## ARKANSAS GLOBAL RICE MODEL



# International Baseline Projections For 1997 – 2010

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his report on the world rice economy discusses recent and projected trends in consumption, production, trade, stocks and prices. The Arkansas Global Rice Model (AGRM) baseline projections have been developed in collaboration with the Food and Agricultural Policy Research Institute (FAPRI) at the University of Missouri-Columbia and Iowa State University. The rice baseline model results presented in this report were developed with FAPRI in January 1997. The AGRM baseline is generated within an international multi-market framework that includes wheat, feed grains, oilseeds, livestock, fiber, fruits and vegetable models. Revisions in production, consumption, trade and price data since January 1997 have been included in the

projections of this report. Updates of this report can be found at the web site http://www.uark.edu/ depts/agriecon/.

The Arkansas Global Rice Model is subject to constant development and refinement. This research has benefitted from previous discussions with colleagues throughout the world and in workshops on the global rice economy conducted in the United States, Japan, South Korea, China, Philippines, Taiwan and Spain. The research presented in this report has been funded by the U.S. Department of Agriculture, Economic Research Service, Agreement No. 96-34351-2537, "Rice Modeling Project-Marketing and Policy."

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## International Baseline Projections For 1997–2010

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#### **INTRODUCTION**

ice accounts for over 22 percent of global caloric intake. While production and consumption is concentrated in Asia, rice is an important crop in specific regions in North and South America, Africa and Europe. The international rice economy is becoming more market oriented due to many changes over the past several years. Foremost among these changes is the implementation of the General Agreement on Tariffs and Trade (GATT) accord. The agreement requires 1) market access, the opening of markets to imports in Japan, South Korea and other countries, 2) reductions in aggregate support levels and 3) reduction in export subsidies notably in the European Union (EU) and the United States (U.S.). A regional initiative, which is already changing global rice trade, is the free trade agreement in South America, the MERCOSUR, which includes Argentina, Brazil, Paraguay and Uruguay (Bierlen et al., 1997).

The Federal Agriculture Improvement and Reform (FAIR) Act of 1996 of the United States is another important policy initiative. This new legislation changes U.S. rice industry policy significantly by 1) eliminating supply control mechanisms, 2) decoupling farm income support (deficiency) payments from production decisions and 3) reducing export subsidies more quickly than the bound rate in the Uruguay Round agreement. Unilateral actions in other countries include adjustments in rice production infrastructure such as in Japan, Korea and Taiwan. National policy programs resulting in the diversification of cropping patterns in traditional rice production countries in Southeast Asia are responding to changes in consumer demand and dietary patterns. Prospects for higher resource productivity for rice based on research and extension programs are being led by the International Rice Research Institute (IRRI) and its linkage to national rice research programs such as CORRA, Council for Partnership on Rice Research in Asia. Finally, fundamental demand-determining factors of income and population growth, as well as dietary changes, continue to influence the world rice economy.

The baseline projections of consumption, production, trade, stocks and prices presented in this paper reflect the latest developments in the international rice industry. The current baseline projections include substantial changes relative to previous projection reports (Wailes et al., 1995, 1996a, 1996b). The following changes have been incorporated:

- revised macroeconomic data and population forecasts (Wharton Econometrics Forecasting Associates and Project LINK),
- current rice supply and utilization data (USDA, 1997a, 1997b),
- provisions of the Federal Agriculture Improvement and Reform Act of 1996 of the United States,
- revised model structure for U.S. rice supply, demand, and prices with disaggregation into long grain (indica) and medium grain (japonica),
- addition of individual country models for three MERCOSUR countries, Argentina, Brazil and Uruguay,
- revised models for Vietnam, China, and the restof-the-world (ROW) rice supply and demand estimates.

The Arkansas Global Rice Model (AGRM) projections are based on a multi-country econometric model framework that provides projections for a set of 20 major rice producing and/or trading countries and one aggregate ROW region. Projections include national levels of production (area harvested and yields), utilization, net trade (exports less imports), stocks and prices. Historical data for these variables are from the Economic Research Service, U.S. Department of Agriculture (Gudmunds, 1997). Estimates for these variables are based on a set of explanatory variables including exogenous macroeconomic factors such as income, population, inflation rate, technology development and, especially, government-determined policy variables that reflect the various mechanisms by which countries intervene in their rice sector economy. Macroeconomic data are based on forecasts from the Wharton Econometrics Forecasting Associates (WEFA) and Project LINK (Appendix Tables 1-5).

An updated baseline projection for the world rice economy is valuable as it provides a benchmark against which it is possible to evaluate the impacts of policy reforms on rice and changes in supply and/ or demand on world rice prices. The set of countries or regions explicitly included in the model are the United States, Thailand, Pakistan, China, India, Myanmar, Vietnam, Australia, Egypt, Argentina, Uruguay, Japan, South Korea, Indonesia, the European Union, Iran, Iraq, Saudi Arabia, Taiwan and Brazil. Projections for the United States are separated by state and rice type (i.e., long grain and medium grain). EU's rice supply is divided among Italy, Spain and Other EU. All other countries not listed above are included in the ROW region. All data on rice quantities in the following discussion and tables are on a white milled basis except where noted.

### WORLD RICE CONSUMPTION, PRODUCTION, TRADE AND PRICES

#### Consumption

Changes in world rice consumption are determined primarily by population and income growth, and relative food grain prices. Total utilization of rice is projected to increase from 376 mmt in 1996 to 435 mmt by 2010 (Table 1 and Figure 1) at a rate of only 1.05 percent annually. This growth rate is slightly less than the 1.09 annual percent growth rate experienced over the 1990-95 period but is much lower than the growth in rice consumption over the previous 20 years at 2.27 percent (Figure 2).

The rapid slowdown in world rice consumption is a result of 1) projected reductions in population growth rates in many Asian countries (Appendix Table 1) and 2) a diversification in the food consumption patterns as a result of changing lifestyles and spending patterns, especially in Asian countries that have experienced rapid industrialization. For some Asian countries, rice has become an inferior good (i.e., rice consumption declines as incomes rise, implying negative income elasticities. In less industri-



alized Asian nations and a few non-Asian industrialized market economies, such as the United States, rice consumption increases with income growth.

#### Production

The growth in world rice production necessary to satisfy the projected consumption levels over the next 15 years (1996-2010) will mainly come from yield increases, as it has for the past 20 years (Figure 3 through Figure 5). Area harvested is projected to increase only slightly to 151.6 million hectares (ha) by 2010 from 148.5 million in 1996 (Table 1). This increase is equivalent to an annual growth rate of only 0.15 percent. Projected area expansion is comparable to the annual growth rate observed for the past six years (1990-95) at 0.17 percent but lower than the 0.23 percent seen for the past 20 years (Figure 3). World rice area harvested has increased by approximately 300 thousand ha per year since 1975, consid-



erably less than the 1.9 million ha increase per year during the 1966-75 period. World rice area harvested is expected to increase to 149 million ha in 1997 as a result of relatively high current rice prices.

The world average rice yield was 2.52 metric tons (mt) per ha in 1996. Yield is projected to increase to 2.87 mt by 2010, a 0.93 percent increase per year. This represents a more optimistic yield growth scenario than that which has been experienced for the past six years at a 0.68 percent growth rate. The basis for this more optimistic yield projection is primarily due to the development and increased use of improved varieties. This projection, however, is much lower than the 2.04 rate observed for the past 20 years (Figure 4). IRRI research reports on the potential of new "super" rice varieties suggest that farmers will be able to increase yields by 20-25 percent, with release of these varieties beginning at the end of the 1990s (New York Times, 1997). Therefore, the projected annual yield growth projection of 0.93 percent is realistic. To the extent that yield growth exceeds the 0.93 percent growth rate, less land resources will be needed to accommodate the consumption projections.



Our yield projections do not include weather variables and therefore reflect, implicitly, an assumption of normal weather. However, we recognize that a major source of volatility in world rice prices, production and trade is the monsoon climate of many Asian countries. As such, the year-to-year accuracy of our projections is not expected to be high. However, the long-term estimates are clearly consistent with the historical trends.

Total production is projected to increase from 375 mmt in 1996 to 436 mmt by 2010 (Table 1). This increase represents an annual growth rate of 1.08 percent (Figure 5). Since it is slightly higher than the consumption growth rate, a gradual recovery of global stock levels is expected. World rice production has increased by only 0.84 percent per year since 1990, well below the 2.28 percent annual growth for the 1976-95 period.



#### Trade

World rice trade has expanded at an annual growth rate of 8.82 percent over the past six years. This expansion has been the result of 1) weather-related production shortfalls (e.g., in Indonesia, China, Philippines and Bangladesh), 2) improving political stability in some rice-consuming countries (e.g., Iraq and Iran) and 3) growth in population and incomes. Total world rice trade is projected to grow by 1.11 percent per year from 18 million metric tons (mmt) in 1996 to 21 mmt by 2010 (Table 2). This projection reflects a significant decline in the growth of rice trade compared to an average annual increase in trade of 1.45 mmt or a 8.82 percent growth over the past six years (Figure 6). The trade projection reflects a situation in which the major effects of unilateral, regional and multilateral rice trade liberalization, have been substantially realized. Increased political stability, especially in the Middle East, has meant a return to more normal trade volumes in that region. The rapid growth in world rice trade over the past six years has also been the result of production shortfalls in consecutive years in a number of major Asian rice-consuming nations (Figure 7). Obviously, yield shocks have dramatically influenced trade volume and variability from year-to-year such as in 1993, 1994 and 1995.





Fig. 7. Major ROW Importers, 1990-96



The total world rice trade forecast for 1997 is 17.9 mmt (Table 2). Rice trade will remain thin (i.e., a small percent of world consumption). Trade accounted for only 4.7 percent of consumption in 1996. This is projected to range from 4.6 to 4.8 percent over the forecast period. Major exporters in 1996 were Thailand, Vietnam, United States, India and Pakistan. Major importers in 1996 were the EU, Iran, Brazil, Indonesia, and China. A number of countries, like the Philippines and Bangladesh, occasionally

make substantial purchases due to weather-related shortfalls in domestic production such as in 1995. Beginning in 1997, Brazil is projected to be the largest importer, followed by Indonesia, EU, China and Saudi Arabia. By 2008, however, Indonesia's imports will surpass those of Brazil and the EU.

World net rice trade (exports less imports, or vice versa) is projected to increase from 15.3 mmt in 1996 to 15.6 mmt in 1997, and increase steadily to 18.4 mmt in 2010 (Table 3). In the case of the EU, for example, total imports in 1996 were 1.368 mmt and total exports were 1.070 mmt, resulting in a net trade (imports) of 298 thousand mt. For the United States, on the other hand, exports (2.5 mmt) substantially exceeded imports (0.3 mmt) in 1996.

Long Grain (Indica) Markets. Indica (long grain) rice trade is given in Table 4. Nearly 90 percent of total trade is long grain and aromatic types, such as jasmine and basmati. Major exporters are Thailand, Vietnam, India, United States and Pakistan. The United States is projected to lose market share in the long grain export market over time because of reduced production. Major long grain rice importers are Indonesia, the EU, Middle East countries and Brazil. The United States is a rapidly growing market for aromatic rice imports, which are projected to increase continuously over the projection period. The ROW accounts for nearly 51 percent of imports in 1996, but this share is projected to decline to 46 percent in 1997 and ranges from 44 to 48 percent over the projection period. The decline in world imports in 1996 is primarily a result of reduced imports by the Philippines, Bangladesh, North Korea, Syria and Turkey.

Medium Grain (Japonica) Markets. The approximate world medium grain (japonica) rice trade is presented in Table 5. These japonica trade numbers are overstated because not all trade from China, Italy, Australia and Japan is japonica. The major sources of japonica rice exports are Australia, China, United States, and Italy. Although China is the world's largest producer of japonica rice, it is not expected to dominate this export market as the country's domestic demand for japonica rice expands with production. Other sources of japonica rice exports include Japan, Taiwan and Egypt. The major importers of japonica are Japan and South Korea due to market access requirements of the GATT accord. The projection for Taiwan assumes that a minimum access requirement will apply once the country is admitted into the World Trade Organization (WTO). Total japonica trade is expected to account for only 13 percent of total world rice trade if market access rules are not increased for the years beyond 2002 for Japan and 2005 for South Korea. While indica rice trade is projected to grow annually at 1.3 percent over the 1997-2010 period, japonica rice trade only increases by 0.5 percent per year over the same period.

**Stocks.** World ending stocks are projected to range from 49 to 56 mmt over the projection period (Table 1). After having declined by an annual average of nearly 2 mmt (or 3 percent per year) for the past six years from 58.6 mmt in 1990 to 49.4 mmt in 1996 (Figure 8), a modest recovery in global rice stocks is projected, increasing to 56 mmt by 2002 before declining to 54 mmt by 2010. Relative to consumption, world stocks are projected to decline slightly, with the stocks-to-use ratio decreasing from 13 percent to 12 percent over the projection period (equivalent to only 1.5 months of global rice consumption).



#### Prices

The international reference price for indica rice (Thai 5% NPQ fob) is expected to increase, in nominal terms, to US\$344 per mt in the 1997 marketing year from \$331 in 1996 (Table 6). The Thai prices have strengthened in the early part of 1997 due to a number of factors, which include the Iraq oil-for-food deal, tight long grain rice stocks, strong demand for Asian fragrant (jasmine) rice, growing demand from Central and South American countries for U.S. rice, and a strong U.S. domestic market. In general, a higher U.S. price premium over Thai export prices has been a result of competitive export pressures on Thailand from both Vietnam and India. The world indica price is projected to average within the range of \$331 to \$346 per mt from the period 1998 through 2010, depending on the dynamics of world supply and demand. In real terms (1985 dollars), however, the world price is projected to decline steadily from \$227 per mt in 1996 to \$165 by 2010 (Figure 9).





The reference price for japonica rice is the No. 2 California FOB price. It is projected to increase to US\$445 per mt in 1997 from \$422 in 1996 then decline to \$430 per mt in 1998 before increasing steadily to \$470 by the end of the forecast period. The relationship between the indica and japonica rice prices is important where substitution in production is possible. A comparison of the Houston U.S. #2 long grain FOB price to the California medium grain price gives an indication of the relationship. Medium grain enjoyed a price premium of 8 percent in 1995 over long grain, but the situation reversed in 1996 with strong long grain prices. The long grain price is projected to maintain a premium over the medium grain. The long grain premium, however, declines from 5.8 percent in 1996 to 1.3 percent in 2000 before gradually increasing to 6.5 percent in 2010 (Figure 10).

The other important price projected is the Thai FOB 35% broken long grain. Its relationships with the Thai FOB 5% rice and the U.S. wheat No. 2 FOB price are important (Table 6 and Figure 11). This relationship is relatively important in explaining potential substitution of wheat for rice in the ROW



projection, which has an elasticity of demand with respect to the price ratio of rice to wheat of -0.27. High wheat prices in 1996 resulted in an unusually high ratio to the Thai 35% price of 73 percent. The resulting strength in rice demand pushed rice prices in the same direction as wheat. Because wheat supply response to own price is generally believed to be more elastic than rice supply to prices, the rice to wheat price ratio is expected to decline to the more typical range of 53 to 56 percent throughout the projection period.





#### MAJOR EXPORTING COUNTRIES

#### Thailand

Thailand harvested 9.03 million ha of rice in 1996, lower than the 9.25 million ha in 1995 partly due to unfavorable weather late in 1996. Projected harvested area for crop year 1997 is 9.12 million ha (Table 7 and Figure 12). The harvested area is expected to decline slightly to 8.66 million by the end of the projection period. Yields in the long term for Thailand will be determined by further adoption of highyielding varieties, relative costs of production and weather factors. Under the assumption of normal weather, yields are projected to increase from 1.54 mt per ha in 1996 to 1.78 mt per ha in 2010. The



1996/97 second crop (which is mainly irrigated) yield is expected to be sharply higher than last year because of improved water supply. As a result of changes in area harvested and yield, rice production is projected to increase gradually from 13.9 mmt in 1996 to 15.4 mmt by 2010.

Rice demand in Thailand is price inelastic. Per capita rice use in Thailand is projected to decrease slightly to 139.8 kilograms in 1997 from 141 kilograms in 1996 and declines steadily to 127.7 kilograms by 2010. Per capita incomes maintain strong growth (8.3 percent in 1996 and stabilizing around 7 percent by 2005–the third highest among the major rice economies). Based on a negative relationship with income, per capita rice consumption declines as dietary habits change. Reflecting the country's relatively low population growth (1.2 percent in 1996 and declining to 0.2 percent by 2005), the total rice consumption only increases from 8.6 mmt in 1996 to 8.7 mmt by 2001 and then declines gradually to 8.4 mmt by 2010.

Thailand's economic development policies are based on a competitive, export-oriented, free market philosophy. The government of Thailand ratified the Uruguay Round agreements in December 1994. Thailand, however, maintains several programs that benefit manufactured products or processed agricultural products and may constitute export subsidies. These programs include subsidized credit on some government-to-government sales of Thai rice; preferential financing for exporters in the form of packing credits; tax certificates for rebates of packing credits and tax certificates for rebates of taxes and import duties on inputs for products made for export (Department of State).

Thailand is the world's largest rice exporter. The country's rice industry is becoming more marketoriented. Export taxes and quotas were eliminated in 1986, boosting its exports. The government also provides discounted credit to exporters. Thailand is projected to maintain its status as the largest rice-exporting country over the projection period. The country expects to increase its share of the Japanese rice imports as a result of World Trade Organization agreements. Thailand, however, is expected to experience increasing competition from Vietnam and Pakistan. Projected total exports in the 1997 marketing year increase to 5.7 mmt from 5.0 mmt in 1996, and increase steadily to 7.3 mmt by 2010. Under the GATT accord, Thailand is supposed to import 239 thousand mt of rice in 1996, increasing to 250 thousand mt in 2004, and remaining at that level over the rest of the projection period. USDA Foreign Agricultural Service, however, reported that actual imports in 1996 were only 107 mt of rice from the United States. Ending stocks are expected to increase steadily to 1.6 mmt 2010 from 1.0 mmt in 1996.

#### **United States**

Long-term projections of the U.S. rice economy presented in this study include the provisions of the FAIR Act starting in the 1996 crop year. This program radically changed the nature of government intervention in the rice sector. Specifically, it decouples the linkage of farm income support from production decisions using a new concept: contract acreage and payments. Under this system, rice producers are provided complete flexibility in planting decisions. They will receive a rice contract payment whether they produce rice or not. The production decision will be primarily determined by relative market returns. To be eligible, a producer should have participated in the government program for at least one of the past five years.

The U.S. rice farm program for the period of 1974 through 1995 included three sets of policy instruments to support prices and incomes of rice produc-

ers. These included 1) supply control mechanisms through limitations on or incentives to reduce acreage planted to rice, 2) price supports through a price floor, known as the nonrecourse loan rate, and 3) income supports through deficiency payments that were coupled to the production of the rice farmers when they voluntarily participated in the government rice program. Due to relatively favorable target prices, the rice program typically attracted a high participation rate, i.e., over 94 percent of eligible production. Deficiency payments were important to rice producers, accounting for nearly 30 percent of the gross income of U.S. rice producers from 1990 to 1995. The average annual government cost of the rice program during the same period was approximately \$550 million.

The FAIR Act significantly changes the price and income mechanisms for rice and other grains. Supply control mechanisms are essentially eliminated. Income support is decoupled from production of a specific program crop and replaced by a seven-year production flexibility contract that provides annual transition payments to producers who had participated in the commodity programs for at least one of the past five years. The FAIR Act establishes a sevenyear payment contract with farmers and ranchers. Eligibility for payments is not influenced by current crop planting, production or prices. The contract payments are allocated among farmers from a fixed but declining amount by making payment on 85 percent of a calculated base acreage times program yields (Table 8). Nonrecourse loans will continue to be available to rice producers at a maximum rate of \$6.50 per hundred weight (cwt).

The FAIR Act retains export assistance programs for rice and other grains. These programs include Export Credit Guarantee programs (GSM), Market Access (promotion) Programs (MAP), P.L. 480 food aid, and the Export Enhancement Program (EEP). EEP subsidizes exports into markets as a countervailing policy to unfair export competition. Export programs have been traditionally important for the U.S. rice industry as 20 to 40 percent of annual rice exports have relied upon these government programs in the past.

Projections of rice production are based upon planted acreage and yields estimates as influenced by market returns. Acreage is generally determined by net returns to producers, while changes in yields over time are driven by research expenditures. Total U.S. rice area harvested decreased from 3.32 million acres in 1994 to 3.09 million acres in 1995. Under the new policy reform, rice acreage declined by 10 percent, resulting in only 2.8 million acres in 1996. Acreage is expected to increase to 2.9 million acres in 1997 due to higher prices in 1996. Over the longer run, area harvested ranges between 2.8 to 3 million acres (Table 8 and Figure 13).



Long grain harvested acreage declined to 1.96 million acres in 1996 from 2.31 million in 1995 and gradually declines to 1.87 million in 2010 (Table 9). Medium grain acreage, on the other hand, increased to 835 thousand acres in 1996 from 781 thousand in 1995 due to area gains in California and a shift from long grain to medium grain varieties in Arkansas. Medium grain area is expected to decline to 793 thousand acres in 1997 due to the relative strength of long grain rice prices (Table 10). The medium grain acreage recovers in 1998 at 878 thousand acres, and increases steadily thereafter to 951 thousand acres. Over the projection period, long grain acreage is projected to decline by 0.3 percent per year on the average, and medium grain acreage increases by 0.9 percent per year. For purposes of comparison with other countries, Table 11 provides U.S. rice supply and utilization in metric units.

The projected reduction in U.S. rice acreage is not uniform across all states (Table 12 through Table 17 and Figure 14). Arkansas' total rice area declined to 1.17 million acres in 1996 from 1.34 million in 1995 but is expected to stabilize around 1.2 million acres over the forecast period. All the decline in the Arkansas rice area comes from long grain acreage, as medium grain area increases. Arkansas long grain area is expected to increase to 977 thousand acres in 1997 and 994 thousand acres in 1998 before gradually declining to 908 thousand in 2010. Arkansas' medium grain area, however, increases by 1.2 percent per year over the forecast period (Table 12 and Figure 15).



Fig. 15. AGRM 1997 Projections: Arkansas Rice Supply by Type



Louisiana's total rice area decreased to 533 thousand acres in 1996 from 570 thousand in 1995, with all the decline coming from medium grain area (Table 13 and Figure 16). Texas' area declined to 298 thousand acres in 1996 from 318 thousand in 1995 (Table 14). Missouri's area declined to 90 thousand acres from 112 thousand (Table 15), and Mississippi's acreage decreased by the largest percent to 208 thousand acres in 1996 from 288 thousand in 1995 (Table 16). California's acreage increased to 500 thousand acres in 1996 from 465 thousand in 1995 and is expected to range between 481 to 514 thousand acres over the projection period. The average annual changes in harvested area by state over the projection period are as follows: Arkansas, +0.3 percent; Louisiana, -0.2 percent; Texas, -0.5 percent; Missouri, +0.2 percent; and Mississippi, -0.2 percent; and California, +0.2 percent.





Acreage declines are expected to be offset partially by yield gains resulting from continued research expenditures for rice (Figure 17). Long grain yields would grow by 0.4 percent per year while medium grain rice yields are projected to grow faster at 0.7 percent per year. The average U.S. rice yield increased to 61.21 cwt per acre in 1996 from 56.21 cwt in 1995. Yields decrease to 60.88 cwt in 1997 before steadily increasing 66.12 cwt by 2010.

In 1996, the higher yields (8.9 percent above 1995) partially offset the substantial decline in acreage (-9.5 percent), resulting in only a slight decrease in production (1.5 percent) at 171.3 million cwt compared to 173.9 million in 1995. Unlike the previous



U.S. baseline projections, which showed declining total U.S. output, the current baseline shows total production increasing to 186.6 million cwt in 2010 from 176.7 million cwt in 1997. On the average, long grain production would remain relatively flat, while medium grain production is projected to increase by 1.6 percent per year over the projection period. Figure 18 shows total U.S. rice production by state.



Following an initial decline in total supply to 206.7 million cwt in 1996 from 212.5 million in 1995, total supply ranges between 209 to 217 million cwt until the year 2005 and steadily increases thereafter to 233 million cwt in 2010 as imports and production continue to increase. The increase in imports is driven by the decline in real Thai 5% fob price and the growth in domestic U.S. rice consumption.

Domestic use of rice is projected to increase to 107.2 million cwt in 1997 from 104.7 million in 1996. It increases steadily to 135.2 million cwt by 2010 (Figure 19). With a stable population growth of less than one percent over the forecast period (Appendix Table 1), the expansion in rice consumption is a result of increased per capita direct and processed food consumption. The increase in food consumption is driven by growth in income and declining real retail prices, assuming low levels of inflation rates over the period (Appendix Tables 2 and 4). Seed demand declines as planted rice acreage declines. Small increases in brewing demand is driven by income growth.



Given a relatively inelastic domestic demand for U.S. rice, the availability of domestic rice supply for exportation declined from 83.0 million cwt in 1995 to 78.0 million in 1996 and is projected to be only 67.4 million by 2010 (Figure 20). Long grain exports decrease to 42.0 million cwt in 2010 from 60.0 million in 1996 as both real Thai 5% fob price and U.S.



export supply decline. Medium grain exports, on the other hand, increase from 18.0 million in 1996 to 25.4 million cwt, mainly due to the increase in exportable supply, which more than compensates for the decline in real medium grain export price.

The nominal season average farm price (SAFP) increased to \$9.85 per cwt (rough basis) in 1996 from \$9.15 in 1995 and is projected to decline to \$9.50 in 1997 due to larger U.S. production and weaker international prices. Farm prices decline over the 1998 to 2000 period but increase from \$9.02 in 2001 to \$9.65 by 2010 (Figure 21). The average long grain farm price decreases to \$9.72 in 1997 from \$10.23 in 1996. It is expected to range between \$8.84 and \$9.23 for the 1998-2002 period; thereafter, the long grain price increases from \$9.31 in 2003 to \$9.68 by 2010.



The average medium grain farm price increased from \$8.86 per cwt in 1995 to \$9.06 in 1996, and remains flat in 1997. After a decrease to \$8.37 in 1998, the medium grain price converges steadily to the long grain price by the end of the projection period (Figure 22).



The long grain farm price maintains a premium over the medium grain farm price throughout the entire projection period. The price premium narrows from \$1.17 per cwt in 1996 to \$0.06 by 2010. The

long grain export price (FOB Houston) is projected to increase to \$20.81 per cwt (milled basis) in 1997 from \$20.32 in 1996 and decrease to \$19.88 in 1998 before steadily increasing to \$22.78 by 2010 (Table 8). The medium grain export price (FOB California) is projected to increase to \$20.17 per cwt (milled basis) in 1997 from \$19.28 in 1996, and declines to \$19.51 per cwt in 1998 before increasing steadily to \$21.31 in 2010. In real terms, both U.S. farm and export prices steadily decline over the projection period.

#### China

China's government policies significantly influence its rice economy. Economic reforms and opening of trade to the outside world are central to China's development formula. However, the current five-year plan also reconfirms the role of state-owned enterprises, which still directly accounts for more than one-third of total industrial output (Department of State, 1995). Under the ongoing economic reforms, farmers determine their rice acreage based not only on the government procurement prices but also on expected free market prices and the adoption of new technologies.

Following two years of declining production, rice harvested area in 1995 and 1996 increased to 30.7 million ha from 30.3 million in 1994, partly due to favorable government policies and market prices. The area harvested in 1997 is projected to be nearly 31 million ha and would increase slightly to 31.3 million in 2001 before declining slightly to 31.0 million by the end of the projection period. One reason for this decrease is the decline in real procurement prices, with growth in CPI remaining at 9.8 percent over the forecast period. Nominal rice procurement price was raised in 1996 by an average of 30 percent in grainproducing provinces such as Jiangxi, Anhui and Sichuan. Real input prices remained stable. Rice vields in China are influenced by the free market price, the flow of new technologies, as well as by government price policies. Yields are projected to decrease slightly to 4.27 mt per ha in 1997 from 4.36 mt per ha in 1996 and gradually increase to 4.62 mt per ha by 2010. Total production is projected to decrease to 132.3 mmt in 1997 from 133.7 mmt in 1996 before increasing gradually to 143.5 mmt by 2010 (Table 18 and Figure 23). Off-farm employment has



become a problem for China's grain production as farmers find better-paying industrial jobs and rural industrial development uses an increasing amount of farm land.

Chinese annual per capita rice consumption is projected to decrease slightly to 108.2 kilograms in 1997 from 108.6 kilograms in 1996 before declining to 106.3 kilograms by 2010. With a negative income elasticity, per capita consumption declines slightly as real income grows. Real GDP is projected to grow around 9 percent per year over the projection period, the second fastest growth rate (second only to Vietnam) among the rice economies. Total consumption, however, is projected to continue to increase as population grows slightly (1.03 percent in 1996 and stabilizing at 0.65 percent by 2006). USDA Foreign Agricultural Service (1997c) reported that consumer preferences may be shifting away from the traditionally grown rice varieties in China. Consumers in Shanghai are said to prefer japonica and other highquality short grain rice varieties compared to early rice. Early rice is fed to hogs. The area planted to japonica in Heilongjiang province, the largest producer, increased by 30 percent in 1996.

China abolished direct export subsidies on January 1, 1991. Many of China's manufactured exports, however, receive indirect subsidies through guaranteed provision of energy, raw materials or labor supplies (Department of State, 1995). In 1994, rice exports were banned, and local governments were given authority to set ceiling prices. The country was a net importer of 1.97 mmt rice in 1994 due to a weather-related production shortfall. Annual net rice imports declined substantially to 550 thousand mt in 1995. Thailand dominates China's official rice imports, and Vietnam, which borders China, dominates unofficial trade. China is expected to remain a net importer of rice during the entire forecast period, with net imports projected to increase to 325 thousand mt by 2010 from 50 thousand in 1996. Ending stocks are projected to range from 23 to 26 mmt over the projection period.

