



**Agriculture:
Mainstreaming biodiversity in
Agriculture - inviting various sectors
in actions to enhance biodiversity
related to rice paddies**

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Ramsar Network Japan**



Contents

- Background and activities towards adopting Rice paddy resolution of Ramsar
- Rice paddy resolution of Ramsar(X.31), 2008 and decision of CBD(X/34),2010.
- Strategy towards 2020 under UN Decade of Biodiversity
- RiceBED Project connected to UNDB and Aichi Biodiversity Targets.

WHY RICE PADDY? (1)

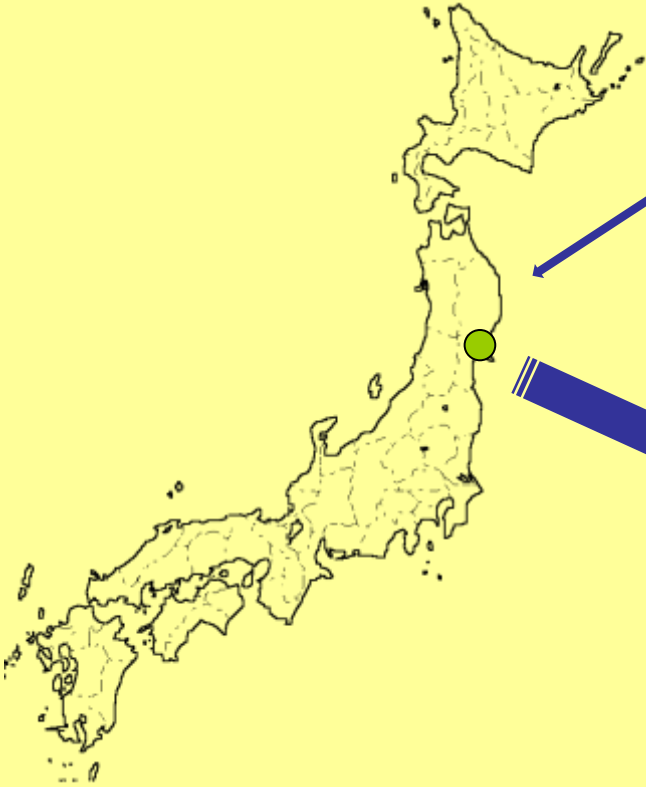
NEGATIVE Background

- **Critical decrease of wetland** habitat over the past 100 years.
- Many Natural wetlands have changed to Rice Paddy
- Change of quality of rice paddy ;

Wet to Easy Drying

POSITIVE Background

- History of sustainable use for thousands of years.
- Possibility of **restoring or recovering to wetlands** using working rice paddies, typical Asia-origin agro-wetland.
- Recognized as a type of wetland by Ramsar Convention
- Good case studies of **Agro-Environmental Rice Farming** ; Winter Flooded Rice Paddies project.

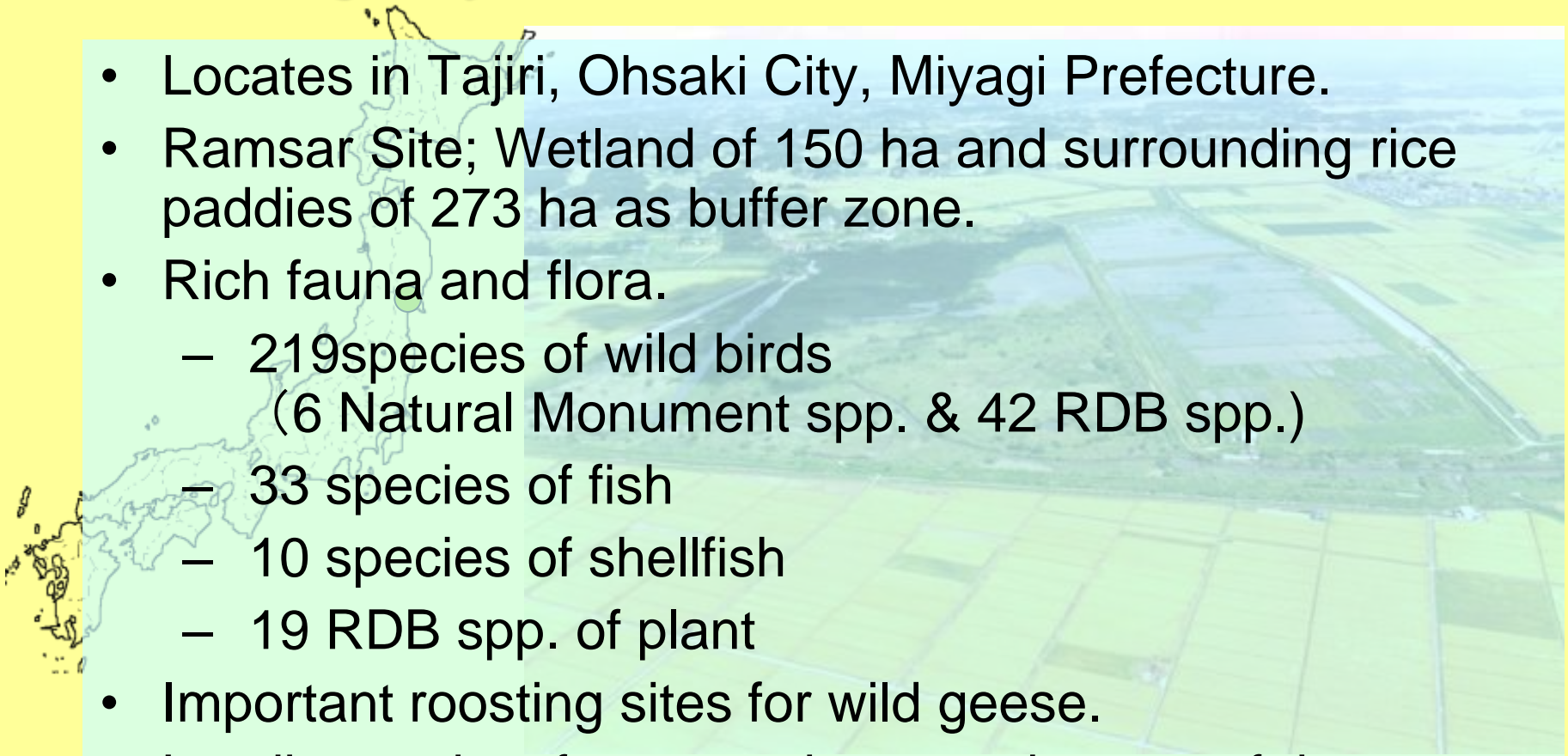


Kabukuri-numa Marsh

Kabukuri-numa Marsh

-Leading Project for Co-existence Rice and Birds -

- Locates in Tajiri, Ohsaki City, Miyagi Prefecture.
- Ramsar Site; Wetland of 150 ha and surrounding rice paddies of 273 ha as buffer zone.
- Rich fauna and flora.
 - 219 species of wild birds
(6 Natural Monument spp. & 42 RDB spp.)
 - 33 species of fish
 - 10 species of shellfish
 - 19 RDB spp. of plant
- Important roosting sites for wild geese.
- Leading project for promoting co-existence of rice farming and waterfowl through recovering or restoring wetland habitat.



