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# Thailand

# Sugar

## Semi-Annual

2005

#### Approved by:

Russ Nicely, Acting Agricultural Counselor U.S. Embassy, Bangkok

#### Prepared by:

Ponnarong Prasertsri, Agricultural Specialist

#### **Report Highlights:**

MY 2006 sugarcane production is revised downward in response to drier weather conditions. The contraction for the third consecutive year of sugarcane production will limit the exportable supplies of sugar. The Government will likely raise the minimum prices of sugarcane in order to secure sugarcane and molasses supplies for ethanol production.

Includes PSD Changes: Yes Includes Trade Matrix: Yes Semi-Annual Report Bangkok [TH1] [TH]

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#### **Executive Summary**

MY 2006 sugarcane production is revised downward to 40 million tons, down significantly for the third consecutive year, due to drier weather conditions. The drought will also dampen the extraction rate of cane for sugar, leading to a sharp reduction in sugar production. In addition, molasses production will likely drop significantly. Sugar exports are expected to continue the downward trend due to limited exportable supplies. Also, the upward pressure in prices of sugarcane and molasses causes uncertainties in investment plans for sugarcane/molasses-based ethanol plants. The Government is expected to reverse its sugarcane production restriction policy set in MY 2004 by setting higher minimum prices for MY 2006 sugarcane crop so as to secure sugarcane and molasses supplies for ethanol production.

#### 1. Production

#### 1.1 Sugarcane

MY 2006 sugarcane production is expected to decline for the third consecutive year to 40 million tons due to continued drier weather conditions in major growing areas, particularly in the northeastern region. Sugarcane production in the northeastern region, accounting for about 40 percent of total planted area, will likely drop by 20 percent. The level of rainfall is expected to be far below the 30-year average rainfall. Most sugarcane cultivation is rain-fed, accounting for about 85 percent of total cultivated area.

#### 1.2 Sugar

MY 2006 sugar production is forecast to continue the downward trend in line with continued drop in sugarcane production resulting from drier weather conditions. Also, the drought will likely dampen the average extraction rate of cane for sugar to 108.2 kg/ton of cane, as compared to 108.5 kg/ton of cane in the previous year. Also, molasses, which is a by-product of sugar production, is expected to shrink significantly to around 2 million tons, of which around 1 million tons are used domestically as raw material in food and beverage industries. This will lead to a surge in molasses prices to 3,200 baht/ton (roughly US\$ 78/MT). Even at this price it is still not cost effective to use molasses for ethanol production, given the fixed domestic ethanol price at 12.75 baht/liter (roughly U.S.\$ 33 cents/liter).

|                                   | MY 2004 | MY 2005 | MY 2006 |
|-----------------------------------|---------|---------|---------|
| Yield per metric ton of cane      |         |         |         |
| Sugar (kg.)                       | 108.71  | 108.49  | 108.22  |
| Molasses (kg.)                    | 45.51   | 47.29   | 47.5    |
| Farm price (ex-factory): Baht/ton | 465     | 620     | 820     |
| Wholesale prices                  |         |         |         |
| Sugar (Baht/100 kg.)              | 1,177   | 1,177   | 1,177   |
| Molasses (Baht/ton)               | 1,000   | 1,800   | 3,200   |

#### 2. Consumption

#### 2.1 Sugarcane

Despite the start of some sugarcane/molasses-based ethanol by the end of 2005, all sugarcane is still used for sugar production due to drought-limited sugarcane supplies. The current market price of sugarcane is at around 1,000 baht/ton (roughly U.S.\$ 24/MT).

#### 2.2 Sugar

MY 2006 sugar consumption is expected to continue the upward trend both in household and industrial use in line with the country's economic expansion. The current domestic prices for sugar remain unchanged at 11.77 baht/kg. (roughly U.S.\$ 13 cents/lb) wholesale, and 13.25 baht/kg. (roughly U.S.\$ 15 cents/lb) retail, despite the political pressure to raise domestic

sugar prices by another 2 baht/kg. (roughly U.S.\$ 2 cents/lb) in order to ease the debt burden of state-run Cane and Sugar Fund.

