

TAYAMA PREDICTS THE FUTURE OF WORLD CUT FLOWER PRODUCTION

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Which will be the most important countries for the production and consumption of cut flowers in the year 2000?

Using a range of data, Professor Harry Tayama of The Ohio State University predicts not only a very bright future for the floriculture industry internationally, but also a considerable change in the geographical position of the centers of production and consumption of flowers between now and the year 2000.

Production Factors

In the 1980s (see Table 1), the top ten countries listed in terms of production area (indoor/outdoor), accounted for almost 80 percent of the world's cut flower production.

Things are changing, and in this decade to the year 2000 it is predicted that Mexico, Spain, Morocco, Australia, Thailand, Singapore and Indonesia, plus some of the East European countries, will become major production centers, especially for export. The production in Turkey should be monitored, given the ambitious development plans of its government.

After 1992, Spain will become the leader in Europe. Apart from a favorable climate and other advantages such as relatively low cost land and labor, Spain is not going to develop its own channels of distribution! Instead, it will use the Dutch auctions, which are the best channels of distribution in the world. A similarly close cooperation

Table 1

Estimates of Fresh Cut Flower Production Area (Hectares) for 10 Countries

Japan	13,089 (HA)
Italy	7,600
Holland	5,081
U.S.A.	5,067
Mexico	4,250 X
Spain	2,900
West Germany	2,538
Colombia	2,122
France	1,692
Israel	1,483

Source: Statistical information on the International Production and Trade of Fresh Cut Flowers, CLIF, The Hague, NL. Estimates for 1985-88.

X=Source: Flowers Unlimited, International Developments in Floriculture, United Flower Auctions, Aalsmeer for 1980.

can be seen in the joint venture production units and the supplying of other large scale distributors in Northern Europe, on a programmed basis.

Italy will also experience a substantial increase in its production of cut flowers, though factors such as the government's disinterest in the sector, poor cooperation within the industry, relatively high labor costs and poor channels of distribution, make such expansion much more difficult than in the case of Spain.

Both countries will need to improve the level of production and post-production technology employed and the amount of research undertaken to develop varieties

better suited to their own range of climates and others with which to lead the market.

Production in Israel, having experienced a long period of expansion since 1960, will level off near to its 1990 output.

Mexico will become much more important. It has a favorable climate, low-cost land, cheap labor, and is very close to the North American market (it is predicted that within the next decade, the U.S. will reach the position of the highest per capita consumption of cut flowers in the world). Already in Mexico there are a number of very large production units being established as joint ventures between West German and Mexican interests and between U.S. and Mexican firms.

Better government cooperation to help the industry expand is considered vital, as is the need to remove the habit of 'rake-off' payments in so many aspects of commercial life. Production and post-production technology needs upgrading and the channels of distribution to the USA must be improved in order to preserve quality and to make supplies more reliable.

Production output in Colombia is likely to stabilize at its current high level and some future expansion could take place in Ecuador and Peru.

The Australian growers and government are absolutely dedicated to establishing a sizable floriculture production, mainly for export, and the same applies for New Zealand. There's more money in flowers than in sheep these days! The geographical position of these countries is an advantage and enables them to supply large quantities of flowers to the markets of N.W. Europe and the USA during the winter months.

Production and post-production technology will need to be of a high level to ensure maximum yields of high quality flowers to offset the notable disadvantage of high cost air-freight in view of the long distances involved. Market opportunities will also

improve in the nearer countries of the Pacific area as their consumption of cut flowers increases.

South Africa enters the same category, although it already has a relatively high level of production technology in use, and produces more flowers for export than for the domestic market. Other African countries, such as Kenya, are to some extent limited by insufficient skilled labor and air-freight capacity to Europe. Given a satisfactory level of government support, however, flower production is likely to increase in a number of African countries - especially in Zimbabwe. Watch out for Nigeria also, it too has some development plants in the floriculture sector.

It is predicted that the Kenyan production will level off at its present levels. Production in Morocco and the Canary Islands can be best considered with the sphere of Spanish production, and in the case of Morocco, sizable French investments.

The Pacific Rim countries: Indonesia, Malaysia, Thailand, Singapore, and the Philippines, all have much lower labor costs than in Japan, South Korea or Taiwan. The cost of land is also low, except in the case of Singapore.

The warm, humid climate of these countries is already being used to grow specialty and more exotic flowers such as orchids and anthuriums. The climate would be more favorable, in general terms, if these countries did more to develop new varieties of many of the more traditional cut flower crops better suited to this climate. The varieties currently being grown were developed for production in Northern Europe.

The production and post-production technology employed must be radically improved in these countries. They need a great deal of assistance in this respect and Professor Tayama considers that the only way to achieve sufficient "technology

transfer" is for growers from these countries to study in Holland, Denmark or the USA for period of one to two years.

Distribution channels are non-existent in these countries, except for Thailand, and need to be developed. Since the consumption of flowers in many of the Pacific countries is predicted to rise considerably by the year 2000, these distribution channels will not be restricted to supplying the U.S. and European markets.

Despite the large investments being made in the Japanese floriculture industry, the high value yen has made cut flower exports uncompetitive in the Pacific region. Equally, imports have become a much more interesting proposition to the market.