Awareness-Raising of farmers and public

- Meetings and Symposiums
- Rice Paddy Wildlife Monitoring involving local farmers and public



Awareness-Raising of farmers and public

■ Tools Published and Used for Winter Flooded Rice Paddy

- Pamphlet (MoE & JAWGP)
- Calendar & Almanac (MoE, JAWGP, Tambo)
- Picture Book (Tajiri T. & JAWGP)
- CD for Songs and Materials (WFRF Song Committee & JAWGP)



The Kabukuri-numa Declaration (1998)

(One Wetland, One Future)

We, the participants of the Twelfth Annual Symposium on Geese,

- Aware that the wetland environment of Kabukuri-numa and the rice paddies surrounding it, here in Tajiri Township, Miyagi Prefecture, constitutes a precious legacy that we can be proud of before the whole world,
- Further aware that, for the migratory geese that seek out this rich wetland environment every year, it is an internationally important site, and is moreover one of the premier wintering grounds for geese in Japan,
- We are convinced that to maintain this wetland landscape will afford significant benefits not only to geese, but also to humankind, including people living in the local area,
- Thus, we declare that we will promote rice agriculture that will protect this environment and enhance its naturalness, which will also provide a better food source for the geese,
- And, we recognize that to pursue a wholesome agricultural practices that allow for co-habitation with geese will result in sustainable agriculture that makes the best possible use of the area's geographical advantages,
- Thus, in order to protect the wetland landscape and manage Kabukuri-numa and the rice paddies surrounding it for the purpose of conserving the birds, fish, and other animals that inhabit the site,
- We will seek to establish a management plan for Kabukuri-numa and the rice paddies surrounding it that will include the participation, and put into practice the wisdom, of people from various fields, including local residents,
- And, in order that the values embodied in Kabukuri-numa shall be passed on without fail to the next generation in the twenty-first century, for example through establishing a Ramsar Designation Preparatory Committee,
- We hereby declare that we will make our utmost efforts.

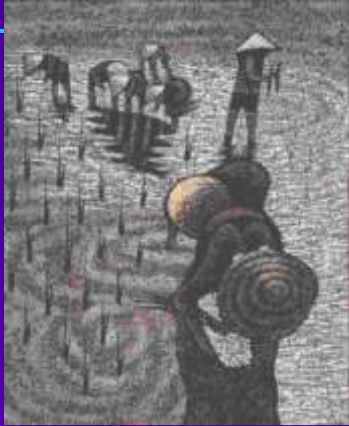
8 December 1998

Tajiri Township, Miyagi Prefecture Japan

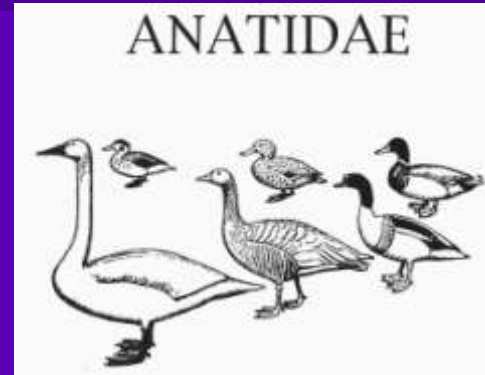
Participants of the Twelfth Annual Symposium on Geese

New relationship between agriculture and waterbirds

- from conflict to co-existence-



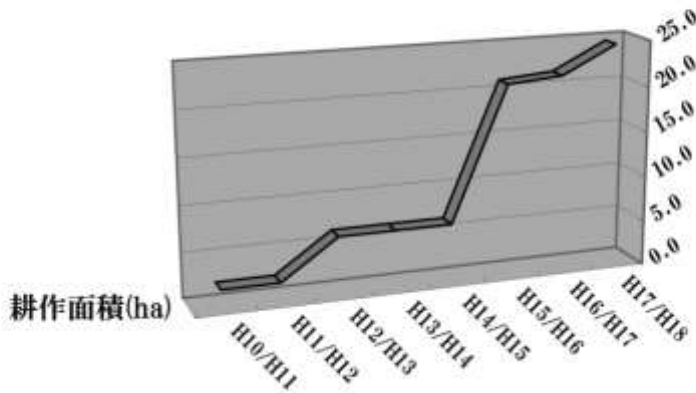
co-existence



- Geese are symbol of rice paddies of rich biodiversity.
- Rice harvested from these paddies means
 - to be safe and good for health.
 - to gain additional economical value.
 - to maintain or recover goose habitat through goose friendly farming.
- Winter-flooded Rice Farming works as a core system since 1998.

Farmers Join to Winter Flooded Rice Paddy around Kabukuri-numa since 1998/99 winter

大崎市田尻（旧田尻町）ふゆみずたんぼの耕作面積 (ha)

