SDGs International Forum for Biodiversity

– Initiatives by Hyogo Prefecture –

SUSTAINABLE DEVELOPMENT GOALS

HYOGO SDGs Week 2023

10.23 (Mon.) - 10.29 (Sun.)

October 24, 2023

兵庫県 Hyogo Prefecture

Common resources of Hyogo Pref. and Sado City

Globally Important Agricultural Heritage Systems (GIAHS)

Integrated Farming System for Harmonizing People and Tajima Cattle in the Mikata District
(Recognized Jul. 2023)

and

Sado's Satoyama in Harmony with Japanese Crested Ibis
(Recognized Jun. 2011)

Hyogo Pref.

- **Oriental White Storks and Japanese Crested Ibises**
- **Stork-friendly Rice and "Town with Crested Ibis" Rice**

Expansion of eco-friendly farming methods

- **Ikuno Silver Mine and Sado Gold Mine**
- **Awaichi and Sadoichi**

Tourism promotion featuring cycling

Sado City

ひょうごフィールドパビリオン
Our Field, Our SDGs
私たちのフィールド、私たちのSDGs

IGES × Hyogo Pref.
IGES Kansai Research Centre (Kobe City, since June 2001): Collaborating in building a Regional Circular and Ecological Sphere and developing human resources to create a decarbonized society

IGES
Institute for Global Environmental Strategies

Institute for Global Environmental Strategies

SDGs未来都市
佐渡市

IGES × Sado City
Concluded a cooperative agreement on sustainable urban and regional development (December 2020)

Niigata-Hyogo Collaborative Conference@Sado City (Sep. 4-5)

Participants: [Niigata] Governor Hanazumi, Mayor Watanabe of Sado City
[Hyogo] Governor Saito, Mayor Kannuki of Toyooka City

Visiting the site of “ibis-friendly farming”

Seeing the online class connecting Sado City Gyoya Elementary School and Toyooka City Tazuruno Elementary School

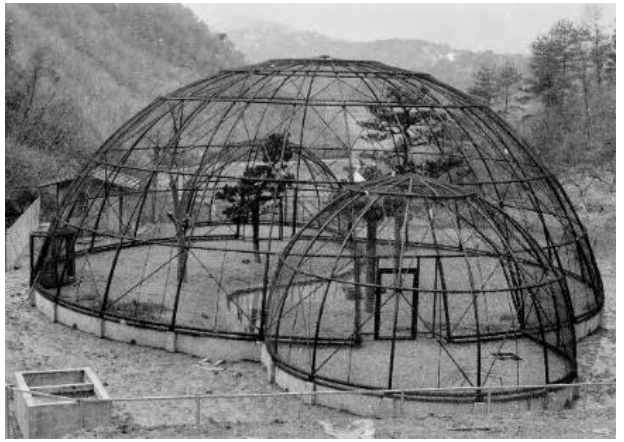
<u>Agreed to cooperate in the five fields:</u>

1. Promoting reintroduction of Japanese Crested Ibises and Oriental White Storks into the wild
2. Expanding sustainable farming for a harmonious environment
3. Promoting understanding of cultural value of Sado Gold/Silver Mine and Ikuno Silver Mine
4. Promoting tourism through cycling
5. Promoting the use of airports

Promoting reintroduction of Oriental White Storks into the wild

■ History of protection and reintroduction

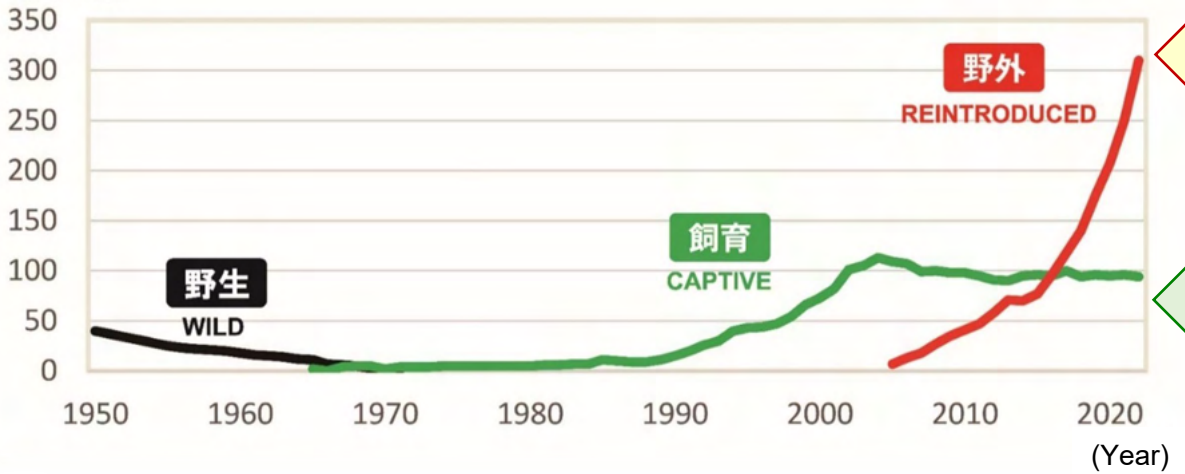
1956 Designated as a Special Natural Monument
1965 Artificial breeding was started with a captured couple; designated as the prefectural bird of Hyogo
1971 The last wild stork died (Wild storks in Japan became extinct)
1985 Received six young wild storks from Khabarovsk Krai in former USSR
1989 Succeeded in captive breeding (Successfully bred every year thereafter)
2005 Pilot release was started
2007 The first young stork bred in the wild hatched and left the nest
2022 Population of reintroduced storks reached 300 in July
2023 Breeding grounds expanded to Ibaraki, Kagawa, Hiroshima and Saga (12 prefectures in total)