#### 3. Trade

MY 2006 sugar exports are revised downward to 2.7 million tons in anticipation of limited exportable supplies, following the contraction of domestic sugarcane production from the drier weather conditions. Current raw sugar export prices reportedly continue to increase to around U.S.\$ 11 cents/lb (roughly U.S.\$ 243/MT). Some regular importers in Asian region reportedly shifted to relatively cheaper Brazilian and Indian sugar. Thailand has already shipped all raw sugar under MY 2005 U.S. tariff-rate quota in the amount of 14,743 metric tons (raw value). Meanwhile, exports of raw sugar to other countries declined significantly in the first half of 2005, as most exporters shifted to more value-added sugar, like white and refined sugar.

Sugar imports in MY 2006 will likely be insignificant due to sufficient available domestic supply, despite anticipated low sugarcane production. The government import policy on sugar follows the WTO agreement, which is limited to a 65 percent tariff rate (roughly U.S.\$ 15.95 cents/kg.) under the quota of 13,760 tons in CY 2005. Meanwhile, the out-of-quota tariff rate is 94 percent (roughly U.S.\$ 23.06 cents/kg.).

#### 4. Stocks

MY 2006 stocks are expected to decline to record lows due to the continued contraction in sugarcane crop.

#### 5. Policy

The Government is expected to reverse its sugarcane production restriction policy set in MY 2004 after drought hit sugarcane production for the third consecutive year. The MY 2006 minimum prices for sugarcane will likely be set higher at 820 baht/ton (roughly U.S.\$ 20/MT, ex-factory prices) in order to encourage farmers to continue their sugarcane crop, and to secure sugarcane/molasses supplies for ethanol production. Cane growers, particularly in the northeastern region, has reportedly shifted to a more attractive crop like tapioca when the Government limited the financial assistance via subsidy price to sugarcane production in MY 2004. Meanwhile, the Government also encouraged the alternative use of sugarcane as a raw material for ethanol production by approving 13 new sugarcane/molasses-based ethanol plants, to produce at around 2 million liters/day by CY 2007. However, the current shortfall of sugarcane production resulted in a surge in sugarcane prices at 1,000 bath/ton against the ethanol optimum prices of 600 baht/ton; molasses prices at 3,200 baht/ton against 1,800 baht/ton. The Government kept the ethanol prices at 12.75 baht/liter. As a result, the Government has recently allowed ethanol imports of 18 million liters from India, which will be sufficient for ethanol demand during September - December 2005. Gasohol, a mixture of 10 percent ethanol and 90 percent regular gasoline, is increasingly popular, as the prices are relatively cheaper by 1.5 baht/liter than regular gasoline. At the moment, there are three molasses-based ethanol plants producing around 400,000 liters/day to domestic oil refineries for gasohol. By the end of CY 2005, there will be additional ethanol production of around 450,000 liters/day, of which 150,000 liters are from a molasses-based ethanol plant, and the balance from two cassava-based ethanol plants. It is expected that demand for molasses will be around 530,000 annually, given the extraction rate of molasses for ethanol is 260 liter/ton of molasses. The Government has also recently proposed an export ban on molasses,

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amounting to around 1.5 million tons annually, in order to secure domestic supplies of molasses for ethanol production. However, the plan was strongly opposed by sugar millers because the ban will adversely affect their revenue and farmer income.

According to the government plan, by 2007 there will be altogether 24 ethanol plants producing around 4.7 million liters/day, of which around 2.5 million liters are from eighteen sugarcane/molasses-based ethanol plants, and 2.2 million liters are from six cassava-based ethanol plants.