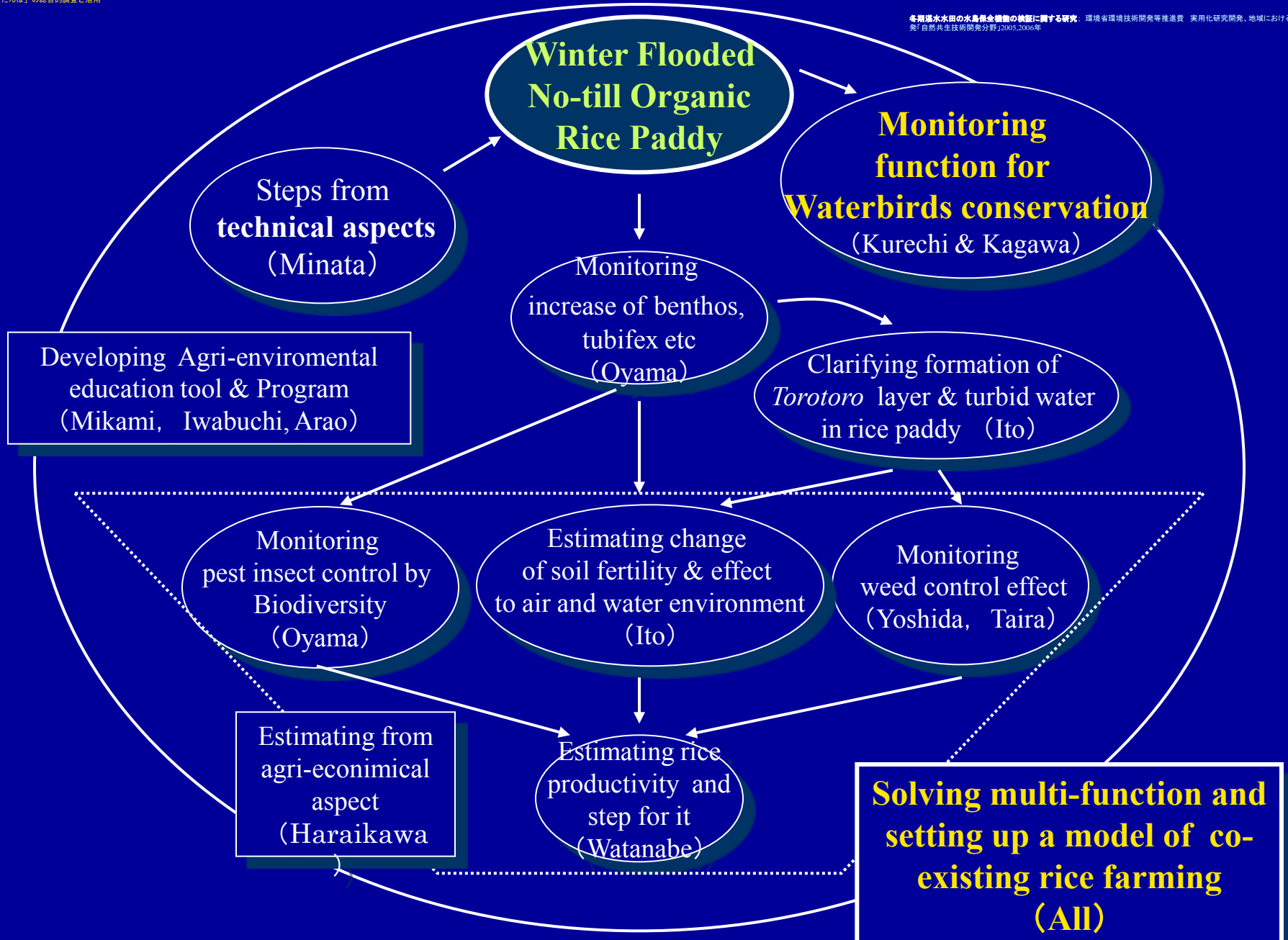


Bewick's Swans in Winter-flooded Rice Paddy

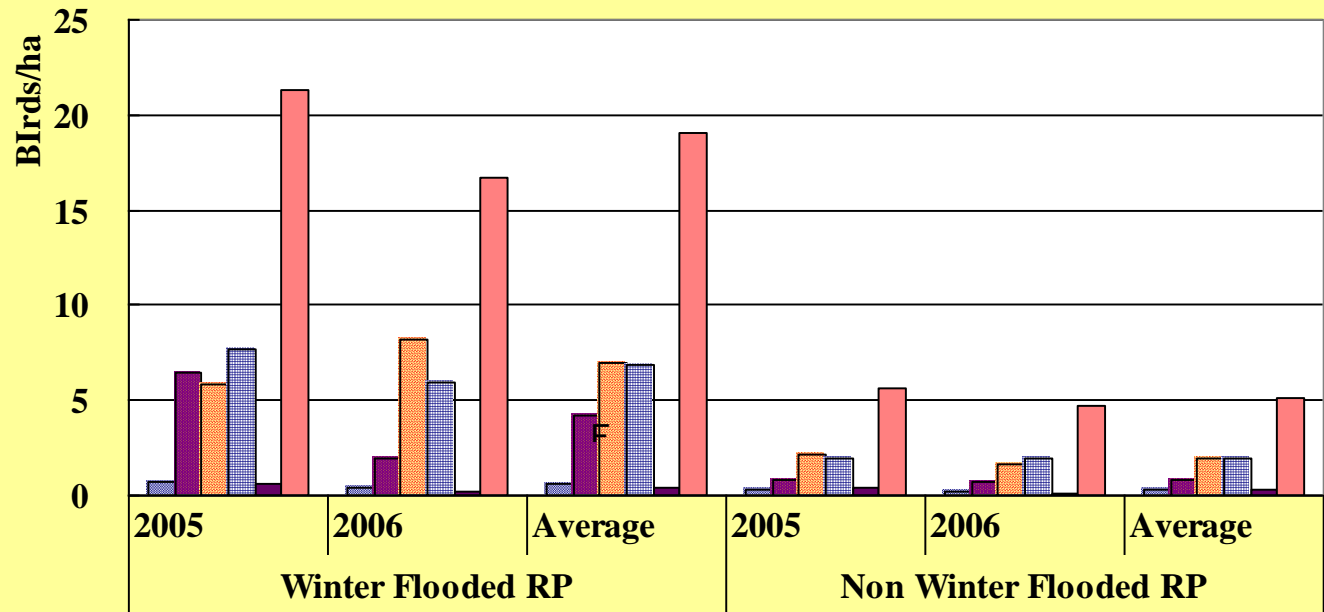
Joint Studies on Winter Flooded Rice Paddy

「ふゆみずたんぼ」の総合的調査と活用

冬期湛水水田の水鳥保全機能の検証に関する研究：環境省環境技術開発等推進費 実用化研究開発、地域における研究開発「自然共生技術開発分野」2005,2006年



Monitoring at Winter Flooded Rice Paddy in Summer



	Winter Flooded RP			Non Winter Flooded RP		
	2005	2006	Average	2005	2006	Average
Grey Heron <i>Ardea cinerea</i>	0.73	0.45	0.59	0.35	0.20	0.28
Cattle Egret <i>Bubulcus ibis</i>	6.50	1.98	4.24	0.78	0.77	0.77
Great Egret <i>Egretta alba</i>	5.85	8.16	7.01	2.19	1.62	1.91
Intermediate Egret <i>E. intermedia</i>	7.70	5.94	6.82	1.91	1.97	1.94
Little Egret <i>E. garzetta</i>	0.58	0.20	0.39	0.39	0.14	0.27
Total	21.35	16.73	19.04	5.63	4.70	5.16

