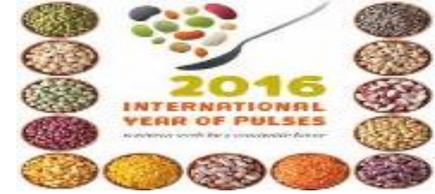




Food and Agriculture
Organization of the
United Nations



Issues of food security in South Africa and FAO's role in eradication of food insecurity and malnutrition

Pulses and Food Security Discussion Forum
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What is Food Security?

- “Food security exists when all people, at all times, have physical and economic access to sufficient, safe and nutritious food that meets their dietary needs and food preferences for an active and healthy life”. (World Food Summit, 1996)
- The definition reinforces the multidimensional nature of food security and includes:
 - accessibility,
 - availability,
 - utilization
 - stability.

Global Challenges

- World Population is expected to reach 9.1 bln by 2050
- Around 70 percent of the world population will live in cities or urban areas by 2050
- Food production must increase by 70 percent to meet the projected demand
- At least 1.3 tonnes Food Waste / Loss is reported whilst we try to achieve the food security goal (Current & Future generation)
- Climate change threatens to derail efforts to eradicate extreme poverty and hunger, which the international community has committed to doing by 2030 under Sustainable Development Goal 2
- Natural Resources are being degraded
- Unemployment continues to be an issues (particularly in youth)
- Food insecurity is a major issue for many people and households in poor and developing countries—it is estimated that 795 million people are undernourished.

Issues of Food Security in RSA

- South Africa is one of the developing countries monitored by FAO which have achieved the Millennium Development Goal target of halving the prevalence of undernourishment by 2015 – (new SDGs)
- It has been currently experiencing the worst drought in decades, exacerbated by an El Niño weather phenomenon that has caused successive harvest failures and widespread livestock deaths.
- A paradigm shift towards agriculture and food systems that are more resilient, more productive, and more sustainable is required for the country to continue with its good works towards achieving food security for all.

FAO's role in FNS

- FAO has identified five Strategic Objectives to sharpen its focus on fighting hunger and to create more sustainable food systems.
- This puts FAO in a strong position to support particularly countries that are taking the lead in implementing the Sustainable Development Goals. Through its international expertise FAO is also well positioned to assist broad regional and international partnerships required to achieve zero hunger by 2030.
- **FAO's Strategic Objectives are:**
 - 1. Help eliminate hunger and malnutrition
 - 2. Make agriculture, forestry and fisheries more productive and sustainable
 - 3. Reduce rural poverty
 - 4. Enable inclusive and efficient agricultural and food systems
 - 5. Increase the resilience of livelihoods to disasters

FAO's Role in FNS cont..

- At least 14 out of the 17 are related to FAO's work.
- Regional Initiative 1 – End Hunger by 2025
- FAO Supports Malabo Declaration – Comprehensive African Agriculture Development Programme (CAADP):
 - Pillar 1: Extending the area under sustainable land management and reliable water control systems;
 - Pillar 2: Improving rural infrastructure and trade-related capacities for market access;
 - Pillar 3: Increasing food supply, reducing hunger, and improving responses to food emergency crises; and
 - Pillar 4: Improving agriculture research, technology dissemination and adoption.
- All these are aimed at a world without hunger

Then why the pulses??

- 68th UN General Assembly formally declared 2016 as the IYP
- The Food and Agriculture Organization of the United Nations (FAO) has been nominated to facilitate the implementation of the Year in collaboration with Governments, relevant organizations, non-governmental organizations and all other relevant stakeholders.
- The IYP 2016 aims to heighten public awareness of the nutritional benefits of pulses as part of sustainable food production aimed towards food security and nutrition.
- The Year will create a unique opportunity to encourage connections throughout the food chain that would better utilize pulse-based proteins, further global production of pulses, better utilize crop rotations and address the challenges in the trade of pulses.

Contribution of pulses to food security

- **A valuable source of protein**
 - Pulses are an inexpensive source of protein—a crucial component of any healthy diet, but especially in poorer areas where meat, dairy and fish are economically inaccessible.
- **Shelf-stable with a low food wastage footprint**
 - If properly stored, pulses remain edible for several years, making them a smart option for households without refrigeration.
- **Cultivation in marginal areas**
 - There are many drought-resistant pulses, such as pigeon peas, bambara beans and lentils. These pulses can be cultivated in arid climates that have limited, and often erratic, rainfall of 300-450 mm/year.

Health benefits of pulses



- Diet is an important contributor to health, and to disease.
- Most countries face nutritional problems, from undernutrition and micronutrient deficiencies to obesity and diet-related diseases (such as type II diabetes and certain types of cancer), or a mix of these.
- Pulses are a nutrient-rich food that as part of a healthy diet can help fight malnutrition in both developed and developing countries.