#### India

India is experiencing a trend of diverting area from food grains to commercial crops, which underlies the sharp decline by more than 3 percent in India's food grain production in the 1995 marketing year. While wheat area declined by over half a million ha, and coarse cereals by nearly half a million ha, oilseed area is estimated to have increased by nearly a million ha. Other dampening factors included delays in crop sowing due to belated monsoon and skewed distribution of rainfall, causing floods in some parts of the country. Reduction in the use of fertilizers and the cumulative effect of unbalanced nutrient use over the years have also caused a decline in productivity.

India harvests more rice area than any other country, and it has the second largest production of any country following China. The area harvested is projected to increase from 42.7 million in 1996 and to 43.3 million ha by 2010 (Table 19 and Figure 24). This increase is driven by technology and infrastructure development, which is partly offset by the decline in real farm harvest price. The use of hybrid rice is gaining popularity in India. Several research institutions have successfully developed highly promising hybrids, which augur well for the country's rice industry. The Indian Council of Agricultural Research (ICAR) projects that the area under hybrid rice will expand from the current 50 thousand ha to over 2.0 million ha in 4 years-or nearly 5 percent of total rice area. Hybrid rice is increasingly being planted in Punjab, Haryana and Western Uttar Pradesh in North India, and in Andhra Pradesh, Karnataka and Tamil Nadu in the South. ICAR has developed seven location-specific hybrid rice varieties, in addition to the six being marketed by private companies. The In-



dian Agricultural Research Institute (IARI) in New Delhi has also developed the first nuclease-bred variety (PNR 381) for the upland areas of the country. The early maturing, semi-dwarf rice gives superior grain quality and is resistant to multiple pests and diseases of rice. PNR 381, which is widely used in Uttar Pradesh, is found suitable both as a directseeded crop in rain-fed upland areas and as a transplanted crop in irrigated areas. The Central Rice Research Institute (CRRI) of Cuttack has also released four new high-yielding rice varieties suitable for different areas in Orissa. Lastly, India plans, through its national rice biotechnology network (NRBN), to develop hybrid rice using biotechnology to improve yields. These developments indicate that technology can provide the competitive edge for India's rice industry in the long run.

India's rice crop is mostly rain fed. Hence, it is highly dependent on monsoon rains. The country has experienced favorable weather over the last eight years, boosting its production. Rice yields are responsive to changes in fertilizer prices and the adoption of high-yielding varieties. Yields are projected to increase at an average annual rate of 1.4 percent, from 1.87 mt per ha in 1996 to 2.27 mt by 2010. Total production is projected to increase to 82.5 mmt in 1997 from 80 mmt in 1996, and increases steadily to 98 mmt by 2010.

While per capita rice consumption in India is pro-

jected to decline from 83.7 kilograms in 1996 to 81.5 kilograms in 2010, total consumption is projected to grow steadily due to population growth (1.7 percent in 1996 and stabilizing to 1.4 percent by 2005) and income growth (6.7 percent in 1996 and increasing to over 7 percent by 2002). Total consumption in 1997 increases to 80.7 mmt from 79.8 mmt in 1996 and increases steadily to 95.9 mmt by 2010.

The food processing industry is one of the major growth sectors in India. REI Agro Ltd of Calcutta has built a Rs 218-million, 72-thousand mt per year basmati rice processing plant at Bewal in Haryana. The company plans to export 90 percent of its production to the United States, Korea, Europe, Japan and Australia.

Central and state governments still regulate the prices of most essential products, including food grains, sugar, edible oils, basic medicines, energy, fertilizers, water, and many industrial inputs (U.S. Department of State, 1995). India uses procurement prices and open market sales program to stabilize prices. The government sets fixed procurement prices, which serve as a price floor for producers. A procurement price prevents substantial declines in the rice price while open market sales program prevents significant increases in price. The minimum export price was eliminated both for basmati and nonbasmati rice in 1994. In 1995, the government fixed the sales price of rice exports at the open market price. India has devalued its exchange rate to improve its export competitiveness (U.S. Department of State, 1995). The heavy demand for Indian basmati rice in Europe, West Asia and America resulted in higher prices in the 1996 marketing year. The Food Corporation of India proposed to increase the rice levy to a uniform 75 percent in all major producing states, an action that is likely to disrupt India's rice export prospects and depress paddy prices.

India was the world's fourth largest exporter of rice in 1996. Its primary rice export destinations are Saudi Arabia, UAE, UK, Kuwait, USA, Bahrain, Sri Lanka and Oman. Rice exports increased dramatically in 1994, amounting to 4.2 mmt, as the country relaxed its export quota in response to substantial production and stock build-up. Net exports decreased slightly to 4.0 mmt in 1995 and substantially to 1.7 mmt in 1996. In the 1995 marketing year, India exported basmati rice valued at Rs 8.5 billion, and non-

basmati rice worth Rs 37.2 billion. The declining trend in exports is expected to continue until 2000, with net exports reaching 1.6 mmt, before increasing slightly to 2.0 mmt by 2010. Exports are driven mainly by excess rice supply. The Indian government's recent decision to fully enforce a rule that requires rice millers to sell about 75 percent of rice to state-run food agencies may have a dampening effect on the country's rice exports. The government has decided to fix exports of food grains at 2 percent of India's production every year. The allocation has been reduced for the next two years to 2 percent to give higher priority to domestic food security requirements. At present, there is no quantitative ceiling on export of rice from private stocks; but the ceiling is imposed on non-basmati rice exported from the stocks of the Food Corporation of India.

India and Pakistan have a duopoly over basmati rice exports. The two countries are the only significant producers of high quality basmati rice. Basmati rice accounts for only 1.0 mmt or 5 percent of the total world rice trade. In another development, the government of India plans to introduce futures trading in basmati rice and non-edible commodities.

Ending stocks are projected to build-up steadily to 12.5 mmt in 2010 from 9.5 mmt in 1996. The Indian government may decide to impose quantitative restrictions on stocks of non-basmati rice exported on private accounts, which are now under open general license (OGL). The relatively low level of the country's food grains stock in the central pool, which is caused by the decline in procurement, has been a cause for concern.

#### Pakistan

Pakistan has pursued policies aimed at private sector-led development, macroeconomic stability and structural reforms. Implementation has been uneven and received with mixed success. Import tariffs remain quite high as the government seeks to protect local industry and generate fiscal revenues.

The rice area in Pakistan is determined by government price policies. The basic policy is aimed at increasing rice production through improved yields and government support prices, which are adjusted annually to keep pace with increased costs of production. The government support price is assumed to increase steadily over time in real terms. Increases in consumer prices are expected to stabilize at 19.2 percent by 2001 from 10.2 percent in 1996 (Appendix Table 4). In October 1996, Pakistan's cabinet raised its rice procurement price for farmers by at least 8 percent for 1996-97 (July-June) rice crop and announced that it is ready to buy large volumes of the new crop. Producers' prices are kept lower than world prices through state control of exports and government procurement.

The rice area harvested in Pakistan is projected to range from 2.2 to 2.3 million ha during the forecast period (Table 20 and Figure 25). Rice yields in Pakistan are responsive to input prices and the adoption of high-yielding varieties. Yields per ha in 1997 are expected to remain at the 1996 level of 1.91 mt and increase gradually to 2.20 mt by 2010. Following the yield trend, total production is projected to increase steadily from 4.27 mmt in 1996 to 4.91 mmt by 2010.



Annual per capita consumption of rice in Pakistan is lower than in other Asian countries, at 19.4 kilograms in 1996, and is projected to decrease gradually to 18.2 kilograms by the end of the projection period. However, a relatively high population growth rate results in an increase in total rice consumption from 2.6 mmt in 1996 to 3.6 mmt by 2010.

Pakistan is projected to remain as a major exporter, i.e., the fifth largest, in international rice trade. Net

rice exports in 1997 are projected to decline to 1.6 mmt from 1.7 mmt in 1996 and stabilize around 1.6 mmt thereafter. Ending stocks are projected to remain in the range of 400 to 900 thousand mt over the forecast period.

#### Myanmar

Myanmar is moving away from a centralized economy and trying to re-enter the world community after more than three decades of economic isolation. The economy has promising potential, given its rich natural resources and relatively low-wage labor. More than 50 percent of its population is within the working ages of 15 through 59. Private corporations are now permitted to participate in infrastructure development projects. More than half of Myanmar's gross domestic product and half of its foreign exchange earnings come from agriculture, forestry, fishing and livestock.

Substantial investments are pouring into Myanmar, and many will have direct benefits to the country's rice industry. Singapore, recognizing Myanmar's potential, invested a total of \$584 million in the country by the end of 1995, which accounted for 22 percent of Myanmar's total foreign investments going to 36 projects, including one which aimed at improving the output of the country's fragrant rice varieties. Marubeni Corporation is also entering into a joint venture with the Myanmar government by spring 1997 to produce rice for animal feed. The venture is expected to produce 150 thousand mt by 2004, and is projected to reach 3.0 mmt per year eventually or about 30 percent of the country's current level of rice production. Rice feed is planned to be exported to other Asian countries beyond the year 2000.

The rice area harvested in Myanmar is strongly influenced by government rice prices and technology. In 1995, the country implemented a policy requiring two wet-season rice crops on all designated rice land. Following the current support policies and the expansion in irrigated rice area, the total harvested area is projected to increase to 6.3 million ha by 2010 from 5.7 million ha in 1996 (Table 21 and Figure 26). The government has developed 800 thousand ha of summer (second crop) irrigated rice, with an additional 800 thousand ha planned to be brought into production over the next several years. Average yields per ha are projected to increase steadily at 1.5 percent per year to 2.14 mt by 2010 from 1.74 mt in 1996. As a result, total production is projected to grow steadily to 13.4 mmt in 2010 from 9.9 mmt in 1996.

#### Fig. 26. AGRM 1997 Projections: Myanmar Rice



Total rice consumption is projected to increase to 9.8 mmt in 1997 from 9.3 mmt in 1996. Consumption will continue to steadily increase to 12.5 mmt by 2010 due to rapid population growth of 2.1 percent and income growth of 2.7 percent per year. Annual per capita consumption ranges from 203 to 209 kilograms over the forecast period. Per capita consumption, however, may be overstated because of the existence of substantial amount of unreported trade with China and different ethnic tribes bordering the country along the borders with Laos and Thailand.

While Myanmar is an emerging major exporter in the international rice market, current trade projections are revised downward relative to the previous baseline, because the government's original targets for production are unlikely to be attained based on the evidence of the past two years. An increase in exports is driven mainly by available supply. The government of Myanmar monopolizes rice exports. Net exports are projected to increase to 497 thousand mt in 1997 from 266 thousand in 1996 and steadily increase to 881 thousand mt by 2010. Projected ending stocks increase to 1.7 mmt by 2000 from 1.05 mmt in 1996, and decrease gradually to 830 thousand mt by 2010.

#### Vietnam

Vietnam's transition to family farming (1988-92) from the contract system (1982-87) supported the agricultural liberalization efforts and provided incentives to producers. Farmers were assigned long-term leases on their land, and the land rights were transferable. Farmers were no longer required to sell a part of their production to the state at prices below those prevailing in the market. The rice retail market was privatized. Food grain subsidies to government employees and army personnel were eliminated.

Vietnam is attracting foreign investment on several fronts-strengthening the foundation of its ongoing economic growth, especially its agricultural sector. Ciba (now called Novartis, after merging with Sandoz), one of the first major companies to invest in the country, has broken ground for a new agrochemicals and pharmaceutical complex in Dong Nai province near Ho Chi Minh City. The facility will package crop protection chemicals and pharmaceutical products to be marketed in the country. The products include Tilt, a fungicide, and Sofit, a herbicide, for rice. Tomen Corporation will provide a \$US215 million loan to the Vietnam Chemical Corporation to build the first phosphate fertilizer plant in Vietnam. The production capacity of the plant is 330 thousand mt per year of fertilizer intended for rice production. Construction is planned to start in 1997 and will take 6 to 12 months to complete. Rabobank Nederland, one of the world's top 40 banks with US\$175 billion in assets, has set up an office in Ho Chi Minh City and intends to provide finance, market analysis and other services "to help Vietnam become a major agricultural producer." There are now three Dutch banks with operations in Vietnam, helping to support 27 Dutch projects involving a total of US\$447 million. Rabobank, however, is the first Dutch bank to concentrate on agribusiness in the country.

Vietnam's rice industry is also attracting direct investments. Mitsui & Co Ltd (Japan) and two Hong Kong partners (Golden Resources Development International Ltd and the Bank of East Asia) have established a joint-venture, Vietnam Resources Rice Processing Industry, to produce refined rice for export. Golden Resources is said to have 70 percent of Hong Kong's retail rice market and initiated the joint venture to diversify its rice supplies. Equity is divided with four regional Vietnamese municipalities taking 51.5 percent and the foreign companies, 48.5 percent. The US\$10 million-project which has been established in My Tho, a major urban center in Mekong Delta, will have a full processing capacity of 90 thousand mt of rough rice initially (1997). It will expanded to 180 thousand mt per year by 2000. The Vietnamese government also has approved a US\$2 million investment project for a rice drying system with a capacity of 1 mmt. Another US\$18million project is being undertaken by the governments of Vietnam and Denmark to develop the milling system in Thai Binh, Soc Trang and Can Tho provinces. Vietnam has 5000 rice mills, with a total annual capacity of 10 mmt of rice, and facilities that husk, sort and polish rice, with a capacity of 2.3 mmt per year.

Rice production in Vietnam has increased rapidly over the past decade due to the economic reforms instituted by the government, and expanded use and improvements in technology. One of the major catalysts of the country's march toward progress is a socio-economic development plan for the Mekong River delta which will cost US\$6 billion over the next five years and US\$28 billion over the following 10 years. The 39,600-square kilometer delta contributes 60 percent of the country's food output and half of its rice exports. Rice accounts for 70 percent of the delta's 2.6 million ha of agricultural land. The goal of the plan is to upgrade the delta's food production through intense cultivation and improve the quality of rice. The country's Ministry of Agriculture and Rural Development (MARD) has implemented a US\$120 million program to improve the quality of the country's rice for the period 1996 through 2000. The focus will be on boosting capacity and upgrading facilities for drying, husking, screening and preserving. Another aspect of the program is standardizing and integrating the collection and processing system, which is presently done by the private sector. The country's Planning and Investment Ministry is to use a \$20-million grant from the Danish government to improve rice quality and limit post-harvest losses.

Given the favorable developments on the supply

side, a high growth rate in rice production is expected to continue in Vietnam throughout the projection period. Total area harvested is projected to increase slightly to 7.1 million ha in 1997 from 6.9 million in 1996 and remain relatively steady around 7.0 million ha over the forecast period (Table 22 and Figure 27). Yields per ha are projected to continue to increase steadily from 2.46 to 3.02 mt during the same period. Total production is projected to increase slightly to 17.8 mmt in 1997 from 17.0 mmt in 1996, and grow steadily to 21.1 mmt by 2010.

#### Fig. 27. AGRM 1997 Projections: Vietnam Rice



Due to low but rising per capita incomes, per capita rice consumption is projected to increase to 196 kilograms in 1997 from 188 kilograms in 1996, and stabilize around 199 kilograms during the rest of the forecast period. Vietnam's economy is expected to have the fastest growth (10.2 percent in 1996 and stabilizing at 9.5 percent by 2000) among the major rice economies (Appendix Table 2). Total rice consumption will increase to 15.1 mmt in 1997 from 14.3 mmt in 1996 and to 18.3 mmt by 2010 due to population and income growth.

Vietnam is emerging as a major rice exporter and has overtaken India as the second largest Asian rice exporter in 1996. According to news sources, Iraq agreed to buy 300 thousand mt of Vietnamese rice per year for the next four years. Vietnam raised its export quota from 2.5 mmt to 3.0 mmt during the 1996 marketing year. The country limits rice exports by a licensing system, but has been pressured to liberalize export trade. The country is expected to relax the state's monopoly on rice trade by allowing private companies to sell grain abroad. It is also considering replacing its rice export quotas with a system of export taxes to make the rice sector more flexible and competitive in international markets. To boost exports, the government may set aside special areas for the production of rice for export. In the Red River Delta, about 100 thousand ha will be reserved to develop improved strains of hybrid rice for export. By the year 2000, close to 1 million ha will be set aside in Dong Thap, An Giang, Soc Trang, Can Tho, Long An and Tien Giang provinces for rice production. Poor quality is identified as a major threat to the competitiveness of its exports and the reason why Vietnamese rice has a lower price compared to rice from other countries. To help improve quality, the government is also considering establishing a \$20.5 million rice exporting center in Binh Khanh commune, Can Gio province. It has a capacity of 3.7 mmt of rice per year, and would include a plant to process bran and rice husks. Currently, while the southern part of the country produces 11.0 mmt per year of rough rice, its milling facilities could only process 1.3 mmt of high quality rice per year. The rest is crudely processed by farmers, which can lead to quality problems.

Projected net rice exports in 1997 are expected to remain close to the 1996 level of 2.7 mmt and decline gradually to 2.5 mmt by 1999 before increasing steadily to 2.8 mmt by 2010. Inadequate information on rice stocks is reflected in an assumption of zero change over the forecast period.

#### Australia

Australia harvested 165 thousand ha of rice in 1996. Harvested area is projected to remain stable from 1997 to 2001 at 165 thousand ha, but is expected to increase gradually to 173 thousand ha by 2010 (Table 23 and Figure 28); harvested area is driven by technology. Rice growing in Australia was recently concentrated in two main areas. The major area is located in the Murray and Murrumbidgee Valleys in New South Wales (NSW), with only minor production in the Home Hill and Mareeba areas of Northern Queensland. NSW has approximately 1,800 irrigated growers. Rice yields in Australia are



influenced by market conditions and the development of new technologies. Average yield per ha is projected to decrease slightly to 6.23 mt in 1997 from 6.3 mt in 1996 before increasing steadily to 6.82 mt by 2010. Total production in Australia is projected to increase slightly to 1.2 mmt in 2010 from 1 mmt in 1996.

Per capita consumption is projected to grow steadily at 0.8 percent per year. Total consumption is projected to increase from 280 thousand mt in 1996 to 357 thousand in 2010 due to population growth (1.28 percent in 1996 and stabilizing at 0.86 percent by 2006). The country's economy is projected to grow at 3.3 percent in 1996 and stabilize around 3.4 percent by 2004.

Australia's rice trade is driven by available supply and time. The country exports nearly 70% of its production, with Papua New Guinea as its biggest single customer. Trade with some Pacific Island nations is sometimes constrained by economic problems and lack of foreign exchange. Net exports are projected to increase to 772 thousand mt in 1997 from 760 thousand in 1996 and decline to 697 thousand mt in 1998 before increasing steadily to 839 thousand mt by the year 2010.

The Australian market is open to imports with zero tariff. The local industry is concerned that imports are taking an increasing share of the domestic market (currently around 20 percent). Thailand is the largest supplier at 20-25 thousand mt per year. Other suppliers are India, Pakistan, Italy and the United States. Unlike previous baselines where zero ending stocks were assumed, the current baseline projects ending stocks ranging from 24 to 131 thousand mt.

#### Egypt

The harvested rice area in Egypt declined substantially from 575 thousand ha in 1994 to 420 thousand in 1995, a level that is maintained over the projection period (Table 24 and Figure 29) due to government policy limiting the use of water for rice. Rice yields in Egypt, which are one of the highest in the world, are projected to decline to 5.58 mt per ha in 1997 from 5.95 mt in 1996, before growing steadily to 6.47 mt in 2010. Increases in yields are mainly driven by improvements in development and extension of technology. Given a relatively fixed area for planting, total production follows the yield trend. Total production is projected to decline from 2.5 mmt in 1996 to 2.3 mmt in 1997 before steadily increasing to 2.7 mmt by 2010.



Annual per capita consumption is projected to decrease to 35.7 kilograms in 1997 from 38.0 kilograms in 1996 and declines gradually to 33.2 kilograms by the year 2010 as income grows. The country's economy is likely to grow by 3.3 to 3.4 percent per year over the forecast period. Due to population growth (1.92 percent in 1996 and stabilizing at 1.73 percent by 2006), total consumption is projected to increase from 2.4 mmt in 1996 to 2.7 mmt by the end of the forecast period. Net exports are projected to increase to 88 thousand mt in 1997 from 75 thousand in 1996 before decreasing steadily to 33 thousand by the end of the projection period. Ending stocks are projected to decrease from 258 thousand mt in 1996 to 146 thousand by 2010.

#### Argentina

Harvested area in Argentina is projected to increase steadily to 359 thousand ha by 2010 from 215 thousand ha in 1996 (Table 25 and Figure 30). Considerable land area is available to be developed for rice production. However, some of these areas are subject to excessive flooding, such as in Corrientes. Irrigation systems also need to be developed at a reasonable cost to sustain the expansion of rice area. Gains in yield are expected due to improved varieties, technology and fertilizer use. The average yield per ha is projected to increase from 3.26 mt in 1996 to 4.15 mt by 2010. Total production is projected to double over the forecast period, increasing to 1.5 mmt in 2010 from 700 thousand mt in 1996.



Per capita consumption is projected to decrease to 7.06 kilograms in 1997 from 7.21 kilograms in 1996 before increasing steadily to 7.95 by 2010. Total consumption is projected to increase from 250

thousand mt in 1996 to 318 thousand by 2010. The country's economy is assumed to grow well over 4 percent per year over the projection period. Argentina previously maintained export taxes on rice, but starting in 1992, a subsidy of 2.5 percent was implemented. Argentina is a member of the MERCOSUR trade bloc that was created in March 1991, eliminating tariffs, and implementing common external tariffs in January 1995. The other members of the bloc are Uruguay, Brazil and Paraguay. An increase in external tariffs from 10 percent to the current level of 20 percent has made Argentine rice exports move competitively into Brazil. The country's total exports are projected to increase substantially from 450 thousand mt in 1996 to 1.2 mmt by 2010, equivalent to an annual growth of nearly 7 percent. Ending stocks will range from 60 to 123 thousand mt during the same period.

#### Uruguay

Uruguay's harvested area and yields returned to trend levels in 1996 following a record yield of 4.55 mt per ha in 1995. Harvested area is projected to expand steadily from 140 thousand ha in 1996 to 201 thousand ha by 2010 (Table 26 and Figure 31). Yields increase from 3.71 mt per ha in 1996 to 4.3 mt by 2010. Total production is projected to increase to 864 thousand mt in 2010 from 520 thousand in 1996.

Total consumption is projected to increase gradu-



lowland-irrigated, lowland-rainfed and upland rice

ally from 80 thousand mt in 1996 to 101 thousand in 2010 as population grows at a decreasing rate (0.63)percent in 1996 to 0.3 percent by 2002). Per capita consumption is expected to increase steadily to 30.1 kilograms in 2010 from 25.2 kilograms in 1996 as incomes grow. The country's GDP growth is projected to range from 2 to 3 percent per year over the forecast period. Its inflation rate, which is declining, remains high at 30.1 percent in 1996. It is expected to decline and stabilize at 16.2 percent by 2001. As a member of MERCOSUR like Argentina, Uruguay is able to increase its exports to Brazil due to the favorable external tariff. Brazil has normally imported about 75 percent of Uruguay's rice. Uruguay rice exports to Brazil are usually priced at a premium of \$100 per mt above world market price. Uruguay exports high quality long grain rice to non-MERCOSUR markets. The large crop during the 1995/96 crop year enabled the country to export rice to Iran, Peru, Mexico and Senegal. The country's exports are projected to increase to 772 thousand mt by 2010 from 475 thousand in 1996. Ending stocks range from 24 to 48 thousand mt during the same period.

#### MAJOR IMPORTING COUNTRIES

#### Brazil

Brazil is in the midst of an ambitious economic restructuring program designed to bring inflation down, dismantle state control of the economy, reduce market barriers and encourage greater private sector (including foreign) investment to achieve sustainable long-term, non-inflationary growth. The process of trade liberalization initiated in 1990 has produced significant changes in the country's trade regime, resulting in a more open and competitive economy.

Brazil's economy grew around 2.8 percent in 1996 and is projected to grow faster in 1997 at 5.5 percent before declining to 3.9 percent by 2006. Population grew at 1.2 percent in 1996 and slows to 0.8 percent starting in 2005. The country experienced the third highest inflation rate in 1996 at 19.5 percent, which is expected to stabilize at 9.8 percent beginning in 2002.

Brazil has three rice production environments:

areas. Ninety percent of the lowland-irrigated area is planted to modern rice varieties, and 80 percent is planted in rotation with two years of rice and three years of pasture. There are 12,000 irrigated rice producers. The irrigated rice area is expected to grow at 3.1 percent per year over the forecast period. Upland rice, which has served as a reclamation crop in new areas that eventually convert to soybeans, has been decreasing over time and is projected to decline by 2.3 percent per year during the projection period. Total harvested rice area is projected to decrease by 0.4 percent annually from 3.6 million ha in 1996 to 3.4 million by 2010 due to a relatively larger decline in upland area compared to an increase in irrigated area (Table 27 and Figure 32). Production constraints include the prevalence of red rice, rice water weevil and low temperatures during flowering time. The average yield per ha is projected to increase from 1.8 mt in 1996 to 2.39 mt by 2010. Total rice production is projected to decrease slightly to 6.3 mmt in 1997 from 6.5 mmt in 1996 and increase steadily to 8.1 mmt by 2010.

#### Fig. 32. AGRM 1997 Projections: Brazil Rice



Annual per capita consumption is projected to increase gradually from 49.5 kilograms in 1996 to 52.2 kilograms by the end of the forecast period. Total rice consumption is projected to continue increasing steadily from 8.1 mmt in 1996 to 9.6 mmt in 2010. Brazil is expected to remain a rice-importing country, with projected net imports increasing from 1 mmt in 1996 to 1.9 mmt in 1998 before declining steadily to 1.5 mmt by 2010. Ending stocks are projected to decline to 355 thousand mt in 2000 from 528 thousand in 1996 and increase steadily to 900 thousand mt by 2010.

#### **European Union**

The EU is the world's largest economy and the largest U.S. trade and investment partner. Its aggregate economy is assumed to grow at 2.2 to 2.5 percent per year over the projection period. The EU is important both as a rice importing and exporting region; however, it is projected as a net importing region over the forecast period. The total harvested area is projected to decrease gradually from 405 thousand ha in 1996 to 365 by 2010 (Table 28 and Figure 33). Italy, which represents over 60 percent of the EU's rice area, is constrained from expanding its rice area beyond 240 thousand ha (Table 29 and Figure 34). Spain's rice area fluctuates between 50 and 100 thousand ha because it is dependent on rainfed reservoirs. Rice area in Spain is projected to average between the extremes at 78 thousand (Table 30 and Figure 35). The rest of EU's rice area (France and Greece) declines from 60 thousand ha in 1996 to 47 thousand ha by 2010 (Table 31 and Figure 36).

### Fig. 33. AGRM 1997 Projections: European Union Rice









The EU average rice yields are projected to increase from 3.99 mt per ha in 1997 to 4.28 mt per ha during the projection period. Average rice yield of Italy is projected to increase by 0.7 percent annually, and Spain's yield is projected to increase by 0.4 percent annually. Yields in other EU producing countries are expected to increase by 0.6 percent per year. Total EU production is projected to range from 1.5 to 1.6 mmt over the entire forecast period. Production of Italy increases from 850 thousand mt in 1996 to 1.0 mmt by the end of the projection period due solely to yield gains. Spain's production declines to 380 thousand mt in 2010 from 515 thousand mt in 1996. Production of the rest of EU is projected to decline from 215 thousand mt in 1996 to 174 thousand mt in 2010.

As the EU population grows slightly (0.31 percent in 1996 and declining to 0.13 by 2006), total rice consumption also is projected to continue growing marginally, i.e., from 1.8 mmt in 1996 to 2.3 mmt by 2010. Per capita consumption increases steadily from 5.2 kilograms to 6.0 kilograms over the same period. As a result of reduced import levies and export subsidies, EU's net imports are projected to increase from 298 thousand mt in 1996 to 736 thousand mt in 2010. Recently, the EU imposed a quota of 42,650 mt of rice imports from overseas countries and territories for the first four months of 1997. Italy's exports, which are driven by available supply and real average medium grain export price, are projected to increase to 554 thousand mt in 2010 from 525 thousand in 1996.

The EU has tightened up rice quality standards as part of a sweeping reform of its rice market under the Common Agricultural Policy. The regulation determining the standard quality of rice (No. 3073/95) replaces the 1976 requirements. It states that paddy rice must be of a "sound and fair marketable quality, free of odor." Moisture content is limited to 14 percent in 1996 and 1997 and 13 percent thereafter.

#### Indonesia

Indonesia was the fourth fastest growing rice economy in 1996, with GDP growing at 7.8 percent. This rate is projected to slow down gradually and stabilize at 5.5 percent by 2006. As the third largest rice-producing and consuming country in the world, Indonesia's participation in international rice trade is relatively small but volatile. At times it has been a major importer, at other times a significant exporter. The government has promoted a rice self-sufficiency policy for many years. Area harvested in the country is influenced by farm prices. The government is trying to expand rice production by developing 1.0 million ha of new rice area out of the 4-5 million ha of bogs in Central Kalimantan. The government also plans to introduce new high-yielding varieties, expand irrigation and encourage the use of efficient types of fertilizers. However, at least 400 thousand ha of the 1.0 million new agricultural land may not be suitable for rice due to thick peat layers. The estimated cost of the project is Rp5 trillion. The country is also developing 350 thousand ha of farmland for rice over 26 provinces distributed across South Celesta, West Java, North Sumatra and West Sumatra—aimed at increasing rice production. Java accounts for over half of Indonesia's rice production.

Indonesia's rice area is a function of government support and input (fertilizer) prices. The area harvested is projected to increase slightly to 11.64 million ha in 1997 from 11.6 million in 1996, and increase steadily to 12.24 million ha by the year 2010 (Table 32 and Figure 37). Due to a strong national commitment to rice research and the adoption of International Rice Research Institute (IRRI) varieties, yields are projected to increase, from 2.89 mt in 1996 to 3.33 mt per ha by the end of the projection period. Total production is projected to increase to 34.1 mmt in 1997 from 33.5 mmt in 1996 reaching an annual output of 40.7 mmt by 2010.



