The Weekly

Information Resource Bulletin

Focus: Cassava

Climate change scenarios of warmer and drier conditions may significantly reduce yields of crops in southern Africa.

An International Food Policy Research Institute study says climate change, with rising temperatures and increasingly erratic rainfall patterns across much of the sub-Saharan region, will likely cause a decline in average maize and sorghum yields.

Malawi is one of the countries hardest hit by climate change and a rapidly expanding population is likely to add to future problems. Agriculture is the primary source of employment and income for most of the rural population of the country.

Extreme weather events like droughts, floods and changes in the frequency and intensity of dry spells is already negatively affecting agriculture in most parts of the country.

Sustainable agriculture under a warmer and drier climate requires proper choice of plants – such as cassava – which is drought tolerant.

The goals of the Weekly Bulletin are:

- To emphasize the link between climate change and food shortages
- To promote discussion and dialogue between listeners and other community members about the adaptive strategies that farmers can use in response to climate change effects (growing cassava)
- To learn from other farmers about the advantages of growing cassava

---

The Problem: Not Enough Knowledge on Cassava as a Crop That Could Help in Relieving Food Shortages

More than 95% of Malawian agriculture is rain-fed and nearly all smallholder farmers rely on rain-fed agriculture, as such anything that affects agriculture has far reaching effects on smallholder farmers. For example; droughts and floods can lead to hunger.

Cassava which is already widely grown elsewhere in Africa is a crop that is highly drought-tolerant.

Cassava is a staple food crop for almost 30-40% of the population in Malawi and ranks second as the most important food crop and third as a cash crop. It is mainly produced by smallholder farmers and a few large-scale farmers. (IITA/SARRNET, 2007)

Andy Jarvis of the Colombia-based non-profit International Center for Tropical Agriculture says cassava could be the answer to climate change adaptation in Africa, because cassava is often the food crop that continues to provide food in periods of the year when other food sources are not available.

He adds that cassava has the ability to use water and soil nutrients efficiently, and tolerates droughts and sporadic pest attacks.

Cassava can produce reasonable yields in areas with poor soils and unpredictable rainfall; therefore it is important for Malawians to consider planting more cassava to help reduce food shortages in the country.

Activities for Journalists

Use your radio station to help your community understand that cassava is one of the crops that could potentially guarantee food security in Malawi, regardless of the weather.

By reducing food shortages, cassava can also help farmers increase their income.

Help your listeners understand the following points about cassava:

Scientists from the Colombia-based International Centre for Tropical Agriculture (CIAT) and the CGIAR's Climate Change Agriculture and Food Security Research Programme (CCAFS), established that by 2030, temperature rises of between one and two degrees Celsius combined with changes in rainfall, will leave cassava in a class of its own, outperforming other crops overall. Cassava thrives in high temperatures, and if drought hits- the plant system simply shuts down until the rains come again.

No specific production skills are required to grow cassava, which tolerates drought, acidity and low soil fertility (Asher et al. 1980). As such, the crop often becomes an important source of food.

In terms of human consumption the cassava tuber is utilized in many food preparations where it provides most of the calories in a meal (IITA, 1990). Sweet cassava tubers are usually eaten raw after removing the skin and rind or cooked for breakfast and sometimes used as *gado* (small pieces fried in oil).

Bitter tubers are processed into *kondowole* (cassava flour) using traditional methods of soaking and drying to remove cyanogenic compounds (chemical compounds contained in cassava that release hydrogen cyanide when chewed or digested; they are poisonous to human beings). Cassava flour is also used in many bakery products especially bread (IITA, 1990).

The cassava leaves are used as a vegetable called *chigwada*, which provides significant proportion of protein and other nutrients.

Have an interview with farmers who cultivate cassava in your area and find out the importance of cassava over other crops and how it tolerates unfavorable weather conditions. Also ask them how the cultivation of cassava is helping them economically.

Ask them why they grow cassava.

Interview an agricultural expert from your area; ask him/her about the cultivation of cassava in responding to climate change effects.

Interview someone about the many different recipes for cassava. Have a cooking show describing the many uses of cassava.

Useful Contacts

- PRB- Contact person; Sandra Mapemba: +265-99-921-9789
- Land O Lakes Malawi-Contact person Jeff Chisale-Communication specialist; +265 (0) 1 753 341
- Malawi Demographic Health survey 2010
- http://www.fao.org/ag/AGP/agpc/gcds/index_en.html