



# BRIEFING

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## Chickpeas (Garbanzo Beans)

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### Background

Chickpeas, *Cicer arietinum*, are an annual grain legume or pulse crop. Chickpeas were first grown over 8,000 years ago (between 7,000-6,000 BC) in the Fertile Crescent between the Tigris and Euphrates Rivers, a region that now encompasses portions of Jordan, Turkey, Iraq, Iran, Israel, Lebanon, and Syria. The term “pulse” originates from the Latin word *puls*, meaning thick soup. Chickpeas are legumes that convert nitrogen from the atmosphere into nitrogen nodules on the plant roots.

Two types of chickpeas are raised: Kabuli and Desi. Kabuli chickpeas are usually grown in temperate regions of the world. They have large seeds that contain a thin seed coat and are graded into 58 or fewer

seeds per ounce. Kabuli chickpeas are often referred to as “Garbanzo beans” and have a white to cream-colored seed coat.

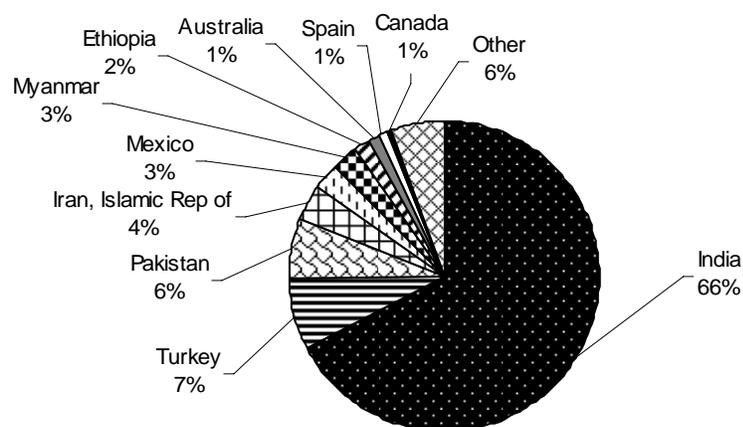
Desi chickpeas are usually grown in more semi-arid tropic regions of the world. They have smaller seeds than Kabuli chickpeas, and are graded around 100 or more seeds per ounce. Desi seeds have a thick, irregular-shaped seed coat with color ranging from light tan to black.

There is often little distinction between chickpeas and Garbanzo beans in the United States and Montana, although the technical definition classifies Kabulis as Garbanzo beans. Kabuli are often described as big chickpeas and Desi as small chickpeas.

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**Figure 1: Percent of World Chickpea Production by Country: 2004**



**Table 1: World Chickpea Production, Historical**

Year	Production in Metric Tons
1993	6,784
1994	7,111
1995	9,738
1996	8,088
1997	8,317
1998	8,871
1999	9,416
2000	7,947
2001	6,911
2002	8,305
2003	7,139
2004	8,583

**Table 2: United States Chickpea Production, Acreage and Production**

Year	Acreage		Production		
	Planted (000)	Harvested (000)	Yield (lbs)/acre	Total (000) cwt.	Metric Tons
1993	27.3	25.7	1,171	301	13,653
1994	21.9	21.9	1,498	328	14,878
1995	30.6	28.6	1,654	473	21,455
1996	42.7	39.4	1,279	504	22,861
1997	24.3	24.0	1,633	392	17,781
1998	28.5	28.0	1493	418	67,722
1999	62.0	58.8	1323	778	59,739
2000	116.2	105.2	1,268	1,334	59,330
2001	148.7	128.5	1,254	1,612	73,120
2002	85.5	74.1	1,162	861	39,054
2003	43.5	41.4	1,007	417	18,915
2004	45.0	43.4	1,366	593	26,898

**Production**

*World*<sup>1</sup>: In 2004, global chickpea production was about 8.6 million metric tons, second only to dry beans among edible pulses. Chickpeas are produced in over 45 different countries. India typically produces nearly two thirds of total world chickpea output (Figure 1).

Annual world chickpea production fluctuated between approximately 6.7 million metric tons and 9.7 million metric tons between 1993 and 2004 (Table 1). In 1999, global chickpea production was 9.2 million metric tons but declined in subsequent years. In 2004, world chickpea production was about 8.6 million metric tons, approximately nine percent lower than in 1999.

*United States*: The United States accounted for less than one percent of world chickpea production in 2004. In the United States, the total area planted to chickpeas increased moderately in the early to mid 1990's and more substantially in 1999 and 2000 (Table 2). However, both the area planted to chickpeas and chickpea production fell substantially from about 148,700 acres planted in 2001 to only 82,100 acres planted in 2002, an approximate 45 percent decline. In 2003 and 2004, chickpeas declined even more to only 45,000 acres planted in 2004, a reduction of approximately 70 percent from 2001.