1965
The first flying cage that housed wild storks for the first time
(known as "The Promised Cage")

*Registered as a Tangible Cultural Property of Japan in 2019

■ Population of Oriental White Storks



Reintroduced storks 371

Captive storks 94

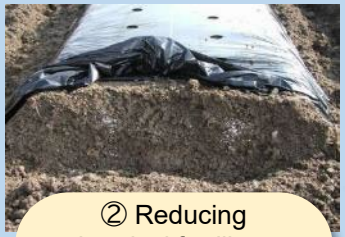
As of July 31, 2023

Expanding sustainable farming for a harmonious environment

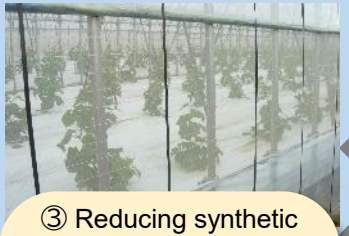
Sustainable farming for a harmonious environment

[Principle]
Agriculture that creates new relationships between people and the environment, leading to the creation of a society where people and nature, urban and rural areas, and producers and consumers can live in harmony and helping the formation of farmers' pride

① Soil development (Spreading compost)



② Reducing chemical fertilizers (Partial fertilization)



③ Reducing synthetic pesticides (Physical pest control)

■ Current status and goal of the planting acreage featuring this style of farming

[Current (2022)] 20,093 hectares * 34% of the total planting acreage
[Goal (2030)] 24,600 hectares * 50% of the rice/vegetable acreage

■ Efforts in 2023

The newly established "Study Group on Policies for Promoting Sustainable Farming for a Harmonious Environment, Including Organic Farming" is discussing future policy improvements involving expert committee members.

2nd meeting (Aug. 22, 2023)

Case example

Stork-friendly Farming Method

Done in approx. 600 hectares of farmland in Tajima

Winter flooding in rice fields

Rice fields serve as feeding grounds for storks

3 types of farming
① JAS-certified organic
② Pesticide-free
③ Less pesticides

Children investigate creatures in rice fields

Sold at direct sales outlets

- Biologically friendly farming created additional value, making the rice popular nationwide
- Approx. 1,400 tons of rice is shipped nationwide
- Among them, 19 tons of rice is exported to seven countries and regions

Newly added value of sustainable farming for a harmonious environment

- "Stork-friendly rice," produced using Hyogo's sustainable farming, has been confirmed to reduce CO_2 emissions by 24%.
- In addition to the value of safe/reliable food and biodiversity protection, we will communicate the value of decarbonization to consumers and link this to branding.

Conventional value

Safe and reliable food

Chem. Ferti-lizers

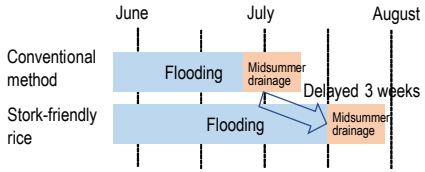
Pesti-cides

Reduce

Hyogo-grown safe and reliable food certified by the prefecture

Biodiversity Protection

Delaying midsummer drainage



Tadpole that has grown to have legs due to delayed midsummer drainage (Photo provided by Toyooka City)

