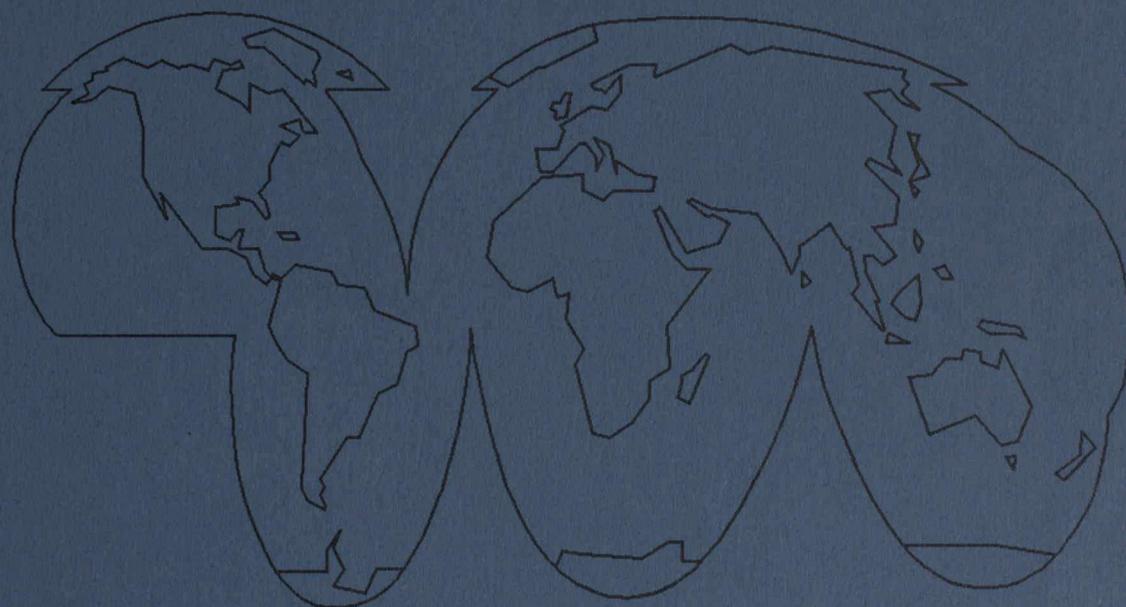


**THE
WORLD OF
PULSES**



**A CANADIAN
PERSPECTIVE**

Canada

External Affairs and
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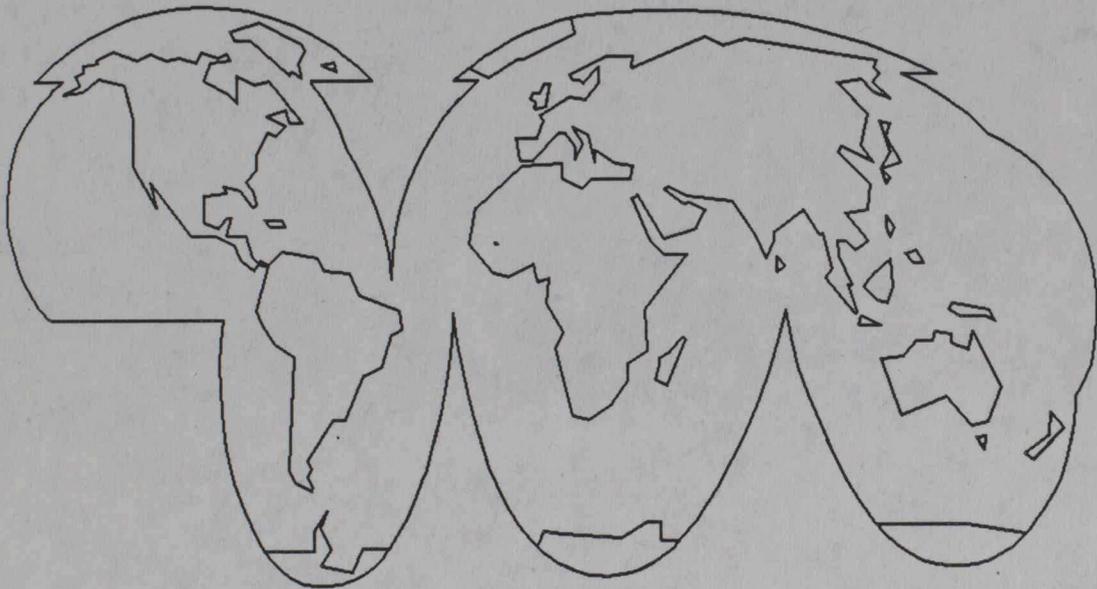
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**THE
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FOREWORD

The global marketplace is evolving in a direction that will be quite different from past experience. Various factors affecting global trade have begun to alter the previously accepted norms. An increased emphasis on the global picture has forced many industries to rethink their strategies dealing with world trade. As recent mergers have indicated, there has been an increased movement towards concentration across sectors. The advent of an "Information Society" has hastened the pace of international transactions. In addition, many of the cultural and language barriers that had previously inhibited trade, are being overcome by firms that realize how important international trade is to their viability. Generally, the international trading regime is increasingly one where political and sociological barriers are becoming more transparent. The global marketplace of the future will be one comprised of firms who firmly realize the benefits to be gained from international trade.

In order to compete in the global marketplace, Canadian firms must have access to a wide variety of information. Without the necessary information, Canadian firms will be at a disadvantage with respect to their competitors worldwide. The Department of External Affairs and International Trade is proud to introduce this publication, which is intended to provide information needed by the Canadian pulse industry, to allow them to effectively and accurately challenge world competitors. The publication will be structured in such a way as to allow for easy annual update of the statistics contained within. Combined with an ongoing dialogue between government and industry, this publication should provide the necessary information to allow the Canadian pulse industry to grow and prosper in the future. Only through a consolidated effort can many of the obstacles of international trade be overcome. The next decade will be a very rewarding one for the Canadian pulse industry.

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External Affairs and International Trade Canada has prepared "The World of Pulses" to provide the Canadian pulse industry with a basic guide to world pulse markets. It is designed to provide Canadian pulse exporters with current information that can be used to develop their export market strategies.

The undersigned gratefully acknowledges the contributions of all who have assisted in the production of this report. Special thanks are extended to: trade commissioners and commercial officers resident in the various Canadian embassies and consulates; Agriculture Canada officials, including Ron Wilson, Field Crop Section; Len Seguin, Grain Inspection Division; Dr. E. Small, Biosystematics Research Center; and Christiane Deslauriers, Seed Division. Thanks also to Florent Beaudette, Roy Legumex Inc.; Dr. A.E. Slinkard, Crop Development Center of the University of Saskatchewan; and finally Gary G. Smith of our Agri-Food Division who designed and coordinated its production.

The Department hopes this report will be of assistance to you in the preparation of your export strategies. As it is our intention to update it annually, we would welcome any comments and suggestions on ways to make it more useful.

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S. Elkady

Sam Elkady
Trade Commissioner
Agri-Food Division

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S. Rickard

Sam Rickard
Trade Commissioner
Pulses Division

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AFRICA/MIDDLE EAST

Egypt	Mali	Tanzania
Ethiopia	Morocco	Tunisia
Gabon	Nigeria	Zaire
Ghana	Saudi Arabia	Zambia
Guinea	South Africa	Zimbabwe
Iran	Syria	

ASIA/PACIFIC

Australia	Pakistan	Taiwan
China	Philippines	Thailand
New Zealand	Singapore	

EUROPE

Belgium	Greece	Portugal
Czechoslovakia	Italy	Spain
Finland	Norway	Yugoslavia
France		

LATIN AMERICA/CARIBBEAN

Barbados	Guyana	Trinidad and Tobago
Guatemala	Haiti	

INTRODUCTION

Perhaps one of the least recognized crops of Canadian origin are "pulses". When described by their common names, these crops are easily recognized (peas, beans, lentils, etc.), but, if the word "pulse" is used to describe the commodity, people generally have a very low response rate to the term. This fact has been borne out in various consumer studies, and can be verified by simply asking someone if they understand what "pulses" represent. Chances are that, if they have not had any direct exposure to "pulses", they will not know exactly what commodities the term represents. Therefore, a void exists in knowledge with respect to pulses, a void that will be partially filled by this publication.

A learned history professor once stated, "...you will never know where you are going, unless you know where you have come from." Adhering to this piece of wisdom would seem like the most logical step to better familiarize people about pulses. By beginning with the complete history of pulses, perhaps this publication will be able to better inform its readers with respect to an important crop to Canada. In addition to a brief history, this publication will attempt to address numerous other issues affecting pulses. Hopefully, anyone who reads this publication will be more informed about pulses, whether that be a small piece of information, or a wealth of knowledge. The publication is intended to act as a common reference source to be used by Canadian embassies abroad, in addition to the domestic pulse industry. With the publication representing all facets of the Canadian pulse industry, the dissemination of information should be made easier between the industry and Canadian posts abroad.

COMMON CANADIAN PULSE TYPES

Canada is renowned for its high-yielding, disease-resistant varieties of pulses. Pulses are grown and processed at various locations in the country for home and world markets. Pulses are an excellent source of protein, fibre, vitamins and minerals, providing nutrition at reasonable cost. In addition to their excellent food value, they can be stored for long periods of time and are an integral part of peoples' diets worldwide. As a source of human and animal foods, pulses are ranked second to cereal in many countries of the world.

Canada is a major supplier of high-quality pulses to world markets, with increasing quantities of dry beans, dry peas and lentils being exported annually to more than 65 countries. Production is centered in Ontario and the western provinces of Manitoba, Saskatchewan and Alberta. Ontario is the leading producer of dry beans, including navy or white, great northern, white kidney, red kidney, pinto and brown beans, as well as white-hilum soybeans. Saskatchewan is the leading producer of both lentil and peas. Dry beans, including pinto, pink, small red, black and faba beans, are also grown in Manitoba and Alberta. Dry beans, dry peas and lentil are processed and cleaned to high standards for both domestic and export markets. Grade standards set by the Canadian Grain Commission provide the buyer with a guarantee of superior and consistent quality.

White Pea Bean

Also referred to as navy beans, white pea beans have been produced commercially in southwestern Ontario for over 100 years. Ontario is the major producer of white pea beans in Canada, with a smaller production occurring in southern Alberta. White pea beans are marketed under the Ontario Bean Producers' Marketing Board which represents over 2,500 bean producers, and which also initiates policies, research and testing programs designed to ensure that only the best beans are developed and used. One of the most inexpensive sources of food energy obtainable, white pea beans are nutritious and high in protein (@22%). They are a good source of fibre, iron, calcium, phosphorus and thiamine. White pea beans are used almost entirely for human consumption, primarily going to the canning trade for production of canned baked beans. Normally, 80-85% of production is exported to over 71 countries around the world. The weight per 1000 seeds for white pea beans is 170-230 grams.

Kidney Bean

Light, dark red and white kidney beans are produced in southwestern Ontario and Manitoba. Some of the production of these types goes to the food processing industry for canning, but a significant proportion of each crop (up to 75%) is available for export. While the light and dark red kidney beans are popular in chilies, both canned and homemade, these types are also used in baked beans and salads. Traditional export markets include the USA, Europe and the Caribbean region.

Black Bean

Black beans have a black seed coat and a white cotyledon and are produced in Ontario and Manitoba. Virtually the entire crop is exported to markets in the Caribbean and Latin America. The weight per 1000 seeds is about 160 grams.

Cranberry Bean

Cranberry (or romano) bean is one of the smaller volume pulse crops produced in Ontario. These large, reddish brown mottled beans have a white cotyledon and are primarily exported to markets in southern Europe. Cranberry beans are processed as a canned product and are used in soups and stews.

Brown Bean

Brown beans have been produced in Ontario for a number of years, primarily under contract. Also called Dutch brown beans, this type is normally shipped to markets in Europe.

Great Northern Bean

This type is produced in Ontario and Alberta, and is mainly exported to western European markets. It is a large bean with a weight per 1000 seeds of about 290 grams.

Pinto Bean

Produced in Alberta and Ontario, this large mottled brown bean with a white cotyledon is exported to the USA (often for re-export) and to markets in Latin America. Pinto beans are used extensively in Mexican cooking. The seed weight for 1000 seeds of pinto beans is about 340 grams.

Pink Bean

This medium-sized bean type is produced exclusively in Alberta and has a pink seed coat. Pink beans are very mild with a delicate flavour and are a good substitute for other beans. Most of the Canadian pink bean crop is exported to markets in Latin America. Weight per 1000 seeds is about 280 grams.

Small Red Bean

Also called Mexican red bean, this bean has a red seed coat and white cotyledon. Small red beans have a robust flavour and retain their dark red color when cooked making them a good substitute for red kidney beans. They are mainly used in chilies, soups and mixed bean salads. Weight per 1000 seeds is about 285 grams.

Faba Bean

The faba bean (Vicia faba minor) is a smaller-seeded member of the species which includes the garden broad bean. It was originally introduced to Western Canada from Europe and was first produced on a commercial basis in that region in 1972. Faba beans are produced in many parts of the world and consumed primarily as a vegetable, although in certain countries it is also valued as a protein supplement for livestock feeding. Protein content generally ranges between 23-30 %, and the lysine content is high. For Canadian varieties, the weight per 1000 seeds ranges between 360-430 grams.

Soybean

Almost all of Canada's soybean output is produced by over 24,000 growers in southwestern Ontario. Soybeans have long been recognized as one of the most important sources of protein in the world. Whole soybeans, soya milk, soya flours and isolated soya proteins are used in a variety of ways for human consumption. In Japan, China, Southeast Asia and Africa, soybeans continue to be an integral part of traditional dishes such as tofu, natto, hamanatto and tempeh. Normally used as flavouring agents, soy sauce (shoyu) and soy paste (miso) are also made from soybeans. Canadian soybeans exported for human consumption are almost exclusively white hilum types. Recently-developed varieties include smaller soybeans which are ideally suited for the Japanese delicacy, natto.

Lentil

The first commercial production of lentil was in western Canada in 1970 and the province of Saskatchewan is currently the leading producer of this important pulse. Production commenced with the green (yellow cotyledon) Chilean or regular type lentil. More recently, two new lentil varieties, the large-seeded Laird and the small-seeded Persian type, Eston, were introduced to augment the regular type lentil, and both have been produced and marketed with considerable success. Lentil require no presoaking as do most other pulses and cook quickly, mainly being used in soups, stews and casseroles. Each year, about 90% of the Canadian lentil crop is exported to more than 30 countries, mainly in western Europe and South America.

Dry Pea

The Canadian dry pea crop is grown in the western Canadian provinces of Manitoba, Saskatchewan and Alberta. Dry yellow peas, whole or split, are the main type produced, with dry green peas making up only a small proportion of the crop at the present time. Both yellow and green types have smooth seed coats and are widely used for human food and livestock feed. In Canada, only a small part of the dry pea crop is utilized, primarily in soups. In certain overseas markets, India in particular, dry peas are a valuable food legume and they are used dehulled and split as dhal, roasted or parched or ground into flour for soups. In many years, more than 80% of the Canadian pea crop is exported to more than 40 countries. The weight per 1000 seeds ranges between 146-236 grams.

NOMENCLATURE

DRY BEANS

The general term "dry beans" includes various species of the genus Phaseolus, used nearly exclusively for food purposes.

Phaseolus vulgaris: the kidney bean group, also called haricot, French, snap or common bean. Specific types of commercial significance within the species are:

- pea bean: (also navy, Michigan or small white) grown mainly in North America, East Africa (Ethiopia), and Eastern Europe. Favoured for canning purposes in Anglo-Saxon areas. Similarly shaped, but larger beans in Japan.
- white kidney/great northern: (also cannellini and Haricot), grown mainly in the Americas and the Mediterranean region, and the preferred white bean in continental Europe, Algeria, the Middle East and the Philippines.
- red kidney: production and consumption restricted largely to the Americas and East Africa.
- pinto: light brown spotted bean produced and consumed only in the Americas.
- cranberry: (also romano and borlotti), another spotted bean (white or light brown with red) popular in Italy, Spain and Latin America.
- black: (including the turtle soup bean), popular in Brazil, Venezuela, Central America and the Caribbean.
- pink: grown in the USA and Latin America.
- yellow-eye: (white with brown spot), grown and eaten only in the USA and Canada.
- brown: (with variations to yellows), grown mainly in Holland, Sweden and Angola, fairly popular throughout Scandinavia, in the Netherlands and in Surinam.

Vigna radiata: (also V.mungo) The mung bean group includes many varieties of different colors. It is the main bean produced in Asia east of Pakistan and is also grown in East Africa. It is used boiled with rice or vegetables. The two best known commercial varieties are the green mung and the black matpe.

Phaseolus lunatus: (also P. limensis), the lima or butter bean group. Other commercial names include the pole bean, the Madagascar and the Burma bean. It is popular in the Americas, Southern Africa and South East Asia.

Vigna angularis: adzuki beans, grown and used almost exclusively in Chinese, Japanese and Korean areas, it is the major ingredient in red bean paste in Japan.

Phaseolus coccineus: (also P. multiflorus), the scarlet runner bean group. Some white varieties are called "elephant" or "Soissons" beans.

Vigna calcaratus: pegin or bamboo bean of South East Asia.

Vigna aconitifolius: the moth bean, exclusive to India and Indonesia.

Phaseolus acutifolius: the tepary bean, grown and used in Central America and Southern Africa.

GRASS PEA

Lathyrus sativus: also called chickling vetch, grown and consumed mainly in India, it thrives on poor soils and during drought conditions. High consumption may produce the disease lathyrism.

LENTILS

Lens culinaris: sometimes referred to as flat peas, the main production areas are the same as for the chick peas, except for Mexico. Europeans favour the large light-green type, while the Middle East and India-Pakistan prefer the small red varieties eaten as split lentils.

LUPIN

Several species of the genus Lupinus are cultivated largely in the U.S.S.R., Poland, South Africa, Australia and Italy. New alkaloid-free varieties are largely responsible for renewed interest in this crop, basically for animal feed.

FABA BEAN

Vicia faba major, broad bean, large faba bean

Vicia faba equina, horsebean, medium faba bean

Vicia faba minor, tick bean, small faba bean

This species is important in China, the Mediterranean region, parts of Latin America (broad beans), and in Europe (medium and small faba). They are used as food and feed.

VETCH

This group includes several species of the genus Vicia grown mainly for animal feed (as green fodder or as pulses) in Eastern Europe, the Middle East and the Mediterranean region.

DRY PEA

Pisum sativum: includes many varieties of dry peas important to Europe, the U.S.S.R., China, and India.

PIGEON PEA

Cajanus cajan: basically an Indian crop, with some importance in East Africa as well.

CHICK PEA

Cicer arietinum: known as Begal gram in India, and garbanzo in Spanish speaking countries, it is a major pulse in Asia west of Burma, the Mediterranean area, Ethiopia and Mexico. The small seeded types are preferred in Central Asia, while the Mediterranean peoples and Latin Americans prefer the large seeded garbanzos.

COW PEA

Vigna unguiculata: an important food crop in West and Central Africa, also grown in Asia, Brazil and the southern USA.

THE HISTORY OF PULSES

Pulses are derived from the family of plants known as Leguminosae. According to the Economic Plants Section of the Biosystematics Research Centre at Agriculture Canada, the Leguminosae family is comprised of approximately 16,497 species distributed among 635 genera. The Leguminosae family is commonly broken down into three sub-families, Caesalpiaceae, Mimosaceae, and Fabaceae (Papilionaceae). The Leguminosae family is believed to have been well developed by about 136,000,000 years ago during the Cretaceous time. By this time, the three sub-families had developed in such a way as represented by the living genera today. There have been numerous fossil discoveries dating back 54,000,000 years to the Early Tertiary Period. Thus, the origins of pulses date back hundreds of thousands of centuries.

Although pulse evolution dates back many years, man has only utilized the crop for his own benefit for approximately 8,000-10,000 years. In addition, it has been asserted that some pulses are among the oldest cultivated plants in the world. For example, beans have been credited (along with maize), with a shift in settlement patterns for the Meso-American culture of about 3500 years ago. The use of these cultivated crops allowed the primarily seasonal hunting cultures, to begin to form semi-permanent villages. Examples of pulse cultivation can also be found by its presence in ancient Egyptian tombs, dating back to the twelfth Dynasty (2200 B.C.). Therefore, man's utilization of pulses is of historical significance, and has played an important role in many different cultures over the past few thousand years.

Technically speaking, pulses are defined as the "edible seeds of leguminous plants". Generally, a legume is a one-celled, two-valved seed pod with marginal placentation (ovule attachment). Worldwide, the legume can assume a large variety of forms. Legume seeds can be quite colourful, and come in various sizes ranging from a pinhead to a baseball. Legume seeds have not only been used for edible purposes, but have been used as a currency in some cultures, as well as commonly exploited for handbags and jewelry because of their hard seed coats. Over the years, legume seeds have incorporated themselves into man's culture in many different ways.

In addition to the obvious usefulness of pulses as food for man and beast, the majority of species of the Legume family play an extremely important role in the natural ecosystem. Agronomically, legumes have the capacity, through microorganisms, to convert biologically inert atmospheric nitrogen into nitrates, which can be easily metabolized by plant life. Legumes are able to "fix" atmospheric nitrogen through symbiotic fixation. This occurs when root nodules are formed on the plant in reaction to infections by soil bacteria belonging to the genus Rhizobium. Because of this property, legumes are responsible for the great mass of such biological recycling. Also, an interesting biochemical component of legume seeds is phytohemagglutinin. Phytohemagglutinin can be found in approximately 60 percent of legume seed types, and is a large protein molecule that is specific in its capacity to agglutinate certain human blood types. Particularly abundant in the common bean, phytohemagglutinin has been extracted in a pure state on a commercial scale. The compound has other biological effects: it is toxic to rats; it inactivates certain human tumor cells; and has beneficial effects on aplastic anemia, the shortage of blood cells in man because of destruction of blood-forming tissues. Thus, in addition to their value as food and for soil nutrition through crop rotation, pulses play a vital role to man in many other ways.

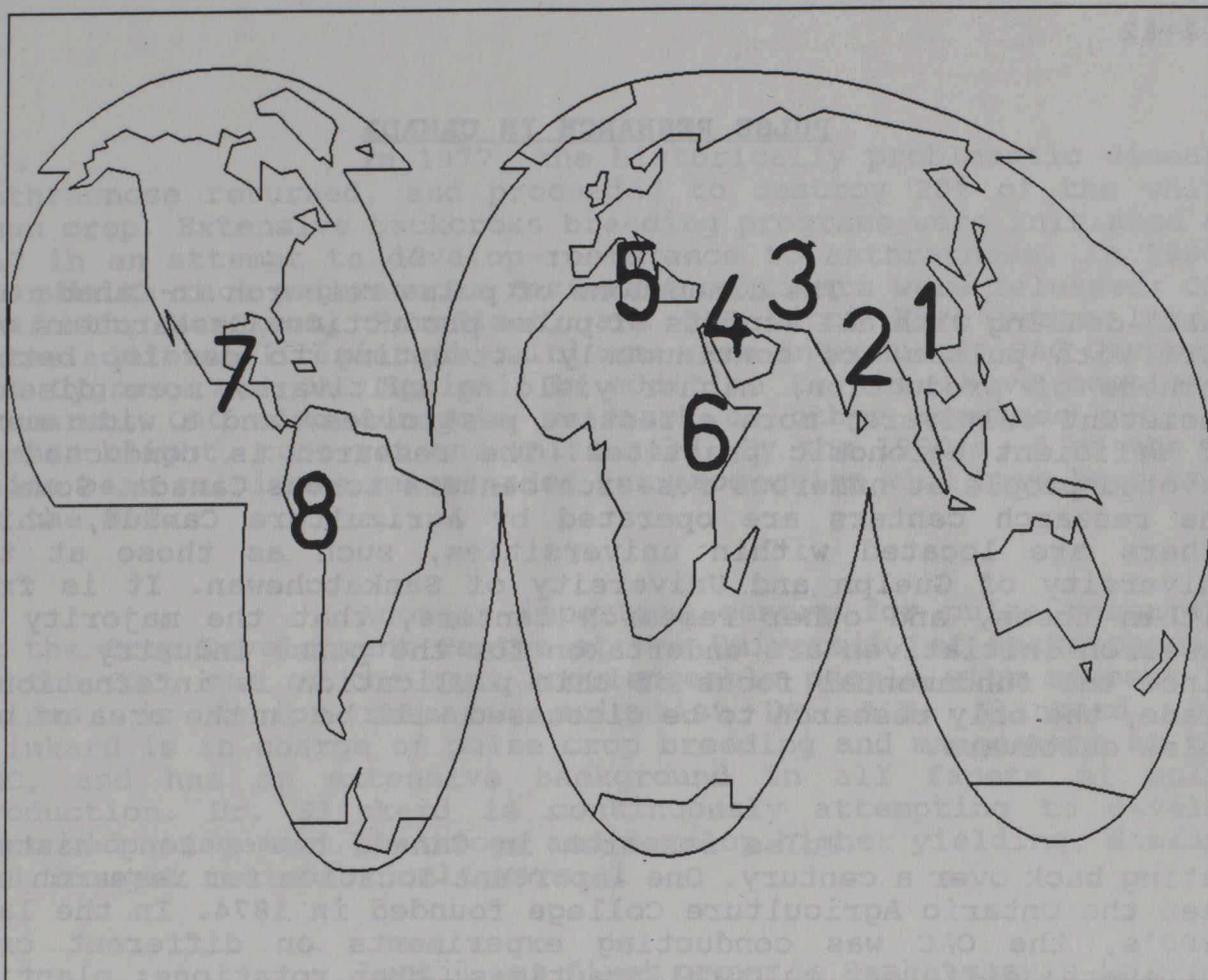


FIGURE 1. Certain leguminous plants have been assigned to main centers of origin (hearths). The following centers of origin are depicted in the diagram above.

1. Soybean (Glycine max)
2. Mung Bean (Vigna radiata)
Cow Pea (Vigna unguiculata)
3. Pea (Pisum sativum)
Horse Bean (Vicia faba)
Mung Bean (Vigna radiata)**Secondary center**
4. Lentil (Lens culinaris)
5. Pea (Pisum sativum)**Secondary center**
6. Cow Pea (Vigna unguiculata)**Secondary center**
7. Common Bean (Phaseolus vulgaris)
Lima Bean (Phaseolus lunatus)
8. Lima Bean (Phaseolus lunatus)**Secondary center**
Common Bean (Phaseolus vulgaris)**Secondary center**

PULSE RESEARCH IN CANADA

The dimensions of pulse research in Canada are vast, dealing with all aspects of pulse production. Researchers who work with pulses are continuously attempting to develop better methods of production; higher yielding cultivars; more disease resistant cultivars; more effective pesticides; and a wide array of efficient agronomic practices. The research is conducted by devoted people at numerous research centers across Canada. Some of the research centers are operated by Agriculture Canada, while others are located within universities, such as those at the University of Guelph and University of Saskatchewan. It is from within these, and other research centers, that the majority of research initiatives are undertaken for the pulse industry. Since the fundamental focus of this publication is international trade, the only research to be discussed will be in the area of new pulse cultivars.

Pulse research in Canada has a long history dating back over a century. One important location for research has been the Ontario Agriculture College founded in 1874. In the late 1800's, the OAC was conducting experiments on different crop cultivars; different cultural practices; crop rotations; planting dates; and fertility levels. During the early research period, extensive experimentation was conducted on Phaseolus beans. In 1927, C.A. Zavitz authored the landmark OAC Bulletin 352, "Forty Years Experiments with Grain Crops". The publication has been heralded for the pioneering crop research that was conducted, and has since been nicknamed "Forty Years in the Wilderness". The OAC has maintained its work in bean research, while at the same time providing valuable information to farmers on cultivars and production. In 1964, the OAC with its two sister colleges formed the basis for the present day University of Guelph.

During the 1970's, there were four dominant cultivars of white pea beans grown in Ontario; Sanalac, Seafarer, Kentwood, and Fleetwood. The potential for improvement was recognised, and in 1976 a white pea bean breeding program was initiated at OAC. Cultivars of common beans were obtained from Colombia and successes were found. The most successful was Ex Rico 23, which out yielded other cultivars by 50%. Ex Rico 23 became the most widely grown cultivar and captured about 50% of the white bean acreage in Ontario.

In 1977, the historically problematic disease anthracnose returned, and proceeded to destroy 20% of the white bean crop. Extensive backcross breeding programs were initiated at OAC in an attempt to develop resistance to anthracnose. In 1983, four delta-race anthracnose resistant cultivars were released; OAC Seaforth, Harokent, Harofleet, and OAC Rico. Five years later, three additional resistant cultivars were introduced; OAC Gryphon, OAC Cygnus, and OAC Sprint. In addition to the above mentioned research, OAC also conducts research on other diseases such as common blight, root rot and white mold. By the 1990's, 5 of the 18 white bean cultivars recommended for production will have been bred at the OAC.

Another important centre for pulse research, is the Crop Development Centre at the University of Saskatchewan. At the CDC, one of the most knowledgeable people with respect to pulses, is senior research scientist Dr. A.E. Slinkard. Dr. Slinkard is in charge of pulse crop breeding and management at the CDC, and has an extensive background in all facets of pulse production. Dr. Slinkard is continuously attempting to develop improved management practices and develop higher yielding, disease and drought resistant cultivars.

Lentil was first grown in Saskatchewan in 1969. Lack of proper management almost eliminated lentil by 1976. The CDC initiated a series of management studies placing emphasis on seeding depth, seeding methods, rate and date of seeding, swathing stages, and chemical and cultural weed control. Thus, by 1976 a new package of agronomic practices had been developed, and with the assistance of Agriculture Canada, a three year program was initiated. In the first year, one of the ten first-time lentil growers had outstanding results and grossed over \$1500/ha!!

Since then, lentil production has increased every year except for 1983, 1988 and 1989. Laird lentil was registered in 1978 and is currently the most widely grown cultivar in the world. Eston lentil was registered in 1980, but is susceptible to ascochyta blight. Currently, a backcross program has been initiated to produce a Laird type lentil that will be resistant to both foliar infection and seed infection by ascochyta. In addition, Dr. Slinkard has developed the red cotyledon cultivar Rose lentil, which was registered in 1990. The addition of the Rose lentil should help expand Canada's markets overseas in countries where red cotyledon lentil is preferred.

Faba bean requires a long growing season, and has poor heat and drought tolerance, and thus is best suited to the Black soil zone of southern Manitoba, or irrigated areas. After the first substantial increase in production in Manitoba in 1972-73, the faba bean experienced crop failure problems due to the lack of adapted cultivars and lack of a suitable management system. The first cultivars were early maturing European cultivars, but since then, adapted cultivars and an excellent package of agronomic practices has been made available. The package includes early seeding and good herbicide selection. There are now 5 earlier, and better adapted Canadian cultivars available due to research efforts: Outlook (1981), Aladin (1981), Pegasus (1984), Encore (1985), and Orion (1987). Increased use of irrigation should help lead to increasing faba bean production in the future.

Dry pea has been produced in western Canada for over 80 years. Production in western Canada increased slowly during the 1970's, but experienced massive increases after 1985. These massive increases were largely the result of increases in acreage, primarily in Saskatchewan. After the wheat surpluses of the late 1960's, researchers at the Prairie Regional Laboratory and the National Research Council of Canada began to investigate potential alternative crops. Because it is an excellent protein crop, peas were selected in an attempt to substitute domestic production for expensive soybean meal being imported from the USA.

Researchers at the PRL developed methods for wet and dry processing of peas and a wide array of products were developed. Dry processing helped to create pea flour, pea starch, a 50% protein concentrate, in addition to the hulls being finely ground for use in a high fiber bread. The University of Saskatchewan and the PRL researched the potential value of pea meal and pea protein concentrate for use in such products as bread, desserts, a high protein beverage, and a new product "pea chips". In the future, research will proceed towards increasing the use of dry peas as livestock protein supplement, thereby eliminating imports of soybean meal from the USA. Agronomic practices have been developed which include seeding rate and date, inoculation, fertilization, chemical weed control, and harvesting methods. The yield potential of peas has increased recently through breeding programs at Agriculture Canada and the CDC at the University of Saskatchewan. Introduction of new pea cultivars has been progressing for the past three decades in Canada, as evidenced by the chart on the following page.

Table. Dry pea cultivars registered in Canada.

CULTIVAR	YIELD	MATURITY	SEED SIZE	COLOR
Century (1960)	Fair	Medium	Large	Y
Trapper (1970)	Fair	Medium	Small	Y
Triumph (1973)	Poor	Late	V. Large	G
Tara (1978)	V. Good	Medium	Medium	Y
Lenca (1979)	Fair	Medium	Medium	Y
Finale (1980)	Poor	Early	Large	G
Victoria (1984)	Good	Early	Medium	Y
Tipu (1985)	Fair	Medium	Large	Y
Titan (1985)	Good	Medium	Large	Y
Bellevue (1986)	Good	Late	Medium	Y
Fortune (1986)	Good	Late	Medium	Y
Express (1987)	Good	Early	Large	Y
Princess (1988)	Poor	Early	Medium	G
Sirius (1989)	Good	Early	Medium	Y
Stegholt (1989)	Good	Early	V. Large	Y
Whero (1989)	Poor	Late	Medium	Y
Yellowhead (1989)	Good	Late	Large	Y
Miranda (1989)*	Fair	Early	V. Large	Y
Radley (1989)*	Good	Early	Medium	G
Topper (1989)*	Good	Medium	V. Large	Y

*Denotes cultivar received interim registration.

**Yield, maturity and seed size comparisons are made using Century as the standard.

**Color, refers to cotyledon color; Y for yellow and G for green.

Currently, research is ongoing in Saskatchewan in an attempt to develop new pulse crops. The development of new pulse crops has been primarily focused on chickpea and grass peas. Both pulse types hold potential for future production.

Grass pea is characterized by the presence of a neurotoxin which can result in the paralysis of people who consume them for long periods of time. Dr. Clayton Campbell, Agriculture Canada in Morden, has recently developed near-zero neurotoxin lines of grass pea. The new lines will be tested under different environmental conditions in order to evaluate the stability of the neurotoxin levels. Grass pea for feed purposes should be available within 8 to 11 years. It is anticipated that grass pea will also be used for human consumption within 11 to 15 years. Human consumption of the near-zero neurotoxin grass pea may take a little longer, due to the reluctance to consume products derived from a previously toxic food group.

Two types of chickpea are presently being researched for future production possibilities. Around 1980, an agronomic package was developed for kabuli chickpea production, which included the use of a ascochyta-free seed, fungicidal seed treatment to control seed rots, weed control herbicides, and different seeding times. Original yields produced seed sizes that were too small for the canning trade. Thus, new lines are being developed with a larger seed size. It is expected that a desirable line of kabuli chickpea will be available within 5 to 8 years. Research is also being concentrated on the easy growing, and lower quality standard desi chickpea. Because of outstanding nitrogen fixing capabilities and superior drought resistance, a promising line of desi chickpea should be available for full scale field production within 3 to 5 years.

The above discussed research activities are in no way an exhaustive representation of the numerous research centres in Canada working on pulse products. Universities, government departments, and private companies all are continuously engaged in pulse research. All sources are determined to develop higher quality pulse products, with the objective of injecting new ideas and products into the Canadian pulse industry. These efforts will assist the Canadian pulse industry to expand exports abroad by development of better and more comprehensive lines of pulse products. Dr. Slinkard has stated that, if he is provided with the specifications and scientific particulars of a pulse, that he could produce any type of pulse desired. It is from this base of optimism, that future research efforts across Canada must forge forward, to the benefit of the Canadian pulse industry.

CANADIAN GRADING STANDARDS FOR PULSES

Canadian pulse products have acquired a reputation worldwide for high quality, and consistently superior standards. The primary reason for the reputation, is based in the rigid grading specifications that dictate trade within the industry. These specifications are established and maintained by the Canadian Grain Commission.

The grading specifications for pulse products have been in force, basically for only 10 years. This is representative of the relative infancy of the pulse industry in many parts of Canada. The specifications for pulse products are altered occasionally, with fluctuations moving both up and down with respect to quality. In fact, pulse product specifications change fairly often when compared to the changes for other Canadian crops. The changes in pulse cultivars create the need for adoption of appropriate specifications. When pulse standards are either being introduced, or revised, the cooperation of the pulse industry is sought and obtained. The pulse industry has legitimate input, and is consulted before standard specifications are established. The standards that are approved for pulse crops, as with other crops, are determined by the Western Committee on Grain Standards. The Committee was created by the Canadian Grain Commission, and is comprised of exporters, processors, producers and scientific and technical specialists. Thus, a beneficial dialogue exists between the Canadian Grain Commission and the pulse industry with respect to the establishment of grading standards.

Consistent and high quality standards are seen as desirable by the pulse industry. Apart from establishing an excellent reputation for our pulses abroad, high quality standards act as a form of protection for the industry. Grading standards allow for trade to take place, without the conflicts that arise from quality discrepancies. The Canadian Grain Commission has a mandate to work in the interest of producers. Official inspection throughout the prairies is difficult to administer, due to the diverse location of the different pulse processors. Processors are responsible for the expenses incurred during the inspection process, and these expenses are eventually passed on to the grower through costs. The official inspection process is largely responsible for maintaining the high quality standards of Canadian pulse crops.

The precise standards for the different pulses appear on the following pages.

YELLOW PEAS - PRIMARY AND EXPORT GRADE DETERMINANTS

The variety or colour may be added to and become part of the grade name

Grade Name	Standard of Quality		Maximum Limits of									
	Colour	Peas of Other Colours	Foreign Material		Cracked Seed Coats Including Splits	Splits	Shrivelled	Heated	Insect Damage	Other Damage	Total Damage	
No. 1 Canada	Good natural colour	1.0%	Ergot	Total	5.0%	1.0%	3.0%	Nil	1.0%	3.0%	3.0%	
No. 2 Canada	Fair colour	2.0%	0.05%	About 0.5%	9.5%	2.5%	5.0%	About 0.05%	1.5%	5.0%	5.0%	
Extra No. 3 Canada	Fair colour	2.0%	0.06%	About 0.5%	13.0%	5.0%	5.0%	About 0.05%	1.5%	5.0%	8.5%	
No. 3 Canada	Off colour	3.0%	0.06%	1.0%	15.0%	5.0%	7.0%	About 0.2%	4.0%	10.0%	10.0%	
Final Grade Name	No. 3 Canada	Over 3.0% grade Peas. Sample Canada "Colour or Variety" Account Mixed Colours	Over 0.06% grade Peas. Sample Canada "Colour or Variety" Account Ergot	Over 1.0% grade Peas. Sample Canada "Colour or Variety" Account Admixture	Over 15.0% grade Peas. Sample Canada "Colour or Variety" Account Cracked Seed Coats	Over 5.0% grade Peas. Sample Canada "Colour or Variety" Account Splits. Over 5.0% splits and other colours Grade Peas. Sample Canada Account Mixed Colours and Splits	Over 7.0% grade Peas. Sample Canada "Colour or Variety" Account Shrivelled	Over 0.2% grade Peas Sample Canada "Colour or Variety" Account Heated	Over 4.0% grade Peas. Sample Canada "Colour or Variety" Account Insect Damage	Over 10.0% grade Peas. Sample Canada "Colour or Variety" Account Damaged	Over 10.0% grade Peas. Sample Canada "Colour or Variety" Account Damage	

GREEN PEAS - PRIMARY AND EXPORT GRADE DETERMINANTS

Grade Name	Standard of Quality				Maximum Limits of Damage							
	Minimum Requirement For Colour	Other Classes	Bleached	Total Other Classes and Bleached	Foreign Material	Cracked Seed Coats Including Splits	Splits	Shrivelled	Heated	Insect Damaged	Other Damage	Total Damage
No. 1 Canada	Good natural colour	0.5%	2.0%	2.0%	0.1%	5.0%	0.5%	2.0%	Nil	0.3%	2.0%	3.0%
No. 2 Canada	Fair colour	1.0%	3.0%	3.8%	0.2%	8.0%	1.0%	4.0	0.1%	0.8%	4.0%	5.0%
No. 3 Canada	Off colour	2.0%	5.0%	6.5%	0.5%	13.0%	5.0%	8.0%	0.5%	2.5%	10.0%	12.0%
Final Grade Name	No. 3 Canada	Over 2.0% up to 10.0% grade Peas, Sample Canada "Green or Variety" Account Mixed Colours. Over 10.0% grade Peas, Sample Canada Account Mixed Colours	Over 5.0% grade Peas, Sample Canada "Green or Variety" Account Bleached	Over 6.5% grade Peas, Sample Canada "Green or Variety" Account Mixed Colours and Bleached	Over 0.5% grade Peas, Sample Canada "Green or Variety" Account Admixture	Over 13.0% grade Peas, Sample Canada "Green or Variety" Account Cracked Seed Coats	Over 5.0% grade Peas, Sample Canada "Green or Variety" Account Splits	Over 8.0% grade Peas, Sample Canada "Green or Variety" Account Shrivelled	Over 0.5% grade Peas, Sample Canada "Green or Variety" Account Heated	Over 2.5% grade Peas, Sample Canada "Green or Variety" Account Insect Damage	Over 10.0% grade Peas, Sample Canada "Green or Variety" Account Damaged	Over 12.0% grade Peas, Sample Canada "Green or Variety" Account Damage

PEA BEANS (Canada)

Grade Name	Standard of Quality	Foreign Material			Maximum Limits of			
		Stones, Shale or similar Material	Total Foreign Material	Contrasting Classes of Beans	Damage, Foreign Material and Contrasting Classes	Total Damage Including Splits Foreign Material and Contrasting Classes	Other Classes of Beans That Blend	
Extra No. 1 Canada	Well screened and picked, uniform in size, of good natural colour	About 0.01%	About 0.05%	About 0.1%	1.0%	1.0%	1.0%	
Canada Select	Well screened and picked, of fairly good colour	About 0.01%	About 0.05%	About 0.1%	1.5%	2.0%	1.0%	
No. 1 Canada	Well screened and picked of reasonably good colour	About 0.05%	About 0.1%	About 0.1%	1.5%	2.0%	1.0%	
No. 2 Canada	Reasonably well screened and picked, of fairly good colour	0.1%	0.2%	1.0%	3.0%	4.0%	5.0%	
No. 3 Canada	Fairly well screened and picked, of fairly good colour	0.2%	0.5%	1.0%	5.0%	6.0%	5.0%	
No. 4 Canada	Off colour	0.2%	0.5%	1.0%	8.5%	10.0%	5.0%	
Final Grade Name	Over grade tolerance up to 2.5% grade Pea Beans, Rejected, "grade" Account Stones. Over 2.5% grade Pea Beans, Sample Salvage		Over 0.5% grade Pea Beans, Sample Canada Account Admixture	Over 1.0% grade Pea Beans, Sample Canada Account Contrasting Classes	Over 8.5% grade Pea Beans, Sample Canada Account Reason	Over 10.0% grade Pea Beans, Sample Canada Account Reason	Over 5.0% grade Pea Beans, Sample Canada Account Other Classes That Blend	

Grade Name	Ergot	Sclerotinia	Heated, Rotted, Mouldy	
			Free	Over 1.0% grade Pea Beans, Sample Canada Account Heated or Account Mouldy Kernels
Extra No. 1 Canada	0.05%	0.05%	0.2%	
Canada Select	0.05%	0.05%	0.1%	
No. 1 Canada	0.05%	0.05%	0.2%	
No. 2 Canada	0.05%	0.05%	0.3%	
No. 3 Canada	0.05%	0.05%	1.0%	
No. 4 Canada	0.05%	0.05%	Over 1.0% grade Pea Beans, Sample Canada Account Heated or Account Mouldy Kernels	
Final Grade Name	Over 0.05% grade Pea Beans, grade Sample Canada Account Ergot	Over 0.05% grade Pea Beans, Sample Canada Account Admixture		

*For Eastern grain see Appendix R - Definitions: Stones

PEA BEANS (Canada)

Maximum Limits of

Grade Name	Standard of Quality	Foreign Material		Maximum Limits of			Total Damage Including Foreign Material and Contrasting Classes	Other Classes of Beans That Blend
		Stones, Shale or similar Material	Total Foreign Material	Contrasting Classes of Beans	Damage, Foreign Material and Contrasting Classes	Total Damage Including Foreign Material and Contrasting Classes		
Extra No. 1 Canada	Well screened and picked, uniform in size, of good natural colour	About 0.01%	About 0.05%	About 0.1%	1.0%	1.0%	1.0%	1.0%
Canada Select	Well screened and picked, of fairly good colour	About 0.01%	About 0.05%	About 0.1%	1.5%	2.0%	1.0%	1.0%
No. 1 Canada	Well screened and picked of reasonably good colour	About 0.05%	About 0.1%	About 0.1%	1.5%	2.0%	1.0%	1.0%
No. 2 Canada	Reasonably well screened and picked, of fairly good colour	0.1%	0.2%	1.0%	3.0%	4.0%	5.0%	5.0%
No. 3 Canada	Fairly well screened and picked, of fairly good colour	0.2%	0.5%	1.0%	5.0%	6.0%	5.0%	5.0%
No. 4 Canada	Off colour	0.2%	0.5%	1.0%	8.5%	10.0%	5.0%	5.0%
Final Grade Name	Over grade tolerance up to 2.5% grade Pea Beans. Rejected, "grade" Account Stones. Over 2.5% grade Pea Beans, Sample Salvage		Over 0.5% grade Pea Beans, Sample Canada Account Admixture	Over 1.0% grade Pea Beans, Sample Canada Account Contrasting Classes	Over 8.5% grade Pea Beans, Sample Canada Account Reason	Over 10.0% grade Pea Beans, Sample Canada Account Reason	Over 5.0% grade Pea Beans, Sample Canada Account Other Classes That Blend	

Grade Name	Ergot	Sclerotinia	Heated, Rotted, Mouldy
Extra No. 1 Canada	0.05%	0.05%	Free
Canada Select	0.05%	0.05%	0.2%
No. 1 Canada	0.05%	0.05%	0.1%
No. 2 Canada	0.05%	0.05%	0.2%
No. 3 Canada	0.05%	0.05%	0.3%
No. 4 Canada	0.05%	0.05%	1.0%
Final Grade Name	Over 0.05% grade Pea Beans, grade Sample Canada Account Ergot	Over 0.05% grade Pea Beans, Sample Canada Account Admixture	Over 1.0% grade Pea Beans, Sample Canada Account Heated or Account Mouldy

*For Eastern grain see Appendix A - Definitions: Stones

LENTILS - PRIMARY AND EXPORT GRADE DETERMINANTS

Grade Name	Degree of Soundness	Maximum Limits of						Foreign Material			
		Damage		Other Damage	Total	Stones	Ergot	Sclerotinia*	Total Foreign Material		
		Heated	Peeled, Split and Broken								
No. 1 Canada	Uniform in size, of good natural colour	About 0.2%	2.0%	1.0%	2.0%	About 0.1%	0.05%	0.10%	About 0.2%		
No. 2 Canada	Uniform in size, of reasonably good natural colour	About 0.5%	3.5%	2.0%	3.5%	About 0.2%	0.05%	0.10%	About 0.5%		
Extra No. 3 Canada	Uniform in size, of reasonably good natural colour	About 0.5%	5.0%	5.0%	5.0%	About 0.2%	0.05%	0.10%	About 0.5%		
No. 3 Canada	Fair colour	1.0%	10.0%	10.0%	10.0%	About 0.2%	0.05%	0.10%	1.0%		
Final Grade Name		Over 1.0% grade Lentils, Sample Canada Account Heated	Over 10.0% grade Lentils, Sample Canada Account Damaged	Over 10.0% grade Lentils, Sample Canada Account Damaged	Over 10.0% grade Lentils, Sample Canada Account Damaged	**Over grade up to 2.5% grade Lentils, Rejected -grade Account Stones. Over 2.5% grade Lentils Sample Salvage	Over 0.05% grade Lentils, Sample Canada Account Ergot	Over 0.10% grade Lentils, Sample Canada Account Admixture	Over 1.0% grade Lentils, Sample Canada Account Admixture		

*On Export Shipments of Lentils, all grades may contain up to 0.05% sclerotinia. All other established tolerances apply.

