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SPECIAL BULLETIN

PROSPECTS FOR 2004/05 RAINFALL SEASON

DEPARTMENT OF METEOROLOGICAL SERVICES

Month: September **Season:2004/05** **Release date: 30-09-2004**

BOTTOM LINE OF 2004/05 SEASONAL FORECAST:
Adequate seasonal rains with erratic onset expected

Agricultural Interpretation of the 2004/05 Seasonal Forecast for Malawi
(October 2004-March 2005)

"What is the meaning of this forecast for the agricultural sector? How can one use this seasonal Forecast?

These are some of the questions most people related with food and agriculture may ask. Meteorologists and other professionals dealing with climate can understand this product; but most of the agricultural users have problems to make the right interpretation of seasonal forecasts. For this reason, the Agrometeorological component of the Department of Meteorological Services has produced a special bulletin to give an agricultural interpretation and use of the 2004/05 seasonal forecast.

OCTOBER TO DECEMBER(OND) 2004 FORECAST

Based on the seasonal forecast issued by the Department of Meteorological Services on Wednesday 22 September 2004 the period October to December 2004 may turn out to be quite challenging for the agricultural sector in Malawi. Analysis of one of the local predictors for the start of the main rains indicate that inland surface heating over the country, which normally precedes the onset of the main rains, has not been favourable for early start. It has been established that persistent positive heating degree days in July, August and September in most cases result in early onset of main rains while mixed heating degree days yield mixed start. The heating degree days in 2004 have so far been mixed. Additionally, an analysis of historical onset dates for main rains showed late start of main rains in most parts of Malawi particularly in recent years. Therefore, the most likely rainfall scenario is for slow and erratic onset of the main rains with long breaks during October to December 2004. This development could lead to generally below normal rainfall cumulatively. The agricultural implication is that poor germination and crop establishment could be experienced in some parts of Malawi.

JANUARY TO MARCH 2005 (JFM) FORECAST

In the second half of the season (January to March 2005), chances of receiving poor and erratic rainfall decrease significantly as there are strong indications that the weather systems that bring most rains to Malawi could become established and remain active. Therefore, there is a high chance of receiving good rainfall to support agricultural production in most areas of Malawi. January to March season is very important for agricultural production. It is during this period that most crops reach the key stages of crop growth. Any moisture stress at this stage has significant negative impacts on the final crop yields. On the other hand, Tropical cyclones in the Indian Ocean are expected to be active. Therefore, occurrences of high rainfall intensities,floods and dry spells are expected.

RECOMMENDATIONS:

Planning for agricultural production should ideally start with a seasonal forecast that gives an indication of what climatic conditions are likely to happen during the coming season. The forecast provides information that can help the farmer to make informed decisions and reduce food insecurity at household and national levels.

The following recommendations are mainly addressed to the District Agricultural Development Officers (DADOs) and Agricultural Extension Coordinators (AEDCs) in all the Agricultural Development Divisions (ADDs) in Malawi because they are in a better position to transmit the messages to farmers. This information is also useful for many other users in the agricultural sector (NGO's, UN organizations, International cooperation agencies, etc.).

In view of impending erratic and slow onset of the main rains with long breaks during October to December 2004 season, District Agricultural Development Officers and Agricultural Extension Coordinators should advise farmers to:

- Consider multiple cropping in order to increase food production potential
- Consider crop diversification
- Implement on-farm soil-water conservation techniques
- Plant a high proportion of early maturing and drought tolerant crop varieties
- Use in-field water harvesting
- Consider staggering planting dates as a way of spreading climatic risks
- Where possible use supplementary irrigation
- Reduce density of field crops

While during January to March 2005 season, District Agricultural Development Officers and Agricultural Extension Coordinators should encourage farmers to:

- Improve field drainage to avoid soil water loggings
- Watch out for incidence of pests and diseases for crops and livestock
- Improve post-harvest management and storage to minimize losses