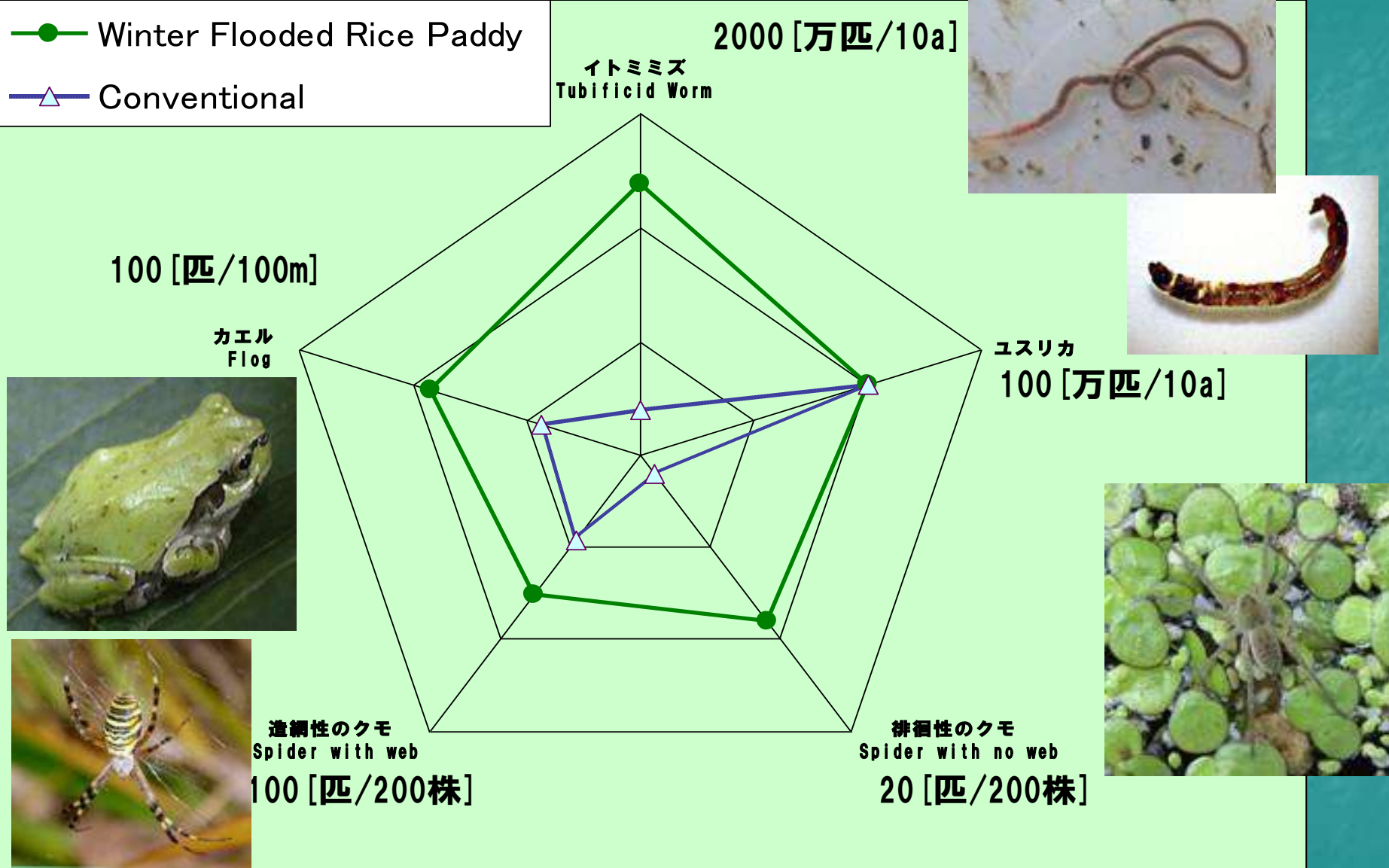
Winter-flooded Rice Farming and Heron Density in Summer (Average in 2005 & 2006 summers n=1,980)

Around 4 Times Higher in WFRP

Winter Flooded Rice Paddy with High Biodiversity

ふゆみずたんぼにするといろいろな生き物がよみがえる

- Winter Flooded Rice Paddy
- ▲ Conventional



Winter Flooded Rice Paddy

Benefits both Wildlife & Agriculture

[Wildlife in rice paddy] = Habitat Recovery

- Rich biodiversity... from microorganisms to waterbirds
- Spread flyways of Geese throughout Japan by the network of WFRP.

[Agriculture] = New method of Farming

= WFRP Method = IBM (Integrated Biodiversity Management)

- Weeds Control Effect (No or less herbicide)
- Pests Control Effect (No or less pesticide)
- Waterfowl Droppings as Fertilizer (Less fertilizer)
- Decompose rice straw
- Model of IBM

[Co-existent way for Agriculture and Nature ; Agro-Biodiversity]

- Sustainable
- Less Impact against Environment

Kabukuri-numa and Surrounding Rice Paddies

New Ramsar Site in November 2005



- First Ramsar Site Involving Large Area of Rice Paddy, typical Asian Wetland, under Agreement of Most Stakeholders.
- New Idea on Ramsar as a Useful Tool for Agro-Environmental Rice Farming.

**Hit an Idea for
Rice paddy Resolution in Ramsar COP10**

Rice Paddy Resolution X.31 adopted in Ramsar Cop10 2008, Changwon



**Proposed by governments of Japan and Korea
Supported by NGOs of both countries.**

Rice Paddy Resolution X.31

- 1) Rice paddy of agro-wetland **can work sustainably with rich biodiversity** if managed properly.
- 2) **Releasing Biodiversity of rice paddy, Asian typical wetland, to the world.**
- 3) **Bridge to CBD COP10, 2010 in Nagoya.**
- 4) **Focusing on artificial wetland** which has strong relation with human activity and is required its wise use.

Civil-Government Informal Meetings on Biodiversity in Rice Paddies in Japan since 2009

Launched by a proposal from **NGO** for the Implementation of the Rice Paddy Resolution In July 2009.

