TRANSCRIPT FOR "Good Agronomic Practices Training Video (Dagbanli)"

<https://vimeo.com/225458764>

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| Groundnut is one of the major leguminous crops grown widely in Northern Ghana. |
| It serves as an important source of protein, fats, and oils, as well as carbohydrates, which are good for human body development.  |
| Unfortunately, aflatoxin contamination of food, including groundnuts, when eaten affects the ability of the body to absorb nutrients. |
| To minimize these effects, many agronomists belive that adopting simple but good agronomic practices. |
| As part of SPRING/Ghana’s strategy to promote nutrition-sensitive agricultural practices, Farmer Field School (FFS) training methodology has been adopted to enhance the understanding and adoption of knowledge and practices that will promoote the production and consumption of aflatoxin-safe groundnuts among 1000 day beneficiaries.  |
| This instructional-based training video is developed by SPRING/Ghana to serve as a job aid to agricultural extention agents (AEAs) to engage groundnut farmers in Northern Ghana on some selected topics using the FFS methodology. |
| Selecting land for the cultivation of groundnut is very critical to you as a farmer. |
| Planting of groundnut is not just done on any field or land since groundnut cannot grow well on rocky, water-logged, and sandy fields. |
| Groundnut does well in a deep, well-drained, light-textured, loose sandy loam or sandy clay loam soils.  |
| These soils improve seed germination, seed emergence during planting, and allow easy pegs penetration and pod formation during the latter development of groundnut plants. |
| You need to select land for your groundnut field taking into consideration the characteristics of the soil type and land. |
| You need to select your site before the onset of the rains. |
| Seedbeds can be prepared using hoe, bullock traction, or donkey-drawn plough. |
| Depending on your ability as a farmer, you can employ any of these services. |
| However, tractor services, though costly, are good for good land preparation since tractor ploughing is able to turn soil deep to bury crop residue and weeds. It removes stumps and also guarantees proper water penetration. |
| After tractor ploughing or animal traction, you need to level the land or prepare ridges to ensure proper spacing and planting. |
| For you to get good and improved/recommended seed varieties such as Chinese for planting as a groundnut farmer, you need to obtain or buy your seeds from a certified/registered agro-input dealer. |
| It is also recommended for you to preserve unshelled groundnut to be used as seeds during the planting season. However, they should be hand-shelled two weeks before planting to prevent any damage of seeds. |
| After shelling, you have to sort out the seeds to remove the shriveled, immature, moldy, skinned, and small seeds before sowing. |
| To determe seeds’ viability before sowing, you need to conduct a germination test at least a week before planting. |
| This will help you to know in advance wheter a maximum plant population will be achieved or not. |
| You can conduct a germination test in the backyard garden at home or through a sample of soil collected in a container as demonstrated here. |
| One hundred (100) or twenty (20) seeds are randomly selected and planted in the soil. |
| Cover the seeds with moist soil and keep under favorable conditions to maintain good moisture count. |
| If there is no rain, or the container is not in the open to receive direct rain water, remember to water it at least once a day. |
| After 7 days, check the number of seeds that have sprouted. |
| If 85/17 or more seeds out of the 100 or 20 sprout respectively, plant one seed per stand. If 70 to 84 sprout, then plant two seeds per stand. |
| Recommended spacing is very important to ensuring optimal plant population in any given field. |
| Plant your groundnut in rows in order to ease cultural practices such as weeding, spraying, pest and disease identification, and harvesting. |
| A hill is a hole in which seeds are sown. For groundnut, you need to use one seed per hill. |
| Hills can be created by using indigenous tools such as a hoe, a cutlass and a dibbler (pointed stick), among others, or a manual planter. |
| Locally, the use of hoes or cutlasses and dibblers (pointed stick) are common. |
| Manual planters are also recommended to reduce the workload and time required during planting using the traditional planting techniques. |
| Farmers are therefore encouraged to buy manual planters which are easy to use. As you can see in the video, dibblers are commonly used in Northern Ghana due to the large sizes of groundnut farms. |
| In the case of the Upper East region of Ghana, hoe planting is commonly practiced mostly by women through co-operatives or groups. They use seed bowls in one hand and the hoe in the other hand. |
| It should be noted that, in using any of these planting techniques, recommended spacing and depth of hill must be respected. |
| Using any of these planting techniques, one groundnut seed per hill and a recommended spacing (30cm X 15cm) with a depth of 5cm as shown. You can achieve an optimum plant population of 166,667 plants per hectare in your farm. |
