

## CHAPTER 5, LEADING SECTORS FOR U.S. EXPORTS AND INVESTMENT

The U.S. Embassy in Indonesia has identified a number of "best prospect" sectors, i.e. sectors of the Indonesian economy that offer particular export opportunities to U.S. firms.

Below are the listings of twelve "best prospect" industrial sectors identified by the U.S. Commercial Service and the five top agricultural sectors identified by the Foreign Agricultural Service in Indonesia. Each listing is followed by a narrative description and statistical snapshot of the sectors. American exporters in these sectors are encouraged to contact the Commercial or Agriculture offices at the Embassy to explore avenues for entering or expanding their presence in these markets.

### **A. Best Prospects for Non-Agricultural Industries**

1. Industrial Chemicals (ICH)
2. Pollution Control Equipment (POL)
3. Water Resources Equipment and Services (WRE)
4. Telecommunications Equipment (TEL)
5. Aircraft Parts (AIR)
6. Oil and Gas field machinery (OGM)
7. General Services (Retail)
8. Franchising (FRA)
9. Electrical Power Systems (ELP)
10. Security and Safety Equipment (SEC)
11. Computers and Peripherals (CPT)
12. Educational and Training Services (EDS)

Best Prospects are ranked by the estimated growth in U.S. exports (in U.S. dollar value) for the coming year. U.S. \$1 = 9,000 Rupiah

Rank: No. 1

#### *Industrial Chemicals*

##### ICH

Industrial chemicals are generally regarded as intermediate substances and materials vital to the industrial preparation of finished products of all types. Indonesia's dependence on imports of chemicals remains very strong since domestic chemical industries can not yet meet local demand. Indonesia, in particular, depends heavily on imported upstream and midstream chemical products. In Indonesia, most industrial chemicals have been imported from the United States, Japan, Germany and the United Kingdom. International companies such as Dow Chemicals, Union Carbide, BASF, DuPont, LG, Hoechst, and Ciba Chemicals are among the significant industrial chemical players with manufacturing operations in Indonesia.

As the economic condition has been showing an improvement, domestic demand for chemicals is projected to increase in 2002. This increased demand represents an export opportunity for U.S. industrial chemical supplies. Promising sub-sectors include both organic (HS29) and inorganic (HS28) chemicals and tanning and dyeing extracts (HS32) and other chemical products (HS38).

US \$ Millions	2000 (Actual)	2001 (Actual)	2002 (Est.)
Total Market Size	4,752.9	4,329.0	4,545.5
Total Local Production	2,391.7	2,382.8	2,502.0
Total Exports	1,718.4	1,712.0	1,797.6
Total Imports	4,079.6	3,658.2	3,841.1
Imports from the U.S.	425.6	331.5	399.5

**Note:** The above statistics are unofficial estimates.

Rank : No. 2

### *Pollution Control Equipment* POL

During the last two-year were challenging years for the pollution control market in Indonesia. There is still a demand for environmental products and services in Indonesia. The Indonesian government continues to focus attention on the environment.

Air pollution is still one of Indonesia's greatest environmental challenges. Indonesia's continued use of leaded gasoline compounds Jakarta's transport-related air pollution problem. The government began to take steps to phase out the use of leaded gasoline in 2001 together with the state oil company, Pertamina, aim to supply unleaded gasoline throughout Indonesia within the next 3-5 years and are currently planning refinery modifications. Octane-boosting fuel additives, detergents, and lubricants that meet Indonesian, U.S. and international criteria for safety, human health, and environment might be used in the reformulated gasoline. After gasoline phase-out is complete and other technical preconditions are met, the Indonesian Government intends to require the use of catalytic converters to reduce air pollution.

Most of Indonesian's environmental pollution control equipment needs are met through imports. U.S. pollution control equipment and technology is well regarded in Indonesia though the economic crisis has sometimes pushed environmental cleanup onto the back burner, and the weak Rupiah makes imported U.S. equipment prohibitively expensive for many Indonesian companies.