*Montana*: Montana is a relatively minor producer of chickpeas, accounting for about seven percent of total United States production in 2004. Chickpea production in

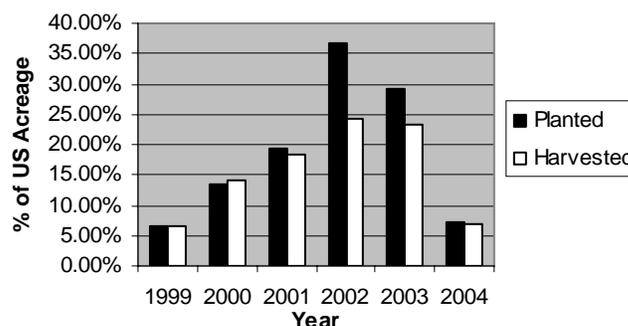
Montana reached a peak of 7,983 metric tons in 2000 and 2001, but declined over 81 percent to 1,497 metric tons in 2005. The area planted to chickpeas declined from 31,500 acres to 12,700 acres between 2002 and 2003, but plummeted to only 3,200 acres and 2,200 acres in 2004 and 2005 (Table 3). Producers have suggested that disease problems, limited marketing channels, and prolonged drought contributed to recent decreases in chickpea acreage and production in Montana.

<sup>1</sup> The data on world production of chickpeas was obtained from the FAOSTAT database of the Food and Agriculture Organization of the United Nations, which is compiled on a calendar year-basis. Marketing year and crop year information may yield somewhat different numerical results.

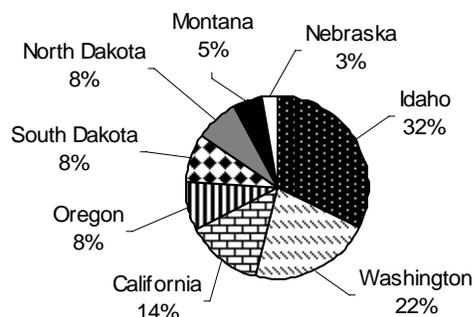
**Table 3: Montana Chickpea Production, Historical Production**

Year	Acreage		Production		
	Planted (000)	Harvested (000)	Yield (lbs.)/acre	Total (000) cwt.	Metric Tons
1999	4	3.80	22.10	84	3,810
2000	15.6	14.8	11.9	176	7,983
2001	28.8	23.5	7.5	176	7,983
2002	31.5	18	9.5	171	7,757
2003	12.7	9.6	7.6	73	3,311
2004	2.2	2.1	15.7	33	1,497

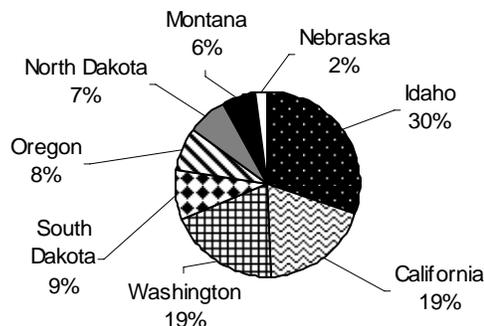
**Figure 2: Montana's Share of United States Total Chickpea Acreage**



**Figure 3: Percent of United States Chickpea Planted Acreage by State: 2004**



**Figure 4: Percent of United States Chickpea Production by State: 2004**



Montana’s share of total United States chickpea planted acreage was about 37 percent in 2002, but fell to approximately seven percent in 2004 (Figure 2). Montana grows both small and large chickpeas.

*Domestic Competition:* In addition to producer in other countries, Montana producers must compete with other states for the United States chickpea market. Chickpea acreage is spread among eight states. Idaho and Washington have the largest proportions of United States acreage at 32 percent and 22 percent, respectively (Figure 3). Chickpea yields per acre vary considerably across states. Idaho, Washington, and California produce 35 percent, 19 percent, and 19 percent of chickpea output in the United States, respectively (Figure 4). In 2004, Montana accounted for five percent of U.S. chickpea acreage and six percent of U.S.

chickpea production.

**Consumption**

Chickpeas are valued for their nutritive seeds that have protein content ranging from 25 to 29 percent. Additional nutritional attributes of chickpeas include 67 percent total carbohydrates, 47 percent starch, eight percent crude fiber, five percent fat, and over three percent ash. Chickpea seeds are eaten fresh as green vegetables, parched, fried, roasted, broiled, in snack foods and condiments, and their flour can be used as soup, dhal, and to make bread. Small amounts of chickpeas are also used for livestock feeds.

Kabuli chickpeas are marketed as canned Garbanzo beans for salads and also ground for baking flour. Desi chickpeas require a special seed coat removal process that leaves behind a small yellow seed resembling a pea,

and are used in numerous East Asian ethnic food products.

**Imports**

In recent years, about 10 percent of the world’s production of chickpeas has been traded internationally. Around 880,000 metric tons were traded internationally in the 2003 crop year.

In 2003, the top three importing countries for chickpeas were India, Pakistan, and Bangladesh (Table 4), collectively accounting for approximately 53 percent of world chickpea imports. India by itself had a 29 percent share of total world imports. The United States is a minor importer of chickpeas, with less than a two percent share of total world imports (Figure 5).