Per capita use, which has increased over the past several decades, decreased to 163.3 kilograms in 1995 due to the rationing effect of the policy of import restriction. Per capita consumption recovered in 1996 at 169.3 kilograms and is expected to increase slightly and stabilize at the 170-kilogram level thereafter. Per capita consumption is a function of GDP and real retail prices; the positive effect of GDP is counterbalanced by the negative effect of increasing real retail prices. Total consumption is projected to increase slightly to 35.7 mmt in 1997 from 35.0 mmt in 1996. By 2010, consumption is expected to be 42.7 mmt due to population growth (1.56 percent in 1996, but projected to decline to and stabilize at 1.33 percent by 2005).

Indonesia has made considerable progress in trade and investment deregulation. In May 1995, the country unveiled a comprehensive tariff reduction package that covered roughly two-thirds of all traded goods and will reduce most tariffs to under 5 percent by 2003. In general, the government allows the market to determine price levels. A system of floor and ceiling prices, however, is enforced for certain "strategic" food products such as rice. Direct government subsidies are limited to a few goods such as fertilizers (Department of State, 1995).

While Indonesia has a policy of self-sufficiency, production shortfalls are expected to make the country a net rice importer during the projection period. Under the GATT accord, Indonesia would phase-out non-tariff barriers and reduce the bound tariff rate to 160 percent by 2004. The country's National Logistics Agency (BULOG) announced that it will sign no rice import contracts in the 1996/97 fiscal year (April-May). Despite this pronouncement, USDA-Economic Research Service (1997b) reported that the country had net imports of 1.0 mmt in 1996. The country is expected to remain a source of volatility in the world rice trade mainly due to weatherrelated factors. The country's net imports increased sharply to 3.0 mmt in 1994 from 0.73 mmt in 1993 due to a weather-related production shortfall but declined to 1.25 mmt in 1995 and 1.0 mmt in 1996. Net imports are projected to increase to 1.7 mmt in 1997 and fluctuate within the range 1.5 to 2.0 mmt thereafter. Ending stocks increase steadily from 2.0 mmt in 1996 to 2.8 mmt in 2010 (Table 30).

#### Iran

Iran's economic difficulties are an offshoot of the country's struggle with a government program of austerity designed to cope with the excesses of the reconstruction boom of the early 1990s, the government's failure to implement promised economic reform measures and a stagnant petroleum sector. While the country did not resort to external debt during the eight-year war with Iraq, Iran borrowed heavily during 1988 through 1992-leading to the current external debt of nearly \$30 billion. The principal of the rescheduled debts became due in 1996, and the country's ability to make timely payments remains uncertain. To aggravate the situation, Iran is not a member of the WTO, and U.S. investments in and trade with Iran are prohibited under Executive Order 12959, which took full effect in August 1995 (Department of State, 1995).

While Iran's economy grew nearly 2 percent in 1996, it is expected to stabilize at a 3.3 percent by 2002. Iran experienced a high rate of inflation at 45.6 percent in 1996, which is assumed to decline to 30.2 percent in 1997 before stabilizing at 8.5 percent by 2001.

Harvested rice area in Iran has recently increased due to the government's high domestic price and its support in improving the agricultural market infrastructure, e.g., farm-to-market roads, which benefit rice production. The area harvested is projected to increase from 650 thousand ha in 1996 to 677 thousand in 1997 and increase steadily to 856 thousand ha by 2010 (Table 33 and Figure 38). Yields per ha increase from 2.92 mt in 1996 to 3.27 mt by 2010. Likewise, total rice production is projected to grow steadily from 1.9 mmt in 1996 to 2.8 mmt by 2010.

Annual per capita consumption is projected to decrease gradually from 51 kilograms in 1996 to 44 kilograms by the end of the forecast period. Growth in total rice consumption is projected to continue, increasing from 3.2 mmt in 1996 to 3.7 mmt in 2010, due primarily to population growth of over 2 percent over the forecast period. Total rice consumption is also a function of real CIF rice prices and real GDP.

Iran's government has a monopoly on rice imports. It is expected to remain a rice-importing country, with imports declining to 708 thousand mt in 1997 from 1.2 mmt in 1996. Net imports fluctuate around 900 thousand mt over the rest of the forecast period.



Sale of imported rice in Iran is controlled through issuance of ration coupons. Ending stocks decline to 501 thousand mt in 1997 from 802 thousand in 1996, and range between 500 to 600 thousand mt during the rest of the projection period.

#### Iraq

A United Nation's near-total trade and air embargo on Iraq and freezing of the country's overseas assets are still in effect, and the country's economy continues to deteriorate. For humanitarian reasons, the U.N. Security Council passed Resolution 986 in April 1995 allowing Iraq to export \$1 billion worth of oil every three months and to use the proceeds to purchase food, medicine and other essential items for civilian purposes. The Iraqi government refused to implement the resolution initially but finally agreed to an "oilfor-food deal" in December 1996.

Iraq depends on imports for most of its rice requirements for domestic consumption. Domestic production capacity has improved in recent years, but it remains vulnerable to weather and political conditions. It is becoming increasingly difficult for the government to convince farmers to sell their harvest to the government. Most farmers prefer to hoard their production or sell it on the black market at much higher prices than is paid by the government.

The USDA estimate of harvested area in 1995 has

been revised substantially upwards to 150 thousand ha from the previous estimate of 40 thousand. The area harvested increased to 175 thousand ha in 1996 and is projected to decline to 159 thousand from 1998 through 2000 before gradually recovering to 171 thousand ha by 2010 (Table 34 and Figure 39). Yields per ha are projected to increase steadily from 1.43 mt in 1996 to 1.93 mt in 2010. The revised USDA production estimate for 1995 increased substantially to 200 thousand mt from the previous baseline level of 50 thousand mt. Total production increased to 250 thousand mt in 1996 and is projected to reach 330 thousand by 2010.





Total consumption is projected to increase rapidly as population grows at 3 percent per year and incomes rise. Like Iran, Iraq's total rice consumption is driven by real CIF rice prices and real GDP. The country's inflation is assumed to be stable at 4.2 percent. Rice consumption increased substantially to 900 thousand mt in 1996 from 450 thousand in 1995 due to the food-related relaxation of the ban for humanitarian reason. The consumption is expected to adjust downwards in 1997 to a level of 773 thousand mt before steadily increasing to 1.2 mmt by 2010. Annual per capita consumption increased to 42 kilograms in 1996 from around 21.7 kilograms in 1995, but declines to 35 kilograms in 1997 before increasing to nearly 37 in 2010. The government procures and distributes rice. Net imports increased substantially to 750 thousand mt in 1996 from 250 thousand in 1995 but will decline to 541 thousand in 1997 before slowly increasing to 862 thousand mt by 2010. Ending stocks are projected to increase from 100 thousand mt in 1996 to 200 thousand in 1999 and stabilize at that level over the forecast period. In contrast, the previous baseline assumed zero ending stocks over the same period.

#### Saudi Arabia

The Saudi government has traditionally maintained price controls for basic utilities, energy and agricultural products. Water, electricity and petroleum products are heavily subsidized, with prices often substantially below the costs of production in order to share the wealth and spur development. The country is not a member of the WTO but a WTO working party has been formed to review its request for accession (Department of State, 1995)).

Since Saudi Arabia has virtually no rice production, its rice supplies are dependent upon imports. Providing best quality rice to consumers at a low price is a major government policy. While per capita consumption remains stable at 40 kilograms during the projection period, the total consumption forecast shows an increase from 645 thousand mt in 1996 to 1.2 mmt by 2010 as population grows rapidly, i.e., by more than 3 percent per year (second only to Iraq), and incomes grow by 3 percent per year (Table 35 and Figure 40). Consumption is determined by income and imported rice prices.



Saudi Arabia is projected to import all of its rice consumption requirements. While import subsidies have been used in the past, most imports are currently done through the open market. The government encourages suppliers to compete in providing the lowest possible import prices.

#### Japan

Japan's current economic slowdown, which began in mid-1991, has proven to be the longest in the country's postwar history. Japan's economy is undergoing serious structural pressures, due primarily to technology-driven global competition. The domestic rice sector in Japan has been insulated from international markets through high support prices and tight restrictions on rice imports. Japan imported 450 thousand mt in 1995, which exceeded the minimum access requirement of 230 thousand mt under the GATT accord. Exports in 1995 were 200 thousand mt, resulting in net imports of 250 thousand mt. Imports increased to 600 thousand mt in 1996 but are expected to decline to the minimum access level of 531 thousand mt in 1997 before increasing to 924 thousand mt by 2010.

The Japanese government has used land diversion programs to control rice supplies. Rice acreage is influenced by this government policy and rising costs of production. Japan's rice has rebounded from the 1993 cold-weather-related production shortfall, harvesting 2.2 million ha in 1994. The area harvested, however, declined slightly to under 2.0 million ha in 1996 from 2.1 million ha in 1995. To accommodate for higher yields, imports and limits on storage costs, the riceland diversion program is expected to be managed such that only 1.5 million ha of rice will be harvested by 2010 (Table 36 and Figure 41). Japan's



rice yields are influenced by high support prices, production costs and new technology. While the Japanese government allocated ¥115.3 billion in the fiscal 1995 budget for rice farmers, subsidies to producers of independently-distributed rice are being phased out. Yield per ha is projected to increase steadily from 4.76 mt in 1996 to 5.23 mt by 2010. After a low postwar rice production record of 7.1 mmt in 1993, production recovered in 1994, reaching 10.9 mmt. Production decreased to 9.8 mmt in 1995 and 9.4 mmt in 1996 and is projected to continue to decline to 7.6 mmt by 2010.

Japan's rice consumption is strongly influenced by a negative income elasticity. The country's per capita use of rice declined substantially over the past few decades and is expected to continue declining gradually from 73.5 kilograms in 1996 to nearly 66 kilograms by the year 2010. Income and population growth rates are assumed to decline. Consequently, total consumption decreased slightly to 9.25 mmt in 1996 from 9.3 mmt in 1995 and declines to 8.6 mmt by the end of the projection period.

Due to bumper rice harvests between 1994 and 1996, ending stocks in 1996 stood at 3.1 mmt-substantially higher than the 1995 level of 2.6 mmt and the target level of 1.5 mmt. The Ministry of Agriculture, Forestry and Fisheries intends to cut the stockpile by initially exporting 100 to 200 thousand mt of rice, including some imports. The ministry will follow a "rice-as-aid plan." About 10 nations have asked Japan to supply more than 60,000 mt of rice. Criticism of the use of imported rice for food aid is based on the notion that this prevents access of less expensive rice to Japanese consumers, violating the spirit of the Uruguay Round agreement. Ending stocks are expected to steadily decline such that by 2004, the government's target level of 1.5 mmt would have been attained.

#### South Korea

Korea's economy is based on private ownership of the means of production and distribution. Governmental intervention, however, has historically been used to guide the direction of economic development. This includes policy loans and discretionary enforcement of regulatory policies (Department of State, 1995).

A review of key demographic changes that oc-

curred in the country over the past couple of years offers a better understanding of the Korean rice industry. From the period 1970 through 1995, there was rapid rural-to-urban migration in the country, with the share of rural population declining from 45 percent of population to 10 percent. Young people moved to cities, leaving an older population and labor force in the farm sector. About 23 percent of the farm workers are over 60 years old, and 45 percent are women. Farmers are highly dependent on farm income due to the limited off-farm income opportunities.

To a large extent, this demographic shift has a dampening effect on the country's agricultural industry in general and on rice in particular. The country's major objective has been self-sufficiency in rice and increased rural incomes. The rice industry has been protected, and prices have been three to five times higher than world prices. Support policies have included producer price incentives, restrictions on rice imports and government purchases of rice output. Despite these policies, the harvested rice area in South Korea is projected to decline annually by 0.6 percent, from 1.05 million ha in 1996 to 959 thousand ha by 2010 (Table 37 and Figure 42). One factor causing this decline is the declining level of government support prices in real terms. The increase in government procurement prices in 1996 ranged from 1 to 6 percent. Yields, driven by improvements

#### Fig. 42. AGRM 1997 Projections: South Korea Rice



in technology, decline to 4.61 mt per ha in 1997 from 5.07 mt in 1996 before increasing slightly to 4.75 mt per ha by 2010. Total production would decline to nearly 5 mmt in 1997 from 5.3 mmt in 1996 and is projected to decline to 4.5 mmt by the end of the forecast period.

One favorable development is that rice farmers appear to respond well to a structural reform program being implemented by the Ministry of Agriculture, Forestry and Fisheries. Over 7,035 rice farming households have received financial support from the government to specialize in rice production. The average rice farming area per household rose 56 percent to 3.85 ha per household in 1995 from 2.47 ha in 1994. The number of farm households with more than 5 ha rice land also increased, i.e., more than tripled, from 395 to 1,426. To increase production and pay the government back, most rice farmers raised two crops a year, thus intensifying the land use rate to 138.3 percent from 129.7 percent.

Rice has become an inferior good in South Korea. It is projected that annual per capita use will decline steadily from about 111 kilograms in 1996 to 92 kilograms by 2010, a 1.3 percent annual decline. This decline is due to higher incomes (the country's growth in real GDP in 1996 at 7.3 percent is the fifth highest among the rice economies but will slow down to and stabilize at 5.7 percent by 2006) and higher real retail prices. Consumer prices are expected to increase by 5.1 percent per year during most of the projection period. Despite the population growth (1.03 percent in 1996 and less than 1 percent thereafter), total consumption is projected to decrease annually by 0.4 percent from 5.1 mmt in 1996 to 4.8 mmt in 2010.

In terms of trade, while the most explicit barriers to imports have declined over time, more subtle barriers remain intact. The typical trade barriers facing exporters into the country are the large number of regulations that complicate licensing, inspections, type approval, marking requirements and other standards affecting trade.

Under GATT, South Korea has agreed to increase imports 1 to 2 percent of domestic consumption for 5 years beginning in 1995, increasing to 2 to 4 percent of consumption by 2000 through 2004. With its developing country status and a special clause in the Uruguay agreement, the implementation period for tariffication is extended to 10 years, from 1995 through 2005. State trading is allowed to continue, and trade will be controlled by the state during the 10-year grace period. Korea imported 115 thousand mt in 1995 and 77 thousand mt in 1996. Imports are projected to remain flat in 1997 at 77 thousand mt and increase steadily to 237 thousand by the end of the forecast period. Recently, the United States complained about South Korea's purchase of rice from China through international open bidding. The Seoul government, however, has decided to uphold its stance for rice buying through this method. Projected ending stocks range from 755 to 918 thousand mt over the projection period.

#### Taiwan

Taiwan aims to accede to the World Trade Organization (WTO) and to develop into an Asia-Pacific regional operations center. In line with this goal, Taiwan has begun to take unilateral steps to liberalize its trade and investment regime (Department of State, 1995).

Taiwan plans to reduce supports for rice (along with other selected crops) over the next five years, in preparation for its application for membership in the World Trade Organization (WTO). Taiwan has agreed to convert most of its non-tariff barriers to tariffs or tariff quotas upon accession. The price guarantee programs currently in place will be kept, and imports will be permitted. Rice area harvested is projected to decline from 348 thousand ha in 1996 to 324 thousand in 1997 and increase to 334 thousand ha in 1998 before declining steadily to 219 thousand by the year 2010. This decrease is mainly due to a policy of reducing the second crop area from production and declining real farm harvest prices. Yields per ha, on the other hand, are projected to increase steadily from 4.08 mt in 1996 to 4.58 mt by 2010 (Table 38 and Figure 43). Average yield is a function of improvements in technology. The expected yield gain, however, is not adequate to compensate for the sharp decline in the area harvested-causing a decline in total production from 1.4 mmt in 1996 to only 1.0 mmt by the year 2010.

Per capita consumption declines from 66.4 kilograms in 1996 to 47.1 kilograms by 2010, causing total consumption to decrease from 1.44 mmt to 1.14 mmt during the same period, as per capita incomes



increase. Population growth is slightly lower than South Korea's, at 0.91 percent in 1996 and declines to 0.71 percent per year starting in 2006.

Taiwan's small rice and sugar exports enjoy indirect subsidies through guaranteed purchase prices higher than world prices. Fertilizer manufacturing is subsidized by offering lower fuel prices to domestic manufacturers. Taiwan has maintained domestic prices of rice higher than international prices. The government has purchased rice at two to three times higher than world price. Based on an assumption of Taiwan membership in the WTO, the country is expected to be a net importer of rice starting in 1997. Net imports are projected to increase steadily from 99 thousand mt in 1997 to 132 thousand mt by the year 2000 and would stabilize at this level over the rest of the projection period. Ending stocks are expected to be in the range of 156 to 233 thousand mt over the projection period.

#### **Rest of the World**

While the ROW is an aggregate region, there are a number of pertinent country-specific developments, especially on the demand side, that have substantial potential impact on world prices and hence will be mentioned here. One of these developments is the potential famine in North Korea brought about by weather-damaged crops and the country's urgent need for 500 thousand mt of U.S. rice and wheat. Colombia's possible purchase of a substantial quantity of rice is also a subject of speculation that has affected prices in 1996. Other countries that can, time and again, cause uncertainties in the rice market due to unexpected weather-related imports include Bangladesh and the Philippines.

The rest of the world is a net rice importer. Area harvested is responsive to low quality rice (Thai 35%) price and technology. Yields are projected according to historical patterns. Consumption is responsive to the relative world prices of wheat and Thai 35% rice.

Total harvested area in 1996 was 29.3 million ha and is projected to increase slightly to 31.2 million ha by 2010. Yields are expected to increase steadily from 1.58 mt per ha in 1996 to 1.93 mt per ha by the end of the projection period (Table 39 and Figure 44). Total production is projected to grow by 1.9 percent per year, from 46.4 mmt in 1996 to 60.3 mmt by 2010.



Fig. 44. AGRM 1997 Projections: Rest of the World Rice

Total consumption is projected to increase to 70 mmt in 2010 from nearly 58 mmt in 1996. The ROW imports are projected to range from 9 to 10 mmt over the projection period. Ending stocks range from 5 to 6 mmt during the same period.

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						Table 1.	World Ric	e Supply	and Utiliz	ation							
Variable	Unit / Yr	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Area Harvested Yield Production Total Consumption Net Exports Net Imports	(1000 ha) (mt/ha) (1000 mt) (1000 mt) (1000 mt)	148620 2.50 371590 370450 17585	148495 2.52 374870 375900 15269 15269	149015 2.55 379857 379144 15598 15598	149614 2.58 385901 384371 15733 15733	149808 2.61 390552 389100 15894 15894	150060 2.63 395171 394162 16138	150277 2.66 399850 398754 16347 16347	150576 2.68 404266 403480 16577	150627 2.71 407706 407908 16691 16691	150734 2.73 411438 412406 16886 16886	150876 2.75 415275 416157 16960 16960	151006 2.78 419231 419899 17183 17183	151132 2.80 423164 17395 17395	151301 2.82 427299 427031 17670 17670	151475 2.85 431456 431022 18003 18003	151648 2.87 435591 435037 18351 18351
Ending Stocks	(1000 mt)	50430	49400	50113	51643 51643 Tahla 2 T	53094	54103 54103	55199 de (Comb	55985 55985	55784	54816 Indica)	53934	53266	52932	53200	53634	54188
Country	Units / Yr	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
EXPORTERS	(1000 mt)	19821	17813	17878	17877	18033	18314	18536	18810	18988	19240	19341	19580	19804	20088	20432	20787
United States	(1000 mt)	2711	2477	2474	2486	2322	2246	2198	2195	2158	2136	2111	2094	2089	2102	2113	2139
Thailand Pakistan	(1000 mt)	5280 1635	5000	5680 1634	6018 1595	6261 1585	6407 1587	6522 1570	6645 1559	6747 1551	6908 1544	6906 1535	6987 1551	7048 1563	7098	7169 1585	7250 1589
Myanmar	(1000 mt)	265	266	497	599	640	749	795	813	815	821	829	839	848	859	870	881
Vietnam	(1000 mt)	3100	2750 750	2741	2540	2448 445	2503 407	2525	2580 404	2591 200	2607	2615 275	2641	2650	2692	2762	2817 202
Unita	(1000 mt)	300 4000	1700	424 1619	319 1577	415 1559	407 1560	410 1570	401 1591	390 1619	378 1653	3/5 1692	377 1737	378 1790	38U 1851	381 1925	382 2000
Australia	(1000 mt)	475	800	814	735	750	758	784	801	816	829	842	854	866	878	890	902
Egypt	(1000 mt)	75	75	88	83	81 201	78	74	02	99	61	56	52	47 075	43	88	33
liaiy+Uiriei EU Japan	(1000 mt)	914 200	300	0	020	000	0	004 0	700 0	700	6/0 0	0	0	0	0/2	000	000
Argentina	(1000 mt)	320	450	495	526	564	604	647	695	746	802	850	901	955	1017	1084	1156
Uruguay	(1000 mt)	546	475	477	502	522	538	558	580	605	622	648	670	694	719	745	772
IMPORTERS	(1000 mt)	19821	17813	17878	17877	18033	18314	18536	18810	18988	19240	19341	19580	19804	20088	20432	20787
United States	(1000 mt)	242 2	333 J	263	286	306	330	352	375	397	420	441	464	486	508	530	550
China	(1000 mt)	050	000	240	241	243	244	240	747	249	755	007	1002	092	067	007	092
Japan	(1000 mt)	450	009	531	606 606	000 682	758	773	789	804	820	837	854	871	888	906	924
Indonesia	(1000 mt)	1350	1000	1728	1792	1609	1583	1555	1551	1566	1554	1556	1520	1539	1632	1790	1990
Iraq	(1000 mt)	250	750	541	574	627	602	627	651	677	702	728	754	781	808	835	863
lran	(1000 mt)	1400	1200	708	924	906 010	886	872	863	858	857	859	864	871	881	892	906
Saudi Arabia Europoon Linion	(1000 mt)	GT0	040	1001	830	850	880	914	940 777	9/6	600L	1041	0/0L	2111Z	1149	118/	1220
South Korea	(1000 mt)	115			88	107	105	132	162	192	220	224	224	227	230	233	237
Taiwan	(1000 mt)	-185	- 88	66	110	121	132	132	132	132	132	132	132	132	132	132	132
Australia	(1000 mt)	30	40	42	38	40	42	45	47	49	51	53	55	57	59	61	63
Brazil	(1000 mt)	750	1054	1866	1925	1897	1840	1790	1735	1687	1653	1637	1634	1621	1598	1573	1544
ROW	(1000 mt)	12551	10033	8908	8422	8580	8821	9029	9216	9259	9385	9388	9555	9662	9763	9856	9921

						Tal	ole 3. Wor	Id Rice Ne	et Trade								
Country	Units / Yr	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
NET EXPORTERS	(1000 mt)	17585	15269	15598	15733	15894	16138	16347	16577	16691	16886	16960	17183	17395	17670	18003	18351
United States	(1000 mt)	2469	2143	2211	2200	2017	1916	1846	1820	1761	1716	1670	1630	1603	1594	1583	1588
Thailand	(1000 mt)	5280	5000	5440	5777	6018	6163	6276	6398	6498	6658	6656	6737	6798	6848	6919	7000
Pakistan	(1000 mt)	1635	1700	1634	1595	1585	1587	1570	1559	1551	1544	1535	1551	1563	1577	1585	1589
Myanmar	(1000 mt)	265	266	497	599	640	749	795	813	815	821	829	839	848	859	870	881
Vietnam	(1000 mt)	3100	2750	2741	2540	2448	2503	2525	2580	2591	2607	2615	2641	2650	2692	2762	2817
China	(1000 mt)	-550	-50	-376	-365	-251	-276	-253	-281	-329	-377	-380	-374	-364	-350	-337	-325
India	(1000 mt)	4000	1700	1619	1577	1559	1560	1570	1591	1619	1653	1692	1737	1790	1851	1925	2000
Australia	(1000 mt)	445	760	772	697	709	716	739	754	767	778	789	799	810	820	830	839
Egypt	(1000 mt)	75	75	88	83	81	78	74	20	99	61	56	52	47	43	88	g
Argentina	(1000 mt)	320	450	495	526	564	604	647	695	746	802	850	901	955	1017	1084	1156
Uruguay	(1000 mt)	546	475	477	502	522	538	558	580	605	622	648	670	694	719	745	772
NET IMPORTERS	(1000 mt)	17585	15269	15598	15733	15894	16138	16347	16577	16691	16886	16960	17183	17395	17670	18003	18351
Japan	(1000 mt)	250	300	531	606	682	758	773	789	804	820	837	854	871	888	906	924
Indonesia	(1000 mt)	1350	1000	1728	1792	1609	1583	1555	1551	1566	1554	1556	1520	1539	1632	1790	1990
Iraq	(1000 mt)	250	750	541	574	627	602	627	651	677	702	728	754	781	808	835	863
Iran	(1000 mt)	1400	1200	708	924	906	886	872	863	858	857	859	864	871	881	892	906
Saudi Arabia	(1000 mt)	615	645	750	830	856	886	914	945	976	1009	1041	1076	1112	1149	1187	1226
European Union	(1000 mt)	489	298	391	462	507	524	523	534	541	553	557	570	579	589	599	609
South Korea	(1000 mt)	115	11	17	88	107	105	132	162	192	220	224	224	227	230	233	237
Taiwan	(1000 mt)	-185	-88	66	110	121	132	132	132	132	132	132	132	132	132	132	132
Brazil	(1000 mt)	750	1054	1866	1925	1897	1840	1790	1735	1687	1653	1637	1634	1621	1598	1573	1544
Rest of World	(1000 mt)	12551	10033	8908	8422	8580	8821	9029	9216	9259	9385	9388	9555	9662	9763	9856	9921

						Tabl	e 4. Worlc	l Indica Ri	ce Trade								
Country	Units / Yr	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
EXPORTERS	(1000 mt)	17688	14791	15390	15545	15625	15933	16121	16378	16541	16787	16867	17084	17276	17522	17825	18135
United States	(1000 mt)	2142	1905	1831	1808	1671	1614	1558	1543	1495	1463	1427	1399	1374	1360	1342	1333
Thailand	(1000 mt)	5280 4626	5000	5680	6018 1505	6261 1505	6407	6522 1570	6645	6747	6908	6906	6987	7048	7098	7169	7250
Myanmar	(1000 mt)	1035 285	00/1	1034 707	C6C1	079	18CT	302 202	8001 812	1.001 718	1044	0008	1.001	50CT	1/018	028	1980 1980
Vietnam	(1000 mt)	3100	2750	741	2540 2540	040 2448	2503	2525	2580	2591	2607	023 2615	2641	2650	2692	2762	2817
India	(1000 mt)	4000	1700	1619	1577	1559	1560	1570	1591	1619	1653	1692	1737	1790	1851	1925	2000
EU excl. Italy	(1000 mt)	400	545	416	379	375	371	376	373	371	366	365	358	354	348	343	337
Argentina	(1000 mt)	320	450	495	526	564	604	647	695	746	802	850	901	955	1017	1084	1156 
Uruguay	(1000 mt)	546	475	477	502	522	538	558	580	605	622	648	670	694	719	745	772
IMPORTERS	(1000 mt)	17688	14791	15390	15545	15625	15933	16121	16378	16541	16787	16867	17084	17276	17522	17825	18135
United States	(1000 mt)	242	333	263	286	306	330	352	375	397	420	441	464	486	508	530	550
Thailand	(1000 mt)	0	0	240	241	243	244	246	247	249	250	250	250	250	250	250	250
China	(1000 mt)	850	800	800 1728	685 1702	666 1600	683 1583	663 1555	683 1551	719 1566	755 1551	756 1556	751 1520	742 1530	729 1632	718	707
Irad	(1000 mt)	250	750	541	574	6001	602	627	651	229	4001 2012	728	754	781	808	835	1990 863
Iran	(1000 mt)	1400	1200	708	924	906	886	872	863	858	857	859	864	871	881	892	906
Saudi Arabia	(1000 mt)	615	645	750	830	856	886	914	945	976	1009	1041	1076	1112	1149	1187	1226
European Union	(1000 mt)	1403	1368	1327	1357	1392	1401	1407	1416	1423	1432	1438	1447	1454	1461	1468	1475
Australia	(1000 mt)	30	40	42	38	40	42	45	47 1 705	49	51	53	55	57	59	61	63
ROW	(1000 mt)	10799	7600	7128	6894	7083	1040 7435	7652	7867	7941	8105	8107	8269	1021 8364	1330 8447	8521	1344 8562
						Table	5. World ,	Japonica	Rice Trad	e							
Country	Units / Yr	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
EXPORTERS	(1000 mt)	2132	3022	2488	2332	2408	2381	2415	2432	2447	2454	2474	2495	2528	2566	2607	2651
United States	(1000 mt)	568	572	642	678	651	632	640	651	664	673	684	694	715	742	771	805
Australia Eovot	(1000 mt)	475 75	800 75	814 88	735 83	750 81	758 78	784 74	801 70	816 66	829 61	842 56	854 52	866 47	878 43	890 38	902 33
Ley Providence of the second sec	(1000 mt)	514	525	519	516	511	506	508	509	511	513	516	519	521	524	526	529
Japan China	(1000 mt) (1000 mt)	200 300	300 750	0 424	0 319	0 415	0 407	0 410	0 401	0 390	0 378	0 375	0 377	0 378	0 380	0 381	0 382
IMPORTERS	(1000 mt)	2132	3022	2488	2332	2408	2381	2415	2432	2447	2454	2474	2495	2528	2566	2607	2651
Japan	(1000 mt)	450	600	531	606	682	758	773	789	804	820	837	854	871	888	906	924
South Korea	(1000 mt)	115	11	11	88	107	105	132	162	192	220	224	224	227	230	233	237
Taiwan	(1000 mt)	-185	-88 -88	66	110	121	132	132	132	132	132	132	132	132	132	132	132
Others (residual)	(1000 mt)	1/52	2433	1/81	1528	149/	1386	13/8	1350	1318	1281	1281	1286	1298	1316	1336	1359

