

Follow-up Survey on the “Biodiversity-friendly Label” Initiative for Rice: A Comparison with the 2010 Survey

TANAKA Atsushi

1. Introduction

“Ikimono mark” or “biodiversity-friendly label” initiative, referring to the agricultural practice of transitioning from conventional farming and farmland management to biodiversity-friendly ways that conserve the habitats of the living creatures while producing agricultural products is a means of communicating with consumers named by The Ministry of Agriculture, Forestry and Fisheries (Ministry of Agriculture, Forestry and Fisheries, 2010). The biodiversity-friendly label (normally in the form of a photograph of the living creatures, brand name, or original illustration) symbolizes an initiative for conserving and nurturing biodiversity in agriculture, forestry, and fisheries. It is used as a means of providing information to consumers on agricultural practices as well as a way to communicate about environmental awareness. Typically, labels or illustrations showing the living creatures being conserved are attached to the products packages with the intention to raise interest in biodiversity conservation efforts; however, there is no comprehensive national certification system for the biodiversity-friendly label initiative.

In 2010, the Policy Research Institute of the Ministry of Agriculture, Forestry and Fisheries conducted a survey of 39 rice brand producers that were involved in the biodiversity-friendly label initiative (hereinafter, “bio label rice”) regarding the details of their initiatives, sales methods, and prices. The survey examined the difference in retail prices (hereinafter referred to as the “premium”) compared with conventionally grown rice sold in the region where the rice was produced and found that bio label rice had an average premium of JPY 661 per 5 kg. The survey also found that the premium for bio label rice promoting the conservation of birds and fish could be greater than that of other living creatures; that the premium for organic rice was larger; and that in some cases which sell directly to consumers instead of market, even the premium is lower than average, the producers could still earn sufficient profit. As more than 10 years have passed since that survey, we conducted a follow-up survey to see how the biodiversity-friendly label initiative had evolved as of 2021. This study summarizes the results of that follow-up survey.

2. Methodology

In this follow-up survey, mail and web-based questionnaire surveys was conducted to 77 cases from December 2021 to February 2022, including those from the previous survey and those newly identified from the internet and other surveys, and responses was received from 53 cases (for a response rate of 69%). The survey results were compiled from the 53 cases, and the results were classified mainly according to retail price and in relation to the agricultural practices and living creatures being conserved.

3. Results

Figure 1 shows the number of cases classified by the retail price range of bio label rice. Increases were observed in the two retail price ranges of JPY 3,500 and higher and JPY 2,000–JPY 2,499. Although there were some cases of organic rice brand sold at relatively low prices in the JPY 2,000–JPY 2,499 range, the survey responses indicated that these cases tended to be sold to restaurants, agricultural co-operatives, and other co-ops. The overall average retail price was JPY 2,994, which was increased about JPY 100 from JPY 2,885 of the previous survey.

Figure 2 shows the subtotal for the rice cultivated area by scale of production, which is divided into five tiers. Rice cultivated area increased in all tiers from the smallest (0–0.99 ha) to the largest (>100 ha), and the number of cases increased in all tiers except for the 1–9.99 ha tier.

Figure 3 shows the average retail price and the number of cases for each type of living creature being conserved. In the previous survey, rice with the highest average retail price

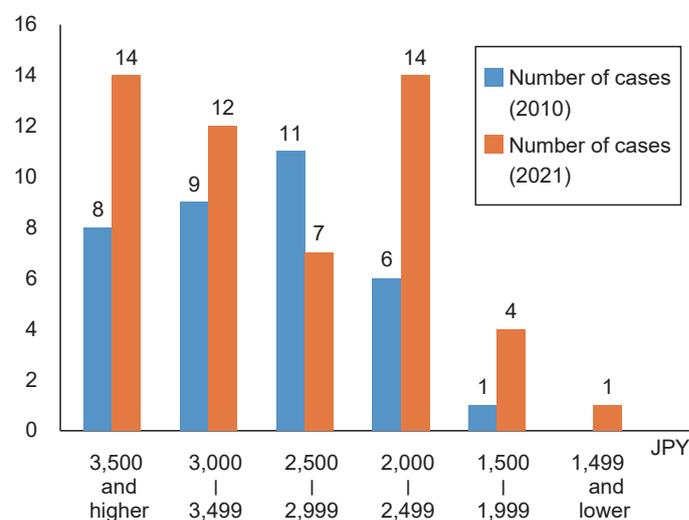


Figure 1. Distribution of retail prices for bio label rice

and largest number of cases was the bio label rice conserving birds. In this time, the average retail price of this rice was also high and the plenty of cases was found. However, the highest average retail price in this time was the rice that aims to conserve whole living things, and the number of cases was the greatest as well. There was also a significant increase in the average retail price and number of cases of bio label rice conserving insects, notably conserving red dragonflies and lesser emperor (*Anax parthenope*).