Winter flooding

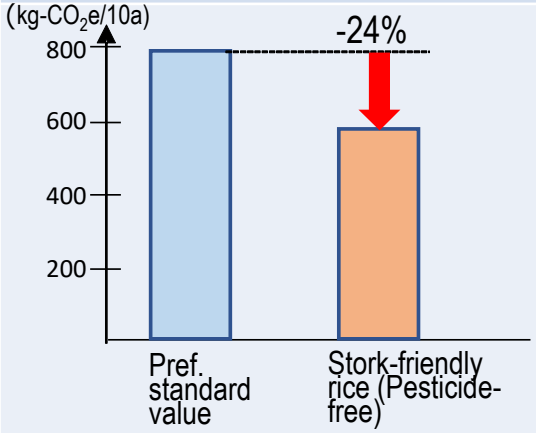
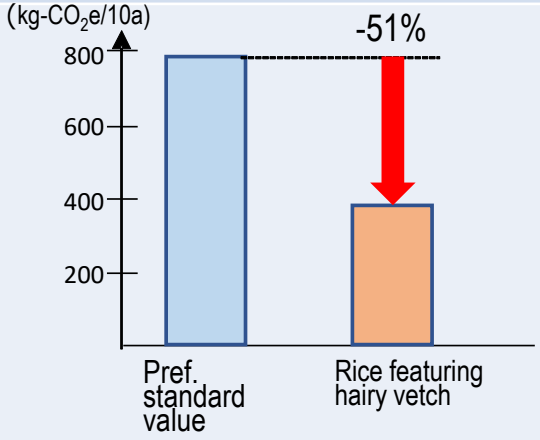
Winter flooding (Photo provided by Toyooka City)

Securing habitat for aquatic animals

Newly added value

Decarbonization

Greenhouse gas (GHG) emission reductions that contribute to global warming prevention

	Stork-friendly Rice	Rice featuring "hairy vetch" green manure
GHG reduction factors	• Reducing use of chemical fertilizers and pesticides	• Reducing use of chemical fertilizers and pesticides (Plowing in compost) • Reducing tillage work • Extending midsummer drainage (about 7 days)
GHG reduction amount		

* Hyogo Pref. and IGES estimated based on MAFF "Simplified calculation sheet for GHG from agricultural products (rev.)"

* Scope of calculation: Raw material procurement and production stages

Future initiatives: Restoring a bountiful and beautiful *satoumi*

Promoting decarbonization with cultivated *nori* seaweed

- Investigation and study of the potential of cultivated *nori* seaweed as blue carbon
- Branding of decarbonization type “Hyogo Nori” (Zero Carbon Nori)
  - ① Estimating CO_2 fixation amount
  - ② Studying CO_2 saving in the production process

Thallus of *nori* seaweed

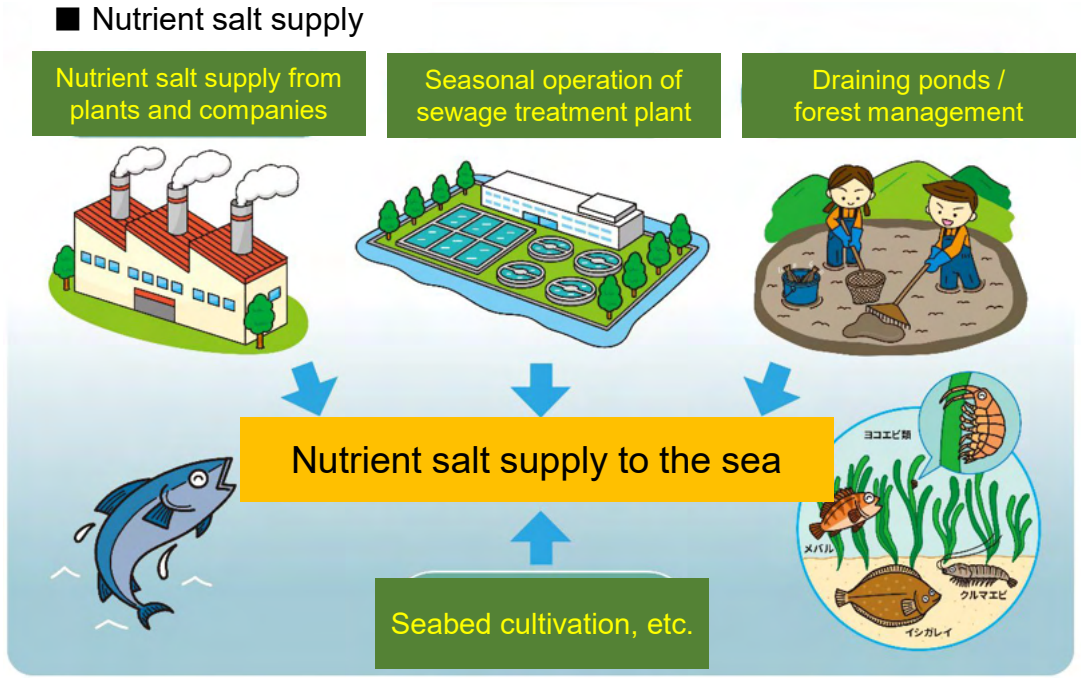
Torn off by wind and wave (approx. 20%)