						Table	5. World	laponica	<b>Rice Trad</b>	Ð							
ountry	Units / Yr	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
<b>KPORTERS</b>	(1000 mt)	2132	3022	2488	2332	2408	2381	2415	2432	2447	2454	2474	2495	2528	2566	2607	2651
nited States	(1000 mt)	568	572	642	678	651	632	640	651	664	673	684	694	715	742	771	805
ustralia	(1000 mt)	475	800	814	735	750	758	784	801	816	829	842	854	866	878	890	902
gypt	(1000 mt)	75	75	88	8	81	78	74	02	99	61	56	52	47	43	88	g
aly	(1000 mt)	514	525	519	516	511	506	508	509	511	513	516	519	521	524	526	529
apan	(1000 mt)	200	300	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hina	(1000 mt)	300	750	424	319	415	407	410	401	390	378	375	377	378	380	381	382
PORTERS	(1000 mt)	2132	3022	2488	2332	2408	2381	2415	2432	2447	2454	2474	2495	2528	2566	2607	2651
apan	(1000 mt)	450	600	531	606	682	758	773	789	804	820	837	854	871	888	906	924
outh Korea	(1000 mt)	115	11	11	88	107	105	132	162	192	220	224	224	227	230	233	237
aiwan	(1000 mt)	-185	-88	66	110	121	132	132	132	132	132	132	132	132	132	132	132
thers (residual)	(1000 mt)	1752	2433	1781	1528	1497	1386	1378	1350	1318	1281	1281	1286	1298	1316	1336	1359

					Tab	ole 6. Worl	d Rice Pr	ices and F	rice Rela	tionships							
Country	Units / Yr	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Indica Rice (High Qı	uality)																
Thai 100%B fob	US\$/mt	362	339	357	343	348	343	352	349	351	348	354	352	354	355	357	359
Thai 5% fob	US\$/mt	352	331	344	331	335	331	339	336	338	335	341	339	341	342	344	346
Thai 5% fob (1985\$	) US\$/mt	248	227	230	216	213	205	205	198	194	187	185	179	176	172	168	165
US No. 2 fob Hous US No. 2-Thai	ton US\$/mt	412	448	459	438	445	445	456	458	463	465	474	477	483	489	495	502
5% Margin	US\$/mt	60	117	114	107	110	114	117	121	125	130	133	138	142	147	151	156
Indica Rice (Low Qu	ality) and Wł	neat															
Thai 35% fob US Wheat No. 2.	US\$/mt US\$/mt	302 209	261 191	288 152	277 149	294 163	291 163	302 169	300 169	301 169	300 169	305 171	304 171	305 171	306 171	307 172	308 172
fob Gulf																	
Wheat/Thai 35% P. Thai 35%-	rice Ratio	0.69	0.73	0.53	0.54	0.55	0.56	0.56	0.56	0.56	0.56	0.56	0.56	0.56	0.56	0.56	0.56
US Wheat Margin	US\$/mt	93	70	136	129	131	128	133	131	132	131	134	133	134	134	135	137
Japonica Rice																	
U.S. No.2 MG fob C	A US\$/mt	445	422	445	430	437	439	447	448	452	454	459	462	464	466	468	470
MG fob CA–LG fob Houston Margin	US\$/mt	33	-26	-14	ထု	ထု	φ	ရ -	-10	-12	-12	-15	-15	-19	-23	-27	-33
					•	Table 7. TI	hailand R	ice Supply	r and Utili	zation							
Variable	Units / Yr	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Area Harvested	(1000 ha)	9250	9032	9118	9236	9258	9258	9220	9195	9141	9094	9016	8939	8864	8792	8720	8655
Yield	(mt/ha)	1.56	1.54	1.56	1.57	1.59	1.61	1.62	1.64	1.66	1.68	1.69	1.71	1.73	1.74	1.76	1.78
Per-capita Use	(ka)	142.69	140.97	139.80	138.66	137.12	136.15	135.07	133.99	132.92	131.91	130.91	130.13	129.42	128.82	128.23	127.66
Total Consumption	(1000 mt)	8600	8600	8627	8651	8642	8662	8665	8655	8630	8594	8546	8511	8482	8459	8438	8417
Exports	(1000 mt)	5280	5000	5680	6018	6261	6407	6522	6645	6747	6908	6906	6987	7048	7098	7169	7250
Imports	(1000 mt)	0.07	0.11	240	241	243	244	246	247	249	250	250	250	250	250	250	250
Net Exports	(1000 mt)	5280	5000	5440	5777	6018	6163	6276	6398	6498	6658	6656	6737	6798	6848	6919	7000
Ending Stocks	(1000 mt)	713	1013	1128	1226	1285	1337	1368	1404	1432	1412	1466	1496	1516	1534	1553	1572

				-	Table 8. De	stailed U.S	. Rice Su	pply and l	Jtilization	(In Englis	sh Units)						
Variable	Units / Yr	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
<b>YIELD (rough basis)</b> Actual Program	(lb/ac) (lb/ac)	5621 4860	6121 4860	6088 4860	6141 4860	6174 4860	6199 4860	6250 4860	6288 4860	6336 4860	6376 4860	6421 4860	6452 4860	6492 4860	6531 4860	6571 4860	6612 4860
HARVESTED ACREA Program Area/ Contract Area Total Harvested Area	<b>GE</b> (1000 ac) (1000 ac)	2971.9 3093.0	4104.5 2799.0	4104.9 2902.8	4105.7 2998.7	4106.6 2783.5	4107.6 2825.4	4107.6 2754.5	4107.9 2803.9	4108.0 2765.9	4108.0 2773.2	4108.0 2748.4	4108.0 2765.5	4108.0 2772.4	4108.0 2796.1	4108.0 2807.2	4108.0 2822.5
SUPPLY (rough basis Production Beginning Stocks Imports	(mil. cwt) (mil. cwt) (mil. cwt)	212.5 173.9 31.2 7.4	206.7 171.3 24.8 10.5	209.0 176.7 24.0 8.3	217.1 184.2 23.9 9.0	211.0 171.9 29.6 9.6	212.5 175.1 27.0 10.4	211.6 172.2 28.3 11.1	214.6 176.3 26.5 11.8	215.1 175.3 27.3 12.5	216.8 176.8 26.8 13.2	217.3 176.5 27.0 13.9	219.2 178.4 26.1 14.6	221.6 180.0 26.3 15.3	225.3 182.6 26.7 16.0	228.9 184.5 27.7 16.7	232.7 186.6 28.7 17.3
DOMESTIC USE (rouç Food Seed Brewing Residual	gh basis) (mil. cwt) (mil. cwt) (mil. cwt) (mil. cwt)	104.6 77.0 3.7 15.6 8.3	104.7 78.5 3.7 15.4 7.1	107.2 79.9 4.0 15.3 8.0	109.2 82.0 3.7 15.5 8.0	110.9 83.3 3.8 15.8 8.0	113.5 85.8 3.7 16.0 8.0	115.8 87.9 3.7 16.2 8.0	118.1 90.1 3.7 16.4 8.0	120.4 92.1 3.6 16.6 8.0	122.6 94.2 3.6 16.8 8.0	124.7 96.1 3.6 17.0 8.0	126.9 98.1 3.6 17.2 8.0	129.1 100.1 3.6 17.4 8.0	131.4 102.2 3.6 17.6 8.0	133.6 104.2 3.6 17.8 8.0	135.2 106.2 3.0 8.0
EXPORTS TOTAL USE ENDING STOCKS	(mil. cwt) (mil. cwt) (mil. cwt)	83.0 187.6 24.8	78.0 182.7 24.0	77.9 185.1 23.9	78.3 187.5 29.6	73.1 184.0 27.0	70.7 184.2 28.3	69.2 185.1 26.5	69.1 187.3 27.3	68.0 188.3 26.8	67.3 189.8 27.0	66.5 191.2 26.1	65.9 192.9 26.3	65.8 194.9 26.7	66.2 197.6 27.7	66.5 200.1 28.7	67.4 202.6 30.1
<b>PRICES</b> Loan Rate Season Avg. Farm Pric	(US\$/cwt) e, SAFP	6.50	6.50	6.50	6.50	6.50	6.50	6.50	6.50	6.50	6.50	6.50	6.50	6.50	6.50	6.50	6.50
Long Grain Farm Pric	(US\$/cwt) 2e (US\$/cwt)	9.19 0.19	9.85 10.23	9.72 9.72	8.85 8.85	8.89 9.17	8.71 8.84	9.02	8.98 9.12	9.14 9.31	9.10 9.28	9.52	9.40	9.49 9.59	9.50 9.60	9.65 9.65	co.6
Medium Grain Farm	Price (US\$/cwt)	8.86	9.06	9.05	8.37	8.38	8.45	8.64	8.73	8.84	8.94	9.11	9.22	9.34	9.43	9.52	9.62
LG-MG Margin	(US\$/cwt)	0.34	1.17	0.67	0.49	0.78	0.39	0.59	0.39	0.47	0.34	0.41	0.28	0.26	0.17	0.13	0.06
Export Price, fob Hous Medium Grain Price fot	ton (US No (US\$/cwt) o CA (US N	. 2), EXPI 18.78 lo. 2)	P 20.32	20.81	19.88	20.20	20.19	20.68	20.76	21.02	21.11	21.51	21.64	21.91	22.18	22.46	22.78
Deficiency/CLD/Contra	(US\$/cwt) ct Pay Rate	20.18 <sup>9</sup>	19.28	20.17	19.51	19.84	19.94	20.26	20.33	20.49	20.58	20.84	20.94	21.07	21.16	21.23	21.31
World Price EXPP-SAFP Margin	(US\$/cwt) (US\$/cwt) (US\$/cwt)	4.21 7.32 6.07	2.79 6.90 6.25	2.74 7.17 7.24	2.95 6.90 7.48	2.85 6.99 7.50	2.62 6.90 7.75	2.12 7.06 7.79	2.06 7.01 7.94	2.06 7.05 7.96	2.06 6.99 8.02	2.06 7.10 8.12	2.05 7.06 8.21	2.05 7.10 8.35	2.05 7.13 8.55	2.05 7.16 8.74	2.05 7.21 8.99
INCOME FACTORS Production Market Valu	e - - -															ļ	
Deficiency/Contract Pa	(mil. US\$) yments (mil 119\$)	LGCI LOV	1801	10/8 165	66G1	87G1	67GL	1553 258	248 248	2001	9101 978	248 248	1/01 3/18	6071 878	1/42 348	1//L	2081
Marketing Loan/Certific	tirm. ∪o⊅) ates	-	ł	2024	000		2 + +	000				0	5		0		
Total Income	(mil. US\$) (mil. US\$)	0 2082	0 2159	0 2143	0 2099	0 2011	0 1968	0 1911	0 1931	0 1950	0 1967	0 2001	0 2025	0 2057	0 2090	0 2119	0 2150
Retuins Above variable	US\$/ac)	321.30	230.44	210.15	164.81	176.11	160.04	173.95	166.09	170.93	167.24	174.86	179.36	188.78	194.88	202.51	209.39

					Tab	ile 9. U.S.	Long Gra	in Rice Su	ipply and	Utilizatior	-						
Variable	Units / Yr	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
YIELD (rough basis)	) (Ib/ac)	5265	5777	5605	5644	5667	5698	5737	5781	5823	5868	5914	5947	5986	6028	6909	6112
HARVESTED ACRE.	<b>AGE</b> (1000 ac)	2312.0	1964.0	2109.8	2120.6	1967.7	2001.1	1921.3	1953.7	1907.7	1909.1	1879.3	1886.4	1874.2	1879.0	1872.7	1871.4
SUPPLY (rough bas	t <b>is)</b> (mil. cwt)	142.4	133.1	135.8	140.4	136.6	138.9	138.0	140.5	140.4	141.8	142.2	143.7	145.0	147.1	148.8	150.6
Production	(mil. cwt)	121.7	113.5	118.3	119.7	111.5	114.0	110.2	112.9	111.1	112.0	111.1	112.2	112.2	113.3	113.7	114.4
Beginning Stocks Imports	(mil. cwt) (mil. cwt)	14.4 6.2	10.1 9.5	9.3 8.3	11.7 9.0	15.4 9.6	14.5 10.4	16.7 11.1	15.7 11.8	16.8 12.5	16.6 13.2	17.2 13.9	16.9 14.6	17.5 15.3	17.8 16.0	18.5 16.7	18.9 17.3
DOMESTIC USE + Residual	(mil. cwt)	66.5	63.8	66.4	68.0	69.4	71.4	73.2	75.0	76.8	78.6	80.3	82.1	83.9	85.8	87.6	89.1
EXPORTS	(mil. cwt)	65.6	60.0	57.7	56.9	52.6	50.8	49.1	48.6	47.1	46.1	44.9	44.1	43.3	42.8	42.3	42.0
<b>TOTAL USE</b> + Residual	(mil. cwt)	132.1	123.8	124.1	125.0	122.1	122.2	122.3	123.6	123.9	124.7	125.3	126.2	127.2	128.6	129.9	131.1
ENDING STOCKS	(mil. cwt)	10.3	9.3	11.7	15.4	14.5	16.7	15.7	16.8	16.6	17.2	16.9	17.5	17.8	18.5	18.9	19.5
PRICES Season Average Farr	n Price (US\$/cwt)	9.19	10.23	9.72	8.85	9.17	8.84	9.23	9.12	9.31	9.28	9.52	9.50	9.59	9.60	9.65	9.68
Export Price fob Houston (US No.2)	) (US\$/cwt)	18.78	20.32	20.81	19.88	20.20	20.19	20.68	20.76	21.02	21.11	21.51	21.64	21.91	22.18	22.46	22.78
PRODUCTION MAR	KET VALUE (mil. US\$)	: 1118.9	1161.4	1148.9	1059.9	1022.1	1008.3	1017.8	1029.8	1034.1	1039.9	1058.1	1066.0	1076.1	1087.6	1097.0	1107.1

					Table .	10. U.S. M	edium Gr	ain Rice S	upply and	I Utilizatio	E						
Variable	Units / Yr	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
YIELD (rough basi	<b>is)</b> (Ib/ac)	6663	6926	7371	7341	7396	7413	7434	7454	7478	7497	7517	7536	7547	7561	7577	7596
HARVESTED ACR	<b>EAGE</b> (1000 ac)	781.0	835.0	793.0	878.1	815.8	824.3	833.2	850.2	858.2	864.0	869.1	879.1	898.2	917.2	934.5	951.1
SUPPLY (rough ba	isis)	EO E	C 04	1 07	76.6	V V 2	70 5	70 E	<b>* * * *</b>	215	0 12	76.4	76 /	76.6	70 1	0.00	000
Production Beginning Stocks	(mil. cwt) (mil. cwt) (mil. cwt)	52.1 15.8	57.9 57.9 14.3	58.5 14.6	64.5 12.1	60.3 14.1	61.1 61.1 12.4	61.9 61.9 11.5	63.4 10.7	64.2 10.4	64.8 64.8 10.1	65.3 9.7	66.3 9.1	67.8 8.7	- 0.7 69.3 8.8	70.8 9.2	02.0 72.2 9.7
Imports	(mil. cwt)	1.2	1.0	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
DOMESTIC USE + Residual		37.6	40.5	40.7	41.2	41.5	42.1	42.6	43.1	43.6	44.0	44.4	44.8	45.2	45.6	46.0	46.1
EXPORTS	(mil. cwt)	17.4	18.0	20.2	21.4	20.5	19.9	20.1	20.5	20.9	21.2	21.5	21.9	22.5	23.4	24.3	25.4
TOTAL USE + Residual	(mil. cwt)	55.1	58.5	60.9	62.5	62.0	62.0	62.8	63.6	64.5	65.2	65.9	66.7	67.7	68.9	70.2	71.5
ENDING STOCKS	(mil. cwt)	14.5	14.6	12.1	14.1	12.4	11.5	10.7	10.4	10.1	9.7	9.1	8.7	8.8	9.2	9.7	10.5
<b>PRICES</b> Season Average Fa	irm Price (US\$/cwt)	8.86	9.06	9.05	8.37	8.38	8.45	8.64	8.73	8.84	8.94	9.11	9.22	9.34	9.43	9.52	9.62
Medium Grain Price fob CA (US No. 2)	, (US\$/cwt)	20.18	19.28	20.17	19.51	19.84	19.94	20.26	20.33	20.49	20.58	20.84	20.94	21.07	21.16	21.23	21.31
PRODUCTION MA	RKET VALUE (mil. US\$)	461.4	524.5	529.0	539.3	505.9	516.6	535.4	553.0	567.6	579.1	595.3	611.0	632.8	654.1	674.4	694.7
					Table 1	1. U.S. Ric	e Supply	and Utiliz	ation (in <sup>h</sup>	Aetric Uni	ts)						
Variable	Units / Yr	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Area Harvested	(1000 ha)	1251 1 51	1132	1174 178	1213 1 82	1126 1 85	1143 1 87	1114 1 01	1134 1 07	1119 1 07	1122 5 00	1112 5 04	1119 5 06	1122 5 10	1131 5 13	1136 5 16	1142 5 10
Production	(1000 mt)	5678	5440	5611	5847	5457	5561	5466	5598	5565	5614	5603	5666	5715	5798	5857	5925
Imports Food Use	(1000 mt) (1000 mt)	242 2515	333 2493	263 2537	286 2604	306 2646	330 2724	352 2791	375 2860	397 2925	420 2990	441 3052	464 3116	486 3180	508 3244	530 3308	550 3373
Seed Use	(1000 mt)	121	117	126	117	120	117	118	116	116	114	114	114	114	114	114	95
Brewer Use	(1000 mt)	509 2416	489 2224	485 2402	492 2467	501 2521	508 2603	515 2670	521 2751	527 2011	534 2002	540 2060	546 4020	553 1100	559 1171	566 1212	572 1204
Per Capita Use	(kg)	34.10 12.95	3324 12.48	3402 12.64	340/ 12.76	12.84	3003 13.03	30/0 13.18	13.33	3022 13.46	3092 13.60	13.72	4030 13.85	4100	41/1	4242 14.22	4234 14.28
Exports	(1000 mt)	2711	2477 275	2474 254	2486 254	2322 254	2246 254	2198 254	2195 254	2158 254	2136 254	2111 254	2094 254	2089 254	2102 254	2113 254	2139 754
Total Use	(1000 mt)	6127	5801 5801	5876 5876	5953	5844	5849	5876	5946	5980	6028	6071	6124	6189	6273	6355 6355	6433
Ending Stocks	(1000 mt)	826	798	796	975	894	936	877	905	887	892	866	872	883	917	949	992

						Table 1	2. Arkans	as Rice St	ipply by T	ype							
Variable	Units / Yr	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Long Grain Area	(1000 ac)	1140.0	910.0	977.5	994.0	932.9	946.7	916.1	930.8	914.4	916.8	906.7	911.4	907.7	910.1	908.1	908.2
Long Grain Yield Long Grain Prod	(pounds/ac)	5370 61 2	6050 55 1	5807 56 8	5828 57 9	5849 54 6	5873 55.6	5914 54 2	5957 55 4	6000 54 9	6045 55 4	6091 55 2	6121 55 8	6151 55 8	6182 56 3	6213 56 4	6246 56 7
Medium Grain Area	(1000 ac)	2000	260.0	2416	284.4	262.5	264.6	266.1	270.5	271.6	73.8	275.7	279.4	286.7	2070	300.6	307.1
Medium Grain Yield	d (pounds/ac)	5900	6500	6200	6226	6251	6277	6303	6330	6357	6384	6411	6437	6463	6489	6515	6542
Medium Grain Proc	1. (mil. cwt)	11.8	16.9	15.0	17.7	16.4	16.6	16.8	17.1	17.3	17.5	17.7	18.0	18.5	19.1	19.6	20.1
Total Area	(1000 ac)	1340.0	1170.0	1219.1	1278.5	1195.5	1211.3	1182.2	1201.3	1186.0	1190.6	1182.4	1190.8	1194.4	1204.0	1208.8	1215.3
Average Yield	(pounds/ac)	5449	6149	5885	5916	5937	5961	6002	6041	6082	6123	6166	6195	6226	6257	6289	6320
Total Production	(mil. cwt)	73.0	71.9	71.7	75.6	71.0	72.2	71.0	72.6	72.1	72.9	72.9	73.8	74.4	75.3	76.0	76.8
						Table 13	3. Louisia	na Rice Si	L vd vlaar	vpe							
Variable	Units / Yr	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Long Grain Area	(1000 ac)	456.0	463.0	475.4	458.1	436.3	436.8	423.9	424.6	415.9	413.0	406.3	404.1	399.8 	397.4	393.7 7000	390.6 200.6
Long Grain Yield	(pounds/ac)	4610	4900	4868	4887	4907	4935	4976	5020 24 0	5065	5112	5161 21 0	5198 01.0	5237	5278	5320 22.0	5364 24 2
Long Grain Prod.	(mil. cwt)	21.0	772.0	23.1	22.4	21.4	21.0	21.1	21.3	21.1	1.12	0.12	0.12	20.9	21.0	20.9	0.12
Modium Crain Viels	4 (1000 ac) 4 (pointe/po)	114.0	0.07	10.4	0.00 1622	00.0	12.21	10.0	0770	00.00	30. I	84.3 4776	88.3 1000	0.701	27.CI 1	1.221	130.0
Medium Grain Treic	u (pourius/ac) 4 (mil cwt)	4000 7 0	4/00	4012	4004 3 7	4009	3.4	4004 3.6	4/00 2 0	41.50	4,00	4//0	4000	4070 70	4040 7 6	4000 6 0	403   6 4
	(1000 oc)	2.5	0.0	2.6 EAE 0	2.0	7.7 2 0 1 0	1002	2.0 2.0	5.0 E 0 E	501 7	1.0 1	500 S	2 T C Z	2.5 207 1	510 G	Б16.0 2.0	1.0 2.0
Averade Yield	(nounds/ac)	0.07C	4874	040.0 4835	0.000 4849	0.4.0 4871	209.5 4896	4932	000.0 4969	2008	5048	5088	5120	5150	5181	5213	5246
Total Production	(mil. cwt)	26.2	26.0	26.4	26.1	24.6	24.9	24.7	25.2	25.1	25.4	25.5	25.8	26.1	26.6	26.9	27.3
					Table 14	. Texas R	ice Suppl	v (Aggreg	ate; Mostl	y Long G	rain)						
Variable	Units / Yr	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Totol Aroo	1000	0 0 7 0	0 000	0100	0.000		0000	3 2 2 0	1 000	1 970	0 440	9.020	3775	0 020	076 6	0.970	0 2 2 0
Nucrea Viola	(1000 ac)	310.U	290.U	204.0	300.U	202.9	230.2	0103	203.0	1.012	0.112	0.212	C.412	212.07	C.C12	7.012	2117 2715
Total Production	(mil. cwt)	0800 17.8	0190 18.5	17.1	0000 18.6	0140 17.4	17.9	17.3	17.71	17.4	0349 17.6	17.4	0424 17.6	17.7	0009 18.1	004z 18.3	07.10 18.7
						Table 15	Miecouri	Dice Sunt	and D wh	Crain)							
11	11-2-772	1001	0001	1001	0001						1000	1000	0000	1000	0000	0000	0100
Variable	Units / Yr	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Total Area	(1000 ac)	112.0	90.06	107.9	110.3	99.2	101.7	96.0	98.3	95.0	95.0	92.9	93.3	92.6	93.0	92.6	92.6
Average Yield	(pounds/ac)	5300	5550	5370	5385	5400	5415	5433	5451	5469	5488	5506	5522	5538	5554	5570	5586
Total Production	(mil. cwt)	5.9	5.0	5.8	5.9	5.4	5.5	5.2	5.4	5.2	5.2	5.1	5.2	5.1	5.2	5.2	5.2
					Table	e 16. Miss	issippi Ri	ce Supply	(Mostly L	ong Grain	Ē						
Variable	Units / Yr	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Total Area	(1000 ac)	288.0	208.0	265.0	252.2	216.4	225.7	207.9	216.5	206.2	207.3	200.8	203.1	201.2	203.0	202.0	202.2
Average Yield	(pounds/ac	5400	6000	5841	5881	5922	5962	6003	6043	6083	6124	6164	6205	6245	6286	6326	6367
Total Production	(mil. cwt)	15.6	12.5	15.5	14.8	12.8	13.5	12.5	13.1	12.5	12.7	12.4	12.6	12.6	12.8	12.8	12.9
				Table 1	7. Califori	nia Rice S	upply (Aç	Igregate;	Mostly Me	dium and	Short Gr	ain)					
Variable	Units / Yr	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Total Area	(1000 ac)	465.0	500.0	481.0	513.1	484.7	487.2	490.4	497.8	500.8	500.2	499.1	500.4	504.2	508.0	511.1	514.0
Average Yield	(pounds/ac)	7600 24 8	7500 27 1	8364 40.2	8384 13 0	8406 40.7	8441 11 1	8477 11 6	8516 12 1	8557 12 0	8600 13 0	8646 13 1	8693 12 E	8743 11 1	8796 11 7	8852 15 7	8910 15 8
	(IIIII. CWL)	0,40	0/.1	40.4	C	+0.7	+	4	47.4	44.0	10.C	+0	10.0	+	1.44	7.04	0.04

						Table 18.	. China Ri	ce Supply	and Utiliz	cation							
Variable	Units / Yr	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Area Harvested	(1000 ha)	30700	30700	30982	31199	31314	31358	31348	31310	31245	31163	31131	31103	31079	31059	31042	31025
Yield	(mt/ha)	4.22	4.36	4.27	4.30	4.33	4.36	4.40	4.43	4.45	4.48	4.49	4.52	4.54	4.57	4.60	4.62
Production	(1000 mt)	129650	133700	132305	134130	135570	136637	138016	138807	139116	139476	139876	140562	141249	142009	142754	143485
Per Capita Use	(kg)	108.05	108.60	108.19	108.28	108.17	108.33	108.26	108.33	108.35	108.38	107.98	107.68	107.33	106.99	106.66	106.31
Total Consumption	(1000 mt)	130000	132000	132790	134140	135184	136501	137476	138590	139599	140604	141005	141524	141985	142457	142932	143401
Exports	(1000 mt)	300	750	424	319	415	407	410	401	390	378	375	377	378	380	381	382
Imports	(1000 mt)	850	800	800	685	666	683	663	683	719	755	756	751	742	729	718	707
Net Exports	(1000 mt)	-550	-50	-376	-365	-251	-276	-253	-281	-329	-377	-380	-374	-364	-350	-337	-325
Ending Stocks	(1000 mt)	21456	23206	23096	23452	24089	24501	25294	25792	25638	24887	24139	23550	23177	23079	23239	23648
						Tahla 10	India Riv	vluur.	and Htiliz	ation							
1 /orichio	11-140 / 14	1005	1000	1007	1000					0000	1000	2000	9000	2000	0000		0100
Variable	Units / Yr	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Area Harvested	(1000 ha)	42910	42700	42746	42802	42865	42938	43019	43105	43079	43081	43105	43099	43117	43155	43208	43271
Yield	(mt/ha)	1.86	1.87	1.93	1.96	2.00	2.02	2.04	2.07	2.09	2.12	2.14	2.17	2.19	2.22	2.24	2.27
Production	(1000 mt)	79620	80000	82507	84020	85574	86748	87954	89188	90203	91290	92438	93441	94510	95633	96802	98012
Per Capita Use	(kg)	84.05	83.72	83.21	83.14	83.18	83.21	83.14	83.15	83.04	82.95	82.86	82.56	82.20	81.71	81.57	81.48
Total Consumption	(1000 mt)	78720	79800	80680	81981	83361	84728	85974	87300	88489	89696	90886	91839	92723	93467	94630	95857
Net Exports	(1000 mt)	4000	1700	1619	1577	1559	1560	1570	1591	1619	1653	1692	1737	1790	1851	1925	2000
Ending Stocks	(1000 mt)	10983	9483	9691	10153	10807	11268	11677	11975	12071	12012	11873	11738	11735	12049	12297	12451
								c									
						lable zu.	Pakistan P	vice supp	iy and Uti	Ization							
Variable	Units / Yr	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Area Harvested	(1000 ha)	2162	2229	2213	2212	2221	2235	2247	2259	2266	2270	2266	2272	2270	2263	2249	2230
Yield	(mt/ha)	1.82	1.91	1.91	1.93	1.95	1.97	1.99	2.01	2.03	2.05	2.08	2.10	2.12	2.15	2.17	2.20
Production	(1000 mt)	3936	4266	4220	4264	4329	4402	4473	4543	4606	4662	4705	4766	4813	4859	4890	4910
Per Can Use	(ka)	19.01	19.39	18.60	18.59	18.58	18.57	18.56	18.55	18.53	18.51	18 48	18 43	18.38	18.33	18.27	18.20
Total Consumption	(1000 mt)	2500	2600	2558	2622	2687	2759	2835	2913	2992	3071	3150	3229	3309	3389	3470	3551
Net Exports	(1000 mt)	1635	1700	1634	1595	1585	1587	1570	1559	1551	1544	1535	1551	1563	1577	1585	1589
Ending Stocks	(1000 mt)	512	478	507	553	609	665	734	804	868	914	933	919	860	753	589	358
						Table 21. N	dyanmar	Rice Supp	ly and Uti	lization							
Variable	Units / Yr	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Area Harvested	(1000 ha)	5700	5666	5723	5825	5816	5850	5870	5917	5947	5987	6023	6073	6115	6164	6214	6267
Yield	(mt/ha)	1.75	1.74	1.85	1.87	1.89	1.91	1.93	1.95	1.98	2.00	2.02	2.05	2.07	2.09	2.12	2.14
Production	(1000 mt)	10000	9860	10560	10872	10981	11172	11339	11560	11753	11968	12179	12421	12651	12899	13154	13417
Per-capita Use	(kg)	212.84	201.96	209.21	208.89	208.24	207.98	207.90	207.51	207.67	207.63	207.52	206.49	205.56	204.75	204.08	203.54
Total Consumption	(1000 mt)	9600 265	9300 766	9836	10027	10205	10405	10619 705	10822	11057	11287	11517	11700	11891	12092	12305	12530
Net Exputs Ending Stocks	(1000 mt)	757	200 1051	431 1277	089 1524	040 1660	1678 1	ر ی 1603	013 1529	010 1409	021 1270	مح» 1104	وی 986	040 898	845 845	0/0 824	00 I 830