In Indonesia, locally manufactured products are very widely used for the supporting equipment of wastewater treatment plants, such as steel structures, screens, filters, air diffusers, chemicals, steel tanks, pipes, fittings and valves. Centrifugal pumps and aerators are also already produced locally, but although considerably cheaper in comparison to most imported products, these have not yet gained much popularity for quality reasons.

Since environmental issues cut across so many industry sectors, the market potential data is solely based on judgement. In addition, The Indonesian Central Bureau of Statistics classifies environmental pollution control equipment under various types of pumps, furnaces (for incinerators) and filtering equipment (rather than under a specific environmental HS code). However, prospective customers in Indonesia include international joint ventures (especially where the foreign partner has made a commitment to a clean environment), donor-funded projects, many of which require environmental impact statements and action plans, those Indonesian cities and regions

which have a commitment to a cleaner environment (e.g., the Jakarta Inspection and Maintenance program for automobiles/leaded gasoline).

US \$ Millions	2000 (Actual)	2001 (Actual)	2002 (Est.)
Total Market Size	188	180	208
Total Local Production	11.0	9.7	12.0
Total Exports	17.2	18.1	20.0
Total Imports	182.38	198.0	216.0
Import from the U.S.	32.2	29.5	34.0

**Note:** The above statistics are unofficial estimates.

Rank : No. 3

### *WATER RESOURCES EQUIPMENT & SERVICES WRE*

Clean water and sanitation is major challenge for Indonesia. Small locally based cooperatives are responsible for supplying water in most of Indonesia. There has been some attempt to develop this sector (e.g. with private sector participation) but most cooperatives remain short of fund to invest in water resources equipment and services. The sanitation sector has received even less attention than the water supply sector, though some major cities have installed wastewater management programs and facilities.

With rapid growth in its urban population, Indonesia has a tremendous need to enhance the management of production and distribution of its clean water supply. Investments in municipal water projects are huge. Local governments, the owners of municipal water enterprises (PDAM), face financial and managerial constraints in meeting the demand for clean water. At present, about 300 PDAMs are operating in Indonesia, comprised of 8 large-scale PDAMs (over 50,000 house connections) and 77 medium-scale PDAMs (10,000 to 50,000 house connections). The rest are small-scale PDAMs (less than 10,000 house connections).

After the Asian economic crisis of 1997/98, and 300% increase in the local currency price of consumables, only about 30 PDAMs are able to recover operations and maintenance (but not depreciation) costs. 164 PDAMs are just breaking even, and the rest are in a critical financial condition. Until decentralization, the main implementor of new water supply construction projects has been the central government agency, the Directorate General of Regional Infrastructure Development, Ministry of Settlements and Regional Development.

Prospects for the clean water sector in Indonesia have encouraged foreign investors to venture in this business. Suez Lyonnaise des Eaux and Vivendi of France, Biwater, and Thames Water of Britain have been operating several clean water supply facilities and are looking to increase their investments in Indonesia.

The principal end users of water supply during Indonesia's monetary crisis were new industrial installations and new customers of municipal water enterprises. The reasons are : (1) water enterprises must increase connections in order to sell their excess capacity, and (2) multilateral loan funds for expansion of water supply are still coming

through. The most likely end users of new water treatment facilities would be export-oriented enterprises such as a new mining concession, a new oil production site, or a factory processing export quality goods.

The upgrades, and expansion of water supply are unlikely in the present downturn, except in specific areas, as where an American-owned factory processing export goods would have to be expanded, or through multilateral bank funded government projects.

At present, the water pumps have the best prospects for the Indonesian market. Similarly, the best products/equipment for industrial water supply are filters and pumps, especially for use in high rise buildings, mining, and the petroleum industry.