Government: Ministry of the Environment (**MOE**)/ Ministry of Agriculture, Forestry and Fisheries (**MAFF**)/ Ministry of Land, Infrastructure, Transportation and Tourism (**MLIT**)

NGO: Ramsar Network Japan.

- **A platform for implementing Ramsar Resolution X.31** “Enhancing Biodiversity in Rice Paddies as Wetland Systems”(Ramsar COP10 in 2008).
- **Frankly exchanged opinions and practical results** obtained.
- **Promote understanding on** government policies and concrete local activities
- **Bridges between** farmers/citizens in the field and government officials.
- **Cooperative work project involving the MOE and NGOs** for a report to **Ramsar COP11** on case studies and presentations on biodiversity in rice paddies
- **Ramsar Resolution XI.15**, Rice paddy and pest control, **recognised the contribution** of this report.

Big achievements:

- **Incorporate Ramsar Resolution** on rice paddies **into a decision of the CBD COP10** in 2010.
- **Drafted the CBD Decision X/34 “Agricultural Biodiversity”** adopted incorporating the idea proposed by the Japanese government.

The largest outcome;

- **Enhanced mutual understanding both between NGOs and government, and among ministries** within the government.
- **Unique framework** for both NGOs and for the government in Japan.
- **Mentioned in the National Biodiversity Strategy and Planning** of Japan 2012-2020.
- Expected that **ideas for new policies will be developed** through frank discussion at these Meetings.
- **Informal and regular meeting** in every six weeks, and **53rd meeting** since 2009 **by now..**

Progress of Rice paddy decision X/34 for CBD COP10

First draft by Ramsar Network Japan, Japanese NGO.

Discussed in Regular Civil-Government Informal Meetings (MOE, MAFF, MLIT) and NGO (RamNetJ)

Drafted by Government of Japan

In CBD SBSTTA 13 (May 10-21, 2010, Nairobi)

The draft was **accepted as** a part of recommendation of *AGRICULTURAL BIODIVERSITY* for COP10

Adopted in CBD COP10, Oct. 2010, Nagoya
Decision X/34: Agricultural Biodiversity

DECISION ADOPTED BY THE CONFERENCE OF THE PARTIES TO THE CONVENTION ON BIOLOGICAL DIVERSITY AT ITS TENTH MEETING

CBD COP10



X/34. Agricultural biodiversity

- **19. Welcomes resolution X.31 of the tenth meeting of the Conference of the Parties to the Convention on Wetlands (Ramsar, Iran, 1971) on the subject “Enhancing biodiversity in rice paddies as wetland systems”**, which notes, *inter alia*, the culture of rice in 114 countries worldwide, that rice paddies (flooded and irrigated fields in which rice is grown) have provided large areas of open water for centuries and that they support a high level of rice associated biodiversity important for sustaining rice-paddy ecosystems, as well as providing many other ecosystem services, *recognizes* the relevance of this resolution to the implementation of the programme of work on agricultural biodiversity and **invites relevant Parties, as appropriate, to fully implement this resolution;**
- **20. *Recognizes also*** the importance of agro-ecosystems, in particular rice-paddy and oasis systems, for the conservation and sustainable use of biodiversity, and *invites* the Food and Agriculture Organization of the United Nations, subject to resources, and in consultation with the Executive Secretary and relevant partners, including indigenous and local communities, to undertake further studies on the valuation of the biodiversity and ecosystem services provided by agricultural ecosystems, in order to further support policy-relevant guidance to Parties for consideration by the Conference of the Parties at its eleventh meeting, consistent and in harmony with the Convention on Biological Diversity and other relevant international obligations.

Tambo

"Tambo" is Japanese meaning Rice Paddy. It has just done to light that the rice paddy ecosystem in Japan supports as many as 5,668 species of living organisms.
That's the first result of co-operated surveys of many paddy fields in different fields.
The components linked with rice paddy form a complex ecosystem known as Satoyama landscape in Japan and provide habitats for various living organisms.



Wildlives in Rice Paddy as Resources

- Agricultural Resources for Sustainable Agriculture
- Local Food Resources to be used sustainably
- Bio Resources creating rich landscape

「田んぼの生物多様性向上10年プロジェクト」

Rice-paddy Biodiversity Enhancement Decade RiceBED Project



国連生物多様性の10年日本委員会
認定連携事業



愛知目標の達成をめざす、
にじゅうまるプロジェクトにも参加



RiceBED Project

Rice-paddy Biodiversity Enhancement Decade



- **Launched by Ramsar Network Japan(NGO).**
- **Ten -Year project connected to UNDB**
- **Local based project to concretize activities based on Rice Resolution and Aichi Biodiversity Targets.**
- **Umbrella for supporting various movements to make bottom-up activities on rice paddy biodiversity.**
- **Main streaming Bio diversity in rice paddy for the goal in 2020.**