Table 1: Thailand's Sugarcane Production

## PSD Table Country Thailand Commodity Sugar Cane for Centrifugal 2004 2005 (1000 HA)(1000 MT) 2006

|                       | 20       | 04        | 20       | 05        | 2006     |           |  |
|-----------------------|----------|-----------|----------|-----------|----------|-----------|--|
|                       | Rev      | ised      | Esti     | mate      | Forecast |           |  |
|                       | USDA     | Post      | USDA     | Post      | USDA     | Post      |  |
|                       | Official | Estimate[ | Official | Estimate[ | Official | Estimate[ |  |
|                       | [Old]    | New]      | [Old]    | New]      | [Old]    | New]      |  |
| Market Year Begin     | 12/2     | 2003      | 12/2     | 2004      | 12/2005  |           |  |
| Area Planted          | 1200     | 1200      | 1050     | 1050      | 1000     | 1000      |  |
| Area Harvested        | 1050     | 1050      | 990      | 990       | 950      | 950       |  |
| Production            | 64500    | 64500     | 48000    | 47820     | 42000    | 40000     |  |
| TOTAL SUPPLY          | 64500    | 64500     | 48000    | 47820     | 42000    | 40000     |  |
| Utilization for Sugar | 64500    | 64500     | 48000    | 47820     | 42000    | 40000     |  |
| Utilizatn for Alcohol | 0        | 0         | 0        | 0         | 0        | 0         |  |
| TOTAL UTILIZATION     | 64500    | 64500     | 48000    | 47820     | 42000    | 40000     |  |

#### Table 2: Thailand's Production, Supply and Demand for Sugar

## PSD Table Country Thailand Commodity Sugar, Centrifugal (1000 MT) 2004 2005 2006 Revised Estimate Forecast USDA Post USDA Post USDA Post

| USDA     | Post                                                                                                                                  | USDA                                                                                                                                                                                                                                                                                                              | Post                                                                                                                                                                                                                                                                                                                                                                                                                                                            | USDA                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Post                                                   |
|----------|---------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------|
| Official | Estimate[                                                                                                                             | Official                                                                                                                                                                                                                                                                                                          | Estimate[                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Official                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Estimate[                                              |
| [Old]    | New]                                                                                                                                  | [Old]                                                                                                                                                                                                                                                                                                             | New]                                                                                                                                                                                                                                                                                                                                                                                                                                                            | [Old]                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | New]                                                   |
| 12/2     | 003                                                                                                                                   | 12/2                                                                                                                                                                                                                                                                                                              | 12/2004                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 005                                                    |
| 1045     | 1045                                                                                                                                  | 1194                                                                                                                                                                                                                                                                                                              | 1215                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 724                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 732                                                    |
| 0        | 0                                                                                                                                     | 0                                                                                                                                                                                                                                                                                                                 | 0                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 0                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 0                                                      |
| 6989     | 7010                                                                                                                                  | 5200                                                                                                                                                                                                                                                                                                              | 5187                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 4500                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 4330                                                   |
| 6989     | 7010                                                                                                                                  | 5200                                                                                                                                                                                                                                                                                                              | 5187                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 4500                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 4330                                                   |
|          |                                                                                                                                       |                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                        |
| 0        | 0                                                                                                                                     | 0                                                                                                                                                                                                                                                                                                                 | 0                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 0                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 0                                                      |
| 0        | 0                                                                                                                                     | 0                                                                                                                                                                                                                                                                                                                 | 0                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 0                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 0                                                      |
| 0        | 0                                                                                                                                     | 0                                                                                                                                                                                                                                                                                                                 | 0                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 0                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 0                                                      |
| 8034     | 8055                                                                                                                                  | 6394                                                                                                                                                                                                                                                                                                              | 6402                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 5224                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 5062                                                   |
| 2281     | 2281                                                                                                                                  | 1630                                                                                                                                                                                                                                                                                                              | 1630                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 1300                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 1200                                                   |
| 2579     | 2579                                                                                                                                  | 1990                                                                                                                                                                                                                                                                                                              | 1990                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 1600                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 1500                                                   |
| 4860     | 4860                                                                                                                                  | 3620                                                                                                                                                                                                                                                                                                              | 3620                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 2900                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 2700                                                   |
| 1980     | 1980                                                                                                                                  | 2050                                                                                                                                                                                                                                                                                                              | 2050                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 2100                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 2100                                                   |
|          |                                                                                                                                       |                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                        |
| 0        | 0                                                                                                                                     | 0                                                                                                                                                                                                                                                                                                                 | 0                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 0                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 0                                                      |
| 1980     | 1980                                                                                                                                  | 2050                                                                                                                                                                                                                                                                                                              | 2050                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 2100                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 2100                                                   |
| 1194     | 1215                                                                                                                                  | 724                                                                                                                                                                                                                                                                                                               | 732                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 224                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 262                                                    |
| 8034     | 8055                                                                                                                                  | 6394                                                                                                                                                                                                                                                                                                              | 6402                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 5224                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 5062                                                   |
|          | Official<br>[Old]<br>12/2<br>1045<br>0<br>6989<br>6989<br>6989<br>0<br>0<br>0<br>8034<br>2281<br>2579<br>4860<br>1980<br>1980<br>1194 | Official   Estimate[     [Old]   New]     12/2003     1045   1045     0   0     6989   7010     6989   7010     6989   7010     0   0     0   0     0   0     0   0     0   0     0   0     0   0     8034   8055     2281   2281     2579   2579     4860   4860     1980   1980     1980   1980     1194   1215 | Official   Estimate[<br>[Old]   Official<br>[Old]   Official<br>[Old]     12/2003   12/2     1045   1045   1194     0   0   0     6989   7010   5200     6989   7010   5200     0   0   0     0   0   0     0   0   0     0   0   0     0   0   0     0   0   0     0   0   0     0   0   0     0   0   0     281   2281   1630     2579   2579   1990     4860   4860   3620     1980   1980   2050     0   0   0     1980   1980   2050     1194   1215   724 | Official   Estimate[<br>[Old]   Official   Estimate[<br>[Old]   New]     12/2003   12/2004   12/2004     1045   1045   1194   1215     0   0   0   0     6989   7010   5200   5187     6989   7010   5200   5187     6989   7010   5200   5187     0   0   0   0   0     0   0   0   0   0     0   0   0   0   0     0   0   0   0   0     0   0   0   0   0     0   0   0   0   0     0   0   0   0   0     2281   2281   1630   1630     2579   2579   1990   1990     4860   4860   3620   3620     1980   1980   2050   2050     1980 <td< td=""><td><math display="block">\begin{array}{c c c c c c c c c c c c c c c c c c c </math></td></td<> | $\begin{array}{c c c c c c c c c c c c c c c c c c c $ |