US \$ Millions	2000 (Actual)	2001 (Actual)	2002 (Est.)
Total Market Size	807	872	960
Total Local Production	677	731	804
Total Exports	17.0	18.0	19.0
Total Imports	147	159	175
Imports from the U.S.	30.5	34	39

**Note:** The above statistics are unofficial estimates.

Rank : No. 4

#### *Telecommunications Equipment*

TEL

In the recent past, The Government of Indonesia has made several announcements to support the development of its telecommunications infrastructure. Since 1999, the Indonesian Government has announced that the liberalization of this sector will take place by restructuring the industry and allowing foreign telecommunication companies to enter the Indonesian telecom domestic fixed line market. However, there is a distinct feeling that the reform process in the telecom sector has slowed down, since several important elements in telecom regulation are not in place. Nevertheless, there are some signs that the demand for telecommunications equipment particularly from the well-to-do regions of Indonesia and from the wireless segment may rise.

The introduction of the new Telecommunications Law no. 36/1999 to liberalize the telecommunications sector and the announcement in August 2000, that the monopoly of major operators in Indonesia - PT Telkom (the domestic local and long-distance carrier), PT Indosat, and PT Satelindo (both international carriers) – are planned to be terminated. PT Telkom's exclusive right in operating domestic and long-distance fixed lines are to be terminated in August 2002 and 2003, respectively. PT Indosat and PT Satelindo are to lose their exclusive rights in operating international services in August 2003.

In order that the competition will be truly and effectively starting in August 2002, all parties are expecting that the several important elements in regulation such as, regulation of the universal services obligation, interconnection, modern and more transparent licensing and the telecommunication independent regulatory body are in place.

The Presidential Decree No.6/2001 instructing various government entities to further use and develop the information and technology sector suggests that the government has strong intentions to build the telecommunications and information technology industry in the country. The current administration (in order to strengthen the implementation of the above decree of the previous administration) has established a state Ministry of Communications and Information to oversee the development of broadcasting, mass media and information technology. The new ministry will be focusing on the development of e-government strategies and coordinating standards for national and regional government agencies.

Although in practical terms this may not translate to large increases in equipment orders in the short term, given that the regional governments have now obtained larger budgetary allocations and some resource-rich regions are exceedingly obtaining greater taxation revenue, in the long term, it is expected that some regional agencies will increase the telecommunications and IT equipment purchases. Furthermore, they are expected to increase the telecommunications network and subscriber lines through the establishment of locally operated telephone companies.

The encouraging growth in the Indonesian cellular market in 2001 and continued growth in 2002 is expected to surpass the number of fixed lines. This tremendous growth in cellular market is spurred by the affordable prepaid connection and the popularity of SMS (by February 2002 has exceeded six million messages per day). SMS usage is growing rapidly following the implementation of inter-operator SMS in May 2001, between the three national cell operators.

US \$ Millions	2000 (Actual)	2001 (Actual)	2002 (Est.)
Total Market Size	420	410	430
Total Local Production	663	500	525
Total Exports	496	347	364
Total Imports	253	257	269
Imports from the U.S.	42	26	29

**Note:** The above statistics are unofficial estimates.

Rank : No. 5

#### *Aircraft/Parts* AIR

The airline industry in Indonesia has been growing since 2000 and is predicted to remain attractive in 2002. The passenger numbers expected to reach around 9.6 million people, an increase of 6% from 2001. As of May 2002, there are fifteen scheduled airline companies operating in Indonesia. They are Garuda Indonesia, Merpati Nusantara Airlines (MNA), Mandala Airlines, Bouraq Indonesia, Dirgantara Air Service (DAS), Pelita Air Service, Lion Mentari Airline, Bayu Indonesia Air, Airmark Indonesia Aviation, Jatayu Gelang Sejahtera, Star Air, Republic Express, Kartika Airlines, Indonesian Airlines Avi Patria, and Metro Batavia. The first five companies are old players in the industry, which survived the recent economic crisis and the other ten companies are new players, which started their operations in the last two years. One new company, Air Wagon International (Awair) has temporarily stopped its operations. In addition, the Directorate

General of Air Communication has granted new licenses to six other companies; however, they have not started their operations yet.