Figure 4 shows the average retail prices and premiums by cultivation standard. The cultivation standards are as follows, in descending order of strictness: (1) no pesticides and chemical fertilizers, (2) more than a 50% reduction in pesticides and chemical fertilizers, (3) other reductions in pesticides and chemical fertilizers, and (4) no pesticide and chemical fertilizer standards. As was the case about 10 years ago, in the current survey, the average retail price increased with stricter growing standards; however, there was a reversal in premiums between those with more than a 50% reduction in pesticides and chemical fertilizers and those with other reductions in pesticides and chemical fertilizers. This may be due to the fact that latter group also includes cases grown under conditions similar to no pesticides and chemical fertilizers without any explicit cultivation standard.

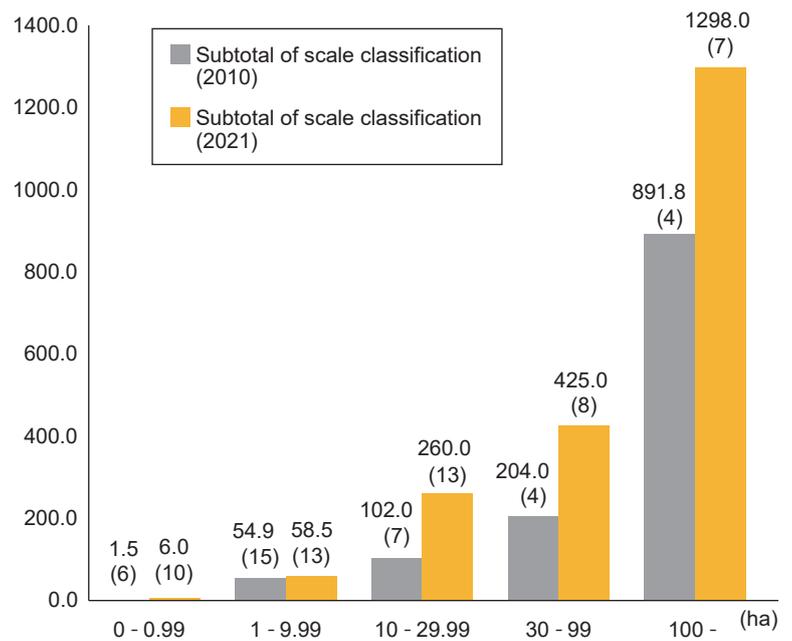


Figure 2. Production scale of bio label rice producers
 Note: Numbers in parentheses in data labels are numbers of cases

4. Conclusion

The number of cases of bio label rice identified increased to 53 from the 39 cases in the previous survey, and the premium increased from JPY 661 to JPY 917. In the previous survey, there was also a trend toward higher premiums for bio label conserving birds, whole living things, and fish. However, our recent survey revealed an increase in the number of cases where conserving efforts are being made to insects and amphibians, as well as an increase in the total rice cultivated area, suggesting that the scope of the bio label rice initiative is expanding. Simultaneously, the questionnaire survey revealed cases where not all of the rice produced was sold out, and some responses highlighted such issues as the lack of a successor to the farm and changes in sales channels to continue production. This can be considered as problems that appear when the farm scale expands and production increases, or when producers age and have no successors. We plan to conduct a more detailed analysis of the background and factors behind the results of this survey by conducting field surveys of all entities involved in the bio label rice initiative.

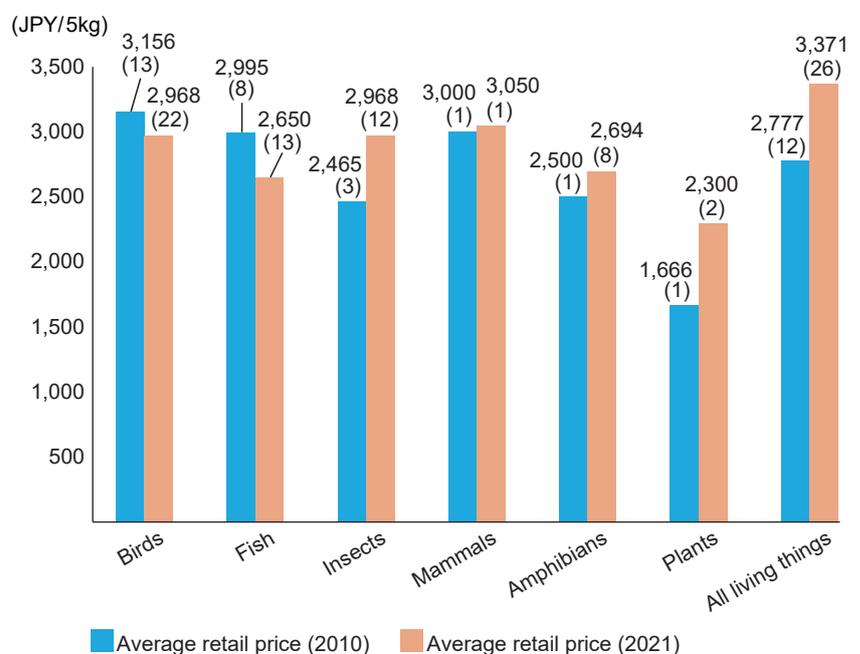


Figure 3. Type of living thing, average retail price, and number of cases
 Note: Numbers in parentheses in data labels are numbers of cases

As a final note, please see Tanaka and Hayashi (2010) for the results of the previous survey in 2010.