Table 3: Thailand's Exports of Sugar

# **Export Trade Matrix**

| Country      | Thailand | d           |         |
|--------------|----------|-------------|---------|
| Commodity    | Sugar, 0 | Centrifugal |         |
| Time Period  | Jan      | Units:      | MTRV    |
|              | Dec.     |             |         |
| Exports for: | 2004     |             | 2005    |
| U.S.         | 14615    | U.S.        | 14615   |
| Others       |          | Others      |         |
| Indonesia    | 1327521  | Indonesia   | 883085  |
| Japan        | 754013   | Japan       | 393767  |
| China        | 286468   | China       | 17398   |
| Malaysia     | 577117   | Malaysia    | 94958   |
| South Korea  | 228157   | South Korea | 60865   |
| Cambodia     | 195914   | Cambodia    | 101191  |
| Taiwan       | 418774   | Taiwan      | 96256   |
| Russia       | 76942    | Russia      | 30914   |
| Singapore    | 117294   | Singapore   | 25819   |
| Bangladesh   | 304502   | Bangladesh  | 55279   |
| Total for    | 4286702  |             | 1759532 |
| Others       |          |             |         |
| Others not   | 533481   |             | 126100  |
| Listed       |          |             |         |
| Grand Total  | 4834798  |             | 1900247 |

Note: The figures for 2005 are exports for the period of Jan. – Jun.

