• Crack the pods and observe the inside wall (mature pods have dark brown inside walls).

• Avoid using yellowing of leaves as indication of maturity (yellowing of leaves could be a symptom of diseases).

• Prompt harvesting should be done at maturity to avoid loss of kernel through sprouting.

• Harvest by pulling the plant and turning it such that the pods are not shaded from the sun.

• When the soil is dry, it is advisable to use hoes to dig up the pods from the soil.

• Mechanical groundnut harvesters are also available for use on large scale crops.

**Post-harvest drying**

- Strip harvested pods immediately for drying.
- If stripping cannot be done immediately, the plants should be turned such that the pods face the sun after uprooting.
- Dry pods on concrete platforms or on tarpaulins.
- Remove immature, cracked or damaged pods to reduce the problem of aflatoxin contamination.
- Drying should be done in small batches to permit easy drying of the produce.
- Pods should be dried to low a moisture content (less than 8%) before storage.
- Store dry pods in jute sacks arranged on wooden planks and protected from moisture.

This leaflet is a product of CSIR-Savanna Agricultural Research Institute. It was produced in August 2017 for all actors in the groundnut value chain with financial support from the BMGF TLIII Project. It is available for download from the CSIR-SARI website. This content was developed as a result of research conducted by research scientist and technicians of Council for Scientific and Industrial Research (CSIR)

Compiled by: R. Oteng-Frimonp, M.A. Rasheed, I.A. Rashid, N.N. Denwar and S.K. Nutsugah

For more information, contact:
CSIR-Savanna Agricultural Research Institute
P.O. Box TL52, Tamale, Ghana.
WhatsApp:+233243741968
Email: directorsari@gmail.com
Website: www.csir-sari.org
Site Selection
- Select well-drained, loose, medium textured soils.
- Avoid heavy and clay soils.
- Avoid fields that were planted to groundnut during the previous cropping season.

Land preparation
- The land should be adequately prepared by ploughing and harrowing (at least twice).
- On poorly drained soils, it is advisable to plant the groundnut on ridges.

Choosing a variety
- Choose a variety with a growth period that will match moisture availability.
- Medium to late maturing varieties ideal for the Northern Region of Ghana.

Seed selection
Observe the following guidelines for seed selection;
- select pods that are well filled.
- Shell seeds manually within few days of planting.
- Select normal size seeds, with colour typical for the variety.
- Avoid using seeds that have cracks on them.
Obtain good quality seed of preferred variety from Certified seed dealers.

Germination test
Very important step to take before planting large lots of seed. The following steps guides you to conduct a germination test.
- Select a number of pods from your seed stock.
- The pods should be well-filled, as those you intend to plant.

Hand-shell the pods and select 100 healthy seeds (i.e. of normal size, shape and colour).
- Make a shallow trench 1-2 metres long.
- Place the seeds evenly in the shallow trench.
- Cover with 3-5 cm of soil and water well.
- Count the number of seedlings emerging after 8 days.
If you get 85 or more seedlings, plant one seed per hole.
If you get between 70 and 84 seedlings, plant 2 seeds per hole.
If you count less than 70 seedlings, your seed stock is not suitable for planting.

Planting distances
- Recommended spacing for erect or semi-erect variety is 40cm x 15cm.
- Recommended spacing for creeping type of variety is 50cm x 20cm.

How to plant
- Always plant in rows for optimum plant density.
- Plant to a depth between 4 - 5cm and cover the seeds completely.
- On large acreages, the use of mechanical planters is recommended.
- Seeds should be protected by coating them with seed dressers (eg Dress Force).

When to plant
- Only plant when the soil is moist (preferably the day after rains or irrigation).
- Plant at a time such that the flowering and early pod development stages will coincide with periods of adequate moisture availability while the crop matures during a period of relatively dry weather.

Avoid planting in December and January as the cold weather at the time retards growth and prolong the vegetative phase of the crop.

Fertilizer Application
- Apply one bag Urea plus one bag of TSP (Triple Super phosphate) per acre.
- Apply a small quantity of the fertiliser between 10 to 14 days after planting to one side of each plant.
- Mechanised drills can also be used for fertilizer application in large acreages.
- Apply 160kg Calcium fertilizer (Gypsum or Omya calcipril) per acre (at least 6 bags of 25kg packs or 3 bags of 50kg packs) at the beginning of flowering.

Weed control
- Good land preparation (ploughing and twice harrowing) is needed for good initial weed control.
- Applying a pre-emergence herbicide (Stomp CS or Vezir) on the same day after planting effectively protects the crop for 4 to 6 weeks depending on the kind of weeds present on the field and how well the land was prepared.
- Avoid weeding or walking through a groundnut field when it is at peak flowering to pegging stage.
- Where necessary, weeding within rows should be limited to hand pulling of weeds when pod development begins.

Pest Control
- Occasionally scout for the presence of aphids and spray with lambdacyhalothrin (Karate) or cypermethrin based pesticides when their levels are high.
- Plant varieties resistant to foliar diseases or spray with fungicides (eg. Topsin-M) 3 – 4 times beginning from the 30th day after planting.

When and how to harvest
- Test for maturity by randomly digging a few plants.