

Farmer's feral rice comes from paddy rife with life

NAGOYA (Kyodo) A 70-year-old farmer grows high quality rice on a 7-hectare paddy in Chiba Prefecture that does not require cultivation as he uses plants developed like those in the wild.

Compared with other rice fields in the area, Yoshihide Fujisaki's paddy has many more living creatures, including loaches and frogs. Even birds that prey on them have come to settle on the field.

Living creatures tend to be seen as natural enemies of farmers, but to me, they are lovely," said Fujisaki, proudly holding golden ears of rice ahead of this year's harvest.

Conserving dynamic ecosystems such as Fujisaki's paddy is a main item on the agenda at the COP10 international conference taking place in Nagoya through Friday, with negotiators trying to come up with ways to prevent further loss of biodiversity worldwide.

Fujisaki's business shows the value of this diversity. Even without cultivation, he produces and sells enough rice to make ends meet. As for taste, he said it is so good "you can tell right away when you eat it."

Although his rice is more expensive than market prices, Fujisaki said he has about 100 customers across Japan — spread through word of mouth — who are willing to pay more as they value the safety of his product.

The feral rice was developed by Nobuo Iwasawa, a 78-year-old agricultural researcher who began in the 1980s to seek ways to develop grains that can withstand cold weather.

He came up with a "primitive" farming method of making the rice plants wild.

The result, which Iwasawa says he had never imagined at first, was a paddy that is rich in wildlife and serves as a stage for a dynamic ecological chain.

By letting water flow into the paddy during winter as well, the straws that remain after harvest break down and create large amounts of plankton, which then attracts a wide variety of organisms.

Among the creatures, the sludge worm was found to help the feral rice grow as its excretion creates a layer that prevents the budding of weeds and also acts as a fertilizer, making it unnecessary to use pesticides and chemical fertilizer.

In addition to an increasing number of farmers across the country who have studied his rice farming method, Iwasawa, also based in Chiba Prefecture, has visitors, including from abroad, who come to look at his paddy and buy the rice Iwasawa grows there.

"The living creatures in the rice fields are a legacy to our children and grandchildren," he said.

Besides preserving biodiversity, participants of the U.N. meeting are also working to compile a protocol on equitable sharing of benefits derived from the use of genetic resources found in plants and microorganisms for commercial purposes between countries where the resources originate and the companies that develop products such as medicine.

While genetic resources are often found in developing countries but used by companies based in advanced nations, such resources can also be found in an industrialized country like Japan.

The Japanese horseshoe crab, dubbed a "living fossil," has retained its basic physical form since about 200 million years ago. It has recently been found to be a biological resource utilized in the field of medicine.

One of its blood components has been developed into a drug used to detect poison in the human body and was also found to have effects in suppressing the propagation of HIV.

But the species is quickly disappearing from many parts of the world due to the destruction of nature.

The same is true in the coastal area of Saijo, Ehime Prefecture, where sightings of the horseshoe crab on tidal land have become sparse since Japan's high-growth period began in the 1960s.

The tidelands, where the crabs lay their eggs, were developed, and the subsequent deterioration of water quality in the area caused deformations in their larvae. By the 1980s, they were on the verge of extinction.

Tadakatsu Imai, assistant director of a city-run folk museum in Saijo that has been working on protecting the species, said: "Japanese horseshoe crabs cannot live on tidal land where the ecosystem has collapsed. They are a symbol of clean seas."

Fishermen say the crabs were abundant in the area in the past. But rapid industrial development has apparently caused their population to shrink significantly in a matter of several decades.

Local efforts to conserve the crab were boosted in the 1990s, and participants in the activities began in 1994 to stock about 10,000 larvae every year in the remaining tideland.

"We are waiting for the day when they come back to lay their eggs," Imai said, noting it usually takes 13 to 14 years for the crabs to mature.

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