**For Eastern grain refer to Appendix A - Definitions: Stones

FABABEANS - PRIMARY AND EXPORT GRADE DETERMINANTS

Grade Name	Degree of Soundness	Maximum Limits of						
		Damage			Foreign Material			
		Heated and/or Rotted	Mouldy	Perforated Damage	Total	Splits	Stones or Shale	Total
No. 1 Canada	Reasonably well matured, of reasonably good natural colour	Nil	Nil	1.0%	4.0%	6.0%	About 0.1%	About 0.2%
No. 2 Canada	Fairly well matured, fair colour	3K	6K	3.0%	6.0%	9.0%	About 0.2%	About 0.5%
No. 3 Canada	Excluded from higher grades on account of immaturity, poor colour or damage, but cool and sweet	1.0%	2.0%	3.0%	10.0%	12.0%	About 0.5%	2.0%
Final Grade Name		Over 1.0% grade Fababeans, Sample Canada Account Heated	Over 2.0% grade Fababeans, Sample Canada Account Mouldy Kernels	Over 3.0% grade Fababeans, Sample Canada Account Damaged	Over 10.0% grade Fababeans, Sample Canada Account Damaged	Over 12.0% grade Fababeans, Sample Canada Account Splits	Over 0.5% up to 2.5% grade Fababeans, Rejected "grade" Account Stones.	Over 2.0% grade Fababeans Sample Canada Account Admixture

NOTE: THE LETTER "K" IN THESE TABLES REFERS TO WHOLE FABABEANS IN 500 GRAMS

*For Eastern grain refer to Appendix A - Definitions: Stones

SPECIFIC GRADING STANDARDS FOR EXPORT SHIPMENTS

PEAS

Samples are graded according to the official grade definitions of the respective grade. Foreign material in cleaned or processed peas will be treated as a grading factor and not assessed as dockage. Shipments containing dockage are not permitted except with permission from the Commission.

BEANS

Shipments ex terminal and transfer elevators are considered Commercially Clean when they contain no dockage material. Shipments containing dockage material are considered Not Commercially Clean (NCC) and are not permitted except with permission of the Commission. NCC shipments approved by the Commission will have dockage assessed in accordance with primary procedures to the nearest 0.1% less a direct deduction of 0.2%. Shipments loaded for direct export may contain not more than 0.5% sclerotinia in all grades.

LENTILS

Shipments ex terminal and transfer elevators are considered commercially clean when containing up to 0.2% dockage material. Shipments containing in excess of 0.2% are considered Not Commercially Clean (NCC) and will not be permitted except with permission of the Commission.

FABA BEANS

Shipments ex terminal and transfer elevators are considered commercially clean when containing up to 0.2% of total dockage including not over 0.1% foreign material that passes through the No.8 Slotted sieve. In addition to dockage material, commercially clean shipments for direct export may contain up to 1.0% and shipments not for direct export may contain up to 0.75% of finely broken faba beans removable with the No.8 Slotted sieve. Shipments containing in excess of 0.2% dockage material are considered Not Commercially Clean (NCC) and will not be permitted except with permission of the Commission. NCC shipments approved by the Commission ex terminal and transfer elevators will have dockage assessed in accordance with the primary procedure to the nearest 0.1% less a direct deduction of 0.2%.

Form 675 G (5)
PROCÉDÉ *Plusfax*® PROCESS
MONTREAL TORONTO

WORLD PULSE PRODUCTION

ACRES

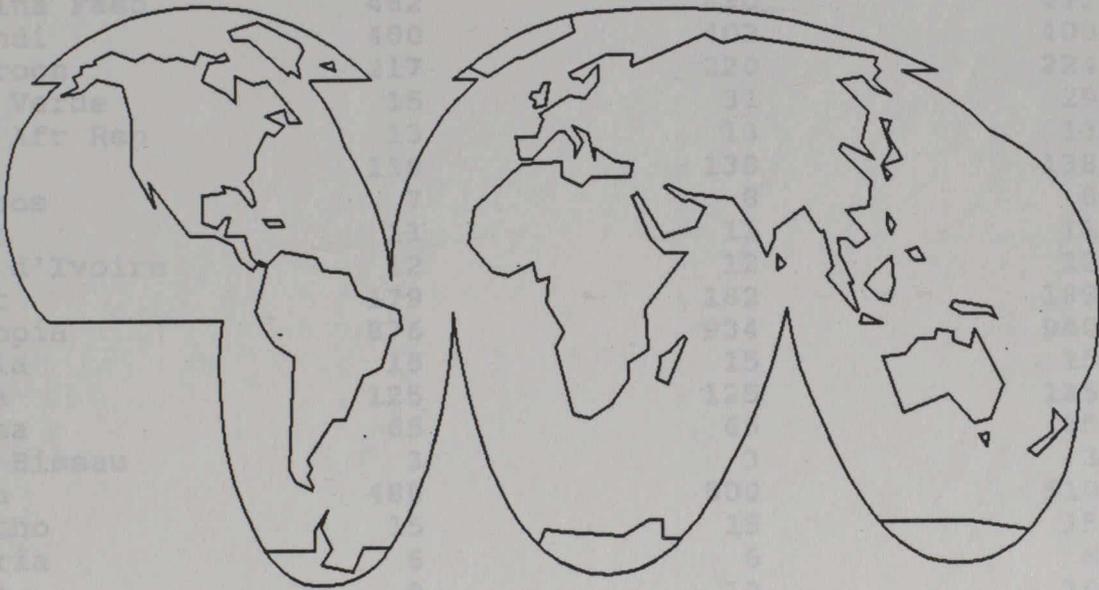
(1,000 hect)

WORLD

1982

	1981	1982	1983
World	68,174	67,845	68,439
Algeria	156	163	141
Angola	110	110	111
Benin	89	91	80
Botswana	30	30	30
Burkina Faso	482	482	491
Burundi	180	180	171
Camerun	17	17	22
Cape Verde	15	15	29
Central Africa			11
Chad		130	138
Comoros			
Congo			
Cote d'Ivoire	2	2	2
Egypt	182	182	182
Ethiopia	934	934	941
Gambia	15	15	15
Ghana	125	125	125
Guinea	82	82	82
Guinea Bissau	2	2	2
Kenya	48	48	48
Lesotho	25	25	25
Liberia	6	6	6
Libya	9	9	10
Madagascar	66	66	66
Malawi	372	372	372
Mali	55	55	55
Mauritania	74	74	74
Mauritius	2	2	2
Morocco	506	516	498
Mozambique	125	125	125
Namibia	7	7	7
Niger	1,614	1,614	1,614
Nigeria	2,121	2,121	2,121
Randa			20
Senegal	11	11	11
Sierra Leone	55	55	55
Somalia	29	29	29
South Africa	81	79	81
Sudan	93	93	93

PRODUCTION



WORLD



PRODUCTION

WORLD PULSE PRODUCTION

	ACREAGE		
	(,000 hect)		
	<u>1986</u>	<u>1987</u>	<u>1988</u>
WORLD	68,174	67,645	68,536
AFRICA	10,959	11,149	11,289
Algeria	156	163	161
Angola	110	110	110
Benin	89	91	90
Botswana	30	30	30
Burkina Faso	482	490	491
Burundi	400	402	409
Cameroon	217	220	224
Cape Verde	15	31	29
Cent Afr Rep	13	13	13
Chad	138	138	138
Comoros	7	8	8
Congo	11	11	11
Cote d'Ivoire	12	12	12
Egypt	179	182	189
Ethiopia	876	934	940
Gambia	15	15	15
Ghana	125	125	125
Guinea	65	65	65
Guin Bissau	3	3	3
Kenya	480	500	510
Lesotho	15	15	15
Liberia	6	6	6
Libya	9	10	10
Madagascar	66	60	62
Malawi	372	372	375
Mali	55	55	55
Mauritania	74	76	76
Mauritius	2	2	2
Morocco	506	516	486
Mozambique	125	125	125
Namibia	7	7	7
Niger	1,614	1,825	1,978
Nigeria	2,270	2,120	2,120
Rwanda	332	275	286
Senegal	118	72	71
Sierra Leone	55	56	56
Somalia	29	48	50
South Africa	81	79	87
Sudan	93	97	98

WORLD PULSE PRODUCTION

	ACREAGE		
	(,000 hect)		
	<u>1986</u>	<u>1987</u>	<u>1988</u>
Swaziland	5	5	5
Tanzania	632	800	800
Togo	128	121	65
Tunisia	115	114	86
Uganda	538	457	506
Zaire	200	200	200
Zambia	20	24	18
Zimbabwe	69	70	71
N&C AMERICA	3,860	4,125	4,045
Bahamas	1	1	1
Barbados	1	1	1
Belize	4	4	4
Canada	331	573	517
Costa Rica	56	48	48
Cuba	35	35	35
Dominica	1	1	1
Dominican Rep	74	87	110
El Salvador	61	63	57
Grenada	1	1	1
Guatemala	167	193	195
Haiti	179	184	179
Honduras	75	41	80
Jamaica	9	8	8
Mexico	2,009	1,977	2,043
Nicaragua	82	72	88
Panama	14	11	13
Puerto Rico	5	5	5
Trinidad-Tobago	2	2	2
United States	754	819	658
SOUTH AMERICA	6,655	6,437	7,170
Argentina	266	275	270
Bolivia	25	23	25
Brazil	5,620	5,364	6,077
Chile	155	160	137
Colombia	224	218	225
Ecuador	67	71	94
Guyana	3	3	3
Paraguay	52	69	69
Peru	148	160	161
Uruguay	6	6	6
Venezuela	88	90	104

WORLD PULSE PRODUCTION

	ACREAGE (,000 hect)		
	<u>1986</u>	<u>1987</u>	<u>1988</u>
ASIA	35,790	34,674	34,576
Afghanistan	25	25	25
Bangladesh	260	251	256
Bhutan	5	5	5
Burma	790	715	869
China	4,418	4,417	4,417
Cyprus	4	4	4
India	24,189	22,734	22,540
Indonesia	413	408	414
Iran	499	525	569
Iraq	41	25	32
Israel	9	10	10
Japan	80	87	88
Jordan	6	9	16
Kampuchea DM	42	43	43
Korea DPR	342	348	350
Korea Rep	50	60	51
Laos	13	13	14
Lebanon	10	10	11
Mongolia	4	4	4
Nepal	336	344	352
Pakistan	1,449	1,496	1,222
Philippines	45	44	44
Saudi Arabia	4	4	4
Sri Lanka	58	57	60
Syria	163	241	279
Thailand	598	543	626
Turkey	1,719	2,030	2,043
Vietnam	194	198	201
Yemen AR	27	24	30
EUROPE	3,263	3,553	3,435
Albania	60	60	61
Austria	1	n/a	n/a
Belg-Lux	3	6	4
Bulgaria	83	87	96
Czechoslovakia	108	106	108
Denmark	145	204	120
Finland	3	2	3
France	331	479	534
Germany DR	57	54	52
Germany FR	73	117	121
Greece	41	38	38
Hungary	120	142	131

WORLD PULSE PRODUCTION

	ACREAGE (,000 hect)		
	<u>1986</u>	<u>1987</u>	<u>1988</u>
Italy	178	175	163
Malta	1	1	1
Netherlands	32	47	31
Poland	310	300	339
Portugal	249	246	209
Romania	641	655	657
Spain	418	431	387
Sweden	41	41	42
United Kingdom	149	202	191
Yugoslavia	219	160	147
OCEANIA	924	1,285	1,646
Australia	891	1,240	1,603
New Zealand	27	38	36
Papua New Guinea	4	4	4
Solomon Islands	2	2	2
USSR	6,723	6,423	6,376
DEVELOPED	4,057	4,996	4,990
N.America	1,085	1,393	1,175
W.Europe	1,884	2,150	1,990
Oceania	918	1,278	1,639
Other Developed	170	176	185
DEVELOPING	51,016	49,813	50,711
Africa	10,597	10,781	10,905
Latin America	9,430	9,169	10,039
Near East	2,779	3,186	3,308
Far East	28,204	26,669	26,451
Other Developing	7	7	7
CENTRALLY PLANNED	13,101	12,836	12,836
Asian	5,000	5,010	5,015
E.Europe & USSR	8,102	7,826	7,821
DEVELOPED ALL	12,159	12,823	12,811
DEVELOPING ALL	56,016	54,822	55,726

WORLD PULSE PRODUCTION

	YIELDS (kg/hect)			PRODUCTION (,000 mt)		
	1986	1987	1988	1986	1987	1988
WORLD	771	807	797	52,594	54,619	54,652
AFRICA	648	588	608	7,101	6,558	6,865
Algeria	437	433	435	68	71	70
Angola	364	364	364	40	40	40
Benin	557	512	572	50	46	52
Botswana	467	467	467	14	14	14
Burkina Faso	376	368	355	181	180	174
Burundi	872	878	870	349	353	356
Cameroon	571	577	576	124	127	129
Cape Verde	402	423	431	6	13	13
Cent Afr Rep	492	492	493	6	7	7
Chad	435	435	435	60	60	60
Comoros	905	872	840	7	7	7
Congo	659	705	737	7	8	8
Cote d'Ivoire	667	667	667	8	8	8
Egypt	3,109	3,342	3,254	556	608	616
Ethiopia	1,016	948	1,050	890	885	987
Gambia	267	267	267	4	4	4
Ghana	88	88	88	11	11	11
Guinea	769	769	769	50	50	50
Guin Bissau	567	567	567	2	2	2
Kenya	1,080	920	922	518	460	470
Lesotho	411	411	411	6	6	6
Liberia	550	550	550	3	3	3
Libya	1,206	1,182	1,187	11	12	12
Madagascar	786	826	807	52	49	50
Malawi	612	618	630	228	230	236
Mali	1,036	1,036	1,036	57	57	57
Mauritania	324	342	368	24	26	28
Mauritius	625	650	650	1	1	1
Morocco	919	614	927	465	317	450
Mozambique	480	480	480	60	60	60
Namibia	985	985	1,000	6	6	7
Niger	194	173	188	313	316	373
Nigeria	587	495	495	1,332	1,050	1,050
Rwanda	895	544	532	297	150	152
Senegal	467	401	347	55	29	25
Sierra Leone	608	633	633	33	35	35
Somalia	439	323	503	13	16	25
South Africa	1,393	1,178	1,214	112	93	105
Sudan	1,272	1,131	1,108	119	110	108

WORLD PULSE PRODUCTION

	YIELDS (kg/hect)			PRODUCTION (,000 mt)		
	1986	1987	1988	1986	1987	1988
Swaziland	609	609	609	3	3	3
Tanzania	506	475	475	320	380	380
Togo	231	328	386	30	40	25
Tunisia	632	708	565	72	81	49
Uganda	646	750	704	348	343	356
Zaire	634	644	655	127	129	131
Zambia	518	654	613	10	15	11
Zimbabwe	734	681	687	51	48	49
N&C AMERICA	930	978	856	3,589	4,036	3,462
Bahamas	1,300	1,294	1,302	1	1	1
Barbados	1,258	1,254	1,254	1	1	1
Belize	761	722	743	3	3	3
Canada	1,419	1,555	1,001	470	892	518
Costa Rica	570	474	610	32	23	29
Cuba	800	800	800	28	28	28
Dominica	500	500	510	1	1	1
Dominican Rep	765	795	876	57	69	96
El Salvador	825	391	983	50	24	56
Grenada	1,390	1,386	1,379	1	1	1
Guatemala	666	650	495	111	125	96
Haiti	527	523	515	94	96	92
Honduras	536	544	575	40	22	46
Jamaica	917	895	916	8	7	8
Mexico	643	623	629	1,292	1,231	1,285
Nicaragua	713	520	564	59	38	50
Panama	544	517	469	8	6	6
Puerto Rico	555	572	525	3	3	3
Trinidad-Tob	1,235	1,311	1,299	2	2	2
United States	1,763	1,786	1,733	1,329	1,463	1,140
SOUTH AMERICA	466	448	538	3,101	2,881	3,856
Argentina	1,023	871	892	272	240	241
Bolivia	1,088	1,125	1,117	27	26	27
Brazil	401	382	491	2,254	2,051	2,981
Chile	912	870	1,071	142	139	146
Colombia	696	653	657	156	142	148
Ecuador	465	458	542	31	32	51
Guyana	600	600	600	2	2	2
Paraguay	704	884	899	37	61	62
Peru	862	835	836	128	133	134
Uruguay	980	983	960	6	6	6
Venezuela	521	545	550	46	49	57

WORLD PULSE PRODUCTION

	YIELDS (kg/hect)			PRODUCTION (,000 mt)		
	1986	1987	1988	1986	1987	1988
ASIA	686	674	672	24,560	23,373	23,237
Afghanistan	1,633	1,633	1,633	40	40	40
Bangladesh	736	738	737	191	185	188
Bhutan	622	717	722	3	4	4
Burma	757	806	843	598	577	732
China	1,228	1,210	1,286	5,423	5,344	5,679
Cyprus	1,197	1,215	1,201	5	5	4
India	550	529	498	13,311	12,024	11,229
Indonesia	797	819	820	329	334	339
Iran	703	705	679	351	370	386
Iraq	838	923	891	34	23	28
Israel	1,092	1,121	1,119	10	11	11
Japan	1,641	1,549	1,543	132	135	137
Jordan	640	927	911	4	8	15
Kampuchea DM	905	930	837	38	40	36
Korea DPR	877	876	900	300	305	315
Korea Rep	1,081	1,067	1,130	54	64	57
Laos	2,160	2,200	2,143	27	29	30
Lebanon	1,007	1,017	1,022	10	11	11
Mongolia	811	750	825	3	3	3
Nepal	435	435	436	146	150	153
Pakistan	547	517	451	792	773	552
Philippines	798	802	804	36	35	35
Saudi Arabia	1,842	1,842	1,846	7	7	7
Sri Lanka	750	687	653	43	39	39
Syria	872	713	1,010	142	172	282
Thailand	622	622	622	372	338	389
Turkey	1,124	1,051	1,125	1,931	2,134	2,298
Vietnam	928	890	945	180	176	190
Yemen AR	1,744	1,639	1,550	47	39	46
EUROPE	1,650	1,768	2,010	5,384	6,281	6,906
Albania	404	409	413	24	25	25
Austria	2,027	2,250	2,270	2	1	1
Belg-Lux	3,983	3,349	3,827	11	19	16
Bulgaria	984	976	961	82	85	93
Czechoslovakia	2,035	2,108	2,341	220	224	253
Denmark	3,821	2,570	4,827	553	524	579
Finland	2,120	1,682	1,760	5	4	4
France	3,813	4,085	4,912	1,263	1,956	2,623
Germany DR	1,781	1,687	1,725	102	90	90
Germany FR	3,823	3,259	3,322	280	382	403
Greece	1,595	1,422	1,421	66	54	54
Hungary	2,040	1,932	2,051	244	274	270

WORLD PULSE PRODUCTION

	YIELDS (kg/hect)			PRODUCTION (,000 mt)		
	1986	1987	1988	1986	1987	1988
Italy	1,395	1,333	1,310	249	233	213
Malta	2,308	2,389	2,471	2	2	2
Netherlands	5,191	3,651	3,462	164	173	106
Poland	1,530	1,709	1,665	474	512	565
Portugal	316	324	372	79	80	78
Romania	563	659	513	361	432	337
Spain	750	777	816	313	335	316
Sweden	3,060	3,011	3,008	126	125	125
United Kingdom	3,557	2,767	3,079	530	559	588
Yugoslavia	1,066	1,192	1,106	233	190	163
OCEANIA	1,000	1,240	967	924	1,593	1,591
Australia	960	1,194	923	855	1,481	1,480
New Zealand	2,389	2,815	2,928	65	106	105
Papua N.Guin	500	512	524	2	2	2
Solomon Is	1,100	1,150	1,200	2	2	2
USSR	1,180	1,541	1,370	7,936	9,898	8,735
DEVELOPED	1,688	1,765	1,758	6,850	8,821	8,770
N.America	1,658	1,691	1,411	1,799	2,355	1,658
W.Europe	2,058	2,158	2,650	3,877	4,639	5,273
Oceania	1,002	1,242	967	920	1,587	1,586
Other Dev'ed	1,493	1,359	1,366	254	239	253
DEVELOPING	595	570	578	30,358	28,391	29,292
Africa	595	532	552	6,303	5,736	6,024
Latin America	519	498	564	4,891	4,562	5,660
Near East	1,172	1,111	1,165	3,258	3,538	3,854
Far East	564	546	520	15,902	14,550	13,748
Other Dev'ing	762	794	814	5	5	6
CENTRALLY PLN'	1,174	1,356	1,293	15,387	17,407	16,591
Asian	1,189	1,171	1,241	5,944	5,868	6,223
E.Eur & USSR	1,165	1,474	1,326	9,442	11,539	10,368
DEVELOPED ALL	1,340	1,588	1,494	16,292	20,360	19,137
DEVELOPING ALL	648	625	637	36,302	34,259	35,515

WORLD DRY BEAN PRODUCTION

	ACREAGE		
	(,000 hect)		
	<u>1986</u>	<u>1987</u>	<u>1988</u>
WORLD	26,174	25,437	27,332
AFRICA	2,479	2,467	2,469
Algeria	3	3	3
Angola	110	110	110
Benin	79	81	80
Burundi	340	340	345
Cameroon	165	166	168
Chad	98	98	98
Congo	6	6	6
Egypt	8	10	10
Ethiopia	41	40	41
Lesotho	7	7	7
Madagascar	54	48	50
Malawi	133	134	134
Morocco	12	13	13
Rwanda	300	250	260
Somalia	29	48	50
South Africa	56	54	62
Sudan	2	2	2
Swaziland	2	2	2
Tanzania	318	400	400
Togo	119	115	56
Uganda	397	339	370
Zaire	135	135	135
Zimbabwe	64	65	66
N&C AMERICA	3,067	3,121	3,095
Belize	4	4	4
Canada	44	57	45
Costa Rica	56	48	48
Cuba	35	35	35
Dominican Rep	43	63	69
El Salvador	61	63	57
Guatemala	145	170	172
Haiti	85	90	85
Honduras	75	41	80
Mexico	1,820	1,787	1,850
Nicaragua	82	72	88
Panama	11	8	10
United States	605	683	553

WORLD DRY BEAN PRODUCTION

	ACREAGE (,000 hect)		
	1986	1987	1988
SOUTH AMERICA	6,175	5,939	6,677
Argentina	240	245	240
Bolivia	9	8	9
Brazil	5,478	5,222	5,937
Chile	90	86	76
Colombia	127	121	128
Ecuador	42	42	58
Paraguay	41	55	54
Peru	67	78	79
Uruguay	5	5	5
Venezuela	76	78	92
ASIA	13,069	12,587	13,821
Bangladesh	46	44	44
Burma	467	433	500
China	1,418	1,417	1,417
Cyprus	1	2	1
India	9,360	8,938	10,000
Indonesia	405	400	406
Iran	207	218	235
Iraq	9	9	9
Japan	78	85	86
Kampuchea DM	42	43	43
Korea Rep	35	40	33
Lebanon	1	1	1
Nepal	28	29	30
Pakistan	192	169	169
Philippines	42	41	42
Sri Lanka	30	32	35
Syria	4	7	7
Thailand	493	438	520
Turkey	152	180	180
Vietnam	60	62	63
EUROPE	1,324	1,261	1,208
Albania	51	52	52
Belg-Lux	1	1	1
Bulgaria	43	41	42
Czechoslovakia	4	3	3
France	9	8	7
Germany FR	4	3	2
Greece	20	17	17

WORLD DRY BEAN PRODUCTION

	ACREAGE		
	(<u>,000 hect</u>)		
	<u>1986</u>	<u>1987</u>	<u>1988</u>
Hungary	16	19	20
Italy	36	33	30
Netherlands	3	2	2
Poland	50	48	54
Portugal	200	197	162
Romania	590	600	600
Spain	105	103	100
Sweden	1	1	1
Yugoslavia	191	132	114
OCEANIA	7	11	12
Australia	7	11	12
USSR	53	51	50
DEVELOPED	1,359	1,387	1,195
N.America	649	740	597
W.Europe	570	498	438
Oceania	7	11	12
Other Developed	134	139	148
DEVELOPING	22,488	21,714	23,794
Africa	2,413	2,400	2,394
Latin America	8,593	8,320	9,175
Near East	384	429	446
Far East	11,097	10,564	11,778
CENTRALLY PLANNED	2,328	2,336	2,343
Asian	1,520	1,522	1,523
E.Europe & USSR	808	815	820
DEVELOPED ALL	2,167	2,202	2,015
DEVELOPING ALL	24,008	23,235	25,317

WORLD DRY BEAN PRODUCTION

	YIELDS (kg/hect)			PRODUCTION (,000 mt)		
	1986	1987	1988	1986	1987	1988
WORLD	553	563	568	14,482	14,315	15,533
AFRICA	707	669	680	1,753	1,651	1,678
Algeria	381	500	700	1	2	2
Angola	364	364	364	40	40	40
Benin	555	501	563	44	40	45
Burundi	921	926	916	313	315	316
Cameroon	679	687	685	112	114	115
Chad	429	429	429	42	42	42
Congo	635	709	750	4	5	5
Egypt	2,256	2,777	2,857	18	28	29
Ethiopia	805	750	805	33	30	33
Lesotho	342	342	342	3	3	3
Libya	2,039	2,077	2,057	1	1	1
Madagascar	780	825	800	42	40	40
Malawi	541	560	575	72	75	77
Morocco	917	692	712	11	9	9
Rwanda	927	563	550	278	141	143
Somalia	439	323	503	13	16	25
South Africa	1,696	1,407	1,419	95	76	88
Sudan	1,176	1,250	1,500	2	3	3
Swaziland	471	471	471	1	1	1
Tanzania	660	600	600	210	240	240
Togo	193	316	323	23	36	18
Uganda	673	801	749	267	272	277
Zaire	593	593	593	80	80	80
Zimbabwe	750	692	697	48	45	46
N&C AMERICA	835	853	783	2,560	2,664	2,424
Belize	761	722	743	3	3	3
Canada	957	2,041	1,631	42	116	73
Costa Rica	570	474	610	32	23	29
Cuba	800	800	800	28	28	28
Dominican Rep	664	685	785	29	43	54
El Salvador	825	391	983	50	24	56
Guatemala	698	676	501	101	115	86
Haiti	573	556	565	49	50	48
Honduras	536	544	575	40	22	46
Mexico	596	572	581	1,085	1,023	1,075
Nicaragua	713	520	564	59	38	50
Panama	352	393	350	4	3	4
United States	1,717	1,720	1,578	1,039	1,175	872

WORLD DRY BEAN PRODUCTION

	YIELDS (kg/hect)			PRODUCTION (,000 mt)		
	1986	1987	1988	1986	1987	1988
SOUTH AMERICA	453	431	532	2,799	2,561	3,549
Argentina	1,000	816	839	240	200	201
Bolivia	1,200	1,313	1,294	11	11	11
Brazil	403	384	495	2,209	2,006	2,941
Chile	993	948	1,319	89	81	100
Colombia	819	747	749	104	90	96
Ecuador	509	517	672	21	22	39
Paraguay	684	877	898	28	48	49
Peru	803	749	753	54	59	60
Uruguay	625	620	617	3	3	3
Venezuela	518	541	543	40	42	50
ASIA	490	523	513	6,401	6,586	7,091
Bangladesh	643	658	658	30	29	29
Burma	726	819	828	339	355	414
China	1,074	1,008	1,150	1,523	1,428	1,629
Cyprus	1,529	1,411	1,167	1	2	1
India	329	371	350	3,077	3,321	3,500
Indonesia	802	825	825	325	330	335
Iran	803	805	780	166	175	184
Iraq	659	841	851	6	8	8
Japan	1,648	1,553	1,547	128	132	133
Kampuchea DM	905	930	837	38	40	36
Korea Rep	1,081	1,044	1,152	37	42	38
Lebanon	1,455	1,417	1,400	2	2	2
Nepal	500	505	508	14	15	15
Pakistan	491	462	491	94	78	83
Philippines	730	733	745	31	30	31
Sri Lanka	624	531	490	19	17	17
Syria	1,463	1,664	437	6	11	3
Thailand	611	611	612	301	267	318
Turkey	1,117	1,167	1,167	170	210	210
Vietnam	1,583	1,552	1,667	95	96	105
EUROPE	671	613	599	888	773	724
Albania	399	405	410	21	21	21
Belg-Lux	3,110	2,979	3,260	2	3	2
Bulgaria	1,048	739	669	46	30	28
Czechoslovakia	1,016	1,108	1,109	4	4	3
France	1,882	1,857	1,973	16	16	15
Germany FR	3,584	3,200	3,200	15	8	8
Greece	1,900	1,559	1,552	38	27	27

WORLD DRY BEAN PRODUCTION

	YIELDS (kg/hect)			PRODUCTION (,000 mt)		
	1986	1987	1988	1986	1987	1988
Hungary	978	693	672	15	13	13
Italy	1,663	1,534	1,738	60	51	53
Malta	2,000	2,151	2,305	1	1	1
Netherlands	2,825	1,755	2,435	9	3	6
Poland	2,054	2,007	2,000	102	97	108
Portugal	236	241	289	47	47	47
Romania	444	414	375	262	248	225
Spain	734	699	630	77	72	63
Sweden	1,577	444	439	2	1	1
Yugoslavia	896	995	917	171	131	104
OCEANIA	748	722	583	5	8	7
Australia	748	722	583	5	8	7
USSR	1,415	1,392	1,200	75	71	60
DEVELOPED	1,285	1,345	1,254	1,747	1,866	1,498
N.America	1,665	1,744	1,582	1,080	1,291	945
W.Europe	769	723	743	438	360	325
Oceania	748	722	583	5	8	7
Other Developed	1,668	1,496	1,493	223	208	221
DEVELOPING	469	479	496	10,554	10,400	11,806
Africa	678	643	650	1,637	1,544	1,557
Latin America	498	473	548	4,279	3,934	5,028
Near East	967	1,024	987	371	439	440
Far East	384	424	406	4,266	4,483	4,780
CENTRALLY PLANNED	937	877	951	2,181	2,048	2,229
Asian	1,090	1,028	1,162	1,656	1,564	1,770
E.Europe & USSR	650	595	559	525	485	459
DEVELOPED ALL	1,048	1,068	971	2,272	2,351	1,957
DEVELOPING ALL	509	515	536	12,210	11,964	13,576

WORLD DRY BROAD BEAN PRODUCTION

	ACREAGE (,000 hect)		1987	1988
	1986	1987		
WORLD	3,213	3,288	3,288	3,271
AFRICA	845	872	872	854
Algeria	73	75	75	77
Egypt	129	136	136	140
Ethiopia	360	360	360	360
Libya	8	9	9	9
Morocco	196	211	211	207
Sierra Leone	1	1	1	1
Sudan	30	30	30	30
Tunisia	48	50	50	31
N&C AMERICA	87	88	88	97
Canada	25	25	25	32
Dominican Rep	10	10	10	11
Guatemala	22	23	23	23
Mexico	30	30	30	32
SOUTH AMERICA	204	208	208	207
Argentina	1	1	1	1
Bolivia	11	10	10	11
Brazil	142	142	142	140
Ecuador	9	11	11	10
Paraguay	9	12	12	13
Peru	32	32	32	32
ASIA	1,764	1,764	1,764	1,766
China	1,700	1,700	1,700	1,700
Cyprus	2	1	1	1
Iraq	9	8	8	8
Japan	1	1	1	1
Jordan	1	1	1	1
Syria	8	9	9	12
Turkey	43	44	44	43

WORLD DRY BROAD BEAN PRODUCTION

	ACREAGE (,000 hect)		PRODUCTION (,000 mt)
	1986	1987	1988
EUROPE	294	318	297
Belg-Lux	n/a	1	1
Czechoslovakia	14	13	13
France	41	37	36
German DR	7	7	7
Germany FR	28	54	58
Greece	4	3	4
Italy	120	120	111
Netherlands	6	10	n/a
Portugal	23	24	22
Spain	50	49	45
OCEANIA	19	38	50
Australia	19	38	50
DEVELOPED	318	363	359
N.America	25	25	32
W.Europe	273	299	277
Oceania	19	38	50
Other Developed	1	1	1
DEVELOPING	1,174	1,206	1,192
Africa	677	697	675
Latin America	266	271	272
Near East	230	238	244
CENTRALLY PLANNED	1,721	1,720	1,720
Asian	1,700	1,700	1,700
E.Europe & USSR	21	20	20
DEVELOPED ALL	339	382	379
DEVELOPING ALL	2,874	2,906	2,892

WORLD DRY BROAD BEAN PRODUCTION

	YIELDS (kg/hect)			PRODUCTION (,000 mt)		
	1986	1987	1988	1986	1987	1988
WORLD	1,366	1,400	1,443	4,389	4,603	4,720
AFRICA	1,553	1,423	1,620	1,312	1,241	1,384
Algeria	562	533	519	41	40	40
Egypt	3,474	3,666	3,571	448	499	500
Ethiopia	1,444	1,333	1,500	520	480	540
Libya	1,024	1,000	1,006	9	9	9
Morocco	1,096	603	1,123	215	127	232
Sierra Leone	1,229	1,167	1,167	1	1	1
Sudan	1,667	1,667	1,600	50	50	48
Tunisia	604	694	463	29	35	14
N&C AMERICA	938	952	936	82	84	91
Canada	756	800	791	19	20	25
Dominican Rep	1,268	1,298	1,346	13	14	14
Guatemala	455	453	453	10	10	10
Mexico	1,333	1,333	1,281	40	40	41
SOUTH AMERICA	529	537	517	108	112	107
Argentina	9,091	9,091	9,091	10	10	10
Bolivia	1,000	1,000	1,000	11	10	11
Brazil	317	317	286	45	45	40
Ecuador	470	480	380	4	5	4
Paraguay	791	924	917	7	11	12
Peru	938	938	938	30	30	30
Uruguay	2,727	2,773	2,800	1	1	1
ASIA	1,308	1,374	1,393	2,308	2,425	2,461
China	1,294	1,362	1,382	2,200	2,316	2,350
Cyprus	1,228	1,286	1,600	2	2	2
Iraq	1,022	1,139	1,131	10	9	10
Japan	1,093	1,091	1,091	1	1	1
Syria	1,696	1,775	1,769	14	16	21
Turkey	1,882	1,818	1,791	80	80	77

WORLD DRY BROAD BEAN PRODUCTION

	YIELDS (kg/hect)			PRODUCTION (,000 mt)		
	<u>1986</u>	<u>1987</u>	<u>1988</u>	<u>1986</u>	<u>1987</u>	<u>1988</u>
EUROPE	1,870	2,111	2,070	551	672	614
Belg-Lux	3,810	3,550	3,333	1	3	3
Czechoslovakia	1,453	2,257	1,629	21	30	22
France	3,195	3,750	3,849	131	138	140
Germany DR	2,402	2,365	2,348	17	16	16
Germany FR	3,838	3,617	3,717	106	195	216
Greece	1,573	1,627	1,629	7	6	6
Italy	1,355	1,299	1,196	163	156	133
Netherlands	5,175	4,712	n/a	30	48	n/a
Portugal	778	779	823	18	19	18
Spain	1,110	1,265	1,356	56	62	61
Switzerland	3,782	3,814	3,865	1	1	1
OCEANIA	1,526	1,816	1,260	29	69	63
Australia	1,526	1,816	1,260	29	69	63
DEVELOPED	1,767	1,978	1,853	562	717	666
N.America	756	800	791	19	20	25
W.Europe	1,878	2,099	2,084	513	627	577
Oceania	1,526	1,816	1,260	29	69	63
Other Developed	1,066	1,062	1,062	1	1	1
DEVELOPING	1,354	1,264	1,399	1,589	1,524	1,667
Africa	1,189	980	1,225	805	683	827
Latin America	641	648	634	171	176	173
Near East	2,664	2,792	2,731	613	666	667
CENTRALLY PLN'D	1,300	1,373	1,388	2,237	2,361	2,387
Asian	1,294	1,362	1,382	2,200	2,316	2,350
E.Europe & USSR	1,766	2,293	1,868	37	45	37
DEVELOPED ALL	1,767	1,994	1,854	599	762	703
DEVELOPING ALL	1,318	1,321	1,389	3,789	3,840	4,017

WORLD DRY PEA PRODUCTION

	ACREAGE		
	(–000 hect)		
	1986	1987	1988
WORLD	9,318	9,612	9,854
AFRICA	449	459	463
Algeria	17	18	16
Burundi	60	62	64
Congo	5	5	5
Egypt	3	3	3
Ethiopia	146	146	146
Lesotho	7	7	7
Morocco	50	45	46
Rwanda	32	25	26
Sierra Leone	2	2	2
South Africa	4	4	4
Tanzania	50	70	70
Uganda	21	20	21
Zaire	52	52	52
N&C AMERICA	227	341	384
Canada	131	253	297
Dominican Rep	2	1	1
Jamaica	5	5	5
Mexico	4	4	4
United States	85	79	77
SOUTH AMERICA	130	134	140
Argentina	7	10	10
Bolivia	5	5	5
Chile	8	6	6
Colombia	57	57	57
Ecuador	13	15	20
Guyana	3	3	3
Paraguay	2	2	2
Peru	33	33	33
Uruguay	1	1	1
Venezuela	3	3	3
ASIA	2,046	2,024	2,023
Burma	29	26	30
China	1,300	1,300	1,300
India	502	479	471
Iran	67	70	76
Israel	1	1	1

WORLD DRY PEA PRODUCTION

	ACREAGE (,000 hect)		
	<u>1986</u>	<u>1987</u>	<u>1987</u>
Japan	1	1	1
Korea Rep	2	2	2
Pakistan	141	143	138
Syria	1	1	1
Turkey	2	2	2
EUROPE	773	1,068	1,036
Belg-Lux	2	4	2
Bulgaria	20	27	32
Czechoslovakia	70	75	76
Denmark	135	199	115
Finland	3	2	3
France	271	423	479
Germany DR	23	22	21
Hungary	68	93	95
Italy	3	3	4
Netherlands	22	35	28
Romania	42	45	47
Spain	4	4	4
Sweden	5	5	5
United Kingdom	91	117	106
Yugoslavia	13	13	18
OCEANIA	235	351	469
Australia	208	314	433
New Zealand	27	38	36
USSR	5,457	5,234	5,340
DEVELOPED	1,007	1,495	1,613
N.America	217	331	374
W.Europe	550	807	765
Oceania	235	351	469
Other Developed	5	5	5
DEVELOPING	1,331	1,321	1,329
Africa	442	452	455
Latin America	141	143	149
Near & Far East	748	725	724
CENTRALLY PLANNED	6,980	6,796	6,912
DEVELOPED ALL	6,687	6,990	7,225
DEVELOPING ALL	2,631	2,621	2,629

WORLD DRY PEA PRODUCTION

	YIELDS (kg/hect)			PRODUCTION (,000 mt)		
	1986	1987	1988	1986	1987	1988
WORLD	1,330	1,624	1,574	12,392	15,613	15,505
AFRICA	714	625	715	321	287	331
Algeria	387	222	250	7	4	4
Burundi	600	613	625	36	38	40
Congo	690	700	720	3	4	4
Egypt	2,041	2,381	2,167	6	6	7
Ethiopia	890	822	959	130	120	140
Lesotho	479	479	479	4	4	4
Libya	5,000	5,060	5,144	2	2	2
Morocco	841	496	845	42	22	39
Rwanda	594	360	350	19	9	9
Sierra Leone	750	750	750	2	2	2
South Africa	1,925	1,750	1,875	8	7	8
Tanzania	300	286	286	15	20	20
Uganda	476	500	571	10	10	12
Zaire	731	769	808	38	40	42
N&C AMERICA	1,982	1,923	1,540	451	656	591
Canada	1,814	1,749	1,199	238	442	357
Dominican Rep	608	862	479	1	1	n/a
Jamaica	938	879	882	4	4	4
Mexico	500	500	512	2	2	2
United States	2,401	2,633	2,975	205	207	228
SOUTH AMERICA	704	744	727	92	99	102
Argentina	1,106	1,368	1,368	7	13	13
Bolivia	1,111	1,109	1,106	5	5	5
Chile	588	862	783	5	5	5
Colombia	614	614	614	35	35	35
Ecuador	293	244	300	4	4	6
Guyana	600	600	600	2	2	2
Paraguay	716	832	837	1	2	2
Peru	892	909	909	29	30	30
Uruguay	2,182	2,273	2,091	2	3	2
Venezuela	532	561	581	2	2	2
ASIA	1,113	1,055	1,119	2,277	2,136	2,264
Burma	808	734	824	24	19	25
China	1,308	1,231	1,308	1,700	1,600	1,700
India	851	810	869	427	388	410
Iran	725	726	690	49	51	53
Japan	2,195	2,183	2,195	2	2	2

WORLD DRY PEA PRODUCTION

	YIELDS (kg/hect)			PRODUCTION (,000 mt)		
	1986	1987	1988	1986	1987	1988
Korea Rep	882	900	933	2	1	1
Pakistan	482	483	486	68	69	67
Syria	825	912	845	1	1	1
Turkey	2,049	2,083	2,083	5	5	5
EUROPE	3,428	3,193	3,984	2,651	3,411	4,129
Belg-Lux	4,440	3,410	4,200	8	13	10
Bulgaria	1,192	1,327	1,486	24	35	48
Czechoslovakia	2,511	2,345	2,788	176	175	212
Denmark	3,807	2,437	4,696	514	485	540
Finland	2,120	1,682	1,760	5	4	4
France	4,041	4,212	5,114	1,095	1,782	2,448
Germany DR	2,237	1,980	2,095	52	44	44
Hungary	2,791	2,431	2,524	189	227	241
Ireland	3,590	3,500	3,500	1	1	1
Italy	1,684	1,669	2,155	5	5	9
Netherlands	5,548	3,448	3,546	124	122	100
Romania	2,143	3,858	2,128	90	174	100
Spain	1,136	1,250	1,250	5	5	5
Sweden	2,000	2,020	2,038	10	10	11
United Kingdom	3,626	2,641	3,189	330	309	338
Yugoslavia	1,601	1,497	960	22	20	17
OCEANIA	1,298	1,756	1,258	305	617	590
Australia	1,157	1,630	1,120	241	511	485
New Zealand	2,380	2,805	2,917	65	106	105
USSR	1,154	1,606	1,404	6,296	8,407	7,500
DEVELOPED	2,857	2,697	2,894	2,877	4,032	4,668
N.America	2,045	1,958	1,562	443	649	584
W.Europe	3,853	3,417	4,557	2,119	2,757	3,484
Oceania	1,298	1,756	1,258	305	617	590
Other Developed	1,813	1,677	1,771	10	9	10
DEVELOPING	742	697	747	987	920	993
Africa	690	601	691	305	272	314
Latin America	705	743	725	100	106	108
Near & Far East	803	789	797	582	542	570
CENTRALLY PLN'D	1,222	1,569	1,424	8,527	10,661	9,844
DEVELOPED ALL	1,451	1,873	1,773	9,705	13,093	12,812
DEVELOPING ALL	1,021	961	1,024	2,687	2,520	2,693

WORLD CHICK PEA PRODUCTION

	ACREAGE (,000 hect)		PRODUCTION (,000 met)	
	<u>1986</u>	<u>1987</u>	<u>1986</u>	<u>1987</u>
WORLD	10,564	10,028		8,650
AFRICA	415	463		454
Algeria	58	58		58
Egypt	11	8		9
Ethiopia	132	180		182
Libya	1	1		1
Malawi	33	33		34
Morocco	82	77		73
Sudan	1	2		2
Tanzania	50	60		60
Tunisia	44	40		31
Uganda	4	5		6
N&C AMERICA	140	140		140
Mexico	140	140		140
SOUTH AMERICA	42	45		44
Argentina	3	4		4
Chile	13	15		14
Colombia	23	23		23
Peru	3	3		3
ASIA	9,810	9,187		7,847
Bangladesh	47	47		46
Burma	187	175		255
India	7,805	6,984		5,806
Iran	101	106		115
Iraq	17	3		10
Israel	5	5		5
Jordan	1	2		2
Lebanon	2	2		2
Nepal	40	41		41
Pakistan	1,033	1,082		817
Syria	38	84		83
Turkey	533	655		665

WORLD CHICK PEA PRODUCTION

	ACREAGE (,000 hect)		PRODUCTION (,000 mt)	
	1986	1987	1986	1987
EUROPE	130	127		115
Greece	5	5		5
Italy	9	8		8
Portugal	25	24		24
Spain	90	89		77
Yugoslavia	2	1		1
OCEANIA	26	67		50
Australia	26	67		50
DEVELOPED	162	199		170
W.Europe	130	127		115
Oceania	26	67		50
Other Developed	5	5		5
DEVELOPING	10,402	9,829		8,480
Africa	403	453		444
Latin America	182	185		184
Near East	705	863		888
Far East	9,113	8,328		6,965
DEVELOPED ALL	162	199		170
DEVELOPING ALL	10,402	9,829		8,480

WORLD CHICK PEA PRODUCTION

	YIELDS (kg/hect)			PRODUCTION (,000 mt)		
	1986	1987	1988	1986	1987	1988
WORLD	750	680	671	7,919	6,817	5,803
AFRICA	639	637	643	265	295	292
Algeria	316	379	379	18	22	22
Egypt	1,714	1,719	1,765	18	13	15
Ethiopia	670	667	714	88	120	130
Libya	706	712	714	n/a	n/a	n/a
Malawi	658	667	716	22	22	24
Morocco	857	794	766	70	61	56
Sudan	1,034	1,067	1,045	2	2	2
Tanzania	300	333	333	15	20	20
Tunisia	682	800	654	30	32	21
Uganda	450	500	500	2	3	3
N&C AMERICA	1,071	1,071	1,071	150	150	150
Mexico	1,071	1,071	1,071	150	150	150
SOUTH AMERICA	610	718	563	26	32	25
Argentina	1,000	1,000	1,000	3	4	4
Chile	706	1,003	536	9	15	8
Colombia	478	478	478	11	11	11
Peru	828	828	828	2	2	2
ASIA	750	673	664	7,354	6,184	5,209
Bangladesh	768	809	804	36	38	37
Burma	909	876	943	170	153	240
India	742	649	624	5,788	4,532	3,622
Iran	721	721	694	73	77	80
Iraq	859	754	750	14	3	8
Israel	1,479	1,463	1,458	7	8	8
Jordan	511	792	833	1	1	1
Lebanon	1,250	1,300	1,325	3	3	3
Nepal	450	445	445	18	18	18
Pakistan	567	539	440	586	583	360
Syria	723	512	662	28	43	55
Turkey	1,181	1,106	1,169	630	725	778