The country's entire fleet serves more than 400 routes to over 90 destinations across the country. In 2001, the average load factor reached 68%, which is the same as the 2000 and 1999 level but higher than the 40% average load factor recorded in 1998 (during the depth of the Asia financial crisis). The total aircraft used by the airlines in 1999 were 125 units and it has decreased to 110 units in 2000. By May 2002, there are around 134 units aircraft operated by the operators. There might be more aircraft coming when the new airlines start their operations and additional aircraft needed by the existing airlines.

Imported products account for almost 95% of all aircraft spare-parts consumed in Indonesia. Indonesia's imports of aircraft spare-parts totaled \$ 277.8 million in 2000. In 2001 (temporary figures) the total import value decreased slightly by 5% and amounted to \$ 264 million. The import value for American aircraft spare-parts totaled US \$ 44.5 millions in 2000 and decreased to US\$ 35.6 million in 2001 (preliminary figures). The actual import value of US products could be higher than it was recorded. Many Indonesian companies imported various US products through Singapore. The other major suppliers to Indonesia's market were Singapore, Britain, Japan, France and Germany. With more new airline companies in operation this year, it is predicted that the total market will increased by 5% and the share of US products will increase by 10% in 2002.

Imports from U.S. suppliers are particularly strong in the following areas: turbo propeller of power not exceeding 1,100 kW of aircraft engines, parts of turbo-jets or turbo propellers, other for aircraft engines, aircraft electrical wiring sets, other parts, and aircraft launch gear and part.

US \$ Millions	2000 (Actual)	2001 (*)	2002 (Est.)
Total Market Size	280.8	265.8	279.1
Total Local Production	15.0	15.0	15.0
Total Exports	12.0	13.2	13.7
Total Imports	277.8	264.0	277.8
Imports from the U.S.	44.5	35.6	39.2

**Note :** (\*) preliminary figure

The above statistics are unofficial estimates

Rank : No. 6

### *Oil & Gas field Machinery* OGM

The market for oil and gas equipment in Indonesia remains attractive and stable for the last three years. In 2001, nine new contracts were signed to undertake oil and gas in deep water exploration areas, with total investment of US\$ 5 billion. The value of capital invested by Production Sharing Contract (PSC) operators in Indonesia reached \$ 3.9 billion in 2001, below the estimated investment value of \$ 5.4 billion. The total investment for exploration in 2001 reached \$361 million. For development spending, Pertamina and its Production Sharing Contractors spent \$ 754 million and their

production spending reached \$ 2.4 billion. In 2002, the government plans to award new contracts for exploration in 17 geographical blocks in Eastern Indonesia.

Foreign contractors account for 95 percent of the country's oil and gas production, with an estimated output of 1.5 million barrels of oil per day. In 2001, contractors conducted 915 development drilling, consisting of 718 onshore drillings and 197 offshore drillings. In addition, contractors also conducted 62 exploration drillings (24 onshore and 34 offshore drillings).

Indonesia imported \$ 592.7 million worth of oil and gas equipment in 2000. Imports of U.S. products amounted to \$ 294.2 million, or 49.3 percent of the total import requirement. In 2001 (preliminary figures), the total import value of oil and gas equipment increased around 6% to \$ 628.7 million. However, the value of imported US products decreased around 40 percent of the total import value. The actual import value of US products may be higher than what is reported. Many US products are being imported to Indonesia through Singapore. American suppliers are particularly strong for the following equipment: tools for drilling (not rock drilling), pile-drivers and pile-extractors, self propelled boring and sinking machinery, parts of boring/sinking machinery, drill pipe of a kind used in drilling for oil and gas, casing or tubing of a kind used for oil and gas pipelines, and floating or submersible drilling or production platforms. The other countries that also supplied to oil and gas industry in Indonesia were Japan, France, Singapore, Australia and China.

The following table shows the development of the Indonesian market for oil and gas equipment in two years, 2000-2001, with an estimate of the market for 2002. It is estimated that the market will increase by 5%, and the market share for US products will increase by 10% in 2002 as the new explorations begin and the increases in the utilization of existing capacities are in place.

