FFTC Agricultural Policy Platform (FFTC-AP)

Available online at: http://ap.fftc.agnet.org/index.php

The Price Stabilization Program for Mixed Forage

Yoshihisa Godo,
Professor, Meiji Gakuin University, Japan

(A subsidy program for protecting livestock farmers from a sharp rise in feeding costs:)

1. Introduction

Japan does not have an advantage in the production of feeding crops because of its humid climate and mountainous geography. Thus, Japanese livestock farmers purchase mixed forage whose ingredients are largely imported from around the world[1]. The import prices of these ingredient crops fluctuate drastically, reflecting the volatilities of exchange rates and international crop markets. This is one of the biggest concerns for Japanese livestock farmers, as feeding costs account for nearly half of the total livestock production cost[2]. In order to protect livestock farmers against the instability of feed prices, the Japanese government developed a unique program called the Price Stabilization Program for Mixed Forage (PSPMF). This paper aims to outline the PSPMF system.

2. Production trends for mixed forage

Before discussing the PSPMF, it would be useful to briefly review the total production of mixed forage in Japan. As shown in Table 1, the total production of mixed forage grew to around 26 million tons in 1988. In 1998, it declined by nearly 2 million tons and has remained almost constant at around 24 million tons for the past 15 years.

Table 1 also shows that the mixed forage used to feed egg-laying hens and has accounted for the largest portion of the total production of mixed forage. However, this percentage displays a declining trend: it has recently reduced from more than half of the total production in 1965 to only one-fourth. In contrast, the percentage of mixed forage used to feed beef cattle increased from less than 10% to nearly 20% during the past quarter century.

Table 1. Production of mixed forage by purpose

Fiscal year[a]	For egg-laying hens	For broilers	For hogs	For dairy cattle	For beef cattle	Others	Total
1965	4,857	455	1,744	804	77	213	8,150
1975	6,522	2,315	4,538	1,833	1,544	66	16,818
1980	7,347	3,345	6,399	2,323	2,724	114	22,252
1988	7,783	4,338	7,733	2,991	3,463	129	26,437
1993	7,613	3,964	7,250	3,289	3,891	129	26,136
1998	7,022	3,523	6,482	3,382	3,964	143	24,516
2003	7,001	3,655	6,193	3,410	4,200	143	24,602
2004	6,571	3,615	6,030	3,388	4,182	130	23,916
2005	6,602	3,728	5,984	3,387	4,262	146	24,109
2006	6,623	3,783	6,066	3,307	4,454	148	24,381
2007	6,647	3,807	5,991	3,307	4,606	131	24,489
2008	6,431	3,898	6,094	3,321	4,658	97	24,499
2009	6,423	3,975	6,318	3,276	4,698	113	24,803
2010	6,394	3,955	6,110	3,299	4,598	123	24,479
2011	6,320	3,889	6,078	3,254	4,551	83	24,175
2012	6,216	3,851	6,068	3,260	4,571	104	24,070
2013	6,174	3,860	5,996	3,235	4,569	97	23,931

Note a: The Japanese fiscal year starts on April 1 in the calendar year and ends on March 31 in the next year.
Source: Rakuno Keizai Tsushin Sha (2014)

3. Three funds for stabilizing mixed forage prices

The producers and distributors of mixed forage in Japan are categorized into three groups. The first group, consisting of multi-business type agricultural cooperatives, is called the Zen-noh Group. The second group, consisting of livestock-specific type agricultural cooperatives, is called the Chikusan Group, and the third group, consisting of private companies, is called the Shokei Group.

There had been various attempts to stabilize mixed forage prices before the establishment the PSPMF in 1975. For example, before 1975, each of the three groups had established its own fund to stabilize feed prices[3]. The funds are the Zen-noh Fund (established in February 1968), the Chikusan Fund (established in April 1968), and the Shokei Fund (established in March 1973). These funds collect money from livestock farmers and mixed forage producers when mixed forage prices are low and provide money to farmers when mixed forage prices are high.

