



「Establishing the new national “technical guidelines of Animal welfare and compliance regarding animal welfare of broiler in Japan」、Keiranniku Jyohou (Information of Chicken and Egg), Japanese Poultry Magazine (August 25, 2023)

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1. Introduction

While I was writing this article, I heard the shocking news. The Japanese Ministry of Agriculture, Forestry and Fisheries (MAFF) temporarily suspended importing live birds and poultry meats from Santa Catarina in Brazil due to occurrence of High Pathogen Avian Influenza (HPAI). As Santa Catarina is the country's second biggest chicken meat exporter in Brazil, the impact is huge although the export ban is only limited to Santa Catarina. Globally chicken meat exporting countries cannot prevent the occurrence of HPAI completely. If Japan cannot import birds and poultry meats, there may be a risk of insufficient supply of poultry meats in Japan.

I write this article three years after the previous writing. I have been writing the article about Animal Welfare twice a year from January 1998 to January 2020 in this magazine. The reason I did not write the article is because COVID-19 (see Data 1) and HPAI (see Data 2) happened simultaneously in Japan and I was not able to travel to conduct enough survey and collect information in domestic and foreign farms due to travel restriction. The last three years were very difficult time for the politics, economics and poultry industry surrounded by uncertainties.

In January 2020 the first patient of COVID-19 was confirmed and the number of patients increased a lot in 2022. The COVID-19 pandemic continued for three years but COVID-19 has been recategorized as a Category V infectious, placing it at the same level as that of seasonal influenza since May 2023 in Japan. Simultaneously HPAI occurred. Particularly the worst situation started from October 2022 and continued until April 2023. Eighty four cases were reported and the number of birds killed reached 17.71 million for over half a year. In addition, Russia invaded Ukraine in February 2022. Over the past three years, production cost increased significantly due to rising feed prices caused by negative impact of social

environment. Broiler industry continues to face challenging conditions.

2. New National Animal Welfare(AW) Guidelines in Japan

The new national AW guidelines were established. In the third Opinion Exchange Meeting, “Notification proposal” from the director-general of the Livestock Bureau and national AW guidelines (guideline proposal) were prepared and published on the MAFF website.

On July 26 new final guidelines for AW of each livestock were released as the notification from the director-general of the Livestock Bureau based on the discussion of the 3rd Opinion Exchange Meeting. These guidelines are published on the website below along with the reference information such as Opinion Exchange Meetings, related notifications, Q & A, Checklists. 2023 will be the memorable year for AW in Japan.

https://www.maff.go.jp/j/chikusan/sinko/animal_welfare_iken.html

I serve as a committee member for two years from 2022 by recommended of the Japan Livestock Technology Association (See Data 3. List of committee members for Opinion Exchange Meeting about AW). According to the meeting minutes of the 3rd opinion exchange meeting, from May 23 2022 to June 21 2022, 1730 public comments were submitted about the guidelines drafts.

These guidelines drafts show the future AW movements through the explanation from MAFF to the public comments. There are three points in the guidelines (see Data. 4).

- ① In order to expand export (including SDGs actions) the standards of AW in Japan meet the international standards, OIE codes.
- ② For rearing and managing each livestock, “recommended practices” and “future recommended practices” should be clearly defined.
- ③ After the guidelines are released, MAFF monitors the implementation status and sets a target year when the recommended practices will be achieved.

In the guidelines (see data 5 ⑦), AW measurement indexes are listed. AW will be evaluated using the measurement indexes based on the results especially broiler conditions. The indexes in the guideline are 11 items as below.

- ① Mortality, culling and morbidity
- ② Gait
- ③ Contact dermatitis
- ④ Feather condition
- ⑤ Incidence of diseases, metabolic disorders and parasitic infestations
- ⑥ Behavior
- ⑦ Water and feed consumption
- ⑧ Performance

- ⑨ Injury rate
- ⑩ Eye conditions
- ⑪ Vocalization

In order to comply with these guidelines, the obligation to make direct efforts for rearing and managing is obviously necessary. In addition, the compliance needs to be improved by more detailed observation, records, knowledge, technical acquisition, equipment, creating plans etc.