WORLD CHICK PEA PRODUCTION

	YIELDS (kg/hect)			PRODUCTION (,000 mt)		
	<u>1986</u>	<u>1987</u>	<u>1988</u>	<u>1986</u>	<u>1987</u>	<u>1988</u>
EUROPE	675	733	740	88	93	85
Greece	1,200	1,164	1,170	6	5	6
Italy	1,137	1,157	1,090	10	9	9
Portugal	502	521	500	12	12	12
Spain	639	719	740	58	64	57
Yugoslavia	1,260	1,382	1,357	2	2	2
OCEANIA	1,379	940	840	36	63	42
Australia	1,379	940	840	36	63	42
DEVELOPED	813	822	792	131	164	135
W.Europe	675	733	740	88	93	85
Oceania	1,379	940	840	36	63	42
Other Developed	1,479	1,463	1,458	7	8	8
DEVELOPING	749	677	668	7,788	6,653	5,668
Africa	610	617	620	246	280	275
Latin America	965	986	950	176	182	175
Near East	1,089	1,004	1,060	768	866	941
Far East	724	639	614	6,599	5,324	4,276
DEVELOPED ALL	813	822	792	131	164	135
DEVELOPING ALL	749	677	668	7,788	6,653	5,668

WORLD LENTIL PRODUCTION

	ACREAGE (,000 hect)		
	1986	1987	1988
WORLD	2,843	3,233	3,087
AFRICA	146	169	141
Algeria	5	8	6
Egypt	9	10	9
Ethiopia	45	60	60
Morocco	86	90	65
Tunisia	2	2	2
N&C AMERICA	210	312	189
Canada	131	239	144
Mexico	15	16	17
United States	64	58	29
SOUTH AMERICA	77	87	73
Argentina	16	16	16
Chile	37	46	33
Colombia	17	17	17
Ecuador	2	2	2
Peru	5	5	5
ASIA	2,264	2,482	2,510
Bangladesh	67	64	66
Burma	2	3	3
India	1,091	1,087	1,053
Iran	96	101	110
Iraq	4	2	2
Jordan	3	5	10
Lebanon	4	4	4
Nepal	125	129	134
Pakistan	57	81	76
Syria	67	89	132
Turkey	747	916	920

WORLD LENTIL PRODUCTION

	ACREAGE (,000 hect)		PRODUCTION (,000 mt)	
	1986	1987	1986	1988
EUROPE	109	142		123
Bulgaria	18	18		21
Czechoslovakia	6	6		5
France	10	10		11
Greece	2	2		2
Hungary	5	10		11
Italy	1	1		1
Spain	67	94		72
Yugoslavia	1	1		1
USSR	38	41		50
DEVELOPED	275	404		259
N.America	195	296		172
W.Europe	80	108		87
DEVELOPING	2,502	2,753		2,741
Africa	137	159		133
Latin America	92	103		90
Near East	930	1,127		1,186
Far East	1,343	1,364		1,332
CENTRALLY PLANNED	67	75		86
E.Europe & USSR	67	75		86
DEVELOPED ALL	342	479		345
DEVELOPING ALL	2,502	2,753		2,741

WORLD LENTIL PRODUCTION

	YIELDS (kg/hect)			PRODUCTION (,000 mt)		
	1986	1987	1988	1986	1987	1988
WORLD	810	792	812	2,303	2,560	2,508
AFRICA	765	630	877	111	107	124
Algeria	217	250	167	1	2	1
Egypt	1,556	1,800	1,765	14	18	15
Ethiopia	577	833	933	26	50	56
Morocco	813	398	781	70	36	51
Tunisia	667	625	625	1	1	1
N&C AMERICA	1,294	1,317	639	272	411	121
Canada	1,304	1,314	442	171	314	64
Mexico	1,000	1,000	1,000	15	16	17
United States	1,345	1,416	1,413	86	81	41
SOUTH AMERICA	668	562	604	52	49	44
Argentina	774	813	813	12	13	13
Chile	779	534	614	29	25	20
Colombia	353	353	353	6	6	6
Ecuador	291	516	545	1	1	1
Peru	741	741	741	4	4	4
ASIA	782	744	829	1,771	1,845	2,082
Bangladesh	710	684	682	48	44	45
Burma	326	363	357	1	1	1
Cyprus	750	758	758	n/a	n/a	n/a
India	607	598	629	663	650	663
Iran	479	480	462	46	49	51
Iraq	714	765	789	3	1	2
Israel	294	294	294	n/a	n/a	n/a
Jordan	618	1,032	1,014	2	5	10
Lebanon	912	927	928	4	4	4
Nepal	488	487	486	61	63	65
Pakistan	544	402	408	31	32	31
Syria	938	793	1,295	63	71	171
Turkey	1,137	1,010	1,130	850	925	1,040

WORLD LENTIL PRODUCTION

	YIELDS (kg/hect)			PRODUCTION (,000 mt)		
	<u>1986</u>	<u>1987</u>	<u>1988</u>	<u>1986</u>	<u>1987</u>	<u>1988</u>
EUROPE	790	792	866	86	112	106
Bulgaria	651	1,003	753	12	18	16
Czechoslovakia	958	1,080	1,161	5	6	6
France	2,000	2,000	1,818	20	20	20
Germany DR	4,118	3,176	3,235	n/a	n/a	n/a
Greece	1,316	1,500	1,500	3	3	3
Hungary	797	909	914	4	9	10
Italy	923	851	782	1	1	1
Spain	611	574	708	41	54	51
Yugoslavia	1,128	1,000	958	1	1	1
USSR	316	878	600	12	36	30
DEVELOPED	1,168	1,172	693	321	474	180
N.America	1,317	1,334	604	257	395	104
W.Europe	809	729	870	65	79	76
DEVELOPING	779	732	827	1,949	2,017	2,267
Africa	713	557	820	97	89	109
Latin America	722	630	678	67	65	61
Near East	1,055	952	1,089	981	1,073	1,292
Far East	598	579	604	803	790	805
CENTRALLY PLANNED	497	928	707	33	70	61
E.Europe & USSR	497	928	707	33	70	61
DEVELOPED ALL	1,038	1,134	696	354	543	240
DEVELOPING ALL	779	732	827	1,949	2,017	2,267

Form 675 G (5)
PROCÉDÉ **Plasdex**® PROCESS
MONTREAL - TORONTO



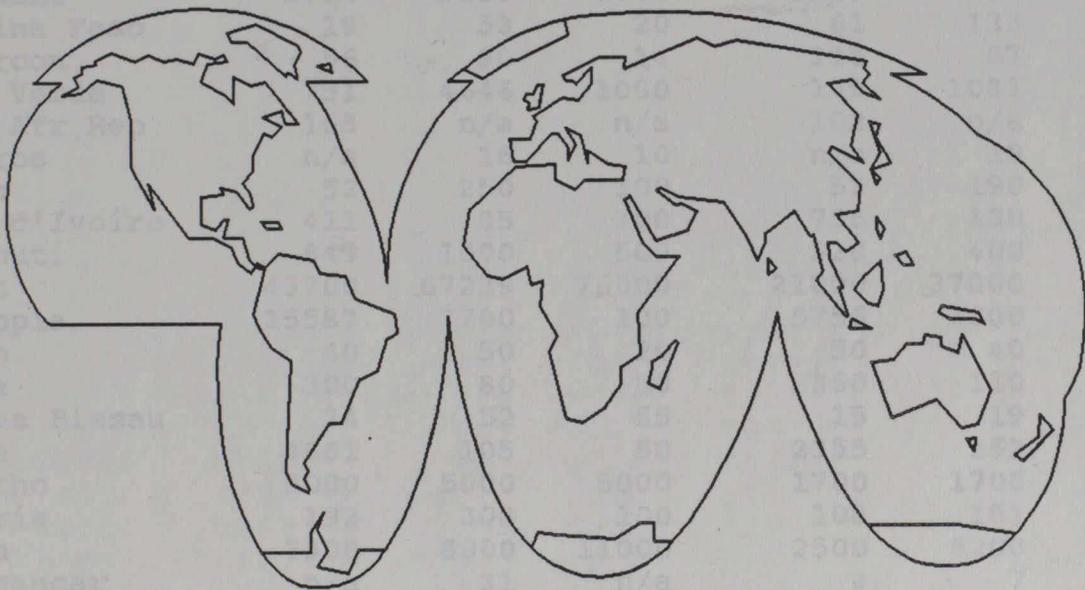
WORLD FISH TRADE

WORLD FISH EXPORTS

WORLD

(3,000)

	1985	1986	1987	1988	1989	1990
WORLD	2024494	2097794	2052285	2614232	2061422	19580
AFRICA	114493	114372	242134	142287	137430	1509
Algeria	82945	146139	77712	45320	29015	344
Angola	27000	13000	4700	30000	4107	314
Spain	400	200	150	200	210	0
Botswana	5714	5000	9000	2345	3250	1000
Burkina Faso	10	10	10	10	10	10
Camerun	10	10	10	10	10	10
Comoros	10	10	10	10	10	10
Cote d'Ivoire	10	10	10	10	10	10
Egypt	10	10	10	10	10	10
Equatorial Guinea	10	10	10	10	10	10
Guinea Bissau	10	10	10	10	10	10
Kenya	10	10	10	10	10	10
Lesotho	10	10	10	10	10	10
Liberia	10	10	10	10	10	10
Mali	10	10	10	10	10	10
Madagascar	10	10	10	10	10	10
Mali	10	10	10	10	10	10
Mauritania	10	10	10	10	10	10
Mauritius	9030	2500	11695	4180	4000	350
Morocco	560	400	200	544	450	10
Mozambique	5000	5400	2490	2900	1100	1300
Nigeria	8300	3500	2500	2200	4000	1200
Rwanda	10	10	10	10	10	10
Senegal	10	10	10	10	10	10
Sierra Leone	10	10	10	10	10	10
South Africa	12593	6000	21700	5204	3400	700



TRADE

WORLD



TRADE

WORLD PULSE TRADEWORLD PULSE IMPORTS

	(metric tonnes)			(\$,000)		
	<u>1985</u>	<u>1986</u>	<u>1987</u>	<u>1985</u>	<u>1986</u>	<u>1987</u>
WORLD	3934496	4597794	5052085	1614232	2001422	1956052
AFRICA	314490	344672	292134	162967	197438	130944
Algeria	82945	146139	77712	45320	89015	34402
Angola	27000	13058	8703	10000	4157	3374
Benin	400	200	150	200	110	90
Botswana	5714	5000	5000	3545	3250	3000
Burkina Faso	19	53	20	61	133	55
Cameroon	56	30	14	116	57	23
Cape Verde	751	4646	1000	199	1081	250
Cent Afr Rep	165	n/a	n/a	102	n/a	n/a
Comoros	n/a	16	10	n/a	18	15
Congo	52	250	100	52	190	75
Cote d'Ivoire	411	85	100	756	130	140
Djibouti	849	1000	500	328	400	150
Egypt	43700	67239	76000	21000	37000	27000
Ethiopia	15587	7700	100	5756	3300	40
Gabon	40	50	20	50	40	25
Ghana	300	80	50	350	110	50
Guinea Bissau	34	52	55	15	19	45
Kenya	4661	105	50	2355	252	100
Lesotho	5000	5000	5000	1700	1700	1400
Liberia	192	308	100	108	181	45
Libya	3300	8000	11000	2500	6200	6000
Madagascar	n/a	31	n/a	3	7	n/a
Malawi	6	n/a	n/a	46	n/a	n/a
Mauritania	500	260	150	230	250	140
Mauritius	9035	8509	11695	4186	4002	5948
Morocco	560	402	100	544	458	180
Mozambique	5000	5400	24600	2900	3100	12300
Namibia	8500	8500	8500	4200	4200	4200
Niger	800	n/a	n/a	200	n/a	n/a
Nigeria	4939	25216	10000	3281	14640	6000
Reunion	5161	6121	5383	4417	6727	5866
Rwanda	4898	1444	1000	3542	493	350
Sao Tome & Prin	500	300	400	250	260	320
Senegal	900	300	400	900	400	540
Seychelles	228	230	180	180	190	110
Sierra Leone	14	22	n/a	10	67	n/a
Somalia	600	600	11000	170	200	4000
South Africa	13595	6000	21700	5204	2400	7600

WORLD PULSE IMPORTS

	(metric tonnes)			(\$,000)		
	<u>1985</u>	<u>1986</u>	<u>1987</u>	<u>1985</u>	<u>1986</u>	<u>1987</u>
Sudan	36000	18000	7000	21877	10000	4200
Tanzania	6000	1000	1000	3000	600	600
Togo	200	200	130	80	130	100
Tunisia	13700	2024	2812	7479	1325	1821
Uganda	600	700	n/a	300	480	n/a
Zaire	2500	n/a	n/a	1200	n/a	n/a
Zambia	700	n/a	300	98	n/a	300
Zimbabwe	8378	402	100	4158	166	90
N&C AMERICA	497640	384340	229842	204706	193290	114242
Antigua-Barb	250	260	260	200	220	230
Bahamas	350	110	100	310	80	80
Barbados	1278	700	400	838	440	270
Belize	396	600	280	338	540	290
Bermuda	89	80	75	96	85	77
Canada	16874	18313	18300	10873	11176	12437
Costa Rica	773	500	620	868	520	630
Cuba	127824	94011	72000	58201	43945	27000
Dominica	120	120	120	100	100	100
Dominican Rep	5014	7500	12000	4244	5600	7200
El Salvador	633	6132	500	289	2382	200
Greenland	2	3	3	2	3	5
Grenada	135	100	100	92	60	60
Guadeloupe	2650	2461	2852	2579	2501	2638
Guatemala	586	2600	600	253	1200	390
Haiti	800	2100	9100	500	1300	4700
Honduras	322	1300	300	144	650	150
Jamaica	265	531	350	170	406	260
Martinique	2110	1969	1976	2083	2111	2061
Mexico	270232	178944	39464	82959	82910	17990
Montserrat	20	27	27	20	24	24
Neth Antilles	557	388	400	450	329	300
Nicaragua	12782	6700	1200	7231	3400	630
Panama	7530	8845	8600	5858	7228	6000
St.Kitts Nev	68	70	80	57	60	70
St.Lucia	516	579	600	473	561	600
St.Vincent	252	100	500	204	80	300
Trinidad-Tobago	10730	12096	13744	7071	5542	7870
United States	34482	37201	45291	18203	19837	21680

WORLD PULSE IMPORTS

	(metric tonnes)			(\$, 000)		
	1985	1986	1987	1985	1986	1987
SOUTH AMERICA	159709	229367	199454	87184	111320	79955
Argentina	903	1335	1100	785	1275	800
Bolivia	1900	4200	3000	950	1900	1500
Brazil	30653	114413	46456	13346	52964	16866
Chile	424	402	750	300	402	800
Colombia	31246	35030	70000	16588	18149	25300
Ecuador	27	42	n/a	37	51	n/a
French Guiana	465	430	625	463	431	678
Guyana	3800	4000	4000	2400	2500	2500
Paraguay	19	10	70	4	5	25
Peru	7000	16545	12100	2935	9486	5600
Suriname	3422	2927	3200	2045	2236	2100
Uruguay	1007	822	1500	697	688	860
Venezuela	78843	49211	56653	43634	21233	22926
ASIA	1039781	1447395	1389070	438718	573376	479142
Bahrain	1816	2400	1700	1243	1600	950
Bangladesh	3000	1987	34200	900	726	14300
Brunei Darus	429	697	500	333	348	260
China	89384	107897	99650	32606	39796	26902
Cyprus	1682	1803	1896	1161	1506	1325
Hong Kong	63409	238104	104313	16411	52563	25425
India	307000	390400	418000	117000	147700	127000
Indonesia	10045	27269	23318	3278	9380	6616
Iran	11882	6193	15200	6261	4919	7300
Iraq	72200	77300	79400	34000	45000	39400
Israel	21674	20000	12000	12073	13230	7200
Japan	154835	193089	162601	64380	84448	67695
Jordan	15508	16120	24653	7728	7692	10196
Korea Rep	19687	20426	15873	8545	6845	5050
Kuwait	8300	11044	7300	5400	7414	3800
Lebanon	33000	38000	40000	21700	25200	18000
Macau	884	816	800	229	182	160
Malaysia	44043	48673	51995	14401	14963	15477
Maldives	2300	2300	2300	720	720	700
Nepal	7500	4000	4000	2066	1400	1200
Oman	2478	2082	2100	1904	1542	1600
Pakistan	20163	53154	117829	10315	21500	33064
Philippines	4474	15364	13463	1437	3684	3936
Qatar	2224	2236	2000	1322	1271	1000
Saudi Arabia	38060	42702	41700	19424	20484	15400
Singapore	45663	56667	37940	17107	17949	13072
Sri Lanka	31920	42102	45173	22067	28364	18226
Syria	2118	432	200	2264	447	300

WORLD PULSE IMPORTS

	(metric tonnes)			(\$,000)		
	<u>1985</u>	<u>1986</u>	<u>1987</u>	<u>1985</u>	<u>1986</u>	<u>1987</u>
Thailand	1198	1503	2000	476	552	600
Turkey	5	35	9966	6	21	5458
U A Emirates	20000	20000	15700	10500	10600	6800
Yemen AR	300	300	300	150	130	130
Yemen Dem	2600	2300	1000	1311	1200	600
EUROPE	1895957	2125336	2127432	703428	899029	1141199
Austria	6821	7476	10023	4330	5638	6832
Belg-Lux	209042	210455	359497	62419	75574	113415
Bulgaria	1906	2466	2127	1000	1350	1080
Czechoslovakia	11000	13000	10200	6008	8444	5532
Denmark	8675	5197	14667	4883	4598	8142
Finland	821	858	968	676	834	1029
France	108391	124794	263221	65388	86847	112394
Germany DR	7139	7950	8000	3100	4200	4100
Germany FR	443587	508657	680179	122798	181874	246487
Greece	16125	31633	25730	10468	20526	15544
Hungary	5669	5013	7327	3625	3781	5989
Iceland	267	349	343	195	284	269
Ireland	9592	15586	17311	4518	6537	7462
Italy	222700	235256	316856	97441	97684	111666
Malta	1015	1032	1116	482	532	622
Netherlands	573647	628635	850948	150586	199975	262822
Norway	5319	5413	5317	2567	3153	3444
Poland	200	1600	300	200	1500	300
Portugal	2969	10216	27972	1512	5846	16601
Romania	2800	1700	2800	1700	1100	1600
Spain	64177	98761	94654	46205	64641	49501
Sweden	4552	5696	16514	3462	4431	7033
Switzerland	12579	8685	13851	5503	6803	7853
United Kingdom	175800	182930	179737	103685	105117	147305
Yugoslavia	1164	11978	7774	677	7760	4177
OCEANIA	16841	18449	14210	14099	15362	9016
Australia	9013	8403	5570	9157	9453	3899
Fiji	3713	4700	4188	1522	1900	1539
French Polynesia	604	2497	2000	649	1662	1200
Kiribati	7	1	n/a	12	2	n/a
New Caledonia	600	289	150	500	371	200
New Zealand	2780	2447	2190	2122	1853	2087
Papau New Guinea	110	100	100	120	110	80
Solomon Islands	12	12	12	12	11	11
Vanuatu	2	n/a	n/a	5	n/a	n/a

WORLD PULSE IMPORTS

	(metric tonnes)			(\$,000)		
	<u>1985</u>	<u>1986</u>	<u>1987</u>	<u>1985</u>	<u>1986</u>	<u>1987</u>
USSR	10078	48235	9943	3130	11607	1554
DEVELOPED	2120496	2379060	3154330	809807	1021051	1245196
N.America	51356	55514	63591	29076	31013	34117
W.Europe	1867243	2093607	2886678	687795	878654	1122598
Oceania	11793	10850	7760	11279	11306	5986
Other Developed	190104	219089	196301	81657	100078	82495
DEVELOPING	1685824	2030873	1757408	753056	908593	663799
Africa	217895	245433	176434	112386	141838	86144
Latin America	605902	558110	365627	262716	273509	159998
Near East	295173	316186	337115	159751	182226	149459
Far East	561715	903462	871704	215285	306876	265086
Other Developing	5139	7682	6528	2918	4144	3112
CENTRALLY PLN'D	128176	187861	140347	51369	71778	47057
Asian	89384	107897	99650	32606	39796	26902
E.Europe & USSR	38792	79964	40697	18763	31982	20155
DEVELOPED ALL	2159288	2459024	3195027	828570	1053033	1265351
DEVELOPING ALL	1775208	2138770	1857058	785662	948389	690701

WORLD PULSE TRADEWORLD PULSE EXPORTS

	(metric tonnes)			(\$, 000)		
	<u>1985</u>	<u>1986</u>	<u>1987</u>	<u>1985</u>	<u>1986</u>	<u>1987</u>
WORLD	3686014	4772622	5354483	1391636	1824002	1833498
AFRICA	74328	145991	170703	35240	66142	69429
Botswana	7	n/a	n/a	2	n/a	n/a
Burkina Faso	3770	1232	1200	1133	252	230
Cameroon	105	87	5	38	32	2
Cote d'Ivoire	10	n/a	n/a	8	n/a	n/a
Egypt	747	614	5520	326	831	4242
Ethiopia	10198	6500	6200	4500	3200	4000
Guin Bissau	1	n/a	n/a	n/a	n/a	n/a
Kenya	1582	21266	47944	770	8363	16360
Lesotho	700	700	700	210	210	210
Madagascar	4907	2728	2604	3292	4471	5644
Malawi	12723	18120	48524	4841	4880	11614
Mauritius	38	127	100	27	112	100
Morocco	16631	31939	13956	8461	12843	5731
Niger	5000	25000	10000	3200	13800	5800
Reunion	29	73	n/a	32	74	n/a
Sierra Leone	11	6	n/a	6	2	n/a
South Africa	3300	23000	11400	2028	9200	5000
Tanzania	5000	10000	18000	2700	5500	7700
Tunisia	5182	1061	1050	2125	273	296
Zambia	33	n/a	n/a	50	n/a	n/a
Zimbabwe	4354	3538	3500	1491	2099	2500
N&C AMERICA	694017	904873	1003186	324440	421658	396358
Barbados	32	n/a	n/a	39	n/a	n/a
Belize	73	100	100	79	110	110
Canada	200022	265071	433609	73449	94279	116291
Costa Rica	17	n/a	n/a	12	n/a	n/a
Dominican Rep	1840	1613	2160	1817	1682	2092
El Salvador	n/a	89	n/a	n/a	83	n/a
Guadeloupe	20	n/a	n/a	14	n/a	n/a
Guatemala	224	n/a	n/a	216	n/a	n/a
Honduras	691	n/a	n/a	410	n/a	n/a
Jamaica	n/a	7	n/a	n/a	6	n/a
Martinique	11	n/a	n/a	10	n/a	n/a
Mexico	44959	62195	71021	30102	41145	31883
Panama	n/a	161	100	n/a	91	50
Trinidad-Tobago	59	176	298	42	79	130
United States	446069	575461	495898	218250	284183	245802

WORLD PULSE EXPORTS

	(metric tonnes)			(\$,000)		
	1985	1986	1987	1985	1986	1987
SOUTH AMERICA	301575	321220	284176	122514	144108	114936
Argentina	207461	232655	225000	80370	101067	90000
Brazil	9683	4602	3902	2167	751	836
Chile	80580	82072	51074	36911	40897	21500
Colombia	n/a	30	2300	n/a	71	1400
French Guiana	1	11	n/a	1	5	n/a
Peru	3850	1850	1900	3065	1317	1200
ASIA	1064288	1726893	1650638	446052	581604	482204
Afghanistan	14000	8000	8000	7100	4200	3900
Brunei Darus	3	1	n/a	3	1	n/a
Burma	90000	85665	70000	30000	25109	17500
China	152562	587834	431310	65854	135150	105550
Cyprus	1523	185	1306	1318	144	470
Hong Kong	32891	224663	80902	9894	55949	21247
India	6500	6000	5000	2600	2700	2100
Indonesia	372	191	603	100	93	112
Iran	186	223	n/a	323	258	n/a
Israel	410	480	300	144	195	150
Japan	22	13	29	86	66	134
Jordan	1122	148	140	623	49	45
Korea Rep	124	80	167	219	118	202
Kuwait	235	362	420	210	302	335
Lebanon	2500	7000	4000	1800	5300	3200
Macau	246	71	n/a	92	17	n/a
Malaysia	1468	2524	2000	555	878	800
Nepal	27159	23000	7000	9632	12000	2800
Oman	3	10	n/a	1	6	n/a
Pakistan	1056	3885	3777	540	2616	2826
Philippines	60	154	39	45	116	36
Saudi Arabia	479	100	300	347	100	250
Singapore	46820	34573	31419	21855	11405	10121
Sri Lanka	613	28	398	229	17	175
Syria	4097	6892	3100	2857	6136	2328
Thailand	282970	189574	230949	100295	70008	68429
Turkey	360567	533987	758179	171390	242721	233994
U A Emirates	1200	1250	1300	900	950	1000
Vietnam	35000	10000	10000	17000	5000	4500
Yemen Dem	100	n/a	n/a	41	n/a	n/a
EUROPE	1388240	1389091	1703268	416636	532936	668090
Albania	300	500	450	150	300	350
Austria	3849	1987	1370	1165	971	1056
Belg-Lux	44991	40819	52805	19193	20899	23573
Bulgaria	n/a	220	2925	n/a	110	1250
Czechoslovakia	5000	3200	4000	1481	1008	1258

WORLD PULSE EXPORTS

	(metric tonnes)			(\$, 000)		
	1985	1986	1987	1985	1986	1987
Denmark	255793	181813	126485	63093	61622	51463
Finland	14	3	11	7	3	12
France	665277	532023	633449	177475	191550	246772
Germany DR	4000	9600	7200	1400	4300	3000
Germany FR	14688	23197	13789	7649	15058	12278
Greece	1029	418	777	659	505	912
Hungary	72922	100326	172763	17847	25168	38741
Ireland	711	506	663	2672	2741	3196
Italy	6157	6112	5476	5060	6170	5649
Netherlands	81844	112808	167298	49521	74915	91436
Norway	29	101	150	30	62	68
Poland	55379	55056	72200	9699	10471	12600
Portugal	4432	2770	1474	2764	2059	1149
Romania	10500	15000	14000	4700	7700	9100
Spain	8773	5404	5383	5548	4852	4125
Sweden	389	409	376	250	515	629
Switzerland	92	98	130	119	248	237
United Kingdom	143752	293710	407838	42044	99065	149632
Yugoslavia	8319	3011	12256	4110	2644	9604
OCEANIA	99813	218996	480358	30048	60931	89601
Australia	49062	153977	426906	14564	38117	70270
Cook Islands	75	70	70	129	141	145
Fiji	2	n/a	n/a	1	n/a	n/a
New Zealand	50674	64949	53382	15354	22673	19186
USSR	63753	65558	62154	16706	16624	12881
DEVELOPED	1989698	2288140	2851254	705234	932592	1058624
N.America	646091	840532	929507	291699	378462	362093
W.Europe	1240139	1205189	1429730	381359	483879	601791
Oceania	99736	218926	480288	29918	60790	89456
Other developed	3732	23493	11729	2258	9461	5284
DEVELOPING	1296900	1637188	1726227	551566	685580	585645
Africa	70281	122377	153783	32886	56111	60187
Latin America	349501	385561	357855	155255	187304	149201
Near East	386759	558771	782265	187236	260997	249764
Far East	490282	570409	432254	176058	181027	126348
Other Developing	77	70	70	130	141	145
CENTRALLY PLN'D	399416	847294	777002	134837	205831	189230
DEVELOPED ALL	2201552	2537600	3186946	757217	998273	1137804
DEVELOPING ALL	1484462	2235022	2167537	634420	825729	695695

EEC PULSE IMPORTS
QUANTITIES (mt)
1988

0713.10.90 PEAS

Exporters	EEC 12		Belg		Neth	West		UK	Irlnd	Denmk	Port	Spain
	EEC 12	France	Lux	Germ		Italy	Germ					
WORLD	1623252	49603	394066	574272	505039	22441	18249	26925	1192	20166	11299	
France	734288	0	254035	316874	161085	379	15	0	24	998	878	
Belg-Lux	75264	4522	0	59622	9392	79	693	931	25	0	0	
Netherlands	53047	4461	15065	0	31895	262	536	0	211	537	80	
West Germany	3517	106	443	2573	0	40	37	0	261	57	0	
Italy	93	8	0	0	53	0	0	0	0	32	0	
UK	95317	607	119	41298	48311	0	0	4690	156	99	37	
Ireland	333	76	8	7	109	3	130	0	0	0	0	
Denmark	200028	2	0	21551	177375	0	0	1100	0	0	0	
Greece	421	0	0	421	0	0	0	0	0	0	0	
Spain	10	0	0	0	2	0	0	8	0	0	0	
Yugoslavia	266	0	0	39	0	227	0	0	0	0	0	
Turkey	296	59	7	128	42	0	0	0	0	60	0	
East Germany	702	0	0	702	0	0	0	0	0	0	0	
Poland	23737	0	3808	9248	10658	23	0	0	0	0	0	
Czechoslovakia	8234	0	0	345	7866	23	0	0	0	0	0	
Hungary	50312	40	879	4505	28384	16057	55	0	207	97	88	
Bulgaria	5432	0	0	194	799	4439	0	0	0	0	0	
Tanzania	412	0	0	412	0	0	0	0	0	0	0	
Malawi	1067	40	445	0	0	0	582	0	0	0	0	
USA	25169	104	5070	11268	1575	766	4991	38	2	2	1353	
Canada	192610	223	90765	54976	23099	18	7039	16174	54	262	0	
Argentina	288	0	0	288	0	0	0	0	0	0	0	
Cyprus	257	0	0	257	0	0	0	0	0	0	0	
China	347	0	0	0	0	0	305	0	0	42	0	
Australia	131674	39346	17634	42565	4200	83	1058	2080	0	15845	8863	
New Zealand	19235	0	5628	6846	157	20	2422	1775	252	2135	0	

EEC PULSE IMPORTS
QUANTITIES (mt)
1988

0713.20.90 CHICK PEAS

Exporters	EEC 12	France	Belg Lux	Neth	West Germ	Italy	UK	Irlnd	Denmk	Port	Spain
WORLD	93366	8040	3505	986	1504	18294	9607	32	98	5513	45787
France	1302	0	722	4	280	296	0	0	0	0	0
Belg-Lux	846	592	0	128	7	12	32	0	25	0	0
Netherlands	276	105	57	0	84	0	24	0	5	1	0
West Germany	36	0	2	6	0	0	23	0	5	0	0
Italy	39	1	2	0	28	0	8	0	0	0	0
UK	69	6	5	1	20	0	0	12	4	21	0
Ireland	5	0	0	0	0	0	5	0	0	0	0
Greece	2	0	0	0	2	0	0	0	0	0	0
Portugal	13	0	2	0	1	0	0	0	10	0	0
Spain	164	3	31	0	75	51	4	0	0	0	0
Turkey	40447	7119	2684	477	844	13921	1928	0	31	5451	7992
Hungary	260	0	0	46	133	0	81	0	0	0	0
Morocco	218	176	0	0	2	0	40	0	0	0	0
Malawi	368	0	0	0	0	0	368	0	0	0	0
USA	657	0	0	8	9	24	592	20	4	0	0
Canada	234	0	0	0	0	0	234	0	0	0	0
Mexico	41670	18	0	54	0	3892	0	0	0	0	37706
India	545	0	0	0	1	0	544	0	0	0	0
Australia	5815	0	0	262	0	0	5553	0	0	0	0

EEC PULSE IMPORTS
 QUANTITIES (mt)
 1988

0713.31.90 BEANS (Vigna mungo and Vigna radiata)

Exporters	EEC 12	France	Belg Lux	Neth	West Germ	Italy	UK	Irlnd	Denmk	Port	Spain
WORLD	6901	257	190	723	799	478	2758	189	226	923	358
France	44	0	26	0	18	0	0	0	0	0	0
Belg-Lux	63	22	0	20	4	0	2	0	15	0	0
Netherlands	459	76	25	0	51	1	62	0	149	95	0
West Germany	44	0	0	43	0	0	0	0	1	0	0
Italy	4	3	0	0	0	0	0	0	1	0	0
UK	130	0	0	41	31	10	0	42	3	3	0
Ireland	22	0	0	0	0	0	22	0	0	0	0
Denmark	4	0	4	0	0	0	0	0	0	0	0
Spain	12	7	0	0	1	0	4	0	0	0	0
Turkey	138	0	0	0	115	20	3	0	0	0	0
Tanzania	180	0	0	180	0	0	0	0	0	0	0
USA	1777	0	36	0	13	56	1171	2	17	410	72
Canada	451	0	0	36	215	0	1	145	18	36	0
Argentina	392	0	0	0	0	0	0	0	0	323	69
India	158	0	0	0	0	0	158	0	0	0	0
Thailand	1402	126	0	336	111	0	594	0	19	0	216
China	293	2	68	25	44	17	134	0	3	0	0
Australia	1142	3	16	42	194	374	513	0	0	0	0

EEC PULSE IMPORTS
 QUANTITIES (mt)
 1988

0713.32.90 BEANS, SMALL RED (Phaseolus and Vigna angularis)

Exporters	EEC 12	France	Belg		Neth	West Germ		Italy	UK	Irlnd	Denmk	Port	Spain
			Lux	Germ		Germ	Denmk						
WORLD	3246	590	451	142	137	313	1198	188	72	152	3	0	0
France	54	0	47	0	7	0	0	0	0	0	0	0	0
Belg-Lux	118	26	0	47	2	0	0	0	43	0	0	0	0
Netherlands	140	4	50	0	49	34	1	0	2	0	0	0	0
UK	82	2	0	31	0	42	0	5	2	0	0	0	0
Greece	2	0	0	0	2	0	0	0	0	0	0	0	0
Spain	48	0	0	0	0	0	0	0	0	0	48	0	0
Turkey	174	5	3	27	34	99	6	0	0	0	0	0	0
USA	565	149	0	0	28	19	147	183	4	35	0	0	0
Thailand	482	0	0	0	4	0	457	0	21	0	0	0	0
China	1298	404	313	18	0	34	513	0	0	16	0	0	0

EEC PULSE IMPORTS
QUANTITIES (mt)
1988

0713.33.90 BEANS (Phaseolus vulgaris)

Exporters	Belg		West		Denmk	Irlnd	UK	Italy	Germ	Ireland	Denmk	Port	Spain
	Lux	Neth	Germ	Italy									
WORLD	11592	126553	13508	43094	120946	1972	102	17153	30581				
France	366	1869	286	23	125	0	0	0	233				
Belg-Lux	0	1139	89	1805	329	0	5	58	15				
Netherlands	477	0	1261	1958	179	0	42	400	0				
West Germany	32	121	0	44	46	0	0	18	58				
Italy	28	20	54	0	100	0	0	18	222				
UK	311	1584	105	76	0	22	0	80	0				
Ireland	0	0	0	0	9	0	0	0	0				
Denmark	0	0	2	0	0	0	0	0	0				
Greece	0	0	13	0	0	0	0	0	0				
Portugal	1	16	10	0	0	0	0	0	0				
Spain	33	10	52	10	2	0	0	496	0				
Yugoslavia	323	17	23	562	0	0	0	0	784				
Turkey	410	156	312	5004	2	0	0	27	1860				
Poland	3	0	337	794	0	0	0	0	154				
Romania	0	0	0	0	496	0	0	0	0				
Egypt	0	0	0	735	0	0	0	0	0				
Ethiopia	0	794	0	0	0	0	0	0	0				
Kenya	9	17	0	0	48	0	0	36	0				
Tanzania	0	16142	0	0	36	0	0	0	0				
South Africa	192	18	141	438	399	0	0	36	0				
USA	2614	50853	4694	6173	68138	36	10	3463	2326				
Canada	1112	15199	2449	1218	45123	1914	0	109	163				
Peru	20	0	20	0	80	0	0	641	700				
Brazil	0	1356	0	36	0	0	0	0	0				
Chile	1084	872	1281	2217	2998	0	0	2159	2186				
Paraguay	0	0	0	163	0	0	0	256	0				
Argentina	1408	31411	1441	18764	190	0	0	5016	21801				
Thailand	0	84	2	0	451	0	41	0	21				
China	3152	4820	927	2821	767	0	0	4082	0				
Australia	0	0	0	36	1386	0	0	0	0				

EEC PULSE IMPORTS
QUANTITIES (mt)
1988

0713.39.90 BEANS NES

Exporters	EEC 12	France	Belg Lux	Neth	West Germ	Italy	UK	Irlnd	Denmk	Port	Spain
WORLD	42539	2557	1682	17162	2208	3746	6209	242	232	5023	3478
France	949	0	245	375	222	25	61	0	0	0	21
Belg-Lux	213	111	0	45	0	0	5	0	52	0	0
Netherlands	2547	532	523	0	425	167	786	11	81	22	0
West Germany	120	0	15	96	0	0	0	0	9	0	0
Italy	143	69	1	14	59	0	0	0	0	0	0
UK	368	26	36	118	28	32	0	84	42	2	0
Ireland	76	6	0	48	0	0	22	0	0	0	0
Greece	29	0	0	0	7	22	0	0	0	0	0
Spain	164	0	4	0	11	4	1	0	0	144	0
Yugoslavia	207	0	0	0	0	207	0	0	0	0	0
Turkey	3013	29	5	38	496	1106	37	0	11	0	1291
Poland	457	0	0	0	25	432	0	0	0	0	0
Mozambique	1476	0	0	1476	0	0	0	0	0	0	0
USA	6882	463	768	755	413	633	2012	0	18	1111	709
Canada	2558	78	0	1528	161	217	98	147	3	109	217
Peru	743	0	0	0	0	0	81	0	0	300	362
Brazil	496	7	0	489	0	0	0	0	0	0	0
Chile	1441	60	0	120	20	298	0	0	0	623	320
Argentina	4054	220	0	915	36	0	18	0	0	2361	504
Thailand	2826	584	0	401	174	0	1666	0	1	0	0
China	12097	305	85	10666	19	550	255	0	0	217	0
Australia	1061	63	0	21	109	0	868	0	0	0	0

0413-11'20 BEANS (UNDESIGNED ANIMALS)
Year
CIVILILLES (mt)
EEC PULSE IMPORTS

EEC PULSE IMPORTS
 QUANTITIES (mt)
 1988

0713.40.90 LENTILS

Exporters	EEC 12	France	Belg Lux	Neth	West Germ	Italy	UK	Irlnd	Denmk	Port	Spain
WORLD	169284	27594	26649	32245	16357	22193	12555	67	187	52	31385
France	901	0	649	58	172	0	21	0	1	0	0
Belg-Lux	17139	1414	0	15302	245	85	93	0	0	0	0
Netherlands	975	3	153	0	745	55	1	0	9	9	0
West Germany	181	5	52	86	0	8	2	0	28	0	0
Italy	67	0	24	0	33	0	10	0	0	0	0
UK	456	96	2	37	176	0	0	67	38	40	0
Ireland	2	0	0	0	0	0	2	0	0	0	0
Greece	30	0	0	0	2	28	0	0	0	0	0
Spain	1486	1439	23	0	22	0	2	0	0	0	0
Turkey	54049	9467	3007	345	1129	13292	10410	0	44	3	16352
Morocco	1061	63	13	73	6	755	0	0	0	0	151
Malawi	232	0	0	0	0	0	232	0	0	0	0
USA	12653	59	0	79	369	2612	103	0	42	0	9389
Canada	63970	7583	21941	11973	12867	3711	493	0	21	0	5381
Haiti	238	0	0	0	0	238	0	0	0	0	0
Argentina	328	214	4	0	3	107	0	0	0	0	0
Lebanon	727	20	0	0	3	20	680	0	3	0	1
India	210	0	0	0	10	0	198	0	1	0	1
Thailand	147	0	0	0	0	0	147	0	0	0	0
China	12115	7065	781	4269	0	0	0	0	0	0	0
New Zealand	1678	0	0	0	406	1162	0	0	0	0	110

EEC PULSE IMPORTS
QUANTITIES (mt)
1988

0713.50.90 OTHER BEANS

Exporters	EEC 12	France	Belg		Neth	West		UK	Irlnd	Denmk	Port	Spain
			Lux	Lux		Germ	Italy					
WORLD	411315	2567	16929	34541	134777	215574	233	14	128	1453	5099	
France	69902	0	14252	13823	32514	4738	23	0	0	0	4552	
Belg-Lux	1929	171	0	1225	508	25	0	0	0	0	0	
Netherlands	30018	682	152	0	29149	0	22	5	5	0	3	
West Germany	297	13	0	186	0	0	0	0	98	0	0	
Italy	56	55	0	1	0	0	0	0	0	0	0	
UK	69602	1212	2260	15174	47642	2634	0	9	0	557	114	
Denmark	7736	0	0	0	7716	0	0	0	0	0	20	
Greece	80	0	0	0	1	79	0	0	0	0	0	
Portugal	51	47	0	0	4	0	0	0	0	0	0	
Spain	106	24	0	0	0	48	20	0	0	14	0	
Yugoslavia	386	0	0	0	0	386	0	0	0	0	0	
Turkey	22111	6	2	6	14	22064	19	0	0	0	0	
East Germany	667	0	0	600	0	0	67	0	0	0	0	
Poland	46680	0	0	2843	14751	29086	0	0	0	0	0	
Hungary	7629	0	0	0	0	7629	0	0	0	0	0	
Morocco	13698	166	0	7	0	13088	0	0	0	401	36	
Tunisia	615	0	0	0	0	615	0	0	0	0	0	
Egypt	5379	0	0	0	0	5253	14	0	0	112	0	
Canada	18551	20	256	644	2243	14958	0	0	25	264	141	
China	101517	0	0	14	1	101502	0	0	0	0	0	
Australia	13536	168	0	0	0	13048	0	0	0	105	215	
New Zealand	222	0	0	0	0	222	0	0	0	0	0	

Table
0713.50.90 (mt)
EEC PULSE IMPORTS

EEC PULSE IMPORTS
 QUANTITIES (mt)
 1988

0713.90.90 PULSES NES

Exporters	EEC 12	France	Belg Lux	Neth	West Germ	Italy	UK	Irlnd	Denmk	Port	Spain
WORLD	25338	242	649	24	419	20790	1577	67	6	1383	181
France	508	0	325	7	82	53	41	0	0	0	0
Belg-Lux	81	52	0	10	11	1	7	0	0	0	0
Netherlands	329	17	63	0	231	3	0	0	6	0	9
West Germany	2	0	1	0	0	0	1	0	0	0	0
Italy	29	1	0	0	1	0	27	0	0	0	0
UK	261	25	81	4	25	0	30	67	0	59	0
Ireland	25	0	0	0	0	0	25	0	0	0	0
Denmark	10	0	0	0	1	0	9	0	0	0	0
Portugal	1	0	0	0	1	0	0	0	0	0	0
Spain	7	0	0	0	7	0	0	0	0	0	0
Turkey	764	12	97	3	27	216	20	0	0	389	0
Poland	2925	0	0	0	0	2925	0	0	0	0	0
United States	1107	0	70	0	5	254	655	0	0	16	107
Canada	601	0	0	0	0	455	146	0	0	0	0
Peru	396	0	10	0	0	0	386	0	0	0	0
Chile	906	0	0	0	0	172	0	0	0	734	0
China	11680	4	0	0	0	11674	2	0	0	0	0
Australia	4929	0	0	0	2	4799	3	0	0	125	0

EEC PULSE EXPORTS
QUANTITIES (mt)
1988

0713.10.90 PEAS

Importers	EEC 12		Belg		West		UK	Irlnd	Denmk	Port	Spain
	EEC 12	France	Lux	Neth	Germ	Italy					
WORLD	1082030	731372	53563	54623	1969	615	66565	523	172781	1	18
France	9807	0	3798	5439	39	34	415	82	0	0	0
Belg-Lux	273165	257635	0	15181	70	4	266	9	0	0	0
Netherlands	389065	313663	30823	0	1541	0	29234	13	13791	0	0
West Germany	380625	152994	15002	28402	0	1	28728	109	155389	0	0
Italy	759	414	82	255	0	0	5	3	0	0	0
UK	1708	42	746	631	35	0	0	214	40	0	0
Ireland	5081	0	950	0	0	0	4131	0	0	0	0
Denmark	586	24	24	252	139	0	147	0	0	0	0
Greece	101	0	49	45	0	0	0	7	0	0	0
Portugal	2247	1651	0	516	0	0	80	0	0	0	0
Spain	1146	883	0	206	0	0	32	25	0	0	0
Norway	3036	9	22	775	0	0	353	0	1877	0	0
Malta	392	0	119	104	0	0	149	0	20	0	0
Libya	500	0	0	0	0	500	0	0	0	0	0
Reunion	3779	3779	0	0	0	0	0	0	0	0	0
South Africa	1327	0	792	417	118	0	0	0	0	0	0
United States	221	0	119	0	7	0	58	37	0	0	0
Surinam	1497	0	382	1100	0	0	0	0	15	0	0
South Yemen	960	0	0	0	0	0	0	0	960	0	0
Pakistan	374	0	0	14	0	0	0	0	360	0	0
Thailand	268	0	0	0	0	0	268	0	0	0	0
Japan	2198	0	0	60	0	0	2138	0	0	0	0
Taiwan	350	0	0	0	0	0	350	0	0	0	0
Australia	500	0	0	500	0	0	0	0	0	0	0

EEC PULSE EXPORTS
 QUANTITIES (mt)
 1988

0713.20.90 CHICK PEAS

Importers	EEC 12	France	Belg Lux	Neth	West Germ	Italy	UK	Irlnd	Denmk	Port	Spain
WORLD	15708	3559	2381	1628	84	631	3666	0	643	176	2940
France	629	0	589	8	0	22	7	0	0	0	3
Belg-Lux	1142	1061	0	57	1	0	0	0	0	0	23
Netherlands	3824	2079	144	0	12	0	1589	0	0	0	0
West Germany	3975	85	46	1313	0	43	1791	0	635	15	57
Italy	335	296	12	0	0	0	0	0	0	0	27
UK	89	0	83	1	2	0	0	0	0	0	3
Ireland	40	0	0	0	0	0	40	0	0	0	0
Denmark	65	0	46	14	5	0	0	0	0	10	0
Spain	7	0	0	0	0	0	7	0	0	0	0
Canary Is.	2664	0	0	0	0	0	0	0	0	0	2664
Libya	410	0	0	0	0	410	0	0	0	0	0
Trin.&Tobago	673	0	654	0	0	0	19	0	0	0	0
Surinam	651	0	411	240	0	0	0	0	0	0	0

