



2019 CRG Group annual Meeting
Nov 14th, 2019@San Antonio

GLOBAL
RESEARCH
ALLIANCE

ON AGRICULTURAL GREENHOUSE GASES

CROPLANDS RESEARCH GROUP: [JAPAN] Country Update

CRG representatives: Japan Contact Point

Dr. Ayaka W. Kishimoto-Mo

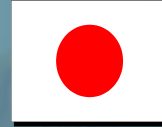
Institute for Agro-Environmental Sciences

NARO- National Agriculture and Food Research Organization



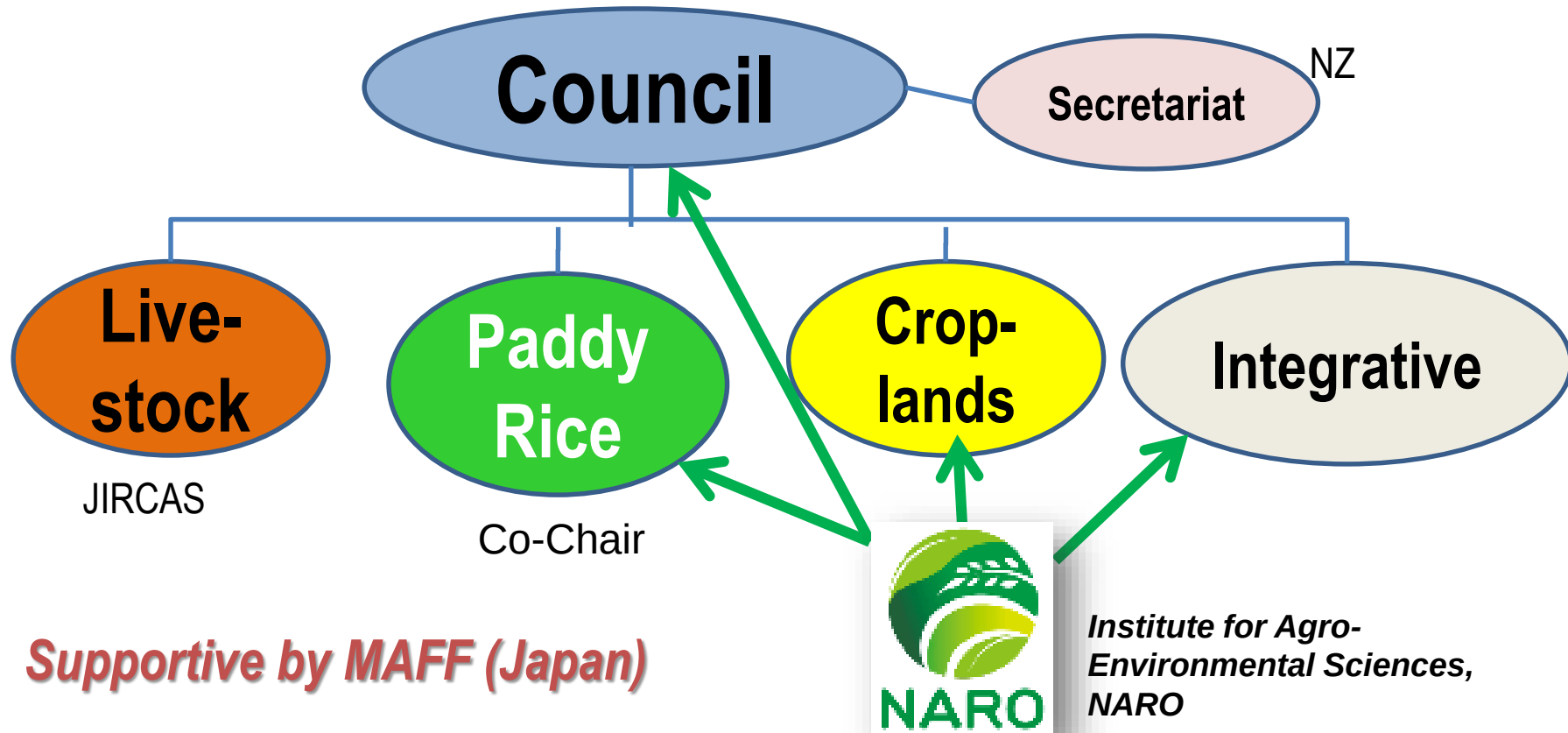
Nov 14th, 2019@San Antonio

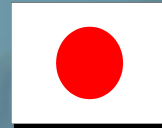
Country Update - Japan



GLOBAL
RESEARCH
ALLIANCE

ON AGRICULTURAL GREENHOUSE GASES



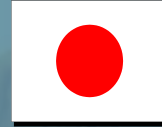


Identified CRG members (Japan) at NARO:

