

covered. If the gross income was over \$35.05 the excess would be a return to management.

The difference between total production costs with and without fertilizer was \$5.20. All but three costs changed when fertilizer was added. The added costs included the fertilizer and a fertilizer attachment added to the planter, the cost of fertilizer handling time, and the extra cost to handle the increased output. Output must increase enough to at least cover the extra costs of using fertilizer, \$5.20 in this example. If output did not increase enough to cover this cost, then the practice should be dropped or analyzed to see what adjustments are needed to make the practice profitable.

What additional equipment is required for sunflowers in addition to the typical small grain equipment? The producer must have row cultivating equipment and must invest in a sunflower harvest attachment for his combine or hire the work done.

Sunflowers generally are grown under contract. Production costs help us make a better analysis of production or marketing contracts.

Farming is highly competitive so business adjustments must be studied constantly and decisions made on what to do, how to do it, how much to do, and when to do it. Production costs and returns provide the guides for making production decisions. The cost information presented here can be

used as a guide for the individual farmer to make a decision as to how sunflowers might fit into his cropping program. You are encouraged to use your own costs where possible. Each farm has a different mix or amount and quality of resources to use. Therefore, costs vary from farm to farm and the most profitable crop combination differs from farm to farm.

FROM THE DIRECTOR (from page 2)

admitted to a graduate program of study. Thus both the foreign and American students represent a high level of intelligence and competence. We believe this mix of students at the graduate level is mutually highly desirable. The foreign student brings to our faculty, students, and agricultural research program many ideas and inspirations which serve to make our total program more meaningful and useful. They also bring a willingness to work as they learn. At the same time, they are at liberty to pick and choose those items of knowledge and technique which can be made useful in their native country when they return.

History clearly indicates the value of education as it affects the general welfare of mankind. The modest sum utilized for Graduate Research Assistants pays handsomely in dividends right back into North Dakota as well as making a very positive contribution to international relations and the agriculture of our sister nations.

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