						Table 22.	Vietnam R	ice Suppl	y and Util	zation							
Variable	Units / Yr	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Area Harvested	(1000 ha)	7187	0069	7148	7155	7149	7150	7138	7132	7112	7091	7065	7046	7019	7005	7001	6991
Mekong Delta	(1000 ha)	3292	3160	3278	3299	3294	3294	3283	3275	3257	3237	3214	3196	3174	3164	3164	3159
Rest of Vietnam	(1000 ha)	3895	3740	3870	3857	3854	3856	3855	3857	3855	3854	3851	3849	3845	3841	3836	3831
Yield Average	(mt/ha)	2.45	2.46	2.49	2.53	2.56	2.60	2.64	2.68	2.72	2.76	2.80	2.84	2.89	2.93	2.98	3.02
Production	(1000 mt)	17600	17000	17823	18132	18268	18557	18815	19091	19332	19572	19799	20044	20271	20536	20829	21108
Per Capita Use	(kg)	194.91	188.33	196.07	199.50	199.35	199.34	199.39	199.30	199.31	199.31	199.26	199.26	199.21	199.17	199.11	199.04
Total Consumption	(1000 mt)	14500	14250	15082	15592	15819	16054	16290	16512	16741	16965	17183	17403	17621	17844	18066	18291
Net Exports	(1000 mt)	3100	2750	2741	2540	2448	2503	2525	2580	2591	2607	2615	2641	2650	2692	2762	2817
Ending Stocks	(1000 mt)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
					-	able 23. 4	vustralia R	tice Suppl	v and Util	ization							
Variable	Units / Yr	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Area Harvested	(1000 ha)	149	165	165	165	165	165	165	166	167	168	169	171	172	173	173	173
Yield	(mt/ha)	4.56	6.30	6.23	6.26	6.30	6.34	6.38	6.41	6.45	6.49	6.53	6.57	6.62	6.68	6.75	6.82
Production	(1000 mt)	680	1040	1025	1030	1037	1045	1055	1066	1078	1091	1106	1122	1137	1153	1169	1184
Per Capita Use	(kg)	14.74	15.09	15.21	15.33	15.45	15.58	15.70	15.83	15.95	16.08	16.21	16.34	16.47	16.60	16.74	16.87
Total Consumption	(1000 mt)	270	280	286	291	297	302	307	313	318	324	329	335	340	346	352	357
Imports	(1000 mt)	30	40	42	38	40	42	45	47	49	51	53	55	57	59	61	63
Exports	(1000 mt)	475	800	814	735	750	758	784	801	816	829	842	854	866	878	890	902
Net Exports	(1000 mt)	445	760	772	697	209	716	739	754	767	778	789	799	810	820	830	839
Ending Stocks	(1000 mt)	56	56	24	65	96	123	131	130	123	113	100	88	75	63	50	37
						Table 24.	Egypt Ric	ce Supply	and Utiliz	ation							
Variable	Units / Yr	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Area Harvested	(1000 ha)	420	420	420	420	420	420	420	420	420	420	420	420	420	420	420	420
Yield	(mt/ha)	5.00	5.95	5.58	5.72	5.85	5.98	6.01	6.06	6.10	6.13	6.17	6.23	6.29	6.35	6.41	6.47
Production	(1000 mt)	2100	2500	2344	2403	2457	2511	2526	2544	2560	2576	2591	2618	2644	2668	2692	2716
Per Capita Use	(kg)	33.50	38.01	35.74	35.98	35.43	35.42	35.34	35.13	34.92	34.73	34.42	34.12	33.87	33.63	33.41	33.20
Total Consumption	(1000 mt)	2075	2400	2299	2358	2365	2407	2445	2474	2504	2534	2555	2577	2602	2629	2656	2686
Net Exports	(1000 mt)	75	75	88	83	81	78	74	20	99	61	56	52	47	43	89	g
Ending Stocks	(1000 mt)	233	258	215	176	187	214	221	220	211	192	171	160	154	151	149	146
					F	able 25. A	rgentina F	Rice Supp	ly and Uti	ization							
Variable	Units / Yr	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Area Harvested	(1000 ha)	182	215	220	229	237	246	255	264	274	285	296	307	319	332	345	359
Yield	(mt/ha)	3.13	3.26	3.36	3.42	3.48	3.54	3.60	3.66	3.72	3.78	3.84	3.90	3.97	4.03	4.09	4.15
Production	(1000 mt)	570	200	737	782	826	870	916	967	1021	1078	1137	1200	1267	1337	1411	1490
Per capita use	(kg)	7.29	7.21	7.06	7.11	7.16	7.22	7.28	7.35	7.42	7.49	7.56	7.64	7.71	7.79	7.87	7.95
Total Consumption	(1000 mt)	250	250	248	252	256	261	266	272	277	283	288	294	300	306	312	318
Exports	(1000 mt)	320	450	495	526 20	564	604	647	695	746	802	850	901	955	1017	1084	1156
Ending Stocks	(1000 mt)	09	60	54	28	64	68	71	72	69	62	61	99	78	92	107	123

					μ	able 26. U	ruguay Ri	ce Supply	r and Utili	zation							
Variable	Units / Yr	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Area Harvested	(1000 ha)	146	140	149	155	160	164	168	172	176	180	183	187	191	194	197	201
Yield	(mt/ha)	4.55	3.71	3.76	3.79	3.82	3.85	3.89	3.94	4.00	4.03	4.07	4.10	4.15	4.19	4.24	4.30
Production	(1000 mt)	665	520	559	586	610	630	652	676	704	724	746	767	790	814	838	864
Per capita use	(kg)	25.40	25.24	25.43	25.98	26.84	27.68	28.12	28.48	28.86	29.19	29.48	29.70	29.89	30.00	30.11	30.15
Total Consumption	(1000 mt)	80	80	81	83	87	6	91	<u> </u>	94	96	67	86 86	66	100	100	101
Exports	(1000 mt)	546	475	477	502	522	538	558	580	605	622	648	670	694	719	745	772
Ending Stocks	(1000 mt)	59	24	25	26	27	29	32	36	41	48	48	47	44	39	32	23
						Table 27.	Brazil Ric	e Supply a	and Utiliza	ation							
Variable	Units / Yr	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Area Harvested	(1000 ha)	3880	3608	3658	3553	3566	3547	3527	3512	3500	3487	3467	3444	3430	3420	3410	3401
Irrigated	(1000 ha)	949	906	981	1017	1043	1072	1102	1132	1164	1197	1228	1259	1289	1320	1351	1383
Upland	(1000 ha)	2931	2702	2677	2536	2523	2475	2424	2381	2336	2291	2240	2184	2141	2100	2059	2018
Average Yield	(mt/ha)	1.76	1.80	1.71	1.76	1.80	1.85	1.90	1.95	2.00	2.05	2.10	2.16	2.21	2.27	2.33	2.39
Total Production	(1000 mt)	6834	6480	6267	6247	6432	6564	6696	6842	9669	7152	7295	7434	7598	7771	7950	8135
Per capita use	(kg)	49.65	49.55	49.72	49.74	49.69	49.61	49.52	49.42	49.56	49.80	50.14	50.53	50.94	51.37	51.80	52.24
Total Consumption	(1000 mt)	7980	8060	8180	8271	8347	8412	8472	8530	8627	8742	8873	9013	9158	9307	9460	9615
Net Imports	(1000 mt)	750	1054	1866	1925	1897	1840	1790	1735	1687	1653	1637	1634	1621	1598	1573	1544
Ending Stocks	(1000 mt)	1054	528	481	381	364	355	369	416	472	535	594	649	710	772	835	899
					Table	28. Europ	oean Unio	n Rice Su	pply and	Utilizatior	-						
Variable	Units / Yr	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Area Harvested	(1000 ha)	357	405	399	391	373	373	373	372	371	370	369	368	367	367	366	365
Yield	(mt/ha)	3.46	3.90	3.99	4.01	4.01	4.03	4.06	4.08	4.11	4.13	4.16	4.18	4.21	4.23	4.26	4.28
Production	(1000 mt)	1234	1580	1592	1568	1496	1506	1512	1518	1524	1530	1535	1541	154/	1552	1558	1564
Per Capita Use	(kg)	5.07	5.16	5.39	5.50	5.56	5.61	5.66	5.70	5.75	5.79	5.84	5.88	5.92	5.97	6.01	6.05
Total Consumption	(1000 mt)	1782	1818	1905	1948	1977	2000	2021	2041	2061	2080	2099	2118	2136	2155	2173	2192
Imports	(1000 mt)	1403	1368	1327	1357	1392	1401	1407	1416	1423	1432	1438	1447	1454	1461	1468	1475
Exports	(1000 mt)	914	1070	935	895	885	877	884	882	882	879	881	877	875	872	869	866
Net Imports Ending Stocks	(1000 mt)	489 171	298	391	462 301	105	524 446	523 460	534 471	541 475	566	166	57U	579 452	989 130	999 723	609 707
	(1111 0001)			200		-	P F	2	F	, F		F	2	107	2	2	Ę
						Ë	able 29. It	aly Rice S	upply								
Variable	Units / Yr	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Area Harvested	(1000 ha)	239	240	240	240	240	240	240	240	240	240	240	240	240	240	240	240
Yield	(mt/ha)	3.32	3.54	3.87	3.89	3.92	3.95	3.97	4.00	4.02	4.05	4.08	4.10	4.13	4.16	4.18	4.21
Production	(1000 mt)	794	850	928	934	941	947	953	960	996	972	679	985	991	968	1004	1010
Exports (Japonica)	(1000 mt)	514	525	519	516	511	506	508	509	511	513	516	519	521	524	526	529
						Та	ble 30. Sr	ain Rice (	Supply								
Variable	Units / Yr	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Area Harvested	(1000 ha)	54	105	100	94	11	78	62	62	62	62	78	78	78	78	78	78
Yield	(mt/ha)	4.24	4.90	4.63	4.65	4.67	4.68	4.70	4.72	4.74	4.75	4.77	4.79	4.80	4.82	4.84	4.86
Production	(1000 mt)	229	515	464	437	362	367	370	371	372	373	374	375	376	378	379	380