In June 1973, the United States imposed an embargo on the export of soybeans. As a result, mixed forage prices increased so sharply that all three funds were on the verge of bankruptcy. Hence, in 1974, in order to protect mixed forage producers and livestock farmers, the Japanese government injected money into the three funds as an emergency measure.

From this experience, the government became aware of the need for a more systematic approach to mitigate unexpected sharp rises in feed prices. Thus, in 1975, the government created a new fund, the Fund for Extraordinary Compensation (FEC), and established the PSPMF. Since then, the Zen-noh Fund, the Chikusan Fund, and the Shokei Fund have been called the Funds for Ordinary Compensation (FOCs) to distinguish these three funds from the FEC. The function of the FEC is to provide financial support for the operation of the PSPMF by transferring money to the FOCs when the import prices of mixed forage ingredient crops surge to extraordinary levels.

4. The PSPMF system

While there have been occasional revisions to the PSPMF, the basic features of the system have remained the same since its creation in 1975[4].

Every time a livestock farmer purchases mixed forage, the farmer pays 600 yen per kilogram and the mixed forage producer pays 1,200 yen per ton to the FOCs. The FEC also collects money; in this case, the money is collected from mixed forage producers and the government (50% from all mixed forage producers and 50% from the government). Every year, considering the business conditions of the mixed forage industry, the government determines how much money the FEC should collect.

The weighted average of the import prices for the mixed forage ingredient crops is used as the index price for the PSPMF. For each quarter, the average of index price for the previous four quarters (i.e., one year) is calculated as the standard price. If the index price in the current quarter is more than the standard price, livestock farmers receive compensation to bridge the gap between the current index price and the standard price (note 5).

If the current index price is higher than the standard price, but lower than 1.15 times the standard price, livestock farmers receive compensation from the FOCs alone. If the current index price is higher than 1.15 times the standard price, livestock farmers receive compensation from the FOCs and the FEC as well. The FEC provides compensation to bridge the gap between the current index price and 1.15 times the standard price.

The record of payments of compensation since 1975 is shown in Table 2 and Fig. 1.

Table 2. Compensation under the PSPMF[a]

Fiscal year[b]	Quarter[c]	FEC[d]		FOC[d]	
		Unit value (yen per ton)	Total (billion yen)	Unit value (yen per ton)	Total (billion yen)
1975	3rd			3,500	7.4
	4th			3,500	3.3
1976	2nd			3,400	6.8
	3rd			3,400	11.2
	4th			1,200	5.2
1977	1st			1,200	4.2
	2nd			1,600	3.7
1979	1st			2,550	3.8
	2nd	2,660	10.0	4,020	15.1
	3rd	1,220	5.0	4,120	16.8
	4th	8,620	32.0	980	3.6
1980	1st	4,370	20.6	4,600	21.7
	2nd			3,900	17.5
	4th	1,600	6.6	3,100	12.9
1981	1st	500	2.3	3,100	14.5
1982	2nd			2,750	12.0
	3rd			2,750	7.3
1983	2nd			3,500	15.9
	3rd	1,060	4.3	5,270	24.6
	4th			5,000	23.2
1984	1st			3,200	16.2
1988	2nd			3,600	17.5
	3rd			3,600	31.3
	4th			3,600	21.1
1989	1st			3,600	19.9
	2nd	2,200	11.7	6,000	31.9
	3rd	1,200	6.8	5,000	28.2
	4th			3,800	20.3
1990	1st			2,500	14.1
	2nd			2,100	11.0
1991	2nd			900	4.7
	3rd			900	5.1
1993	4th			1,900	9.9
1994	1st			1,900	10.3
1995	3rd	155	0.8	2,945	15.8
	4th	1,753	8.9	2,945	15.0
1996	1st	3,223	17.5	2,945	16.0
	2nd	3,846	20.2	2,945	15.5