US \$ Millions	2000 (Actual)	2001 (*)	2002 (Est.)
Total Market Size	667.0	677.5	711.4
Total Local Production	140.6	154.7	170.2
Total Exports	66.3	105.9	118.5
Total Imports	592,7	628,7	660.1
Imports from the U.S.	294.2	176.5	194.2

**Note:** (\*) temporary figures

The above statistics are unofficial estimates.

Rank : No. 7

### *General Services (Retail)*

#### *GSV*

The retail industry in Indonesia has evolved significantly from poor traditional markets and modest kiosks to sophisticated hypermarkets and superstores. People are now more accustomed to shop for daily necessities in shopping malls although they need to stand in a line to pay for their purchases. Although many business sectors are still recovering from the economic crisis, the retail sector is on a rebound. Total sales of the retail sector have been increasing since the downfall in 1998. At present, many big

retailers are engaged in major expansion projects. With the entrance of some foreign retail giants like Carrefour, Makro, and Sogo, competition in the Indonesian retail market has become very fierce.

In 2001, the Indonesian retail industry booked an approximate sales turnover of \$3.5 billion, of which 32.3 percent was generated by hypermarkets such as Carrefour and Makro. Although foreign retailers account only 8 % in terms of the number of outlets, they collect approximately 26 % of the total retail sales revenues. It is predicted that retail sales will reach \$8.4 billion in 2005. New investment is estimated to increase by \$1.2 billion in 2005.

US \$ Millions	2000 (Actual)	2001 (Actual)	2002 (Est.)
Total Retail Sales	2,800	3,502	3,852
Generated by Local Retailers	2,059	2,575	2,833
Generated by Foreign Retailers	741	927	1,019

**Note:** The above statistics are unofficial estimates.

Rank : No. 8

#### *Franchising* FRA

Indonesia offers a great long-term market potential for franchising, a business concept that began to develop in 1970s. The industry started with 3 franchises in 1970s and grew to some 35 franchises with 308 outlets in early 1990s. The industry had grown rapidly since then. By August 1997, the number of franchises reached 253 with a total of more than 2,000 outlets.

Due to the fall of the country's currency followed by political and social instabilities at the end of 1997, many franchises have stopped their operation and closed down approximately 500 outlets. The industry began to recover in late 1999 to early 2000 when there were around 17 new foreign and 9 domestic franchises started their business.

Today, there are a wide range of franchise businesses that operate in Indonesia, including food and beverages, educational and training services, real estate groups, automotive garages, children services, and many others. American franchises dominate the franchise business in Indonesia and hold up to 55% of the domestic market for foreign franchises, which accounts for approximately 80% of the whole market. Until recently, estimated future growth in the franchise industry was considered to be around 10% per year.

Number of Franchise Business	2000	2001	2002 (Est)
Total	261	274	300
Local Franchises	39	42	45
Foreign Franchises	222	232	255
U.S. Franchises	122	128	140

**Note:** The above statistics are unofficial estimates.

Rank : No. 9

### *Electrical Power Systems*

#### ELP

Indonesia is predicted to face a power shortage in 2004-2005. With the average growth rate of 9% per year, the electricity demand will reach 23,000 MW in 2004-2005. At present, the total supply is 18,608 MW, where 14,000 MW comes from the state-owned electricity company, PLN, power generation plants. The rest of the power supply comes from the independent power producers.

The government has projected that the financial need for power development during 2001-2010 is US\$ 33.698 billion. The plan consists of the development of 25,519 MW power plants; 14,604 kilometers of transmission networks, the development of 48,777 MVA of central distribution stations, distribution network, and rural electricity. Around US\$ 19,286 will be used to developed the electricity in Java-Bali, and the rest for other islands in Indonesia. However, due to the lack of funding, the government relies heavily on the private sector to secure the country's power supply.

Recently, the government announced a release of seven power plant projects, which were postponed due to the economic crisis. The projects are: Tanjung Jati B, Paiton I and II, Gunung Salak Unit 4,5,6, Derajat Unit II, Sengkang and Lahendong. The implementation of those projects are expected to attract more than US\$ 7 billion in investment.