|     | 3.69 3.71                                |                    | 175 174 | 7 175 174<br>3 343 337         | 7 175 174<br>3 343 337                                     | 7 175 174<br>3 343 337<br>3 2009 2010   | 7 175 174<br>3 343 337<br>3 2009 2010<br>2 12232 12236<br>3 33   | 175         174           343         337           2009         2010           2009         2010           2003         2010           2004         2010           2005         2010           2005         2010           233         333           2005         2010           2010         2010           2010         2010           2010         2010           2010         2010   | 175         174           343         337           2009         2010           2033         233           17232         12236           330         3.33           40381         40708           170.16         170.08           170.15         170.08  | 175         174           343         337           2009         2010           2009         2010           2003         233           2003         233           2004         2010           201232         12236           233         3.33           201216         170.08           170.16         170.08           1790         1990           2733         2773  | 175         174           343         337           2009         2010           201232         233           201232         12236           201232         12236           201232         12236           201232         12236           201232         12236           201216         170.08           20135         42664           1790         1990           2739         2773  | 175         174           343         337           2009         2010           201236         3.33           201232         12236           2003         3.33           2003         2010           2003         2010           2003         2010           2003         2010           2003         2010           2003         2739           2739         2739           2739         2730           2739         2730           2739         2730           2739         2730   | 175         174           343         337           2009         2010           201232         12236           201232         12236           201232         12236           201232       
 12236           201232         12236           201016         17008           201016         17008           201016         17008           201016         2773           200917         2010           200917         2010           200917         2010           200917         2010           200917         2010  | 175         174           343         337           2009         2010           201232         12236           201232         12236           201232         12236           201232         12236           201215         12236           217016         17008           177016         17008           2739         2773           2739         2773           2739         2773           2739         2773           2739         2773           2739         2773           2739         2773           2733         2733           2733         2733           2733         2733           2733         2733           2733         2733           2733         2773           2733         2773           2733         2773           2733         2773           2773         2010           2773         3.27           3.27         3.27 | 175         174           343         337           2009         2010           201232         12236           201232         12236           201232         12236           201215         12236           212232         12236           212232         12236           21232         12236           21703         17008           21703         17008           21735         12664           17790         1790           2739         2773           2739         2773           2739         2773           2733         2010           2753         2010           2753         2010           2753         2804   | 175         174           343         337           2009         2010           201232         12236           201232         12236           201232         12236           201215         12236           217016         17008           170016         17008           2739         2773           2739         2773           2739         2773           2739         2773           2733         2773           2733         2010           2733         2010           2753         2804           2753         2804           2753         2804           2753         2804           2753         2804   | 175     174       343     337       343     337       343     337       352009     2010       3699     2010       371     4078       372     12236       373     333       374     40708       373     333       374     40708       375     12236       3733     1290       3740     1990       3739     2773       3735     2773       375     327       375     327       3753     337       3753     337       3753     369       3835     3699       3835     3669  
  | 175         174           343         337           2009         2010           201         233           201         233           201         233           201         233           21         2236           233         333           201         233           233         333           233         333           233         333           233         333           233         333           233         333           2122         12236           170.16         170.08           1700.16         1700           1779         1990           2739         2773           2739         2773           2739         2773           2739         2773           2755         2804           8         3.27           2753         2804         
 892         3699           892         906           605         617   | 175     174       343     337       343     337       343     337       35     2009       2010     2010       201236     3.33       201236     3.33       201236     3.33       212236     12236       21224     12664       117016     17008       1170116     17008       11790     1990       2739     27739       2739     2773       2733     2739       2753     2009       2753     2010       8     847       8     847       8     3.27       2753     2804       1255     3.273       2753     2804       892     3699       892     906       606     617  | 175         174           343         337           2009         2010           201223         233           201223         12235           201233         333           201232         12236           201232         12236           201215         12236           217016         170.08           21703         12664           21703         12664           21703         12664           21703         1290           21739         2773           21739         2773           22059         2010           2325         3.27           2325         3.27           2325         3.27           2753         2804           2753         2804           2753         2606           892         3656           892         906           606         607           606         2010           2009         2010  | 175         174           343         337           2009         2010           202         2010           20331         337           20331         2033           20331         20333           20331         40708           23333         3.33           20116         170.06           20116         170.08           20116         170.08           2739         2773           2739         2773           2739         2773           2739         2773           2733         2773           2733         2773           2733         2773           2733         2773           2733         2773           2733         2773           2733         2773           274         4264           42156         856           325         3699           3692         3699           3692         3693           3692         3696           3692         3696           3692         3696           3692         3696 <td< th=""><th>175         174           343         337           2009         2010           202         2010           20331         337           20331         2033           20331         40708           170.16         170.08           170.16         170.08           1700.16         170.08           2739         2773           2739         2773           2739         2773           27335         327           27335         3699           8         27339           2753         2773           2753         2773           2753         2773           2753         2773           2753         2773           2753         2773           2753         2773           2753         2773           2753         2773           2753         2773           2753         2773           2753         2773           2754         2773           2755         3696           3635         3696           3636         36906</th><th>175         174           343         337           343         337           343         337           35         2009         2010           200         2010         3.33           310         3.33         3.33           311         40708         3.33           312         12236         12236           3133         3.33         3.33           3170.16         170.08         1700           1700.16         1700         1990           2739         2739         2773           2739         2773         2739           2733         2739         2773           323         3.27         2739           3255         2804         44.40           44.40         44.26         3699           892         3606         617           8         2009         2010           8         2009         2010           8         2009         3.27           8         2009         3.27           8         2009         1.93           8         2009         1.93           8</th><th>175     174       343     337       343     337       343     337       35     2009       2010     2010       2010     3.33       333     3.33       340381     40708       1700.16     17008       1700.16     17008       1700.16     17008       2739     2773       2739     2773       2739     2773       2739     2773       2739     2773       2733     2733       2733     2733       2733     2733       2733     2733       2733     2733       2733     2733       2733     2733       2753     2804       44.40     44.26       3695     906       606     617       606     617       1190     1.93       323     330       323     330       323     3667       3666     3667       3667     3667</th><th>175     174       343     337       343     337       343     337       352009     2010       343     333       343     333       353     333       3647     856       17790     1990       2739     2773       2739     2773       2739     2773       2739     2773       2739     2773       2739     2773       2739     2773       2739     2773       2739     2773       2739     2773       2739     2773       2733     2739       2733     2733       2733     2733       2733     2733       2733     2733       2733     2733       2733     2773       2733     2773       2733     2773       27440     44.26       2755     2804       2805     906       892     906       892     3667       333     333       335     3657       335     3657       335     3657       335     3667       355</th><th>175     174       343     337       343     337       343     337       352009     2010       353     2032       3666     170.16       170.16     170.08       170.16     170.08       170.16     170.08       1700.16     170.08       1700.16     170.08       1700.16     170.08       1700.16     170.08       2739     2773       2739     2773       2753     2009       2753     2804       44.40     44.26       33.25     3696       892     906       892     906       892     309       835     36.67       1197     1.93       33.33     330       33.35     330       835     863       835     863       835     863       835     863</th><th>175         174           343         337           343         337           35         2009         2010           36         2009         2010           37         3.33         3.33           38         2032         12236           39         3.33         3.33           30         12232         12236           31         12332         12236           31         40381         40708           31         40381         40708           31         42135         42664           177016         1770         11990           31         2739         2773           32         2739         2773           32         2739         2773           32         2753         2804           3255         2804         44.26           3325         3699         892           333         3333         3330           333         3333         3330           335         3369         3667           3835         3609         3610           333         3330         3330      3</th><th>175         174           343         337           343         337           2009         2010           2012232         12236           2012332         12236           20123333         3.33          
2012332         12236           2012333         3.33           201234         12008           201235         12236           217036         170.06           170.16         170.08           170.15         1700.08           2739         2773           2739         2773           27735         2804           170016         1790           27553         3699           847         856           2753         2804           2753         2804           2753         2804           2805         607           8825         3695           8835         3666           1157         1193           2835         3693           835         3663           835         3663           835         330           2009         2010</th><th>175         174           343         337           343         337           32009         2010           32009         2010           333         3.33           340381         40788           40381         40708           177016         17008           177016         17008           17790         2739           2733         3.33           333         3.33           40381         40708           17700         1700           17790         2010           2753         2804           44.40         44.26           3.25         3.273           3.255         2804           2753         2804           2753         2804           2753         2804           2805         906           892         3657           3330         3330           3330         3330           3330         3330           3330         3330           3330         3330           3330         3330           3330         3609</th><th>175         174           343         337           343         337           35         2009         2010           35         2009         2010           36         2003         2010           37         3.33         3.33           38         2009         2010           313         3.33         3.33           40381         40381         40788           1700.16         170.16         170.08           17790         1735         42664           17790         27735         2804           2753         2009         2010           30         2755         2804           44.40         44.26         3656           30535         3699         906           892         905         906           805         3605         917           1170         1.93         333           1157         1193         36.65           3030         2000         2010           300         2000         2010           30157         100         1.93           30157         1.93         33.03</th></td<>   | 175         174           343         337           2009         2010           202         2010           20331         337           20331         2033           20331         40708           170.16         170.08           170.16         170.08           1700.16         170.08           2739         2773           2739         2773           2739         2773           27335         327           27335         3699           8         27339           2753         2773           2753         2773           2753         2773           2753         2773           2753         2773           2753         2773           2753         2773           2753         2773           2753         2773           2753         2773           2753         2773           2753         2773           2754         2773           2755         3696           3635         3696           3636         36906  
  | 175         174           343         337           343         337           343         337           35         2009         2010           200         2010         3.33           310         3.33         3.33           311         40708         3.33           312         12236         12236           3133         3.33         3.33           3170.16         170.08         1700           1700.16         1700         1990           2739         2739         2773           2739         2773         2739           2733         2739         2773           323         3.27         2739           3255         2804         44.40           44.40         44.26         3699           892         3606         617           8         2009         2010           8         2009         2010           8         2009         3.27           8         2009         3.27           8         2009         1.93           8         2009         1.93           8  | 175     174       343     337       343     337       343     337       35     2009       2010     2010       2010     3.33       333     3.33       340381     40708       1700.16     17008       1700.16     17008       1700.16     17008       2739     2773       2739     2773       2739     2773       2739     2773       2739     2773       2733     2733       2733     2733       2733     2733       2733     2733       2733     2733       2733     2733       2733     2733       2753     2804       44.40     44.26       3695     906       606     617       606     617       1190     1.93       323     330       323     330       323     3667       3666     3667       3667     3667   
   | 175     174       343     337       343     337       343     337       352009     2010       343     333       343     333       353     333       3647     856       17790     1990       2739     2773       2739     2773       2739     2773       2739     2773       2739     2773       2739     2773       2739     2773       2739     2773       2739     2773       2739     2773       2739     2773       2733     2739       2733     2733       2733     2733       2733     2733       2733     2733       2733     2733       2733     2773       2733     2773       2733     2773       27440     44.26       2755     2804       2805     906       892     906       892     3667       333     333       335     3657       335     3657       335     3657       335     3667       355  | 175     174       343     337       343     337       343     337       352009     2010       353     2032       3666     170.16       170.16     170.08       170.16     170.08       170.16     170.08       1700.16     170.08       1700.16     170.08       1700.16     170.08       1700.16     170.08       2739     2773       2739     2773       2753     2009       2753     2804       44.40     44.26       33.25     3696       892     906       892     906       892     309       835     36.67       1197     1.93       33.33     330       33.35     330       835     863       835     863       835     863       835     863  
  | 175         174           343         337           343         337           35         2009         2010           36         2009         2010           37         3.33         3.33           38         2032         12236           39         3.33         3.33           30         12232         12236           31         12332         12236           31         40381         40708           31         40381         40708           31         42135         42664           177016         1770         11990           31         2739         2773           32         2739         2773           32         2739         2773           32         2753         2804           3255         2804         44.26           3325         3699         892           333         3333         3330           333         3333         3330           335         3369         3667           3835         3609         3610           333         3330         3330      3  | 175         174           343         337           343         337           2009         2010           2012232         12236           2012332         12236           20123333         3.33           2012332         12236           2012333         3.33           201234         12008           201235         12236           217036         170.06           170.16         170.08           170.15         1700.08           2739         2773           2739         2773           27735         2804           170016         1790           27553         3699           847         856           2753         2804           2753         2804           2753         2804           2805         607           8825         3695           8835         3666           1157         1193           2835         3693           835         3663           835         3663           835         330           2009         2010  | 175         174           343         337           343         337           32009         2010           32009         2010           333         3.33           340381         40788           40381         40708           177016         17008           177016         17008           17790         2739           2733         3.33           333         3.33           40381         40708           17700         1700           17790         2010           2753         2804           44.40         44.26           3.25         3.273           3.255         2804           2753         2804           2753         2804           2753         2804           2805         906           892         3657           3330         3330           3330         3330           3330         3330           3330         3330           3330         3330           3330         3330           3330         3609  | 175         174           343        
337           343         337           35         2009         2010           35         2009         2010           36         2003         2010           37         3.33         3.33           38         2009         2010           313         3.33         3.33           40381         40381         40788           1700.16         170.16         170.08           17790         1735         42664           17790         27735         2804           2753         2009         2010           30         2755         2804           44.40         44.26         3656           30535         3699         906           892         905         906           805         3605         917           1170         1.93         333           1157         1193         36.65           3030         2000         2010           300         2000         2010           30157         100         1.93           30157         1.93         33.03 |
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|     | 49 44<br>3.65 3.67                       | 0.00               | 179 17  | 179 17 <sup>.</sup><br>354 34  | 179 17 <sup>-</sup><br>354 34 <sup>-</sup>                 | 179 17<br>354 34<br>2007 200  | 179 17<br>354 34<br>2007 200<br>2181 1221<br>3 25 32   | 179 17<br>354 34<br>2007 200<br>3.25 3.29<br>3.55 3.999<br>3.55 3.999   | 179 17<br>354 34<br>354 34<br>2007 200<br>2181 1221<br>3.25 3932<br>30.2<br>30.18 170.1<br>11064 4159  | 179         17           354         34!           354         34!           2007         200!           2007         200!           33.25         392?           355.3         393?           17.1         1221:           70.18         170.1:           11064         4159           1539         163           2669         270  | 179         17           354         34           354         34           2007         200           2057         201           171         1221           3553         392           3554         344           2007         2001           2055         3932           352         3932           353         3532           355         3932           1654         170.1           1539         163           1539         2569           270         270 | 179         17           354         34!           354         34!           2007         200           2181         1221:           3.25         3.29           99557         3999:           11064         4159           1539         163:           1539         163:           2669         270:           2007         200   | 179         17           354         34           354         34           2007         200           2181         1221           3.25         399           1504         4159          
1539         163           1539         163           2669         270           2669         270           828         83  | 179         17           354         34           354         34           2007         200           2055         399           3555         3999           170.48         170.4           1539         153           1539         165           2669         270           2007         200           33.25         3999           36557         3999           1539         165           2669         270           2007         200           32.2         3328           32.2         3328           33.2         368           32.2         368           32.2         369           32.2         3399           32.2         368           32.2         368           32.2         368           32.2         37.2   | 179         17           354         34           354         34           2007         200           2007         201           2181         1221           35557         3999           70548         3721           35557         3999           70548         170.1           15024         3999           70557         3999           20569         2700           2069         2700           828         83           3.20         3.2           2007         200           2067         200           2067         270           2007         200           2203         3.2           3.2         3.2           2007         200   | 179         17           354         34           354         34           2007         200           2007         201           13.25         399           1555         3999           1604         4159           1539         163           1604         4159           1539         163           2007         200           32.2         3993           32.2         3993           1539         1639           2669         270           2007         200           2007         200           2007         200           21539         163           3.2         3.2           3.2         3.2           2007         200           2007         200           21639         270           204         270           244.70         244.57     | 179         17           354         34           354         34           2007         200           2007         201           11221:         33.2           2181         1221:           1255         39.32           2055         39.33.2           1555         39.32           2007         2001           153         153           153         153           153         153           2007         200           2007         200           828         83           320         270           2153         2669           2007         200           828         83           3510         357           3510         357  
  | 179         17           354         344           354         344           2007         2001           2007         201           2181         1221           3.25         3995           70.18         170.14           11064         4159           11064         4159           21659         2700           2007         2001           21539         163           21659         2700           21649         2700           3220         3.22           3210         3.27           3510         3.57           3510         3.57           3551         355   
  | 179         17           354         34           354         34           2007         200           2007         200           3.25         3999           1064         4159           1539         163           1539         163           2007         200           2007         200           2007         200           2007         200           2007         200           2569         270           3510         353           3510         365           871         88           871         88           585         59   | 179         17           354         34           354         34           2007         200           2007         200           1555         39.2           3555         39.2           1535         39.2           3516         170.1           1539         163.3           1539         163.3           1539         163.3           25669         270           2007         200           828         83.3           37.0         3.2           3510         357           3510         357           3510         357           365         59           585         59           507         2007  | 179         17           354         34           354         34           2007         200           2007         200           1955         3932           1535         39332           1535         39332           1535         39332           1535         39332           1535         39332           1536         163           1539         153           1539         153           2007         200           2007         200           2103         258           3510         357           3571         357           3571         357           3571         357           3571         358           585         59           585         59           587         59           167         16  
   | 179         17           354         34           354         34           2007         200           2057         3932           19557         39332           1553         39332           1554         344           2007         2001           15557         39332           15557         39332           15557         39322           15557         39322           2007         200           2007         200           2007         200           25669         270           3510         357           3571         357           3571         357           3571         357           3571         357           3571         357           3571         357           3571         357           3571         357           3573         363           364         363           372         357           367         363           368         363           363         363           364         363  
  | 179         17           354         34           354         34           2007         200           2007         200           20557         3932           19557         3932           1533         3525           1539         1533           1539         1533           1539         1633           1539         1633           2007         200           2007         200           2669         270           2649         270           3510         363           3511         383           3510         363           2007         200           2655         59           2007         200           3510         363           585         59           500         31           2007         200           350         31           303         31  | 179         17           354         34           354         34           2007         200           2007         200           163         1221           1955         3932           19557         39332           19557         39332           19557         39332           2007         200           211064         4159           1539         163           1539         163           2007         200           2007         200           2103         250           2669         270           3510         36.3           3510         36.5           356.5         59           2007         200           2007         200           210         44.57           355         59           36.6         36.6           36.6         36.6           36.6         36.6  
   | 179         17           354         34           354         34           2007         2007           2007         2001           2007         201           355         399:           15:055         399:           35:10         372           35:10         372           35:10         357           35:10         357           35:10         357           35:10         357           35:10         357           35:10         357           35:10         357           35:10         357           35:10         357           35:10         357           35:10         357           35:58         53           36:58         36:61           36:58         36:61           36:58         36:61           36:58         36:61           36:58         36:61           36:58         36:61           36:61         36:61           708         116  | 179         17           354         344           354         344           2007         2001           2007         2001           20181         1221:           355         39.2:           355         39.2:           355         39.2:           355         39.2:           356         344           153         163:           153         153:           2007         200           2055         39.2:           3510         357:           3510         357:           3510         357:           365:         59:           365:         36:           112         16           126         31           36:         36:           37:         36:           38:         38:           36:         31           36:         31           37:         30:           38:         36:           38:         36:           108:         112           700         200           30:         31 <t< td=""><td>179         17           354         34           354         34           2007        
200           2007         200           2007         200           3.25         3999           1064         4159           1539         163           1539         163           2007         200           2007         200           2007         200           2007         200           2007         200           2007         200           2007         200           2007         200           2007         200           2007         200           3510         35.5           3510         35.5           3510         35.5           3510         35.5           355         58.5           585         59.6           108         112           108         112           108         112           108         112           108         112           108         112           108         112      &lt;</td><td>179         17           354         34           354         34           2007         200           2055         39.3.2           3553         39.3.2           3553         39.3.2           3553         39.3.2           3553         39.3.2           3553         39.3.2           3554         344           1533         1633           1535         39.3.2           2007         200           2007         200           2007         200           2007         200           828         83           3510         357           3655         59           370         2007           2007         200           2007         200           2007         200           3655         59           3655         59           3655         36.6           308         31.2           2007         200           2007         200           2007         200           2007         200           200         200</td></t<> <td>179         17           354         34           354         34           2007         200           2007         200           2007         200           3.25         3932           19557         39393           19557         39393           19557         39393           2007         200           153         3.25           325         39393           153         3.25           2669         270           2669         270           2669         270           3510         44.5           3510         44.5           3510         36.6           167         168           168         3112           1089         112           1089         112           2007         200           2007         200           265         59           260         200           2007         200           2007         200           2007         200           2007         200           2007         200</td> <td>179         17           354         34           354         34           2007         200           2007         200           2007         200           355         39.2           355         39.2           355         39.2           355         39.2           355         39.2           355         39.2           356         165           153         153           2669         270           2007         200           2669         270           2669         270           2669         270           270         200           828         83           871         88           871         86           1089         31.1           2007         200           2007         200           2007         200           2007         200           2007         200           2007         200           2007         200           2007         200           200         200</td> | 179         17           354         34           354         34           2007         200           2007         200           2007         200           3.25         3999           1064         4159           1539         163           1539         163           2007         200           2007         200           2007         200           2007         200           2007         200           2007         200           2007         200           2007         200           2007         200           2007         200           3510         35.5           3510         35.5           3510         35.5           3510         35.5           355         58.5           585         59.6           108         112           108         112           108         112           108         112           108         112           108         112           108         112      <  | 179         17           354         34           354         34           2007         200           2055         39.3.2           3553         39.3.2           3553         39.3.2           3553         39.3.2           3553         39.3.2           3553         39.3.2           3554         344           1533         1633           1535         39.3.2           2007         200           2007         200           2007         200           2007         200           828         83           3510         357           3655         59           370         2007           2007         200           2007         200           2007         200           3655         59           3655         59           3655         36.6           308         31.2           2007         200           2007         200           2007         200           2007         200           200         200   | 179         17           354         34           354         34           2007         200           2007         200           2007         200           3.25         3932           19557         39393           19557         39393           19557         39393           2007         200           153         3.25           325         39393           153         3.25           2669         270           2669         270           2669         270           3510         44.5           3510         44.5           3510         36.6           167         168           168         3112           1089         112           1089         112           2007         200           2007         200           265         59           260         200           2007         200           2007         200           2007         200           2007         200           2007         200   | 179         17           354        
34           354         34           2007         200           2007         200           2007         200           355         39.2           355         39.2           355         39.2           355         39.2           355         39.2           355         39.2           356         165           153         153           2669         270           2007         200           2669         270           2669         270           2669         270           270         200           828         83           871         88           871         86           1089         31.1           2007         200           2007         200           2007         200           2007         200           2007         200           2007         200           2007         200           2007         200           200         200  |
|     | 00<br>3.63                               | 0000               | 181     | 181<br>358                     | 181<br>358   | 181<br>358<br>2006 2  | 181<br>358<br>2006 2<br>3 23<br>3 23   | 181<br>358<br>2006 2<br>3.22 3<br>3.22 3<br>3.22 3<br>12 12 12 12 12 12 12 12 12 12 12 12 12 1  | 181<br>358<br>358<br>2006 2<br>3.22 3<br>39085 35<br>170.34 17<br>40575 41   | 181<br>358<br>358<br>12140 12<br>3.22<br>3.22<br>3.22<br>3085 35<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34 | 181<br>358<br>358<br>2006 2<br>3.22 (2<br>3.22 (2<br>3.22 (2<br>3.22 (2<br>170.34 17<br>40575 41<br>1520 1<br>2637 2   | 181<br>358<br>358<br>358<br>12140<br>3.22<br>39085<br>36<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.34<br>170.32<br>2637<br>2637<br>2006<br>2  | 181           358           358           358           358           358           358           358           358           358           358           358           358           3985
          3985 <tr< td=""><td>181           358           358           358           358           358           358           358           358           358           358           358           358           3985           3985           3985           3985           3985           3985           3985           3985           3985           3985           3985           3985           3985           3985           3985           3985           3985           3985           3085           3085           317           317</td><td>181           358           358           358           358           358           358           358           358           358           358           358           358           3935           3935           3935           3935           3935           3935           3936           3936           1206           2637           2637           2637           2637           3.17           3.17</td><td>181           358           358           358           358           358           358           358           358           358           358           358           358           358           3935           317           317           317           317           317           317           317           317           317           317           317           317           317</td><td>181           358           358           358           358           358           358           358           358           358           358           358           358           352           39085           39085           39085           39085           39085           39085           39085           317           2637           2637           2637           316           3450</td><td>181           358           358           358           358           358           358           358           358           358           358           358           358           39085           39085           39085           39085           39085           39085           39085           39085           322           39085           3006           2170.34           1520           1520           2637           218           818           3.17           2506           253           3450           864           575</td><td>181       358       358       358       358       358       358       358       322       322       39085       39085       39085       39085       39085       39085       39085       39085       39085       39085       317       2506       2006       2117       25006       317       25006       317       317       317       2506       317       317       317       318       317       318       317       317       2506       3664       575</td><td>181           358           358           358           358           358           358           358           358           358           358           358           358           358           358           359           3908           3908           3908           3908           3908           3908           3908           3908           317           40575           417           40575           417           40575           317           2637           2637           2637           317           2596           317           317           317           318           317           317           317           317           317           317           317           317           318           317           317<!--</td--><td>181           358           358           358           358           358           358           358           358           358           358           358           358           358           358           352           39085           39085           39085           39085           39085           39085           3006           2006           2006           217           2537           3450           864           575           2006           2006           217           2575           3450           864           575           2006           2006           2006           2006           2006           2006           2006           2006</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><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><math display="block">\begin{array}{c ccccccccccccccccccccccccccccccccccc</math></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><math display="block">\begin{array}{c ccccccccccccccccccccccccccccccccccc</math></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><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>181           358           358           358           358           358           358           358           358           358           358           358           358           358           358           3206           322           33085           33085           33085           3301           36.52           317           36.52           317           36.52           318           36.52           317           36.52           318           36.52           317           36.52           316           36.52           316           36.52           316           36.52           317           36.52           318           36.52           310           36.52           310           36.52           310           310.55      &lt;</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></tr<> | 181           358           358           358           358           358           358           358           358           358           358           358           358           3985           3985           3985           3985           3985           3985           3985           3985           3985           3985           3985           3985           3985           3985           3985           3985           3985           3985           3085           3085           317           317  | 181           358           358           358           358           358           358           358           358           358           358           358           358           3935           3935           3935           3935           3935           3935           3936           3936           1206           2637           2637           2637           2637           3.17           3.17   | 181           358           358           358           358           358           358           358           358           358           358           358           358           358           3935           317           317           317           317           317           317           317           317           317           317           317           317           317                | 181           358           358           358           358           358           358           358           358           358           358           358           358           352           39085           39085           39085           39085           39085           39085           39085           317           2637           2637           2637           316           3450  
  | 181           358           358           358           358           358           358           358           358           358           358           358           358           39085           39085           39085           39085           39085           39085           39085           39085           322           39085           3006           2170.34           1520           1520           2637           218           818           3.17           2506           253           3450           864           575   
  | 181       358       358       358       358       358       358       358       322       322       39085       39085       39085       39085       39085       39085       39085       39085       39085       39085       317       2506       2006       2117       25006       317       25006       317       317       317       2506       317       317       317       318       317       318       317       317       2506       3664       575   | 181           358           358           358           358           358           358           358           358           358           358           358           358           358           358           359           3908           3908           3908           3908           3908           3908           3908           3908           317           40575           417           40575           417           40575           317           2637           2637           2637           317           2596           317           317           317           318           317           317           317           317           317           317           317           317           318           317           317 </td <td>181           358           358           358           358           358           358           358           358           358           358           358           358           358           358           352           39085           39085           39085           39085           39085           39085           3006           2006           2006           217           2537           3450           864           575           2006           2006           217           2575           3450           864           575           2006           2006           2006           2006           2006           2006           2006           2006</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><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><math display="block">\begin{array}{c ccccccccccccccccccccccccccccccccccc</math></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><math display="block">\begin{array}{c ccccccccccccccccccccccccccccccccccc</math></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><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>181           358           358           358           358           358           358           358           358           358           358           358           358           358           358           3206           322           33085           33085           33085           3301           36.52           317           36.52           317           36.52           318           36.52           317           36.52           318           36.52           317           36.52           316           36.52           316           36.52           316           36.52           317           36.52           318           36.52           310           36.52           310           36.52           310           310.55      &lt;</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> | 181           358           358           358           358           358           358           358           358           358           358           358           358           358           358           352           39085           39085           39085           39085           39085           39085           3006           2006           2006           217           2537           3450           864           575           2006           2006           217           2575           3450           864           575           2006           2006           2006           2006           2006           2006           2006           2006  
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  | 84         182           166         365           104         2005           143         12094           165         38586           165         38586           165         38586           166         3.19           165         38586           166         3.19           165         38586           167         170.56           168         40108           1556         38586           157         2005           004         2005           166         807           162         3.15   | 84         182           166         365           104         2005           143         12094           146         3.19           157         12094           165         38586           157         170.56           154         40108           573         1556           573         2607           904         2005           916         807           112         3.15           185         2541   | 84         182           166         365           104         2005           143         12094           156         38586           157         170.56           164         2005           165         38586           157         170.56           164         2005           165         38586           157         170.56           154         40108           1556         373           2607         306           96         807           112         3.15           185         2541           117         45.01   | 84         182           166         365           104         2005           143         12094           165         38586           57         170.56           164         3.19           165         38586           57         170.56           173         2607           173         2607           17         3564           17         2561           17         2607           17         45.01           333         3391           333         3391  
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   | 84         182           66         365           66         365           04         2005           143         12094           165         38586           57         170.56           544         1556           573         2607           014         2005           173         2607           173         2607           173         2607           174         2005           173         2607           173         2607           173         2607           173         2607           185         2541           173         2607           185         2541           173         2607           173         2607           173         3391           173         3391           185         2541           173         355           565         565           564         2005           164         165  | 84         182           66         365           66         365           104         2005           143         12094           165         38586           57         170.56           574         1556           573         2607           014         2005           173         2607           173         2607           173         2607           174         45.011           185         2541           173         2607           173         2607           173         2607           174         2561           175         555           565         565           565         565           104         2005           164  
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   | 84         182           66         365           104         2005           104         2005           116         3.19           116         3.19           116         3.19           116         3.19           116         3.19           116         3.19           117         5607           117         1556           117         45.01           117         45.01           117         45.01           117         45.01           117         45.01           117         45.01           117         45.01           117         45.01           117         45.01           117         45.01           117         45.01           117         45.01           118         2665           117         45.01           118         2005           104         2005           104         2005           104         2005           105         1028           1064         1065           107         20122 <td>84         182           66         365           104         2005           104         2005           116         3.19           116         3.19           116         3.19           116         3.19           116         3.19           116         3.19           117         1556           117         1556           117         45.01           104         20</td> <td>84     182       66     365       104     2005       104     2005       116     3.19       116     3.19       116     3.19       116     3.19       116     3.19       116     3.19       116     3.19       116     3.19       116     3.19       1263     38586       131     12094       164     1065       17     45.01       133     3391       133     3391       133     3391       164     165       164     165       164     165       164     165       164     165       102     728       020     2005</td> <td>84         182           66         365           66         365           104         2005           143         12094           157         12094           165         38586           57         170.56           154         40108           155         375           164         2005           173         2607           96         807           17         45.01           177         45.01           177         45.01           177         45.01           177         45.01           177         45.01           177         45.01           177         45.01           177         45.01           177         45.01           177         2554           164         165           164         165           1022         565           2005         2005           200         200           200         200           200         200           200         200  </td> <td>84     182       66     365       104     2005       104     2005       116     3.19       116     3.19       116     3.19       116     3.19       116     3.19       116     3.19       116     3.19       116     3.19       116     3.19       1264     40108       133     3391       147     45.01       133     3391       155     565       164     165       164     165       164     165       164     165       164     165       164     165       164     165       164     165       164     165       164     165       164     165       164     165       164     165       164     165       164     2005       164     2005       164     2005       164     2005       164     2005       164     2005       164     2005       164     2005       164     2005</td> <td>84         182           66         365           104         2005           104         2005           116         3.19           116         3.19           116         3.19           116         3.19           116         3.19           116         3.19           117         35607           117         45.01           11022         5005           1022         <t< td=""></t<></td> | 84         182           66         365           104         2005           104         2005           116         3.19           116         3.19           116         3.19           116         3.19           116         3.19           116         3.19           117         1556           117         1556           117         45.01           104         20  | 84     182       66     365       104     2005       104     2005       116     3.19       116     3.19       116     3.19       116     3.19       116     3.19       116     3.19       116     3.19       116     3.19       116     3.19       1263     38586       131     12094       164     1065       17     45.01       133     3391       133     3391       133     3391       164 
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|     | 3.56 3.56                                |                    | 186 18⁄ | 186 18 <sup>2</sup><br>371 36( | 186 18 <sup>2</sup><br>371 36 <u>6</u><br><b>ilization</b> | 186 184<br>371 366<br><b>ilization</b><br>2003 200 <sup>,</sup>                                     | 186 184<br>371 366<br><b>ilization</b><br>2003 2004<br>11988 1204:   | 186 184<br>371 366<br><b>ilization</b><br>2003 2004<br>11988 12045<br>3.13 3.16<br>3.7528 38061   | 186         184           371         366           371         366           2003         2004           2003         2004           3.13         3.16           375.28         38065           39057         3958-   | 186         184           371         366           371         366           2003         2004           2003         2004           3.13         3.16           375.29         38067           39057         3958           1566         155-           2539         2572  | 186         184           371         366           371         366           112ation         2003           2003         2004           3.13         3.16           3.13         3.16           3.13         3.16           3.13         3.16           3.13         3.16           3.1528         170.66           170.55         170.56           39057         3956           39057         3553           2539         2572           2539         2572  | 186         184           371         366           371         366           2003         2002           2003         2004           313         3.16           37528         3066           37528         39057           39057         3958-           170.59         170.55           30057         3958-           1566         155-           2539         2572           2533         2573           2533         2507           ation         2003   | 186         184           371         366           371         366           371         366           1112ation         2002           2003         2004           11988         12044  
