

## Importance of Pulses for Nutritious Food and Sustainable Agriculture

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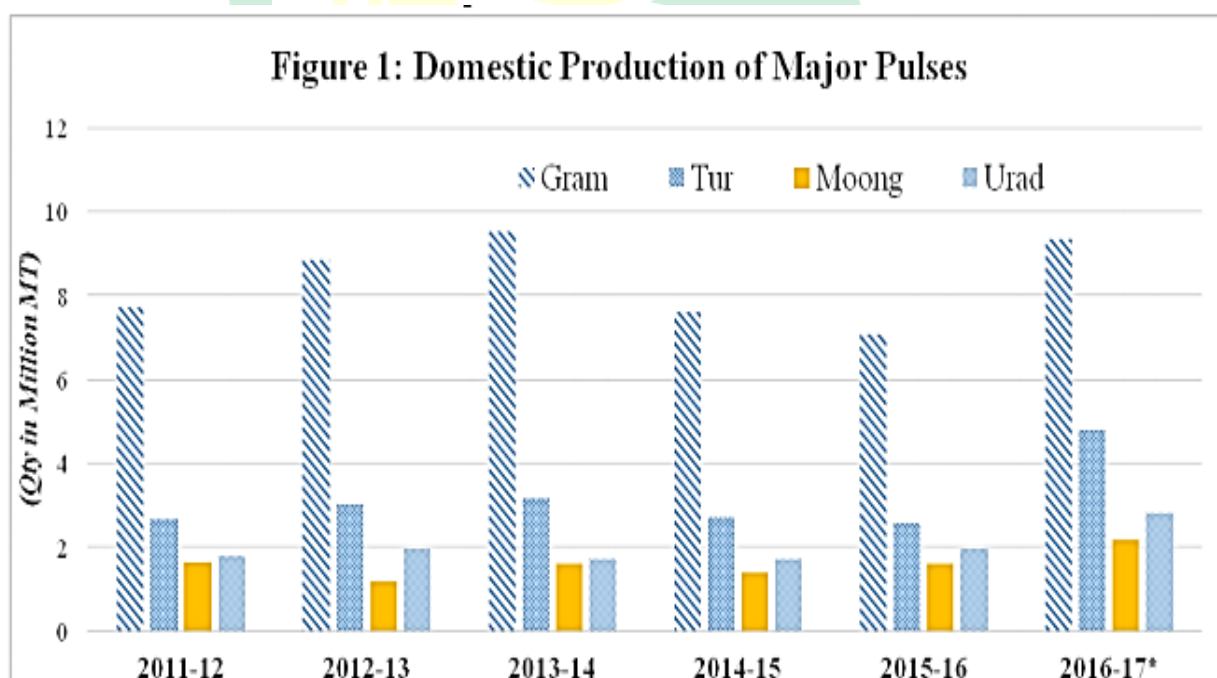
### Introduction

Pulses have been an essential part of the human diet for centuries. Their nutritional value is not recognized and their consumption is frequently under-appreciated. Pulses have been traditionally recognized as indispensable constituents of Indian diet. Pulses are an important source of proteins and micronutrients such as amino acids, zinc and iron. They provide the ideally supplement the cereal rich diet of predominantly vegetarian masses by virtue of their rich content of protein and essential amino acids. On an average, pulses contain 20-30 percent protein on dry seed basis, which is almost 2.5-3.0 times of the value normally found in cereals. Besides being rich source of protein, they sustain the productivity of cropping system because of their ability to use atmospheric nitrogen through biological nitrogen fixation, which is economically sounder and also environmentally acceptable. The broad genetic diversity of pulses allows for the selection of climate-resilient varieties, and their nitrogen-fixing ability improves soil quality and produces a low carbon footprint. The amino acid composition of protein in a blend diet of cereals and pulses, which match with the amino acid compositions milk protein.

Since pulses are cheaper than meat (The source of animal protein), they are often referred to as poor man's meat in developing country like India. Pulses contain no cholesterol, have a low glycaemic index and have low fat content hence they can contribute to fighting non-communicable diseases. Pulses vary in their protein content. The protein content and quality of the protein available in different pulses is. Dietary protein provides amino acids for the synthesis of body protein and other biologically important compound in the body. Since the concrete effort should be made to enhance the production and productivity of pulses, which will in turn ensure more availability of per capita of pulses. The decreasing per capita availability of pulses from 60.7 g in 951 to 35.9 g in 2000 as against the FAO/WHO

recommendation of 80 g capita per day is of great concern in the Indian context where majority of the people are vegetarian or semi-vegetarian. Even achieving self-sufficiency in the food production, protein calorie malnutrition still remains a major problem among young Indian children. The increased supply of protein from cheap sources like pulses will ensure the nutritional security for the poor farming community and other masses of our society.

Pulses occupy 68.32 million hectares area and contribute 57.51 million tonnes to the world's basket. India shares 35.2 percent area and 27.65 percent of the global production. Percent contribution of pulses in total food grain production in India has declined during the last three decades, whereas it has increased for rice and wheat. It was unanimously accepted in the symposium on pulses organized by the Indian Society of Pulses Research and Development that the massive efforts is required in the field as per capita availability has declined and the country would need at least 23 million tons by 2005 A.D. and 18 million tons by 2025 A.D. Out of 146 legume species available worldwide, about 80 species are consumed by human beings and only 14 of them are of major economic importance. Among the different pulses crop grown in india ciz., Chickpea, Pigeonpea, Urdbean, Mungbean, Soyabean, Rajmash, Lentil, Pea, Cowpea, Lathyrus, horsebean, etc.



**Production of Gram (chickpeas) is the highest among all pulses produced in the country.**

## Production of Pulses in India

(Unit: Thousand Tonnes)

Production of Pulses during 2014-15 to 2016-17						
Pulses/Year	2014-15	% Share in Total production	2015-16	% Share in Total production	2016-17*	% Share in Total production
<b>Tur</b>	2810.00	16.38	2560.00	15.65	4780.00	20.82
<b>Gram</b>	7330.00	42.74	7060.00	43.18	9330.00	40.65
<b>Moong</b>	1500.00	8.74	1590.00	9.72	2160.00	9.41
<b>Urad</b>	1960.00	11.42	1950.00	11.92	2800.00	12.20
<b>Other pulses</b>	3550.00	26.69	3190.00	19.52	3880.00	16.90
<b>Total pulses</b>	17150.00		16350.00		22950.00	

**Source:** Directorate of Economics and Statistics (DES)\*: Based on 04th Advance Estimates for 2016-17.

### Conclusion

Pulses are a cornerstone of nutritious food and sustainable agriculture. Their nutritional value, environmental benefits, and contribution to food security underscore their importance in addressing global challenges related to nutrition, climate change, and agricultural sustainability. Emphasizing the significance of pulses in both diet and farming practices is essential to promoting healthier societies and a more sustainable planet.

### References

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