

International Year of Pulses 2016

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COLUMN ARTICLE

Malnutrition is one of the major problems in many parts of the world is mainly due to protein deficiency in the diet. Pulses (grain legumes) are the major and cheaper source of protein as compared to animal protein. *Grain legumes crops cultivated especially for their mature seeds for human consumption are called pulses.* Legumes crops which are cultivated only to feed livestock are called forage legumes. Both grain and forage legume crops belong to the family *leguminosae*. Pulses are a vital source of plant-based proteins for people and animals. Pulses have significantly higher proteins than cereal and other field crops. Pulses also rich in micronutrients, amino acids and vitamin-B. Pulses (proteins) can improve the diets in poorer parts of the world, where animal proteins is more expensive than that of pulses proteins. Pulses have the ability to fix nitrogen (N) thereby increasing soil fertility and have a positive impact on the environment as compared to the use of N-fertilizers (urea, ammonium sulphate, calcium ammonium nitrate etc.) which have negative impact on our environment (soil, water and air). However, the low yields and overall production of many pulse crops in many parts of the world is attributed to major constraints which includes: (1) strong competition from cereals (wheat, maize and rice), cash and industrial crops (cotton, sugarcane, tobacco, oilseed crops etc.) which gave better economic returns, (2) lack of modern pulses production technologies designed to maximize resource use and so ineffective crop management practices, (3) shortage of

experienced personnel and lack of effective research and extension programmes and (4) lack of high yielding pulses varieties and the poor state of seed multiplication, certification and distribution systems etc. The production of pulses which are high yielding, disease resistant and environmentally adaptable can overcome the malnutrition problem in the world.

Keeping in view the importance of pulses, the 68th session of the United Nations General Assembly on December 21st 2013 in New York declared the 2016 the International Year of Pulses (IYP-2016). The aim of IYP 2016 is to heighten public awareness of the nutritional benefits of pulse crops (having higher proteins than other crops) as part of sustainable food production aimed towards food security and nutrition with following objectives:

1. To raise awareness about the important role of pulses in sustainable food production and healthy diets and their contribution to food security and nutrition
2. To promote the value and utilization of pulses throughout the food system, their benefits for soil fertility and climate change and for combating malnutrition, and
3. To encourage connections throughout the food chain to further global production of pulses, foster enhanced research, better utilize crop rotations and address the challenges in the trade of pulses.

The FAO believe that that IYP-2016 will promote broad discussion and cooperation at the national, regional and

global levels to increase awareness and understanding of the challenges faced by pulse farmers. The improvement in the yield of pulses can play an important role in addressing hunger, food security, malnutrition, environmental challenges and human health all over the world. Pulses (grain legumes), because of their several unique features, including biological nitrogen fixation ability, as a rich source of vegetable proteins, adaptability to stress conditions, flexibility to varying cropping patterns and multipurpose use, such as food, feed and fuel, constitute pulse crops an extremely important group of crops for increased and sustained food production.

In Pakistan the importance of pulses (grain legumes) in the daily diet from pre-historic times as DAL-ROTI is the well-known phrase which signifies the fact that pulses in combination with cereals constitute the subsistence food of the common people of Pakistan. The important pulses of Khyber Pakhtunkhwa (Pakistan) are chickpea (*Cicer arietinum* L.), lentil (*Lens culinaris Medic*) and peas (*Pisum sativum* L.) are grown in winter; while the major pulses grown in summer includes mung bean (*Vigna radiata* L., Wilczek), black bean/mash (*Vigna mungo* L., Hepper), common bean/kidney bean (*Phaseolus vulgaris* L.), cowpea (*Vigna unguiculata* L., Walp) and pigeon pea (*Cajanus cajan* L., Millsp) etc.

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