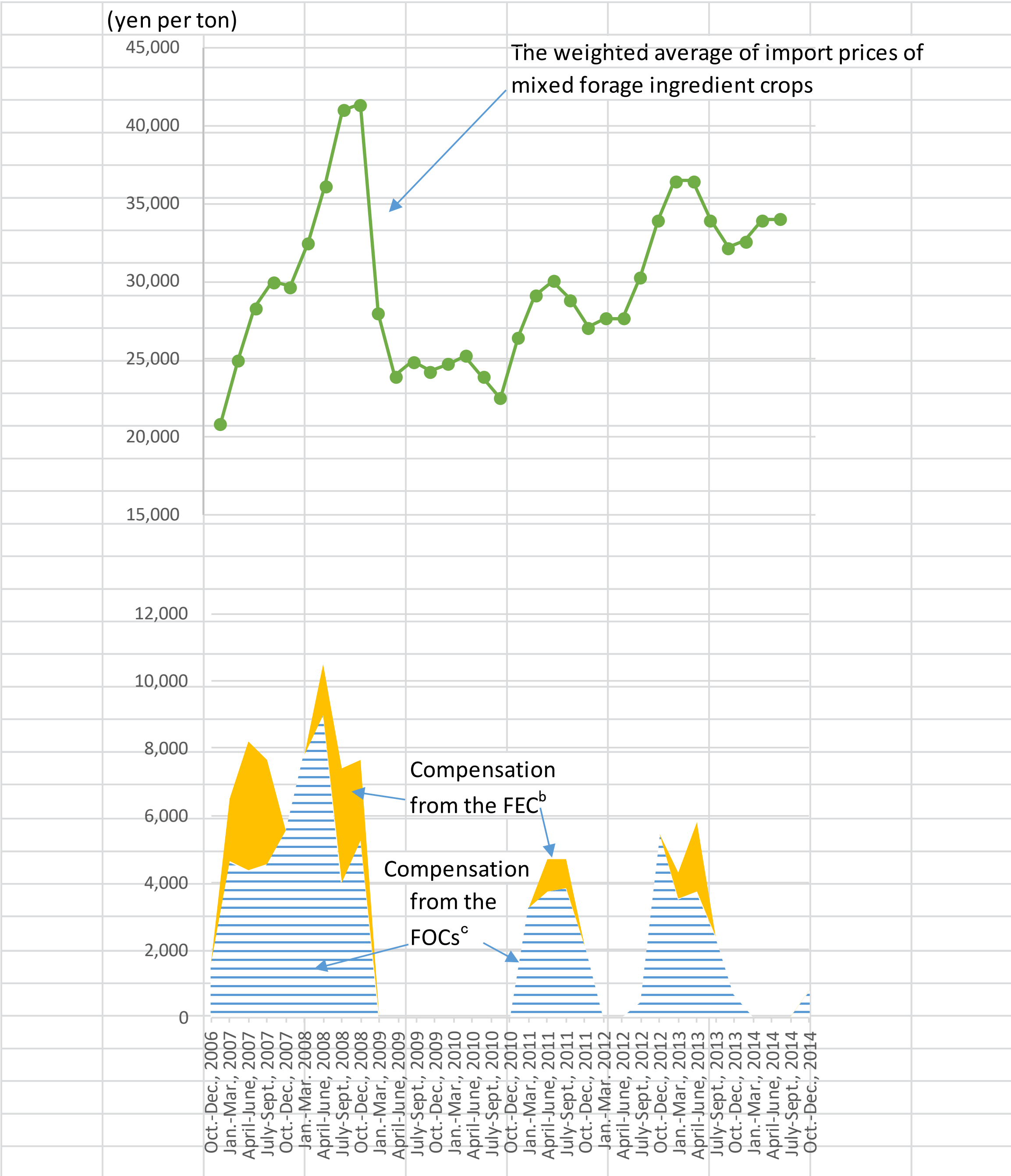
	3rd			4,300	24.0
	4th			2,300	12.3
1997	1st			2,750	15.0
	2nd			1,400	7.4
	3rd			1,100	6.3
	4th			2,400	11.6
1998	1st			450	2.4
2000	1st			1,025	5.4
	2nd			500	2.5
	4th			1,100	5.6
2001	1st			1,200	8.4
	2nd			1,000	5.1
	3rd			1,450	8.0
	4th			2,150	11.0
2002	1st	800	1.3	1,350	9.3
	2nd			300	1.6
	3rd			1,050	5.9
	4th			1,550	8.0
2003	1st			550	3.0
	2nd			650	5.1
	4th			1,650	8.6
2004	1st	616	3.3	3,584	19.2
	2nd	1,868	9.7	2,932	15.1
2005	4th			1,350	7.0
2006	1st			700	3.8
	3rd			1,600	9.0
	4th	1,860	9.8	4,640	24.6
2007	1st	3,829	21.5	4,371	24.5
	2nd	3,097	16.7	4,553	24.5
	3rd			5,550	32.5
	4th			7,800	42.6
2008	1st	1,517	8.8	8,983	52.0
	2nd	3,398	18.9	4,002	22.3
	3rd	2,398	14.3	5,252	31.4
2010	4th			3,250	17.3
2011	1st	966	5.4	3,734	20.8
	2nd	865	4.7	3,835	20.7
	3rd			2,100	12.2
2012	2nd			450	2.4
	3rd			5,450	31.9
	4th	776	4.3	3,524	19.3
2013	1st	2,062	11.6	3,738	21.0
	2nd			2,400	13.0
	3rd			700	4.0