田んぼの生物多様性向上10年プロジェクト

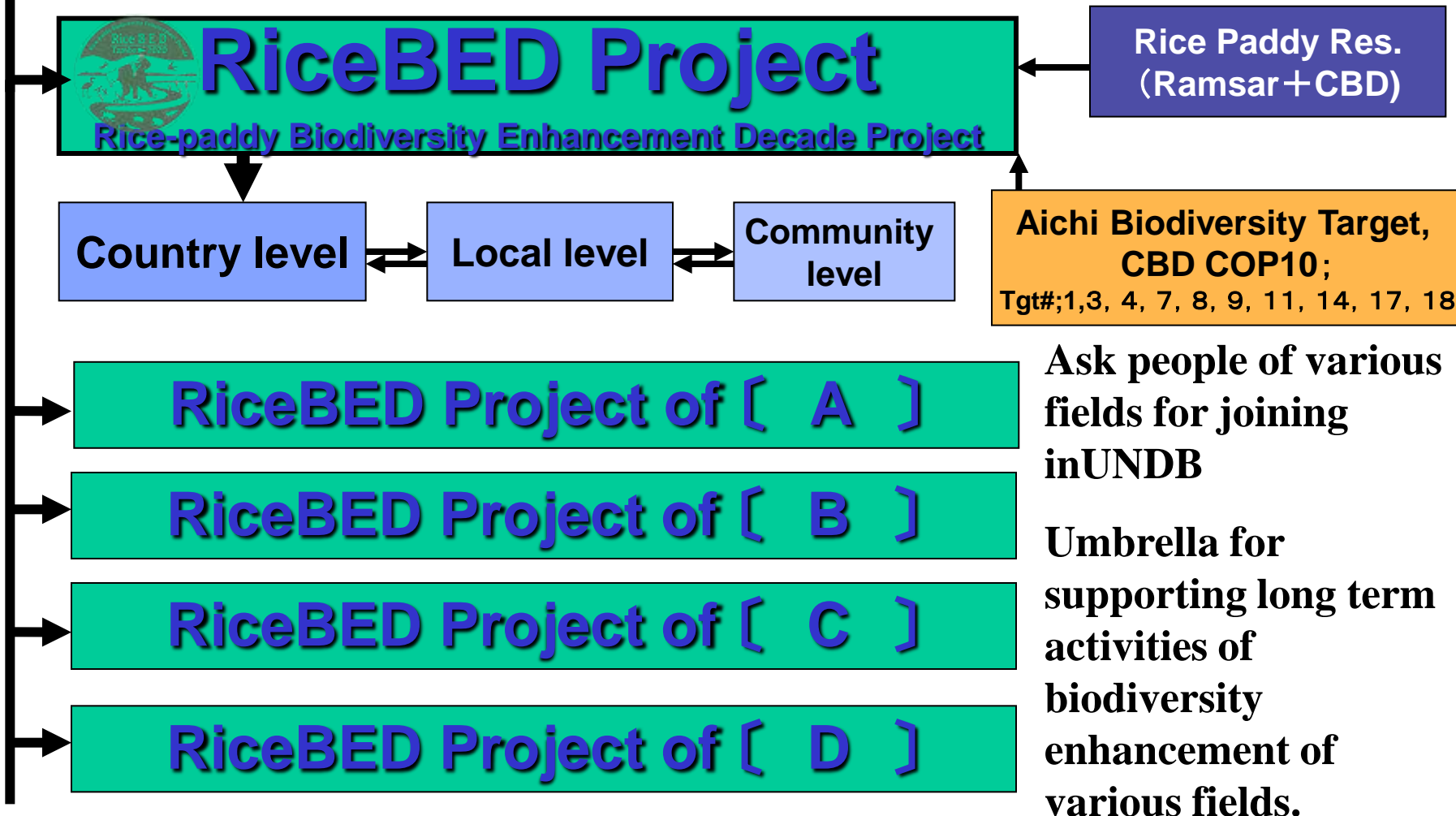


- NGOのラムネット日本水田部会が提唱。
- 国連生物多様性の10年の田んぼ版
- ラムサールCOP10とCBD・COP10で採択された水田の生物多様性決議を具体化する取り組みを提案
- 「愛知目標」達成をめざす「にじゅうまるプロジェクト」に参加
- 自治体には生物多様性地域戦略に水田決議の内容を盛り込むよう働きかける。
- 現場主義に立ち、各地の多様な人々の田んぼの生物多様性向上の取り組みを支援する受け皿
- 賛同者の輪を広げ、10年かけて目標の達成と、田んぼの生物多様性の主流化をめざす。



NGO Initiative for UN
Decade of Biodiversity

UN Decade of Biodiversity(2011-2020)



Kick off Symposium for Rice-paddy Biodiversity Enhancement Decade Project (Oyama, 9 Feb.2013)

More than 50 organizations/ individuals have joined from many different sectors; farmers, environmental NGOs, local governments, scientists, companies, school teachers and etc.



What's Rice-paddy Biodiversity Enhancement decade ?

decade ?



Rice Paddy Target
(Aichi Biodiversity
Target, CBD COP10)