| Control weeds on your farm at the early stages of plant development (3-6 weeks after planting). |
| Remove weeds as early as possible to reduce competition with groundnuts for nutrients, water and light. |
| Weeds are removed with a hoe, cutlass, or pulling out by hand. |
| Weed your farm at least two times. |
| The first weeding should be done between 1 to 2 weeks after planting. The second weeding is done at 5 to 6 weeks after planting and before pegging. |
| At the advanced stage, especially during pegging, you need to use your hand to gently pull out weeds that are interspersed with groundnut plants in order not to disturb pegging and pod formation. |
| To boost plant growth and development, you ned to maintain a reasonable level of organic matter in the soil by either using animal droppings or prepared compost. |
| This will enrich the soil and thus reduce the incidences of soil degredation and other environmental hazards. |
| Harvest groundnuts when there are clear indications that they have matured. |
| The maturity of your pods can normally be realized when the vines turn yellow and the leaves begin to shed. |
| Even though some farmers use leaf falls as the basis to determine maturity, it is not the best way to determine the maturity of your pods. |
| Sometimes leaf falls could be due to disease, infestation, or water stress. |
| Apart from the signs on the leaves, another way you can observe maturity in your groundnuts is after a count of each plant uprooted. If 70-80% have dark markings in the side, then your groundnuts can be harvested. |
| It is good for you to ensure that all these signs are observed to be present in your farm in order to harvest your groundnuts timely. |
| This is because groundnut kernels shrink upon drying if they are harvested prematurely. This could result in decreased yield, poor seed quality, and low oil content. |
| Again, if you harvest your groundnuts late, non-dormant varieties sprout in the field, resulting in bad-looking groundnuts, yield losses, and poor seed quality if you want to use some of them as seeds during planting. |
| This will also increase mold formation during storage. |
| It is therefore good for you to know the maturity period of the variety you have planted to serve as a guide as to when to harvest your groundnuts. |
| You can harvest groundnuts through various techniques such as hand pulling, digging the plant with a hoe, or using a groundnut lifter. |
| After lifting the groundnut plant, you have to turn the haulms upside-down to expose the nuts if the pods cannot be stripped immediately. |
| Harvested plants are staked in the field for a few days to allow them to dry in the sun in and airy place before stripping the pods. |
| Drying is done by continuously leaving the pods under the sun on a tarapaulin for 6-7 days, until the moisture content is reduced. |
| Your harvested nuts can also be dried on a dry cement floor, but not on the bare, wet ground/floor. You want to prevent the nuts from getting in contact with moisture. |
| After 7 days of drying, you can determine the dryness of the nuts by putting some in your hand and shaking to hear a rattling sound. You can also bite a groundnut between your teeth. If it remains fixed to your teeth, then it is not yet dry. |
| If, on the other hand, the nut falls out easily, then it is well dried. |
| Over-drying of pods can affect kernel quality and seed germination during planting. |
| You can store groundnuts either shelled or unshelled. |
| The best way for you to store dried unshelled pods of groundnut is in sacks, clay/mud silos, woven-straw baskets, and clay pots. |
| All forms of storage facilities should be raised above the ground to prevent the groudnuts from absorbing moisture. |
| Groundnuts are highly nutritious. Therefore, you need to treat them well by ensuring good hygiene and sanitation during processing and utilization. |
| Proper hygiene and sanitation through simple washing with soap are very essential in reducing contamination during food preparation. |
| After roasting, groundnuts are then skinned and cleaned to remove unwanted particles. |
| It is then milled into a paste which is the finished product of the process. Groundnut oil can also be extracted from the paste. |
| During processing, use clean utensils and containers to store groundnut paste and oil if you are not using them immediately. |
| The finished groundnut paste can be eaten with bread. Before adding groundnut paste to bread, remember to wash your hands with soap under running water. |
| Also, cut bread with a clean knife and put it on a clean plate. |
| To prepare soups and stews for household consumption, remember to maintain good environmental hygiene and sanitation. |
| Remember, mix groundnut paste and oil with children’s food such as porridge and prepare it under good hygenic conditions to help enrich the diets and provide energy an protein to children under 2 years. |
| This will help your children grow well and strong, thus helping reduce malnutrition among children in 1000 day households. |
| It is good therefore for you to adopt these recommended practices to improve your income and ensure safe family food. |
| Aflatoxin-free groundnuts also attracts good prices. |