        3.13         3.16           3.13         3.16           3.13         3.16           3.1528         38065           170.559         170.55           170.553         2553           2539         2577           2539         2577           2539         2577           2539         2577           2533         2577           2533         2577           2533         2577           2533         2577           2533         2577           2003         2004           784         796  | 186         184           371         366           371         366           371         366           371         366           371         366           371         366           371         366           371         366           371         366           375         3752           37528         3806           37528         3806           3755         3765           3657         3358           170.559         170.55           37528         3262           3657         2359           2539         257           2539         257           366         155-           2539         257           2539         257           366         371           3.10         3.12  | 186         184           371         366           371         366           371         366           371         366           2003         2004           3014         306           30188         1204           3013         306           3013         306           3015         3366           170.55         3365           3055         3358           1566         155           1565         150.57           3655         2573           2539         2577           2539         2577           2539         2577           2539         2577           2539         2577           2539         2577           2539         2577           2539         2577           2603         2004           3.10         3.11           3.10         3.15           2481         2481 | 186         184           371         366           371         366           371         366           371         366           371         366           2003         2004           3.13         3.16           3.13         3.16           3.13         3.16           3.1528         3806?           37528         3806?           170.559         3705.7           36557         3958.4           1566         155.2           2539         257.2           2539         257.3           3.10         3.17           ation         3.17           3.10         2.553           2533         2.573           3.10         3.17           3.10         3.17           2.003         2.004           784         7.94           45.32         45.11 | 186         184           371         366           371         366           371         366           371         366           37528         2003           313         3.16           37528         38065           37528         38065           39057         3958           170.53         39585           39057         3958           39057         3958           39057         3958           39057         3958           39057         3958           39057         3958           39057         3958           39057         3958           39057         3958           39057         3958           39057         3958           39057         3958           39057         3958           39057         3958           39058         1554           2533         2557           39058         2557           39058         353           3005         333           333         333           3556         357  
  | 186         184           371         366           371         366           371         366           371         366           2003         2004           3.13         3.16           3.13         3.16           3.7528         3806           3.7528         3805           3.7528         3805           3.755         3755           30557         3805           3057         3856           170.559         170.55           30557         3805           2539         2577           2539         2577           354         796           3.10         3.16           3.10         3.15           3276         333           858         855           546         554   
  | 186         184           371         366           371         366           371         366           371         366           37528         38065           170.59         170.51           39057         39558           39057         39568           170.59         170.55           30057         39568           1566         1554           1566         1555           30057         39568           30057         39568           30057         39568           310         316           3575         39057           39057         39568           30057         39568           3100         2533           2533         2573           30057         3957           3005         3568           310         316           310         317           3276         3333           856         855           546         551           546         551   | 186         184           371         366           371         366           371         366           371         366           2003         2004          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      1.77           1.77         1.76           2003         2004           2003         2004           2033         3333           858         855           546         &lt;</td> <td>186         184           371         36E           371         36E           37528         2003           2003         2004           3.13         3.16           3.13         3.16           3.13         3.16           3.13         3.16           3.13         3.16           3.13         3.16           3.13         3.16           3.13         3.16           3.13         3.16           3.13         3.16           3.10         39657           39057         39568           1556         1556           2533         2602           2603         2004           3.10         3.16           3.10         3.15           3.10         3.15           3.10         3.16           45.32         45.17           45.32         3637           546         55           546         56           2003         2002           1.77         1.77           36.21         36.33           36.21         36.33           36.21<td>186         184           371         366           371         366           371         366           375         2003           2003         2004           37528         38065           37528         38065           37528         38065           37528         38065           3755         37055           3765         3705           376         352           3703         2002           2003         2002           21003         2002           2103         2002           310         315           3276         333           858         851           858         851           858         851           858         851           3203         2002           2003         2003           2003         2003           163         1.77           163         1.77           163         1.77           35.21         36.37           35.21         36.37           35.1         36.37  </td><td>186         184           371         366           371         366           371         366           371         366           371         366           2003         2004           37528         38065           37528         38065           37528         38065           37528         38065           37528         38065           376         3575           2539         2575           2539         2577           2603         2004           784         796           784         796           3310         311           311         315           312         3335           3276         3333           858         855           858         855           858         855           957         3603           957         957           957         957           957         957           957         950           957         950           957         950           950           &lt;</td><td>186         184           371         36E           371         36E           371         36E           2003         2002           2003         2004           3.13         3.16           3.13         3.16           3.13         3.16           3.13         3.16           3.13         3.16           3.13         3.16           3.13         3.16           3.13         3.16           3.13         3.16           3.13         3.16           3.10.55         39057           39057         39584           170.55         3005           3.10         3.15           3.10         3.15           3.10         3.15           3.10         3.15           3.10         3.15           3.10         3.16           45.32         45.13           45.32         45.13           32.76         33.37           856         855           546        
564           577         2002           1.772         1.77           36.7&lt;</td><td>186         184           371         366           371         366           371         366           2003         2004           2003         2004           3.13         3.13           3.13         3.16           3.13         3.16           170.528         38065           37528         38065           37528         38065           3763         39055           39057         39565           170.553         39055           39057         39565           39057         39565           39057         39565           3010         2002           2103         2002           310         3.15           310         3.15           310         3.16           45.32         45.17           36.21         36.35           957         967           957         967           957         967           957         960           677         700           2003         2000           2003         2000           200</td><td>186         184           371         36E           371         36E           2003         2004           2003         2004           3.13         3.16           3.13         3.13           3.13         3.16           3.13         3.16           3.13         3.16           3.13         3.16           3.13         3.16           3.13         3.16           3.13         3.16           3.13         3.16           3.13         3.16           3.10         3.16           3.10         3.16           3.10         3.16           3.10         3.16           3.10         3.16           3.10         3.16           3.10         3.16           3.10         3.16           3.10         3.16           45.32         45.13           45.32         36.35           32.6         36.35           32.6         36.35           36.7         36.36           45.3         36.35           36.2         36.35           36.2</td><td>186         184           371         366           371         366           371         366           371         366           371         366           2003         2004           37528         38065           37528         38065           37528         38065           37528         38065           37528         38065           376         3527           2539         2573           2603         2002           2704         748           310         315           2539         2573           2539         2573           2603         2002           310         315           310         315           310         315           3276         3333           858         857           858         857           957         957           957         957           957         957           957         957           957         957           957         956           957         956     &lt;</td></td>  | 186         184           371         36E           371         36E           371         36E           371         36E           112ation         2003           2003         2004           3.13         3.16           3.13         3.16           3.13         3.16           3.1558         38065           170.59         170.55           39057         39582           1566         1554           2539         2553           2603         2004           2003         2006           310         3.15           310         3.15           3276         333           3276         333           3276         333           3276         355           546         55           546         55           1.65         1.72           1.72         1.72  
  | 186         184           371         36E           371         36E           371         36E           2003         2004           2003         2004           3.13         3.16           3.13         3.16           3.13         3.16           3.13         3.16           3.13         3.16           3.13         3.16           3.13         3.16           3.13         3.16           3.13         3.16           3.10         3.16           170.57         39568           1566         1556           2533         2557           39057         39568           310         2106           2533         2002           2603         2002           3276         3333           858         855           546         555           166         1.77           1.77         1.76           2003         2004           2003         2004           2033         3333           858         855           546         <   | 186         184           371         36E           371         36E           37528         2003           2003         2004           3.13         3.16           3.13         3.16           3.13         3.16           3.13         3.16           3.13         3.16           3.13         3.16           3.13         3.16           3.13         3.16           3.13         3.16           3.13         3.16           3.10         39657           39057         39568           1556         1556           2533         2602           2603         2004           3.10         3.16           3.10         3.15           3.10         3.15           3.10         3.16           45.32         45.17           45.32         3637           546         55           546         56           2003         2002           1.77         1.77           36.21         36.33           36.21         36.33           36.21 <td>186         184           371         366           371         366           371         366           375         2003           2003         2004           37528         38065           37528         38065           37528         38065           37528         38065           3755         37055           3765         3705           376         352           3703         2002           2003         2002           21003         2002           2103         2002           310         315           3276         333           858         851           858         851           858         851           858         851           3203         2002           2003         2003           2003         2003           163         1.77           163         1.77           163         1.77           35.21         36.37           35.21         36.37           35.1         36.37  </td> <td>186         184           371         366           371         366           371         366           371         366           371         366           2003         2004           37528         38065           37528         38065           37528         38065           37528         38065           37528         38065           376         3575           2539       
 2575           2539         2577           2603         2004           784         796           784         796           3310         311           311         315           312         3335           3276         3333           858         855           858         855           858         855           957         3603           957         957           957         957           957         957           957         950           957         950           957         950           950           &lt;</td> <td>186         184           371         36E           371         36E           371         36E           2003         2002           2003         2004           3.13         3.16           3.13         3.16           3.13         3.16           3.13         3.16           3.13         3.16           3.13         3.16           3.13         3.16           3.13         3.16           3.13         3.16           3.13         3.16           3.10.55         39057           39057         39584           170.55         3005           3.10         3.15           3.10         3.15           3.10         3.15           3.10         3.15           3.10         3.15           3.10         3.16           45.32         45.13           45.32         45.13           32.76         33.37           856         855           546         564           577         2002           1.772         1.77           36.7&lt;</td> <td>186         184           371         366           371         366           371         366           2003         2004           2003         2004           3.13         3.13           3.13         3.16           3.13         3.16           170.528         38065           37528         38065           37528         38065           3763         39055           39057         39565           170.553         39055           39057         39565           39057         39565           39057         39565           3010         2002           2103         2002           310         3.15           310         3.15           310         3.16           45.32         45.17           36.21         36.35           957         967           957         967           957         967           957         960           677         700           2003         2000           2003         2000           200</td> <td>186         184           371         36E           371         36E           2003         2004           2003         2004           3.13         3.16           3.13         3.13           3.13         3.16           3.13         3.16           3.13         3.16           3.13         3.16           3.13         3.16           3.13         3.16           3.13         3.16           3.13         3.16           3.13         3.16           3.10         3.16           3.10         3.16           3.10         3.16           3.10         3.16           3.10         3.16           3.10         3.16           3.10         3.16           3.10         3.16           3.10         3.16           45.32         45.13           45.32         36.35           32.6         36.35           32.6         36.35           36.7         36.36           45.3         36.35           36.2         36.35           36.2</td> <td>186         184           371         366           371         366           371         366           371         366           371         366           2003         2004           37528         38065           37528         38065           37528         38065           37528         38065           37528         38065           376         3527           2539         2573           2603         2002           2704         748           310         315           2539         2573           2539         2573           2603         2002           310         315           310         315           310         315           3276         3333           858         857           858         857           957         957           957         957           957         957           957         957           957         957           957         956           957         956     &lt;</td> | 186         184           371         366           371         366           371         366           375         2003           2003         2004           37528         38065           37528         38065           37528         38065           37528         38065           3755         37055           3765         3705           376         352           3703         2002           2003         2002           21003         2002           2103         2002           310         315           3276         333           858         851           858         851           858         851           858         851           3203         2002           2003         2003           2003         2003           163         1.77           163         1.77           163         1.77           35.21         36.37           35.21         36.37           35.1         36.37  | 186         184           371         366           371         366           371         366           371         366           371         366           2003         2004           37528         38065           37528         38065           37528         38065           37528         38065           37528         38065           376         3575           2539         2575           2539         2577           2603         2004           784         796           784         796           3310         311           311         315           312         3335           3276         3333           858         855           858         855           858         855           957         3603           957         957           957         957           957         957           957         950           957         950           957         950           950           <  
  | 186         184           371         36E           371         36E           371         36E           2003         2002           2003         2004           3.13         3.16           3.13         3.16           3.13         3.16           3.13         3.16           3.13         3.16           3.13         3.16           3.13         3.16           3.13         3.16           3.13         3.16           3.13         3.16           3.10.55         39057           39057         39584           170.55         3005           3.10         3.15           3.10         3.15           3.10         3.15           3.10         3.15           3.10         3.15           3.10         3.16           45.32         45.13           45.32         45.13           32.76         33.37           856         855           546         564           577         2002           1.772         1.77           36.7<   | 186         184           371         366           371         366           371         366           2003         2004           2003         2004           3.13         3.13           3.13         3.16           3.13         3.16           170.528         38065           37528         38065           37528         38065           3763         39055           39057         39565           170.553         39055           39057         39565           39057         39565           39057         39565           3010         2002           2103         2002           310         3.15           310         3.15           310         3.16           45.32         45.17           36.21         36.35           957         967           957         967           957         967           957         960           677         700           2003         2000           2003         2000           200   | 186         184           371         36E           371         36E           2003         2004           2003         2004           3.13         3.16           3.13         3.13           3.13         3.16           3.13         3.16           3.13         3.16           3.13         3.16           3.13         3.16           3.13         3.16           3.13         3.16           3.13         3.16           3.13         3.16           3.10         3.16           3.10         3.16           3.10         3.16           3.10         3.16           3.10         3.16           3.10         3.16           3.10         3.16           3.10         3.16           3.10         3.16           45.32         45.13           45.32         36.35           32.6         36.35           32.6         36.35           36.7         36.36           45.3         36.35           36.2         36.35           36.2  | 186         184           371        
366           371         366           371         366           371         366           371         366           2003         2004           37528         38065           37528         38065           37528         38065           37528         38065           37528         38065           376         3527           2539         2573           2603         2002           2704         748           310         315           2539         2573           2539         2573           2603         2002           310         315           310         315           310         315           3276         3333           858         857           858         857           957         957           957         957           957         957           957         957           957         957           957         956           957         956     <  |
| C L | 4 03<br>1 3.54                           | -                  | 0 188   | 0 188<br>6 373                 | 0 188<br>6 373<br>upply and Utilis                         | 0         188           6         373           upply and Utiliz         1           1         2002 | 0         188           6         373           upply and Utiliz         1           1         2002           5         11932           5         3102 | D         188           6         373           upply and Utiliz         1           1         2002           5         11932           7         3.10           7         3.6978   | 0         188           6         373           100000         373           100000         10000           1         2002           1         2002           1         2002           1         36978           36978         3           0         170.477           0         38494   | D         188           6         373           upply and Utiliz         373           1         2002           5         11932         1           6         3.10         3           7         3.10         3           9         36978         3           0         170.47         1           0         38494         3           5         1551         6           2502         1551         3  | 0         188           6         373           1         2002           1         2002           5         11932         1           6         3.10         3           7         3.697         3           0         170.47         1           0         38494         3           5         1551         1           6         2502         3           oly and Utilizati         oly and Utilizati  | 0         188           6         373           upply and Utiliz         1           1         2002           5         11932         1           7         3.10         3           9         36978         3           0         170.47         1           6         2502         3           6         2502         3           9         38494         3           1         2002         1           1         2002         1           1         2002         1   | 0         188           6         373           upply and Utiliz         1           1         2002           5         11932           7         3.10           7         3.6978         
 9         36944           170.447         1           0         1770.477           5         15552           6         2502           1         2002           1         2002           6         2502           1         2002           1         2002   | 0         188           6         373           upply and Utiliz         1           1         2002           7         3.10           7         3.10           7         3.10           8         36978           9         36944           170.447         1           6         15502           15         15621           6         2502           1         2002           1         2002   | 0         188           6         373           1         2002           1         2002           5         11932           7         3.10           8         36978           9         36943           1         2502           5         1551           6         2502           1         2002           1         2002           6         1551           6         2502           1         2002           3.07         5           5         3.07           5         3.07  | 0         188           6         373           9         373           1         2002           1         2002           1         2002           7         3.10           7         3.10           8         36978           9         36944           1         2002           1551         1           6         1551           1         2002           1         2002           1         2002           1         2002           1         2002           3         3.07           5         45.49   | 5         373           6         373           1         2002           1         2002           5         11932           6         36978           7         3.10           9         36978           0         170.47           5         1551           6         2502           1         2002           1         2002           6         2502           1         2002           1         2002           1         2002           38494         3           5         1551           6         2502           7         2002           1         2002           3         2366           5         3220           8         3220           8         3220           8         3220   
  | 0         188           6         373           9         373           5         11932           7         3.10           7         3.10           7         3.10           9         36978           0         170.47           5         1551           6         2502           1         2002           1         2002           1         2002           1         2002           1         2002           1         2002           1         2002           1         2002           1         2002           5         3.07           5         3.07           5         3.07           5         3.07           5         3.07           5         3.07           5         3.07           5         3.07           5         3.07           5  
      3.07           6         3.07           7         3.07           8         5.3220 <tr tbox<="" tr=""> <tr tbox<="" tr=""></tr></tr>                         | 5         373           5         373           upply and Utiliz         1           1         2002           5         11932         1           7         3.10         3           9         36978         3           0         170.47         1:           0         38494         3           5         1551         1           6         2502         1           1         2002         1           1         2002         3           1         2002         1           1         2002         2           5         3.07         3           5         3.07         3           5         3.07         3           5         3.07         3           5         3.07         3           5         3.07         3           5         3.07         3           6         3.07         3           7         3.07         3           6         3.07         3           7         3.07         3           8         537 | 5         188           5         373           9         373           1         2002           5         11932           7         3.10           7         3.103           9         36978           0         170.47           1         2002           1         2502           1551         3           5         1551           6         2502           310         170.47           5         1551           6         2502           33         23866           6         770           5         3220           5         3220           5         3220           6         537           8         537           9         9           1         2002           1         2002           1         2002           1         2002   | 5         373           5         373           upply and Utiliz         1           5         310           5         11932           7         3.10           9         36978           0         170.47           11         2002           9         36978           0         170.47           5         1551           6         2502           1         2002           1         2002           5         3.07           5         3.07           5         3.07           5         3.07           5         3.07           5         3.07           5         3.07           5         3.07           5         3220           6         5.323           8         5.37           1         2002           1         2002           1         2002           1         2002           1         2002           1         2002           1         2002           1         2002 </td <td>5     373       5     373       upply and Utiliz       5     310       5     11932       7     3.10       9     36978       0     170.47       1     2002       0     170.47       5     1551       6     2502       1     2002       5     1551       6     2502       3     3.07       5     3.07       5     3.07       5     3.07       5     3.07       5     3.07       5     3.07       5     3.07       5     3.07       5     3.07       5     3.07       5     3.07       5     3.07       5     3.07       5     3.07       6     770       7     1.002       1     2002       1     2002       1     2002       1     2002       1     2002       1     2002       1     2002       1     2002       1     2002       1     2002       1     <t< td=""><td>5     373       6     373       1     2002       5     310       6     3.10       7     3.103       8     36978       9     36978       9     36978       9     36978       170.47     11       170.47     11       1     2002       1     170147       1     2002       1     2002       1     2002       3     3.07       3     2366       5     3.07       5     3.07       5     3.07       5     3.07       5     3.07       5     3.07       5     3.07       5     3.07       5     3.07       5     3.07       5     3.07       6     7.00       7     1.70       8     5.3250       8     5.37       9     9       1     2002       1     2002       1     2002       6     1.70       7     1.70       8     5.75       7     1.70</td><td>5     373       6     373       1     2002       5     3.10       6     3.103       7     3.103       8     36978       9     36978       9     36978       1     2002       1     2002       1     2002       1     2002       1     2002       1     2002       1     2002       1     2002       1     2002       1     2002       1     2002       1     2002       1     2002       1     2002       1     2002</td><td>5     373       6     373       1     2002       5     3.10       7     3.10       9     36978       9     36978       9     36978       1     2002       1     2002       1     2002       1     2002       1     2002       1     2002       1     2002       1     2002       5     3.07       33.07     33.07       33.07     33.07       5     3.07       5     3.07       5     3.07       5     3.07       5     3.07       5     3.07       5     3.07       5     3.07       5     3.07       5     3.07       5     3.07       5     3.07       6     3.07       7     1.70       8     2.75       8     36.06       9     96.06       650     556</td><td>5     373       5     373       9     373       1     2002       5     11932       7     3.10       7     3.103       9     36978       1     2002       1     2002       1     2002       1     2002       1     2002       1     2002       1     2002       1     2002       3494     3       1     2002       3     1551       1     2002       2     5502       3     2562       3     3.07       3     2320       5     3220       5     3220       5     537       8     537       9     36.06       1     2002       1     2002       1     2002       2     537       8     537       9     36.06       9     36.06       9     92.66       9     200       5     500       65     500       7     651</td><td>5         373           9         373           1         2002           5         3.10           5         3.10           7         3.10           9         36978           0         170.47           1         2002           1         2002           1         2502           1         2002           1         2002           1         2002           1         2002           1         2002           1         2002           1         2002           5         3.07           5         3.07           5         3.07           5         3.07           5         3.07           5         3.07           5         3.07           5         3.07           6         3.07           7         1.70           8         5.320           8         5.320           9         36.06           6         36.06           7         6.06           6         36.06     <td>5     373       9     373       1     2002       5     3.10       6     3.10       7     3.10       9     36978       9     36978       9     36978       1     2002       1     2002       1     2002       1     2002       1     2002       1     2002       1     2002       1     2002       3     494       3     36494       5     3220       5     3220       5     3220       6     770       5     3220       6     770       5     3220       6     3220       6     357       9     3663       9     3663       6     357       7     1.700       8     36.06       7     651       0     2002       7     651       0     200       7     651       7     2002       7     651       8     36.06       7     651       9     200&lt;</td><td>5     373       9     373       1     2002       5     3.10       5     3.10       6     3.10       7     3.10       9     36978       0     170.47       1     2002       1     2002       0     170.47       1     2002       1     2002       1     2002       1     2002       5     3.07       5     3.07       5     3.07       5     3.07       5     3.07       5     3.07       5     3.07       5    
3.07       5     3.07       5     3.07       6     3.07       7     1.70       8     5.756       6     36.06       7     2002       7     2002       7     2002       7     2002       7     2002       7     2002       7     2002       8     36.06       6     36.06       7     5002       8     40.13</td><td>5     373       9     373       1     2002       5     3.10       5     3.10       9     36978       9     36978       9     36978       170.47     1.       170.47     1.       170.47     1.       1     2002       1     2002       1     2002       1     2002       1     2002       2     3.50       38494     3       38494     3       5     3502       6     770       5     3220       8     537       9     36.06       5     95.66       6     770       7     1.70       8     2376       9     36.06       7     1.70       8     275       9     36.06       7     5002       7     1.70       8     36.06       7     5002       7     5002       8     40.13       945     945</td></td></t<></td>   | 5     373       5     373       upply and Utiliz       5     310       5     11932       7     3.10       9     36978       0     170.47       1     2002       0     170.47       5     1551       6     2502       1     2002       5     1551       6     2502       3     3.07       5     3.07       5     3.07       5     3.07       5     3.07       5     3.07       5     3.07       5     3.07       5     3.07       5     3.07       5     3.07       5     3.07       5     3.07       5     3.07       5     3.07       6     770       7     1.002       1     2002       1     2002       1     2002       1     2002       1     2002       1     2002       1     2002       1     2002       1     2002       1     2002       1 <t< td=""><td>5     373       6     373       1     2002       5     310       6     3.10       7     3.103       8     36978       9     36978       9     36978       9     36978       170.47     11       170.47     11       1     2002       1     170147       1     2002       1     2002       1     2002       3     3.07       3     2366       5     3.07       5     3.07       5     3.07       5     3.07       5     3.07       5     3.07       5     3.07       5     3.07       5     3.07       5     3.07       5     3.07       6     7.00       7     1.70       8     5.3250       8     5.37       9     9       1     2002       1     2002       1     2002       6     1.70       7     1.70       8     5.75       7     1.70</td><td>5     373       6     373       1     2002       5     3.10       6     3.103       7     3.103       8     36978       9     36978       9     36978       1     2002       1     2002       1     2002       1     2002       1     2002       1     2002       1     2002       1     2002       1     2002       1     2002       1     2002       1     2002       1     2002       1     2002       1     2002</td><td>5     373       6     373       1     2002       5     3.10       7     3.10       9     36978       9     36978       9     36978       1     2002       1     2002       1     2002       1     2002       1     2002       1     2002       1     2002       1     2002       5     3.07       33.07     33.07       33.07     33.07       5     3.07       5     3.07       5     3.07       5     3.07       5     3.07       5     3.07       5     3.07       5     3.07       5     3.07       5     3.07       5     3.07       5     3.07       6     3.07       7     1.70       8     2.75       8     36.06       9     96.06       650     556</td><td>5     373       5     373       9     373       1     2002       5     11932       7     3.10       7     3.103       9     36978       1     2002       1     2002       1     2002       1     2002       1     2002       1     2002       1     2002       1     2002       3494     3       1     2002       3     1551       1     2002       2     5502       3     2562       3     3.07       3     2320       5     3220       5     3220       5     537       8     537       9     36.06       1     2002       1     2002       1     2002       2     537       8     537       9     36.06       9     36.06       9     92.66       9     200       5     500       65     500       7     651</td><td>5         373           9         373           1         2002           5         3.10           5         3.10           7         3.10           9         36978           0         170.47           1         2002           1         2002           1         2502           1         2002           1         2002           1         2002           1         2002           1         2002           1         2002           1         2002           5         3.07           5         3.07           5         3.07           5         3.07           5         3.07           5         3.07           5         3.07           5         3.07           6         3.07           7         1.70           8         5.320           8         5.320           9         36.06           6         36.06           7         6.06           6         36.06     <td>5     373       9     373       1     2002       5     3.10       6     3.10       7     3.10       9     36978       9     36978       9     36978       1     2002       1     2002       1     2002       1     2002       1     2002       1     2002       1     2002       1     2002       3     494       3     36494       5     3220       5     3220       5     3220       6     770       5     3220       6     770       5     3220       6     3220       6     357       9     3663       9     3663       6     357       7     1.700       8     36.06       7     651       0     2002       7     651       0     200       7     651       7     2002       7     651       8     36.06       7     651       9     200&lt;</td><td>5     373       9     373       1     2002       5     3.10       5     3.10       6     3.10       7     3.10       9     36978       0     170.47       1     2002       1     2002       0     170.47       1     2002       1     2002       1     2002       1     2002       5     3.07       5     3.07       5     3.07       5     3.07       5     3.07       5     3.07       5     3.07       5     3.07       5     3.07       5     3.07       6     3.07       7     1.70       8     5.756       6     36.06       7     2002       7     2002       7     2002       7     2002       7     2002       7     2002       7     2002       8     36.06       6     36.06       7     5002       8     40.13</td><td>5     373       9     373       1     2002       5     3.10       5     3.10       9     36978       9     36978       9     36978       170.47     1.       170.47     1.       170.47     1.       1     2002       1     2002       1     2002       1     2002       1     2002       2     3.50       38494     3       38494     3       5     3502       6     770       5     3220       8     537       9     36.06       5     95.66       6     770       7     1.70       8     2376       9     36.06       7     1.70       8     275       9     36.06       7     5002       7     1.70       8     36.06       7     5002       7     5002       8     40.13       945     945</td></td></t<>   
  | 5     373       6     373       1     2002       5     310       6     3.10       7     3.103       8     36978       9     36978       9     36978       9     36978       170.47     11       170.47     11       1     2002       1     170147       1     2002       1     2002       1     2002       3     3.07       3     2366       5     3.07       5     3.07       5     3.07       5     3.07       5     3.07       5     3.07       5     3.07       5     3.07       5     3.07       5     3.07       5     3.07       6     7.00       7     1.70       8     5.3250       8     5.37       9     9       1     2002       1     2002       1     2002       6     1.70       7     1.70       8     5.75       7     1.70   | 5     373       6     373       1     2002       5     3.10       6     3.103       7     3.103       8     36978       9     36978       9     36978       1     2002       1     2002       1     2002       1     2002       1     2002       1     2002       1     2002       1     2002       1     2002       1     2002       1     2002       1     2002       1     2002       1     2002       1     2002  
   | 5     373       6     373       1     2002       5     3.10       7     3.10       9     36978       9     36978       9     36978       1     2002       1     2002       1     2002       1     2002       1     2002       1     2002       1     2002       1     2002       5     3.07       33.07     33.07       33.07     33.07       5     3.07       5     3.07       5     3.07       5     3.07       5     3.07       5     3.07       5     3.07       5     3.07       5     3.07       5     3.07       5     3.07       5     3.07       6     3.07       7     1.70       8     2.75       8     36.06       9     96.06       650     556   | 5     373       5     373       9     373       1     2002       5     11932       7     3.10       7     3.103       9     36978       1     2002       1     2002       1     2002       1     2002       1     2002       1     2002       1     2002       1     2002       3494     3       1     2002       3     1551       1     2002       2     5502       3     2562       3     3.07       3     2320       5     3220       5     3220       5     537       8     537       9     36.06       1     2002       1     2002       1     2002       2     537       8     537       9     36.06       9     36.06       9     92.66       9     200       5     500       65     500       7     651  
  | 5         373           9         373           1         2002           5         3.10           5         3.10           7         3.10           9         36978           0         170.47           1         2002           1         2002           1         2502           1         2002           1         2002           1         2002           1         2002           1         2002           1         2002           1         2002           5         3.07           5         3.07           5         3.07           5         3.07           5         3.07           5         3.07           5         3.07           5         3.07           6         3.07           7         1.70           8         5.320           8         5.320           9         36.06           6         36.06           7         6.06           6         36.06 <td>5     373       9     373       1     2002       5     3.10       6     3.10       7     3.10       9     36978       9     36978       9     36978       1     2002       1     2002       1     2002       1     2002       1     2002       1     2002       1     2002       1     2002       3     494       3     36494       5     3220       5     3220       5     3220       6     770       5     3220       6     770       5     3220       6     3220       6     357       9     3663       9     3663       6     357       7     1.700       8     36.06       7     651       0     2002       7     651       0     200       7     651       7     2002       7     651       8     36.06       7     651       9     200&lt;</td> <td>5     373       9     373       1     2002       5     3.10       5     3.10       6     3.10       7     3.10       9     36978       0     170.47       1     2002       1     2002       0     170.47       1     2002       1     2002       1     2002       1     2002       5     3.07       5     3.07       5     3.07       5     3.07       5     3.07       5     3.07       5     3.07       5     3.07       5     3.07       5     3.07       6     3.07       7     1.70       8     5.756       6     36.06       7     2002       7     2002       7     2002       7     2002       7     2002       7     2002       7     2002       8     36.06       6     36.06       7     5002       8     40.13</td> <td>5     373       9     373       1     2002       5     3.10       5     3.10       9     36978       9     36978       9     36978       170.47     1.       170.47     1.       170.47     1.       1     2002       1     2002       1     2002       1     2002       1     2002       2     3.50       38494     3       38494     3       5     3502       6     770       5     3220       8     537       9     36.06       5     95.66       6     770       7     1.70       8     2376       9     36.06       7     1.70       8     275       9     36.06       7     5002       7     1.70       8     36.06       7     5002       7     5002       8     40.13       945     945</td> | 5     373       9     373       1     2002       5     3.10       6     3.10       7     3.10       9     36978       9     36978       9     36978       1     2002       1     2002       1     2002       1     2002       1     2002       1     2002       1     2002       1     2002       3     494       3     36494       5     3220       5     3220       5     3220       6     770       5     3220       6     770       5     3220       6     3220       6     357       9     3663       9     3663       6     357       7     1.700       8     36.06       7     651       0     2002       7     651       0     200       7     651       7     2002       7     651       8     36.06       7     651       9     200<  | 5     373       9     373       1     2002       5     3.10       5     3.10       6     3.10       7     3.10       9     36978       0     170.47       1     2002       1     2002       0     170.47       1     2002       1     2002       1     2002       1     2002       5     3.07       5     3.07       5     3.07       5     3.07       5     3.07       5     3.07       5     3.07       5     3.07       5     3.07       5     3.07       6     3.07       7     1.70       8     5.756       6     36.06       7     2002       7     2002       7     2002       7     2002       7     2002       7     2002       7     2002       8     36.06       6     36.06       7     5002       8     40.13   | 5     373       9     373       1    
2002       5     3.10       5     3.10       9     36978       9     36978       9     36978       170.47     1.       170.47     1.       170.47     1.       1     2002       1     2002       1     2002       1     2002       1     2002       2     3.50       38494     3       38494     3       5     3502       6     770       5     3220       8     537       9     36.06       5     95.66       6     770       7     1.70       8     2376       9     36.06       7     1.70       8     275       9     36.06       7     5002       7     1.70       8     36.06       7     5002       7     5002       8     40.13       945     945  |
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|     | 3.49 3.51                                |                    | 192 190 | 192 190<br>371 376             | 192 190<br>371 376<br>onesia Rice Su                       | 192         190           371         376           onesia Rice Sul         2000                    | 192 190<br>371 376<br>onesia Rice Sul<br>2000 2001<br>11818 11875<br>3 03 3 03   | 192         190           371         376 <b>onesia Rice Sul</b> 2000           2000         2001           11818         11875           3.03         3.07           3.03         3.07           3.03         3.07   | 192         190           371         376           anesia Rice Sul         2000           2000         2001           11818         11875           3.03         3.07           35854         36419           70.40         170.40           37402         37940  | 192         190           371         376           371         376 <b>onesia Rice Sul</b> 2000           2000         2001           20354         3.07           35854         36419           70.40         170.40           70.40         37940           1583         1555           2431         2466  | 192         190           371         376           371         376 <b>onesia Rice Sul</b> 2000           2000         2001           2033         3.07           303         3.07           35854         36419           70.40         170.40           70.40         170.40           1583         1555           2431         2466           1583         1555           2431         2466           1583         1555           2431         2466         | 192         190           371         376           371         376 <b>onesia</b> Rice Sul         2000           2000         2001           2000         2001           11818         11875           35854         36419           358554         36419           70.40         170.40           37402         37940           1583         1555           2431         2466           2431         2466           2431         2466           21583         1555           2431         2466           21583         1555           2431         2466           21583         1555           2431         2466           2000         2001   | 192         190           371         376           371         376 <b>onesia</b> Rice Sul         2000           2000         2001           11818         11875           3.03        
3.03           3.03         3.03           35854         36419           70.40         170.40           71402         37940           1583         1555           2431         2466           1583         1555           2431         2460           1583         1555           2431         2466           1583         1555           2431         2466           1583         1555           2431         2466           1583         1555           2431         2460           2000         2001           2000         2001           200         2001  | 192         190           371         376           371         376 <b>onesia</b> Rice Sul         2000           2000         2001           2000         2001           35854         36419           37402         37940           37402         37940           1583         1555           2431         2466           1583         1555           2431         2460           1583         1555           2431         2466           1583         1555           2431         2466           1583         1555           2431         2466           1583         1555           2431         2466           1583         1555           2431         2466           170         700           2000         2001           200         2001           3.05         3.056  | 192         190           371         376           371         376 <b>onesia</b> Rice Sul         2000           2000         2001           2000         2001           303         3.03           303         3.03           37402         37940           70.40         170.40           37402         37940           1583         1555           2431         2466           1583         1555           2431         2460           1583         1555           2431         2466           170.40         770.40           1583         1555           2431         2466           740         756           2000         2001           2000         2001           2000         2031           202         2303           2235         2333  | 192         190           371         376           371         376 <b>onesia</b> Rice Sul         2000           2000         2001           2000         2001           30.3         3.03           30.40         170.40           37402         37940           1583         1555           2431         2466           1583         1555           2431         2466           1583         1555           2431         2466           1583         1555           2431         2466           1583         1555           2431         2466           1583         1555           2431         2566           2000         2001           2000         2001           2000         2033           3.05         2333           45.65         365    | 192         190           371         376           371         376 <b>onesia Rice Sul</b> 2000           2000         2001           2000         2001           35854         36419           37402         37940           37402         37940           37402         37940           37402         37940           1583         1555           2431         2466           1583         1555           2431         2466           740         770           1583         1555           2431         2466           740         756           37940         37940           37940         37940           2600         2001           2010         2011           2011         2000           305         2235           3165         3165           3165         3165   
  | 192         190           371         376           371         376 <b>onesia Rice Sul</b> 2000           2000         2001           2000         2001           11818         11875           35854         36419           36854         36419           70.40         170.40           37402         37940           1555         2431           2431         2466           2431         2466           2102         2001           22000         2001           22000         2001           2112         3.65           3.05         3.05           3.05         3.05           3.06         3.07           2000         2001           2011         256           3.05         3.05           3.05         3.05           3.05         3.05    
      3.05         3.05           3.05         3.05           3.05         3.05           3.05         3.05           3.06         3.05           3.07         3.05 | 192         190           371         376           371         376 <b>onesia</b> Rice Sul         2000           2000         2001           2000         2001           11818         11875           35854         36419           35854         36419           70.40         170.40           37402         37940           1583         1555           2431         2466           2431         2466           2000         2001           2128         1555           2431         2466           2112         3.05           3.02         3.05           3.03         3.55           2431         2466           2102         2001           2000         2001           20112         3.05           3.05         3.05           3.05         3.05           3.05         3.05           3.05         3.05           3.05         3.05           3.05         3.05           3.05         3.05           3.05         3.05 | 192         190           371         376           371         376 <b>onesia</b> Rice Sul         2000           2000         2001           2000         2001           303         3.07           35854         36419           303         3.07           35854         36419           70.40         170.40           7102         37940           7402         37940           7402         37940           7402         37940           1583         1555           2431         2466           700         2001           2740         756           3.02         3.05           2431         2466           740         756           3.02         3.05           2235         23.33           3.112         3165           886         872           812         519           519         528           519         528           510         2000           2000         2001           2000         2001  | 192         190           371         376           371         376 <b>onesia</b> Rice Sul         2000           2000         2001           2000         2001           11818         11875           35854         36419           70.40         170.40           37402         37940           37402         37940           1583         1555           2431         2466           1583         1555           2431         2466           2740         756           2112         305           22000         2001           2000         2001           2102         201           2102         203           2112         3165           816         872           816         872           519         528           519         520           2000         2001           2000         201           2000         201           2000         201           2000         201           200         201           200 <td>192         190           371         376           371         376           <b>onesia</b> Rice Sul         2000           2000         2001           2000         2001           11818         11875           35854         36419           70.40         170.40           37402         37940           37402         37940           37402         37940           1583         1555           2431         2466           2000         2001           2000         2001           2000         2001           2000         2001           2000         2001           2105         305           3112         3165           816         872           816         872           816         528           3112         3165           313         3165           316         528           317         2000           2000         2001           2000         2001           2000         2001           2000         2001           <t< td=""><td>192         192         190           371         376         376           371         376         376           <b>onesia</b> Rice Sul         2000         2001           2000         2001         11875           35854         36419         3.07           35854         36419         3.07           35854         36419         3.07           35854         36419         3.07           35854         36419         3.07           3640         170.40         37940           1583         1555         2431           2431         2466         2001           1583         1555         2431           2102         2001         2001           2000         2001         2001           2011         2165         3165           3112         3165         872           519         528         3165           3112         3165         3165           3112         3165         3165           519         528         3165           2000         2001         1001           150         160         160</td><td>192         192         190           371         376         376           371         376         376           <b>onesia</b> Rice Sul         2000         2001           2000         2001         108           35854         36419         3.07           35854         36419         3.07           35854         36419         3.07           35854         36419         3.07           379402         37940         37940           37402         37940         37940           1583         1555         2431           2431         2466         2001           2000         2001         2001           2000         2001         206           2112         3165         8872           3112         3165         872           3112         3165         872           519         528         3165           357         160         2001           159         528         35.71           35.71         35.89         35.71</td><td>192         192         190           371         376           371         376           <b>onesia Rice Suj</b>         2000           2000         2001           11818         11875           3.03         3.07           55854         36419           70.40         170.40           37402         37940        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     2001          