Action Plan

Itemized Activities
Based on the
Aichi Biodiversity
Targets , CBD COP10

Good
Practice

Support for
Local Exchange
Gatherings

Join/
resistration

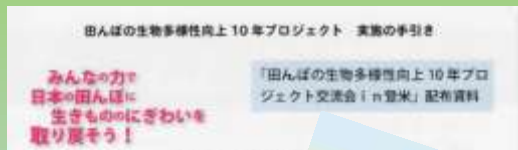
田んぼ、お米、生きもの、鳥のある地域づくりに
関係する全ての人へ・・・

みんなの力で
日本の田んぼに
生きものにぎわいを
取り戻そう！

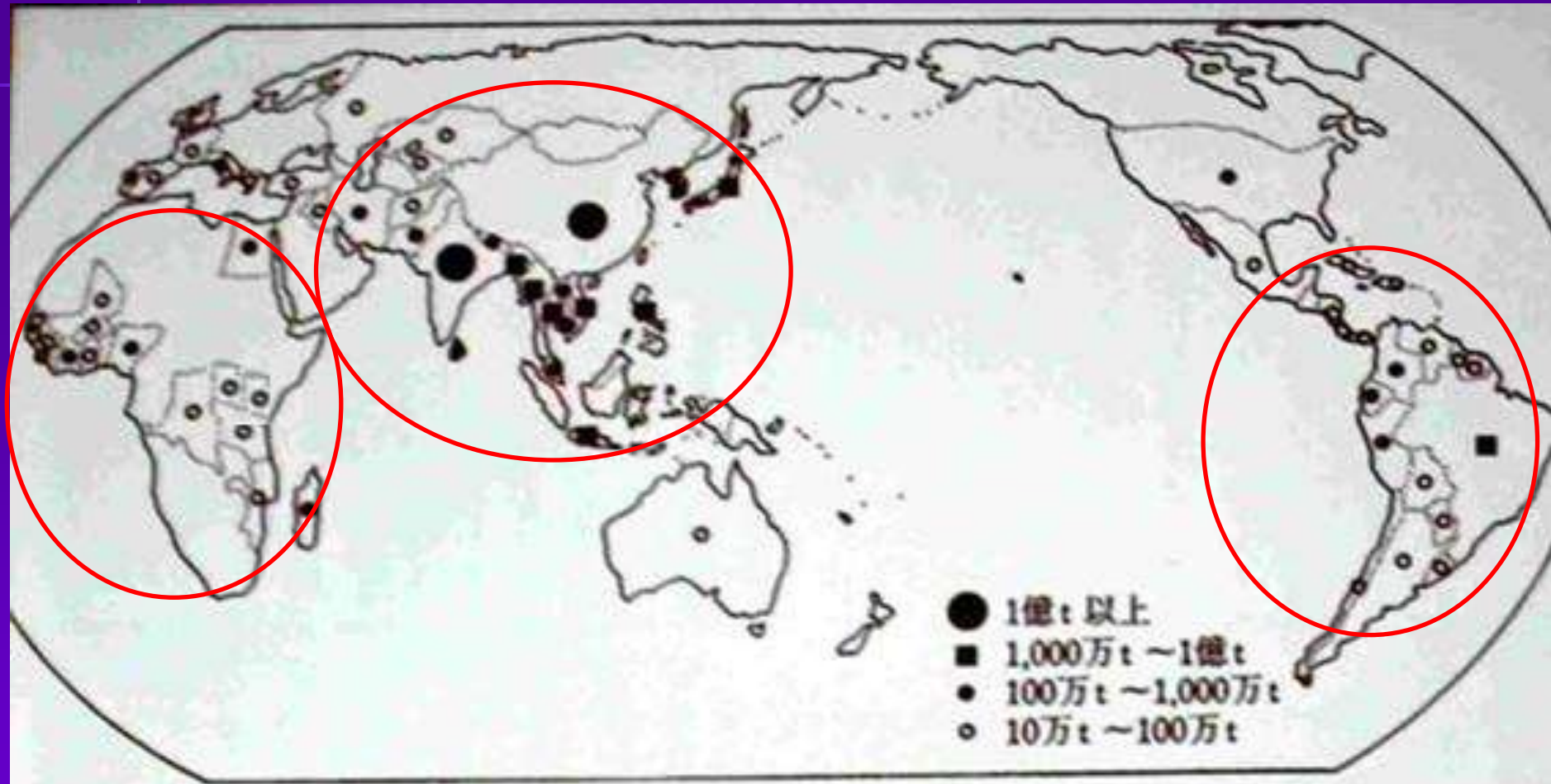
愛知目標を達成しよう
水田目標を達成しよう

田んぼの生物多様性向上10年プロジェクト
行動計画
2013

RiceBED Project, as an umbrella for Activities to Enhance Biodiversity in Rice Paddy, supports for Mainstreaming Biodiversity in Rice paddies. 諸活動の実施と継続・関係者との交流・目標達成・田んぼの主流化



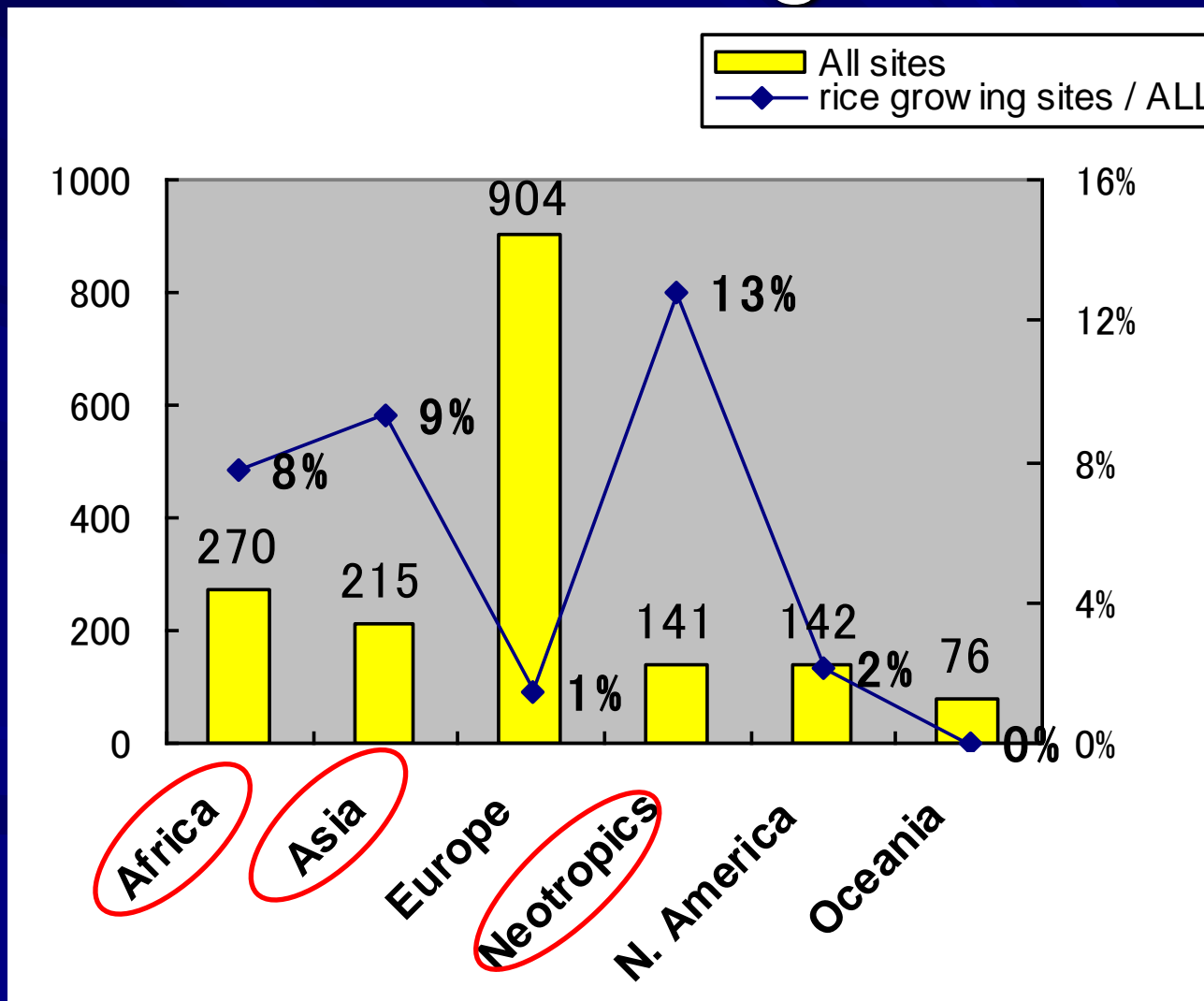
Distribution of Countries with Rice Paddies



世界のコメ生産国 (1996)

(FAOSTATより作)

Rice Growing Ramsar Sites in each Reagon



田んぼ10年プロジェクト【Rice BED Project】 (海外関連; 2014-15)



国際的なネットワークづくり

- CBD COP12: 2014年10月6-17日 (ピョンチャン、韓国): ブース展示/英語版行動計画作成リリース
- ラムサールCOP12: 2015年6月1-9日 (プンタデルエステ, ウルグアイ): 水田サイドイベントを日本政府と共催。#[1112] Follow-up of rice paddy resolution (X.31): アジア、アフリカ、中南米の水田ネットワーク化