1988
 COUNTRIES (AF)
 EEC PULSE EXPORTS

EEC PULSE EXPORTS
 QUANTITIES (mt)
 1988

0713.33.90 BEANS (Phaseolus vulgaris)

Importers	EEC 12		Belg		West		UK	Irlnd	Denmk	Port	Spain
	EEC 12	France	Lux	Neth	Germ	Italy					
WORLD	22056	2803	4947	8221	1092	1355	1891	0	8	694	1045
France	2832	0	1991	398	205	109	65	0	0	61	3
Belg-Lux	924	330	0	296	256	0	29	0	0	1	12
Netherlands	1163	224	194	0	261	48	420	0	0	16	0
West Germany	3043	402	73	2095	0	39	392	0	0	17	25
Italy	3349	49	1548	1683	0	0	59	0	0	0	10
UK	692	147	207	200	47	87	0	0	0	0	4
Ireland	21	0	0	1	0	0	20	0	0	0	0
Denmark	241	0	73	141	0	0	27	0	0	0	0
Greece	117	0	38	0	0	0	79	0	0	0	0
Portugal	739	0	80	306	0	0	112	0	0	0	241
Spain	585	380	15	0	98	92	0	0	0	0	0
Canary Is.	672	0	1	0	0	0	0	0	0	0	671
Sweden	866	0	45	807	4	6	0	0	4	0	0
Austria	548	0	0	45	220	2	281	0	0	0	0
Libya	919	0	0	0	0	919	0	0	0	0	0
Angola	856	60	1	269	0	0	0	0	0	526	0
Ethiopia	200	0	0	200	0	0	0	0	0	0	0
Reunion	496	496	0	0	0	0	0	0	0	0	0
Honduras	987	0	0	987	0	0	0	0	0	0	0
Guadeloupe	277	277	0	0	0	0	0	0	0	0	0
Israel	402	0	59	3	0	0	340	0	0	0	0

EEC PULSE EXPORTS
 QUANTITIES (mt)
 1988

Importers	EEC 12	France	Belg Lux	Neth	West Germ	Italy	UK	Irlnd	Denmk	Port	Spain
0713.40.90 LENTILS											
WORLD	24654	4789	10255	1067	60	3948	846	4	13	8	3664
France	2933	0	1484	4	5	0	72	0	0	0	1368
Belg-Lux	877	655	0	171	3	24	0	0	0	0	24
Netherlands	6640	103	6487	0	9	0	41	0	0	0	0
West Germany	1086	159	239	659	0	0	16	0	0	0	13
Italy	131	0	83	40	8	0	0	0	0	0	0
UK	130	21	94	2	1	6	0	4	0	0	2
Ireland	69	0	0	0	0	0	69	0	0	0	0
Denmark	71	0	5	13	8	0	45	0	0	0	0
Greece	232	0	20	0	0	212	0	0	0	0	0
Portugal	24	0	0	7	0	0	16	0	0	0	1
Spain	1	0	0	0	1	0	0	0	0	0	0
Canary Is.	2142	0	2	0	1	0	1	0	0	0	2138
Morocco	332	332	0	0	0	0	0	0	0	0	0
Libya	751	0	0	0	0	751	0	0	0	0	0
Ethiopia	3046	127	0	0	0	2919	0	0	0	0	0
Reunion	1006	1006	0	0	0	0	0	0	0	0	0
South Africa	835	0	834	0	1	0	0	0	0	0	0
USA	245	9	0	0	11	0	209	0	0	8	0
Canada	298	0	5	0	0	0	293	0	0	0	0
Guadeloupe	1099	1099	0	0	0	0	0	0	0	0	0
Martinique	876	779	97	0	0	0	0	0	0	0	0
Cyprus	202	0	202	0	0	0	0	0	0	0	0

EEC PULSE EXPORTS
 QUANTITIES (mt)
 1988

0713.50.90 OTHER BEANS

Importers	EEC 12	France	Belg Lux	Neth	West Germ	Italy	UK	Irlnd	Denmk	Port	Spain
WORLD	180034	70583	1811	22886	947	1054	73824	0	8422	422	85
France	1461	0	114	55	13	20	1188	0	0	47	24
Belg-Lux	17090	14190	0	148	1	8	2743	0	0	0	0
Netherlands	29202	12551	1019	0	657	13	14962	0	0	0	0
West Germany	104506	33593	607	22580	0	1	39939	0	7786	0	0
Italy	7617	4902	23	0	0	0	2668	0	0	0	24
UK	42	0	0	6	0	1	0	0	0	0	35
Ireland	21	0	0	0	0	0	21	0	0	0	0
Denmark	278	0	0	2	276	0	0	0	0	0	0
Portugal	572	0	0	3	0	0	569	0	0	0	0
Spain	4214	4160	0	20	0	0	14	0	20	0	0
Tunisia	524	0	0	0	0	0	524	0	0	0	0
Libya	1005	0	0	0	0	1000	5	0	0	0	0
Sudan	800	0	0	0	0	0	800	0	0	0	0
Ethiopia	4554	0	0	0	0	0	4554	0	0	0	0
Lebanon	1745	0	0	0	0	0	1745	0	0	0	0
Israel	1349	0	7	0	0	0	1342	0	0	0	0
Jordan	1940	1180	0	0	0	0	760	0	0	0	0
Saudi Arabia	860	0	0	0	0	0	760	0	100	0	0
Kuwait	580	0	0	0	0	0	500	0	80	0	0
Unin.Arab Emir.	280	0	0	0	0	0	140	0	140	0	0
Pakistan	224	0	0	0	0	0	0	0	224	0	0
Japan	487	0	0	0	0	0	237	0	0	250	0

EEC PULSE EXPORTS
 QUANTITIES (mt)
 1988

0713.90.90 PULSES NES

Importers	EEC 12		France		Belg		West		UK	Irlnd	Denmk	Port	Spain
	EEC 12	France	Lux	Neth	Germ	Italy							
WORLD	14127	3521	200	261	37	109	9785	13	41	38	122		
France	135	0	36	0	0	0	97	0	0	2	0		
Belg-Lux	917	444	0	65	0	1	407	0	0	0	0		
Netherlands	5666	2057	114	0	0	0	3495	0	0	0	0		
West Germany	6337	824	0	172	0	4	5304	2	29	0	2		
Italy	43	26	0	0	0	0	0	0	11	6	0		
UK	48	23	9	0	0	4	0	11	1	0	0		
Ireland	74	0	0	0	0	0	74	0	0	0	0		
Denmark	42	0	5	2	35	0	0	0	0	0	0		
Portugal	32	0	0	8	0	0	4	0	0	0	20		
Spain	20	0	0	0	0	0	20	0	0	0	0		

CANADIAN PULSE EXPORTS

(Cdn,000)

	<u>1984</u>	<u>1985</u>	<u>1986</u>	<u>1987</u>
PEAS	30,801	39,069	33,059	56,463
LENTILS	19,302	23,714	49,683	54,261
BEANS	31,065	35,178	44,721	41,212
TOTALS	81,168	97,961	127,463	151,936

NOTE: The classification of all products recorded through international trade has undergone a change since 1987. As of 1988, all of Canada's trade statistics will be recorded by the Harmonized System. The new classification system will attempt to provide more detailed breakdowns of a majority of product sectors. Because of the changes in classifications resulting from the use of the Harmonized System, 1988 statistics will be provided separately. It is hoped that the Harmonized System will provide more comprehensive trade data for future use.

EXPORTS, PEAS SPLIT, DRIED 93-76

(Cdn,000)

	<u>1984</u>	<u>1985</u>	<u>1986</u>	<u>1987</u>
United Kingdom	43	333	1,226	1,430
Belg-Lux	-	19	62	24
France	8	-	-	32
Germany FR	40	-	-	88
Italy	-	-	-	22
Netherlands	40	-	4	51
Spain	-	14	-	-
Emirates U.A.	8	-	-	-
Iran	1,722	-	-	-
Kuwait	-	-	-	-
Saudi Arabia	351	292	100	149
S. Yemen	-	94	-	-
South Africa	10	1	279	-
Zaire	557	993	74	-

EXPORTS, PEAS SPLIT, DRIED 93-76
(Cdn,000)

	<u>1984</u>	<u>1985</u>	<u>1986</u>	<u>1987</u>
Mozambique	649	274	699	15
Tanzania	-	15	-	-
Angola	-	42	-	-
Mauritania	-	151	-	-
Bangladesh	-	169	20	155
Sri Lanka	151	365	255	180
Hong Kong	-	81	19	14
India	114	515	316	310
Pakistan	42	326	199	-
Indonesia	89	445	26	-
Japan	57	45	81	-
Taiwan	-	155	396	371
Philippines	1	-	-	-
Guyana	-	-	23	-
French Guiana	-	-	7	-
Surinam	-	74	163	490
Paraguay	78	-	-	-
Peru	17	-	-	-
Uruguay	897	-	-	-
Venezuela	897	246	591	69
Belize	-	8	-	-
Barbados	12	8	29	52
Jamaica	-	-	-	7
Lee-Win Islands	22	19	41	21
Trinidad-Tobago	27	22	501	65
Dominican Rep	1	-	12	27
Fr. West Indies	-	303	-	-
Guatemala	24	-	-	-
Haiti	-	11	-	-
Mexico	-	1	8	-
Panama	127	240	214	155
United States	503	200	598	445
Sweden	-	6	13	60
Kenya	-	1,672	-	-
Ireland	-	-	-	8
Greece	-	-	-	4
Israel	-	-	-	21
TOTALS	5,981	7,139	5,956	4,265

EXPORTS, PEAS WHOLE, DRIED 93-77
(Cdn, 000)

	<u>1984</u>	<u>1985</u>	<u>1986</u>	<u>1987</u>
United Kingdom	492	384	2,273	3,224
Belg-Lux	-	-	511	8,153
France	88	34	14	593
Germany FR	-	-	52	3,034
Italy	-	18	22	22
Netherlands	396	100	4,458	21,382
Norway	42	31	51	31
Sweden	-	6	131	12
Ethiopia	-	184	154	-
Kuwait	-	-	17	5
Sudan	-	780	-	-
Emirates U.A.	10	-	-	-
South Africa	53	22	152	163
Angola	-	-	153	166
Togo	-	-	26	-
Algeria	8	-	-	-
Sri Lanka	-	-	103	-
Bangladesh	-	112	-	-
Hong Kong	8	36	7	-
India	1,875	13,103	1,244	1,644
Pakistan	-	-	20	105
Japan	1,068	1,370	1,512	1,474
Philippines	-	-	5	22
Taiwan	13	728	836	464
Thailand	-	-	6	32
Bolivia	-	6	-	-
Colombia	137	-	1,200	4,042
Surinam	-	-	41	49
Brazil	-	1	-	-
Peru	282	7	-	14
Uruguay	-	172	-	46
Venezuela	3,303	8,273	1,616	1,479
Barbados	-	11	-	9
Jamaica	-	-	1	-
Lee-Win Islands	8	19	108	184
Trinidad-Tobago	1,447	1,463	1,972	1,348
Cuba	10,258	3,712	9,840	2,670
Guatemala	-	-	34	-
Panama	-	48	100	52
China	-	-	-	16
Greece	-	-	-	22
United States	1,311	933	1,443	1,619
Singapore	-	-	-	23
Malaysia	-	-	-	7
Denmrk, Ireland, Switz	-	-	-	33
TOTALS	24,820	31,930	28,103	52,198

EXPORTS, LENTILS 93-78
(Cdn,000)

	<u>1984</u>	<u>1985</u>	<u>1986</u>	<u>1987</u>
United Kingdom	286	551	722	954
Austria	14	48	12	50
Belg-Lux	1,654	2,702	4,107	3,917
Denmark	12	42	17	50
France	960	2,202	3,190	3,690
Germany FR	3,829	4,706	244	5,694
Greece	321	1,794	4,326	1,708
Italy	1,832	2,746	5,965	3,740
Netherlands	734	354	1,507	2,252
Portugal	-	46	-	-
Spain	439	2,320	4,590	4,311
Sweden	39	138	85	70
Switzerland	43	101	68	421
Czechoslovakia	10	-	348	203
Hungary	-	-	92	-
Yugoslavia	-	-	49	-
Cyprus	-	45	126	60
Ethiopia	-	-	1	-
Israel	-	23	141	148
Lebanon	10	-	381	-
Saudi Arabia	-	23	141	316
Algeria	-	-	218	130
Benin	24	38	15	-
Indonesia	-	-	30	-
Japan	13	8	61	180
Taiwan	-	-	4	17
Australia	53	79	382	163
Argentina	-	-	83	34
Brazil	-	-	982	276
Colombia	2,386	582	7,636	17,235
Peru	282	74	595	1,481
Ecuador	728	-	-	49
Paraguay	9	-	-	-
Uruguay	244	234	238	324
Venezuela	3,536	3,745	2,926	2,825
Barbados	5	2	1	22
Jamaica	10	-	-	-
Lee-Win Islands	118	109	139	49
Trinidad-Tobago	153	172	164	258
Dominican Rep	17	29	24	17
Mexico	34	16	45	103
Panama	852	38	428	1,368
United States	655	727	348	1,904
Other Countries	-	-	-	137
TOTALS	19,302	23,714	49,683	54,261

EXPORTS, WHITE PEA BEANS, DRIED 93-09
(Cdn,000)

	<u>1984</u>	<u>1985</u>	<u>1986</u>	<u>1987</u>
United Kingdom	9,009	14,969	16,516	15,569
Belg-Lux	59	112	309	126
Italy	2	31	67	73
Netherlands	192	706	1,076	241
Norway	57	121	57	-
Spain	14	-	-	-
Sweden	14	11	13	-
Sudan	75	246	-	-
Zimbabwe	482	3	-	-
Mozambique	1,670	-	321	-
Japan	66	132	151	21
Australia	245	358	-	-
New Zealand	1,427	514	4,000	803
Colombia	204	706	7	-
Ecuador	74	-	-	-
Paraguay	99	-	-	7
Lee-Win Islands	4	-	611	1,944
Trinidad-Tobago	14	78	58	50
Costa Rica	4	-	-	-
United States	1,108	388	290	601
Ireland	-	70	23	173
France	-	31	3,226	9
Germany FR	-	1,107	297	301
Greece	-	-	417	298
Portugal	-	14	-	33
Cust. Un. Africa	-	-	-	2,631
Czechoslovakia	-	-	-	52
Angola	-	-	-	19
Malaysia	-	14	27	13
Nicaragua	-	-	-	81
Israel	-	14	14	-
Commonwealth Africa	3,624	1,432	1,599	-
Algeria	-	-	49	-
Togo	-	-	27	-
Bolivia	-	-	78	-
Lebanon	-	621	-	-
Uganda	-	262	-	-
Zambia	-	510	-	-
South Africa	390	393	-	-
Malta	-	30	-	-
Haiti	146	-	-	-
Honduras	-	-	261	-
Nicaragua	-	-	-	81
Other Countries	38	2	10	-
TOTALS	19,033	22,316	28,965	23,121

EXPORTS, FABA BEANS, DRIED 93-10
(Cdn,000)

	<u>1984</u>	<u>1985</u>	<u>1986</u>	<u>1987</u>
United States	707	377	504	279
United Kingdom	7	-	-	19
Belg-Lux	-	-	-	61
Germany FR	-	23	24	21
Italy	67	140	150	3,008
Netherlands	42	-	-	773
Portugal	-	-	-	32
Israel	-	-	-	8
Kuwait	-	-	-	16
Lebanon	75	-	-	8
Saudi Arabia	1,438	2,669	3,400	1,620
Egypt	-	-	-	195
Hong Kong	-	-	-	8
Japan	370	483	358	242
Trinidad-Tobago	-	-	-	9
Panama	-	-	-	18
Malaysia	-	29	92	-
Qatar	-	12	-	-
Sweden	-	-	2	-
Kenya	-	-	93	-
TOTALS	2,706	3,733	4,623	6,320

EXPORTS, BEANS, DRIED 93-12
(Cdn,000)

	<u>1984</u>	<u>1985</u>	<u>1986</u>	<u>1987</u>
United Kingdom	619	1,224	1,589	1,492
Belg-Lux	10	58	113	544
France	106	740	552	720
Italy	233	683	119	325
Netherlands	970	557	940	747
Spain	55	172	-	170
Denmark	-	-	3	-
Norway	56	-	-	-
Portugal	-	13	48	18
Switzerland	-	106	-	-
Ethiopia	1	106	-	-
Saudi Arabia	88	-	23	27
Ghana	88	-	-	-
French Africa	31	25	82	-
South Africa	52	-	412	950

EXPORTS, BEANS, DRIED 93-12
(Cdn,000)

	<u>1984</u>	<u>1985</u>	<u>1986</u>	<u>1988</u>
Uganda	-	133	-	-
Zaire	613	74	-	-
Mozambique	600	-	-	-
Tanzania	7	-	-	-
Angola	283	100	663	353
Commonwealth Africa	-	-	358	-
Algeria	-	-	129	65
Benin	-	-	104	-
Port. Africa	25	56	27	158
India	8	-	-	-
Malaysia	-	25	60	6
Ecuador	-	129	124	80
Japan	262	215	105	915
Nepal	-	43	-	-
Taiwan	-	36	-	9
Philippines	1	-	-	-
Australia	54	102	-	-
Guyana	-	-	6	-
French Guiana	-	21	10	-
Colombia	264	36	69	208
Brazil	-	421	-	236
Costa Rica	27	23	61	33
El Salvador	435	855	229	280
Venezuela	586	513	50	89
Honduras	265	422	492	182
Barbados	-	2	-	-
Jamaica	68	16	1	-
Lee-Win Islands	42	35	3	193
Trinidad-Tobago	106	31	65	210
Dominican Rep	-	26	-	5
Fr. West Indies	306	26	-	41
Guatemala	67	44	111	76
Haiti	120	-	-	304
Mexico	-	1	424	115
Panama	20	34	37	299
United States	1,459	1,032	949	826
Sweden	169	47	29	17
Neth. Antilles	1	-	-	-
Nicaragua	122	118	653	632
Cuba	-	-	1,850	-
Other Countries	612	405	-	388
TOTALS	9,326	9,129	11,133	11,771

CANADIAN PULSE EXPORTS
(Cdn,000)

	<u>1988</u>
PEAS	57,221
BEANS	45,640
LENTILS	43,301
OTHER PULSES	2,351
TOTAL	148,513

**Does not include re-exports

EXPORTS, PEAS, DRIED 0713.10

	<u>1988</u>	<u>(Cdn,000)</u>
	<u>KG</u>	
United States	11,341,623	4,023
United Kingdom	12,614,407	4,295
Ireland	13,730,674	2,625
Belgium	45,624,251	10,766
Denmark	36,319	12
Finland	34,000	13
France	153,279	78
Germany FR	30,824,670	7,072
Italy	100,883	28
Netherlands	36,432,378	8,473
Norway	149,948	76
Portugal	368,584	144
Spain	218,200	87
Sweden	923,689	252
Bulgaria	18,250	5
Germany DR	20,412	7
Saudi Arabia	159,647	76
South Africa	160,000	28
Tanzania, Un. Rep.	1,286	-
Niger	19,000	5
Mozambique	304,000	136

**EXPORTS, PEAS, DRIED 0713.10
1988**

	<u>KG</u>	<u>(Cdn,000)</u>
Bangladesh	100,000	44
Hong Kong	57,645	23
India	3,341,476	1,138
Malaysia	79,875	40
Pakistan	980,750	375
Singapore	99,176	59
Japan	5,143,991	1,519
Taiwan	1,051,841	344
Thailand	135,000	54
Australia	1,031,334	442
New Zealand	8,475	4
Brazil	15,876	4
Colombia	7,662,033	2,113
Surinam	1,536,083	559
Venezuela	5,387,331	1,807
Barbados	63,674	23
Jamaica	40,824	27
Trinidad-Tobago	3,698,310	1,638
Grenada	28,546	16
Saint Lucia	7,182	5
Cuba	24,369,439	8,339
Dominican Rep.	67,465	27
Mexico	429,958	213
Panama	127,765	75
TOTALS	208,699,548	57,111

**CHICKPEAS, DRIED 0713.20
1988**

	<u>KG</u>	<u>(Cdn,000)</u>
United States	55,403	29
Sweden	3,625*	3*
India	61,542	18
Taiwan	200,582	62
Jamaica	499*	-
Trinidad-Tobago	19,998*	1*
TOTALS	341,649	113

*Re-Exports

EXPORTS, URD, MUNG, BLACK OR GREEN GRAM BEANS, DRIED 0713.31
1988

	<u>KG</u>	<u>(Cdn, 000)</u>
United States	23,601	23
United Kingdom	510,524	213
France	18,180	12
Germany FR	230	-
Greece	18,189	7
Netherlands	36,288	3
Venezuela	39,927	20
TOTALS	646,939	281

BEANS, SMALL RED (ADZUKI), DRIED 0713.32
1988

	<u>KG</u>	<u>(Cdn, 000)</u>
United States	6,842*	13*
Belgium	18,271	8
Netherlands	79,554	44
Japan	107,431	51
Nicaragua	496,343	288
TOTALS	708,441	406

*Re-Exports

**EXPORTS, KIDNEY BEANS AND WHITE PEA BEANS, DRIED 0713.33
1988**

	<u>KG</u>	<u>(Cdn, 000)</u>
United States	3,684,515	2,080
United Kingdom	25,974,021	16,751
Ireland	218,620	111
Austria	90,720	28
Belgium	927,202	400
France	828,530	424
Germany FR	4,843,050	1,942
Greece	138,661	83
Italy	619,412	458
Netherlands	3,130,162	1,893
Norway	73,264	42
Portugal	18,180	18
Spain	127,096	83
Switzerland	145,215	50
Ethiopia	998,596	668
Kuwait	39,000	54
Saudi Arabia	195,300	337
Sudan	130,002	78
Tanzania, Un. Rep	47,000	38
Zambia	36,317	46
Angola	1,519,170	646
Guinea	57,000	36
Mozambique	4,743,926	2,372
Tunisia	1,172,950	597
China	18,180	8
Japan	683,387	270
Australia	1,174,402	526
Ecuador	160,000	102
Paraguay	17,000	6
Venezuela	315,067	150
Jamaica	90,720	89
Trinidad-Tobago	30,225	28
Grenada	454	-
El Salvador	80,000	41
Honduras	570,024	486
Mexico	155,000	93
Nicaragua	12,757,402	7,258
TOTALS	65,809,770	38,313

**EXPORTS, BROAD BEANS & HORSE BEANS, DRIED 0713.50
1988**

	<u>KG</u>	<u>(Cdn, 000)</u>
United States	485,944	308
United Kingdom	120,656	32
Germany FR	603,970	131
Italy	8,276,870	1,799
Netherlands	1,331,422	312
Spain	40,824	15
Saudi Arabia	946,091	468
Sudan	601,474	166
Japan	341,363	106
TOTALS	12,870,026	3,389

**BEANS, DRIED NES 0713.39
1988**

	<u>KG</u>	<u>(Cdn, 000)</u>
United States	743,925	272
United Kingdom	1,382,992	669
Belgium	1,768,144	444
France	310,109	105
Germany FR	19,958	9
Greece	52,000	37
Italy	233,150	184
Netherlands	6,006,876	917
Norway	18,160	9
Portugal	119,829	94
Spain	134,930	69
Lebanon	99,809	35
Mozambique	179,628	96
Japan	360,000	122
St Vincent-Grenada	4,082	7
El Salvador	29,938	15
Honduras	280,000	161
Mexico	18,000	9
TOTALS	11,761,530	38,313

EXPORTS, LENTILS 0713.40
1988

	<u>KG</u>	<u>(Cdn, 000)</u>
United States	10,369,489	3,632
United Kingdom	2,965,581	1,051
Austria	36,560	11
Belgium	14,283,443	4,138
Denmark	36,280	18
France	5,254,682	2,858
Germany FR	6,963,887	3,846
Greece	4,167,167	2,518
Iceland	36,280	14
Italy	3,358,256	1,712
Netherlands	16,206,753	4,985
Spain	4,746,589	2,370
Sweden	36,784	23
Switzerland	766,614	363
Czechoslovakia	110,000	46
Germany DR	146,240	86
Cyprus	142,318	76
Israel	251,788	172
Lebanon	1,080,924	389
Somalia	897,000	331
Yemen Dem	170,950	44
Sudan	100,000	73
South Africa	99,900	34
Uganda	18,000	7
Swaziland	100,000	19
Algeria	205,000	54
Niger	79,143	36
Mozambique	4,268,355	1,443
Pakistan	1,651,800	563
China	18,144	10
Taiwan	36,880	10
Australia	342,759	141
Brazil	154,699	64
Colombia	24,398,949	7,092
Peru	2,491,514	763
Surinam	59,875	28
Uruguay	631,591	275
Venezuela	6,839,572	2,685
Barbados	38,597	19
Trinidad-Tobago	810,849	478
St Kitts-Nevis	18,180	6
Dominica	38,597	29
Grenada	19,994	6

EXPORTS, LENTILS 0713.40
1988

	<u>KG</u>	<u>(Cdn,000)</u>
Saint Lucia	54,140	29
Costa Rica	20,412	19
Dominican Rep	8,686	2
Mexico	287,899	163
Netherland Antilles	18,280	11
Panama	1,625,040	514
Puerto Rico	35,790	18
TOTALS	116,500,229	43,301

EXPORTS, OTHER NES 0713.90
1988

	<u>KG</u>	<u>(Cdn,000)</u>
United States	59,493	86
United Kingdom	3,502,159	1,181
Ireland	181,715	68
Belgium	164,763	100
France	326,093	50
Germany FR	72,734	34
Greece	82,330	19
Italy	163,387	174
Netherlands	2,510,884	267
Sweden	20,000	21
Saudi Arabia	97,500	140
Japan	379,645	138
Venezuela	561,917	64
Bahamas	132	-
St Kitts-Nevis	891	2
Martinique	180	-
TOTALS	8,123,823	2,351

CANADIAN PULSE IMPORTS
1988 (Cdn,000)

	<u>FREE</u>	<u>DUTIABLE</u>	<u>TOTAL</u>
PEAS	5,305	56	5,361
BEANS	4,042	3,616	7,658
LENTILS	2,055	-	2,055
OTHERS	1,303	706	2,010
TOTALS	12,705	4,378	17,084

NOTE: Pulses entering Canada generally do not have duty applied when they are in bulk form. Pulse products that have been partially processed, or packaged for retail sale, may have duty imposed upon them.

IMPORTS, PEAS, DRIED 0713.10
1988 (Cdn,000)

	<u>FREE</u>	<u>DUTIABLE</u>	<u>TOTAL</u>
United States	3,948	43	3,991
United Kingdom	178		178
Belgium	13		13
Germany FR	3		3
Netherlands	25		25
Turkey	22	13	35
Malawi	94		94
Hong Kong	7		7
India	86		86
Singapore	49		49
China	15		15
Japan	1		1
Thailand	18		18
Australia	120		120
Dominican Rep	44		44
TOTALS	4,631	56	4,688

IMPORTS, CHICK PEAS, DRIED 0713.20
1988 (Cdn,000)

	<u>FREE</u>	<u>DUTIABLE</u>	<u>TOTAL</u>
United States	241		241
United Kingdom	8		8
Lebanon	4		4
Turkey	153		153
India	50		50
Australia	81		81
Mexico	133		133
TOTALS	674		674

IMPORTS, URD, MUNG, BLACK OR GREEN GRAM BEANS, DRIED 0713.31
1988 (Cdn,000)

	<u>FREE</u>	<u>DUTIABLE</u>	<u>TOTAL</u>
United States	43	532	576
France		1	1
Hong Kong	60	5	66
India	14	2	17
China		9	9
Thailand	450	19	469
Australia	276	14	291
Peru	74		74
TOTALS	921	586	1,507

IMPORTS, BEANS, SMALL RED (ADZUKI), DRIED 0713.32
1988 (Cdn,000)

	<u>FREE</u>	<u>DUTIABLE</u>	<u>TOTAL</u>
United States	122	61	183
Hong Kong		19	19
India	4		4
China	8	31	39
Japan		1	1
Thailand	4		5
Australia		1	1
TOTALS	140	116	256

**IMPORTS, KIDNEY BEANS AND WHITE PEA BEANS, DRIED 0713.33
1988 (Cdn,000)**

	<u>FREE</u>	<u>DUTIABLE</u>	<u>TOTAL</u>
United States	1,645	1,384	3,029
United Kingdom	12		12
Netherlands	5		5
Turkey	1		1
Hong Kong	1	16	18
India	25		25
China	25	56	81
Japan	1		1
Taiwan	8	22	30
Thailand	82		82
Australia	24	1	26
Chile	66		66
Peru	12		12
TOTALS	1,912	1,481	3,393

**IMPORTS, BROAD BEANS AND HORSE BEANS, DRIED 0713.50
1988 (Cdn,000)**

	<u>FREE</u>	<u>DUTIABLE</u>	<u>TOTAL</u>
United States	52	41	94
Netherlands	1	4	5
Portugal	8	15	24
Hong Kong	5	9	14
India	2		2
Singapore	14	3	17
China		2	2
South Korea	3		3
Thailand	3		3
TOTALS	92	79	171

IMPORTS, BEANS, DRIED NES 0713.39
1988 (Cdn,000)

	<u>FREE</u>	<u>DUTIABLE</u>	<u>TOTAL</u>
United States	672	905	1,578
Germany FR		12	12
Greece	1	4	5
Italy		149	149
Portugal		105	105
Hong Kong		50	51
India	13	5	19
Singapore	1	2	3
China	2	78	80
Japan		11	11
Philippines	10		10
Taiwan	1	7	9
Thailand	130	19	150
Australia	111		112
Peru	30		30
TOTALS	977	1,354	2,331

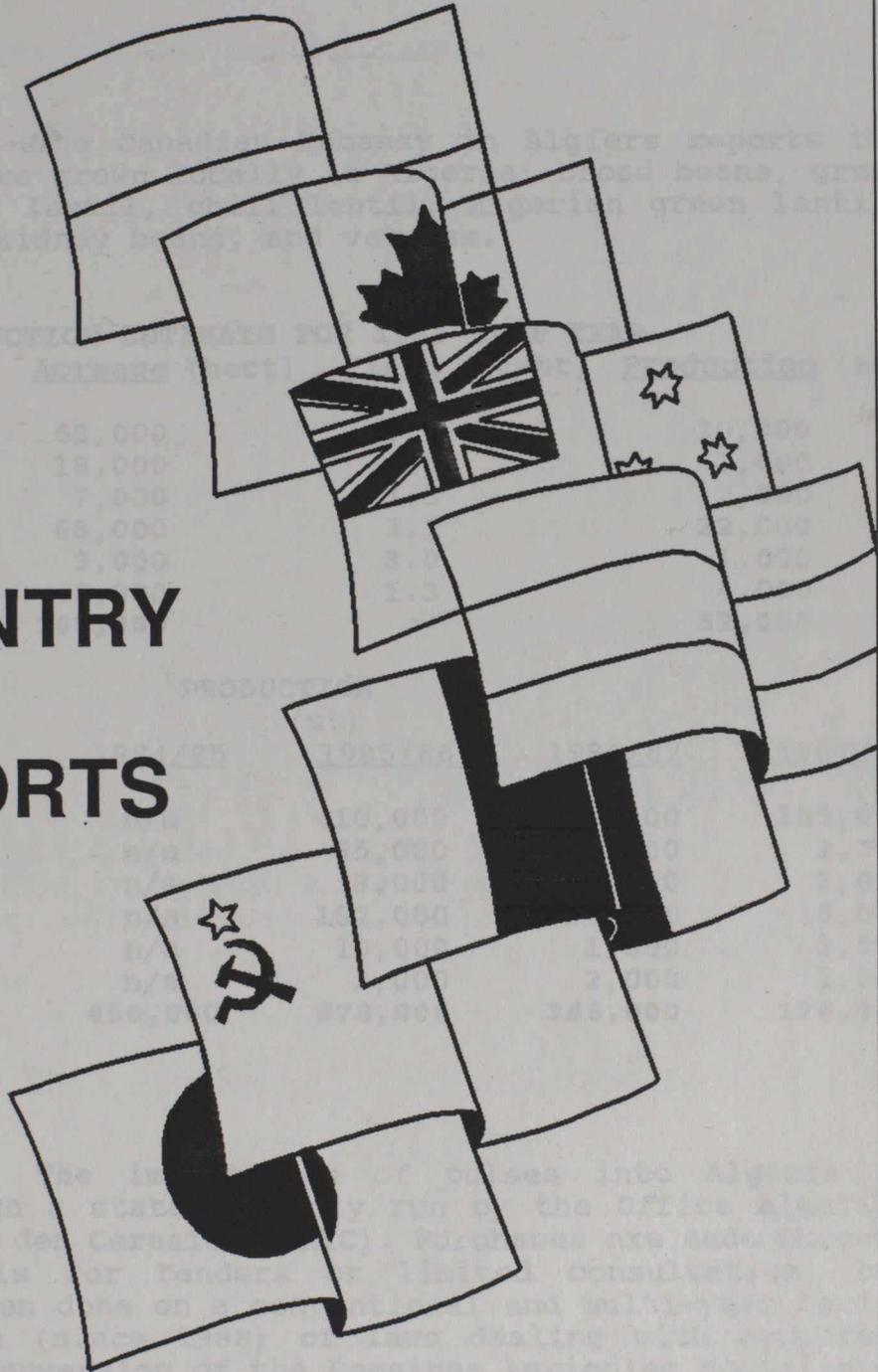
IMPORTS, LENTILS 0713.40
1988 (Cdn,000)

	<u>FREE</u>	<u>DUTIABLE</u>	<u>TOTAL</u>
United States	1,176		1,176
United Kingdom	70		70
Lebanon	5		5
Turkey	348		348
Kenya	52		52
Malawi	37		37
India	188		188
South Korea	12		12
Australia	149		149
Mexico	14		14
TOTALS	2,055		2,055

IMPORTS, OTHERS, DRIED 0713.90
1988 (Cdn,000)

	<u>FREE</u>	<u>DUTIABLE</u>	<u>TOTAL</u>
United States	851	558	1,409
United Kingdom		12	12
Netherlands	41	3	44
Portugal		15	15
Hong Kong	3	28	32
India	22	1	23
China	326	65	391
Japan		2	2
Philippines	1		1
Taiwan		3	3
Thailand	31	14	46
Australia	13		13
Peru	11		11
TOTALS	1,303	706	2,010

COUNTRY REPORTS





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ALGERIALocal Production

The Canadian Embassy in Algiers reports the following pulses are grown locally in Algeria: broad beans, green peas, metropolitan lentil, chili lentil, Algerian green lentil, chick peas, white kidney beans, and vetches.

PRODUCTION ESTIMATE FOR 1989 CROP YEAR

	<u>Acreage (hect)</u>	<u>Yield (mt/ht)</u>	<u>Production (mt)</u>
Faba beans	68,000	3.4	20,000
Peas	18,000	6.0	3,000
Lentil	7,000	3.5	2,000
Chick peas	68,000	3.1	22,000
Dry beans	3,000	3.0	1,000
Vetches	5,000	1.3	4,000
TOTAL	169,000		52,000

PRODUCTION

	<u>(mt)</u>			
	<u>1984/85</u>	<u>1985/86</u>	<u>1986/87</u>	<u>1987/88</u>
Faba beans	n/a	410,000	330,000	155,000
Peas	n/a	65,000	5,000	2,000
Lentil	n/a	8,000	2,000	2,000
Chick peas	n/a	182,000	26,000	15,000
Dry beans	n/a	10,000	1,000	1,000
Vetches	n/a	3,000	2,000	1,000
TOTAL PULSES	456,000	678,000	366,000	176,000

Import Information

The importation of pulses into Algeria is carried out through a state monopoly run by the Office Algerian Interprofessionnel des Cereales (OAIIC). Purchases are made through international calls for tenders or limited consultation, but importation is often done on a conventional and multi-year basis. The implementation (since 1988) of laws dealing with corporate autonomy and the conversion of the Domaines Agricoles Socialistes (DAS) into Entreprises Agricoles Collectives (EAC), may have a positive impact on the future importation of pulses into Algeria. In addition, the OAIIC's monopoly on imports is being reviewed in light of new legislation on foreign trade.

ALGERIAN PULSE IMPORTS (mt)

	<u>1984</u>	<u>1986</u>	<u>1988</u>
Total Pulses	87,890	146,139	109,461

ALGERIAN PULSE IMPORTS

	<u>1988 (mt)</u>
Seed peas	7,550
Seed beans	1,343
Other seed pulses	25
Other beans	34,450
Chick peas	26,253
Other peas	5,325
Lentil	34,515
TOTAL	109,461

Export Information

Algeria does not currently export pulses.

Local Market Information

The price of pulses in Algeria is heavily controlled through a system of subsidies. Subsidies are paid in order to make up the difference between the local cost price for pulses and consumer prices.

LOCAL RETAIL PRICES

(AD/mt)

	<u>Producer</u>	<u>Processor</u>	<u>Wholesaler</u>	<u>Retail</u>
Lentil	5580	5800	6050	7000
Chick peas	5580	5800	6050	7000
Dry beans	3580	3800	4050	5000
Dry peas	3880	4100	4350	5250

Consumption Information

Per capita pulse consumption in Algeria equals 6.4kg, with imports accounting for 60% of the pulses consumed. Pulse consumption is increasing in Algeria, as more and more consumers recognize pulses as an inexpensive source of protein compared to meat.

ARGENTINALocal Production

Argentine production of pulses is basically concentrated on lentil, dry beans, dry peas, and dry chick peas. Due to economic expectations for alternate crops, and climatic factors, pulse production volumes change drastically from year to year. Recent data is not always available in Argentina, and this makes the compilation of accurate data somewhat difficult.

	PRODUCTION (tonnes)			
	<u>Lentils</u>	<u>Dry Beans</u>	<u>Dry Peas</u>	<u>Dry Chick Peas</u>
1978/79	17,400	235,000	12,000	2,800
1979/80	16,800	146,000	18,600	4,400
1980/81	13,370	224,000	14,450	3,900
1981/82	13,900	254,000	8,750	1,330
1982/83	6,550	216,500	13,000	1,700
1983/84	6,880	151,570	7,600	3,750
1984/85	11,500	198,250	12,900	n/a
1985/86	n/a	198,300	7,300	n/a
1986/87	n/a	134,200	n/a	n/a
1987/88	n/a	172,300	n/a	n/a

	YIELDS (kg/hect)			
	<u>Lentils</u>	<u>Dry Beans</u>	<u>Dry Peas</u>	<u>Dry Chick Peas</u>
1978/79	569	1,016	774	751
1979/80	730	712	995	833
1980/81	606	1,060	1,006	830
1981/82	993	1,106	1,029	864
1982/83	888	1,083	1,567	1,063
1983/84	655	991	981	786
1984/85	743	1,036	1,255	n/a
1985/86	n/a	1,036	1,106	n/a
1986/87	n/a	840	n/a	n/a
1987/88	n/a	1,008	n/a	n/a

Import Information

The difficulty of obtaining accurate information on Argentine imports, prevented the Canadian Embassy in Buenos Aires from acquiring import figures. However, through the International Trade Databank, the following import values have been obtained for all pulses imported into Argentina.

ARGENTINE IMPORTS
(US \$,000)

<u>1985</u>		<u>1986</u>		<u>1987</u>	
Total	785	Total	1,276	Total	1,299
Chile	460	Chile	788	Chile	494
USA	206	USA	261	USA	463
Spain	37	Paraguay	87	Neth'ds	104
Mexico	36	France	48	N.Zealand	98
France	15	N.Zealand	33	France	38
Neth'ds	13	W.G.	21	Canada	37
N.Zealand	11	Morocco	10	Belg-Lux	23
Italy	4	Italy	10	Japan	18
S.Africa	2	Belg-Lux	6	Italy	16
		Neth'ds	6	Spain	7

Export Information

In Argentina, a large portion of production is exported without an export license, and this makes accurate reporting difficult. There exists extensive trade between Argentina, Uruguay, Brazil and Bolivia; but again, accurate data is hard to obtain. The following export statistics were obtained from two different sources. The first set of data represents the official quantity of exports as obtained by our Embassy in Buenos Aires. The second set of statistics on total pulse exports, was obtained from the International Trade Databank. Any differences between the two can be attributed to the different methods of reporting information by the two sources.

ARGENTINE EXPORTS
(tonnes)

	<u>Lentils</u>	<u>Dry Beans</u>	<u>Dry Peas</u>	<u>Dry Chick Peas</u>
1981	3	124,329	4,790	2,026
1982	1	150,558	353	636
1983	114	162,790	1,849	43
1984	0	181,784	3,474	201
1985	254	199,832	5,969	258
1986	104	228,964	568	1,349
1987*	522	78,970	2,522	n/a

*estimated

ARGENTINE EXPORTS
(US \$,000)

<u>1985</u>		<u>1986</u>		<u>1987</u>	
Total	80,370	Total	101,068	Total	59,987
Cuba	17,006	Mexico	22,910	Cuba	10,679
Mexico	16,503	Brazil	21,147	Italy	9,762
Italy	8,002	Italy	10,696	Brazil	8,927
Algeria	7,609	Cuba	10,011	Spain	8,771
Angola	6,610	Spain	7,061	Portugal	4,862
Brazil	3,879	Algeria	6,989	France	3,310
France	3,414	France	5,145	Belg-Lux	2,565
Neth'ds	2,424	Nicaragua	2,409	Neth'ds	2,563
Spain	2,118	Israel	2,020	Israel	1,635
Nicaragua	2,064	Belg-Lux	1,811	Nicaragua	1,343

Local Market & Consumption Information

There are no figures available on local consumption patterns of pulses in Argentina. In addition, extremely high inflation rates during the last ten years have made any local price indications meaningless.

AUSTRIA

As with other countries, statistics in Austria dealing with pulses are limited. Through the Canadian Embassy in Vienna, the following statistics were compiled. These statistics were accumulated and collected from various government publications such as the statistical yearbook, import/export statistics, the yearbook of the Chamber of Agriculture, and the yearbook of the Ministry of Agriculture.

Local Production

	ACREAGE			
	(,000 hect)			
	<u>1987</u>	<u>1988</u>	<u>1989</u>	<u>1990(est.)</u>
peas	23.9	38.0	49.6	63.0
horse beans	9.1	20.6	19.4	22.0

	PRODUCTION	
	(,000 mt)	
	<u>1987</u>	<u>1988</u>
peas	87.8	146.4
horse beans	31.3	64.6

	YIELDS	
	(100kg/hect)	
	<u>1987</u>	<u>1988</u>
peas	36.6	38.4
horse beans	34.3	31.4

DEVELOPMENT OF PULSE CULTIVATION

	<u>1985</u>	<u>1986</u>	<u>1987</u>	<u>1988</u>	<u>1989</u>
Contract Acreage(hect)					
Total	7,230	16,320	31,297	51,523	80,000
Subsidy/hectare(Aust.shil)	3,000	5,000			
peas			5,000	4,500	3,500
horse beans			6,000	5,500	
field beans					4,500

The following information with respect to registered breeds in Austria was obtained from "SONDERDRUCK", which is from the "Official Gazette to the Wiener Zeitung". The Wiener Zeitung has been the official bulletin of the Austrian government since 1810. The first section represents the official announcement of varieties registered in the Breeding Register of Cultivated Plants. The following list represents varieties registered effective December 31, 1989 in the Breeding Register of Cultivated Plants.

<u>Register No.</u>	<u>Variety</u>	<u>Plant Breeder</u>	<u>List No.</u>
<u>Garden pea (<i>Pisum sativum</i>)</u>			
230	Belinda	Ez b	75
231	Bohatyr	Ez b	75
535	Consort	Hz b	27
232	Paloma	Ez b	75
233	Solara	Ez b	75
234	Stehgolt	Ez b	59
235	Tyrkys	Ez b	75
<u>Horse bean (field bean)</u> <u>(<i>Vicia faba</i>)</u>			
236	Alfred	Ez b	75
494	Arista	Hz b	59
495	Carola	Hz b	27
537	Doris	Hz b	13
448	Karna	Hz ub	4
536	Koral	Hz b	13
159	Kornberger Kleinkornige	Hz ub	13
160	Wieselburger Kleinkornige	Hz ub	4

NOTE: If the varieties which are listed above are deemed eligible for certification under the OECD Rules, their inclusion in the official OECD list of varieties will be proposed.

HZ = certified seed

Ez = maintenance breeding to produce foundation seed

ub = absolute requirement

b = partial requirement

This section was also obtained from "SONDERDRUCK". It represents an announcement by the government as to which pulses of foreign origin are acceptable based on their agricultural importance. Officially, "the following varieties and local cultivars (ecotypes) of agricultural cultivated plants are announced herewith which -- without being registered in the "Breeding Register of Cultivated Plants" -- are of importance for land improvement in view of their agricultural value." Information concerning acquisition of seed varieties can be obtained from the Agri-Food Division (TAA) in the Department of External Affairs and International Trade.

Pea (Pisum sativum):

Field pea

Arvika	Helia	Lisa	Poneka
Bondi	I.P.5 (Susan)	Nadja	Salome
Enka	Irina	Parvus	Sirius

Garden pea

Dukat	Legenda	Ruga
Erbi	Ramir	Smaragd

Lentil (Lens culinaris)

All varieties and ecotypes.

Lupine (Lupinus spp.)

All varieties and ecotypes.

Horse bean (field bean) (Vicia faba)

Hedin

Grass pea vine (Lathyrus sativus)

All varieties and ecotypes.

Soybean (Glycine max)

Evans	Labrador	McCall
Hodgson	Maple Arrow	

Hungarian vetch (Vicia pannonica)

All varieties and ecotypes.

Common vetch (Vicia sativa)

All varieties and ecotypes from the following countries:
Austria, Bulgaria, Czechoslovakia, Federal Republic of Germany,
German Democratic Republic, France, Hungary, Poland, Romania

Hairy vetch (Vicia villosa)

All varieties and ecotypes.

Import Information

Importation of pulses into Austria is carried out by private importers. There are regulations and duties on certain pulse products entering Austria. Specific information about imports can be obtained by contacting the Agri-Food Division (TAA) of the Department of External Affairs and International Trade. All statistics represented below are such that quantities are in 100kg, and values are c.i.f. Austrian border in \$,000 Austrian Schillings.

