ESWATINI GOVERNMENT

MINISTRY OF AGRICULTURE

NATIONAL EARLY WARNING UNIT

ESWATINI SEASONAL MESSAGES TO FARMERS 2018/19

GENERAL OVERVIEW

1. The Kingdom of Eswatini, according to the Eswatini Seasonal Rainfall Forecast Outlook (2018/2019) of Eswatini Meteorological Service (EMS), the growing season shows the probability of an increase chance of Normal-to-Above Normal rainfall over most parts of the country during the October-November-December (OND) 2018 period. The January-February-March (JFM) 2019 period all the regions are likely to receive the probability of Normal-to-Below Normal rainfall. The seasonal outlook highlighted the historical Indian Ocean Diapoles (IOD) years with positive and negative trends of La Niña and El Niño. For instance, the country experienced La Nina, in the January to April 2018 and in January to April 2016, it was El Niño.

2. Currently, it is observed that in the Seasonal Forecast Outlook that the El Niño–Southern Oscillation (ENSO) is neutral. Thus, observations and model outlooks indicate El Niiño remains possible in 2018 as a result the Kingdom of Eswatini remains at El Niño WATCH, which means there is approximately a probability of 50% chance of El Niño forming in the coming months. Furthermore, the OND period is expected to be wetter across the country than the JFM.

3. Through the Eswatini Seasonal messages, farmers are early warned to act upon the advice provided by the Ministry of Agriculture through the Eswatini National Early Warning Unit (NEWU) and in collaboration with other Crops, Livestock, Fisheries Specialists and relevant stakeholders in the agricultural sector. For more details, farmers are further encouraged to contact the Extension Officers at their nearest Rural Development Areas. Also, farmers will be kept informed of any changes/ developments on the seasonal forecast.

4. Adding to that, the outlook points the associated agricultural risks that may be faced by farm households in the country such as: limited water availability, poor grazing areas and heat stress that may affect both crops and livestock.

5. Below outlines the seasonal messages to be alerted by Eswatini farmers in preparation of the unforeseen events.

CROP PRODUCTION

Crop production fluctuates from season to season depending on many factors including: rainfall amount and distribution. When rainfall is normal to above normal a good harvest is usually expected. This requires farmers to plan their planting programme to take maximum advantage of the rainfall received in order to maximize crop yields.

1. Given the prospects of a good rainfall season, farmers are advised to:
   a) plough and plant early using available draught power.
   b) diversify their crops and stager planting.
   c) use recommended crop varieties.

2. Local leaders (especially Chiefs) are urged to assist in ensuring that livestock is removed from arable land as early as possible to enable early planting.

3. Farmers in drought prone areas (Dry Middleveld and Lowveld) are advised to plant early and grow drought tolerant crops such as sorghum, cotton, legumes and root crops especially cassava. More information on this is available from extension officers of the MOA, NGO's and other relevant partners in the sectors.

Maize production

Maize Farmers in Eswatini are advised to adhere to the following, as they prepare for the cropping season:

1. Utilize the first good rains that marks the beginning of the planting season by planting their crops as early as possible (first two weeks of October).

2. Source seeds from a reputable supplier available throughout the country. Plant varieties that have tolerance to diseases like Maize Streak Virus (MSV), Grey leaf spot (GLS), Rust etc.

Grain Legumes

In terms of grain legumes, farmers are advised to be alert for increase in foliar diseases in grain legumes, for example, rust and leaf spots especially in groundnut crop. To avoid some of these problems, farmers need to equip themselves with chemicals for protective sprays such as Bravo, Copper count / oxychloride and /or Amister to be sprayed forth-nightly depending on the frequency of the rainfall. Farmers should also maintain weed free crop in order to keep away pests. Insects can be controlled using pesticides such as Decis, Fastac and Malasol.

LIVESTOCK PRODUTION

Short term Interventions

1. **Reduce herd numbers/ Destocking stoking** (reduction of livestock population at risk of dying due drought conditions) to reduce grazing pressure in rangeland and to match livestock numbers with available forage. Livestock farmers are encouraged to dispose excess stock, particularly mature males (ready for Slaughter), bullocks (ready for feedlots) and older cows would reduce the population at risk and generate income for the farmers.

2. **Negotiate Supply of Crop residues**: With the income generated from the sale of the excess stock, farmers can procure supplementary feed for their remaining breeding stock. Crop residues such as Sugarcane tops, citrus pulp, sunflower and cotton seed cake and others should be made available for farmers to purchase. This may require engagement of industries generating such residues. Farmers should be encouraged to store crop residues and further trained in using urea and molasses to improve quality and palatability of such crop residues.

3. **Species diversification** (a shift from large ruminants to small ruminants) to match with the current condition (climatic conditions) e.g. cattle and goats. Farmers within the dry Middleveld and the Lowveld are urged to diversify in the type of stock they are keeping to match with the ever-changing climatic conditions (drought situation). Moreover, small ruminants have low forage demand as compared to beef cattle, can also withstand very harsh condition and they have a fast turn-over.

4. **Pasture establishment**: Livestock farmers and keepers are encouraged to engage in pasture establishment/production to increase fodder banks hence meeting forage demand for livestock in the Lowveld and dry Middlveld. Make use of the available rains that the country is anticipated to be receiving this

summer season. Where possible communities are urged to identify baleable sites and fence it off for baling purposes.

5. **Firebreaks:** Livestock owners on communal grazing land, Government farms and private farms are encouraged to establish firebreaks around the farms to avert wildfires from invading their farms hence destroy bulk of the feed (hay or foggage) conserved for the dry season.

