Analysis on Recent US Agricultural Insurance Programs: Participation and Indemnity

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In 2002, the insurable acreage of US agricultural insurance programs continued to increase, and the percent of participation reached approximately eighty percent in response to higher subsidies provided by the Agricultural Risk Protection Act of 2000. Fig. 1 shows that the increase of total insurable acreage depends on the participation of revenue insurance programs, while the acreage insured by crop insurance programs decreased because of a sharp decline of Catastrophic Coverage (CAT).

As for the topic of participation, farmers have purchased higher levels of protection, especially higher coverage levels of revenue insurance policies. Over 50 percent of the insurable acreage in 2002 was insured at 70 percent coverage or higher compared to under 10 percent in 1998. Fig. 2 illustrates that the 70 percent coverage or higher for revenue insurance programs accounts for over 75 percent in 2002, compared to 22 percent in 1988.

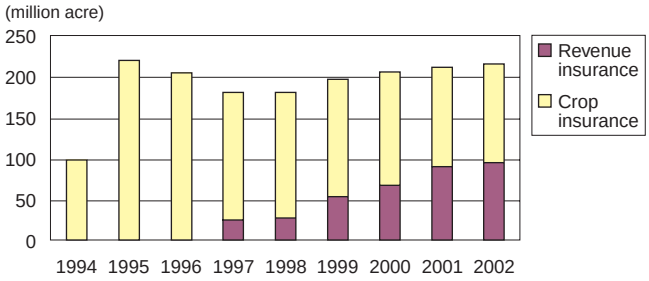

Fig. 1. Insurable Acreage of US Agricultural Insurance Programs
Note: USDA/FCIC, Summary of Business as of 2003/3/31.

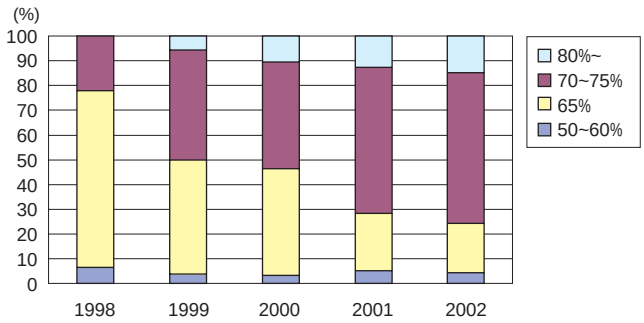

Fig. 2. Insurable Acreage by Coverage Level (Revenue Insurance)
Note: USDA/FCIC, Summary of Business as of 2003/3/31.

The acreage insured by CRC (Crop Revenue Coverage) policies dropped and instead, the insurable acreage of RA (Revenue Assurance) rapidly increased in 2002. The reason is that the CRC premium costs are generally more expensive than RA, even if the protection levels of both programs are the same.

This shows the price/premium elasticity of insurance demand is not low, although many previous studies suggested that the demand for crop insurance was inelastic. Those studies dealt with the old crop insurance programs prior to the 1994 Crop Insurance Reform Act and the introduction of revenue insurance programs.

A result worthy of our attention is that if the premiums of 65 percent coverage in 2002 are lower than in 2001, most farmers would not purchase the same 65 percent coverage to save money, but purchase the higher coverage, for example 75 percent coverage, to obtain strong enough protection.

Due to excessive drought and the highest ever insurance liabilities, total indemnities for 2002 amounted to over $4 billion and were the largest on record. The Loss-Ratio (indemnities divided by premiums) for 2002 was 1.35. The ratio of revenue insurance programs was 1.54 and was larger than crop insurance, which was 1.17. We think one of the reasons for the large payments by revenue insurance policies is that indemnities based on the Replacement Coverage of CRC and RA were paid because not only have crop yields declined, but also prices rose in the 2002 harvest season.

Study on Systematizing Food, Agriculture and Rural Area Policies

Kunihisa YOSHII

We tried to systematize the food, agriculture, and rural area policies of the Ministry of Agriculture, Forestry and Fisheries (MAFF) with the intention of specifying clearly linkages between ends and means among the various policies. As a result, we formulated a "Policy Hierarchy" which is three tiered (goals, objectives, and policies). To put it concretely, at first, we set four basic principles defined in the Basic Law on Food, Agriculture and Rural Areas as the goals of policies, and then we divided each goal into lower objectives which contribute to that goal. In addition, we classified various specific policies according to the objectives. The policies can be evaluated by the degree to which they achieve the objectives. At the same time, we devised an outcome indicator for each objective so that the degree of