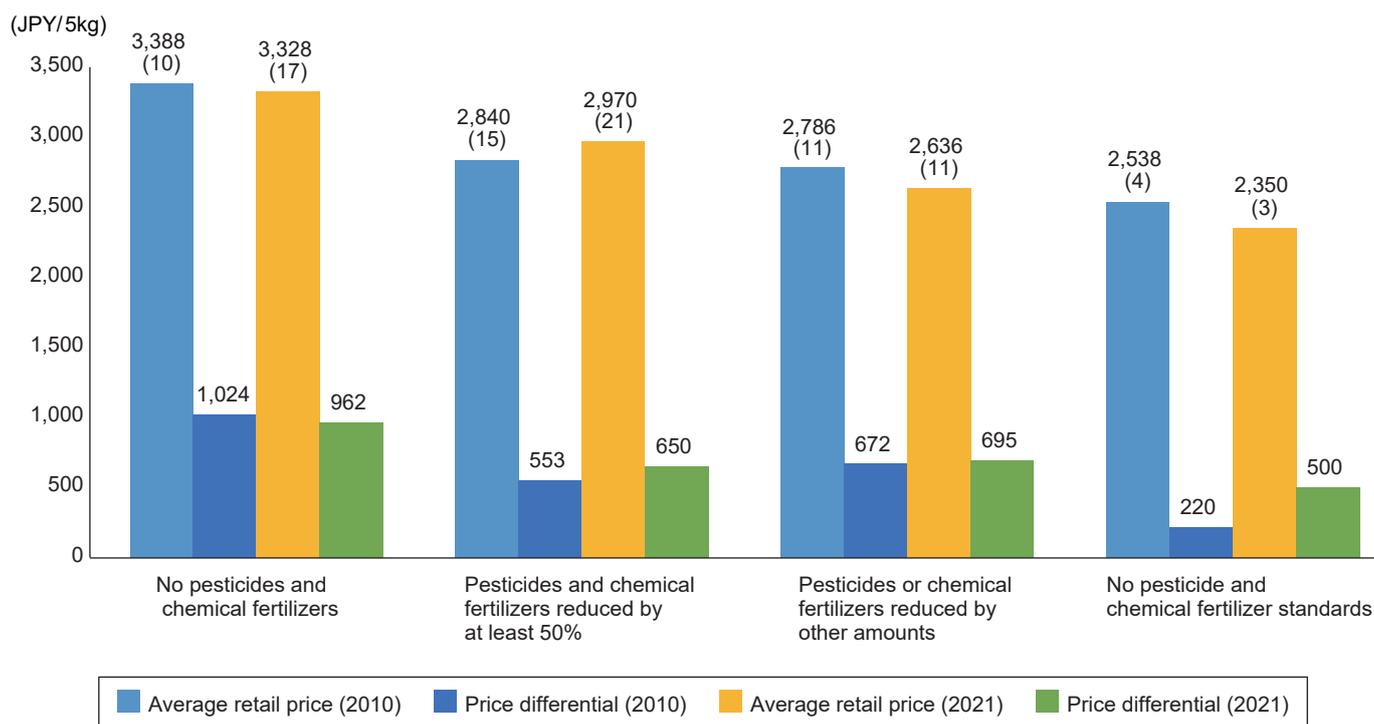


Figure 4. Average retail prices and premiums for bio label rice by cultivation standard

Note: Numbers in parentheses in data labels are numbers of cases

[References]

Ministry of Agriculture, Forestry and Fisheries, Policy Planning Division (2010) “The Biodiversity-friendly Label Guidebook.”

https://www.maff.go.jp/j/kanbo/kankyo/seisaku/c_bd/pr/attach/pdf/pr-34.pdf

Tanaka, A. and T. Hayashi (2010) “Biodiversity Conservation Efforts in Agricultural Production and Biodiversity-friendly Label Agricultural Products.” Policy Research Institute, Ministry of Agriculture, Forestry and Fisheries “Research Materials for Environmental Project No. 2: Impact Assessment and Measures to Promote Agricultural Production That Incorporates Biodiversity Conservation”

https://www.maff.go.jp/primaff/kanko/project/attach/pdf/101224_22kankyo2_01.pdf