Fascinating insights into the world of pulses

Pulses are edible dry seeds of plants belonging to Leguminosae family. Generally known as "dals" in India, they are consumed in the form of whole seed, split grain, and flour. Bengal gram (chana dal), Pigeon pea (toor dal), Moong, Masoor, Rajma and Urad are among the common pulses in India.

Pulses provide protein, dietary fiber, many vitamins and minerals and help managing malnutrition.

Recognizing the global importance of pulses in human diet, the United Nations (UN) observes 10 February as World Pulses Day.

India is the world's largest producer and consumer of various pulses. They form an integral part of Indian daily diet.

India's annual consumption of pulses is estimated to be around 30 mn tons.

In the past 5 years, our domestic production has increased leading to significant reduction in imports. India is set to become self-sufficient in pulses.

India - Increasing Production and Decreasing Import of pulses

Year	Production (mn tons)	Import ($ mn)
2017-18	25.42	2,908
2018-19	22.08	1,141
2019-20	23.03	1,440
2020-21	25.46	1,612
2021-22	27.69	2,088
Growth Rate	**9%**	**-28%**

Source: Ministry of Agriculture and Farmers Welfare Database and APEDA (Accessed on 8th February 2023)

Adoption of high yielding and climate resilient varieties, agronomic practices including application of fertilizers and agrochemicals have all contributed to increasing domestic production and decreasing the import.

Pulses are among the most sustainable crops in the world. Pulses require less water to grow and most ideal for rain fed regions.

Pulses can play a key role in future health and sustainable diet- WHO

Pulses are much more than diets. The root nodules in the pulses plants absorb inert nitrogen from soil air and convert it into biologically useful ammonia- a process called nitrogen fixation. According to FAO, about 90 million hectares of land under pulses cultivation around the world store as much as 3-6 million tons of nitrogen in soils every year.

Pulses play a crucial role in addressing food insecurity and achieving healthy and balanced diets for all.

Pulses have a higher cost-benefit ratio than other staples, which help diversify and improve the income of rural people, often women and youth, located in vulnerable regions.

Pulses have a long shelf life. Shifting consumption patterns to more pulses could, therefore, contribute to reducing food waste.

Pulses: Natural superfood.

– UN Food and Agriculture Organization (FAO)

The atmospheric buildup of greenhouse gases (including CO_2) is a serious environmental issue. Pulses offer ecofriendly protein to people and an affordable alternative to meat. Pulses are a low carbon footprint food. Consider this: Each kilogram of meat emits as much as 100 kgs of CO_2 equivalence during production, whereas pulses emit less than 1 kg of CO_2 equivalence for every kilo produced.

Therefore, cultivation and consumption of pulses help curbing greenhouse gas emissions.

Pulses. Above all else

Key References:

1 https://ourworldindata.org/environmental-impacts-of-food

2 https://www.orfonline.org/expert-speak/pulses-for-food-security-and-sustainable-future/#:~:text=According%20to%20the%20UN%20Food,Development%20Goals%20(SDGs)%20of%20the

3 https://apps.who.int/iris/rest/bitstreams/1170558/retrieve

4 https://www.sciencedaily.com/releases/2016/01/160106125159.htm

5 https://www.fao.org/newsroom/detail/Pulses-are-key-to-food-security-healthy-diets-and-sustainable-agri-food-systems-says-FAO/en

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