Notes:

a. The Japanese fiscal year starts on April 1 in the calendar year and ends on March 31 in the next calendar year.
b. The first quarter starts on April 1 and ends on June 30. The second quarter starts on July 1 and ends on September 30. The third quarter starts on October 1 and ends on December 31. The fourth quarter starts on January 1 and ends on March 31.
c. PSPMF stands for the Price Stabilization Program for Mixed Forage.
d. FEC stands for Fund for Extraordinary Compensation.
e. FOC stands for Fund for Ordinary Compensation.

Source: Rakuno Keizai Tsushin Sha (2014)

Fig. 1. The weighted average of import prices of mixed forage ingredient crops and compensation under the PSPMF[a]



Note:
a. PSPMF stands for the Price Stabilization for Mixed Forage.
b. FEC stands for Fund for Extraordinary Compensation.
c. FOC stands for Fund for Ordinary Compensation.

Source: Shokuniku Co., Ltd (2015)

Notes

1. The Japan Livestock Dealers' Association (2011) estimates that imported crops account for four-fifths of Japanese mixed forage (calculated on the total digestible nutrients (TDN) basis).
2. Rakuno Keizai Tsushin Sha (2014) estimates that feeding expenses account for around 40 to 60 percent of livestock farmers' total production costs.
3. The Livestock Industry Promotion Corporation, a sub-government body and renamed in 1996 as the Agriculture and Livestock Industries Corporation, invested money in these three funds when they were founded.
4. The current version of the PSPMF was stipulated in 2013.
5. There are cases in which compensation is paid when the index price surged compared with the index price in the average of the previous two quarters (instead of the average of the previous four quarters).

References

Japan Livestock Dealers' Association. 2011. *Kachiki Torihiki no Chishiki* (Textbook for Classes for Livestock Dealers), Tokyo: Gyosei.

Rakuno Keizai Tsushin Sha. 2014. *2015 Rakuno Keizai Nenkan* (the 2015 version of Statistical Yearbook for the Dairy Industry), Tokyo: Rakuno Keizai Tsushin Sha.

Shokuniku Co.,Ltd. 2015. *2015 Sujidemiru Shokuniku Sangyo* (the 2015 version of Outlook of the Meat Industry), Tokyo: Shokuniku Co., Ltd.

Date submitted: May 31, 2015
Reviewed, edited and uploaded: June 1, 2015