### Table 4: Thailand's Annual Raw Sugar Exports (MTRV)

| Destination   | 1995    | 1996    | 1997    | 1998    | 1999    | 2000    | 2001    | 2002    | 2003    | 2004    | 2005<br>(Jan Jun.) |
|---------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------------|
| China         | 1236453 | 500526  | 233932  | 85609   | 33858   | 90801   | 346979  | 168982  | 180567  | 252455  | 14672              |
| Congo         | -       | -       | -       | -       | -       | 10260   | -       | -       | -       | -       | -                  |
| Indonesia     | -       | 54378   | 160005  | 25804   | 341700  | 447543  | 402189  | 387971  | 373106  | 463426  | 251536             |
| Iran          | -       | 28728   | -       | -       | -       | -       | -       | 30780   | -       | -       | -                  |
| Japan         | 530636  | 737457  | 703729  | 697216  | 529302  | 746735  | 690220  | 383685  | 565822  | 751129  | 393767             |
| North Korea   | -       | -       | -       | -       | 3386    | 14056   | -       | 6378    | 62877   | 41      | -                  |
| South Korea   | 378943  | 623209  | 710402  | 163560  | 205301  | 318056  | 235919  | 110044  | 175976  | 144877  | 22296              |
| Malaysia      | 291891  | 367924  | 382698  | 84251   | 127470  | 233107  | 247957  | 240636  | 242141  | 245564  | 43143              |
| Mozambique    | 13338   | 2052    | 23598   | 15185   | -       | -       | -       | -       | -       | -       | -                  |
| Philippines   | 113917  | 223843  | 11286   | 134714  | 117547  | 21546   | -       | 3078    | -       | 286     | -                  |
| Romania       | -       | 25650   | -       | -       | 12312   | -       | -       | -       | 41040   | -       | -                  |
| Russia        | 42169   | 44118   | 85158   | 77976   | 469087  | 291589  | 73955   | 484253  | 696757  | 66279   | 30780              |
| Singapore     | 8208    | 83106   | 43092   | 7182    | 17750   | 8161    | 26081   | 52644   | 2786    | 429     | -                  |
| Sri Lanka     | 73564   | 57559   | 47093   | 12312   | 78007   | 73462   | 52839   | 64384   | 52711   | 55149   | 7156               |
| Tanzania      | 20520   | 35223   | 2052    | 18981   | -       | 29959   | 47145   | 33006   | 10012   | 10841   | 208                |
| Taiwan        | -       | -       | -       | -       | -       | 49248   | 71795   | 102794  | 201234  | 313528  | 45442              |
| Ukraine       | 39769   | 14364   | 28728   | -       | -       | -       | -       | -       | -       | -       | -                  |
| United States | 16539   | 32740   | 28284   | 21082   | 15111   | 14615   | 11597   | 14614   | 14615   | 14615   | 14615              |
| UAE           | -       | 72254   | 34474   | 6156    | -       | -       | -       | 45785   | -       | -       | -                  |
| Vietnam       | 44118   | 15390   | 31550   | -       | 14334   | -       | 16416   | -       | -       | -       | 5387               |
| Others        | 43495   | 41389   | 38569   | 73027   | 9537    | 5870    | 15942   | 20075   | 72779   | 23333   | 2761               |
| Total         | 2853560 | 2959910 | 2564650 | 1423055 | 1974702 | 2355008 | 2239034 | 2149108 | 2692423 | 2341952 | 831763             |

SOURCE: TSC, TSTC, SSEC, SITCO, K.S.L., PSC and TISS.