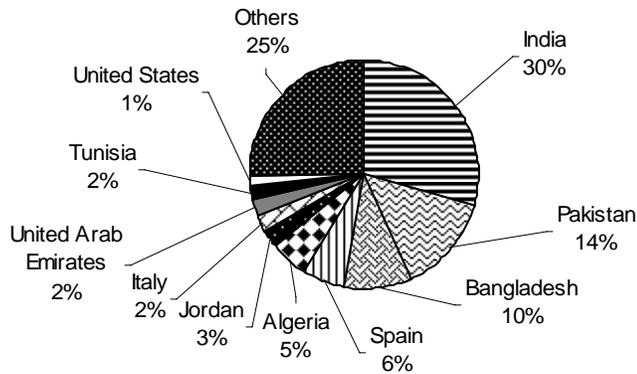
**Table 4: Major World Chickpea Importing Countries, 2003**

Country	World Rank	Metric Tons
India	1	259,239
Pakistan	2	123,261
Bangladesh	3	83,896
Spain	4	53,948
Algeria	5	45,934
Jordan	6	22,585
Italy	7	20,694
United Arab Emirates	8	19,781
Tunisia	9	18,869
United States	10	17,555
Others		216,670
World Total		882,432

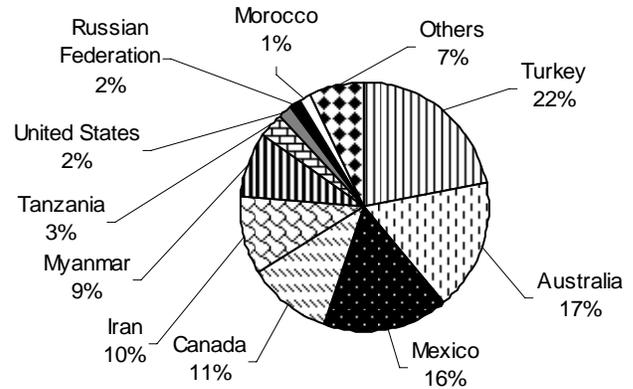
**Table 5: Major World Chickpea Exporting Countries, 2003**

Country	World Rank	Metric Tons
Turkey	1	189,600
Australia	2	144,074
Mexico	3	141,382
Canada	4	94,063
Iran	5	87,111
Myanmar	6	73,252
Tanzania	7	27,226
United States	8	14,872
Russian Federation	9	14,829
Morocco	10	12,281
Others		61,409
World Total		860,096

**Figure 5: Percent of World Chickpea Imports by Country: 2003**



**Figure 6: Percent of World Chickpea Exports by Country: 2003**



## Exports

The United States exported approximately 15,000 metric tons of chickpeas, accounting for about 75 percent of total United States production and two percent of world chickpea exports in the 2003 crop year (Table 5). Turkey, Australia, and Mexico accounted for about 55 percent of world chickpea exports in the same year (Figure 6).

## Summary

World production of chickpeas has averaged about eight million metric tons in recent years. About 10 percent of world production (approximately 880,000 metric tons) is traded internationally annually.

The United States accounts for less than one percent of world production, and about two percent of world exports. Chickpea imports into the United States are minimal. In recent years, Montana accounted for approximately seven percent of the total acres planted to chickpeas in the United States. In the 2003-2005 crop years, the acre

planted for chickpeas and chickpea production in Montana declined sharply, likely due to prolonged drought conditions, disease problems, and limited marketing channels.

## References

1. "Crop Profiles for Chickpea (Garbanzo bean) in Montana," USDA Crop Profiles, North Carolina State University NSF Center for Integrated Pest Management, August 1999, Internet Accessed 7/21/03: <http://pestdata.ncsu.edu/cropprofiles/docs/mtchickpea-garbanzobean.html>
2. "Dry Bean Production Press Release," National Agricultural Statistics Service of the USDA, Internet Accessed 7/21/03: <http://www.nass.usda.gov/mt/crops/forecast/decfor.htm>
3. McNew, Kevin and Bixler, Sam, "Chickpeas: Production, Uses, and Exports," Agricultural Marketing Policy Center, Briefing Number 19, November 2001
4. Miller, Perry et. Al, "Growing Chickpea in the northern Great Plains," Montana State University Extension Service MontGuide,
5. Muehlbauer, F.J. and Tullu, Abebe, "Cicer arietinum L." NewCROP FactSHEET, 1997, Purdue University Center for New Crops & Plant Products, Internet Accessed 7/21/03: <http://www.hort.purdue.edu/newcrop/cropfactsheets/Chickpea.html>
6. "Montana Garbanzo Beans Production Statistics-Historical Data," National Agricultural Statistics Service of the USDA, Internet Accessed 7/21/03: <http://www.nass.usda.gov/mt/crops/garbnayp.htm>
7. United States Garbanzo Beans Production Statistics-Historical Data," National Agricultural Statistics Service of the USDA, Internet Accessed 7/21/03: <http://www.nass.usda.gov:81/ipedb/report.htm>
8. "World Chick-Peas Production and Import/Export Data," FAOSTAT Database, Food and Agriculture Organization of the United Nations, Internet Accessed 7/21/03: <http://apps.fao.org/default.htm>

MT200204 AG 3/2002, March 2002, p. 1-2