Sep. 21, 2023
The 1st blue carbon credit study group on *nori* cultivation

① Growth amount − ② Yield amount
＝ ③ Amount of nori torn off
⇒ Blue carbon

Promoting the nutrient salt management plan

- In the Seto Inland Sea, water quality has greatly improved due to strict effluent restrictions. However, color fading of *nori* seaweed due to lack of nutrient salts has become a problem.
- Hyogo Pref. nutrient salt management plan was formulated ahead of other related prefectures to enable supply of nutrient salts (October 2022)



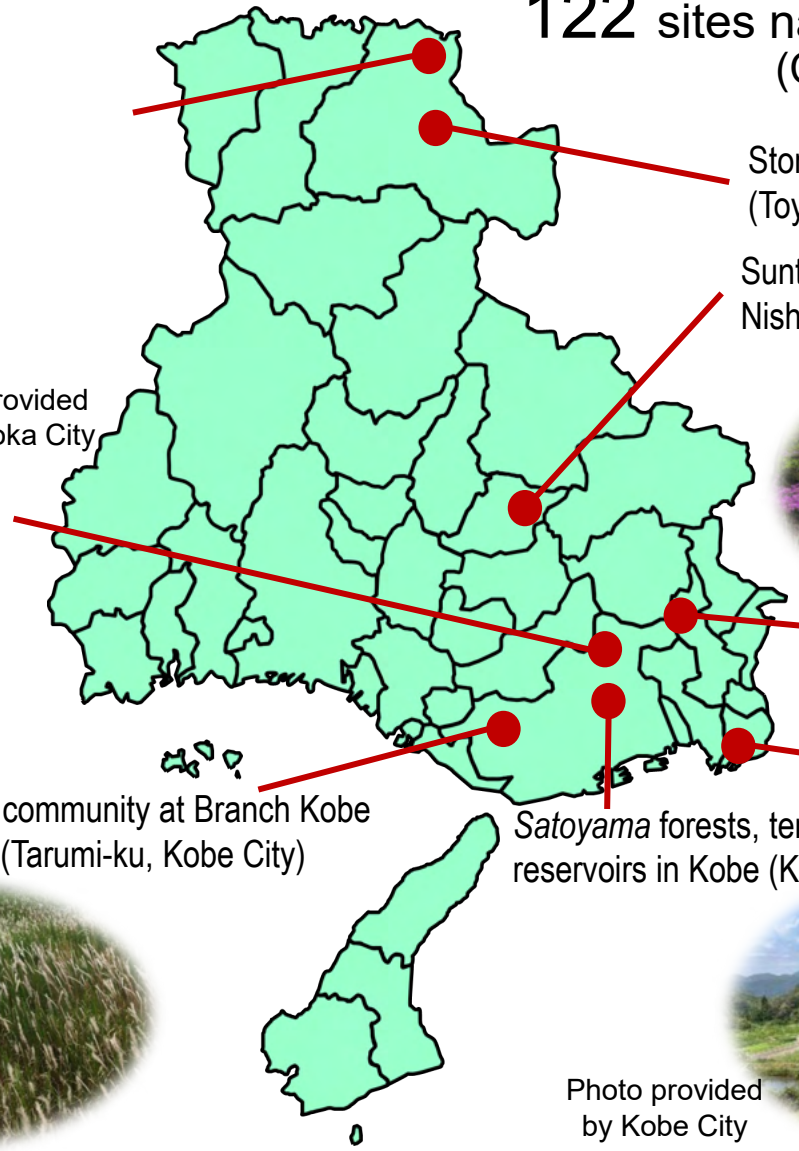
Future initiatives: Promoting OECM certification

30 by 30

Goal to conserve **30%** or more of land and sea by 20**30**

- To achieve the goal, the national government certifies areas where efforts for biodiversity protection are carried out as OECMs

122 sites nationwide (including 8 in Hyogo)
(Certified by the Minister of the Environment on Oct. 25)



Stork-friendly *satochi-satoyama* in Nakasuji (Toyooka City)

Photo provided by Toyooka City

Stork-friendly rice fields in Shounji (Toyooka City)

Suntory Natural Water Sanctuary: Hyogo Nishiwaki Monryusan (Nishiwaki City)

ESPEC Bambi no Sato (Kita-ku, Kobe City)