6. **Bush control/clearing**: Bush thinning especially before the summer season in both Government farms and communal grazing lands to increase carrying capacities of the farms. Thinning of bush in communal rangelands will promote new growth and to allow the infrared-radiation to reach the ground hence meeting the conditions for seed germination thus activating the seedbank.

7. **Promotion of feedlots**: Feedlots that are currently non-functional should be revived and stocked with the young bulls (Emajongosi). The SMI, Power Team and feedloting community should be engaged to lead this process.

Long term

1. Up-scale pasture establishment in both communal land, Government farms and Title Deed farms. Buy legume fodder tree seed/propagative material (Encourage grass legume mixtures)

2. Improve range management extension packages so to ensure proper range utilisation and adoption of proper stocking rates for sustainable utilisation of the resource.

3. Construction and rehabilitation of earth dams and boreholes especially in the Lowveld and dry Middleveld.

4. Up-scale water harvesting techniques, hay making and promote home based feed budgeting.

FISH PRODUCTION

- Fish farmers are encouraged to ensure welfare of fish is taken care of and maintain drainage system as per the fish ponds design in case there is an overflow. They should practice fish pond management and water quality management.
- Fish farmers are to ensure they conserve water through water harvesting for unforeseen future events.
- Diversification in fish farming through integrated farming.

HOME ECONOMICS

- Farm households are encouraged to do backyard gardens, food preservation and water purification using Moringa seeds.
- Advised to do water recycling for higher economic use of available water especially in backyard gardens
- Mulching of gardens to reduce evaporation

AREA SPECIFIC RECOMMENDED CROPS

HIGHVELD, MOIST MIDDLEVELD AND LUBOMBO PLATEAU

MAIZE

Plant long to medium season varieties at the **start/ onset** of the season (these are high to medium yielding varieties). Ideally plant these varieties as from October to mid-November. Long season: e.g. SC719, medium: PAN 53, SC621, and SC 633.

- Choose and plant varieties that are tolerant to diseases such as Grey Leaf Spot e.g. SC719, PAN 53.
- As planting is delayed, select and plant varieties that are **medium, short** and **very shot** maize varieties. SC 621, PAN 53, SC 633, RO 413, and SC403.

GRAIN LEGUMES

1. **Groundnuts**: farmers need to plant early preferably October/ early November.
    - Early maturing cultivars include ICG 221, Japer and Natal Common
    - Late maturing cultivars include Mini Pinter
2. **Jugo Beans**: farmers to plant in October and November. Seeds are available from Khuba Traders, Swaziland Agricultural Suppliers to cite a few.
3. **Beans**: farmers are advised to make use of the expected January rains for planting. Best planting dates under normal circumstances:
    Highveld - January to Mid-February;
    Middleveld and Lubombo - January to March;
    Lowveld - February to March.

    Recommended and available bean seed for the 2018/19 planting season are:
    - PAN 148 and PAN 9216 from PANNAR;

- Kranskorp and Bio NUA 45 from Farm Chemicals and other seed outlets,
- CAP 2000 from Capstone at SAS;
- Cranberry Bush Argentina from Lake Agriculture at SAS, Farm Chemicals and other outlets.

4. **Cowpeas and Mung beans:** plant in December to early March. Grows well in the dry Middleveld, Lowveld and Lubombo Plateau.

ROOT CROPS

1. Sweet potatoes: best to plant in October/ November. Planting in December to January is also recommended.
2. Cassava: plant as soon as there is sufficient moisture.

NOTE:

Maize farmers in the Highveld, Moist Middleveld and Lubombo are advised:

- To consider planting early to medium maturing maize varieties available from seed outlets. These varieties mature fast and have the ability to escape drought conditions if planted early.
- Plant varieties that have tolerance to diseases like Maize Streak Virus (MSV), Grey leaf spot (GLS), Rust to cite a few.
- Apply the recommended fertiliser rate suitable for each region and must be done at the appropriate time.
- Be on the lookout for fall army worm; early detection leads to effective management.
- Field scouting may be done at least once a week and be kept free of weeds to keep away insect pests.

DRY MIDDLEVELD

MAIZE

Plant early (first effective rains). As planting is delayed, select and plant varieties that are **medium, short** and **very shot** maize varieties such as SC 621, PAN 53, SC 633, RO 413, R 201 and SC 403 because of their drought resistance.

For late planting, use short and very short varieties such as RO 413 and SC 403.

Note:

- Make sure that the variety you choose fits into the remaining season length (do not plant long season varieties at the end of the season).
- It is important that flowering of maize should not coincide with drought or dry spells.

SORGHUM

It is most suitable grain crop in this zone. Use the following cultivars NS5511, PAN 8625.

LEGUMES

Cowpeas and Mung beans are highly recommended for later planting.

a) Cowpeas varieties
   - Early maturing: Umtilane
   - Medium to late: local (indigenous) varieties.

b) Mung beans: planting may still be done in December to February to enable the crop mature in the dry season.

LOWVELD

MAIZE

Dry land maize production is not recommended in this region. Farmers are advised to consider other crops. Farmers who decide to grow maize risk total failure unless they can irrigate.

COTTON

This is the main cash crop in this region and farmers are encouraged to grow it. The income obtained from selling cotton can be used to purchase maize for consumption. Farmers must use any available land preparation method including minimum tillage to achieve early planting and good yields (plant between 15th of October to the 30th November). Available varieties are Albar Plus and Delta Opal.

SORGHUM

Farmers in the Lowveld of the country are urged to plant sorghum varieties that tolerate moisture/ heat stress.

Other crops that can be grown include the following:

1. Melons

MESSAGES RELEASED BY

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