AUSTRIAN IMPORTS

	1988		Jan-Jun 1989	
	<u>Qty.</u>	<u>Value</u>	<u>Qty.</u>	<u>Value</u>
0708.10 Peas (fr,ch)				
Total	550	898	768	1,319
EC	526	870	560	1,104
East Europe	00	00	30	18
Italy	502	799	560	1,104
0708.20 Beans, unshelled (fr,ch)				
Total	12,885	20,197	9,286	17,005
EC	6,164	10,831	5,574	10,833
EFTA	4	6	00	00
East Europe	90	107	130	124
Italy	3,095	5,631	3,770	7,157
Greece	00	00	380	316
Turkey	00	00	538	592
Spain	2,805	4,917	1,393	3,204
Egypt	6,060	8,512	2,814	5,048
0708.20.20 Beans, shelled (fr,ch)				
Total	1,973	1,354	343	318
EC	78	192	00	00
East Europe	4	6	00	00
Canada	1,828	1,049	00	00
0708.90 Other pulses (fr,ch)				
Total	122	138	100	189
EC	26	57	65	167
0710.21 Peas (frozen)				
Total	7,742	8,936	4,336	4,598
EC	4,383	5,055	2,033	2,464
East Europe	1,790	1,309	1,953	1,469
Belgium	1,150	1,006	503	510
France	2,631	3,329	1,373	1,706
Netherlands	440	465	00	00
Yugoslavia	1,070	666	00	00
Hungary	1,790	1,309	1,953	1,469
Taiwan	190	772	90	433
China PR	310	1,134	00	00

AUSTRIAN IMPORTS

		1988		Jan-Jun 1989	
		Qty.	Value	Qty.	Value
0710.22	Beans (frozen)				
	Total	13,559	15,978	7,272	9,941
	EC	8,116	11,447	4,507	6,216
	East Europe	3,553	2,476	1,345	988
	West Germany	222	422	248	460
	Italy	2,139	3,589	702	1,348
	Belgium	1,885	1,954	1,211	1,309
	France	3,659	5,262	2,158	2,902
	Yugoslavia	1,400	786	660	394
	Hungary	3,190	2,218	1,345	998
	Taiwan	450	1,190	720	2,250
0713.10	Peas (dried)				
	Total	89,797	45,214	19,204	19,292
	EC	8,437	11,628	6,638	8,564
	EFTA	8	10	00	00
	East Europe	80,614	32,255	12,318	10,104
	West Germany	1,606	2,552	1,889	2,031
	France	00	00	190	255
	Netherlands	5,994	6,629	3,843	4,243
	UK	504	633	395	488
	Denmark	179	1,338	276	1,287
	Ireland	00	00	45	260
	East Germany	623	511	467	359
	Poland	00	00	689	412
	Czechoslovakia	18,653	16,652	9,040	8,667
	Hungary	61,049	14,915	2,122	666
	USA	669	957	193	283
	New Zealand	00	00	35	305
0713.20	Chickpeas (dried)				
	Total	235	183	131	114
	EC	00	00	8	10
	EFTA	15	25	5	08
0713.31	Beans (<u>Vigna mungo</u>) and similar				
	Total	8,135	7,324	4,729	5,836
	EC	1,409	1,295	311	503
	EFTA	1	12	1	12
	East Europe	4,638	3,581	2,431	2,259
	Belgium	00	00	270	447
	West Germany	1,092	906	00	00
	Poland	996	1,083	490	581
	Romania	668	357	00	00
	Hungary	2,974	2,141	1,941	1,678
	USA	1,570	1,879	1,604	2,715

AUSTRIAN IMPORTS

	1988		Jan-Jun 1989	
	Qty.	Value	Qty.	Value
0713.32	Small red (Adzuki) beans (dried)			
	Total	37 110	630 459	
	EC	1 12	6 19	
	Canada	00 00	606 367	
0713.33	Kidney beans (dried)			
	Total	4,232 7,622	4,722 9,207	
	EC	1,367 4,282	685 2,282	
	EFTA	00 10	1 18	
	East Europe	2,000 2,362	1,603 2,107	
	West Germany	415 1,826	124 595	
	Belgium	00 00	270 464	
	Netherlands	884 2,221	279 1,127	
	Poland	750 1,141	1,563 2,003	
	Hungary	1,250 1,221	00 00	
	China PR	00 00	715 2,057	
	USA	665 761	1,628 2,669	
0713.39	Beans (<u>Vigna</u> , <u>Phaseolus</u>) dried			
	Total	28,463 22,122	11,382 11,408	
	EC	210 957	301 1,593	
	East Europe	2,921 3,373	2,100 2,571	
	West Germany	94 474	174 853	
	Netherlands	116 483	117 595	
	Poland	1,715 2,493	750 1,388	
	Romania	998 632	600 492	
	Hungary	00 00	750 691	
	China PR	991 429	4,512 2,508	
	Ethiopia	00 00	757 901	
	Canada	8,214 5,540	1,464 1,047	
	USA	15,658 11,327	2,064 2,594	
0713.40	Lentils (dried)			
	Total	8,964 5,368	5,584 3,612	
	EC	60 235	19 47	
	East Europe	795 480	2,825 1,932	
	Hungary	795 480	2,825 1,932	
	China PR	00 00	1,000 459	
	Canada	3,448 1,639	929 602	
	USA	3,947 2,498	414 277	
0713.50	Broad beans, horse beans (dried)			
	Total	6,675 6,604	634 1,210	
	EC	6,631 6,566	619 1,196	
	West Germany	00 00	120 569	
	Netherlands	6,105 5,999	499 627	

Export Information

AUSTRIAN EXPORTS

		1988		Jan-Jun 1989	
		Qty.	Value	Qty.	Value
0708.10	Peas (fr,ch)				
	Total	29	29	00	00
	EC	29	29	00	00
0708.20	Beans, unshelled (fr,ch)				
	Total	8	5	00	00
	EC	8	5	00	00
0708.90	Other pulses (fr,ch)				
	Total	254	208	00	00
	EC	254	208	00	00
0710.21	Peas (frozen)				
	Total	5,334	6,117	338	251
	EC	5,327	6,095	333	234
	EFTA	7	22	5	17
	Italy	3,461	4,667	00	00
	Spain	1,661	1,167	333	234
0710.22	Beans (frozen)				
	Total	26	71	14	48
	EC	5	10	00	00
	EFTA	21	61	14	48
0713.10	Peas (dried)				
	Total	10,253	9,967	3,612	3,172
	EC	9,972	9,549	1,147	1,373
	EFTA	1	6	1	05
	East Europe	79	56	2,464	1,794
	West Germany	2,368	1,822	00	00
	France	1,502	1,400	00	00
	Netherlands	2,821	2,375	00	00
	UK	3,131	3,837	1,060	1,304
	Hungary	00	00	2,464	1,794
0713.20	Chickpeas (dried)				
	Total	00	00	58	90
	EC	00	00	20	67
	East Europe	00	00	38	23
0713.31	Beans (<u>Vigna mungo</u>) and similar				
	Total	5	17	220	185
	EC	5	17	220	185
0713.33	Kidney beans (dried)				
	Total	00	00	5	17
	EC	00	00	5	17

AUSTRIAN EXPORTS

	1988		Jan-Jun 1989	
	Qty.	Value	Qty.	Value
0713.39 Beans (<u>Vigna, Phaseolus</u>) dried				
Total	232	182	18	131
EC	13	51	18	131
East Europe	219	131	00	00
0713.40 Lentils (dried)				
Total	16	70	8	33
EC	16	70	8	33
0713.50 Broad beans, horse beans (dried)				
Total	3,118	1,897	1,550	1,028
EFTA	498	189	00	00
East Europe	2,620	1,708	1,550	1,028
Hungary	2,620	1,708	1,550	1,028
0713.90 Other pulses (dried)				
Total	232	179	27	45
EC	232	179	00	00

Local Market Information

Within Austria, the local market for pulses is basically divided between two uses. The market is split approximately 50:50 between processing (canned), and food-wholesale. Austria has no national or local associations which are primarily involved in pulses.

Consumption Information

CONSUMPTION

(kg/yr/per capita)

1985/86	.6
1986/87	1.0
Long-term average	.7

FOOD BALANCE

(mt)

	Production	Imports	Exports	Balance
1986/87	65.5	9.0	1.5	73.0
1987/88	119.5	13.5	1.5	131.5

BANGLADESHLocal Production

Bangladesh produces many different varieties of pulses. Those produced include chick pea, pigeon pea, green gram, lentil, black gram, grass pea and pea.

	PRODUCTION (,000 mt)			
	<u>1984/85</u>	<u>1985/86</u>	<u>1986/87</u>	<u>1987/88</u>
Total	549	511	502	530

Import Information

The Canadian Embassy in Dhaka states that pulse importation in Bangladesh is carried out by private importers, in addition to the Trading Corporation of Bangladesh (TCB). The TCB is a government agency that specializes in imports and exports. The TCB is often involved in counter trade, counter purchase agreements and other special trade agreements. There are no specific policies or regulations regarding the importation of pulses.

	IMPORTS (mt)	
	<u>July 88-June 89</u>	<u>Source</u>
Lentil (split)	10,000	Turkey, Nepal
Chick Peas	10,000	Turkey, Australia
Yellow Peas	5,000	Australia, Hungary

Export Information

Bangladesh does not export pulses.

Consumption Information

Pulses represent the main source of protein for the vast majority of people in Bangladesh. The favourites amongst consumers are the lentil and the green gram. Pulses are usually boiled with water/spices and consumed with rice.

	PER CAPITA CONSUMPTION (gm/day)			
	<u>1984/85</u>	<u>1985/86</u>	<u>1986/87</u>	<u>1987/88</u>
Total Pulses	4.92	4.53	4.29	4.05

BRAZILLocal Production

The Canadian Embassy in Brasilia reports that obtaining information in Brazil is both very difficult and often incomplete. Brazil produces more types of pulses than those below, however no information was available.

	ACREAGE (,000hect)				
	1985	1986	1987	1988	1989
Beans	5,316	5,478	5,202	5,909	5,207
Faba beans	n/a	152	121	n/a	n/a

	PRODUCTION (,000mt)				
	1985	1986	1987	1988	1989
Beans	2,549	2,209	2,007	2,901	2,334
Faba beans	n/a	42	28	n/a	n/a

Import Information

The Brazilian government does not allow the importation of pulses which are grown locally. Imports which are permitted are subject to appropriate import duties, which for lentil is 30% for dry and 25% for fresh. Imports are handled by private importers, largely located in Rio de Janeiro and Sao Paulo.

1987 BRAZILIAN PULSE IMPORTS

	Quantity (mt)	Value (\$US)	Source
Black beans	30,011	8,230,000	Argentina
White beans	1,834	1,094,000	Argentina
Other beans	3,209	1,267,000	Chile
Chick peas	2,844	1,611,000	Chile, Mexico
Lentil	2,896	1,592,000	Chile
All dry peas	5,661	2,299,000	Argentina, USA

Export Information

Most pulses produced locally are consumed locally, exports are negligible.

Local Market & Consumption Information

No information is available.

CAMEROONLocal Production

Information received from the Canadian Embassy in Yaounde indicates that dry beans and peas are the only pulses produced in Cameroon.

	ACREAGE			PRODUCTION		
	<u>1986</u>	<u>1987</u>	<u>1988</u>	<u>1986</u>	<u>1987</u>	<u>1988</u>
Total Pulses	217,000	220,000	224,000			
	YIELDS (kg/hect)			PRODUCTION (,000mt)		
	<u>1986</u>	<u>1987</u>	<u>1988</u>	<u>1986</u>	<u>1987</u>	<u>1988</u>
Total Pulses	571	577	576	124	127	129

Import Information

Importation of pulses into Cameroon can be carried out by any person after proper documentation is obtained from the government and a import fee of 10.0FCFA is paid.

	CAMEROON PULSE IMPORTS		
	<u>1985</u>	<u>1986</u>	<u>1987</u>
Total Pulses	\$116,000	\$57,000	\$23,000

Export Information

Cameroon does not export pulses of any statistical significance.

Local Market Information

	LOCAL RETAIL PRICES (FCFA/kg)				
	<u>1985</u>	<u>1986</u>	<u>1987</u>	<u>1988</u>	<u>1989</u>
White beans	587	463	612	909	n/a
Black beans	255	241	n/a	n/a	n/a
Red beans	245	n/a	n/a	396	516

Consumption Information

Consumption of pulses in Cameroon was 2.5kg per person in 1988. Pulses are consumed mainly in salads and sauces, and represent a large portion of people's diets in Cameroon.

CHILELocal Market Information

The Canadian Embassy in Santiago reports the following pulses are grown and exported in Chile: vetches, lupines, green peas, chick peas, lentil, bay beans, bumpy beans, crystal beans, cuyano beans, great northern beans, mussolini beans, navy beans, red kidney beans, strawberry beans and turtledove beans.

	<u>ACREAGE</u>			
	(hect)			
	<u>1986/87</u>	<u>1987/88</u>	<u>1988/89</u>	<u>1989/90</u>
Dry beans	85,660	75,670	63,400	68,560
Lentil	46,330	32,750	14,690	13,930
Dry peas	14,790	14,160	7,830	8,670
Vetches	6,070	6,180	6,550	n/a

PRODUCTION

(mt)

	<u>1986/87</u>	<u>1987/88</u>
Dry beans	81,169	99,774
Lentil	24,742	20,100
Dry peas	14,836	7,590
Vetches	5,238	4,892

Import Information

Chile does not import pulses.

Export InformationCHILEAN PULSE EXPORTS

(mt)

	<u>1987</u>	<u>1988</u>
Dry beans	42,923	70,828
Lentil	4,167	5,496
Peas	3,984	5,001

Local Market Information

The primary local markets for pulses in Chile are the processing industry, supermarkets and retail stores.

COLOMBIALocal Production

A wide variety of pulses are grown in Colombia. The pulses include several varieties of white and red kidney beans, faba beans, green and yellow peas, and red and green lentil. The Canadian Embassy in Bogota indicates the Government of Colombia encourages production of peas and red kidney beans through credit and marketing assistance in an effort to reduce imports.

	ACREAGE	
	(hect)	
	<u>1988</u>	<u>1989</u>
Red Kidney Beans	125,800	131,250
Faba Beans	8,442	8,864
Green Peas	20,820	21,861

	PRODUCTION	
	(mt)	
	<u>1988</u>	<u>1989</u>
Red Kidney Beans	99,900	105,000
Faba Beans	15,229	16,841
Green Peas	29,527	17,488

	YIELDS	
	(kg/hect)	
	<u>1988</u>	<u>1989</u>
Red Kidney Beans	794	800
Faba Beans	1,804	1,900
Green Peas	1,418	800

Import Information

The importation of pulses into Colombia is handled by private importers. Buyers must obtain phytosanitary permits from the Colombian Agricultural Institute (ICA), and request import licenses from the Institute of Foreign Commerce, INCOMEX. The buyers must then negotiate a purchase through one of the local representatives. (For Canada: Elders, XCan Grain, International Grain Trade Canada Inc.) The official importer, the Agricultural Marketing Institute (IDEMA), purchases pulses through tenders with purchase going to the successful bidder.

COLOMBIAN PULSE IMPORTS
(mt)

1988

Lentil	34,003
Green & Yellow Peas	27,083
Garbanzos	2,680
Red Kidney Beans	2,588

Tariffs on lentil, peas and garbanzos entering Colombia are 15% advalorem duty, and 8.5% for other taxes. The importation of beans requires prior approval from the Colombian Ministry of Agriculture, in addition to a 25% advalorem duty, and 8.5% for other taxes. Imports of lentil and peas have shown a continuous increase over the last 5 years, and are expected to continue to grow in the future. In 1988, many importers accumulated inventories in expectation of price increases resulting from the North American drought. As a result, imports were lower in 1989.

Export Information

Colombia does not export pulses.

Local Market Information

Pulses are readily available at all food retail outlets in Colombia. IDEMA sells pulses at its various retail outlets, but, they do not influence prices as a result of the trade. About 25% of production of peas and kidney beans is consumed by the canning industry. The local price for red kidney beans is increasing by 25-30% a year as a result of increases in the cost of production.

LOCAL RETAIL PRICES

(\$US/kg)

1989

Lentil	0.77
Peas	0.50
Red Kidney Beans	1.40

Consumption Information

Per capita pulse consumption in Colombia has been estimated at 9.7 kgs per year. Lentil and garbanzos are preferred as a main dish or soup, while peas and beans are eaten fresh or canned. Due to the high price of beef, many consumers are turning to pulses for their protein requirements. Consumption of pulses has been increasing over the last 5 years in Colombia.

COSTA RICALocal Production

	PRODUCTION	
	(mt)	
	<u>1988</u>	<u>1989 (est)</u>
Red and Black Beans	21,000	22,000

Import Information

The importation of pulses into Costa Rica is conducted by government agencies through regular tenders.

	IMPORTS	
	(mt)	
		<u>1988</u>
Black Beans		4,200
Chile		2,700
Brazil		1,500
Kidney Beans		
Chile		1,900
Lentil		3,521
USA		2,000
Chile		1,500
Canada		21

Local Market Information

The primary local market for pulses in Costa Rica is retail stores.

LOCAL RETAIL PRICES
(\$US)

Black Beans	.80 per kg
Kidney Beans	.79 per kg
Lentil	.98 per kg

Consumption Information

PER CAPITA CONSUMPTION

Black Beans	12 kg per person
Kidney Beans	6 kg per person
Lentil	10 kg per person
Total	28 kg per person

COTE d'IVOIRELocal Production

Food crops grown in Cote d'Ivoire are characterized by small-scale operations using rudimentary techniques and local varieties. Consequently, production of pulses in Cote d'Ivoire is very low. The only pulse crops grown locally are cow peas and peas.

	ACREAGE (,000hect)		
	<u>1986</u>	<u>1987</u>	<u>1988</u>
Pulses	12	12	12
	PRODUCTION (,000mt)		
	<u>1986</u>	<u>1987</u>	<u>1988</u>
Pulses	8	8	8
	YIELDS (kg/hect)		
	<u>1986</u>	<u>1987</u>	<u>1988</u>
Pulses	667	667	667

Import Information

In general, registration must be obtained before External Trade (COMEX) will grant an import licence. The importation of pulses is conducted by private dealers. Pulses are not subject to the regulatory code, and thus, are treated as "free" merchandise. There are no quotas or regulations on supply, but, pulses are subject to customs duties, tax duties and the VAT.

Export Information

Cote d'Ivoire does not export pulses.

Consumption Information

Consumption of pulses is marginal, and demand is met primarily by local production. Generally, pulses are not a common food among Ivorians. Rice is the preferred food.

CUBALocal Production

Production of pulses in Cuba is primarily confined to two types of beans. Cuba only grows black beans and red beans on a commercial basis, with private farmers occasionally growing white beans for household consumption.

ACREAGE

1989 (hect)

	<u>Total Acreage</u>	<u>State farms</u>	<u>Private Sector</u>
Total	509,997	152,999	356,998
Black Beans	305,998	100,000	205,998
Red Beans	203,999	85,000	118,999

PRODUCTION

(mt)

	<u>1985</u>	<u>1986</u>	<u>1987</u>	<u>1988</u>
Total	9,400	9,440	7,500	10,000
Black Beans	7,300	7,200	6,200	7,500
Red Beans	2,100	2,240	1,300	2,500

Import Information

Cuba imports a wide variety of pulse products including black beans, pinto beans, red lentil, yellow peas, white beans and chick-peas. Cuba conducts all its foreign procurement programs through state trading organizations. Pulses, like all other food products, are imported by the state trading agency ALIMPORT, located at Infanta No.16, Vedado, La Habana, Cuba. ALIMPORT issues tenders on an annual basis to various international suppliers with whom they maintain a long standing relationship. The criteria for the acceptance of offers is product quality, price, delivery terms and availability of credit facility or financing (min. 360 days). For certain products, however, ALIMPORT is prepared to make cash payments in hard currency, and this provides an opportunity for sales by Canadian suppliers. In addition, the Soviet Union, under the terms of its annual trade protocol with Cuba, purchases for ALIMPORT dried peas, lentil and some colored beans. Current purchasing policies favour imports from western countries, or individual companies from which credit or financing facilities are available.

CUBAN IMPORTS
1988 (mt)

	COUNTRY OF ORIGIN				
	<u>Canada</u>	<u>Argentina</u>	<u>Mexico</u>	<u>China</u>	<u>France</u>
Black Beans	-	100,000	4,500	-	-
Red Beans	-	-	3,000	25,000	2,000
Lentils	1,000*	-	2,000	-	-
White Beans	-	-	6,000	-	-
Dried Peas	12,184	-	-	-	-
Chick-peas	-	-	2,000	-	-
TOTAL	12,184	100,000	17,500	25,000	2,000

The import trend over the next five years indicates that Cuba will continue to import pulses at approximately the same level as 1988. Since retail sales of most food products are rationed, it is relatively easy for Cuban planners to match import requirements with planned demand. As no increment of per capita food allocation is envisaged, there are no expectations of any significant increase in Cuba's pulse import levels.

Export Information

Cuba does not export pulses.

Local Market Information

Pulses are primarily destined for the retail market. They are sold on a rationed basis which establishes a monthly quota of 4oz. per person of each colored bean imported, and 6oz. per person of dried yellow peas. Prices are set by the State Committee for Prices. Prices are subsidized by the Cuban government, and generally sell at Cuban pesos 0.12 per pound.

Consumption Information

Pulse consumption in Cuba is approximately 16 kg per person. The local population prefers black beans, with red beans next in preference. Pulses are normally consumed in stews, or mixed with white rice. Consumption trends are likely to remain stable, because sales of pulses to the consumers is rationed, and the food allowance is not likely to change.

DENMARKLocal Production

The Canadian Embassy in Copenhagen reports that only green and yellow peas, and a small quantity of horse beans are produced in Denmark.

	<u>ACREAGE</u>				
	<u>(hect)</u>				
	<u>1985</u>	<u>1986</u>	<u>1987</u>	<u>1988</u>	<u>1989</u>
Total Pulses	126,836	144,595	203,604	146,927	117,000

	<u>YIELDS</u>				
	<u>(kg/hect)</u>				
	<u>1985</u>	<u>1986</u>	<u>1987</u>	<u>1988</u>	<u>1989</u>
Total Pulses	4,260	3,810	2,540	3,450	3,860

Import Information

Importation of pulses into Denmark is carried out exclusively by private importers.

DANISH PULSE IMPORTS
1988

<u>H.S.Code</u>		<u>Qty (tons)</u>	<u>Value (kr)</u>
0713.10.11	Feed peas, sowing	996.9	6,246,000
0713.10.19	Peas, sowing	4,475.8	29,011,000
0713.10.90	Peas, food	1,196.9	3,637,000
0713.20.10	Chick peas, sowing	30.9	192,000
0713.20.90	Chick peas, food	104.7	534,000
0713.31.10	Mung beans, sowing	100.0	550,000
0713.31.90	Mung beans, food	233.6	1,280,000
0713.32.90	Small red beans, food	76.4	337,000
0713.33.10	Kidney beans, sowing	28.6	609,000
0713.33.90	Kidney beans, food	107.4	520,000
0713.39.10	Dry beans, sowing	73.2	528,000
0713.39.90	Dry beans, food	244.2	1,540,000
0713.40.90	Lentil	209.7	860,000
0713.50.10	Broad & horse beans, sowing	40.3	276,000
0713.50.90	Broad & horse beans, food	128.1	324,000
0713.90.10	Other pulses, sowing	5.4	34,000
0713.90.90	Other pulses, food	7.2	24,000
	TOTAL PULSES	8,059.3	46,502,000

Export Information**DANISH PULSE EXPORTS
1988**

<u>H.S.Code</u>		<u>Qty (tons)</u>	<u>Value (kr)</u>
0713.10.11	Feed peas, sowing	23,951.6	58,442,000
0713.10.19	Peas, sowing	3,714.6	10,764,000
0713.10.90	Peas, food	172,811.4	412,895,000
0713.20.90	Chick peas, food	648.0	2,049,000
0713.31.10	Mung beans, sowing	3.6	25,000
0713.31.90	Mung beans, food	101.1	688,000
0713.32.90	Small red beans, food	6.1	92,000
0713.33.10	Kidney beans, sowing	1.4	50,000
0713.33.90	Kidney beans, food	12.9	146,000
0713.39.90	Dry beans, food	5.4	53,000
0713.40.90	Lentil	17.0	223,000
0713.50.10	Broad & horse beans, sowing	71.4	461,000
0713.50.90	Broad & horse beans, food	8,422.4	19,562,000
0713.90.10	Other pulses, sowing	483.2	1,277,000
0713.90.90	Other pulses, food	42.9	206,000
	TOTAL PULSES	210,293.0	506,933,000

Local Market Information

There are no local associations or control mechanisms at work in Denmark in regard to pulses. The primary local markets for pulses are retail, health food stores, and catering.

Consumption Information

Due to increased interest in nutrition and changing eating habits, pulse consumption has been clearly increasing recently. The principal pulses marketed in Denmark are: white beans, pinto, black-eyed, dutch brown, green and red lentils (from Turkey not Canada), butter beans, chick peas, red kidney beans, dried green peas and black beans.

EL SALVADORLocal Production

	PRODUCTION	
	(mt)	
	<u>1988</u>	<u>1989 (est)</u>
Black and Red Beans	18,000	18,550

Import Information

The importation of pulses into El Salvador is carried out by private importers.

	IMPORTS	
	(mt)	
		<u>1988</u>
Black Beans		
USA		4,700
Red Beans		
Argentina		2,000
Lentil		
Chile		3,400
Kidney Beans		
Canada		110

Local Market Information

The primary local market for pulses in El Salvador is retail stores.

LOCAL RETAIL PRICES
(\$US)

Black Beans	.73 per kg
Red Beans	.73 per kg
Small Red Beans	.67 per kg
Lentil	.95 per kg

Consumption Information

PER CAPITA CONSUMPTION

Black Beans	7 kg per person
Red Beans	4 kg per person
Lentil	9 kg per person
Kidney Beans	2 kg per person
Total	22 kg per person

HONDURASLocal Production

PRODUCTION

(mt)

19881989 (est)

Red and Black Beans	19,000	21,500
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Import Information

The importation of pulses into Honduras is conducted by government agencies through regular tenders.

IMPORTS

(mt)

1988

Black Beans	3,780
USA	3,500
Canada	280
Red Beans	5,050
USA	4,200
France	850
Kidney Beans	
Canada	570
Lentil	
USA	2,550

Local Market Information

LOCAL RETAIL PRICES

(\$US)

Black Beans	.70 per kg
Red Beans	.73 per kg
Kidney Beans	.75 per kg
Lentil	.98 per kg

Consumption Information

PER CAPITA CONSUMPTION

Black Beans	8 kg per person
Red Beans	3 kg per person
Kidney Beans	3 kg per person
Lentil	10 kg per person
Total	24 kg per person

HONG KONGLocal Production

The Agriculture and Fisheries Department of the Hong Kong Government indicates there is virtually no production of pulses in this area. All pulse requirements rely on imports from various countries.

Import Information

A variety of pulses are imported into Hong Kong. The following is a list of pulses imported, a comprehensive breakdown in the statistics is not possible.

<u>Description</u>	<u>Main Exporters</u>
Red Beans	China, Thailand
Mung Beans	Thailand, China
Broad Beans	China
Black Beans	China, Taiwan, Thailand
Horse Beans	China
Bamboo Beans	China, Vietnam
String (White) Beans	USA, Thailand
Kidney Beans	USA
Small Red Beans	China
Peas	China, Thailand, USA
Lentil	China, USA

Because Hong Kong is a free port, there are no import duties or government restrictions governing the importation of pulses into Hong Kong. Presently, all imports of pulses are handled by importers who bring in the goods on their own accounts. Importers then distribute them to wholesaler/retail endusers, or importers directly to retailer/enduser on 60-day credit terms. The import trends in Hong Kong seem to have a steady growth rate of 3% per year.

HONG KONG IMPORTS

	1988		7/88-6/89	
	<u>Quantity(mt)</u>	<u>Value(C\$m)</u>	<u>Quantity(mt)</u>	<u>Value(C\$m)</u>
Beans(all)	96,488	41.4	56,065	27.6
Peas, Lentil	21,664	5.5	21,750	5.9

Export Information

Since there is no production of pulses in Hong Kong, all quantities exported are in actuality re-exports.

HONG KONG RE-EXPORTS**1988**

	<u>Quantity (kg)</u>	<u>Value (HK\$)</u>
Beans, dried		
Total	76,098,372	212,947,630
United States	1,648,126	7,907,227
Canada	647,934	3,105,090
Sweden	113	1,081
Norway	1,134	7,049
Denmark	136	2,608
Switzerland	54,340	201,562
Portugal	53,000	165,098
Germany FR	40,727	150,920
Netherlands	2,098,306	6,818,159
Belg-Lux	429,758	1,599,479
France	56,762	321,246
Italy	5,220	35,619
United Kingdom	141,337	600,725
Fr Neth W.Indies	7,233	48,633
Panama	24,360	138,652
Curacao	40,917	188,150
Aruba	680	4,950
Jamaica	1,736	9,585
Israel	529,715	1,849,899
Lebanon	100	819
Saudi Arabia	20,000	56,000
Cyprus	600	3,978
Taiwan	18,772,526	48,479,499
Indonesia	9,880,640	18,800,482
Macau	12,977	71,006
Philippines	1,695,450	4,968,911
Korea Rep	3,342,448	8,533,381
Thailand	326,860	1,028,821
Japan	4,841,424	14,098,858
China	193,852	469,164
Pakistan	4,024,135	12,069,603
India	24,191,362	69,559,374

**HONG KONG RE-EXPORTS
1988**

	<u>Quantity(kg)</u>	<u>Value(HK\$)</u>
Beans, dried (con't)		
Malaysia West	111,540	403,363
Sabah	1,267	7,450
Sarawak	2,643	9,360
Singapore	2,486,711	9,425,118
Libya	11,275	36,268
South Africa	282,310	1,074,332
Insular Spain	11,000	52,910
Kenya	160	920
Mauritius	6,685	25,960
US Oceania	11,427	74,727
Oceania NES	8,431	51,023
Trust Ter Pac Islands	10,176	62,847
Australia	19,205	147,127
Fiji	1,583	9,757
New Zealand	50,051	270,840
Peas and Lentils		
Total	10,708,534	19,892,738
United States	4,788	29,564
Canada	3,229	17,188
France	8,349	69,226
United Kingdom	118,126	242,049
Taiwan	2,187,107	4,273,228
Indonesia	65,950	168,080
Macau	3,600	49,250
Philippines	69,948	211,427
Thailand	200	1,234
Japan	1,436	35,010
China	30,603	155,380
Pakistan	132,132	360,720
India	7,577,492	13,240,345
Malaysia West	36,900	92,685
Singapore	38,692	139,265
Bangladesh	300,000	443,460
South Africa	128,982	350,257
Seychelles	1,000	14,370

AVERAGE RE-EXPORT PRICES

Red Beans	C\$467.00 per mt	FOB Hong Kong
Green Beans	C\$700.00 per mt	FOB Hong Kong
Black Eye Beans	C\$625.00 per mt	FOB Hong Kong

Local Market Information

Pulses imported into Hong Kong are used for different purposes. Approximately 90% of the pulses imported are used for manufacturing various products (see below), 7% for retail, and 3% for hotel/restaurant etc.

MANUFACTURING PULSE USAGE

1) RED BEANS

<u>Products</u>	<u>(%)</u>	<u>Qty(mt)</u>
Bean Paste for Bread/Pastry	35	2,975
Desert Soup with Lotus Seed	30	2,550
Ice Cream and Ice Bar	10	850
Bean Paste for Dumping	10	850
Other Usages	15	1,275

2) GREEN BEANS (MUNG BEANS)

<u>Products</u>	<u>(%)</u>	<u>Qty(mt)</u>
Bean Sprout Small Kernel	80	3,700
Bean Thread	5	230
Disel Soup w/Seaweed	10	463
Rice Tamate Filling	3	140
Other Usages	2	92

3) OTHER PULSES

<u>Products</u>	<u>Qty(mt)</u>
Horse Beans & Broad Beans for feeding	2,400
Black Eye Beans for soup making	300
Yellow Split Peas for Confectionery	200
Other Beans/Peas used as animal feed	15,000

Consumption Information

Pulse consumption in Hong Kong has historically remained steady. Although no exact figures could be obtained, it has been estimated that per capita pulse consumption is approximately 5.4 kg per person. An interesting statistic was obtained by the Canadian Embassy in Hong Kong which indicates 70% of the people prefer sweet pulses, while 30% prefer salty. Forecasts for the future indicate that pulse consumption in Hong Kong is expected to increase marginally.

HUNGARYLocal Production

	ACREAGE			
	(hect)			
	<u>1985</u>	<u>1986</u>	<u>1987</u>	<u>1988</u>
Beans	3,179	6,371	7,516	6,738
Peas	55,802	63,626	87,774	125,695
Lentil	1,016	5,023	10,020	3,784
Lupines	5,312	5,279	3,206	5,403
Faba beans	16,145	22,357	13,978	17,672
TOTAL	81,454	102,656	122,494	159,292

	PRODUCTION			
	(mt)			
	<u>1985</u>	<u>1986</u>	<u>1987</u>	<u>1988</u>
Beans	3,306	5,670	4,660	5,660
Peas	150,665	176,880	211,535	339,376
Lentil	884	3,918	9,018	3,292
Lupines	4,568	2,586	2,084	5,835
Faba beans	21,311	29,958	19,988	26,861
TOTAL	180,734	219,012	247,285	381,024

	YIELDS			
	(kg/hect)			
	<u>1985</u>	<u>1986</u>	<u>1987</u>	<u>1988</u>
Beans	1,040	890	620	840
Peas	2,700	2,780	2,410	2,700
Lentil	870	780	900	870
Lupines	860	490	650	1,080
Faba beans	1,320	1,340	1,430	1,520

AVERAGE PURCHASING PRICE FARMERS RECEIVED

	(Forint/mt)			
	<u>1985</u>	<u>1986</u>	<u>1987</u>	<u>1988</u>
Beans	38,438	40,024	41,066	48,313
Peas	9,792	9,660	9,751	9,819
Green Beans	7,830	8,170	8,680	9,000
Green Peas	3,690	3,780	4,010	4,420
Lupines	9,147	7,900	8,804	9,604

Import InformationHUNGARIAN IMPORTS
1988Quantity (mt)

Beans (Human Consumption)

Netherlands	349
Sweden	80
United States	63
France	10
East Germany	6
TOTAL	508

Peas (Human Consumption)

Bulgaria	1,783
Netherlands	1,527
West Germany	649
Czechoslovakia	643
East Germany	298
United Kingdom	219
TOTAL	5,119

Export InformationHUNGARIAN EXPORTS
1988Quantity (mt)

Beans (Human Consumption)

Czechoslovakia	334
Yugoslavia	312
Bulgaria	300
Italy	203
Lebanon	121
East Germany	119
Austria	112
Netherlands	93
United Kingdom	64
West Germany	1
Soviet Union	1
Japan	1
TOTAL	1,661

**HUNGARIAN EXPORTS
1988**

Quantity (mt)

Peas (Human Consumption)

India	76,502
Cuba	44,798
Italy	9,499
West Germany	8,846
Soviet Union	5,526
Netherlands	5,210
Switzerland	2,979
East Germany	2,279
Japan	1,467
Israel	1,133
Pakistan	1,068
United Kingdom	1,050
Austria	991
France	935
Belgium	644
Nigeria	400
Denmark	117
Bulgaria	50
Poland	40
Czechoslovakia	12
TOTAL	163,546

Peas (Feed)

West Germany	8,604
Italy	6,948
Libya	4,530
Czechoslovakia	1,584
Austria	1,270
Netherlands	414
Switzerland	355
TOTAL	23,705

Beans (Feed)

Italy	5,491
Israel	897
Soviet Union	20
TOTAL	6,408

Green Peas

West Germany	5,779
Netherlands	1,858
Czechoslovakia	715
Switzerland	712
Austria	5
TOTAL	9,069

INDIA

Local Market Information**AVERAGE MARKET PRICE**
(Forint/kg)

	<u>1985</u>	<u>1986</u>	<u>1987</u>	<u>1988</u>
Beans	40.00	52.00	71.90	71.90
Peas	18.00	20.40	31.00	32.30
Green Beans	22.30	29.00	25.90	29.80
Green Peas	23.70	27.60	20.80	28.20
Lentil	60.00	65.00	77.20	63.70

Consumption Information

Pulse consumption in Hungary is usually in some form of a vegetable dish. Per capita consumption compares favourably with other staples in the Hungarian diet.

PER CAPITA CONSUMPTIONQuantity (kg)

Pulses	75-80
Cereals	110-115
Meat	75-82

INDIALocal Production

Information received by the Canadian Embassy in New Delhi indicates many different pulses are grown in India. The common pulse types grown in India are red lentil, green mung beans, black matpe, red kidney beans, green and yellow peas, chick peas and pigeon peas. India has two crops during a calendar year, Kharif (summer crop) is harvested in Sept/Oct, and Rabi (winter crop) is harvested in Mar/Apr.

	ACREAGE	
	(–000hect)	
	<u>Jly87-Jun88</u>	<u>Jly88-Jun89</u>
Total kharif	10,270	11,240
Total rabi	11,290	12,010
Total pulses	21,560	23,250

Yield/hect (1987/88)= 0.51 tonne

	PRODUCTION (Crop Year Jly-Jun)			
	(–000tonnes)			
	<u>1985/86</u>	<u>1986/87</u>	<u>1987/88</u>	<u>1988/89</u>
Total kharif	4,540	4,200	4,360	5,560
Total rabi	8,820	7,510	6,680	8,140
Total pulses	13,360	11,710	11,040	13,700

Import Information

India imports numerous pulse types in order to supplement the domestic food supply. Pulses imported are chick peas, Tyson chick peas, Dun peas, kidney beans, pigeon peas, red lentil, mung beans, black matpe, and green & yellow peas. There is potential for cheaper pulse types for human consumption. Pulses are imported into India without restriction under the Open General Licence (OGL). It is expected that a new import control policy valid from April 1,1990 to March 31,1993 will be announced soon by the Indian Ministry of Commerce. The OGL import facility is expected to continue throughout the period. Currently, importation of pulses is undertaken by private firms, in addition to government agencies such as the State Trading Corporation of India Ltd. (STC), and the National Agricultural Co-Operative Marketing Federation of India Ltd. (NAFED). All import contracts must be registered with NAFED, and a fee of Rs.10 per tonne is required. In addition, a phyto-sanitary certificate must accompany each shipment.

The present rate of import duty on pulses entering India is 10% ad valorem. The Government of India uses the import duty as a method of helping to control the domestic price of pulses. Prior to 1987, imports of pulses were duty free. In an attempt to assist farmers, in 1987 the Government imposed a duty of 25% ad valorem on all grain legumes. However, in Sept 1987 the duty was reduced to 10% to bring down the prevailing market prices of pulses which had been pushed upwards. In Oct 1988, the duty was again increased to 35%, but in Nov 1989, it was reduced to 10% for similar reasons.

INDIAN PULSE IMPORTS

	<u>1984/85</u>	<u>1985/86</u>	<u>1986/87</u>	<u>1987/88</u>	<u>1988/89</u>
Total Pulses	235,390	431,441	624,621	738,184	718,605

Export Information

India does not generally export pulses.

Local Market Information

The primary markets for pulses in India are processors (millers) and wholesalers.

LOCAL RETAIL PRICES

	<u>1990</u> (Rs/kg)
Green mung beans	10.0
Green mung split	11.0
Black matpe whole	11.0
Red kidney beans	15.0
Chick peas	14.0
Tyson chick peas	10.0
Pigeon peas	10.0
Green peas	10.0
Red lentil	10.0

Consumption Information

Currently, the per capita net availability of pulses is 33.0 gms per day, as compared with 40.6 gms in 1986, and 74.9 gms in 1959. Pulses are generally consumed as a vegetable with meals, and are used to make chapattis, papadam and besan.

INDONESIALocal Production

Information obtained by the Canadian Embassy in Jakarta indicates that pulses are not grown commercially, and pulses are not included in the list of Indonesian agricultural products for development. According to the Indonesian Department of Agriculture, only red beans are grown and production does not exceed 2000 mt per year.

Import Information

The importation of pulses into Indonesia is carried out by private importers, with only a 10% import duty acting as a barrier to trade.

1988 INDONESIAN PULSE IMPORTS

	<u>Qty (mt)</u>	<u>Value (\$US)</u>
Black beans	56,640	13,745,126
Green beans	3,297	1,197,783
Red beans	63	25,331
Peas	8,499	2,409,936
Chick peas	2,216	832,512
Koro beans	62	20,215
Other pulses	3,598	1,717,276
TOTAL PULSES	74,375	19,948,179

Export Information

Indonesia does not export pulses.

Local Market Information

The primary local markets for pulses in Indonesia are processors, supermarkets and hotels. Local retail prices are equal to a 30-60% mark-up on import prices.

Consumption Information

Even though local production is insignificant, per capita pulse consumption is equal to 0.4kg. As with most parts of the world, pulse consumption is increasing in Indonesia.

IRAQLocal Production

The Canadian Embassy in Baghdad was unable to obtain extensive information on Iraq due to a policy in Iraq of not providing statistics. In any event, the following pulses are grown locally: green peas, red lentil, chick peas, butter beans and large broad beans. Iraq has indicated a policy that will see future production of pulses increase.

Import Information

All pulses imported into Iraq enter through the state company for foodstuff trading. Tenders are sent to companies/suppliers, and are based on a list of approved suppliers provided by each Embassy. Prior to 1989, pulse imports were based on suppliers credit, but since January 1990 are being paid on a cash basis. The following pulses were imported in 1988: white kidney beans, yellow split peas, red lentil, red kidney beans and black-eyed peas.

Export Information

Iraq does not export pulses.

Local Market Information

The primary local market for pulses are retail outlets and the military, both supplied through the state company for foodstuff trading. Pulse are generally sold in bulk form, but are occasionally packaged locally in the more expensive shops. Pulse prices are heavily subsidized by the government by an undetermined amount.

LOCAL RETAIL PRICES

	<u>1989</u> (\$US/kg)
White beans	2.08
Yellow split peas	2.24
Red lentil	1.44
Red kidney beans	2.88
Black-eyed peas	1.28

Consumption Information

No information is available.

IRELANDLocal Production

Two types of pulses are grown in Ireland, peas and field beans. An estimate of 1989 acreage, supplied by the Canadian Embassy in Dublin, puts total acreage for Ireland at 2,054 acres.

	PRODUCTION (mt)				
	<u>1985</u>	<u>1986</u>	<u>1987</u>	<u>1988</u>	<u>1989</u>
Peas	10,500	7,800	3,800	3,081	2,160
Field beans	nil	1,200	3,500	9,638	5,018

Import Information

	IRISH PULSE IMPORTS (mt)				
	<u>1984</u>	<u>1985</u>	<u>1986</u>	<u>1987</u>	<u>1988</u>
Green peas	3,224	4,414	10,415	12,670	26,924
Broad beans	1,911	2,984	2,771	2,870	2,648

Export Information

	IRISH PULSE EXPORTS (mt)				
	<u>1984</u>	<u>1985</u>	<u>1986</u>	<u>1987</u>	<u>1988</u>
Total pulses	660	625	505	458	525

Local Market Information

The primary market for pulses in Ireland is the animal feed industry. The majority of pulses grown and imported into Ireland are allocated to the feed industry. Only a small portion of pulses are used for the processing industry and the remainder are used for human consumption.

Consumption Information

No information was available with regard to pulse consumption in Ireland.

ISRAELLocal Production

The Canadian Embassy in Tel Aviv reports that only chick peas are grown locally in Israel.

	ACREAGE	YIELD	PRODUCTION
1988	3,300 hect	2.12 mt/hect	7,000 mt
1989	4,200 hect	n/a	n/a

Import Information

Import statistics are misleading in Israel. In 1988, statistics show that 22,567mt of chick peas were imported into Israel for re-export, but the Field Crop Growers Association indicates no import licences were granted for chick peas. In addition, Israel statistics on lentil imports from Canada indicate 625mt were imported, but Statistics Canada reported only 252mt of lentil exported to Israel from Canada. In any event, Israel imports approximately 20,000mt of various pulses per annum. The main suppliers are Turkey, China, Canada and Argentina.

Export Information

In 1988, Israel exported 13,000mt of chick peas including re-exports.

Local Market Information

The primary local market for pulses in Israel is the retail sector. Approximately 1% of all pulse imports go to the processing sector.

Consumption Information

PER CAPITA CONSUMPTION

Kg/yr

Lentil	.89
Beans	1.33
Coloured beans	.22
Peas	.44
Chick peas	1.33

JAMAICALocal Production

Jamaica produces four types of pulses within the economy: broad beans, sugar beans, cow peas, red peas and gungo peas.

PRODUCTION

(short tonnes)

	<u>1987</u>	<u>1988</u>
Total	8,187	6,735
Broad Beans	229	194
Sugar Beans	194	145
Red Pea	4,516	3,460
Gungo Pea	1,998	2,357
Cow Pea	1,250	579

Import Information

For the most part, the local market in Jamaica is operated on an open trade policy with very few items subject to import licences and/or restrictive practices. String beans, pigeon peas and red kidney beans all require licences prior to importation. Upon receipt of the import licence, private firms have responsibility for all shipments entering the country, with no changes anticipated for the immediate future. In addition to import licences, there are some duties levied on pulses entering Jamaica, but they are in no way restrictive.

Imports of pulses have generally increased between 1984 and 1988. Due to intensified attempts to produce more pulses locally, red kidney beans have shown some success. Because of this success, statistics show a slow decline in imports over the past few years. The 1988 figures show some decline, this is largely the result of the devastation suffered as the result of hurricane Gilbert in September 1988. The agricultural sector was almost completely wiped out, but has bounced back with resiliency.

IMPORTS (kg)

	<u>1987</u>	<u>1988</u>
Red Kidney Beans	1,190,258	1,007,349
Lima Beans	204,029	203,217
Navy Beans/Michigan	48,102	37,081
Split Peas	52,785	22,101
String Beans	-	152

Export Information

The main export market for Jamaican pulses is Europe. Pulses which are exported are largely snow peas, string beans and gungo peas. Some of Jamaica's re-exports of pulses occur to the same source of purchase.

<u>H.S.Code</u>	<u>Destination</u>	<u>EXPORTS</u>
		(kg)
		<u>1988</u>
0708.20	United Kingdom	11,900
0713.33.99	United Kingdom	7,789
0713.39.90	United Kingdom	3,416
2005.40	Barbados	11,250
	Trinidad & Tobago	3,546
	Cayman Islands	168

Local Market Information

The local Jamaican market for pulses is primarily hotels/restaurants, with some pulses used in processing and households. Organizations such as the Ministry of Agriculture, the Jamaica Agricultural Society and the Farmers' Cooperatives, all encourage and influence the market for pulses. Due to recovery efforts after Gilbert in September 1988, current retail prices are not available on the more popular pulses which have not been seen on the shelves. Prices as of September 1988 ranged from J\$10 to J\$14 per pound.

Consumption Information

Specific data on per capita pulse production was not available for the Canadian Embassy in Kingston. A local delicacy contains as the main ingredient red kidney beans, and is very popular due to the relatively inexpensive nature of the dish. Pulses are generally prepared with rice as "rice and peas". Pulses are also stewed or used in soups. Consumption trends indicate that consumption is stable, but increases sporadically depending on the time of year. (eg. Independence celebration, Easter festivities and fetes)

JAPANLocal Production

Information supplied by the Canadian Embassy in Tokyo indicates the following pulses are grown in Japan: azuki beans, kidney beans, broad beans, horse beans, peas and cow peas.