Indonesia imported \$ 420 million electrical power equipment in 2000. The number was decreased slightly to \$ 403 million in 2001 (preliminary figure). The market share of US products was 13% of the total imported product or \$ 53 million in 2000, and decreased to \$ 48.3 million in 2001 (preliminary figure). There will be more opportunities in the next two years if all the seven power plant projects will be implemented soon. It is predicted that the total market and the market share of US products will increase by 10%. The other suppliers for this industry in Indonesia are Singapore, Japan and Germany.

US \$ Millions	2000 (Actual)	2001 (*)	2002 (Est.)
Total Market Size	453.3	433.1	476.4
Total Local Production	248.3	211.1	232.2
Total Exports	215.0	181.0	199.1
Total Imports	420.0	403.0	443.3
Imports from the U.S.	53	48.3	53.1

**Note :** (\*) preliminary figure

The above statistics are unofficial estimates

Rank : No. 10

*Security and Safety Equipment*  
SEC

The Indonesian security and safety equipment market offers excellent prospects for U.S. products. Demand for security and safety equipment in industrial plants, commercial buildings, oil/gas fields and mining operations has increased. In addition, in the medium and long term, demand should also increase in the construction sector. As the construction industry gradually recovers from the economic crisis, security systems and equipment will be especially needed in new high-rise buildings and in residential units. Upscale public and commercial buildings, as well as residential buildings, need not only building accessories such as keys and conventional locks, but also sophisticated security and safety equipment.

Indonesians often hear news about the increasing number of crimes. Police crime statistics show that the crime rate is growing between 10 to 15% annually, attributable in part to the current unstable economic conditions in Indonesia. The level of crime has also been rising due to the widening gap between the rich and the poor. This high level of crime frightens home owners, especially those of middle and upper level incomes, so they prefer to use more sophisticated security equipment, including alarms for fences, garages, doors, and windows, access control systems, cameras and the like. Commercial and industrial buildings such as hotels and restaurants, shopping and recreational centers, manufacturing plants, offices, hospitals, schools and universities, etc., will also need security systems and equipment similar to, or more sophisticated than, that needed by residential units.

The current economic conditions and the widening gap between the rich and the poor in Indonesia have increased the number of crimes. Growing crime rate and people's feeling of insecurity increases the potential for security and safety equipment. It is a common practice in parking areas, both in public and commercial buildings that the security guard will check the cars with metal detectors. Demand for security and safety equipment in industrial plants, airports/ports, oil/gas fields and mining operations has increased. Commercial and public places such as hotels and restaurants, shopping and recreational centers, offices, hospitals, schools and universities, will also need security system and equipment similar to, or more sophisticated than, those needed by residential units. The need varies from upgrading or replacing the existing equipment and to install additional equipment.

The total value of imported products in safety and security increased remarkably in 2001. In 2001, the value reached \$ 25.9 millions doubled from \$ 12.6 millions in 2000. Imports of U.S. products amounted to \$ 2.6 million, or 20 percent of the total imports. The other suppliers of security and safety equipment are Australia, Singapore, Netherlands and Germany.

U.S companies are particularly strong in supplying safety headgear, fire extinguisher, burglar or fire alarm and similar apparatus, other electric sound or visual signaling apparatus, and other breathing appliances and gasmask. In the next two year, it is predicted that the market will grow by 10%. There will be an increase demand for personal safety equipment, identification equipment, airport security equipment and building security devices from U.S manufacturers.

US \$ Millions	2000 (Actual)	2001 (*)	2002 (Est.)
Total Market Size	13.6	26.5	29.2
Total Local Production	16.5	18.1	18.1
Total Exports	15.5	17.5	17.5
Total Imports	12.6	25.9	28.6
Imports from the U.S.	2.5	2.0	2.15

**Note:** (\*) preliminary figure  
The above statistics are unofficial estimates

Rank No. 11

### *Computers and Peripherals* CPT

The Indonesian computer industry indicates a positive outlook for the year 2002 and beyond. The total PC sales in 2002 is expected to reach 500,000 units valued at US\$ 375 million, an increase from 451,000 units sold in 2001 and 415,000 units in 2000. Internet kiosks, each with an average of 8 PCs, are also expected to boost the sales of PCs in Indonesia. The government is planning to boost the number of internet kiosks across the nation from 2,500 in 2001 to 500,000 in 2004 to popularize internet among general public. The number of internet users are expected to grow to 4 million in 2002, including 42% of the users accessing the internet through internet kiosks.