- *Dr. Ayaka W. Kishimoto-Mo** – CRG contact point, Facebook
 - Dr. Yasuhito SHIRATO** – also the CP of integrative group
 - Dr. Shigeto SUDO** – GHGs mitigation
 - Dr. Hiroko AKIYAMA** – GHGs mitigation, IPCC 2019 Refinement LA
 - Dr. Sadao EGUCHI** – Nitrogen footprint at country scale
 - Dr. Kei ASADA** – LEACHM model at river basin scale
-
- *Dr. Rota WAGAI** – Soil Carbon Flagship



Country Update - Japan



Contribution to Croplands Research Group activities

- *Share CRG activities to Japanese researchers (group meeting logs, how Japan involvement in GRA, ..newsletters)*
- *Bridge Croplands Group with Paddy Rice Group, Livestock Group (MAGGnet spreadsheet, Meeting with LRG-Japan)*
- *Management CRG-Facebook*
- *IPCC 2019 Refinement – contributed as Lead Author*



Country Update - Japan

GLOBAL
RESEARCH
ALLIANCE

ON AGRICULTURAL GREENHOUSE GASES

Group meeting logs (Japanese)



2012 Bali, Italy



2013 Tampa,
USA



2014 Debrecen,
Hungary



2015 Brasilia,
Brazil



2016
Phoenix,
USA



2017
Hatfield, UK



2017-NARO-WS



2018
Rio de Janeiro,
Brazil

How Japan involvement in GRA (Japanese)



2010 MARCO/GRA



2011 Article



2013 Article



2011 GRA-INTRO1



2011 GRA-INTRO2



2011 GRA-INTRO3

2014
GRA
workshop
@Paris



2016
Guidelines
for rice
paddy
CH₄/N₂O
measured



“2019 Refinement to the 2006 IPCC Guidelines for National Greenhouse Gas Inventories” (2019 Refinement)

Contribution as Lead Authors

Two CRG-Japan members (Dr. Ayaka Kishimoto & Dr. Hiroko Akiyama) contributed as Lead Authors

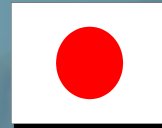
LA meetings :

- 2017/6: Spain (Bilbao)
- 2017/9: Zimbabwe (VF)
- 2018/4: Australia (Cairns)
- 2018/10: Italy (Rome)
- 2019/5: Adopted/Accepted at 49th IPCC Plenary

ipcc
INTERGOVERNMENTAL PANEL ON climate change
WMO UNEP



4th Lead Author Meeting at Rome (FAO Headquarters, Oct. 22-26, 2018)

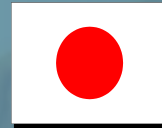


Opportunities to participate in CRG activities

On-going GRA related research projects

- Evaluating specified emission factor (EF) of N₂O for organic amendment – a MAFF funded research program (2011-2013, 2014-2017, 2018-) initiated by NIAES-NARO. It includes 10 field observation sites of the prefectural agricultural experimental stations across Japan. The N₂O EFs for dairy manure composts would be reported and used for national GHGs inventory of Japan. Recent results included in updated EF in IPCC 2019 Refinements. **Published data will go to MAGGnet; could be related to “Nutrient Management”?***





Opportunities to participate in CRG activities

- **Leading actions to meet 4 per mil initiative in Asia:**

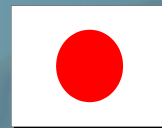
- ✓ *International symposium on “Soil carbon sequestration: needs and prospects under 4 per mil initiative/COP21” held on Feb. 28, 2017.*
- ✓ **ALTENA: Asian Long-Term Experimental Network for Agriculture**
<https://www.naro.affrc.go.jp/english/laboratory/niaes/altena/index.html>



Lead by Dr. Rota Wagai

- **Small-scale international cooperative research programs**

- ✓ *e.g. with UK for adapting DNDC to Andosols (upland crops); with Italy for integrating scientific and local knowledge for GHG mitigation strategies.*



Opportunities, future actions and funding

- 
- *Biochar – socio-economic scheme co-design with farmers*
- *Funding –*
 - ✓ *NARO international cooperation*
 - ✓ *JSPS bilateral research programs*

G20 MACS follow-up International Workshop on
Scaling up and out of climate-smart technologies and practices for sustainable agriculture

Nov. 5-7, 2019
@Tokyo



- *Actions need to involve more researchers participating CRG activities – Benefits and motivation*