	ACREAGE (hect)				
	<u>1985</u>	<u>1986</u>	<u>1987</u>	<u>1988</u>	<u>1989</u>
Azuki beans	61,200	57,000	64,100	66,400	66,700
Kidney beans	23,600	20,600	20,700	20,100	34,900
Broad & horse	900	840	770	734	673
Peas	1,070	880	820	874	975
Cow peas	1,120	890	801	905	n/a
TOTAL PULSES	87,890	80,210	87,190	89,010	103,248

	YIELDS (kg/hect)			
	<u>1985</u>	<u>1986</u>	<u>1987</u>	<u>1988</u>
Azuki beans	1,580	1,550	1,470	1,460
Kidney beans	1,850	1,930	1,820	1,740
Broad & horse	1,090	1,090	1,090	1,090
Peas	2,210	2,190	2,240	2,170
Cow peas	1,000	1,000	1,000	1,000

	PRODUCTION (mt)			
	<u>1985</u>	<u>1986</u>	<u>1987</u>	<u>1988</u>
Azuki beans	97,000	88,200	94,000	96,700
Kidney beans	43,700	39,700	37,700	34,900
Broad & horse	980	920	840	800
Peas	2,370	1,940	1,830	1,900
Cow peas	1,120	890	800	910
TOTAL PULSES	145,170	131,650	135,170	135,210

The production figures for 1989 are not available at this time. However, estimates received from the Canadian Embassy in Tokyo indicate production figures should be as following: azuki beans up 0.5%; kidney beans up 18.4%; broad & horse beans down 8.3%; peas up 11.6%; and cow peas n/a; for a total increase in production in 1989 of 4.6%.

Import Information

All pulses (except those used for sowing purposes; green beans; chick peas and lentil) are under an import quota (IQ) system to protect local producers. Quota size is determined upon consultation by Ministry of Agriculture, Forestry & Fisheries (MAFF) and the Ministry of International Trade & Industry (MITI), based upon Japanese production and estimated demand for the following fiscal year. The IQ is announced for each half of a fiscal year, usually in September and April. Once the IQ has been announced, licensed importers will apply for required imports and proceed towards import operations. Endusers do not buy directly from overseas suppliers because of the IQ system and problems with issues like language.

Pulses entering Japan for sowing purposes enter tariff free, however, all other pulses are subject to a 10% tariff. An additional levy of 20% of the adjustment money is also imposed on pulses, thus, the actual cost of importing pulses other than for sowing is virtually 30%.

IMPORT QUOTAS

(\$US million)

	Fiscal Year (FY)			FY 1988		FY 1989	
	<u>1987</u>	<u>1988</u>	<u>1989</u>	<u>1st</u>	<u>2nd</u>	<u>1st</u>	<u>2nd</u>
Azuki beans	17.2	21.4	17.8	8.7	12.7	10.0	7.8
Peas	4.2	5.7	6.9	2.1	3.6	2.9	4.0
Broad, faba & horse	3.4	4.4	5.6	1.8	2.6	2.4	3.2
Kidney & other beans	19.0	27.9	30.4	9.0	18.9	17.9	12.5
TOTALS	43.8	59.4	60.7	21.6	37.8	33.2	27.5

JAPANESE PULSE IMPORTS

(mt)

	<u>1988</u>	<u>Jly88-Jn89</u>
	Azuki beans	32,491
China	32,491	29,171
Taiwan	210	424
Thailand	76	228
Canada	--	181
United States	163	158
Chick peas	354	511
Mexico	317	478
Australia	--	17
United States	37	16

JAPANESE PULSE IMPORTS

	(mt)	
	<u>1988</u>	<u>Jly88-Jn89</u>
Kidney beans	19,318	22,685
United States	14,079	14,621
China	2,782	4,228
Argentina	1,136	2,200
Canada	482	1,073
North Korea	482	260
South Africa	70	70
Thailand	--	70
Burma	218	68
Taiwan	13	38
Turkey	17	18
Netherlands	21	17
Belgium	17	17
Italy	--	4
West Germany	2	1
Broad, faba & horse beans	10,357	10,810
China	8,626	8,304
Australia	315	900
Morocco	295	414
Canada	472	399
Portugal	220	319
Cyprus	201	117
Peru	35	89
Greece	87	87
Syria	--	67
United States	60	60
United Kingdom	22	50
Spain	18	--
Netherlands	7	--
Peas	22,584	21,512
Canada	6,569	6,613
United States	6,854	6,130
United Kingdom	2,411	3,541
New Zealand	4,313	2,021
Hungary	1,724	1,917
China	521	1,117
Netherlands	66	86
Cook Islands	53	53
Taiwan	11	21
Italy	4	7
South Korea	6	6
USSR	35	--
Austria	17	--

JAPANESE PULSE IMPORTS

	(mt)	
	<u>1988</u>	<u>Jly88-Jn89</u>
Lentil	29	73
United states	29	70
India	--	2
France	--	1
Green beans	62,636	46,880
Thailand	34,275	22,051
China	17,711	18,825
Burma	9,154	4,991
Australia	971	704
United States	388	200
Taiwan	--	99
Vietnam	10	10
Singapore	78	--
North Korea	49	--
Pegin beans	18,472	18,386
Thailand	18,030	17,812
China	247	434
Burma	195	140
Other beans NES	24,402	27,046
United States	18,482	18,056
China	3,006	5,289
Burma	1,959	2,371
Thailand	782	1,138
South Africa	122	122
Philippines	--	70
Turkey	50	--
Taiwan	1	--

Export Information

JAPANESE PULSE EXPORTS

	<u>1988</u> (mt)
Azuki beans	15
Italy	6
United States	3
Thailand	3
Netherlands	2
West Germany	1
Denmark	1

JAPANESE PULSE EXPORTS

	1988 (mt)
Kidney beans	30
Taiwan	29
Chile	1
Peas	1
New Zealand	1

Local Market Information

The primary market for pulses in Japan is in the processing sector, which accounts for approximately 70% of total use. The remainder is allocated to retail, domestic uses, little use by hotels, restaurants and health food stores, with virtually no pulses going to animal feed. The Canadian Embassy in Tokyo has indicated the existence of at least 5 associations active in the pulse industry in Japan.

LOCAL RETAIL PRICES

Dec89 (Yen)

Azuki beans	
Ordinary	328 per 300gm
"Dainagon"	378 per 300gm
Kidney beans	
"Kintoki"	498 per 300gm
"Toramame"	268 per 130gm
"Ohfuku"	438 per 300gm
Cow peas	218 per 120gm

Consumption Information

In 1987, the latest year for which statistics are available, per capita pulse consumption in Japan was equal to 9.7 kgs. Japanese generally do not eat pulses as a main dish. Pulses are eaten as a side dish to a meal or as an alcoholic beverage, but the main consumption occurs as a snack for tea. Japanese prefer the sweeter pulse products and therefore bean/pea jams are very popular.

JORDANLocal Production

The Canadian Embassy in Amman has indicated the following pulses are grown locally in Jordan: dry beans, faba beans, dry peas, lentil, chick peas, vetches, white kidney beans, large broad beans and green peas.

	ACREAGE (hect)				
	<u>1985</u>	<u>1986</u>	<u>1987</u>	<u>1988</u>	<u>1989</u>
White kidney beans	1,709	1,808	854	1,061	n/a
Large broad beans	477	746	656	324	637
Green peas	81	72	162	36	n/a
Lentil	5,198	3,867	10,081	9,334	5,259
Chick peas	2,599	1,628	1,538	3,022	2,676
Vetches	3,660	2,806	5,135	4,119	2,679

	YIELDS (mt/hect)				
	<u>1985</u>	<u>1986</u>	<u>1987</u>	<u>1988</u>	<u>1989</u>
White kidney beans	10.2	11.0	12.3	12.4	n/a
Large broad beans	11.3	12.5	17.5	10.5	16.9
Green peas	6.2	5.6	5.6	5.6	n/a
Lentil	0.8	0.7	0.8	1.1	1.0
Chick peas	0.6	0.6	0.7	0.7	0.7
Vetches	0.7	0.6	0.7	1.6	0.6

	PRODUCTION (mt)				
	<u>1985</u>	<u>1986</u>	<u>1987</u>	<u>1988</u>	<u>1989</u>
White kidney beans	17,500	19,900	10,500	13,200	n/a
Large broad beans	5,400	9,300	11,500	3,400	1,075
Green peas	500	400	900	200	n/a
Lentil	4,100	2,600	7,600	9,800	4,874
Chick peas	1,600	900	1,000	2,100	1,832
Vetches	2,500	1,600	3,800	6,700	1,652

Import Information

The Ministry of Supply in Jordan is the major importer and distributor of pulses. However, the private sector is also involved in importation through regular tenders. The government normally gives subsidies for the purchase of pulses, especially for lentil and chick peas which are the most popular.

JORDAN PULSE IMPORTS

	(mt)	
	1988	Jan-Sept 1989
White kidney beans	1,189	17
Broad beans	4,132	4,063
Green peas	299	224
Lentil	484	11,391
Chick peas	7,516	7,562
Vetches	n/a	232
Red kidney beans	n/a	13

Export Information

Jordan exports minimal amounts of pulses is essentially not a pulse exporter. There were no exports in 1988, and only 60mt, largely broad beans, were exported in the first nine months of 1989. Exports occur only when the season allows with all exports going to neighbouring Middle Eastern countries like Syria, Kuwait, Saudi Arabia and Iraq.

Local Market Information

The primary local market for pulses in Jordan is the retail sector with a minimal share going to hotels and restaurants. The Ministry of Supply is responsible for controlling prices and quantities of pulses.

LOCAL RETAIL PRICES

	(\$US/mt)	
	1988	1989
Regular lentil	312	357
Split lentil	312	446
Chick peas	297	594
Dry beans	n/a	1117
Broad beans	n/a	966

Consumption Information

PER CAPITA PULSE CONSUMPTION

	1988	(gm/yr)
White kidney beans	4795	
Large broad beans	2510	
Green peas	166	
Lentil	3427	
Chick peas	3204	

KENYALocal Production

The Canadian Embassy in Nairobi indicates the following pulses are grown locally in Kenya: rosecoco, mwitemania, Canadian wonder, lentil, pigeon peas and cow peas.

	ACREAGE (hect)				
	<u>1985</u>	<u>1986</u>	<u>1987</u>	<u>1988</u>	<u>1989</u>
Beans	470,887	521,736	546,386	596,671	526,673
Lentil	33,900	45,277	42,105	40,517	n/a
Pigeon peas	80,734	84,651	112,909	107,937	n/a
Cow peas	n/a	n/a	n/a	94,264	n/a

	PRODUCTION (mt)				
	<u>1985</u>	<u>1986</u>	<u>1987</u>	<u>1988</u>	<u>1989</u>
Beans	279,625	409,876	325,890	358,996	279,080
Lentil	16,781	21,759	11,109	19,432	n/a
Pigeon peas	24,802	47,138	47,324	36,298	n/a
Cow peas	n/a	n/a	n/a	37,607	n/a

Import Information

Kenya does not officially import pulses.

Export Information

The following export statistics is only a partial list which could be obtained at this time. The average export prices for beans is \$US450/mt.

KENYAN PULSE EXPORTS

<u>Export Market</u>	<u>1989</u>	
	<u>Quantity (mt)</u>	<u>Product</u>
Mozambique	4,141	Beans
Sudan	8,500	Beans
Zambia	270	Beans
Ethiopia	5,094	Beans
Aden-Yemen	360	Beans
Somalia	660	Beans
Botswana	520	Beans
Djibouti	1,233	Beans

Local Market Information

The primary local markets for pulses in Kenya are retail, hotel/restaurants and educational institutions. Pulse are classed as a scheduled crop, and thus movement and marketing is controlled by the National and Cereal Produce Board. However, due to lack of institutional capacity, marketing and distribution has become less controlled.

LOCAL RETAIL PRICES

	<u>1990</u> (KShs)
Beans	8.50 per kg
Lentil	33.00 per kg
Chick peas	7.00 per kg
Snow peas	7.00 per kg

Consumption Information

Per capita bean consumption in Kenya is 15kg per annum. The local African population prefer beans, while the local Asian origin population prefer lentil and chick peas. The long range consumption of beans appears to be decreasing in Kenya. All types of pulses are generally boiled and then mixed with other vegetables in a soup or as a curry dish.

KUWAIT, BAHRAIN, QATAR, UAE, OMANLocal Production

The Canadian Embassy in Kuwait City is responsible for the above stated countries with regards to supplying information. The following data is a compilation of all the countries within the group. This group of countries do not produce pulses.

Import Information

The importation of pulses to this area is carried out largely by private importers. The Kuwaiti government calls every year for a tender for supply of lentil which is subsidized and sold through its company, the Kuwait Supply Company. Only Bahrain imposes an import duty on pulse imports equal to 4% based on CIF price.

1989 PULSE IMPORTS

	<u>Quantity (mt)</u>	<u>Source</u>
Lentil	10,000	Turkey, India
Green lentil	3,000	Thailand, Australia
Chick peas	10,000	Turkey (75%)
Broad beans	6,000	Turkey, UK
Lupines	3,500	USA
Faba beans	6,500	Spain, Cyprus, Greece
Green mung beans	1,250	Thailand
Black mung beans	1,200	USA
Cow peas	1,300	USA, Turkey
Navy beans	1,200	USA

Export Information

Pulses are not exported from this area.

Local Market Information

The major types of pulses in demand are chick peas, broad beans and lentil, with the wholesale market representing the largest source for buyers. Local retail prices are \$1.40/kg for broad beans, \$1.25/kg for chick peas, and \$1.25/kg for lentil.

Consumption Information

Per capita pulse consumption is estimated at 15kgs per annum for this area. Pulse consumption is increasing at an average of 5% per year in these countries.

MALAYSIALocal Production

According to information obtained by the Senior Statistician of the Agricultural Economics Division, Malaysian Ministry of Agriculture, pulses are not grown in Malaysia. However, small quantities of red beans are grown on rubber tree estates during the first three years following planting of the trees. Red beans are grown for local consumption only, and the quantity is not significant enough to be recorded by a statistician.

Import Information

Importation of pulses into Malaysia is conducted by the private sector. There is no government intervention other than the imposition of import and other duties, and the requirement that imports be subject to inspection by the Department of Agriculture. Import licenses are not required for the importation of pulses into Malaysia. However, pulses originating from certain Asian and African countries require a phytosanitary certificate specifying the shipment is free of the khapra beetle. Consignments of pulses from all countries are subject to inspection, and if necessary, treatment by the Department of Agriculture prior to clearance by Customs.

<u>H.S.Code</u>		<u>IMPORT DUTIES</u>		
		<u>Import (\$US)</u>	<u>Surtax</u>	<u>ASEAN*</u>
0713.10	Peas	3.63	5%	40%
0713.20	Chick peas	3.63	5%	40%
0713.31	Beans	3.63	5%	-
0713.32	Small red	3.63	5%	-
0713.33	Kidney & White	3.63	5%	-
0713.39	Other	3.63	5%	30%
0713.40	Lentil	-	-	30%
0713.50	Broad & Horse	3.63	5%	30%
0713.90.10	Dhall	-	-	30%
0713.90.90	Other	-	-	-

NOTE: Import duties and surtax are based on CIF prices.

*The percentages in this column represent the deduction of import duty for ASEAN sourced goods over goods from other countries.

MALAYSIAN PULSE IMPORTS

	(\$US,000 CIF)			
	<u>1985</u>	<u>1986</u>	<u>1987</u>	<u>1988</u>
Total Pulses	13,192	14,241	14,196	15,151

<u>SITC</u>	1988		<u>Value</u>
	(\$US,000)	<u>Qty(mt)</u>	
054.210 Peas	1,795		728.78
054.220 Chick peas	3,154		1,018.82
054.231 Beans	4,909		1,332.10
054.232 Small red	5,395		1,216.60
054.233 Kidney & White	147		66.79
054.240 Other beans	20,281		5,836.90
054.250 Lentil	67		32.10
054.260 Broad & Horse	2,655		749.07
054.290.1 Dhall	12,670		3,891.14
054.290.9 Other	929		275.60
Total	52,011		15,150.55

Export Information

Because there is no local production of pulses in Malaysia, all export statistics refer to re-exports. The amounts involved are small and most of the product is re-exported to Singapore which accounted for over 75% by value in 1988.

MALAYSIAN PULSE RE-EXPORTS

<u>SITC</u>	1988		<u>Value</u>
	(\$US,000)	<u>Qty(mt)</u>	
054.210 Peas	11		4.06
054.220 Chick peas	104		12.18
054.231 Beans	839		590.78
054.232 Small red	21		5.90
054.239 Other beans	530		205.90
054.240 Lentil	1		-
054.250 Broad & Horse	31		9.96
054.290.1 Dhall	377		157.56
054.290.9 Other	358		155.35
Total	2,272		1,141.69

Local Market Information

The primary local markets for pulses are the sundry/grocery shops, supermarkets, wetmarkets (regular markets which sell fish, meat, vegetables and dry food stuffs which include pulses) and night floating markets. These outlets contribute more than 90% of the total sales of pulses. There are no national or local associations or other control mechanisms influencing pulses in Malaysia. The price of pulses are determined strictly by supply and demand forces.

LOCAL RETAIL PRICES (\$US)

1989

Dhall	0.51 per kg
Red Beans	0.59 per kg
Green Beans	0.59 per kg
White Kidney Beans	0.54 per kg
Lentil	0.74 per kg

Consumption Information

The consumption of pulses has increased in Malaysia from 2.78 kg/person in 1985, to 3.03 kg/person in 1988. In general, consumption of pulses is increasing. Malaysians are becoming increasingly more health conscious and more aware of the nutritional value of pulses. This trend is resulting in an increase in the consumption of lentil.

The major consumers of pulses in Malaysia are vegetarians. In Malaysia, vegetarians are most often found within the Chinese and Indian communities. The major consuming ethnic group is the Indian Malaysian community which consumes dhall and other pulses in the daily preparation of Indian cuisine. The Malay community uses red beans and green peas in the preparation of local cakes. The Chinese Malaysian community uses small red beans and other pulses in the preparation of desserts.

MEXICOLocal Production

The information obtained by the Canadian Embassy in Mexico City deals mainly with beans. Beans are a staple in the Mexican diet, and as such, are the only pulse crop listed among the ten basic grains produced in the country for which reliable statistics are prepared. Other pulses such as lentil, chick-peas, lima beans, green split peas and others are grown in Mexico. Unfortunately, records on acreages planted, production, and yields are not centralized, and therefore meaningful information is not available.

	ACREAGE (,000hect)	
	<u>Colored Beans</u>	<u>Chick-peas</u>
1985	1,770	163
1986	1,820	n/a
1987	1,787	n/a
1988	2,372	n/a

	YIELDS (kg/hect)	
	<u>Colored Beans</u>	<u>Chick-peas</u>
1985	512	1,184
1986	596	n/a
1987	572	n/a
1988	495	n/a

	PRODUCTION (,000 mt)	
	<u>Colored Beans</u>	<u>Chick-peas</u>
1985	906	193
1986	1,095	n/a
1987	1,023	n/a
1988	857	n/a

Import Information

The importation and distribution of beans amongst the most unprotected sector of the population, is within the sole jurisdiction of Campania Nacional de Subsistencias Populares (CONASUPO). Purchases are made by private contract between CONASUPO and the supplier, primarily to cover any shortfalls that might occur as a result of declines in Mexican bean production. One example is the contract signed with Argentina for the supply of beans harvested in the winter, for a total of 55,000 tonnes. Under the current administration (Dec.1,1988-Nov.30,1994), a general replacement of CANASUPO personnel took place.

MEXICAN COLORED BEAN IMPORTS

(black,pinto,small red)

	Quantity (,000 mt)	Value (\$US,000)	(% change)
1985	145	56,037	
1986	179	82,910	+ 23.4
1987	40	17,990	- 77.6
1988	32	13,624	- 20.0
1989	126	n/a	+ 275.0

MEXICAN IMPORTS

1988

	Quantity (,000 mt)	Value (\$US,000)
Peas (<u>Pisum sativum</u>)		
USA	1.0	415
Canada	0.5	175
Kidney Beans (<u>Phaseolus vulgaris</u>)		
USA	9.0	2,777
Lentils		
USA	5.0	2,065
Canada	2.0	632
Colored Beans(other than seed)		
USA	30.0	12,642
Canada	0.4	185
Other	n/a	8
Beans (seed)		
USA	2.0	788
Other		
USA	2.0	849

Under Mexico's General Import Tariff Law (Harmonized System), dry pulses are currently listed under the following classification, dutiable as indicated.

<u>H.S.Code</u>		<u>Ad Valorem Duty</u>
0713.10.01	Peas	10%
0713.10.02	Peas for seed	10%
0713.20.01	Chick peas	10%
0713.31.01	Mung Beans	10%
0713.32.01	Small Red (Adzuki) Beans	10%
0713.33.01	Kidney Beans, White Pea Beans	10%
0713.33.02(*)	Beans, except seed	10%
0713.40.01	Lentil	10%
0713.50.01	Faba Beans	10%
0713.90.99	Others	10%

(*) Requires import permit issued by Secretariat of Commerce.

Export Information

MEXICAN EXPORTS CHICK PEAS

	<u>Quantity</u> (,000 mt)	<u>Value</u> (\$US,000)
1985	44	30,182
1986	62	41,145
1987	71	31,883
1988	52	22,236

MEXICAN EXPORTS 1988

	<u>Quantity</u> (,000 mt)	<u>Value</u> (\$US,000)
Black Beans		
Cuba	7	1,981
Chick peas		
USA	17	7,161
Spain	16	6,885
Italy	6	3,008
Cuba	4	1,807
India	4	1,536
Venezuela	3	1,175
Others	2	664

Local Market Information

Pulses are generally available on supermarket counters throughout Mexico. Prices vary widely from product to product and region to region. Some pulses, such as black and brown beans, are processed (pre-cooked, seasoned, and canned) by domestic companies and sold in the domestic marketplace.

There are no national or local associations or other control mechanisms influencing pulses. Given the importance of beans as a staple food, detailed statistical information is available. Ejido producers of beans (frijoles) belong to the National Campesinos Confederation, and CONASUPO is the only agency presently responsible for ensuring sufficient availability in the country. Other pulses are not considered among products making up the "basket of basic food commodities", and, therefore, statistical data on these is not available.

AVERAGE LOCAL RETAIL PRICES

	Regular Price pesos/kg	Sale Price pesos/kg
Colored Beans	910	n/a
Lentil	3,550	2,200
Lima Beans	5,940	n/a
Green Split Peas	4,760	3,725
Chick peas	3,625	2,180
Small White Peas	4,520	n/a
Large White Beans	2,720	2,140

Consumption Information

Per-capita bean consumption in Mexico has been estimated to be approximately 14.5 kg for 1989. No figures are available for other pulses. Beans are consumed boiled, fried and processed. Per-capita bean consumption has fluctuated greatly over the last decade. Falling consumer purchasing power, and declines in domestic bean production were partly responsible for the fluctuations. Government policies during 1988/89 to combat inflation and stabilize the domestic economy, have had positive results. With inflation controls, stable prices and population growth, per-capita consumption of beans will tend to increase in the future.

PER-CAPITA BEAN CONSUMPTION

<u>1981</u>	<u>1982</u>	<u>1983</u>	<u>1984</u>	<u>1985</u>	<u>1986</u>	<u>1987</u>	<u>1988</u>
25.5	14.6	16.6	12.6	13.5	15.9	13.1	14.2

NETHERLANDSLocal Production

	ACREAGE	
	(hect)	
	<u>1988</u>	<u>1989</u>
Green peas	29,916	14,991
Marrowfat peas	931	759
Brown beans	2,243	3,012
Faba beans	13,360	6,748

	PRODUCTION	
	(mt)	
	<u>1988</u>	<u>1989</u>
Green peas	103,500	72,100
Marrowfat peas	3,800	3,300
Brown beans	6,200	9,500
Faba beans	56,800	29,800

	YIELDS	
	(mt/hect)	
	<u>1988</u>	<u>1989</u>
Green peas	3.85	4.80
Marrowfat peas	4.05	4.40
Brown beans	2.75	3.15
Faba beans	4.25	4.40

Import Information

Importation of pulses into the Netherlands is carried out by private importers. Imports to the Netherlands have expanded strongly during the 1980's and reached their peak in the 1987/88 crop year. Human consumption has remained stable, the substantial increases are attributable almost entirely to higher demand from animal feed manufactures. The proposed EC security deposit scheme will likely affect imports if it is implemented. Import duties are levied on the c.i.f. value of merchandise entering the country.

IMPORT DUTIES

Peas and beans	3.0%
Lentil	2.0%
Faba beans	5.0%
Lupines	2.5%

DUTCH PULSE IMPORTS (\$Cdn)		
	Calendar Year 1988	Crop Year Jly88-Jun89
Peas	591,900	629,100
Beans		
<u>Phaseolus vulgaris</u>	125,800	
<u>Vigna & phaseolus spp.</u>	17,100	
Lentil	32,100	11,100
Faba beans	34,500	72,000
Lupines	131,400	118,900

Export Information

Export markets for Dutch dry pulses are mainly comprised of other EC countries. In 1988, 94% of dry pea exports went to EC-markets, with the balance going to other Europe, Africa and Surinam. Phaseolus vulgaris exports were 62% to EC countries, with the remainder going to other Europe, Africa and the Caribbean. It should be noted a large portion of Dutch pulse exports consists of re-exports.

DUTCH PULSE EXPORTS (\$Cdn)		
	Calendar Year 1988	Crop Year Jly88-Jun89
Peas	54,000	31,000
Beans		
<u>Phaseolus vulgaris</u>	8,000	
<u>Vigna & phaseolus spp.</u>	3,700	
Lentil	1,000	1,300
Faba beans	22,900	12,600
Lupines	35,800	2,600

Local Market Information

Dry pulses are mainly eaten at home in Holland in the form of canned, jarred, processed or dry. Green peas, marrowfat peas and brown beans for human consumption are quoted on the Rotterdam commodities exchange, which in turn reflects market supply and demand. Following were the wholesale prices in the week of January 22-26, 1990.

	<u>Guilders per 100 kgs</u>
Green peas	71.50
Marrowfats	77.00
Brown beans	167.50

LOCAL RETAIL PRICES

Guilders

Brown beans (500gm)	1.90 per package
White beans (500gm)	1.69 per package
Green lentils (500gm)	2.30 per package
Brown beans (1 ltr can)	1.69 per can
White beans (1 ltr can)	1.19 per can
Marrowfat peas (1 ltr can)	.95 per can
Brown beans (1 ltr jar)	2.12 per jar
White beans (1 ltr jar)	2.47 per jar
Marrowfat peas (1 ltr jar)	1.72 per jar

Consumption Information

Information received from the Canadian Embassy in The Hague indicates pulse consumption has been steady over the last few years with an actual decline in per capita consumption. The Dutch are generally conservative when it comes to eating peas and beans. Traditional locally grown pulses are still the most popular, but changes may occur as a result of exposure to dishes in other countries through the media and tourist travel (ex. chili con carne).

DUTCH PULSE CONSUMPTION

Gms/yr

Peas	820
Beans	820
Lentil	68

NICARAGUALocal Production

	PRODUCTION	
	(mt)	
	<u>1988</u>	<u>1989 (est)</u>
Red and Black Beans	25,000	27,500

Import Information

The importation of pulses into Nicaragua is conducted by government agencies.

	IMPORTS	
	(mt)	
		<u>1988</u>
Black Beans		
Chile		2,800
Kidney Beans		16,257
Canada		12,757
Chile		3,500
Small Red Beans		1,996
Argentina		1,500
Canada		496
Lentil		
Cuba		4,850

Local Market Information

LOCAL RETAIL PRICES
(US\$)

Black Beans	.65 per kg
Kidney Beans	.66 per kg
Small Red Beans	.56 per kg
Lentil	.92 per kg

Consumption Information

PER CAPITA CONSUMPTION

Black Beans	3 kg per person
Kidney Beans	4 kg per person
Small red Beans	2 kg per person
Lentil	5 kg per person
Total	14 kg per person

PANAMALocal Production

	PRODUCTION (mt)	
	1988	1989(est)
Red and Black Beans	18,000	16,300

Import Information

The importation of pulses into Panama is conducted through private importers.

	IMPORTS (mt)	
	1988	
Black Beans	5,400	
Colombia	3,400	
Chile	2,000	
Lentil	4,675	
Chile	3,050	
Canada	1,625	

Local Market Information

The primary local market for pulses in Panama is retail stores.

LOCAL RETAIL PRICES

(\$US)

Black Beans	.78 per kg
Lentil	.85 per kg

Consumption InformationPER CAPITA CONSUMPTION

Black Beans	5 kg per person
Lentil	10 kg per person
Total	15 kg per person

CONSUMPTION TRENDS

Black Beans	1% increase
Lentil	2% increase

PERULocal Production

The Canadian Embassy in Lima reports the following pulses are grown in Peru; green lentil, green and white peas, chick peas, large faba beans, kidney beans, pink beans and white pea beans. The main production areas for pulses are in the provinces Ica and Arequipa. Information on all pulse types grown in Peru is not available.

	<u>ACREAGE</u>	
	(hect)	
	<u>1988</u>	<u>1989</u>
Dry beans	51,431	43,482
Large faba beans	30,230	23,500
Green peas	21,065	14,335

	<u>PRODUCTION</u>				
	(mt)				
	<u>1980</u>	<u>1982</u>	<u>1986</u>	<u>1987</u>	<u>1989</u>
Dry beans	39,300	50,000	53,000	60,000	51,000

Import Information

Imports of all agricultural commodities into Peru are controlled by the Ministry of Agriculture. The Ministry controls the quotas established and allocates them according to market needs. All imported agricultural products require a an import licence and a phytosanitary licence. Peru has experienced foreign exchange shortages in recent times and importers have had problems obtaining \$US to facilitate trade. Import duties on pulses are 40% ad valorem FOB prices.

<u>1988 PERUVIAN PULSE IMPORTS</u>		
	<u>Qty (mt)</u>	<u>Value (\$US)</u>
0705.89.03 Lentil	4,867	2,085,614
United States	2,516	1,041,285
Canada	1,961	869,474
Chile	269	132,864
Argentina	121	41,991
0705.89.01 Green peas	7,409	2,921,508
United States	7,092	2,810,299
Japan	196	66,218
Canada	121	44,991

Export Information

PERUVIAN PULSE EXPORTS

(FOB \$US)

	<u>1988</u>	<u>1989</u>
Dry lima beans		
Total	706,056	331,000
Belgium	18,735	22,000
Canada	26,631	2,000
Spain	452,258	00
United States	26,600	229,000
Japan	35,100	2,000
Lebanon	38,525	00
Malta	38,589	00
Netherlands	1,140	18,000
Portugal	2,787	00
United Kingdom	65,691	38,000
Mexico	00	20,000
White small navy beans		
Total		704,762
Saudi Arabia		5,142
Belgium		15,001
Canada		33,644
Spain		105,824
United States		184,000
Greece		9,219
India		215,989
Israel		38,750
Kuwait		7,101
Panama		5,724
Paraguay		47,061
Puerto Rico		6,688
United Kingdom		30,619
Other beans		
Bahamas	9,500	

Local Market Information

No information available.

Consumption Information

No information available.

POLANDLocal Production

	YEAR	ACREAGE (hect)	YIELDS (mt/hect)	PRODUCTION (mt)
All Pulses	1986	309,700	1.53	473,800
	1987	299,600	1.71	512,100
	1988	339,200	1.66	564,800
--for Human Consumption	1986	49,600	2.05	101,900
	1987	48,300	2.01	96,900
	1988	54,000	2.00	108,100
--for Feed	1986	260,100	1.43	371,900
	1987	251,300	1.65	415,200
	1988	285,200	1.60	456,700
--Lupines (bitter) for Manure	1986	15,700	0.95	14,900
	1987	14,300	1.11	16,000
	1988	14,300	1.16	16,600
--Lupines for Feed	1986	108,000	0.90	97,000
	1987	102,000	1.10	111,800
	1988	102,100	1.06	108,300
--Field Peas for Feed	1986	36,300	1.46	52,700
	1987	34,700	1.52	52,600
	1988	37,700	1.39	52,400
--Vetches	1986	9,600	1.06	10,200
	1987	8,600	1.05	9,000
	1988	9,200	1.04	9,500
--Fababeans (<u>Vicia</u> <u>minor</u>)	1986	65,600	2.19	143,500
	1987	66,900	2.52	168,400
	1988	98,400	2.22	218,700
--Fababeans & Dry Beans (<u>Vicia</u> <u>Phas. Vulgar.</u>)	1986	-	-	-
	1987	-	-	-
	1988	20,100	1.82	36,600
--Dry Peas	1986	28,400	2.18	61,800
	1987	30,900	2.09	64,500
	1988	33,900	2.11	71,500

Import Information

Poland does not import any leguminous plants. Local production is sufficient for the country's needs, with some quantities remaining for export.

Export Information

POLISH PULSE EXPORTS

	<u>Year</u>	<u>Exports (mt)</u>	<u>Export Markets</u>
All Dry Peas	1987	5,913.7	Holland, FRG, India
	1988	2,977.2	Sweden, Holland
	Jan-Oct '89	4,921.3	Holland, FRG, Switz
Dry Beans	1987	3,334.0	Yug. Itly. Fran. FRG
	1988	4,468.0	Same as Above
	Jan-Oct '89	5,856.0	Yugoslavia, Italy
Lentil	1987	1,220.0	Switzerland
	1988	520.1	Lebanon
	Jan-Oct '89	567.2	Lebanon
Vetches	1987	1,593.4	FRG, Italy Austria
	1988	313.1	FRG, Austria
	Jan-Oct '89	444.3	FRG, Austria, Norwy
Field Peas	1987	15,892.0	FRG, Holland, USSR
	1988	20,895.6	FRG, Holland
	Jan-Oct '89	14,010.7	FRG, Holland, Switz
Fababeans	1987	52,912.2	Italy, FRG, Holland
	1988	62,894.6	Same as Above
	Jan-Oct '89	86,624.2	Same as Above
Lupines	1987	17,700.1	FRG, Holland, Switz
	1988	22,732.4	Same as Above
	Jan-Oct '89	21,786.1	Same as Above

1989 AVERAGE EXPORT PRICE

		<u>Value</u>
		(\$US/mt)
Dry Peas	(food)	195
	(feed)	193
	(seed)	774
Dry Beans	(food)	818
Lentil	(food)	338
Vetches	(feed)	301
	(seed)	367

Local Market Information

There are no national or local associations controlling the market for pulses in Poland. Retail prices for pulses range from ZL2000 to ZL4000 per kg.

Consumption Information

Traditional consumption habits and taste preferences in Poland place pulses at the end of the list after: potatoes, grain and flour products (bread, various types of groats, noodles, etc.), rice, and other vegetables. Despite the efforts of nutrition institutes indicating pulses as inexpensive, and a valuable source of protein. Meat and a small percentage of fish products remain the primary protein sources in the Polish diet.

Dry Peas are available, both in green and yellow varieties and are consumed in the form of potage, or in a special pork dish. Yellow pea mash and green pea preserves in cans and jars are available on the market (used for various mayonnaise salads, and with meat products). Dry beans (mainly white varieties) and broad beans can be found in Polish cooking, however, the use of pulses is rather limited. Leguminous plants do not play an important role in the Polish agro-economy (human and animal feeding, food processing industry).

ROMANIA

Acquiring accurate information with regards to Romania is difficult at best. Information concerning acreage, production, consumption etc., is not only difficult to obtain, but is questionable with respect to accuracy. The following information on Romania is the best that could be obtained by the Canadian Embassy in Bucharest.

Local Production

Romania is a relatively modest producer of pulses. There are primarily two basic types of pulses grown in Romania. These are dry white beans and dry green peas, and they cover more than 90% of the total cultivated area with pulses.

ACREAGE

(,000 hect)

	<u>1985</u>	<u>1986</u>	<u>1987</u>	<u>1988</u>	<u>1989*</u>
Dry Beans	169	181	174	187	190
Dry Peas	96	98	97	95	90

PRODUCTION

(,000 mt)

	<u>1985</u>	<u>1986</u>	<u>1987</u>	<u>1988</u>	<u>1989*()**</u>
Dry Beans	203	262	248	280	300(600)
Dry Peas	85	83	86	89	90(200)

YIELDS

(mt/hect)

	<u>1985</u>	<u>1986</u>	<u>1987</u>	<u>1988</u>	<u>1989 ()**</u>
Dry Beans	1.20	1.45	1.43	1.50	1.58(3.16)
Dry Peas	0.89	0.85	0.89	0.94	1.00(2.22)

*Estimate

**Figure in brackets represents the probable official statistics.

Previously, Romania's policy makers and planners had planned the area cultivated with basic pulses to slightly decrease in the future. The area cultivated with non-essential pulses like chick peas, chicory, (both are coffee replacements) and others, will be tremendously increased in the near future.

Import Information

Romania was considered self-sufficient in basic pulses (dry beans and dry peas) and therefore was not involved in import-trade.

Export Information

Romania does not export large amounts of pulses, but some export-trade does take place. The previous reasoning behind Romanian exports was since surpluses exist, exportation is the most beneficial way to alleviate the surplus. The only pulses that are reported to be exported are dry beans. In the last several years, Romanian dry bean exports have increased from 40,000mt in 1985, to 70,000mt in 1988. Romanian prices for dry beans seem to be US\$680 per mt free Romanian border. North American Norton dry beans seem to be better valued at US\$855 per mt.

Local Market Information

Local distribution of pulses in Romania falls under the responsibility of the Ministry for Domestic Trade. Questions of control mechanisms and administration fall under the responsibility of the Ministry of Agriculture.

Consumption Information

Pulses are consumed locally in Romania. The primary local markets for pulses are: canteens and restaurants, canned food industry and retail. Pulses are a fairly popular product in Romania. Dry beans are the most popular, and they are either boiled, or boiled and mashed. The apparent per capita consumption in Romania for dry beans is 10kg per person, and for dry peas it is 4kg per person. Real consumption seems to be 5-6kg per person for dry beans, and 2.5-3kg per person for dry peas. Because both dry beans and dry peas were subject to supply limitations, it is very difficult to establish a realistic consumption trend.

SENEGALLocal Production

The Canadian Embassy in Dakar indicates only three pulses are grown locally in Senegal; cow peas, runner beans and dwarf beans. Unfortunately, production data is only available for cow peas.

COW PEA PRODUCTION

	<u>1986</u>	<u>1987</u>	<u>1988</u>	<u>1989</u>
Acreage (hect)	117,607	71,480	68,571	50,000
Yields (kg/hect)	467	400	357	360
Production (mt)	54,863	28,625	17,320	18,000

Import Information

Importation of pulses into Senegal is carried out completely by private importers. A previous minimum price F110/kg for cow peas existed, but has since been removed. Many kinds of pulses are imported to Senegal. Among them are lentil, peas, dwarf kidney beans and chick peas. However, since all these products are imported duty-free to the domestic market, reliable information on tonnage and prices cannot be obtained.

Export Information

Officially, the cow pea is not an export, at least not in the state controlled circuits. However, it is definitely a part of trans-border trade. The fresh green bean is the only pulse exported. In 1987, the only year for which data is available, green bean exports totalled 2,839 mt. The exports were destined for France, the Netherlands, Belgium, Austria, Italy, Switzerland, Britain, West Germany, the USA and Gabon.

Local Market Information

The main local markets for pulse products are: retail sales in local convenience stores, mass merchandisers, city markets, and weekly markets in rural and semi-rural areas.

Consumption Information

Pulses are consumed as a condiment in a number of local dishes. Pulses are eaten mainly in rural areas, inadequate processing has restricted their use in the cities.

SOUTH KOREALocal Production

Many varieties of pulses are produced in South Korea, they include: Adzuki beans, mung beans, kidney beans, cow peas, common peas, and faba beans. Unfortunately, the Canadian Embassy in Seoul was only able to obtain specific production data on Adzuki and mung beans.

	PRODUCTION				
	(mt)				
	<u>1985</u>	<u>1986</u>	<u>1987</u>	<u>1988</u>	<u>1989</u>
Adzuki	23,573	26,872	32,189	30,902	37,000
Mung	5,597	6,973	7,133	8,964	9,000
Others	11,119	14,979	20,030	15,040	14,000

	YIELDS	
	(kg/hect)	
	<u>1989</u>	
Adzuki	1,240	
Mung	1,050	
Others	1,150	

Import Information

With the exception of chick peas, lentil, broad beans and some pulses required for re-export purpose, all other pulses are restricted imports. However, exceptions are made by the Agricultural and Fisheries Marketing Corporation (AFMC), which is authorized to import a limited quantity of Adzuki and mung beans under government instruction, through tenders, to stabilize the domestic prices. According to the liberalization plan announced by the government, peas, kidney beans, other beans, and dried leguminous vegetables are scheduled to be liberalized after 1991, and a 30% tariff applies on all pulses until 1993.

	IMPORTS				
	(mt)				
	<u>1984</u>	<u>1985</u>	<u>1986</u>	<u>1987</u>	<u>1988</u>
Peas	400	-	-	-	3,961
Mung Beans	1,580	1,593	1,068	644	1,210
Adzuki Beans	17,338	17,223	19,356	15,211	12,864
Kidney Beans	-	-	-	-	84
Other Beans	240	870	-	17	-
Total	19,558	19,686	20,424	15,872	18,119

Export Information

South Korea does not export pulses.

Local Market Information

There are two major consumer groups in Korea for pulses (individual households and bakery houses), but there are no statistics available on the quantity used by the specific end-users. The food balance sheet prepared by the Rural Economic Research Institute indicates that 42,000mt of Adzuki beans and 49,000mt of other beans were used for human consumption in 1987. With the exception of the AFMC, which is exclusively authorized to import and stockpile for price stabilization purposes, there are no local associations which influence pulses.

LOCAL RETAIL PRICES
(Cdn\$/kg)

	<u>1987</u>	<u>1988</u>
Adzuki Beans	3.28	3.28
Mung Beans	6.14	5.05
Kidney Beans	2.15	2.15
Cow Beans	3.27	3.27

Consumption Information

Pulses are usually consumed in South Korea as a rice dish, or they are made into pulse paste for bread, pan cake or soup. Per capita pulse consumption has increased slightly from 0.83kg in 1977 to 1.0kg in 1987.

SRI LANKALocal Production

Green gram, black gram, and cow peas are the only pulses grown in Sri Lanka. Cultivation of these crops, among others, is greatly encouraged by the state in a bid to reduce the country's food bill. Measures adopted towards this end include: the extension of credit facilities; dissemination of knowledge on the use of high-yielding varieties of seed; correct application of fertilizer, pesticides and weedicide; guaranteed purchase prices; as well as strengthened research; extension and seed production program; and the application of a protective tariff. With the opening of new lands under the Mahaweli Program and the implementation of the Janasaviya Program (Poverty Alleviation Program) which plans to channel manpower resources into the agricultural field as well, production is expected to increase.

ACREAGE

(,000 hect)

	<u>1976</u>	<u>1982</u>	<u>1984</u>	<u>1986</u>	<u>1987</u>	<u>1988</u>
Green Gram	8.4	21.2	29.6	24.2	34.8	33.5
Black Gram	5.1	9.9	33.4	10.1	14.1	18.2
Cow Pea	19.2	35.7	31.3	24.7	21.1	32.2

PRODUCTION

(mt)

	<u>1985</u>	<u>1986</u>	<u>%change</u>
Green Gram	15,405	17,601	+14.3
Cow Pea	17,260	20,264	+17.4
Black Gram	8,823	7,529	-14.7

YIELDS

(mt/hect)

	<u>1985</u>	<u>1986</u>
Green Gram	0.7	0.7
Cow Pea	0.8	0.8
Black Gram	0.7	0.7

Import Information

Pulses currently imported into Sri Lanka, are mainly red split lentil and chick peas. The Cooperative Wholesale Establishment (CWE) in Colombo, a state sponsored corporation, holds the monopoly for the import of red split lentils. Purchases have been made on the basis of international tenders. Annual requirements are in the region of 40,000-45,000 mt. Imports of red split lentil in 1988 (listed under "Other Dried Leguminous Vegetables") amounted to 31,065 mt, with Turkey as the leading supplier. According to information obtained by the Canadian Embassy in Colombo, red split lentils were last purchased in 1989 at US\$383 per mt (FOB) from a Syrian source. The current customs duty payable is Rs 7.50 per kg, and the sale price is Rs 40.00 per kg. Chick peas are imported by private traders. The current tariff payable is Rs 10.00 per kilo, and the sale price is Rs 55.00 per kg.

**SRI LANKAN PULSE IMPORTS
1988**

	<u>Quantity (kg)</u>	<u>Value (rs)</u>
0705A Chick Peas		
Turkey	4,683,726	91,997,991
Iran	478,851	5,860,129
Australia	481,000	5,616,168
United Arab Emir.	81,510	1,059,828
Pakistan	50,000	441,289
Turks & Caico Is.	20,000	312,957
Singapore	-	292
TOTAL	5,795,087	105,288,654
0705B Other Dried Legum. Veg.		
Turkey	26,031,740	300,886,619
Jordan	5,000,000	59,192,517
United States	11,000	402,276
Austria	21,000	218,973
Netherlands	2,000	182,737
South Korea	40	379
Singapore	5	87
TOTAL	31,065,785	360,883,588

Green peas, chick/yellow peas, cow peas and red lentil are the only Canadian varieties familiar to this market. With fast dwindling foreign exchange reserves, and the state coordinating import and production of food crops, it is unlikely there will be an expansion in the Sri Lankan market for imported pulses.

Export Information

SRI LANKAN PULSE EXPORTS		
1988		
	<u>Quantity</u> (kg)	<u>Value</u> (Rs)
0705A Black Gram		
India	3,188,105	39,926,124
United Arab Emir.	21,000	240,333
Pakistan	18,000	117,697
Maldive Is.	20	807
TOTAL	3,227,125	40,284,961
0705B Cow Peas		
India	130,000	2,196,440
United Arab Emir.	2,750	39,076
Oman	675	7,558
Maldive Is.	50	3,203
TOTAL	133,475	2,246,277
0705C Green Gram		
India	2,156,120	31,761,140
Pakistan	18,000	149,258
Maldive Is.	68	6,510
United Arab Emir.	250	160
TOTAL	2,174,438	31,917,058
0705D Other Dried Legum. Veg.		
India	296,000	3,492,408
United Arab Emir.	29,100	805,058
Saudi Arabia	19,520	370,996
Maldive Is.	246	51,968
Canada	190	30,780
United Kingdom	220	15,420
Kuwait	500	13,882
Bahrain	540	13,059
Australia	50	5,095
Oman	50	621
Sweden	5	362
TOTAL	346,421	4,799,639

Consumption Information

Red split lentil (in curry form) have long been popular among Sri Lankans, whose diet is comprised mainly of rice and curry. Chick peas (boiled and steamed) are also popular, however, escalating prices for chick peas (the result of the current tariff) have discouraged consumption.

SWEDENLocal Production

In Sweden there are a small variety of pulses grown domestically. Pulses grown consist of yellow peas, green peas, Dutch brown beans, field (feed) peas, vetches and field beans. The portion of arable land which is used to grow pulses amounts to only 2.2% of total arable land.