#### Table 5: Thailand's Annual White and Refined Sugar Exports (MTRV)

| Destination  | 1995   | 1996    | 1997    | 1998   | 1999    | 2000    | 2001    | 2002    | 2003    | 2004    | 2005       |
|--------------|--------|---------|---------|--------|---------|---------|---------|---------|---------|---------|------------|
|              |        |         |         |        |         |         |         |         |         |         | (Jan Jun.) |
| Bangladesh   | -      | -       | 25358   | -      | 41555   | 115759  | 36484   | 31717   | 200676  | 304502  | 54766      |
| Brunei       | -      | 3210    | -       | 3210   | 4280    | 2140    | 5374    | 7490    | 1831    | 6233    | 3663       |
| Burma        | 1035   | 5175    | -       | -      | 3601    | 47326   | 362     | 80      | 1031    | 7023    | 877        |
| Cambodia     | 22276  | 38411   | 55430   | 62873  | 157702  | 77029   | 178405  | 244344  | 112394  | 195545  | 101191     |
| China        | 225499 | -       | 2070    | 3780   | -       | 4850    | 64751   | 13954   | 27640   | 34013   | 2726       |
| India        | -      | -       | 25470   | 13973  | 281555  | 8280    | -       | -       | 348     | 803     | -          |
| Indonesia    | 332064 | 632468  | 1133846 | 752807 | 493278  | 834949  | 399476  | 616165  | 903304  | 864095  | 631549     |
| Iran         | 112350 | 329560  | 118580  | -      | 74921   | 6624    | -       | 63368   | 14445   | -       | -          |
| Jordan       | -      | 44380   | -       | -      | 23214   | -       | 4280    | 55961   | 46042   | 65698   | -          |
| North Korea  | 8073   | 20364   | -       | 28134  | 52892   | 65114   | 35713   | 46073   | 81045   | 84073   | 71552      |
| South Korea  | 2277   | -       | -       | -      | 65      | 3815    | 20234   | 26300   | 73497   | 83280   | 38569      |
| Kenya        | -      | 22819   | 15525   | 2381   | -       | 2795    | -       | 1074    | 4693    | 598     | -          |
| Laos         | 12295  | 11412   | 16849   | 14973  | 20445   | 17334   | 39310   | 27899   | 23947   | 27887   | 22650      |
| Malaysia     | -      | -       | -       | 3105   | 11980   | 48738   | 87055   | 129248  | 206155  | 331552  | 51815      |
| Maldives     | -      | 3105    | -       | -      | -       | 2070    | -       | -       | -       | -       | -          |
| Pakistan     | -      | 29725   | 92616   | -      | -       | 148355  | -       | -       | -       | -       | -          |
| Philippines  | 77401  | 126151  | -       | 21444  | 5843    | 42350   | 6596    | 31168   | 45878   | 51193   | 9654       |
| Russia       | 2675   | 2140    | -       | -      | -       | -       | -       | 6793    | 17129   | 10664   | 134        |
| Saudi Arabia | 42881  | 34890   | -       | -      | -       | -       | -       | 4280    | 5350    | -       | -          |
| Singapore    | 4863   | 8455    | 15502   | 6111   | 33768   | 16945   | 37492   | 105910  | 75356   | 116864  | 25819      |
| Somalia      | 3726   | 4280    | -       | -      | 2070    | 59597   | 69138   | 75555   | 61692   | 21568   | -          |
| Sri Lanka    | 20314  | 34007   | 32245   | 6210   | 24737   | 115304  | 5175    | 40081   | 22455   | 24430   | -          |
| Syria        | -      | 27820   | -       | -      | -       | -       | -       | 119379  | 234129  | -       | -          |
| Tanzania     | -      | 10455   | 29187   | 26703  | 6210    | 6893    | 5175    | 23039   | 25351   | 10352   | -          |
| UAE          | 22656  | 59449   | 25680   | -      | 4165    | -       | -       | 3210    | 5280    | 15095   | -          |
| Vietnam      | 68116  | 2087    | 19053   | 8280   | -       | 471     | 49740   | -       | -       | 4347    | 518        |
| Yemen        | 8570   | 89658   | -       | -      | 60379   | 217073  | 16560   | 52890   | 167254  | 26910   | -          |
| Others       | 6229   | 28005   | 34985   | 9212   | 56309   | 8585    | 10405   | 283349  | 330120  | 206120  | 53001      |
| Total        | 973300 | 1568026 | 1642396 | 963196 | 1358969 | 1852396 | 1071725 | 2009327 | 2687042 | 2492845 | 1068484    |

SOURCE: TSC, TSTC, SSEC, SITCO, K.S.L., PSC and TISS.

End of Report.