Increase maize yield through early planting

Recognize the problem
The problem of low yields is common among farmers and is mainly this due to late planting of their maize. A farmer who plants late may experience a yellowing maize crop at vegetative stage and stunted growth in general. This delayed planting can result in 1.5% yield loses per day. It also creates a good environment for maize streak virus disease in high rainfall areas.

Background
Maize is a crop that needs most moisture at germination and also at flowering stage. Early planting ensures that the crop has enough moisture. Late planting in high rainfall regions leads to problems with maize streak virus disease. Often, during high rainfall there is a large migration of insect vectors such as leafhoppers, which spread the virus to healthy maize plants. This disease therefore thrives in these conditions if the crop is planted late. The yield loses from late planting can be easily overcome by a farmer with little or no technical advice.

Management
To avoid loss of maize yield, these practices can help:

- The maize fields should be ready for planting by the first week of November
- Plant early or with first rains, usually in November
- Basal fertilizer (NPK) should be applied at a time of planting in planting rows or planting station
- Rotate maize with other crops like groundnuts and common beans
- Optimal plant density is 40,000 to 50,000 plants/ ha. In other words, plant at 30 cm distance between plants, and at 75 cm between rows

Scientific name(s) > Maize Streak Virus

The recommendations in this factsheet are relevant to: Zambia

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