

## Gram, a Major Pulse Crop in Pakistan

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Gram is a major Rabi pulse crop in Pakistan. It is grown in areas after rain and floods. It is a short duration crop and can be grown between September and November. The best time for sowing is the second week of October.

Being a leguminous crop it is well suited under dry tracks. It requires winter climate weather condition and is allergic to frost. In normal condition the gram matures within four months or a little later. After reaching maturity stage the gram plant cannot stand heavy rains or hail storm.

The crop demand rainy condition but it can be grown in less irrigated areas also. The crop is heat resistant and flourishes under good moisture condition. It can bear drought condition due to long taproot which allows using water from great depths than other pulse. It tolerates acidity but is sensitive to salinity and alkalinity. It has the ability to stick to 60-80 percent of its nitrogen requirement and excessive nitrogen fertilizer may delay maturity. In normal condition the gram matures within four months or a little later.

In Pakistan there are two kinds of gram crop namely desi and Kabuli. A good gram crop in case of desi (black varieties) gives an output of 15 to 20 quintals yield per hectare and in case of Kabuli varieties gives about 25 to 30 quintals yield per hectare.

Chickpea (gram) can be grown as one crop or combine with barely, linseed, mustard, peas, corn, coffee, safflower, potato, sweet potato, wheat or sorghum etc. In sequence it always follows rice, wheat and barely.

Chickpea (gram) crop is mostly grown in Punjab followed by Sindh and NWFP. Punjab contributes about 80 percent toward total production but the yield is highest in Sindh.

Amongst the major pulse crop gram crop exhibited a phenomenal growth of 75.4 percent in 2006-07 due to the increased intervention price of the crop and good rain in Thal area where the gram crop is mainly concentrated. In 2007-08 the gram production is anticipated to be 823,000 tonnes, a decline by 2 percent over last year. The consumption of gram is said to be hovering around 550,000 to 600,000 tonnes annually. Gram domestic price was around Rs39, 000 per tonne and international price about Rs55, 000 per tonne. This price remained an all time high.

Government gram target province wise for the financial year 2008-09 for Punjab is 653,000 tonnes, Sindh is 48,220 tonnes, NWFP is 20,490 tonnes and for Balochistan is 29,800 tonnes. It is estimated that gram production in this year is likely to fall by over 20 percent.

### Gram production and yield Kgs / hectare is given below :

Year	Production (000 tonnes)	Yield Kgs / hectare
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2002-03	675	963
2003-04	611	982
2004-05	868	1094
2005-06	480	1029
2006-07	838	1052
2007-08	823	1046

In Pakistan and India the gram is locally named as Chickpea chana. This is one of the major leguminous crop in the world. In 2006-07 its global production was 8.65 million tonnes. India's share to the total world chana production was 66 percent while Pakistan share was 4.7 percent

India with its huge production of 5.70 million tonnes was ranked first in the global production while Pakistan with a production of 0.4 million tonnes was positioned as third. India is not only the leading producer but also the consumer and importer. The major exporting countries were Turkey, Australia and Mexico. Their contribution was 75 percent of the total export of chickpeas. The share in the world of Desi and Kabuli chana was 6.65 million tonnes and 2.00 million tonnes respectively.

#### **Top Ten (Chickpea )Chana Producing Countries**

Sl No	Countries	Million Tonnes
1.	India	5.70
2.	Turkey	0.61
3.	Pakistan	0.40
4.	Australia	0.30
5.	Iran	0.28
6.	Mexico	0.24
7.	Myanmar	0.23
8.	Canada	0.16
9.	Ethopian	0.14
10.	Iraq	0.10
World Total		8.65

The gram has considerable constrains in its growth process It is most of the time affected by destructive diseases causing heavy losses to the poor farmers. The destructive disease is the fungi, bacteria, viruses

and nematodes. Blight disease is most destructive disease. These diseases attracted the attention of the government late after the production was cut down to a drastic level and it had to import a bulk quantity from abroad and incur a large amount of foreign exchange.

In order to have proper cultivation of gram crop the farmers should avoid growing in diseased areas for 3 to 4 years. The incidence of disease can be minimized by improving the soil condition with good drainage system. The farmers should be encouraged to use good quality seed free from any sort of disease. It should be noted that deep sowing reduces the disease. The disease plant must be uprooted from the farm and burnt far away from the farm. Mixed cropping of gram with wheat, barely, mustard, safflower and millet will help to counter disease.

Farmers engaged in the production of grams are very shy to approach for loans from ZTBL and other commercial banks. They usually depend for their loans and seeds from village dealers. In case of excess production they do not have the storage facilities to store the surplus and they have to sell at a low price to their own village dealers. To sort out their problem the government should provide them good quality pest resistant seeds, encourage them to have easy loans from ZTBL and establish ware houses and storage facilities with the cooperation of private bodies to the farmers.

Chickpea (gram) is a good source of protein. It contains 22 percent protein, 63 percent carbohydrates, 46 percent starch, 5 percent fat, 7 percent crude fiber, 6 percent soluble sugar and 3 percent ash. It does not contain any specific anti - nutritional factors. Due to high contents cheap protein it is highly consumed by the poorer section of people.

The normal use of Chickpea (gram) maintains a good digestion and control cholesterol level in the human body. It is used as medicine for treatment of snake bite, sunstroke, bronchitis, leprosy, skin diseases, blood disorder and biliousness etc. Its seed is used as appetizer and enriches blood and cure skin diseases and inflammation of the ear. It leaves are used for cold, cough and pains.

The whole dried seeds of gram are eaten, cooked or boiled in the form of dal which is prepared by splitting the seeds in a mill and separating the hush. Flour or besan is prepared by grinding the seeds and is one of the main source ingredients of many form of confectionary.

It's a major source of livelihood for the majority of farmers. A majority of 70 percent of the farmers used their own gram seeds while 25 percent purchase seeds from their dealers. Gram the top most user crop of the poor man's diet in Pakistan has been deliberately ignored by the sitting bureaucrats and governments. Millions of valuable foreign exchange often wasted in importing from foreign countries. By little efforts, resources and attention the gram crop production can be boosted and the worst food situation prevailing in the country can easily be saved.