【JICAとの協働】

- 2014年6月17日: 「地域における湿地の生物多様性の保全と持続的利用」蕪栗沼研修
- 2015年1月14日: ウガンダでのRice BEDプロジェクト勉強会 (JICA本部+ウガンダ(テレビ電話))
- 2015年2月24-26日 (コスタリカ): JICA中南米湿地保全地域セミナー「湿地における持続可能な生産」参加講演
- 2016年6月6日コスタリカ国保護区管理官らの蕪栗沼、伊豆沼研修 (JICA「参加型生物多様性保全研修プログラム」の一環): 田んぼ10年の国際ネットワークについても意見交換

【発行・刊行】

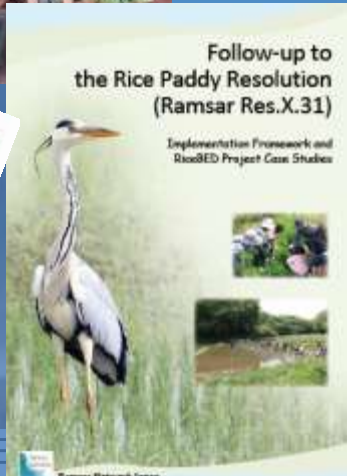
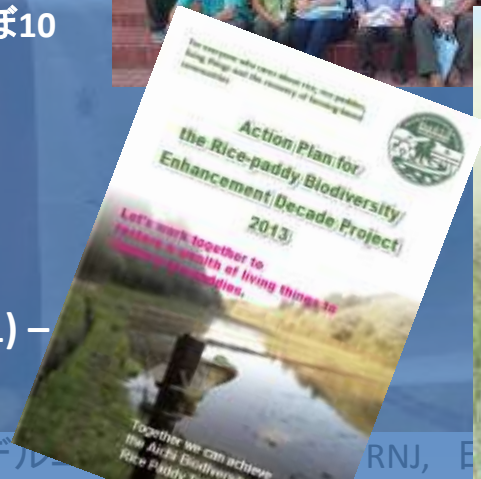
Rice BED Access Guide刊行 (2014 for CBD COP12)

Action Plan for Rice BED Project 刊行 (2014)

Follow-up to the Rice Paddy Resolution (Ramsar Res.X.31) –

Implementation Framework and RiceBED Project Case

Studies刊行 (2015.06 for Ramsar Cop12)



Ramsar COP 12 Side Event

[1112] Follow-up of rice paddy resolution (X.31)

2015.06.08 Hotel Conrad, Punta del Este, Uruguay

水田サイドイベント(ラムネットJ, 日本政府主催)



Mr. Y. Hashibe
RNJ, Alef Co Ltd

Mr. M. KURECHI
RNJ



Ms. K. TSUJITA,
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韓国
Mr. Taesung KIM, ,
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Coordinator
Mr. M. Kashiwagi



Mr. K. TAKADA
MAFFJ



ふゆみずタンゴ



ウガンダ
Mr. Ronald KATO,
Ministry of Agriculture, Animal
Industry and Fisheries, The
Republic of Uganda



コロンビア
Mr. Deynner A.
APONTE FONSECA,
Agricultural Engineer



アジア、アフリカ、中南米の水田ネットワーク

Ramsar sites Inside Rice growing

REGIONAL SYMPOSIUM ON WETLANDS MANAGEMENT
BIODIVERSITY AND HUMAN WELFARE IN EASTERN AFRICA
**IMPLEMENTATION OF WISE USE PRINCIPLES
AND RICE RESOLUTION**

4-5th October, 2016 MBALE, UGANDA

by RAMSAR CENTRE FOR EASTERN AFRICA & JICA

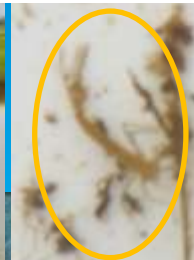
- **SESSION 1: WETLAND AND WISE USE**
- **SESSION 2: WETLAND AND RICE RESOLUTION**



Wildlives in Rice Paddy System in Butareja, Uganda 20161003



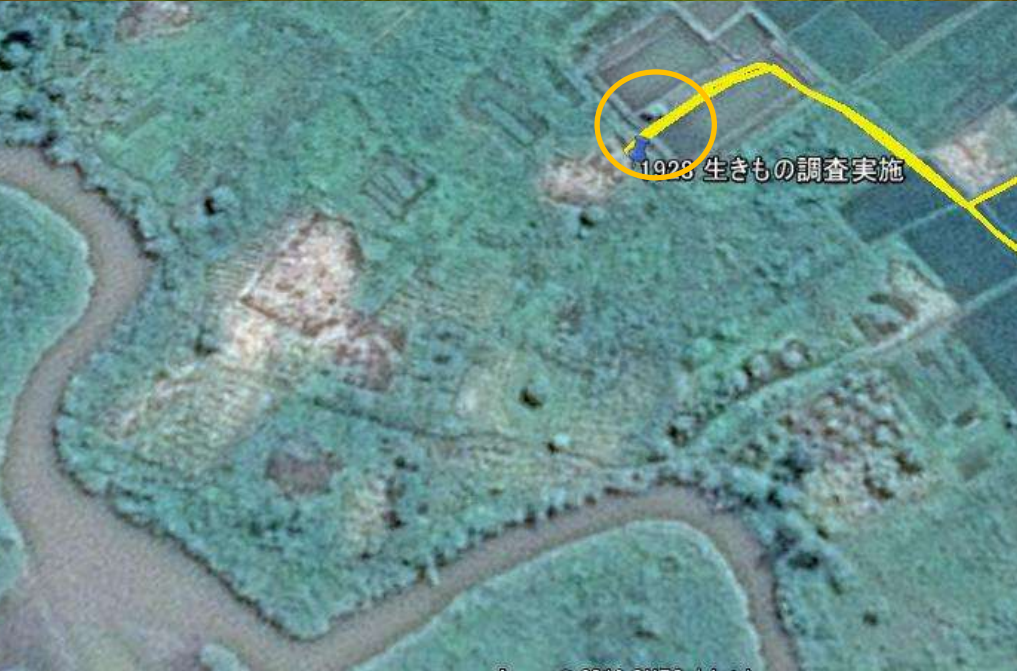
Damsefly larva



Water stick insect



Golden apple snail



1929 生きもの調査実施

Rice-paddy Biodiversity Enhancement Decade Project



**Join us in RiceBED Project
to cover**

Asia-Africa-Neotropics regions

<http://www.ramnet-j.org/tambo10/>