Certain countries are considered to have the most potential for growth in cut flower production, irrespective of whether they are already important producers or not, between now and the year 2000. Worldwide distribution is likely to center around Miami, the Dutch auctions and Singapore.

Population growth: The table below (2) show the six most populated countries in the world together with the percentage of growth from 1980 to 2000. Very large increases are predicted in China, India, Indonesia, Brazil and Pakistan, amongst others.

Perhaps the most important prediction is that by the year 2000, over 50 percent of the world population will be situated in East or South Asia.

In general, a larger population implies an increase in the consumption of cut flowers, and despite the fact that historically these areas have not been much interested in buying cut flowers, in contrast with European and Scandinavian countries, marketing studies indicate that here too, buying habits will change.

Urban V. Rural. The total size of a given population is only one factor contributing to the size of a market. Studies show that an urban population purchases far more flowers than a rural one, so what are the predictions concerning the flow of people from rural to urban areas in the future? Between 1990 and 2000 it is foreseen that this trend towards a more urban population will continue in all major parts of the world except in Oceania (Australia and New Zealand) and only very slight increases will occur in the USA.

The percentage of the population living in urban areas is predicted to rise from 28 percent to 33 percent in East Asia, 25 percent to 34 percent in South Asia, and by comparison, from 70 percent to 75 percent in Europe. This demonstrate the enormous potential for increased flower

	<u>Population in millions</u>			<u>%</u>
				<u>growth</u>
China	996.1	1,123.8	1,255.9	26%
India	688.9	827.2	964.1	40%
USSR	265.5	291.8	314.7	19%
USA	227.7	248.4	268.2	18%
<u>Indonesia</u>	<u>121.3</u>	<u>150.4</u>	<u>179.5</u>	<u>48%</u>
Year	1980	1990	2000	

Population in billions

	<u>1980</u>	<u>1990</u>	<u>2000</u>	<u>%</u>
Africa	479	645	872	14.24%
South America	361	451	546	8.92%
North America	252	275	297	4.86%
East Asia	1,176	1,324	1,475	24.09%
South Asia	1,408	1,734	2,074	33.88%
Europe	485	499	512	8.36%
Oceania	23	26	30	0.50%
<u>USSR</u>	<u>265</u>	<u>292</u>	<u>315</u>	<u>5.15%</u>
World	4,450	5,246	6,122	100.00%

Source: Dept. of International Economic and Social Affairs
Population Studies No. 89, United Nations, 1986

consumption in the world as a whole.

Relative age group: Other marketing studies in the U.S., Europe and Japan have found that people between the ages of 30 and 59 years buy the most flowers. This segment of the population will rise by the year 2000, to a predicted 40.9 percent of the total in Europe, 42.5 percent in the USA and 41.3 percent in Japan. This is another positive indicator that consumption will increase also in those countries that will have a population growth rate of zero percent or near to zero percent as in most European and Scandinavian countries and the USA.

Gross Domestic Product. The economic output of a country's population will also have an effect on the consumption of cut flowers. The source (Data Resources "Where Global Growth is Going," Fortune, Volume 102, No. 3, page 76) gives the following figures in \$ billions for the gross domestic product including all the service side economy for the top five countries in 1988.

This data favors the prediction that the U.S. will become the No. 1 flower consuming country in the world within the

next decade, and judging by the effort that the Dutch are currently making in the U.S. market, they not only believe it, but they will be instrumental in bringing it about. In looking at the relatively low gross domestic product of Holland in relation to its very high consumption of flowers, such a development in the USA seems eminently possible.

Gross Domestic Product
in \$ billions for 1988

United States	4,864.3
Japan	2,858.9
West Germany	1,208.3
France	945.9
Italy	828.8
(Holland)	230.2

A high growth rate in per capita consumption of flowers is also predicted for France and Great Britain in particular. West Germany and Italy have already reached a high level.

To realize the opportunities

To make the best use of the opportunities

that are thus predicted to arise in the floriculture industry, a number of things must be done.

Market research. Only in the last five years has the USA started to apply market research to the floriculture industry internationally. Today it is probably the principal area of expenditure for the Dutch involvement in the sector. It has become imperative that we know the answers to such questions as: what crops are in demand in what quantities, what age group and gender is buying flowers and for what reasons? Such studies need to be repeated at regular intervals, since purchasing habits are constantly changing.

Distribution channels. Distribution channels, especially to Europe and North America, need to be considered and largely in the context of utilization of the Dutch auction system. Transport methods to speed up the shipment and post-production and handling technology have become extremely important in preserving quality.

Education and training. This will be ever more important in supplying suitably skilled people in sufficient numbers, in order to sustain such expansion as is being predicted for the industry. This relates to both production and marketing skills. Other fully trained people will be required to teach, conduct research and to undertake extension work. They will be crucial to the "technology transfer" necessary to expand production in the developing countries.

Government support. Governments in general must start to realize that floriculture is not just a marginal interest within the sphere of agriculture. They must assist in providing the teachers, researchers and consultants. Investment capital, tax incentives, better transport and more air-freight capacity, and reduced import restrictions, will all contribute to the realization of the expansion in production and consumption of cut flowers throughout the world.

(Professor Harry K. Tayama was speaking on the occasion of the International Floriculture Seminar 1989 held in Amsterdam.)