3. AW promotion project by Japan Livestock Technology Association

Japan Livestock Technology Association held the 1st promotion project committee for spreading AW broiler rearing and managing on June 30 2023. This project continues for two years of 2023 and 2024 with eight committee members. As one of the committee members, I would like to cooperate with the domestic and international surveys. According to the meeting minutes, the purpose of the project is to spread and promote AW by collecting the AW conscious information and providing the information of AW and actual AW practices to the farmers and related workers. The project contains two works; ie collecting information and supplying information. For collecting information, they conduct domestic survey about the implementation status of AW and advanced practices. In addition, they conduct an international field survey so that they can comprehend the AW practices in foreign countries. For supplying information, they summarize the collected information and have a study meeting in order to widely spread the rearing and managing of broiler practices which keep AW in mind.

4. Ensuring five freedoms

Ensuring five freedoms are described in two pages of seven pages of the notification from the director-general of the Livestock Bureau of MAFF.

Five freedoms

- ① Freedom from hunger, thirst and malnutrition
- ② Freedom from fear and distress
- ③ Freedom from physical and thermal discomfort
- ④ Freedom from pain, injury and disease
- ⑤ Freedom to express normal patterns of behavior

About the freedom to express normal patterns of behavior, notification from the director-general of the Livestock Bureau writes “Livestock can comfortably rest and adjust postures naturally. As a result, birds can feel comfortable and safe. It is important to give birds chance

where they can behave according to their natural biology and habits.”

5. Outline of environmental enrichment

I consider the environment enrichment as “supplementary tools” which can provide the freedom to express natural behavioral pattern to birds from AW perspective. The broiler supplementary tools include the Window where sun shine comes in for natural light, Veranda, Perch where birds can jump on/off, Space where birds can explore the field and forage, move, spread the feather and legs (density and growth rate are reduced), Straw bale where birds can peck, Pecking block, String with knot, and Dark place where birds can rest and sleep.

6. Natural behaviors according to the livestock natural biology and habits

I introduce the impressive lecture about ensuring freedom in order to express the normal behavioral pattern as one example. In June 2023, I attended the Hubbard premium forum in France hosted by Hubbard. This is the 3rd Hubbard forum I participated after Portugal and Spain. Hubbard belongs to the Aviagen group and has a dominant market share in brown birds all over the world. In the forum Ms. Laura Warin delivered lecture whose title is “What enrichment can bring to premium chickens?” and explained her study results about the natural behaviors according to the broiler’s natural biology and habits. Warin says “Environmental enrichment can satisfy the broiler’s behavioral needs (Data 6).

The environmental enrichment already being used in France includes natural light, stopping at perch, exploring and foraging, moving, spreading the wings and legs (density and growth rate are reduced).

The litter equality is improved in the environment where the birds can dust bathing, birds become more active, perches can reduce the time when the birds contact the litter leading to reduction of contact dermatitis and increase of bird’s activity (jumping on/off the perch) and improvement of the broiler’s gait capability. The environment where the birds can explore and forage will give the birds more opportunities to forage. More cost and more labor are needed for the farmers to provide these environments to birds, but on the other hand the labor condition is improved for the workers and they are happy to see the natural broiler’s behavioral patterns. Workers also enjoy the environmental enrichment such as Veranda.

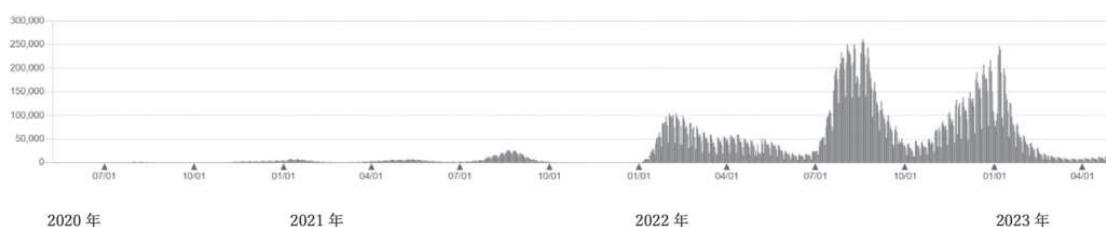
As a conclusion, there are various kinds of environment enrichments which need to be suited to bird breed. If broilers are raised in the better environment, the producers can also expect the performance improvement.