The major brands of PC s dominating the market include; Compaq, Acer, Hewlett-Packard and IBM. The locally assembled PCs, such as Zyrex, Mugen, Wearnes, Access, Indopc, and unbranded units dominate the local market. In 2001 their sales accounted for 65 % of the market share. These figures have remained stable in recent years as the quality became more competitive. The top six PC vendors holding 32 % of the market share include Compaq, Acer, Hewlett-Packard, IBM, Zyrex and Mugen. The most of the local PC vendors assembling PC units use Intel processors (assembled in Malaysia), memories/DRAM mostly from Korea, Taiwan Japan and the U.S, the motherboards, mice keyboards and peripheral cards from Taiwan and China.

US \$ Millions	2000 (Actual)	2001 (Actual)	2002 (Est.)
Total Market Size	311	338	375
Total Local Production	884	503	528
Total Exports	2,017	1,138	1,195
Total Imports	156	196	225
Imports from the U.S.	24	24	25

**Note:** The above statistics are unofficial estimates.

In addition to the figures listed above for the imports from the U.S., a considerable amount of indirect imports occurs mainly through Singapore. It is observed that several U.S. manufacturers such as ATI, Cisco, Hewlett Packard, Intel, Maxtor, Seagate and Sun microsystems have manufacturing plants in Asian countries from which the goods are shipped to Indonesia.

Rank : No. 12

*Educational and Training Services*  
EDS

With a population of over 200 million, Indonesia offers a huge potential market for U.S. providers of secondary, tertiary education and vocational education.

The on-going economic crisis and the depreciation of the rupiah against the dollar has caused studying abroad for many Indonesians to be prohibitively expensive. However, the strong belief in the good quality of overseas education has not discouraged Indonesians' interest in studying abroad. The recent appreciation of rupiah will encourage Indonesians to consider the U.S. as a destination to further their education.

Indonesia, a traditionally strong undergraduate market for the U.S., has shown signs of increasing interest in the graduate programs. This shift is caused by a general view among Indonesians that many undergraduate study programs in Malaysia and Europe offer good quality education. Countries like Malaysia, Germany and Netherlands have gained increasing popularity since English is used as the medium of instructions. Furthermore, due to the currency exchange rate, Malaysia offers lower cost of living and tuition fee; while many institutions in Germany and Netherlands provide free tuition. However, Indonesians still prefer to pursue their graduate studies in the U.S. In the 2000-2001 academic year, there were an estimated of 11,625 Indonesian studying in the United States, representing a growth of 2.9 percent from the previous year. This increase moved Indonesia to rank from the eighth to the seventh largest foreign national group studying at the higher education level in the United States. (Institute for International Education statistics). Approximately 68.5 percent were enrolled in 2-year or 4-year programs and, 25.1 percent in graduate programs, and the remaining 6.4 percent in non-degree programs, including English language studies. Indonesian students form the fourth largest group studying at community colleges. Community colleges offer more affordable academic programs, an attractive advantage to students whose financial resources may have declined with the depreciation of the Rupiah.

US \$ Millions	2000 (Actual)	2001 (Actual)	2002 (Est.)
Total Market Size of Education	2,308.5	2,300.0	2,487.9
Sales by Local Institutions	1,572.7	1,415.2	1,550.0
Total Sales by Foreign Institutions	735.8	884.8	937.9
Sales by US Institutions	339.0	348.7	348.7

**Note:** The above statistics are unofficial estimates

**B. Best Prospects for Agricultural Sectors**

1. Cotton
2. Soybeans
3. Soybean Meal
4. Wheat
5. Consumer Ready Food Products

### *Cotton*

Indonesia remains the world's largest cotton importer. Marketing year 2001/02 imports are forecast to remain at about 490,000 tons.