ACREAGE
(hect)

	<u>1986</u>	<u>1987</u>	<u>1988</u>
Yellow Peas	4,100	6,400	5,600
Field Peas & Vetches	34,900	50,600	38,900
Field Beans	2,000	2,000	1,000
Dutch Brown Beans	n/a	n/a	950

PRODUCTION
(mt)

	<u>1986</u>	<u>1987</u>	<u>1988</u>
Yellow Peas	8,200	12,700	10,600
Field Peas & Vetches	97,700	141,700	115,100
Field Beans	n/a	n/a	n/a
Dutch Brown Beans	n/a	n/a	1,900

Import Information

Importation of pulses into Sweden is carried out entirely by private importers. There are no customs duties applied to dry pulses entering Sweden. In addition, no import licenses are required to bring pulses into the country. However, Sweden has a very complex and flexible system of Agricultural Import Levies which are imposed on a number of agricultural products. The importation of pulses into Sweden has fluctuated during the past five years. It is expected that the importation of pulses is on an upward trend, and will maintain that direction in the future.

SWEDISH PULSE IMPORT LEVIES

<u>H.S.Code</u>	<u>Effective from:</u>	<u>Fee--SEK per 100 kg</u>
0713.10	89-10-18	90.00 a) & b)
0713.31-39	89-10-27	190.00 a)
0713.50	89-10-27	60.00
0713.90	89-10-27	60.00

a) if for seeding purposes - free

b) if for feeding purposes fee will be reduced to the same level as that of H.S.Code 0713.50

SWEDISH IMPORTS
1988

<u>H.S.Code</u>		<u>Quantity(mt)</u>	<u>Value(SEK,000)</u>
0713.10	Peas	6,317	22,302
	USA	2,654	11,722
	Canada	2,457	3,916
	Netherlands	524	3,065
	United Kingdom	530	2,232
	Poland	80	393
0713.10	Chick-peas	208	790
	Turkey	146	555
0713.31	Beans (<u>Vigna mungo, radiata</u>)	240	1,055
	Australia	80	344
0713.32	Small red beans (Adzuki)	25	375
0713.33	Kidney, White pea beans	1,545	9,599
	Netherlands	819	5,500
	USA	455	2,687
	Canada	110	410
	West Germany	37	350
0713.39	Other beans	165	854
	USA	108	495
0713.40	Lentil	405	1,454
	Turkey	167	580
	USA	175	606
0713.50	Broad, Horse beans	794	1,081
	Poland	756	883
0713.90	Other	61	340

Export Information

SWEDISH EXPORTS
1988

<u>H.S.Code</u>		<u>Quantity(mt)</u>	<u>Value(SEK,000)</u>
0713.10	Peas	86	475
0713.33	Kidney, White pea beans	134	1,595
	Hungary	100	1,387

Local Market Information

There is an established local market for particular pulse products. The order of importance of local usage for pulses is as follows:

- 1) Processing (peas-soup; Dutch brown beans-baked brown beans in sauce; White pea beans-baked beans in tomato sauce)
- 2) Hotel/Restaurant (same as above; Dutch brown beans and/or light red kidney beans for salads; White pea beans for other dishes such as Chili con carne)
- 3) Retail
- 4) Health stores

The Canadian Embassy in Copenhagen is not aware of any national or local associations or control mechanisms which influence pulses.

Consumption Information

There are no official statistics that indicate the per capita consumption of pulses in Sweden. However, total consumption figures were obtained from a National Agricultural Market Board's monthly bulletin.

		<u>1975/76</u>	<u>1980/81</u>	<u>1985/86</u>	<u>1986/87</u>	<u>1987/88</u>
GROWERS' SALES(mt)						
Dry Peas	(1)	7,500	9,500	8,500	8,000	1,000
Brown Beans	(2)	2,100	1,900	1,000	1,900	60
IMPORTS	(3)	2,700	4,600	4,600	3,700	9,800
EXPORTS	(4)	800	900	200	200	200
CONS'PTN(1+2+3-4)		11,500	15,100	13,900	13,400	20,200

SWITZERLANDLocal Production

The following statistics were obtained by the Canadian Embassy from the Association of Swiss Farmers in Brugg, Switzerland.

	<u>ACREAGE</u> (hect)	
	<u>Field Beans</u>	<u>Protein-Rich Peas</u>
1975	1,087	n/a
1980	252	n/a
1983	320	130
1984	270	330
1985	202	462
1986	130	830
1987	130	1,220
1988	100	1,210

	<u>PRODUCTION</u> (,000 kg)	
	<u>Field Beans</u>	<u>Protein-Rich Peas</u>
1976/80	9	n/a
1981/85	9	15
1983	11	6
1984	11	17
1985	7	20
1986	4	35
1987	5	47
1988	4	55

	<u>YIELDS</u> (100 kg/hect)	
	<u>Field Beans</u>	<u>Protein-Rich Peas</u>
1976/80	33.4	n/a
1981/85	36.1	n/a
1983	38.2	50.0
1984	39.0	53.0
1985	35.6	44.0
1986	31.4	41.7
1987	36.7	38.7
1988	47.6	45.8

Import Information

The importation of pulses into Switzerland is conducted by private importers. However, the private importers are "guided" by the Swiss Cooperative Society for Cereals and Fodder.

SWISS IMPORT CONTROLS

Product	Used For:	Controls	Levies: S.fr/100kg			
			SC	GF	AF	CD
Pulses						
unprocessed	feed	quota	38.0	6.0	.2	.9
"	food prod.	no quota	3.8	-	.2	.9
"	technical	no quota	3.8	-	.2	.9
"	oth.purposes	no quota	-	-	.2	.9
Pulses						
processed	feed	no quota	38.0	-	.2	4.5
"	oth.purposes	No Import License Required				4.5
Vetches						
"	feed	no quota	50.0	-	.2	Free
"	seed	comp.stks	-	10.0	.2	Free
"	technical	no quota	5.0	-	.2	Free
Lupines						
"	feed	no quota	50.0	-	.2	Free
"	technical	no quota	5.0	-	.2	Free
"	oth.purposes	no quota	-	-	.2	Free

SC= service charge

GF= contribution to guarantee fund

AF= administrative fee

CD= customs duty

SWISS PULSE IMPORTS
(\$,000 US)

<u>1980</u>		<u>1985</u>		<u>1986</u>		<u>1987</u>	
Total	5,730	Total	5,495	Total	6,828	Total	7,865
Hngry	1,743	Nethds	1,634	Nethds	1,501	USA	1,501
USA	1,098	USA	1,451	USA	1,363	Hngry	1,403
Nethds	941	Hngry	527	Hngry	844	Nethds	1,355
Poland	458	France	361	France	670	France	619
France	292	W.Germ	341	W.Germ	547	W.Germ	520
Italy	184	Turkey	206	Italy	307	Canada	370
W.Germ	174	Italy	184	Belg-Lux	299	Poland	367
Mexico	170	Belg-Lux	136	Poland	282	Austral	294
Albania	151	Poland	114	Turkey	214	Italy	254
Czech	86	Spain	105	Spain	143	Romania	176

SWISS PULSE IMPORTS
1988

	Net Weight (kg)	Value (Sw.frnecs)
0713.10.10 Peas		
West Germany	113,680	279,760
France	128,086	331,663
Netherlands	230,845	390,030
Ireland	5,500	85,525
Poland	276,800	105,407
Czechoslovakia	377,160	156,691
Hungary	4,420,327	1,818,899
Yugoslavia	237,330	90,678
Canada	1,194,182	442,789
USA	16,920	26,268
Australia	710,897	258,749
Others	112,074	58,205
Total EC	485,780	1,099,095
Total EFTA	23,020	9,143
TOTAL	7,823,801	4,044,664
	Swiss Francs/100 kg	51.69

0713.20.10 Other Peas

Netherlands	24,975	37,025
Others	39,963	23,603
Total EC	25,128	37,758
Total EFTA	30	96
TOTAL	64,938	60,628
	Swiss Francs/100 kg	93.36

**SWISS PULSE IMPORTS
1988**

	Net Weight (kg)	Value (Sw.frncs)
0713.20.10 Chick Peas		
Turkey	208,323	164,147
Others	87,379	109,238
Total EC	68,660	86,178
TOTAL	295,702	273,385
	Swiss Francs/100 kg	92.45
0713.20.90 Other Chick Peas		
Others	3,308	5,764
Total EC	2,780	5,272
TOTAL	3,308	5,764
	Swiss Francs/100 kg	174.24
0713.31.10 Beans		
West Germany	24,807	47,809
France	21,350	42,629
Italy	21,074	73,023
Netherlands	25,467	90,798
Belg-Lux	40,887	49,976
Australia	83,550	68,146
Others	6,302	9,460
Total EC	133,965	304,877
TOTAL	223,437	381,841
	Swiss Francs/100 kg	170.89
0713.31.90 Other Beans		
Others	13,456	15,644
Total EC	1,223	1,157
TOTAL	13,456	15,644
	Swiss Francs/100 kg	116.26
0713.32.10 Adzuki Beans		
China	171,300	198,029
USA	215,614	193,800
Others	6,651	14,075
Total EC	6,245	12,806
TOTAL	393,565	405,904
	Swiss Francs/100 kg	103.13
0713.32.90 Other Small Red Beans		
Others	750	1,953
Total EC	690	1,343
TOTAL	750	1,953
	Swiss Francs/100 kg	260.40

SWISS PULSE IMPORTS

1988

	Net Weight (kg)	Value (Sw.frncs)
0713.33.10 Garden Beans		
West Germany	24,364	163,734
France	54,759	284,738
Italy	59,666	248,916
Netherlands	172,059	974,178
Belg-Lux	30,530	42,180
Portugal	9,884	25,344
Poland	76,430	275,137
China	145,922	164,700
Canada	179,600	135,752
USA	504,305	627,029
Others	48,422	46,611
Total EC	362,175	1,757,564
Total EFTA	240	1,050
TOTAL	1,305,941	2,988,319
	Swiss Francs/100 kg	228.82
0713.33.90 Other Garden Beans		
Netherlands	6,885	31,300
Others	12,339	16,966
Total EC	17,536	45,520
Total EFTA	158	649
TOTAL	19,224	48,266
	Swiss francs/100 kg	251.07
0713.39.10 Other Beans		
France	741	4,551
Netherlands	11,360	27,869
Belg-Lux	101,763	208,586
Poland	68,740	229,006
China	11,110	64,035
USA	310,036	309,125
Argentina	206,750	55,823
Chile	40,000	48,000
Others	8,439	38,009
Total EC	119,845	274,776
TOTAL	758,939	985,004
	Swiss Francs/100 kg	129.78
0713.39.90 Beans, NES		
Others	995	6,497
Total EC	855	6,149
TOTAL	995	6,497
	Swiss Francs/100 kg	652.96

**SWISS PULSE IMPORTS
1988**

	Net Weight (kg)	Value (Sw.frnecs)
0713.40.10 Lentils		
France	102,541	175,742
Italy	16,125	37,612
Canada	75,209	49,405
USA	691,864	506,260
Others	60,038	67,155
Total EC	150,680	253,351
Total EFTA	420	2,097
TOTAL	945,777	836,174
	Swiss Francs/100 kg	88.41
0713.40.90 Others		
Others	66,909	92,512
Total EC	49,947	78,437
Total EFTA	75	338
TOTAL	66,909	92,512
	Swiss francs/100 kg	138.26
0713.50.10 Broad Beans and Horse Beans		
Great Britain	43,730	28,610
Others	133,108	88,753
Total EC	84,429	77,552
Total EFTA	49,950	23,976
TOTAL	176,838	117,363
	Swiss Francs/100 kg	66.36
0713.50.90 Others		
Others	13,834	25,470
Total EC	13,532	25,234
TOTAL	13,834	25,470
	Swiss Francs/100 kg	184.11
0713.90.10 Others, whole		
Others	519	1,466
Total EC	519	1,466
TOTAL	519	1,466
	Swiss Francs/100 kg	282.46
0713.90.90 Other Pulses NES		
Others	1,953	4,713
Total EC	1,354	3,502
TOTAL	1,953	4,713
	Swiss Francs/100 kg	241.32

Export Information

Switzerland is importing the bulk of its needs in pulses, and exports only very negligible quantities.

SWISS PULSE EXPORTS
(\$,000 US)

	<u>1980</u>		<u>1985</u>		<u>1986</u>		<u>1987</u>
Total	171	Total	120	Total	250	Total	238
Austria	81	W.Germ	105	W.Germ	187	W.Germ	142
W.Germ	57	Austria	7	Austria	19	U Ar Em	43
France	26	France	4	U Ar Em	18	France	27
Nethds	4	Zaire	1	France	10	Austria	10
Iceland	1	Brazil	1	Italy	9	Nethds	8
Czech	1			Nethds	4	Belg-Lux	7
				UK	2	Italy	1
				S.Korea	1		

Local Market Information

The primary local market for pulses in Switzerland is the processing sector. The market is one characterized by free market forces, with many canneries having contracts for the purchase of peas.

DOMESTIC PULSES USED IN PROCESSING

	<u>1987</u>		<u>1988</u>	
	<u>hect</u>	<u>mt</u>	<u>hect</u>	<u>mt</u>
Green Beans				
early planting	1,093	7,200	1,011	7,161
late planting	406	2,680	470	3,290
Peas	1,398	8,390	1,443	8,658
TOTAL	2,897	18,270	2,924	19,109

Consumption Information

Consumption of pulses in Switzerland fluctuates from year to year. Beans and peas are the most popular pulses with consumption of fresh pulses on the rise, and canned pulse products on the decline.

PER CAPITA PULSE CONSUMPTION (kg)

<u>1979</u>	<u>1980</u>	<u>1981</u>	<u>1982</u>	<u>1983</u>	<u>1984</u>	<u>1985</u>	<u>1986</u>	<u>1987</u>
1.0	1.2	3.4	2.3	0.5	0.9	1.4	1.0	1.3

TURKEYLocal Production

	ACREAGE	
	(hect)	
	<u>1988</u>	<u>1989(*)</u>
Green lentils	530,000	450,000
Red lentils	700,000	640,000
Chick peas	750,000	700,000
White faba beans	58,000	50,000
Green field peas	3,080	3,100
White broad beans	138,000	140,000
Kidney beans	2,900	2,800
Cow vetch	186,000	180,000
Wild vetch	21,000	21,000
TOTAL PULSES	2,388,900	2,186,900

	YIELDS	
	(mt/hect)	
	<u>1988</u>	<u>1989(*)</u>
Green lentil	0.98	0.82
Red lentil	0.99	0.78
Chick peas	1.03	0.93
White faba beans	1.63	1.52
Green field peas	1.88	1.67
White broad beans	1.59	1.37
Kidney beans	1.00	0.95
Cow vetch	0.76	0.72
Wild vetch	1.09	1.09

	PRODUCTION	
	(mt)	
	<u>1988</u>	<u>1989(*)</u>
Green lentil	520,000	370,000
Red Lentil	698,000	500,000
Chick peas	778,000	650,000
White faba beans	95,000	76,000
Green field beans	5,800	5,200
White broad beans	219,000	192,000
Kidney beans	2,900	2,650
Cow vetch	142,000	130,000
Wild vetch	23,000	23,000
TOTAL PULSES	2,483,700	1,948,850

(*) Provisional

Import Information

The Canadian Embassy in Ankara reports a recent change in pulse policy by the Turkish government. In an attempt to curb speculative price hikes in the local market, and to match Turkish custom tariff rates to those of EC rates, the government has on January 17, 1990 reduced the custom duty on pulses to 1% from 10%, and lifted the surcharge which was U.S. \$25/mt. However, Turkey is self-sufficient in pulses and therefore does not import pulse products at this time.

Export Information

Turkey exports all the varieties of pulses it produces, unfortunately information is only available on the following pulses at this time.

	TURKISH PULSE EXPORTS			
	Quantity (mt)		Value (FOB \$US, 000)	
	1988	1989*	1988	1989*
Red & green lentil	606,000	202,000	252,100	88,000
Chick peas	525,000	150,000	131,000	51,000
White broad beans	36,000	38,000	16,900	14,870
White faba beans	22,587	25,600	12,100	13,800

(*) Provisional

Local Market Information

In 1988, the state-owned Grain Board (TMO) tried to encourage Turkish people to eat more pulses in light of Turkish production reaching record levels. Pulses are consumed at restaurants, hotels, hospitals, schools and at home.

Consumption Information

Turkish people consume pulses as an alternative to rice, and make up an important part of people's diets. The annual human consumption of pulses is estimated at 1.2-1.3 million metric tonnes. In Turkey, per capita pulse consumption is estimated at 10kgs per year. The TMO is encouraging people to eat pulses as an alternative to meat, by explaining to the people that pulses are a rich source of protein. The pattern over the last few years has seen an increase in pulse consumption in Turkey.

UNITED KINGDOMLocal Production

Two pulses are produced locally in the United Kingdom, field beans for feed and peas for human consumption and feed.

1989 PRODUCTION ESTIMATES

	<u>Acres</u> (hect)	<u>Yield</u> (mt/ht)	<u>Production</u> (mt)
Peas	73,000	3.2	233,700
Beans	133,600	3.2	427,500

PRODUCTION

	<u>(mt)</u>			
	<u>1985</u>	<u>1986</u>	<u>1987</u>	<u>1988</u>
Peas	213,700	262,600	306,300	233,700
Beans	153,800	229,200	293,900	596,400

Import Information

The importation of pulses into the United Kingdom is conducted by private importers. Pulses imports to the United Kingdom, as to other EEC states, may be seriously affected by the proposed security deposit scheme discussed previously in this publication.

U.K. PULSE IMPORTS

	<u>(mt)</u>				
	<u>1984</u>	<u>1985</u>	<u>1986</u>	<u>1987</u>	<u>1988</u>
Total Pulses	175,256	175,787	183,135	179,752	188,577

1988 U.K. PULSE IMPORTS

	<u>Qty</u> (mt)	<u>Value</u> (Pds Stlg)
Peas	31,068	10,027,000
Chick peas	9,608	2,155,000
Beans	132,969	45,232,000
Lentil	12,556	3,001,000
Broad & Horse beans	782	435,000
Other pulses	1,595	633,000
TOTAL PULSES	188,577	61,483,000

Export Information

U.K. PULSE IMPORTS		
	Qty (mt)	Value (Pds Stlg)
Peas	78,490	16,810,000
Chick peas	3,670	705,000
Beans	7,239	2,092,000
Lentil	888	408,000
Broad & Horse beans	73,897	12,997,000
Other pulses	9,884	1,885,000
TOTAL PULSES	174,068	34,897,000

Local Market Information

The Canadian Embassy in London reports that about 50,000mt of domestic peas are directed toward human consumption per year with the remainder used as animal feed. The peas directed toward human consumption are evenly split between the canning industry and dry packets sold at supermarkets. White pea beans capture the majority of the canning market with other pulse types sold primarily in dry packets at supermarkets and health food stores. The following retail prices were obtained recently at one of the largest health food chains in London.

LOCAL RETAIL PRICES

	(pence/pkt)
	<u>1990</u>
Mung beans (250gm)	65
Black Eye beans (500gm)	85
Butter beans (500gm)	99
Red Kidney beans (500gm)	89
Chick peas (500gm)	85
Haricot beans (500gm)	65
Adzuki beans (250gm)	65
Flageolet beans (250gm)	99
Lentil (500gm)	89

Consumption Information

An increased emphasis on diet and health in the U.K. has helped pulse consumption increase in the last few years. In addition, the trend toward vegetarianism for some young people has helped increase sales of pulse and products. There is a good market for lentil in the U.K. partly because they require less soaking time, but also because in the past year they have been used by some chefs as a fashionable alternative to potatoes or rice.

UNITED STATESUSA PULSE IMPORTS

(\$US,000)

	<u>1986</u>	<u>1987</u>	<u>1988</u>
Chick peas or Garbonzos	6,789	5,033	5,301
Mexico	5,868	4,211	4,582
Chile	157	-	-
Turkey	651	718	522
Other countries	112	104	197
Beans	20,615	9,587	10,954
Canada	333	251	616
Mexico	19,064	7,952	8,737
France	402	149	106
Portugal	94	81	132
Taiwan	290	506	333
Other countries	432	648	1,030
Vegetables, leguminous, NSPF	13,052	16,646	20,132
Canada	4,086	4,654	5,275
Mexico	181	166	299
Peru	898	715	761
Chile	197	2,947	1,456
Argentina	270	860	659
United Kingdom	330	410	247
Ireland	231	294	224
West Germany	85	248	196
Netherlands	-	-	143
France	-	-	89
Switzerland	-	130	-
Portugal	190	98	157
Turkey	339	261	207
Lebanon	194	-	-
Israel	-	199	186
India	816	945	1,154
Thailand	1,587	1,019	1,448
Singapore	98	-	-
China	452	388	1,349
South Korea	69	-	123
Hong Kong	161	147	234
Taiwan	451	565	686
Japan	-	68	129
Australia	1,263	1,193	1,441
New Zealand	124	244	1,047
Kenya	383	478	242
Zimbabwe	-	120	-
Malawi	134	74	216
Other countries	510	421	295

USA PULSE EXPORTS

(\$US,000)

	<u>1986</u>	<u>1987</u>	<u>1988</u>
Black Beans	14,681	3,338	2,679
Great Northern Beans	22,979	31,131	50,239
Baby Lima Beans	8,485	7,722	12,957
Lima Beans NSPF	3,715	4,189	3,828
Navy or Pea Beans	45,288	43,290	39,496
Pinto Beans	57,807	43,017	31,995
Red Kidney Beans	11,277	14,054	15,386
White Beans NSPF	1,274	1,704	1,338
Beans NSPF	18,627	15,491	23,661
Green Peas	25,837	20,555	28,659
Yellow Peas	2,990	2,385	5,088
Austrian Winter Peas	1,983	2,035	1,909
Blackeye Cow Peas	7,789	8,502	4,338
Peas NSPF	1,857	1,932	948
Beans (seed)	17,050	20,460	15,934
Peas (seed)	12,617	10,516	12,993
Lentil	27,580	12,526	17,113
Leguminous Vegetables NSPF	2,229	2,536	2,758
TOTAL PULSES	284,065	245,383	271,319

USSRLocal Production

Obtaining recent statistical data on pulses in the Soviet Union can be difficult due to collection methods employed by the Soviet agricultural data collection system. Pulses are often grouped with other grains in sub-groups like "Miscellaneous Grains and Pulses", which does not distinguish pulses from crops like millet, rice and buckwheat.

ACREAGE

(,000hect)

	<u>1980</u>	<u>1985</u>	<u>1986</u>	<u>1987</u>
Total pulses	4,715	6,523	6,723	6,424

PRODUCTION

(,000mt)

	<u>1980</u>	<u>1985</u>	<u>1986</u>	<u>1987</u>
Total pulses	6,362	9,444	7,900	9,952

YIELDS

(mt/hect)

	<u>1980</u>	<u>1985</u>	<u>1986</u>	<u>1987</u>
Total pulses	1.35	1.44	1.17	1.55

Import Information

The Canadian Embassy in Moscow reports that the official Soviet trade statistics show no imports of pulses over the last 10 years, however, these numbers are usually concealed in imports of "other grains".

Export Information

The following pulse exports represent mainly pea exports to Cuba from the Soviet Union.

SOVIET PULSE EXPORTS

(mt)

<u>1982</u>	<u>1983</u>	<u>1984</u>	<u>1985</u>	<u>1986</u>	<u>1987</u>	<u>1988</u>
39,312	46,931	61,130	63,753	65,558	62,154	60,084

VENEZUELALocal Production

There are only three main types of pulses grown in Venezuela: black beans, green peas, and kidney beans. Through the Canadian Embassy in Caracas, only a limited volume of information could be obtained with regard to Venezuela's pulse production. Production estimates for 1989 are not available. However, acreage, yield and production volumes are expected to be below 1988 levels, reflecting the present severe economic recession that has particularly affected agriculture.

	PRODUCTION (mt)	
	<u>1987</u>	<u>1988</u>
Black Beans	30,697	31,376
Green Peas	1,683	1,819
Kidney Beans	11,270	11,986

Import Information

The importation of pulses into Venezuela is carried out almost entirely by private importers. However, when seasonal shortages have arisen, the government has stepped in and ordered black beans directly. In these cases, direct contracts have been preferred over public tenders. In March of this year, the Venezuela government adopted a free, flexible, and floating exchange rate policy. Importers of pulses lost the right to a lower (subsidized) preferential rate. No future changes in procedure are expected. It is expected that the Venezuelan bolivar will continue to devalue moderately in the future.

Pulses are currently charged a 10-20% ad valorem custom duty upon entering Venezuela. With the exception of lentils and chick-peas, imports require a special license which is usually granted when internal shortages exist. The government has promised to start liberalizing and freeing import procedures for all agricultural products, starting in 1991. Imports of pulses have shown an increase in the last few years, reflecting higher consumption and stagnated production. The 1989 figures will likely indicate that imports dropped significantly, due to increases in prices, the economic recession, and a subsequent drop in demand. The situation should stabilize during 1990, and imports of pulses should increase moderately.

WEST GERMANY
VENEZUELA IMPORTS
1988

	<u>Quantity</u> (mt)	<u>Value</u> (\$US,000)	<u>Cdn Share %</u>
Black Beans	31,377	12,611	--
Green Peas	22,391	8,779	32.1
Lentil	9,637	4,750	77.4
White and Pink Beans	8,426	5,314	0.6
Chick-Peas	3,593	2,056	1.4

Export Information

Venezuela does not export pulses.

Local Market Information

Pulses are of importance in three main areas of the Venezuelan economy. The most important use is in retailing, followed by processing, and in the hotel/restaurant setting. Unfortunately, no figures were available to support the ordering with statistics. Present retail prices average Bs.60/Bs.90 per kg.

Consumption Information

No official figures are available, but per-capita consumption estimates are believed to be around 6-6.5 kg per year. Black beans are by far preferred by consumers. Pulses are usually prepared at home, and are still considered a basic food stuff in the average Venezuelan daily diet. It is expected that consumption will increase in the future based on two reasons. Firstly, consumption should increase because of their comparative price advantage, and secondly, as a result of the increased recognition of their nutritional value and high fibre content.

WEST GERMANYLocal Production

The production of pulses in West Germany is not extensive. According to the Canadian Embassy in Bonn, there are only two types of pulses grown in West Germany, field peas and horse beans.

	ACREAGE (hect)		
	<u>1983/87 (avg)</u>	<u>1988</u>	<u>1989</u>
Field Peas	n/a	29,129	19,965
Horse Beans	28,199	60,207	46,274

	PRODUCTION (mt)		
	<u>1983/87 (avg)</u>	<u>1988</u>	<u>1989</u>
Field Peas	n/a	102,965	68,451
Horse Beans	102,780	216,602	155,043

	YIELDS (mt/hect)	
	<u>1988</u>	<u>1989</u>
Field Peas	3.5	3.4
Horse Beans	3.6	3.4

Import Information

The importation of pulses to West Germany is carried out exclusively by private importers. Imports from other EEC members are unrestricted. Imports from outside the EEC are subject to customs duties of up to 3% of the value.

	WEST GERMAN IMPORTS (mt/crop year)			
	EC Member Countries		Non-Ec Countries	
	<u>1987/88</u>	<u>1988/89</u>	<u>1987/88</u>	<u>1988/89</u>
Edible Peas	26,600	102,400	26,500	19,000
Field Peas	340,700	306,300	112,400	54,700
Beans	101,600	224,000	30,900	32,900
Lupins	n/a	100	14,100	11,700
Lentils	300	300	19,500	15,200

Export Information

West Germany does not export pulses.

Local Market Information

Pulses are primarily used as livestock feed in West Germany. In 1988/89, 964,000 tons were used for livestock feed, as opposed to only 35 tons for human consumption. Pulses are sold domestically in ways similar to other western societies.

Consumption Information

Contrary to other western societies, consumption of pulses in West Germany is falling. Per capita consumption amounts to only 0.6 kg/year.

INTERNAL USE

Export Information

For a further description of the export market for pulses in West Germany, see the Country Profile and the Country Profile. The export market for pulses in West Germany is characterized by a high degree of concentration in a few countries. The main export destinations are the United Kingdom, France, Italy, and the Netherlands. The export market for pulses in West Germany is highly competitive and is characterized by a high degree of concentration in a few countries. The main export destinations are the United Kingdom, France, Italy, and the Netherlands.

Pulses are primarily used as livestock feed in West Germany. In 1988/89, 25,000 tons were used for livestock feed, as opposed to 22,000 tons in 1987/88. Pulses are sold domestically in ways similar to other western societies.

Year	Field (t)	Seed (t)	Total (t)
1987/88	22,000	3,000	25,000
1988/89	25,000	0	25,000

Consumption Information

Consumption of pulses in West Germany is falling. Per capita consumption amounts to only 0.6 kg/year. The consumption of pulses in West Germany is falling. Per capita consumption amounts to only 0.6 kg/year. The consumption of pulses in West Germany is falling. Per capita consumption amounts to only 0.6 kg/year.

Year	Field (t)	Seed (t)	Total (t)
1987/88	22,000	3,000	25,000
1988/89	25,000	0	25,000

YIELD

Year	Field (t/ha)	Seed (t/ha)
1987/88	3.6	0.4
1988/89	3.6	0.4

Export Information

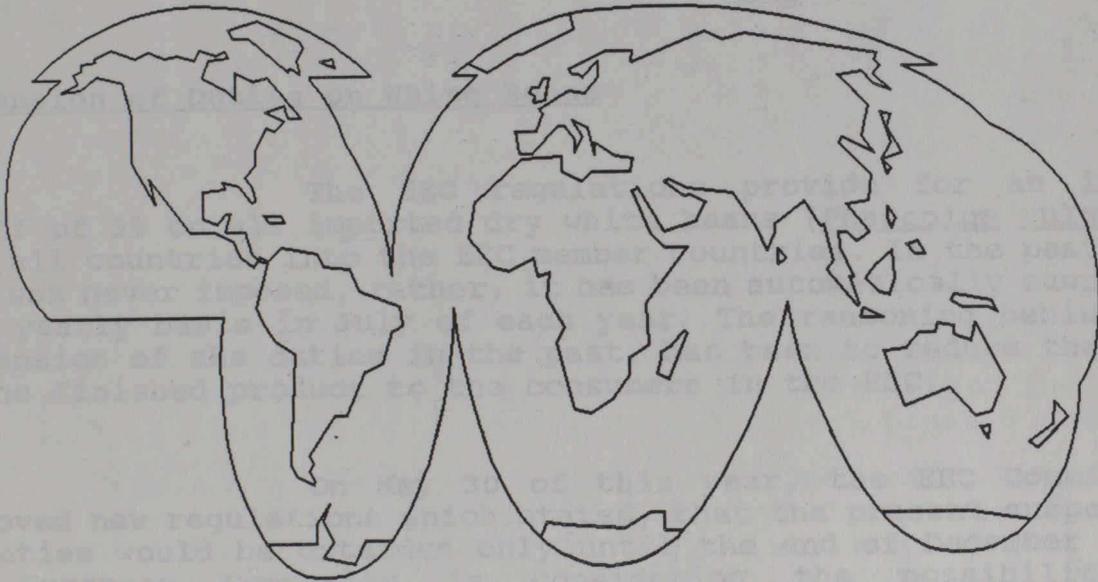
The export market for pulses in West Germany is highly competitive and is characterized by a high degree of concentration in a few countries. The main export destinations are the United Kingdom, France, Italy, and the Netherlands. The export market for pulses in West Germany is highly competitive and is characterized by a high degree of concentration in a few countries. The main export destinations are the United Kingdom, France, Italy, and the Netherlands.

EXPORT MARKET

Country	1987/88 (t)	1988/89 (t)
United Kingdom	10,000	12,000
France	8,000	10,000
Italy	6,000	8,000
Netherlands	4,000	6,000
Other	2,000	4,000
Total	30,000	40,000

1981 SUSPENSION OF DUTIES AND SECURITY AGREEMENT

INTERNATIONAL



ISSUES

INTERNATIONAL



ISSUES

EEC: SUSPENSION OF DUTIES AND SECURITY DEPOSITS

Recent developments in the EEC have placed focus on two initiatives which could adversely affect the exports of Canadian pulses to the European Community. Both initiatives by the EEC have been developed in such a way that, each would create negative repercussions for the Canadian pulse industry. The Department of External Affairs and International Trade has been actively pursuing the resolution of both initiatives, and it is hoped that both issues can be resolved, without injury to the Canadian pulse industry.

Suspension of Duties on White Beans

The EEC regulations provide for an import tariff of 3% on all imported dry white beans (Phaseolus vulgaris) from all countries into the EEC member countries. In the past, the duty was never imposed, rather, it has been automatically suspended on a yearly basis in July of each year. The reasoning behind the suspension of the duties in the past, has been to reduce the cost of the finished product to the consumers in the EEC.

On May 30 of this year, the EEC Commission approved new regulations which stated, that the present suspension of duties would be extended only until the end of December 1989. The European Community is considering the possibility of discontinuing the suspension of duties in the future, and possibly as soon as January 1, 1989. The EEC Commission is delaying its decision, in order to allow for an examination of the current regulation, and a detailed analysis of the production/consumption situation in the EEC. These actions are the result of the low level of the duty, in addition to the fact that the community is becoming self-sufficient in certain types of beans. This highlights the logic behind the EEC action, because the previous suspension of duties had been granted only for products for which there is no community production, or when the latter is not sufficient.

The new regulation also limits the suspension to haricot beans. The regulation would apply to haricot beans of which not more than 2% by weight are retained by a screen with apertures of 8mm in diameter, and which is intended for use in the food-canning industry. The Department of External Affairs and International Trade, as well as the bean industry in the EEC, are very concerned over this break from traditional practice, as it will cause numerous distortions and difficulties to the trade practices of this product. The problems that will be created can be summarized as follows:

- A) The end of December is a mid-season, and therefore, a very counter-productive date for the bean sector. The decision should be announced a long time in advance, at the end of a marketing year, to avoid any serious upsets to the market.
- B) Limiting the suspension to the size of the seeds, will create practical difficulties between exporters and importers, as well as between importers and customs officials.
- C) The regulations will cause distortions and unfair competition between different commercial types of canned beans, between packaged and canned beans, and between exporting countries.

The Canadian government, as well as the International Pulse Trade and Industry Confederation, have made requests to the Commission to extend the suspension of duties until June 30, 1991 for all dry white beans from all countries, without restrictions to either their size or utilization. The Department of External Affairs and International Trade has also asked the Commission to reconsider the entire problem. The latest information received indicates that the suspension of duties has been extended until June 30, 1990. Further information in this area is expected sometime at the end of January 1990.

Security Deposit on Peas and Field Beans

The proposal of the Commission of the European Communities concerns only peas and field beans. By "field beans", the EEC Regulation is referring to Faba beans/broad beans/horse beans/tic beans. (Vicia faba major and equina/minor) Canadian exports have been primarily field peas, mainly for animal feed. A small percentage of Canadian exports are sold for human consumption. Presently, the bound duty rate is 3% ad valorem.

The price proposals for agriculture, agreed by the EC Ministers for the crop year 1989-90, contain a provision which calls on the Commission to make regulations to ensure that imported peas and field beans are processed in such a way as to render them ineligible for aid.

The Commission first floated the concept of a Security Deposit in 1982, and again in 1984. On both occasions, the Council failed to adopt the recommendation, largely because of objections from the industrial users of peas and beans in the EEC. The two industries using the products are the animal feed industry, and a large number of mainly small packagers who prepare peas and beans for human use.

Since 1984, the EC pays a subsidy, or aid, to processors of field peas and beans for animal feed or human consumption. The subsidy is intended to compensate processors for buying EC origin peas and beans from producers at the EC guaranteed price. The EC guarantee price to producers is set at a level, which makes the return to producers from these crops, competitive with the return from alternative crops.

Since 1987, the EEC intra-trade has been further complicated by a requirement for a security deposit on peas and field beans moving from one member state to another. The deposit of 40 ECU per tonne, is intended to prevent a processor from applying for the processing aid in the currency of the member state with the most favourable green currency rate, rather than in the currency of the member state in which the product was grown. Instead, the EC pays a variable subsidy based on the difference between the EEC guaranteed price for the two crops, and the world price of the main, directly competitive product, soybean meal.

The formula used to calculate the rate of subsidy is: 45% of the difference, between the price of world soybean meal in Rotterdam and the activating threshold price. (based on the EC minimum price for peas in the Community) Peas for human consumption are priced such that, the difference is between the activating threshold price and the lowest price for peas available on the world market.

Claiming that it is necessary to prevent fraudulent claims for aid, the Commission of the EEC is proposing that a security deposit of 40 ECU per tonne is required when peas and field beans are imported into the Community. The security deposit will be released when there is evidence that the peas and field beans have been processed in such a way as to render them ineligible for aid. This new requirement is in addition to regulations now in effect, which require all users to maintain separate records of imported, and EEC origin peas and field beans. De facto, this requirement means that imports must be kept separate and distinct from EEC origin goods until they are processed.

Importers fear that the security requirement on imported goods will result in serious prejudice to the trade. At the minimum, the cost of the security deposit will add 2-3% to the cost of the goods. The trade also believes that the requirement for extra documentation will lead to an increase in the price of imports, relative to EC peas and field beans. At worst, the security deposit will lead to a total loss of the trade. Importers may be hesitant to accept the risk of forfeit of the security deposit.

To date, Canada has made diplomatic representations to the Commission and the member states on numerous occasions, to argue that the proposal will act as a barrier to trade. Canada has been actively lobbying the importing and processing trade to protest the security deposit. In response to an EEC offer to cooperate in preventing the security acting as a barrier, Canada made a proposal of an alternate control system. Canada has informed the Commission, in view of the importance of Canada's pea and field bean exports to the Community, that if the security deposit is implemented, we will take the necessary steps to assert our GATT rights. The system which Canada proposed for adoption by the EEC is outlined in the following 3 pages.

EUROPEAN COMMUNITIES

No. _____

IMPORT DECLARATION FOR PEAS, FIELD BEANS, & SWEET LUPINS FROM OUTSIDE THE EEC

Name and address of Importer	Kind	Quantity
	Package	
	Bulk Bag Container	
Entry/Cargo Control No.	Port of Entry	
Tariff Classification	Origin	

DECLARATION OF CONSIGNEE/VENDOR

I _____ representing _____ of
 name _____ company
 _____ the vendor of _____ from the
 address _____ kg.
 shipment identified above, declare that the total product
 declared herein will:

1. be used by me for processing into:
 Compound Feed Products Human Consumption Products
 Other(specify) _____
2. be resold to another person, and;
 - A. I will submit to the Intervention Authority the disposition record(page 2 of this declaration) showing details of all sales within 30 days from last sale; or within 90 days from the importation date, whichever comes first.
 - B. If sold to a person in another member state, that a copy of the declaration together with a copy of the sales invoice, will be submitted to the Intervention Authority of the importing state.

Signature

NOTICE TO FIRST BUYER AND INTERMEDIARY:

NOTICE TO FIRST BUYERS AND INTERMEDIARIES

EEC Regulation Number _____ requires that:

- a) The vendor of the shipment documented above, or any part thereof, shall maintain a record of sales for the said lot and make it available to the EC Intervention Authority upon request;
- b) When transferring the shipment or any part thereof to another EC country, the vendor must provide the Intervention Authority of that country with a document showing the name and address of the buyer and the quantity.

IT IS AN OFFENCE TO USE OR CAUSE TO BE USED THE SAID SHIPMENT OR ANY PART THEREOF TO CLAIM A SUBSIDY OF ANY KIND FROM THE EC.

ADVANTAGES OF THE PROPOSED SYSTEM

Cost of the Proposed System to the EEC

The cost of administering this proposed declaration could never be compared with the cost of administering the proposed security deposit scheme.

Burden and Cost on Importers

The system does not involve any financial loss similar to that which the security deposit would cause. The paperwork involved is simpler and more expedient than the use of the end-user certificate which would be tied with the security deposit for reclaiming the deposit.

Commission's Assurance that Second-buyers Provide Records

First of all, the Intervention Authority would be notified by the importer of sales to the wholesalers. Secondly, the wholesalers would be instructed to notify the Intervention Authority of all sales, and if such record is not received, a submission can be demanded.

EEC Subsidy Control

The system will provide the necessary tools to the EC to detect fraud by checking the declarations against subsidy claims.

PULSES and the CANADA-US FREE TRADE AGREEMENT

PAGE TWO

There has been no issue in recent Canadian history, that has sparked as intense a debate as the Canada-US Free Trade Agreement. The Canadian population was thrust into a nationwide political debate that could be heard from coast to coast. Apart from the extremely emotional aspect of the issue, the "Great Free Trade Debate" generally neglected to deal with the specifics of the text itself. This section of the publication will simply attempt to provide the specific text, as it applies to the Canadian pulse industry.

Recent industry visits, while in no way exhaustive, provided the author with a general feeling for how the Canada-US Free Trade Agreement is viewed by the Canadian pulse industry. Personal feelings aside, the majority of businesses involved in the Canadian pulse industry viewed the agreement as having little direct effect on the industry. The general consensus was that the existing tariffs on pulse products were so low, that removal through the agreement would have little effect on the existing trade. No one interviewed expressed any direct concerns about a possible loss of pulse trade to the US resulting from the implementation of the agreement. In fact, many people in the industry highlighted certain secondary advantages that could possibly arise from the agreement. One such advantage was in relation to the exportation of swine. It was noted that if peas acquire an increased usage for swine feed, and swine exports to the US increase as a result of the Free Trade Agreement, then the domestic usage of peas could increase as a result. This is only one of the secondary ways in which the pulse industry could be affected by the Free Trade Agreement.

While the Canadian pulse industry generally did not perceive the Free Trade Agreement as affecting the pulse trade to any great degree, there was a consensus about the general ideology that the agreement represented. All industry people contacted, felt that the Free Trade Agreement represented a move towards liberalizing world trade. Without exception, this was viewed as a desirable direction for Canada, and the world, to proceed towards. Therefore, one must deduce that the Canadian pulse industry does not perceive any great gain, or loss, resulting from the implementation of the Canada-US Free Trade Agreement.

TARIFF ELIMINATION

1. Except as otherwise provided in the Agreement, each party shall progressively eliminate its customs duties on goods originating in the territory of the other Party in accordance with the following schedule:
 - A. duties on goods provided for in each of the items designated as staging category A in each Party's Schedule contained in Annex 401.2 shall be eliminated entirely and such goods shall be free of duty, effective January 1, 1989;
 - B. duties on goods provided for in each of the items designated as staging category B in each Party's Schedule contained in Annex 401.2 shall be removed in five equal annual stages commencing on January 1, 1989, and such goods shall be free of duty, effective January 1, 1993; and
 - C. duties on goods provided for in each of the items designated as staging category C in each Party's Schedule contained in Annex 401.2 shall be removed in ten equal annual stages commencing on January 1, 1989, and such goods shall be free of duty, effective January 1, 1998.
2. Except as otherwise provided in this Agreement, goods originating in the territory of the other Party that are provided for in each of the items designated as staging category D in each Party's Schedule contained in Annex 401.2 shall continue to receive the existing duty-free treatment indicated therein for such goods.