Terraced rice fields and plant community in ponds/marches in Hosoo (Takarazuka City)

Cogon grass community at Branch Kobe Gakuentoshi (Tarumi-ku, Kobe City)

Satoyama forests, terraced rice fields and reservoirs in Kobe (Kita-ku, Kobe City)

Photo provided by Kobe City

Hyogo Pref. Amagasaki Forest Central Green Space (Amagasaki City)

Hyogo Field Pavilion project – Purpose of Expo 2025 Osaka, Kansai

World Expos in the 19th & 20th centuries

- Since the 1851 Great Exhibition in London, World Expos have been held to showcase the outcomes of industrial development and technological innovation.
- Expo ’70 in Osaka was one such example.

World Expos in the 21st century

- A place for proposing solutions (ideas) to common challenges for humanity, a place generating discussion, a place encouraging action for the future, and a place enabling new ideas to emerge through the fusion of different types of wisdom.
- It is important to highlight challenges in our daily lives, discover and communicate the “universal value for the world” that exists in the daily initiatives of small local organizations/companies and residents to solve these challenges, and stimulate discussion and action.

Hyogo Field Pavilion project – Meaning of Expo 2025 for Hyogo

- In Hyogo Prefecture, which consists of five unique districts featuring their respective histories and climates, local people have long taken initiatives in solving problems to clear a path for their own future.

- As we move toward a new era, we will innovate Hyogo's good and old traditions, industries and cultures, which have been passed down through our predecessors' efforts.
- We will show how we tackle this, both to Japan and the world, at the Expo 2025 Osaka, Kansai.

ひょうごフィールドパビリオン
Our Field, Our SDGs
私たちのフィールド、私たちのSDGs

Hyogo Field Pavilion project

- The Hyogo Field Pavilion project will take place across the prefecture for Hyogo locals to widely communicate their “fields of activities” to people from both home and abroad to see, learn, and experience what Hyogo has to offer.

156 programs approved

1st approval: 113 (Feb. 28, 2023)
2nd approval: 17（May 26, 2023）
3rd approval: 26 (Aug. 22, 2023)

5 programs selected as Premium Programs (Mar. 28, 2023)

- **Highlighting local heroes who are pioneering the “Dynamic Hyogo”**

Foster civic pride
— Rediscover the value of Hyogo —

Hyogo Field Pavilion project: Programs on biodiversity

Oriental White Storks/sustainable farming

- Environmental Learning “Oriental White Stork Reintroduction to the Wild and Natural Environment” (Toyooka City)
- Learning and harvesting experience of “The Rice That Nurtures Storks” (Toyooka City)

Visiting Hyogo Park of the Oriental White Stork

Tajima Cattle farming system certified as GIAHS

- Discover the roots in the “hometown of Wagyu Beef” (Kami Town)
- Tajima Cattle Museum Expedition (Shin’onsen Town)

Visiting tajima pasture park

Bountiful *satoumi*

- Boze Island Fishery Tour & Experience (Himeji City)

Japanese giant salamander and e-bike

- Travel staying in Asago: Travel like you live here (Asago City)

Touring Asago by e-bike

Japan’s No. 1 *satoyama*

- Walking Tour at Japan’s best “Satoyama” (Kawanishi City)
- Visit future “Satoyama” the mountain villages within just 30 mins by train from Osaka (Takarazuka City)

Golden eagles on Ueyama Highlands

- Regional Museum: A trip to learn and taste the mechanism of natural circulation in Highlands (Terroir Journey) (Shin’onsen Town)

Hyogo Field Pavilion project selected as “Municipal SDGs Model Project”

SDGs未来都市選定証

兵庫県

貴県の提案は、我が国におけるＳＤＧｓ（持続可能な開発目標）の達成に貢献する優れたものと認められますので、ＳＤＧｓの達成に向けた今後の取組を奨励し、ここに貴県がＳＤＧｓ未来都市であることを証します

令和５年５月22日

内閣総理大臣 岸田文雄

- Hyogo Pref. was selected as an SDGs Future City for 2023.
- The Hyogo Pavilion project was recognized as a particularly leading initiative and selected as a Municipal SDGs Model Project. (For the first time in Hyogo)
- Overall plan: **“Sustainable Hyogo for the future, supported by public-private relationships”**
  Vision for 2030:
  Creating a sustainable Hyogo for the future by leveraging Hyogo’s unique characteristics and through **concerted efforts** by businesses, organizations and citizens of Hyogo
- Municipal SDGs Model Project
  Creating regional value and increasing the number of visitors through the Hyogo Field Pavilion project, which embodies the SDGs – Our Field, Our SDGs –