

# SOILS

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## **Improved Drainage Increases Farm Land Values**

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When a farm is sold for agricultural production, the sale price is primarily determined by productivity. The productivity is principally determined by the fertility, topography, and drainage of the land and by the number, type, and condition of the buildings. Capital improvements to either buildings or land increase the potential productivity of the farm and consequently its value. This fact sheet discusses the relationship between land values and money invested in drainage improvements.

### **Will Drainage Costs Add to the Value of Land?**

In nearly all situations the investment in improved drainage will increase the value of the land, but the increase will be less than the expense incurred for improved drainage. This phenomenon is true, however, for almost all capital improvements whether to a farm or to a home. This difference between the cost of new

buildings or land improvements and the amount these improvements add to the farm is referred to as lost capital.

The proportion of any capital investment that is lost capital depends upon many factors. The most important factor is related to the usefulness of the capital improvement to potential farm buyers. Improvements that appeal to the operator's preferences but not the preferences of potential buyers and improvements specifically for an enterprise that would probably be eliminated by potential buyers are almost all lost capital and add little or nothing to the value of the property. Capital improvements specific to enterprises that are more common to the area usually have less lost capital; but the proportion of lost capital is still large in many instances because potential buyers may not like the location or layout of the building, silo, and so forth.

The smallest proportion of lost capital usually comes from capital expenditures on land improvements. Drainage is probably the most common land improvement in New York. Although expenditures on drainage usually provide the largest proportionate increase in land values of any capital expenditure, a general rule of thumb often used is that one-half of the expenditure for on-farm drainage is reflected in the land value. This rule of thumb means that one-half of expenditures on drainage is added to land values and one-half is lost capital.

### **What Factors Influence the Increase in Land Values?**

Numerous factors influence the increase in the value of the farm when expenditures are made on drainage. The first is whether the expenditure is for on-farm installation or for outlet development. Little is known about

the effect of outlet development on land values. There is little doubt that outlet availability increases land values, but in some instances, the increase may be very small. In many situations, the availability of an outlet will increase the number of potential buyers, for many farm managers are not interested in buying a farm that cannot be adequately drained.

The most important factor determining the increase in land value as a result of on-farm drainage is the amount the drainage improves the productivity of the land. If the land is moderately well drained before improved drainage, the proportion of lost capital may be very high. If, however, the land is very poorly drained and cannot be farmed or only hay crops (mostly grass) can be grown, expenditures for improving the drainage will markedly increase the value of the land. In such situations, land values might increase as much as the expenditure on drainage.

Another factor affecting the proportion of lost capital is the effect of the drainage on the farm as a productive unit. If the drainage improvement is minor or if there is already a large acreage relative to the size of the livestock enterprises, the impact on land values could be less. If, however, the drainage improvement makes the crop productivity relative to the size of the livestock enterprises much more desirable, the impact on land values will be greater. An example would be a farm where the improved drainage transforms a roughage deficit to adequate roughage and, in most years, a harvest of some corn grain.

Another factor is the local market for land. If most buyers are not excited about drained land and land is readily available (rent or buy), the premium for drained land will be reduced. If most buyers are accustomed to drained land, the premium for drained land will usually be greater.

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