SCHEDULE OF CANADA

H.S. Code	Article Description	Base Rate	Staging Category
07.08	Leguminous vegetables, shelled or unshelled, fresh or chilled.		
0708.10	-Peas (<u>Pisum sativum</u>)		
0708.10.10	---For processing.....	\$2.21/kg but not less than 10%	C
	---Other:		
0708.10.91	---Imported during such period specified by order of the Minister or the Deputy Minister, not exceeding 12 weeks in any 12 month period ending 31st March.....	\$4.41/kg but not less than 10%	C
0708.10.99	----Other.....	Free	D
0708.20	-Beans (<u>Vigna</u> spp., <u>Phaseolus</u> spp.)		
0708.20.10	---Snap beans for processing.....	\$2.21/kg but not less than 10%	C
	--Other snap beans, imported during such period, which may be divided into two separate periods, specified by order of the Minister or the Deputy Minister, not exceeding a total of 14 weeks in any 12 month period ending 31st March:		
0708.20.21	---In packages of a weight not exceeding \$2.27/kg each.....	\$4.41/kg but not less than 10%, plus 5%	C

0708.20.22	---In bulk or in packages of a weight exceeding \$2.27/kg each.....	\$4.41/kg but not less than 10%	C
0708.20.30	--Other snap beans.....	Free	D
	--Other:		
0708.20.91	---Small red (Adzuki) beans (<u>Vigna angularis</u>).....	Free	D
0708.20.99	---Other.....	5%	C
0708.90	-Other leguminous vegetables		
0708.90.10	--Chickpeas (garbanzos), lupini beans, pigeon peas (Congo, dahl and toor), catjang peas, no-eye peas, Angola peas and guar seeds.....	Free	D
0708.90.90	--Other.....	5%	C
07.10	Vegetables (uncooked or cooked by steaming or boiling in water), frozen.		
	-Leguminous vegetables, shelled or unshelled:		
0710.21	--Peas (<u>Pisum sativum</u>).....	15%	C
0710.22	--Beans (<u>Vigna</u> spp., <u>Phaseolus</u> spp.).....	15%	C
0710.29	--Other		
0710.29.10	---Chickpeas (garbanzos), lupini beans, pigeon peas (Congo, dahl and toor), catjang peas, no-eye peas, Angola peas and guar seeds.....	Free	D
0710.29.90	---Other.....	15%	C

07.13	Dried leguminous vegetables, shelled, whether or not skinned or split.		
0713.10	-Peas (<u>Pisum sativum</u>)		
0713.10.10	--Seed in packages of a weight not exceeding 500g each.....	9%	C
0713.10.90	---Other.....	Free	D
0713.20	-Chickpeas (garbanzos).....	Free	D
	-Beans (<u>Vigna</u> spp., <u>Phaseolus</u> spp.):		
0713.31	--Beans of the species <u>Vigna mungo</u> (L.) Hepper or <u>Vigna radiata</u> (L.) Wilczek.....	\$3.31/kg	C
0713.32	--Small red (Adzuki) beans (<u>Vigna angularis</u>).....	\$3.31/kg	C
0713.33	--Kidney beans, including white pea beans (<u>Phaseolus vulgaris</u>)		
0713.33.10	---Seed.....	Free	D
	---Other:		
0713.33.91	----Red kidney beans.....	\$2.21/kg	C
0713.33.99	----Other.....	\$3.31/kg	C
0713.39	--Other		
0713.39.10	---Lima and Madagascar beans.....	Free	D
0713.39.90	---Other.....	\$3.31/kg	C
0713.40	-Lentils.....	Free	D
0713.50	-Broad beans (<u>Vicia faba</u> var. <u>major</u>) and horse beans (<u>Vicia faba</u> var. <u>equina</u> , <u>Vicia faba</u> var. <u>minor</u>)		
0713.50.10	---Seed in bulk or in packages of a weight exceeding 500g each.....	Free	D
0713.50.90	---Other.....	\$3.31/kg	C
0713.90.10	---Other:Seed in bulk or in packages of a weight exceeding 500g each.....	Free	D

SCHEDULE OF THE UNITED STATES OF AMERICA			
20.05	Other vegetables prepared or preserved otherwise than by vinegar or acetic acid, not frozen.		
2005.40	-Peas (<u>Pisum sativum</u>).....	12.5%	C
	-Beans (<u>Vigna</u> spp., <u>Phaseolus</u> spp.):		
2005.51	--Beans, shelled		
2005.51.10	---Baked.....	10%	C
2005.51.90	---Other.....	12.5%	C
2005.59	--Other.....	12.5%	C
2005.90	-Other vegetables and mixtures of vegetables		
2005.90.91	----Artichokes (globe or Chinese), bamboo shoots, cactus leaves (nopales), cardoons, chickpeas (garbonzos), cilantro (Chinese or Mexican parsley or Yen Sai), jicama, leaf chervils, malanga, okra, peas (Angola, catjang, no-eye, pigeon), spinach (basella or malabar), tamarillos (tree Tomatoes), tarragons, tomatillos, topedos and verdolagas.....	Free	D
2005.90.99	----Other.....	12.5%	C

SCHEDULE of the UNITED STATES OF AMERICA

<u>H.S. Code</u>	<u>Article description</u>	<u>Base Rate</u>	<u>Staging Category</u>
0708	Leguminous vegetables, shelled or unshelled, fresh or chilled:		
0708.10	-Peas (<u>Pisum sativum</u>):		
0708.10.20	If entered during the period from July 1 to September 30, inclusive, in any year.....	\$.01.1/kg	C
0708.10.40	Other.....	\$.04.4/kg	C
0708.20	-Beans (<u>Vigna</u> spp., <u>Phaseolus</u> spp.):		
0708.20.10	Lima beans, if entered during the period of November 1 in any year to the following May 31, inclusive.....	\$.05.2/kg	C
0708.20.20	Cowpeas (other than black-eye peas). Free		D
0708.20.90	Other.....	\$.07.7/kg	C
0708.90	-Other leguminous vegetables:		
0708.90.05	Chickpeas (garbonzos).....	\$.02.2/kg	C
0708.90.15	Lentils.....	\$.00.22/kg	C
	Pigeon peas:		
0708.90.25	If entered during the period from July 1 to September 30, inclusive, in any year.....	Free	D
0708.90.30	Other.....	\$.01.8/kg	C
0708.90.40	---Other.....	\$.07.7/kg	C

0710	Vegetables (uncooked or cooked by steaming or boiling in water), frozen:		
	Leguminous vegetables, shelled or unshelled:		
0710.21	-Peas (<u>Pisum sativum</u>):		
0710.21.20	If entered during the period from July 1 to September 30, inclusive, in any year.....	\$.02.2/kg	C
0710.21.40	Other.....	\$.04.4/kg	C
0710.22	-Beans (<u>Vigna</u> spp., <u>Phaseolus</u> spp.): Not reduced in size:		
0710.22.10	Lima beans, if entered during the month of November 1 in any year to the following May 31, inclusive.....	\$.05.2/kg	C
0710.22.20	Cowpeas (other than black-eye peas). Free		D
0710.22.30	Other.....	\$.07.7/kg	C
0710.22.40	Reduced in size.....	17.5%	C
0710.29	-Other:		
0710.29.05	Chickpeas (garbonzos).....	\$.02.2/kg	C
0710.29.15	Lentils.....	\$.00.22/kg	C
	Pigeon peas:		
0710.29.25	If entered during the period from July 1 to September 30, inclusive, in any year.....	Free	D
0710.29.30	Other.....	\$.01.8/kg	C

0713	Dried leguminous vegetables, shelled, whether or not skinned or split:		
0713.10	-Peas (<u>Pisum sativum</u>):		
0713.10.10	Seeds of a kind used for sowing.....	\$.03.3/kg	C
	Other:		
0713.10.20	Split peas.....	Free	D
0713.10.40	Other.....	\$.00.9/kg	C
0713.20	-Chickpeas (garbanzos):		
0713.20.10	Seeds of a kind used for sowing.....	\$.03.3/kg	C
0713.20.20	Other.....	\$.03.1/kg	C
0713.30	-Beans (<u>Vigna</u> spp., <u>Phaseolus</u> spp.):		
0713.31	--Beans of the species <u>Vigna mungo</u> (L.) Hepper or <u>Vigna radiata</u> (L.) Wilczek:		
0713.31.10	Seeds of a kind used for sowing.....	\$.03.3/kg	C
	Other:		
0713.31.20	If entered for consumption during the period from May 1 to August 31, inclusive, in any year.....	Free	D
0713.31.40	If entered for consumption outside the above-stated period, or if withdrawn for consumption at any time	\$.01.1/kg	C
0713.32	--Small red (adzuki) beans (<u>Vigna angularis</u>):		
0713.32.10	Seeds of a kind used for sowing.....	\$.03.3/kg	C
0713.32.20	Other.....	\$.02.6/kg	C
0713.33	--Kidney beans, including white pea beans (<u>Phaseolus vulgaris</u>):		
0713.33.10	Seeds of a kind used for sowing.....	\$.03.3/kg	C

Other:

0713.33.20 If entered for consumption during the period from May 1 to August 31, inclusive, in any year..... \$.02.2/kg C

0713.33.40 If entered for consumption outside the above-stated period, or if withdrawn for consumption at any time \$.03.3/kg C

0713.39 --Other:

0713.39.10 Seeds of a kind used for sowing..... \$.03.3/kg C

0713.39.15 Cowpeas..... Free D

Other:

0713.39.20 If entered for consumption during the period from May 1 to August 31, inclusive, in any year..... \$.01.7/kg C

0713.39.40 If entered for consumption outside the above-stated period, or if withdrawn for consumption at any time \$.03.3/kg C

0713.40 --Lentils:

0713.40.10 Seeds of a kind used for sowing..... \$.03.3/kg C

0713.40.20 Other..... \$.00.33/kg C

0713.50 --Broad beans (Vicia faba var. major) and horse beans (Vicia faba var. equina and Vicia faba var. minor):

0713.50.10 Seeds of a kind for sowing..... \$.03.3/kg C

0713.50.20 Other..... \$.02.6/kg C

0713.90 --Other:

0713.90.10 Seeds of a kind for sowing..... \$.03.3/kg C

Other:

0713.90.50 Guar seeds..... Free D

Other:

0713.90.60	If entered for consumption during the period from May 1 to August 31, inclusive, in any year.....	\$.01.7/kg	C
0713.90.80	If entered for consumption outside the above-stated period, or if withdrawn for consumption at any time	\$.03.3/kg	C
2005	Other vegetables prepared or preserved otherwise than by vinegar or acetic acid, not frozen:		
2005.40	-Peas (<u>Pisum sativum</u>).....	Free	D
2005.50	-Beans (<u>Vigna</u> spp., <u>Phaseolus</u> spp.):		
2005.51	Beans shelled:		
2005.51.20	Black-eye cowpeas.....	\$.03.3/kg on entire contents of container	C
2005.51.40	Other.....	\$.03.3/kg on entire contents of container	C
2005.59	Other.....	\$.03.3/kg on entire contents of container	C

PULSES AS FOOD AID

An important use for Canadian pulses is in the area of food aid. Pulses have been used for food aid for many years, and are directed to needy sources by various institutions. (World Food Program; International Emergency Food Reserve; Gov't-Gov't; International Committee of the Red Cross; Hope International Development Agency; Canadian Council for International Cooperation; World Vision Canada; Rotary Club of Willowdale) Pulses are shipped to numerous countries worldwide for food and emergency relief aid. World food aid has become an integral part of Canadian pulse exports abroad. The different types of pulses shipped, as well as destinations, can be found in the following lists.

YELLOW SPLIT PEAS

<u>Country</u>	<u>Channel</u>	<u>Volume (mt)</u>	<u>Year</u>
Sri Lanka	WFP	475.0	1986
Bangladesh	WFP	500.0	1986
Mozambique	IEFR	200.0	1986
Mozambique	WFP	115.0	1986
Dominican Republic	WFP	35.0	1986
Indonesia	WFP	80.0	1986
Bhutan	WFP	30.0	1986
St. Kitts-Nevis	WFP	2.0	1986
Guatemala	WFP	100.0	1986
Lesotho	WFP	660.0	1986
Pakistan	WFP	148.2	1986
Mozambique	IEFR-1	1600.0	1986
Mozambique	WFP	70.0	1987
Bhutan	WFP	30.0	1987
India	WFP	335.0	1987
Sri Lanka	WFP	735.0	1987
Pakistan	WFP	805.0	1987
Lesotho	WFP	449.0	1987
Dominican Republic	WFP	84.5	1987
Pakistan	WFP	840.0	1988
Mozambique	WFP	169.0	1988
India	WFP	800.0	1988
Bhutan	WFP	114.0	1988
Lesotho	WFP	140.0	1988
Angola	GG	230.0	1988
Yemen A.R.	WFP	450.0	1989
Sri Lanka	IEFR	134.0	1989
India	WFP	550.1	1989
Sri Lanka	WFP	100.0	1989
Botswana	WFP	1360.0	1989
Dominican Republic	WFP	57.0	1989
Ethiopia	IEFR	1879.9	1989

WHITE PEA BEANS

<u>Country</u>	<u>Channel</u>	<u>Volume (mt)</u>	<u>Year</u>
Bolivia	WFP	150.0	1986
Togo	WFP	50.0	1986
St. Lucia	WFP	4.0	1986
Botswana	GG	2611.5	1986
Mozambique	IEFR-1	599.8	1986
Congo	WFP	18.2	1986
Djibouti	WFP	68.0	1986
Colombia	IEFR	11.0	1986
Honduras	IEFR	491.0	1986
Botswana	GG	2224.0	1987
Angola	WFP	210.0	1987
Paraguay	WFP	16.0	1987
Togo	WFP	85.0	1987
Guatemala	WFP	326.0	1987
Botswana	WFP	2000.0	1987
Angola	GG	1537.0	1988
Paraguay	WFP	51.0	1988
Togo	WFP	145.0	1988
Togo	WFP	70.0	1989
Congo	WFP	65.0	1989
Angola	WFP	195.0	1989
El Salvador	WFP	800.3	1989
Guatemala	WFP	1090.0	1989
Nicaragua	IEFR	736.4	1989

KIDNEY BEANS

<u>Country</u>	<u>Channel</u>	<u>Volume</u>	<u>Year</u>
Nicaragua	IEFR	154.0	1986
Angola	WFP	600.9	1986
Costa Rica	WFP	33.0	1986
Sao Tome & Prin	WFP	32.5	1986
Honduras	WFP	60.0	1986
Guinea-Bissau	WFP	32.0	1986
Panama	WFP	29.0	1987
Costa Rica	WFP	29.0	1987
Haiti	GG/WFP	417.0	1987
Ecuador	WFP	100.0	1987
Guatemala	WFP	70.0	1987
Cape Verde	WFP	374.0	1987
El Salvador	WFP	110.0	1988
Angola	WFP	746.9	1988
Colombia	WFP	18.0	1988
Mexico	WFP	158.1	1988
Guinea-Bissau	WFP	57.0	1988
Sao Tome & Prin	WFP	37.2	1989
Nicaragua	IEFR	22.7	1989

SMALL RED BEANS

<u>Country</u>	<u>Channel</u>	<u>Volume (mt)</u>	<u>Year</u>
Angola	IEFR	175.0	1986
Colombia	WFP	64.0	1986
El Salvador	WFP	40.0	1987
Antigua	WFP	7.0	1987
Brazil	WFP	355.0	1987
Angola	WFP	203.8	1987

PINK BEANS

<u>Country</u>	<u>Channel</u>	<u>Volume (mt)</u>	<u>Year</u>
Angola	WFP	674.0	1987
Mexico	WFP	257.0	1987
Sao Tome & Prin	WFP	222.8	1989
Angola	WFP	50.0	1989

FABA BEANS

<u>Country</u>	<u>Channel</u>	<u>Volume (mt)</u>	<u>Year</u>
Sudan	WFP	600.0	1988
Sao Tome & Prin	WFP	205.0	1989
Cape Verde	WFP	555.0	1989
Colombia	WFP	173.3	1989
Yemen A.R.	WFP	413.0	1989
Somalia	WFP	100.0	1989
Lesotho	WFP	795.0	1989
Ecuador	WFP	150.0	1989

PINTO BEANS

<u>Country</u>	<u>Channel</u>	<u>Volume (mt)</u>	<u>Year</u>
Nicaragua	IEFR	46.0	1986
Guatemala	WFP	30.0	1986
El Salvador	ICRC	877.0	1986
Congo	WFP	80.0	1986
Costa Rica	WFP	20.0	1987
Angola	WFP	315.0	1987
Ecuador	WFP	100.0	1987
Ethiopia	GG-ICRC/LRCS	1000.0	1988
Zambia	WFP	46.9	1988
Dominican Republic	NGO-CI-HIDA	36.0	1989

CRANBERRY AND DUTCH BROWN BEANS

<u>Country</u>	<u>Channel</u>	<u>Volume (mt)</u>	<u>Year</u>
Guatemala (Cranberry)	WFP	90.0	1987
Cape Verde (Cranberry)	WFP	58.0	1987
Cape Verde (Dutch Brown)	WFP	93.0	1987

PEAS

<u>Country</u>	<u>Channel</u>	<u>Volume (mt)</u>	<u>Year</u>
Cuba	IEFR	572.0	1986
Lesotho	WFP	40.0	1986
Togo	WFP	65.0	1986

UNSPECIFIED BEANS

<u>Country</u>	<u>Channel</u>	<u>Volume (mt)</u>	<u>Year</u>
Uganda	WFP	250.3	1986
Angola	WFP	333.8	1986
Nicaragua	IEFR	275.0	1986
Benin	WFP	280.0	1986
Sudan	WFP	35.0	1986
Sao Tome & Prin	WFP	32.5	1986
Mozambique	WFP	17.0	1986
Rwanda	WFP	250.0	1986
Costa Rica	WFP	67.0	1986
Botswana	WFP	2160.0	1986
Honduras	IEFR	554.0	1986
Honduras	WFP	230.0	1986
Guinea-Bissau	WFP	5.0	1986
Panama	WFP	640.0	1986
Colombia	WFP	302.0	1986
Ecuador	WFP	175.0	1986
Haiti	WFP	44.0	1987
Guatemala	WFP	40.0	1987
Sao Tome & Prin	WFP	335.0	1987
Brazil	WFP	130.0	1987
Mozambique	GG	5125.0	1988
Nicaragua	GG	1419.0	1988
Costa Rica	WFP	95.0	1988
Mexico	IEFR	243.0	1988
Honduras	IEFR	445.0	1988
Honduras	WFP	826.0	1988
Ecuador	WFP	160.0	1988
Panama	WFP	60.0	1989
Angola	WFP	55.0	1989
Haiti	WFP	30.0	1989

LENTILS

<u>Country</u>	<u>Channel</u>	<u>Volume (mt)</u>	<u>Year</u>
Benin	WFP	150.0	1986
Algeria	IEFR	205.0	1986
Lebanon	IEFR	540.0	1986
Colombia	WFP	209.2	1987
Algeria	IEFR	205.0	1988
Yemen (PDR)	WFP	220.0	1988
Benin	WFP	399.9	1988
Mozambique	IEFR/WFP	4792.7	1988
Somalia	IEFR	3998.7	1988
Pakistan	IEFR	1606.8	1988
Lebanon	IEFR	1080.0	1988
Swaziland	IEFR	245.0	1988
Ethiopia	GG-CCIC	1200.0	1988
Cuba	WFP	142.0	1988
Mozambique	GG	1799.7	1989
Somalia	IEFR	1500.0	1989
Angola	IEFR	240.0	1989
Seychelles	WFP	40.0	1989
Haiti	NGO-CI-RCW	12.0	1989
Ethiopia	IEFR	100.0	1989
Algeria	IEFR	74.0	1989
Malawi	GG-WFP	2000.0	1989

UNSPECIFIED PULSES

<u>Country</u>	<u>Channel</u>	<u>Volume (mt)</u>	<u>Year</u>
Angola	WFP	120.0	1986
Angola	GG	2070.0	1988
El Salvador	GG	140.0	1989
Honduras	GG	375.0	1989
Somalia	IEFR	770.0	1989
Mozambique	GG-WVC	595.0	1989

1989 shipments listed were prior to December 3, 1989

NOTE: For additional information related to the food aid programs and bidding procedures, contact the following government Department.

SUPPLY AND SERVICES CANADA
 CONSUMER PRODUCTS AND TRAFFIC MANAGEMENT BRANCH
 PHASE III, 9B3--11 Laurier St.
 Hull, Quebec K1A 0S5
 Telephone: (613) 956-3787

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Canadian Trade Commissioner Service

The Department of External Affairs and International Trade and the Canadian Trade Commissioner Service are raising the profile of Canadian products and services worldwide. The officers and their staff are in constant contact with potential Canadian suppliers and can provide potential importers with information on the availability of Canadian agricultural products. They also participate in trade shows, in an attempt to introduce local importers and consumers to Canadian exporters and their products.

MARKET DEVELOPMENT

INSTRUMENTS

AVAILABLE TO THE

CANADIAN

PULSE INDUSTRY

Export Market Development Instruments

Export market development instruments or activities employed by the public sector, are primarily designed to perform a supportive role for the private sector in its export marketing operations. Public sector activities are, inter alia, aimed at identifying market opportunities, communicating them to the private sector, and assisting private firms, in various ways, in pursuing them to a successful business conclusion. Some public sector activities are "developmental" in nature, and are usually activities which the private sector cannot afford to perform because of the expanded period before any payoff or benefit result.

MARKET DEVELOPMENT

INSTRUMENTS

AVAILABLE TO THE

CANADIAN

PULSE INDUSTRY

GOVERNMENT DEPARTMENTS AND PROGRAMS

Canadian Trade Commissioner Service

The Department of External Affairs and International Trade has almost 500 Trade Commissioners stationed in embassies and consulates around the world and in Ottawa. They are responsible for promoting Canadian trade, investment, and tourism worldwide. The officers and their staff are in constant contact with potential Canadian suppliers, and can provide potential importers with full details on the availability of Canadian agricultural products. Through the same officers, we are continually organizing marketing missions and trade shows, in an attempt to introduce local importers and consumers to Canadian exporters and their products.

Canadian trade commissioners can assist buyers wishing to visit Canada, and organize meetings with potential suppliers in all regions of Canada. Canadian trade commissioners are only a telephone or a telex away from specialists in Canada who are in regular contact with companies and producers, and maintain comprehensive sourcing lists for all goods and services in the agricultural sector. Trade commissioners have quick access to companies and research organizations using new process and production technology that may be of interest to foreign buyers. If you are new to exporting, your first step is to contact the Trade Commissioner in the International Trade Centre in your province. If you are interested in export market prospects, contact the Agri-Food Division at the Department of External Affairs and International Trade in Ottawa.

Export Market Development Instruments

Export market development instruments or activities employed by the public sector, are primarily designed to perform a supportive role for the private sector in its export marketing operations. Public sector activities are, inter alia, aimed at identifying market opportunities, communicating them to the private sector, and assisting private firms, in various ways, in pursuing them to a successful business conclusion. Some public sector activities are "developmental" in nature, and are usually activities which the private sector cannot afford to perform because of the extended period before any payoff or benefit result.

Assessment of competitors strengths and weaknesses is an essential element in the identification of market opportunities. There is little point in pursuing a trade inquiry if competition is overwhelmingly strong. Once an opportunity is identified as appropriate for a Canadian firm in the context of four main marketing criteria (product, price, place and promotion), the public sector can often play a useful role with regard to promotion. As the private sector must compete internationally with respect to product, price, transportation of product, and promotional activities; so must the public sector also compete internationally with respect to governmental promotional activities and market development assistance to the private sector.

The main promotional vehicles or market development instruments traditionally used by the public sector include the following:

- 1) Outgoing trade missions
- 2) Incoming trade missions
- 3) Trade fairs
- 4) Program for Export Market Development (PEMD)
- 5) Incoming buyers
- 6) Promotional material
- 7) Technical seminars
- 8) Technical support/Trouble shooting
- 9) Technical assistance/Training
- 10) Market maintenance mechanisms
- 11) Solo food shows
- 12) Trial shipments
- 13) Instore promotions and Restaurant Promotions
- 14) Export education mechanisms
- 15) Trade development institutions
- 16) Aid and trade linkage
- 17) Technical agreements
- 18) Model farms
- 19) Dissemination of information
- 20) Credit guarantees and insurance

Depending on the nature of the inquiry, one or more of the above instruments can be used to further develop Canadian exports abroad. Contact the Agri-Food Division of the Department of External Affairs and International Trade in order to find out more information concerning the above promotional activities.

**PROGRAM FOR EXPORT MARKET DEVELOPMENT
(PEMD)**

The Program for Export Market Development, is one of the major trade promotion instruments of the Department of External Affairs and International Trade. The program is managed by the Export and Investment Programs Division, and jointly implemented with Industry, Science and Technology Canada (ISTC). PEMD offers assistance to Canadian business to undertake or participate in various types of export promotion activities. PEMD covers both projects initiated by industry, and projects planned by government, and is designed to share the risk of international market development.

Program Objective

The main objective of PEMD is to increase export sales of Canadian goods and services. The program accomplishes this by sharing the costs of activities that companies normally could not, or would not, undertake alone, to reduce the risks involved in penetrating a foreign market. PEMD encourages Canadian companies not previously involved in exporting to become exporters. PEMD also encourages existing Canadian exporters to enter new geographic markets and new product markets.

Types of Assistance Available

PEMD offers Canadian businesses financial assistance to undertake or participate in various types of trade promotion activities. All activities must be commercially oriented; that is, they must focus on generating export sales. These activities are categorized as either industry-initiated or government-planned.

Industry-initiated activities are:

- * participation in recognized **trade fairs** outside Canada;
- * **visits outside Canada** to identify markets;
- * **visits of foreign buyers** to Canada;
- * **project bidding** for specific projects outside Canada involving international competition/formal bidding procedures;
- * the establishment of **permanent sales offices abroad** in order to undertake sustained marketing efforts in an area where the applicant is currently active;

- * **marketing agreements** aimed at medium-sized companies experienced in exporting;
- * **special activities for non-profit, non-sales organizations**, marketing boards and agencies (for the benefit of their members);
- * **innovative marketing activities** which do not fall precisely into traditional categories.

Government-planned activities are:

- * **trade missions** to markets outside Canada, and for foreign business persons and government officials coming to Canada or to trade shows where Canadian business participation is substantial; **trade fairs** abroad.

General Eligibility

To be eligible for PEMD assistance, applicants must be one of the following:

- * an incorporated business (includes trading houses, co-operatives, and sales organizations);
- * an independent firm of professionals, such as architects or engineers;
- * a non-sales organization, association, marketing agency or board (for special activities only);
- * a national private sector, non-profit trade organization or association, such as the Canadian Exporters' Association or the Canadian Chamber of Commerce (for government-planned missions only)

Applicants must also be **export-ready**. Incorporated businesses and firms of professionals must:

1. be established and operating in Canada and have either sales performance data for at least two years, or annual sales exceeding \$100,000;
2. have satisfactory marketing and managerial capabilities;
3. be financially able to successfully complete the project (positive working capital and tangible net worth);

4. have an exportable product or service that meets Canadian content criteria of 60 percent;
5. be registered with the Department of External Affairs and International Trade's **World Information Network for Exports** (WIN Exports) or with ISTC's **Business Opportunities Sourcing System** (BOSS), or be in the process of registering;
6. have fulfilled reporting and repayment requirements on all previous PEMD assistance. Companies delinquent or in default at the time of invitation or application must first fulfill all requirements before final approval may be given.

Non-profit trade organizations are considered export-ready if they are judged competent to carry out the project and are registered with WIN Exports.

Ineligible Participants and Applicants

PEMD assistance is not available to:

- * unincorporated companies and divisions (other than firms of professionals;
- * municipal, provincial or federal Crown corporations or their subsidiaries;
- * incorporated applicants in which a government has 50 percent or more ownership;
- * educational institutions, their affiliates and subsidiaries;
- * applicants who, in a government fiscal year, have already either received the maximum amount of assistance or the maximum of four activity approvals;
- * applicants who have been consistently unsuccessful in generating export sales as a result of previous PEMD assistance;
- * companies that are majority South African owned as per the following definition: South African beneficial ownership of shares to which are attached more than 50 percent of the voting rights required to elect a board of directors.

If your business meets the general eligibility criteria, and those specific to the activities of special interest to you, as outlined above, you may wish to submit an application. The financial assistance for export marketing activities initiated by industry is not a grant but a repayable contribution. Application must be made prior to incurring any costs for the activity as assistance cannot be applied retroactively.

Handbooks which further describe the program, and additional information and application forms, can be obtained from the International Trade Centre in the regional office of Industry, Science and Technology Canada nearest you. Should there be any questions, or if you require further information, do not hesitate to contact:

**Department of External Affairs and International Trade
Agri-Food Division (TAA)
125 Sussex Drive
Ottawa, Ontario
K1A 0G2**

(613) 995-1775

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APPENDIX

WORLD PULSE TYPES BY SCIENTIFIC AND COMMON NAMESScientific NameCommon NameAbrus precatorius

Coral Bead Plant
 Crab's Eye
 Indian Liquorice
 Jequirity
 Love Pea
 Prayer Beads
 Rosary Pea
 Saga

Arachis hypogaea

Cacahuete
 Earth Nut
 Goober Pea
 Grass Nut
 Ground Pea
 Groundnut
 Mani
 Monkey Nut
 Nguba
 Peanut
 Pindar
 Tumblele

Astragalus edulis

Milk Vetch

Cajanus cajan

Adhaki
 Alverja
 Ambrevade
 Angola Pea
 Arhar
 Catjang Pea
 Congo Pea
 Gandul
 Gungo Pea
 Kadios
 Kandulu
 Mbazi
 No-Eye Pea
 Ohta-farengota
 Pigeon Pea
 Red Gram
 Salboco-ghed
 Thogari
 Thubarai

Cajanus cajan

- Thuvaran
- Toovar
- Tur
- Tuvari
- Tuvarika
- Tuver
- Yellow Dhal
- Yewof-ater

Canavalia ensiformis

- Chickasaw
- Lima
- Cut-Eye
- Feijao De Porco
- Gotani Bean
- Haba De Burro
- Horse Bean
- Jack Bean
- One-Eyed Bean
- Overlook Bean

Canavalia gladiata

- Haricot Sabre
- Maxima
- Pois Sabre
- Sword Bean

Cicer arietinum

- Ater
- Ater-cajeh
- Atir
- Bengal Gram
- Chana Dhal
- Chickpea
- Egyptian Pea
- Erebynthos
- Garbonzo Bean
- Gram
- Pois Chiche
- Shihu
- Shimbera
- Shumbra

Cyamopsis tetragonoloba

- Guar Bean
- Calcutta Lucerne
- Cluster Bean
- Siam Bean

Glycine max

- Soja
- Soyabean
- Soybean

Lablab purpureus

Amora-guaya
 Ataque
 Bonavist Bean
 Chicharos
 Chink
 Dolichos Bean
 Dolique d'Egypte
 Egyptian Kidney Bean
 Field Bean
 Frijoles Caballeros
 Gerenga
 Hyacinth Bean
 Indian Butter Bean
 Lablab Bean
 Louvia
 Lubia Bean
 Lubiah
 O-cala
 Pharao
 Seem
 Seim
 Seme
 Val

Lathyrus sativus

Chicharo
 Chickling Pea
 Chickling Vetch
 Chur'al
 Gayu
 Gesse Blanche
 Grass Pea
 Guaya
 Indian Vetch
 Ka'sa
 Kass'ur
 Khesari
 Kisara
 Lathyrus Pea
 Latu
 Sabberi
 Santal
 Shimbera
 Teora
 Tiura

Lens culinaris

Ades
 Bersem
 Birssin
 Burssum
 Lenteja
 Lentil

Lens culinaris

Lentille
 Manssir
 Masoor
 Masur
 Mesire
 Messer
 Messiri
 Misser
 Red Dahl
 Split Pea
 Tillseed

Lupinus albus (L.termis)

Egyptian Lupin (termis)
 Field Lupin
 Gebto
 Gibto
 Gubto
 Lupin
 Tremoco
 White Lupin
 Wolf Bean

Lupinus angustifolius

Blue Lupin
 Narrow-leaved Lupin

Lupinus luteus

Yellow Lupin

Lupinus mutabilis

Altramuz
 Chochos
 Chuchus
 Muti
 Pearl Lupin
 Tarhui
 Tarwi
 Ullus

Macrotyloma geocarpum

Geocarpa
 Ground Bean
 Groundnut
 Kersting's Groundnut
 Lintille De Terre
 Potato Bean

Macrotyloma uniflorum

Horse Grain
 Horse Gram
 Kallu
 Kulthi Bean
 Madras Gram
 Walawula

Mucuna pruriens

Bengal Velvet Bean
Cowage
Deering Bean
Florida Velvet Bean
Mauritius Bean
Stizolobia
Velvet Bean
Yokohama Velvet Bean

Pachyrhizus erosus

Jicama de agua
Manioc Pea
Yam Beans (American)

Parkia clappertonia

African Locust Bean
Nitta Tree

Phaseolus acutifolius

Dinawa
Tepary Bean

Phaseolus coccineus

Dutch Case-Knife Bean
Haricot d'Espagne
Judia Escarlata
Multiflora Bean
Runner Bean
Scarlet Runner Bean
Stick Bean
String Bean

Phaseolus lunatus

Atera Bakeria
Burma Bean
Butter Bean
Carota
Curry Bean
Fasoelea Makke
Haricot Kissi
Judia de Lima
Judia de Sieva
Lima Bean
Lodjo
Madagascar Bean
Panguita
Poi du Cap
Pole Bean
Rangoon Bean
Sieva Bean
Sugar Bean
Towe Bean

Phaseolus vulgaris

- Adagora
- Adagura
- Adanguare
- Adigura-tsada
- Ashanguare
- Black Bean
- Canary
- Caraota
- Chumbinho
- Common Bean
- Cranberry
- Dry Bean
- Dutch Brown
- Fajola
- Feijao
- Field Bean
- Fosolia
- Fosolia-nech
- French Bean
- Frijol
- Frijol Comun
- Frijoles
- Great Northern Bean
- Haricot Bean
- Haricot Commun
- Kidney Beans
- Navy Bean
- Opoca
- Pea Bean
- Pink Bean
- Pinto Bean
- Poroto
- Rajma Dhal
- Red Mexican Bean
- Red Peas
- Rosococo
- Salboco-bulluc
- Salboco-bulluc-adda
- Salboco-bulluc-ghedud
- Small Reds
- Snap Bean
- String Bean
- Wax Bean
- White Pea Bean
- Yellow Eye Bean
- Zada-adagonna

Pisum sativum

Ain-ater
 Arveja
 Atari
 Ater
 Atero
 Ater-schoa
 Attur
 Common Pea
 Danguleh
 Field Pea
 Garden Pea
 Gishi-shato
 Mattar
 Pea
 Pois
 Tukur-ater

Psophocarpus tetragonolobus

Asparagus Bean or Pea
 Four-Angled Bean
 Four-Cornered Bean
 Goa Bean
 Manila Bean
 Princess Pea
 Sesquidillas
 Winged Bean

Sphenostylis stenocarpa

Akitereku
 Girigiri
 Haricot Igname
 Kotonosu
 Kulege
 Okpo Dudu
 Sese
 Sfenostilo
 Yam Bean (African)
 Yam Pea

Trigonella foenum-graecum

Abacha
 Abakte
 Abish
 Fenugrec
 Fenugreek
 Fet'o
 Fit'o
 Graro
 Shuk'o
 Shumfa
 Sunqo
 Sunko
 Sunk'o
 Ulbata

Vicia faba

Broad Bean
Faba Bean
Fava Bean
Feve
Feve de Marais
Field-Bean
Haba
Horse Bean
Pigeon Bean
Tick Bean
Windsor Bean

Vigna aconitifolia

Mat Bean
Moth Bean

Vigna angularis

Adzuki Bean
Feijao

Vigna unguiculata
var. biflora

Adagura
Adagura-kwolla
Adugguari
Adonguari
Atera Babile
Atera Kech'ene
Catjang
Catjang Cowpea
China Pea
Hindu Pea
Kaffir Bean
Sow Pea

Vigna mungo

Black Gram
Kambulu
Mash
Urad
Urd
Woolly Pyrol

Vigna radiata

Chickasano Pea
Chirodo
Golden Gram
Green Gram
Mung Bean
Oregon Pea

Vigna unguiculata
var. sesquipedalis

Asparagus Bean
Didjire
Dolique Asperge
Pea Bean
Snake Bean
Yard Long Bean

FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED NATIONS

Vigna subterranea

Afghanistan	0.01907
Algeria	0.03643
Antigua	0.04403
Australia	0.06844
Bahamas	0.17740
Bangladesh	0.05733
<u>Vigna umbellata</u>	0.92994
Bangladesh	0.00369
Bolivia	0.41523
Brazil	0.37443
Bulgaria	0.31940
Burkina Faso	0.00365
<u>Vigna unguiculata</u>	0.00365
var. <u>unguiculata</u>	0.00365
China	0.31942
Comoros	0.00365
Costa Rica	0.01425
Cyprus	0.30560
Denmark	0.04166
Dominica	0.44039
Ecuador	0.00312
El Salvador	0.23472
Ethiopia	0.57241
Fiji	0.79177
France	0.71854
Gambia	0.01513
West Germany	0.02909
Greece	0.00717
Guatemala	0.44619
Guinea	0.00382
Guyana	0.04368
Honduras	0.58382
Hungary	0.01456
India	0.02192
Iran	0.01629
Ireland	0.53090
Italy	0.00086
Jamaica	0.22152
Jordan	0.03440
Kiribati	0.31458
Korea Rep.	0.00177
Laos	0.00302
Lesotho	0.42641
Lithuania	0.32260
Luxembourg	0.02946
Malawi	0.41916

Bambarra Erdnuss	
Bambarra Groundnut	
Congo Goober	
Earth Pea	
Haricot Pistache	
Jugo Bean	0.19089
Kaffir Pea	0.01421
Madagascar Groundnut	0.00180
Stone Groundnut	0.05943
Voandzu	0.31880
Climbing Mountain Bean	0.58868
Frijol Arroz	0.11774
Mambi Bean	0.06627
Oriental Bean	0.09770
Rice Bean	0.07227
Adagura	0.41729
Adagura-kwolla	0.00365
Adonguari	0.00240
Arenguade	0.00162
Atera Argobba	0.15079
Black Eye Pea/Bean	0.07834
Cow Pea	0.00862
Crowder Pea	0.18412
Digir	0.04950
Eka-woke	0.00365
Fasolea Dima	0.12950
Gaisa Wuche	0.27581
Haricot a oeil noir	0.00763
Lubia	0.02909
Marble Pea	0.00451
Ngungu	0.18164
Niebe	0.17740
Nori	0.00191
Nyari	0.02902
Pois de Bresil	0.15138
Southern Pea	0.01413
Israel	0.58382
Japan	0.00843
Korea	0.00195
Kuwait	0.12114
Lebanon	0.00256
Liberia	0.17740
Liechtenstein	0.72564
Madagascar	0.00080
Malaysia	0.43849

FOREIGN EXCHANGE QUOTATIONS

	<u>Cdn.\$/unit</u>		<u>Cdn.\$/unit</u>
Afghanistan.....	0.01907	Albania.....	0.18389
Algeria.....	0.16483	Angola.....	0.03981
Antigua.....	0.44039	Argentina.....	0.00180
Australia.....	0.08940	Austria.....	0.08940
Bahamas.....	1.17740	Bahrain.....	3.11880
Bangladesh.....	0.03733	Barbados.....	0.58868
Belgium.....	0.02994	Belize.....	0.58868
Benin.....	0.00365	Bermuda.....	1.11774
Bolivia.....	0.41523	Botswana.....	0.58097
Brazil.....	0.33469	Brunei.....	0.59770
Bulgaria.....	1.31940	Burma.....	0.17559
Burkina Faso.....	0.00365	Burundi.....	0.00752
Cameroon.....	0.00365	Cayman Is.....	1.41280
Cent.Afr.Rep.....	0.00365	Chad.....	0.00365
China PR.....	0.31962	Colombia.....	0.00290
Comoros.....	0.00365	Congo.....	0.00365
Costa Rica.....	0.01425	Cuba.....	1.54290
Cyprus.....	2.36560	Czechoslovakia.....	0.07820
Denmark.....	0.16166	Djibouti.....	0.00682
Dominica.....	0.44039	Dominican Rep.....	0.18332
Ecuador.....	0.00213	Egypt.....	0.45540
El Salvador.....	0.23473	Equatorial Guinea.....	0.00365
Ethiopia.....	0.57243	Eur.Mon.Coop.Fund.....	1.29960
Fiji.....	0.79177	Finland.....	0.27561
France.....	0.18544	Gabon.....	0.00365
Gambia.....	0.15159	East Germany.....	0.62909
West Germany.....	0.62909	Ghana.....	0.00451
Greece.....	0.00717	Greenland.....	0.16166
Grenada.....	0.44039	Guatemala.....	1.17740
Guinea.....	0.00392	Guinea Bissau.....	0.00181
Guyana.....	0.04168	Haiti.....	0.23502
Honduras.....	0.58682	Hong Kong.....	0.15138
Hungary.....	0.01956	Iceland.....	0.01912
India.....	0.07182	Indonesia.....	0.00066
Iran.....	0.01629	Iraq.....	3.87410
Ireland.....	1.68090	Israel.....	0.59382
Italy.....	0.00086	Ivory Coast.....	0.00365
Jamaica.....	0.22152	Japan.....	0.00845
Jordan.....	1.75440	Kenya.....	0.05198
Kiribati.....	0.91468	Korea Dem.....	1.21140
Korea Rep.....	0.00177	Kuwait.....	3.91060
Laos.....	0.00202	Lebanon.....	0.00256
Lesotho.....	0.42841	Liberia.....	1.17740
Libya.....	3.82560	Liechtenstein.....	0.72564
Luxembourg.....	0.02946	Malagasy Rep.....	0.00080
Malawi.....	0.41916	Malaysia.....	0.43849

FOREIGN EXCHANGE QUOTATIONS

	<u>Cdn.\$/unit</u>		<u>Cdn.\$/unit</u>
Maldives.....	0.13042	Mali.....	0.00365
Malta.....	3.36740	Mauritania.....	0.01405
Mauritius.....	0.74650	Mexico.....	0.00046
Monaco.....	0.18544	Mongolia.....	0.35020
Morocco.....	0.13911	Mozambique.....	0.00145
Namibia.....	0.43562	Nepal.....	0.04897
Netherlands.....	0.55719	New Zealand.....	0.69464
Nicaragua.....	0.00006	Niger.....	0.00365
Nigeria.....	0.16097	Norway.....	0.17073
Oman.....	3.05440	Pakistan.....	0.05296
Panama.....	1.17740	Papau New Guinea.....	1.36450
Paraguay.....	0.00094	Peru.....	0.00035
Philippines.....	0.05828	Poland.....	0.00084
Portugal.....	0.00742	Puerto Rico.....	1.17740
Qatar.....	0.32284	Romania.....	0.12804
Rwanda.....	0.01475	Anguilla.....	0.44039
St.Lucia.....	0.44039	St.Pierre-Miquelon.....	0.18544
St.Vincent.....	0.44039	San Tome & Principe.....	0.01077
Saudi Arabia.....	0.31294	Senegal.....	0.00365
Seychelles.....	0.20504	Sierra Leone.....	0.01870
Singapore.....	0.60069	Solomon Is.....	0.49397
Somalia.....	0.00287	South Africa.....	0.43562
Spain.....	0.01000	Sri Lanka.....	0.02943
Sudan.....	0.26113	Surinam.....	0.65833
Swaziland.....	0.42841	Sweden.....	0.18381
Switzerland.....	0.72564	Syria.....	0.05596
Taiwan.....	0.04599	Tanzania.....	0.00815
Thailand.....	0.04560	Togo.....	0.00365
Trinidad & Tobago.....	0.92692	Tunisia.....	1.23100
Turkey.....	0.00054	Turks & Caicos.....	1.11774
Uganda.....	0.00587	U.S.S.R.....	1.88380
United Arab Emir.....	0.31965	United Kingdom.....	1.90550
United States.....	1.17740	Uruguay.....	0.00172
Vatican City State.....	0.00086	Venezuela.....	0.03650
Vietnam.....	0.00026	Western Sahara.....	0.10000
Yemen.....	0.12442	Yemen Dem.....	3.42600
Yugoslavia.....	0.00004	Zaire.....	0.00312
Zambia.....	0.07169	Zimbabwe.....	0.52533

**Rates given are approximate values based on quotations and should not be used as a basis for business.

POPULATIONS OF THE WORLD

	<u>Midyear 1988</u>		<u>Midyear 1988</u>
Afghanistan	14,481,000	Albania	3,149,000
Algeria	23,849,000	American Samoa	37,800
Andorra	51,400	Angola	9,386,000
Anguilla	6,700	Antigua & Barbuda	83,000
Argentina	31,963,000	Aruba	65,500
Australia	16,470,000	Austria	7,577,000
Bahamas	245,000	Bahrain	421,000
Bangladesh	107,756,000	Barbados	254,000
Belgium	9,865,000	Belize	178,000
Benin	4,443,000	Bermuda	58,300
Bhutan	1,365,000	Bolivia	6,993,000
Botswana	1,211,000	Brazil	144,262,000
British Virgin Is.	12,400	Brunei	250,000
Bulgaria	8,978,000	Burkina Faso	8,530,000
Burma	39,952,000	Burundi	5,131,000
Cameroon	11,206,000	Canada	25,880,000
Cape Verde	359,000	Cayman Is.	23,400
Cent. Afr. Rep.	2,843,000	Chad	5,395,000
Chile	12,750,000	China	1,088,200,000
Christmas Is.	1,900	Cocos Is.	600
Colombia	30,661,000	Comoros	433,000
Congo	2,266,000	Cook Is.	17,000
Costa Rica	2,672,000	Cote d'Ivoire	11,634,000
Cuba	10,421,000	Cyprus	720,000
Czechoslovakia	15,604,000	Denmark	5,130,000
Djibouti	484,000	Dominica	79,300
Dominican Rep.	6,850,000	Ecuador	10,203,000
Egypt	50,273,000	El Salvador	5,083,000
Equatorial Guinea	335,000	Ethiopia	47,501,000
Faeroe Is.	47,000	Falkland Is.	1,900
Fiji	742,000	Finland	4,952,000
France	55,860,000	French Guiana	92,100
French Polynesia	188,000	Gabon	1,219,000
Gambia	811,000	Gaza Strip	571,000
East Germany	16,588,000	West Germany	60,782,000
Ghana	13,754,000	Gibraltar	29,500
Greece	10,055,000	Greenland	54,600
Grenada	106,000	Guadeloupe	340,000
Guam	126,000	Guatemala	8,681,000
Guernsey	59,300	Guinea	6,540,000
Guinea-Bissau	931,000	Guyana	757,000
Haiti	5,451,000	Honduras	4,803,000
Hong Kong	5,683,000	Hungary	10,591,000
Iceland	248,000	India	801,806,000

POPULATIONS OF THE WORLD

	Midyear <u>1988</u>		Midyear <u>1988</u>
Indonesia	175,904,000	Iran	51,225,000
Iraq	16,630,000	Ireland	3,553,000
Isle of Man	64,100	Israel	4,512,000
Italy	57,401,000	Jamaica	2,407,000
Japan	122,620,000	Jersey	82,200
Jordan	2,965,000	Kampuchea	7,876,000
Kenya	22,919,000	Kiribati	68,200
North Korea	21,903,000	South Korea	42,593,000
Kuwait	1,958,000	Laos	3,850,000
Lebanon	2,828,000	Lesotho	1,671,000
Liberia	2,427,000	Libya	4,316,000
Liechtenstein	27,800	Luxembourg	372,000
Macau	466,000	Madagascar	10,917,000
Malawi	8,211,000	Malaysia	16,965,000
Maldives	202,000	Mali	7,778,000
Malta	347,000	Martinique	336,000
Mauritania	1,894,000	Mauritius	1,049,000
Mayotte	77,600	Mexico	82,659,000
Monaco	28,900	Mongolia	2,041,000
Montserrat	12,000	Morocco	23,809,000
Mozambique	14,890,000	Nauru	8,100
Nepal	18,004,000	Netherlands	14,741,000
Netherlands Antill.	177,000	New Caledonia	156,000
New Zealand	3,354,000	Nicaragua	3,622,000
Niger	6,937,000	Nigeria	112,258,000
Niue	2,400	Norfolk Is.	2,000
Norway	4,202,000	Oman	1,372,000
Marshall Is.	42,200	Micronesia	101,000
N. Mariana Is.	21,900	Palau	14,700
Pakistan	109,434,000	Panama	2,322,000
Papau New Guinea	3,562,000	Paraguay	4,007,000
Peru	21,256,000	Philippines	58,723,000
Pitcairn Is.	51	Poland	37,864,000
Portugal	10,349,000	Puerto Rico	3,301,000
Qatar	420,000	Reunion	575,000
Romania	23,014,000	Rwanda	6,709,000
St. Helena & Asc.	7,300	St. Kitts & Nevis	43,200
St. Lucia	145,000	St. Pierre & Miq.	6,200
St. Vincent & Gren.	113,000	San Marino	22,600
Sao Tome & Principe	117,000	Saudi Arabia	12,972,000
Senegal	7,187,000	Seychelles	66,900
Sierra Leone	3,883,000	Singapore	2,641,000
Solomon Is.	301,000	Somalia	6,334,000
South Africa	36,840,000	(SA) Bophuthatsw.	2,005,000

POPULATIONS OF THE WORLD

	Midyear 1988		Midyear 1988
(SA)Ciskei	946,000	(SA)Transkei	3,714,000
(SA)Venda	547,000	S.W.Africa	1,228,000
Spain	38,996,000	Sri Lanka	16,606,000
Sudan	26,263,000	Suriname	425,000
Swaziland	716,000	Sweden	8,415,000
Switzerland	6,626,000	Syria	11,338,000
Taiwan	19,813,000	Tanzania	23,996,000
Thailand	54,862,000	Togo	3,486,000
Tokelau	1,700	Tonga	95,300
Trinidad & Tobago	1,258,000	Tunisia	7,877,000
Turkey	54,176,000	Turks & Caicos Is.	10,500
Tuvalu	8,700	Uganda	15,990,000
U.S.S.R.	285,796,000	Un.Arab Emir.	1,774,000
United Kingdom	57,006,000	United States	246,113,000
Uruguay	2,981,000	Vanuatu	149,000
Venezuela	18,757,000	Vietnam	63,807,000
Virgin Is.	107,000	Wallis & Futuna	15,700
West Bank	865,000	Western Sahara	189,000
Western Samoa	162,000	Yemen (Aden)	2,345,000
Yemen (San'a)	8,614,000	Yugoslavia	23,591,000
Zaire	32,559,000	Zambia	7,384,000
Zimbabwe	8,878,000		

**All Figures represent the latest estimates.

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