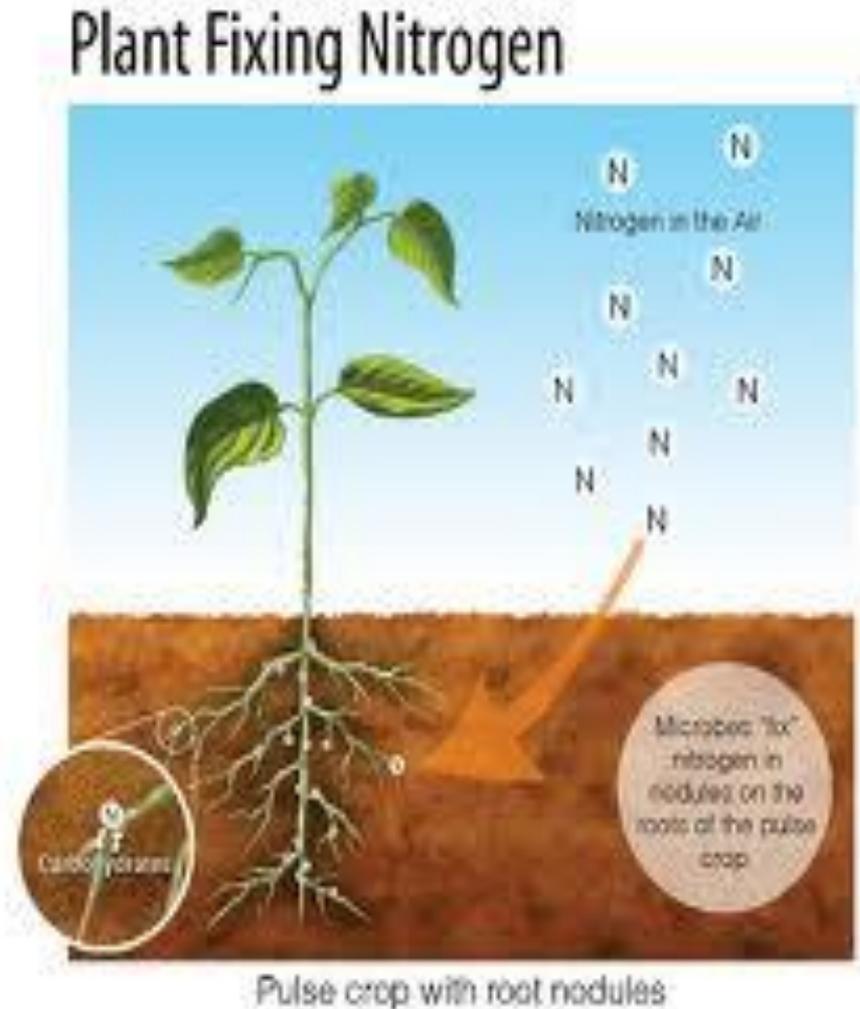


Health benefits of pulses

- **Packed with healthy nutrients**
 - Incredibly rich in their nutritional value, pulses are small but densely packed with protein – double that found in wheat and three times that of rice.
- **A tonic for the body**
 - While pulses are low in calories (260-360 kcal/100 g dried pulses), they are high in complex carbohydrates and fibre, which means they are slowly digested and give a feeling of satiety.
- **A perfect pairing**
 - The protein of pulses is high in lysine and low in sulfur-containing amino acids. Grains' protein is low in lysine but high in sulfur-containing amino acids. Combining them provides a higher protein quality—a complete protein. This means that the body needs less protein to fulfil its protein needs

Benefits for animals and for the environment

- Pulses don't just benefit human health – they also improve animal and soil health and support biodiversity.
- Crop residues from pulses can be used as animal fodder to increase nitrogen concentration in the diet, which improves animal health and growth.
- nitrogen-fixing properties of pulses can improve soil fertility, which extends the productivity of farmland, and eliminates dependency on synthetic fertilizers.
- The latter leads to a smaller carbon footprint and indirectly reduces greenhouse gas emissions.



Benefits for animals and for the environment



- pulses promote below-the-surface biodiversity, too, as they create a rich home for germs, bugs and bacteria of various kinds.
- Because pulses as a group are very genetically diverse, they also hold a great potential for climate adaptation, as they enable farmers to select new varieties to adjust their production to changing climate conditions.
- Finally, using pulses as cover crops and in intercropping systems – planting them in between other crops or as part of crop rotations -- can reduce soil erosion and help control pests and diseases.

Conclusion

- The Food and Agriculture Organization of the United Nations (FAO) with its expertise and resources is well-positioned to support countries in achieving the Sustainable Development Goals to realize a world without hunger.
- However, to realize all this is heavily reliant on strong partnership with other stakeholders.

THANK YOU! 😊