Continuous financial support from Japanese private companies is anticipated.

- Moving forward, with the cooperation of officials from both governments, we aim to provide information and support through AWD that contribute to farmers and support the NDCs of both countries.