Get quality soybean seed through good agricultural practices

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Working in partnership to create down-to-earth messages on integrated soil fertility management

Guidelines for Tanzania
1. Land preparation

- Select soil with moderate to high fertility.
- Plough in crop residues and vegetation to improve soil fertility.
- Break up large lumps of soil and level.
- Where soil is acidic, broadcast 5 bags (50 kg bags) of agricultural lime per acre and plough in.
- Test seed for germination before the start of the rainy season. Plant 30 seeds. If at least 25 germinate, then the seed is good to plant.
- Plant improved varieties. Use certified seed or seed from a crop grown from certified seed. Do not recycle seed for more than 3 seasons.
- Inoculate seeds under a shade and plant on the same day.
- Cover seeds with soil immediately to protect the inoculant from damage by the sun.

2. Planting

*Plant at the start of the rainy season. Space furrows at 50 cm. Furrows should be 5 cm deep.*

- Apply DAP or TSP fertilizer in the furrow at 50 kg per acre to supply phosphorus. Apply about one soda bottle top of fertilizer per metre (every 3 feet) along the furrow.
- Put in 2 seeds per stand along the furrow. Cover with top soil. The spacing from one stand to the next should be 10 cm.
*If manure is available, make furrows slightly deeper, apply manure and fertilizer along the furrow, and mix with soil before placing seed.*

3. Field management

- Thin to one plant per stand (10 cm) if more than one emerge.
- Weed on time. Do the first weeding 2 weeks after planting and the second at 5-6 weeks after planting.
- If growing for seed production, uproot diseased plants and plants that look different from the rest.
- Plant varieties that are resistant to diseases (e.g. Uyole soya 1 and Uyole soya 2). Look out for pests like leaf rollers and leaf eaters.
- If rust is a problem, apply *Folicur* fungicide to soybean if not more than half of the leaves are brown.

4. Harvest

*Timely harvesting is important to avoid shattering.*

- Harvest when most of the pods are dry and brown in colour, and seeds in pods rattle when plants are shaken.
- Preferably, use a panga to cut the mature plants at ground level.
- Soybean roots left in the field add nutrients to the soil.

5. Post harvest

- Dry the harvested plants on tarpaulin in sunlight for 4 days before threshing, to a moisture content of 13% or less. Soybean grain is sufficiently dry when it cracks or breaks when bitten teeth.
- Pile soybean plants on a tarpaulin and hit gently against each other.
- Sort and winnow. Place seed in clean bags placed on wooden pallets in a cool, dry place.

*Expected yield is 1.5 to 2 tonnes per hectare*