<b>1,000 Metric Tons</b>	<b>1999/00</b>	<b>2000/01</b>	<b>2001/02</b>
		<b><u>Oct/Sep Marketing Year</u></b>	
Total Market Size	492	530	490
Total Local Production	3	7	12
Total Exports	24	26	20
Total Imports	450	570	510
Imports from the U.S.	97	243	63

### *Soybeans*

Indonesia is the world's largest consumer of soybeans for food use. Per capita consumption of soybeans, primarily in the form of tofu and tempe, is ten kilograms annually. The United States is the dominant supplier of the large and growing import market for soybeans. Increased emphasis on corn production suggests that domestic soybean production will remain flat while demand and imports continue to rise. Domestic consumption has not been affected by increased prices, as soybean products remain the most inexpensive protein source for the Indonesian consumer.

<b>1,000 Metric Tons</b>	<b>1999/00</b>	<b>2000/01</b>	<b>2001/02</b>
		<b><u>Oct/Sep Marketing Year</u></b>	
Total Market Size	2,598	2,440	2,440
Total Local Production	1,300	1,020	860
Total Exports	0	0	0
Total Imports	1,275	1,317	1,550
Imports from the U.S.	1,149	1,317	1,470

### *Soybean Meal*

The poultry industry is booming after the economic downturn of 1997 and 1998, pushing soybean meal imports to 1.32 million metric tons for 2001/021 marketing year. Poultry is the main animal protein source for most Indonesians.

<b>1,000 Metric Tons</b>	<b>1999/00</b>	<b>2000/01(Est)</b>	<b>2001/02</b>
		<b><u>Oct/Sep Marketing Year</u></b>	
Total Market Size	1223	1,200	1,320
Total Local Production	0	0	0
Total Exports	0	0	0
Total Imports	1028	1,320	1,400
Imports from the U.S.	139	884	700

## Wheat

The emergence of Indonesian private sector wheat imports has led to notable increase in U.S. exports, spurred by a variety of U.S. assistance programs. Mills are experimenting with different varieties and qualities of wheat. Demand is on the rise, primarily due to higher noodle consumption.

<b>1,000 Metric Tons</b>	<b>1999/00</b>	<b>2000/01(Est)</b>	<b>2001/02</b>
		<b><u>Jul/Jan Marketing Year</u></b>	
Total Market Size	4,424	4,040	4,340
Total Local Production	0	0	0
Total Exports	3	4	5
Total Imports	3,724	4,864	4,500
Imports from the U.S.	426	840	500

## Consumer Ready Food Products

Most imported consumer ready food products are consumed by Indonesia's upper and middle class, expatriates and tourists. Imports of U.S. products declined significantly in 1998 following the economic crisis that hit in July 1997. In 1999 and 2000, there was a dramatic resurgence of consumer-ready imports. Although the number of expatriates and tourists remain below pre-crisis levels, the middle and upper class Indonesian consumers have apparently adapted to the increased price levels of imported food products. The exchange rate has also appreciated by nearly 25 percent since late 1998 (currently at around Rp. 9,0200/US\$1), leading to a concomitant decline in prices of imported food at the wholesale level.

<b>US \$ Millions</b>		<b>1998</b>	<b>1999</b>	<b>2000</b>
<b>2001(Est)</b>				
	<b><u>Imports of U.S. Consumer Ready Food</u></b>			
Fresh Fruit	4.9	18.0	24.4	29.5
Processed Fruit & Vegetables	9.1	10.3	11.6	11.5
Dairy	4.2	12.1	13.2	14.5
Red Meat	1.8	5.5	8.6	9.5
Poultry Meat	1.8	6.7	9.0	1.5
Snack Foods	0.7	0.9	1.9	1.8
Others	8.2	9.7	11.1	10.3
Total	28.9	63.2	79.8	78.6