7. Movement toward AW

The loss of global COVID-19 is huge more than 1000 trillion JPY. I consider AW can be the basic prevention to the HPAI derived pandemic.

Establishing national AW guidelines is the very good start as Japan has been said always lagging behind, but gradually we start reaching the stage where European AW common practice can be implemented in Japan. However, AW needs costs. The producers provide the good rearing environment for broilers and try to improve the performance. It seems more understanding and cooperation are needed among consumers, retailers, processors and authorities to bear the cost in the future AW implementation.

Data 1. The number of COVID patients in Japan from January 2020 to May 2023 (Source: Ministry of Health, Labour and Welfare)



Data 2. HPAI occurrence situation (Source: Veterinarian of Ishii)

| 死亡野鳥・糞便・環境試水・(飼育鳥含む) | 検出地区数 | 検出例数 | 死亡・回収 | 野鳥羽数 | Poultry | All | Layer | Broiler | Breeder | others | Location outbreak killing | Location outbreak killing | Location outbreak killing | Location outbreak killing | Location outbreak killing | |
|----------------------|-------|------|-------|------|---------|-----|-------|---------|---------|--------|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|--|
| | | | | | | | | | | | (10,000) | (10,000) | (10,000) | (10,000) | (10,000) | |
| 2022(R4)~2023 | 31 | 251 | 1,637 | | H5N1 | | | | | | | | | | | |
| 2021(R3)~2022 | 8 | 107 | 924 | | H5N1・8 | | | | | | | | | | | |
| 2020(R2)~2021 | 18 | 58 | 1,322 | | H5N8 | | | | | | | | | | | |
| 2019(R1)~2020 | | 0 | 333 | | | | | | | | | | | | | |
| 2018(H30)~2019 | | 0 | 459 | | | | | | | | | | | | | |
| 2017(H29)~2018 | 3 | 46 | 634 | | H5N6 | | | | | | | | | | | |
| 2016(H28)~2017 | 22 | 218 | 2,434 | | H5N6 | | | | | | | | | | | |
| 2014(H26)~2015 | 6 | 12 | | | H5N8 | | | | | | | | | | | |
| 2013(H25)~2014 | | | | | | | | | | | | | | | | |
| 2010(H22)~2011 | 16 | 26 | 60 | | H5N1 | | | | | | | | | | | |
| 2008(H20)~2009 | 3 | | | | | | | | | | | | | | | |
| 2006(H18)~2007 | | | | | | | | | | | | | | | | |
| 2003(H15)~2004 | | | | | | | | | | | | | | | | |

Data 3. List of committee members for opinion exchange meeting about AW (Source: The 3rd opinion exchange meeting organized by MAFF on June 28 2023)

| 【委員：28名】 | |
|----------|--|
| 青木 卓也 | 日本ワイド・フード・インダストリー（株） コミュニケーション&CR本部渉外部 部長 |
| 石川 輝芳 | （株）しむひめスワイン 代表理事 |
| 大木美智子 | （一財）消費科学センター 代表理事 |
| 大熊 茂 | （一社）全国スーパーマーケット協会 調査役 |
| 大澤 浩司 | 千葉県農林水産部畜産課 課長 |
| 岡田 征雄 | 全国酪農農業協同組合連合会 総務部長 |
| 奥村 正裕 | 北海道大学獣医学研究院 教授 |
| 甲斐 崇 | 神奈川県南東畜保健衛生所 企画指導課長 |
| 近藤 康一 | （公社）中央畜産会 専務理事 |
| 斎藤 利幸 | 全国女性団体連絡協議会 事務局 |
| 白石 千秋 | 元（株）群馬県食肉卸売市場 常務取締役 |
| 新井 毅 | 東京農工大学大学院農学研究院 教授 |
| 高橋 雅彦 | 全国農業協同組合連合会 畜産部対策部長 |
| 竹内 茂博 | （株）インシイ 代表取締役社長 |
| 寺田 文典 | 元 東北大学大学院農学研究科 教授 |
| 中林 正悦 | 全国肉牛事業協同組合 理事長 |
| 嶋海 秀一 | 日本ハム（株）執行役員 国内食肉第一事業部長 |
| 徳岡 誠治 | 元 東京農業大学農学部畜産学科 教授 |
| 原田 苗子 | 生活協同組合コオプ みらい・コオプテリ生活協同組合連合会 CSR推進部担当次長 |
| 引地 聖和 | （株）明治 調達本部 酪農部長 |
| 富士 聡子 | オシダ・大地（株）執行役員 Oisix 商品本部長 |
| 町屋 奈 | （公社）日本動物福祉協会 獣医師調査員 |
| 松尾 邦光 | （一社）日本成鶏処理流通協会 会長 |
| 菅 真二 | 日本ワイド・フード・インダストリー（株）品質保証部長 |
| 森 佳光 | 社ニベ（株）執行役員 広報兼産谷子プロジェクト担当 |
| 森田 高樹 | （一社）Food Communication Compass 代表理事 |
| 八木 淳公 | （公社）畜産技術協会 技術普及部長 |
| 栗山 大介 | （株）ホクリョウ 代表取締役社長 |

