The Profitability of Sustainable Agriculture on a Representative Grain Farm in the Mid-Atlantic Region, 1981–1989: Reply

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The authors are correct in identifying the mistakes in our article published in October, 1990 issue of the *Northeastern Journal of Agricultural and Resource Economics*. In the following, I will provide the correct numbers, note changes that should be made in the article's observations, and offer a recommendation given my experience in sustainable agriculture since 1990.

In Table 4 on page 96, the average annual profit for the Conventional, government program was $39,193 (unchanged), the standard deviation was $34,410 (corrected from $24,416), and the 75% lower confidence limit of profits was $16,001 (corrected from $12,777). The Low Input rotation, no government programs, had a lower limit of $16,166 (unchanged) and the Conventional rotation, no government program, had a lower limit of $4,406 (unchanged). Also, note that the CV for the conventional/government system should now be 88%. Finally, in Table 3 on page 94, the average profit for Conventional, government programs in the period 1985–89 should be $41,647.

These changes weaken, but do not invalidate, our conclusion that risk averse farmers, using a safety-first criterion, would choose a low input rotation (currently called sustainable). With the corrections, similar levels of risk reduction are found between a publicly financed price support system and a privately financed crop diversification system using inputs generated on-farm. The reduction in risk experienced by sustainable farmers is still due to crop rotation diversity and less reliance on purchased off-farm inputs.

Of more importance now, with the current pressure to reduce farm program payments, is the comparison between the Low-Input and Conventional base scenarios (which were unchanged). Farmers need alternative strategies to limit risk as government payments are reduced. Comparing the Low-Input and Conventional base scenarios without government programs, the Low-Input lower confidence limit of profits is clearly higher than the Conventional ($16,166 versus $4,406).

In summary, while I still stand by all conclusions drawn from the 1990 article, it must be emphasized that we should use care in applying sustainable lessons outside of the agricultural region from which they were drawn. Policies appropriate for Mid-Atlantic sustainable farmers may not be appropriate for other regions. Sustainable agricultural practices vary considerably around the U.S. and our discussions should reflect that.

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