（五十音順、敬称略）

The members include Mr. Masahiro Takeuchi of ISHII CO., LTD, McDonald’s Company(Japan),Ltd., KFC Holdings Japan, Ltd. etc.

Data 4. Establishing new guidelines for AW (Source: The 3rd opinion exchange meeting on June 28 2023)

Notification ・ Guidelines in the past

- ✓ In order to spread and establish the rearing and managing based on AW, the notification from the Livestock Production and Feed Division was released. For rearing and managing method of each livestock breed, Japan Livestock Technology Association prepared the private farmer’s voluntary guidelines.
- ✓ MAFF supported the preparation of guidelines by Japan Livestock Technology Association, but differentiation between Should(present implementation recommended) and Desirable(Future implementation recommended) was not clear.



Revised

New guidelines

- ✓ In order to expand export of livestock products, MAFF publishes the national guidelines based on OIE codes (proposals for layer) so that Japan’s AW standard can reach the international standards,
- ✓ In line with OIE codes, differentiation between “should” and “desirable” needs to be clear.

✓ After the new national guidelines are released, MAFF monitors the implementation of new guidelines. Considering the implementation status, MAFF sets the target year for Should (present implementation recommended). The subsidies are applied to some projects in order to spread and accelerate AW.

Data 5. Summary of technical national guidelines for broiler rearing and managing (Source: The 3rd opinion exchange meeting on June 28 2023)

1. Management method: Implementation recommended
 - No toe trimming, no de comb
 - Avoid sudden movement in order to eliminate unnecessary stress to birds. Avoid rough handling. Handle softly to avoid damage to the birds.
 - Catching birds are implemented carefully in the dark area not to avoid strong impact to the birds.
2. Nutrient: Implementation recommended
 - Manage the feeding and watering so that the birds can keep the normal body condition. Give sufficient water and feed suitable for the bird's age which contains appropriate nutrients and satisfy physiological needs in quality and quantity.
3. Bird house: Implementation recommended
 - If possible choose the land insusceptible to natural disaster. Houses should be built and maintained so that the risk of exposure to the disease occurrence and contaminated materials can be minimized and the injury and pain to the birds can be avoided.
 - Pay attention that the birds cannot be injured by the damaged part in a house. House structure should be easy for daily rearing and managing of birds and properly removing manures.
4. Rearing method, structure and rearing space: Implementation recommended
 - Give sufficient space so that all birds in the same flock can simultaneously rest without being disturbed and can keep the natural postures.

Rearing method, structure and rearing space: Future implementation recommended

 - It is desirable that chicks do not directly contact the floor and untangled dry litters are provided in order to encourage the dust bathing and foraging.
5. House environment: Implementation recommended
 - Design the house so that the correct temperature can be maintained as much as possible and fresh air can be supplied.
 - Appropriate lighting should be installed so that birds can behave normally and workers can easily do daily work.

6. Confirming AW status: Implementation recommended
 - Risk management manual etc. are prepared in order to minimize the natural disaster effect.
7. Measurement indexes of broiler AW
 - Measurement indexes of particular behaviors in case AW problems occur are listed.

Data 6.

Broiler's natural behavioral needs