2000         2001           2000         2001           2000         2001           2000         2001           2000         2001           2000         2001           1165         1.67           156         528           35.71         35.89           35.71         35.89           36.6         627           2000         2001           2000         2001</td><td>192         190           371         376           371         376           <b>onesia</b> Rice Sul         2000           2000         2001           2000         2001           35854         36419           36854         36419           37940         170.40           37402         37940           37402         37940           37402         37940           37402         37940           37402         37940           37402         37940           37402         37940           37402         37940           3702         301           3703         3.05           3613         3.05           37402         37940           37402         37940           3702         301           2000         2001           2000         2001           160         1.67           155         268           35.71         35.89           864         895           602         602           200         2001           200         200</td><td>192         190           371         376           371         376           <b>onesia</b> Rice Sul         2001           2000         2001           11818         11875           35854         36419           55854         36419           70.40         170.40           37402         37940           37402         37940           37402         37940           1555         2431         2466           2100         2001         2001           2000         2001         2001           2112         3165         8872           3112         3165         8872           3112         3165         8872           3112         3165         8872           35.71         35.89         36.66           886         895         607           159         160         160           150         2000         2001           2000         2001         2002           35.71         35.89         895           805         602         607           2000         200         200</td><td>192         192         190           371         376           371         376           <b>onesia Rice Suj</b>         2000           2000         2001           11818         11875           3.03         3.07           55854         36419           70.40         170.40           37402         37940           1555         2431         2466           1583         1555         2431           2000         2001         2001           2000         2001         2001           2000         2001         2001           2112         3165         8872           8112         3165         8872           8112         3165         528           3112         3165         528           3112         3165         528           886         372         528           864         895         885           35.71         35.89         3614           35.71         35.89         35.71           2000         2001         2001           2000         2001         200           2</td></t<></td> | 192         190           371         376           371         376 <b>onesia</b> Rice Sul         2000           2000         2001           2000         2001           11818         11875           35854         36419           70.40         170.40           37402         37940           37402         37940           37402         37940           1583         1555           2431         2466           2000         2001           2000         2001           2000         2001           2000         2001           2000         2001           2105         305           3112         3165           816         872           816         872           816         528           3112         3165           313         3165           316         528           317         2000           2000         2001           2000         2001           2000         2001           2000         2001 <t< td=""><td>192         192         190           371         376         376           371         376         376           <b>onesia</b> Rice Sul         2000         2001           2000         2001         11875           35854         36419         3.07           35854         36419         3.07           35854         36419         3.07           35854         36419         3.07           35854         36419         3.07           3640         170.40         37940           1583         1555         2431           2431         2466         2001           1583         1555         2431           2102         2001         2001           2000         2001         2001           2011         2165         3165           3112         3165         872           519         528         3165           3112         3165         3165           3112         3165         3165           519         528         3165           2000         2001         1001           150         160         160</td><td>192         192         190           371         376         376           371         376         376           <b>onesia</b> Rice Sul         2000         2001           2000         2001         108           35854         36419         3.07           35854         36419         3.07           35854         36419         3.07           35854         36419         3.07           379402         37940         37940           37402         37940         37940           1583         1555         2431           2431         2466         2001           2000         2001         2001           2000         2001         206           2112         3165         8872           3112         3165         872           3112         3165         872           519         528         3165           357         160         2001           159         528         35.71           35.71         35.89         35.71</td><td>192         192         190           371         376           371         376           <b>onesia Rice Suj</b>         2000           2000         2001           11818         11875           3.03         3.07           55854         36419           70.40         170.40           37402         37940           37402         37940           1555         2431         2466           2000         2001           2000         2001           2000         2001           2000         2001           2000         2001           2000         2001           20112         3165           886         30.52           8112         872           886         3112           886         8872           8112         3165           519         528           35.71         35.89           35.71         35.89           35.71         35.89           35.71         35.89</td><td>192         190           371         376           371         376           <b>onesia Rice Suj</b>         2000           2000         2001           11818         11875           3.03         3.07           5854         36419           70.40         170.40           1703         1555           2000         2001           1583         1555           2431         2466           170.40         756           2431         2466           170.40         756           2431         2466           2100         2001           2000         2001           2000         2001           2112         3165           886         872           8112         887           3112         3165           886         872           1159         160           1165         1.67           1165         1.67           1165         1.67           1165         2.68           864         895           864         895           60</td><td>192         190           371         376           371         376           <b>onesia</b> Rice Sul         2001           2000         2001           11818         11875           3.03         3.07           55854         36419           3.03         3.07           55854         36419           70.40         170.40           1183         1555           2431         2466           2000         2001           2000         2001           2000         2001           2000         2001           2000         2001           2000         2001           2000         2001           2000         2001           2000         2001           2000         2001           2000         2001           2000         2001           1165         1.67           156         528           35.71         35.89           35.71         35.89           36.6         627           2000         2001           2000         2001</td><td>192         190           371         376           371         376           <b>onesia</b> Rice Sul         2000           2000         2001           2000         2001           35854         36419           36854         36419           37940         170.40           37402         37940           37402         37940           37402         37940           37402         37940           37402         37940           37402         37940           37402         37940           37402         37940           3702         301           3703         3.05           3613         3.05           37402         37940           37402         37940           3702         301           2000         2001           2000         2001           160         1.67           155         268           35.71         35.89           864         895           602         602           200         2001           200         200</td><td>192         190           371         376           371         376           <b>onesia</b> Rice Sul         2001           2000         2001           11818         11875           35854         36419           55854         36419           70.40         170.40           37402         37940           37402         37940   
       37402         37940           1555         2431         2466           2100         2001         2001           2000         2001         2001           2112         3165         8872           3112         3165         8872           3112         3165         8872           3112         3165         8872           35.71         35.89         36.66           886         895         607           159         160         160           150         2000         2001           2000         2001         2002           35.71         35.89         895           805         602         607           2000         200         200</td><td>192         192         190           371         376           371         376           <b>onesia Rice Suj</b>         2000           2000         2001           11818         11875           3.03         3.07           55854         36419           70.40         170.40           37402         37940           1555         2431         2466           1583         1555         2431           2000         2001         2001           2000         2001         2001           2000         2001         2001           2112         3165         8872           8112         3165         8872           8112         3165         528           3112         3165         528           3112         3165         528           886         372         528           864         895         885           35.71         35.89         3614           35.71         35.89         35.71           2000         2001         2001           2000         2001         200           2</td></t<> | 192         192         190           371         376         376           371         376         376 <b>onesia</b> Rice Sul         2000         2001           2000         2001         11875           35854         36419         3.07           35854         36419         3.07           35854         36419         3.07           35854         36419         3.07           35854         36419         3.07           3640         170.40         37940           1583         1555         2431           2431         2466         2001           1583         1555         2431           2102         2001         2001           2000         2001         2001           2011         2165         3165           3112         3165         872           519         528         3165           3112         3165         3165           3112         3165         3165           519         528         3165           2000         2001         1001           150         160         160   | 192         192         190           371         376         376           371         376         376 <b>onesia</b> Rice Sul         2000         2001           2000         2001         108           35854         36419         3.07           35854         36419         3.07           35854         36419         3.07           35854         36419         3.07           379402         37940         37940           37402         37940         37940           1583         1555         2431           2431         2466         2001           2000         2001         2001           2000         2001         206           2112         3165         8872           3112         3165         872           3112         3165         872           519         528         3165           357         160         2001           159         528         35.71           35.71         35.89         35.71   
   | 192         192         190           371         376           371         376 <b>onesia Rice Suj</b> 2000           2000         2001           11818         11875           3.03         3.07           55854         36419           70.40         170.40           37402         37940           37402         37940           1555         2431         2466           2000         2001           2000         2001           2000         2001           2000         2001           2000         2001           2000         2001           20112         3165           886         30.52           8112         872           886         3112           886         8872           8112         3165           519         528           35.71         35.89           35.71         35.89           35.71         35.89           35.71         35.89  | 192         190           371         376           371         376 <b>onesia Rice Suj</b> 2000           2000         2001           11818         11875           3.03         3.07           5854         36419           70.40         170.40           1703         1555           2000         2001           1583         1555           2431         2466           170.40         756           2431         2466           170.40         756           2431         2466           2100         2001           2000         2001           2000         2001           2112         3165           886         872           8112         887           3112         3165           886         872           1159         160           1165         1.67           1165         1.67           1165         1.67           1165         2.68           864         895           864         895           60   
  | 192         190           371         376           371         376 <b>onesia</b> Rice Sul         2001           2000         2001           11818         11875           3.03         3.07           55854         36419           3.03         3.07           55854         36419           70.40         170.40           1183         1555           2431         2466           2000         2001           2000         2001           2000         2001           2000         2001           2000         2001           2000         2001           2000         2001           2000         2001           2000         2001           2000         2001           2000         2001           2000         2001           1165         1.67           156         528           35.71         35.89           35.71         35.89           36.6         627           2000         2001           2000         2001   | 192         190           371         376           371         376 <b>onesia</b> Rice Sul         2000           2000         2001           2000         2001           35854         36419           36854         36419           37940         170.40           37402         37940           37402         37940           37402         37940           37402         37940           37402         37940           37402         37940           37402         37940           37402         37940           3702         301           3703         3.05           3613         3.05           37402         37940           37402         37940           3702         301           2000         2001           2000         2001           160         1.67           155         268           35.71         35.89           864         895           602         602           200         2001           200         200  | 192         190           371         376           371         376 <b>onesia</b> Rice Sul         2001           2000         2001           11818         11875           35854         36419           55854         36419           70.40         170.40           37402         37940           37402         37940           37402         37940           1555         2431         2466           2100         2001         2001           2000         2001         2001           2112         3165         8872           3112         3165         8872           3112         3165         8872           3112         3165         8872           35.71         35.89         36.66           886         895         607           159         160         160           150         2000         2001           2000         2001         2002           35.71         35.89         895           805         602         607           2000         200         200                                  | 192         192         190          
371         376           371         376 <b>onesia Rice Suj</b> 2000           2000         2001           11818         11875           3.03         3.07           55854         36419           70.40         170.40           37402         37940           1555         2431         2466           1583         1555         2431           2000         2001         2001           2000         2001         2001           2000         2001         2001           2112         3165         8872           8112         3165         8872           8112         3165         528           3112         3165         528           3112         3165         528           886         372         528           864         895         885           35.71         35.89         3614           35.71         35.89         35.71           2000         2001         2001           2000         2001         200           2                      |
|     | 3.47 S                                   |                    | 7 194   | 7 194<br>9 375                 | 7 194<br>375<br>Table 32. Indo                             | 7 194<br><u>)</u> 375<br><b>Table 32. Indo</b> i<br>3 1999 2  | 7 194<br>375<br><b>Table 32. Indoi</b><br>3 1999 2<br>2 11760 11   | 7 194<br>375<br><b>Table 32. Indoi</b><br>3 1999 2<br>11760 11<br>2 3.00 (1<br>3 35281 35<br>175 135<br>175 155<br>175 155<br>1 | <ul> <li>194</li> <li>375</li> <li>375</li> <li><b>Table 32. Indo</b></li> <li>1999</li> <li>1999</li> <li>2, 11760</li> <li>1170</li> <li>35281</li> <li>35281</li> <li>36852</li> <li>377</li> </ul>   | 7         194           375         375           Table 32. Indoi         32           31999         2           2         11760         11           7         3.00         5           35281         35         37           170.37         170         17           2         36852         37           2         1609         1           2         2395         2  | <ul> <li>194</li> <li>375</li> <li>375</li> <li>Table 32. Indoi</li> <li>3099 2</li> <li>11760 11</li> <li>3.00 5</li> <li>3.5281 35</li> <li>3.6852 37</li> <li>170.37 170</li> <li>170.37 170</li> <li>3.8652 37</li> <li>3.8652 37</li> <li>3.8652 37</li> <li>1609 1</li> <li>2.395 2</li> <li>2.395 2</li> <li>Table 33. Ir:</li> </ul>   | <ul> <li>194</li> <li>375</li> <li>375</li> <li>199</li> <li>1999</li> <li>1999</li> <li>35281</li> <li>35281</li> <li>35281</li> <li>170.37</li> <li>170.36</li> <li>170.37</li> <li>170.37</li></ul> | <ul> <li>194</li> <li>375</li> <li>375</li> <li>1999</li> <li>1999</li> <li>1999</li> <li>3,00</li> <li>3,00</li> <li>3,00</li> <li>3,00</li> <li>3,00</li> <li>3,00</li> <li>170,37</li> <li>170,37</li> <li>170,37</li> <li>170,37</li> <li>3,00</li> <li>3,00</li> <li>3,00</li> <li>1,099</li> <li>2</li> <li>1,099</li> <li>2</li> <li>1,099</li> <li>2</li> <li>1,099</li> <li>2</li> </ul>   
  | <ul> <li>194</li> <li>375</li> <li>375</li> <li>1999</li> <li>1999</li> <li>1999</li> <li>3,00</li> <li>3,00</li> <li>35281</li> <li>35281</li> <li>35281</li> <li>35852</li> <li>1709</li> <li>1609</li> <li>1609</li> <li>1609</li> <li>1609</li> <li>1999</li> <li>2300</li> <li>3,000</li> <li>3,000</li> <li>3,000</li> <li>3,000</li> </ul>  | 194       194       194       1999       1999       1999       11760       11760       1170.37       170.37       170.37       170.37       170.37       170.37       170.37       170.37       170.37       170.37       170.37       170.37       170.37       170.37       1999       2       1999       2       1999       2       1099       2       3.000       2       2       2       2       3.000  | 194       194       194       195       1999       1999       11760       11760       1170.37       170.37       170.37       170.37       170.37       170.37       170.37       170.37       170.37       170.37       170.37       170.37       170.37       170.37       170.37       170.37       170.37       1609       1       2395       2       1999       2       1999       2       3.000       2       2       2       2       2       3.000       2       2       2       1       1       1       2       2       2       2       3.000       2       2       2       2       2       2       2       2       2       2       2       2       2   | 194           194           194           199           1999           11760           11760           11760           1170.37           171.41           172.1           172.1           173.2           174.41           175.41           175.41   
  | 194           194           194           199           1999           1999           1999           1999           11760           11703           117037           17037           1703           17033           17033           17033           17033           17033           17033           17033           17033           17033           17033           1334           1399           1300           1300           1300           1300           1300           1300           1300           1300           1300           1300           1300           1300           146.01           1506           1506  | 7     194       194     194       194     193       199     2       11760     11       35281     35       35281     35       170.37     170       170.37     171       170.37     171       170.37     171       170.37     171       170.37     171       23952     37       31999     2       1700     4       1701     1       1701     1       1701     1       1701     1       1702     2       1099     2       1099     2       1099     2       1000     33.1rs       1000     3059       1000     3059       1005     3059       1006     34.1rs  | 194           194           194           195           1999           1999           1999           11760           11760           1170.37           170.37           1700.37           1700.37           1700.37           1700.37           1700.37           1700.37           1700.37           1700.37           1700.37           1700.37           1700.37           1999           1999           1999           2059           3059           3059           3059           3059           1510           1           510           1           1999           1           1           1           1           1           1           1           1           1           1           1           1           1           1           1  
   | 194       194       194       194       199       1999       11760       11760       1170.37       1170   | 194           194           194           199           1999           11760           1170.37           170.37          
170.37           1099           1099           1005           1050           1050           1050           1050           1050           1050           1050           1050           1050           <  | $\begin{array}{c ccccccccccccccccccccccccccccccccccc$  
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   | $\begin{array}{ c c c c c c c c c c c c c c c c c c c$   | $\begin{array}{ c c c c c c c c c c c c c c c c c c c$  | 194           194           194           195           1999           1999           11760           11760           11703           11703           11703           11703           11703           11703           11703           11703           11703           11703           11703           11703           11703           11703          
11703           11703           11703           11703           11609           11           11           11           11           11           11           11           11           1169           1169           1169           1169           1169           1169           1169           1169           1169           1169           1169           1169           1169           1169           1169  | 194           194           194           199           1999           1999           1999           1999           11760           1170.37           1170.37           1170.37           1170.37           1170.37           1170.37           1170.37           1170.37           1170.37           11609           11609           11609           11           2395           3059           3059           1999           151           151           151           151           153           154           159           159           159           158           159           158           159           1500           1500           1500           1500           1500           1500           1500           1500           1500           150           150   | 194       194       194       195       1999       1999       11760       11760       11703       1169       1169       1169       1169       1162       1162       1163       1164  | 194       194       194       195       1999       200       35281       35281       35281       35281       35281       35852       375       170.37       170.37       170.37       170.37       170.37       170.37       170.37       170.37       170.37       170.37       170.37       170.37       170.37       170.37       170.37       170.37       170.37       1999       2162       2162       2200       1999       235.48       366       159       159       235.48       3634       37548       37548       37548       37548       37548       37548       37548       37548       37548       37548       37548       37548       37548       37548       3759       3759       3759       3759       3759   |
|     | 3.42 3.45                                | 200 197            |         | 416 379                        | 416 379  | 416 379   | 416 379<br>416 379<br>1997 1998<br>11641 11702<br>2 03 2 07  | 416 379<br>416 379<br>1997 1998<br>11641 11702<br>2.93 2.97<br>34065 34698  | 416 379<br>416 379<br>1997 1998<br>11641 11702<br>2.93 2.97<br>2.93 2.97<br>34065 34698<br>34065 34698<br>35708 36275  | 416 379<br>416 379<br>1997 1998<br>11641 11702<br>2.93 2.97<br>34065 34698<br>34065 34698<br>34065 34698<br>35708 170.20<br>35708 36275<br>1728 1792<br>2142 2358  | 416 379<br>1997 1998<br>11641 11702<br>2.93 2.97<br>34065 34698<br>34065 34698<br>35708 36275<br>1728 1792<br>2142 2358  | 416     379       416     379       1997     1998       1997     1998       11641     11702       2.93     2.97       34065     34698       170.08     170.20       35708     36275       1728     1792       2142     2358       2142     2358       2142     2358       1997     1998  | 416         379           416         379           1997         1998           1997         1998           11641         11702           2.93         34698           34065         34698
          37008         1702           35728         1792           17728         1792           2142         2358           2142         2358           677         1998   | 416         379           416         379           1997         1998           1997         1998           11641         11702           2.93         34698           35758         1792           35708         1792           35728         1792           17708         1792           17728         1792           1997         1998           1997         1998           2.95         2142           2.95         2142           2.95         2.958           2.95         2.958  | 416     379       416     379       1997     1998       1997     1998       11641     11702       2.93     34698       370.08     170.20       3570.08     170.20       3570.08     170.20       3570.08     17725       1728     17925       1728     17925       2142     2358       2142     2358       1997     1998       677     701       2.95     2.97       1995     2.082  | 416         379           416         379           1997         1998           1997         1998           11641         11702           2.93         34698           370.08         170.20           3575         17928           1770.8         1770.20           3575         17928           17728         17922           1728         17922           1728         17922           17728         17926           21422         2358           21422         2358           1997         1998           677         701           2.955         2.957           1995         2.957           1995         2.082           1995         2.082           1995         2.082           1995         2.082  | 416         379           416         379           1997         1998           1997         1998           170.08         170.20           35708         36275           1728         1792           1728         1792           2142         2358           2142         2358           1997         1998           1728         1792           1728         1792           2142         2358           2142         2358           2142         2358           2143         2356           3057         306           3006         3006   
  | 416     379       416     379       1997     1998       1997     1998       11641     11702       2.93     2.93       34065     34698       37008     170.20       35708     36275       17228     1792       1728     1792       2142     2358       2142     2358       2142     2358       1997     1998       1997     1998       677     701       2.95     2.97       3004     924       501     501   
  | 416       379         416       379         1997       1998         1997       1998         2.93       2.93         34065       34698         370.08       170.20         35708       36275         17728       170.20         35708       36275         1722       170.20         2142       2358         2142       2358         2142       2358         3004       3006         708       701         501       501         501       501  | 416     379       416     379       1997     1998       1997     1998       34065     34698       35708     36275       170.08     170.20       35708     36275       1728     1792       1728     1792       1997     1998       677     701       2.95     2.97       1995     2.082       47.13     46.17       3004     3006       708     924       501     501       501     501       1997     1998   | 416     379       416     379       1997     1998       1997     1998       170.08     170.20       34065     34698       34065     34698       34065     34698       34065     34698       170.08     170.20       35708     36275       1728     1792       2142     2358       2142     2358       1997     1998       677     701       2.955     2.97       2142     2358       1995     2.97       1995     2.082       701     3006       708     92.4       501     501       1997     1998       1997     1998       1091     1998       1097     1998       708     92.4       501     501       1997     1998  
   | 416     379       416     379       1997     1998       1997     1998       170.08     170.20       34065     34698       34065     34698       34065     34698       170.08     170.20       35708     36275       1728     1792       2142     2358       2142     2358       21935     2.97       21935     2.97       1997     1998       677     701       2.95     2.97       1997     1998       501     501       1997     1998       1097     1998       1095     2.97       1095     2.97       1095     2.97       1095     2.97       10997     1998       10997     1998       1097     1998       1097     1098       1097     1098       1097     1098       1501     1098       1501     1501   
  | 416     379       416     379       1997     1998       1997     1998       2.93     2.93       34065     34698       34065     34698       35708     36275       35708     36275       1728     170.20       35708     36275       1728     1792       2142     2358       2142     2358       2142     2358       1997     1998       677     701       1995     2.95       2014     3006       708     924       501     1998       157     1998       164     159       157     1601       157     1601       157     1.60       255     255   | 416         379           416         379           1997         1998           1997         1998           2.93         2.93           34065         34698           370.08         170.20           35708         36275           1728         1792           2142         2358           2142         2358           2142         2358           2142         2358           2142         2358           3006         701           501         1998           701         1998           701         1998           677         701           1997         1998           708         924           501         501           1097         1998           1501         501           501         501           155         34.55           34.96         35.55           34.96         36.05  
   | 416     379       416     379       1997     1998       1997     1998       1997     1998       2.93     2.93       34065     34698       37008     36275       35708     36275       35708     36275       170.08     170.20       35708     36275       1722     1792       2142     2358       2142     2358       2142     2358       3004     924       501     501       1997     1998       1997     1998       1997     1998       1997     1998       1997     1998       1164     159       157     160       255     34.98       35.55     34.98       36.41     574       574     574  | 416       379         416       379         1997       1998         1997       1998         170.08       170.20         35708       36275         35708       36275         170.08       170.20         35708       36275         170.08       170.20         35708       36275         170.20       36275         1728       1792         1997       1998         677       701         1997       1998         677       701         1995       2.95         2.95       2.97         1995       2.082         47.13       46.17         3004       3006         708       924         501       501         1997       1998         157       2.55         34.98       35.25         34.98       36.45         541       574         541       574   
  | 416     379       416     379       1997     1998       1997     1998       1997     1998       2.93     2.93       34065     34698       37008     36275       35708     36275       35708     36275       170.08     170.20       35708     36275       1792     2142       295     2.97       2142     2358       2004     3006       701     2.95       3004     3006       701     2.95       201     3006       708     924       501     1997       1997     1998       157     164       164     159       157     164       164     501       501     501       157     36.15       125     35.25       34.15     57.4       57.1     57.4       125     150       125     150   | 416     379       416     379       1997     1998       1997     1998       17641     11702       2.93     34065       34065     34698       37008     36275       1728     1792       2.95     2.97       1728     1792       2142     2358       2142     2358       2142     2358       1997     1998       677     701       1995     2.97       701     2.95       2142     2358       1997     1998       677     701       1995     2.97       701     2.95       2142     2358       1997     1998       1997     1998       1997     1998       1997     1998       1501     501       501     501       503     35.25       34.98     35.25       34.98     35.25       34.98     35.25       34.98     35.25       125     150       125     150       1397     1998   | 416     379       416     379       1997     1998       1997     1998       2.93     2.93       34065     34698       37008     36275       35708     36275       170.08     170.20       35708     36275       17228     1792       2142     2358       2142     2358       2014     1998       677     701       1997     1998       677     701       2055     2.95       2142     2358       3004     3006       703     3006       704     3006       708     924       501     1998       157     1164       157     1601       501     501       501     501       158     35.25       34.98     35.25       34.98     35.25       34.98     35.25       34.99     1.160       158     35.25       34.98     35.25       34.98     35.25       34.98     35.25       34.98     35.25       34.98     35.41       1997     1998  | 416     379       416     379       1997
    1997       1997     1998       1997     1998       2.93     2.93       34065     34698       37008     36275       35708     36275       170.08     170.20       35708     36275       17728     1792       2142     2358       2142     2358       204     701       1997     1998       701     2.95       2036     3006       708     3006       708     3006       709     3006       701     2.95       3004     924       501     501       1997     1998       157     164       157     1698       158     35.25       37.41     40.09       750     830       750     830       750     830  |
|     | 04 00<br>38 3.40                         | 11 215             |         | 100 545                        | .00 545  | .00 545<br>1996   | 00 545<br>95 1996<br>100 11600 4   | 00 545<br>95 1996<br>87 2.89<br>00 33500<br>10 33500<br>10 33500<br>10 33500<br>10 33500<br>10 10 10 10 10 10 10 10 10 10 10 10 10 1  | 00 545<br>95 1996<br>00 11600 1<br>87 2.89<br>81 169.28 1<br>50 3500 5<br>500 5<br>500 5   | 00         545           95         1996           00         11600           87         2.89           81         169.28           50         35000           550         35000           558         2058  | 00         545           195         1996           00         11600           87         2.89           81         169.28           169.28         1           550         35000           558         2058   | 00         545           95         1996           95         1996           00         11600           87         2.89           00         33500           81         169.28           169.28         1           550         1000           550         2058           95         1996  | 00         545           95         1996           00         11600         1           87         2.89         35500         3           81         169.28         1         1          
81         169.28         1         1           560         35000         3         1000         3           58         2058         1996         1         1           56         1900         3         500         3           558         2058         1         1996         1           995         1996         1         1         1   | 00         545           95         1996           00         11600           87         2.89           81         169.28           169         33500           81         169.28           560         35000           558         2058           995         1996           900         2.92   | 00         545           95         1996           95         1996           00         11600           87         2.89           81         169.28           169         35500           550         1000           558         2058           95         1996           95         1996           90         2.92           800         2.92   | 00         545           95         1996           95         1996           00         11600           87         2.89           81         169.28           81         169.28           550         35000           556         2058           95         1996           95         1996           95         1996           153         2058           163         28           1996         1996           195         1996           195         1996           150         2.92           512         292   | 00         545           95         1996           95         1996           87         2.89           81         169.28           150         35000           3500         35000           550         1000           169.28         1           169.28         1           169.28         1           169.28         1           1996         35000           1996         1996           1996         1996           1996         1990           2053         2058           205         1996           205         2028           2020         2.92           2030         2.92           2030         2.92           2030         2.92           2030         2.92           2030         2.92           2030         2.92           2030         2.92           2030         2.92           2030         2.92           2.92         2.92           2.92         2.92           2.92         2.92           2.92 <td< td=""><td>00         545           95         1996           95         1996           87         2.89           81         169.28           150         35000           550         35000           558         2058           995         1996           95         1996           169.28         1           169.28         1           550         35000      
    550         1996           95         1996           90         1900           5128         2058           90         2.928           912         1996           92         1996           93         2058           90         2.928           90         2.928           90         2.928           90         2.928           90         2.928           902         802</td><td>00         545           95         1996           95         1996           87         2.89           81         169.28           550         35000           550         1000           550         1996           95         1996           169.28         1           750         1000           550         1000           550         1996           95         1996           90         2.650           90         2.928           1000         12000           90         2.928           91         169.28           1996         1996           900         1996           900         1996           900         2.928           900         2.928           900         2.928           900         2.928           900         1200           900         1200           900         802</td><td>00         545           95         1996           95         1996           00         11600           87         2.89           87         2.89           81         169.28           150         35000           156         35000           156         1996           95         1996           905         1996           150         2058           150         2058           3200         1996           902         802           903         1900           1200         802           9196         1996</td><td>00         545           95         1996           95         1996           87         2.89           81         169.28           550         35000           550         1000           551         1996           95         1996           95         1996           90         2.89           75         51.28           90         2.92           90         2.92           90         2.92           91         169.28           92         1996           93         2058           90         2.92           90         2.92           90         2.92           90         2.92           9196         1996           92         1996           93         1996           93         1996           93         175</td><td>00         545           95         1996           95         1996           00         11600           87         2.89           81         169.28           150         35000           550         1996           169.28         1           169.28         1           169.28         1           2.80         1000           550         1996           995         1996           902         2.922           902         2.922           902         1200           755         51.28           755         1396           75         51.28           75         51.28           75         51.28           75         51.28           75         1996           73         1.43</td><td>00         545           95         1996           95         1996           87         2.89           81         169.28           550         35000           550         1000           550         1996           95         1996           95         1996           95         1996           95         1996           90         2.89           35000         35000           35000         35000           95         1996           90         1200           1200         1200           1200         1200           1200         1200           1200         1200           1200         1200           1200         1200           1200         1200           1200         1200           1200         1200           1200         1200           1200         1200           1200         1200           1200         1200           1200         1200           1200         1250           1250         175<td>00         545           95         1996           95         1996           87         2.89           81         169.28           550         35000           550         1000           550         1996           95         1996           95         1996           95         1996           965         1996           97.75         51.28           902         802           802         1996           95         1996           965         1996           175         51.28           174         42.00           202         2058</td><td>00         545           95         1996           95         1996           87         2.89           87         2.89           81         169.28           150         35000           550         1996           155         1996           155         1996           169         28           169         35000           169         35000           169         1000           1200         1996           100         1200           1200         802           143         1.75           174         42.06           175         175           174         42.06           175         174</td><td>00         545           95         1996           95         1996           87         2.89           87         2.89           81         169.28           150         35500           550         35000           560         355000           50         1000           55         1996           95         1996           965         1996           97         2.92           88         1.63.28           175         51.28           900         1.900           175         51.28           100         1200           1175         1.43           50         1.43           50         1.43           50         1.43           50         1.43           50         1.43           50         1.43           50         1.43           50         1.43           50         1.43           50         1.43           50         1.43           50         1.43           50         1.43</td><td>00         545           95         1996           95         1996           87         2.89           87         2.89           81         169.28           150         35000           550         1996           95         1996           95         1996           965         1996           97.28         2.89           169.28         1.1           50         1996           90         1900           1200         2.922           3200         2.925           90         1906           1200         1906           915         1996           92         1996           93         1.43           2.00         2.050           802         802           905         1996           175         1.75           174         42.06           100         100           100         100</td><td>00         545           95         1996           95         1996           87         2.89           87         2.89           81         169.28           150         35000           560         1000           550         1996           95         1996           965         1996           90         2.650           35000         35000           3500         35000           90         1200           120         1200           120         1200           120         1200           120         1200           120         1200           120         1200           120         1200           120         1200           120         1200           120         1200           120         250           100         100           100         100           100         100           100         100           1175         100           100         100           100         100  <td>00         545           95         1996           95         1996           87         2.89           87         2.89           81         169.28           150         35000           550         35000           550         1996           95         1996           965         1996           90         1200           1200         2.922           90         2.928           143         2.058           175         51.28           174         42.06           175         174           174         42.06           175         1996           95         1996           175         33.23           174         42.06           1750         33.23           1750         33.23           1750         33.23           1996         1996           1996         1996           1996         1996           1996         1996           1996         1996           1996         1996           1996         1996</td><td>00         545           00         545           95         1996           87         2.89           87         2.89           81         169.28           150         35500           550         35500           550         1996           95         1996           965         1996           97         2.89           35000         35000           3500         35000           90         1996           91         175           92         1996           93         1.43           2.72         33.200           90         1.000           175         51.28           90         1000           175         51.28           165         1996           91         166           175         33.23           175         33.23           175         5645</td></td></td></td<> | 00         545           95         1996           95         1996           87         2.89           81         169.28           150         35000           550         35000           558         2058           995         1996           95         1996           169.28         1           169.28         1           550         35000           550         1996           95         1996           90         1900           5128         2058           90         2.928           912         1996           92         1996           93         2058           90         2.928           90         2.928           90         2.928           90         2.928           90         2.928           902         802                
   | 00         545           95         1996           95         1996           87         2.89           81         169.28           550         35000           550         1000           550         1996           95         1996           169.28         1           750         1000           550         1000           550         1996           95         1996           90         2.650           90         2.928           1000         12000           90         2.928           91         169.28           1996         1996           900         1996           900         1996           900         2.928           900         2.928           900         2.928           900         2.928           900         1200           900         1200           900         802  | 00         545           95         1996           95         1996           00         11600           87         2.89           87         2.89           81         169.28           150         35000           156         35000           156         1996           95         1996           905         1996           150         2058           150         2058           3200         1996           902         802           903         1900           1200         802           9196         1996  | 00         545           95         1996           95         1996           87         2.89           81         169.28           550         35000           550         1000           551         1996           95         1996           95         1996           90         2.89           75         51.28           90         2.92           90         2.92           90         2.92           91         169.28           92         1996           93         2058           90         2.92           90         2.92           90         2.92           90         2.92           9196         1996           92         1996           93         1996           93         1996           93         175   
  | 00         545           95         1996           95         1996           00         11600           87         2.89           81         169.28           150         35000           550         1996           169.28         1           169.28         1           169.28         1           2.80         1000           550         1996           995         1996           902         2.922           902         2.922           902         1200           755         51.28           755         1396           75         51.28           75         51.28           75         51.28           75         51.28           75         1996           73         1.43  
   | 00         545           95         1996           95         1996           87         2.89           81         169.28           550         35000           550         1000           550         1996           95         1996           95         1996           95         1996           95         1996           90         2.89           35000         35000           35000         35000           95         1996           90         1200           1200         1200           1200         1200           1200         1200           1200         1200           1200         1200           1200         1200           1200         1200           1200         1200           1200         1200           1200         1200           1200         1200           1200         1200           1200         1200           1200         1200           1200         1250           1250         175 <td>00         545           95         1996           95         1996           87         2.89           81         169.28           550         35000           550         1000           550         1996           95         1996           95         1996           95         1996           965         1996           97.75         51.28           902         802           802         1996           95         1996           965         1996           175         51.28           174         42.00           202         2058</td> <td>00         545           95         1996           95         1996           87         2.89           87         2.89           81         169.28           150         35000           550         1996           155         1996           155         1996           169         28           169         35000           169         35000           169         1000           1200         1996           100         1200           1200         802           143         1.75           174         42.06           175         175           174         42.06           175         174</td> <td>00         545           95         1996           95         1996           87         2.89           87         2.89           81         169.28           150         35500           550         35000           560         355000           50         1000           55         1996           95         1996           965         1996           97         2.92           88         1.63.28           175         51.28           900         1.900           175         51.28           100         1200           1175         1.43           50         1.43           50         1.43           50         1.43           50         1.43           50         1.43           50         1.43           50         1.43           50         1.43           50         1.43           50         1.43           50         1.43           50         1.43           50         1.43</td> <td>00         545           95         1996           95         1996           87         2.89           87         2.89           81         169.28           150         35000           550         1996           95         1996           95         1996           965         1996           97.28         2.89           169.28         1.1           50         1996           90         1900           1200         2.922           3200         2.925           90         1906           1200         1906           915         1996           92         1996           93         1.43           2.00         2.050           802         802           905         1996           175         1.75           174         42.06           100         100           100         100</td> <td>00         545           95         1996           95         1996           87         2.89           87         2.89           81         169.28           150         35000           560         1000           550         1996           95         1996           965         1996           90         2.650           35000         35000           3500         35000           90         1200           120         1200           120         1200           120         1200           120         1200           120         1200           120         1200           120         1200           120         1200           120         1200           120         1200           120         250           100         100           100         100           100         100           100         100           1175         100           100         100           100         100  <td>00         545           95         1996           95         1996           87         2.89           87         2.89           81         169.28           150         35000           550         35000           550         1996           95         1996           965         1996           90         1200           1200         2.922           90         2.928           143         2.058           175         51.28           174         42.06           175         174           174         42.06           175         1996           95         1996           175         33.23           174         42.06           1750         33.23           1750         33.23           1750         33.23           1996         1996           1996         1996           1996         1996           1996         1996           1996         1996           1996         1996           1996         1996</td><td>00         545           00         545           95         1996           87         2.89           87         2.89           81         169.28           150         35500           550         35500           550         1996           95         1996           965         1996           97         2.89           35000         35000           3500         35000           90         1996           91         175           92         1996           93         1.43           2.72         33.200           90         1.000           175         51.28           90         1000           175         51.28           165         1996           91         166           175         33.23           175         33.23           175         5645</td></td> | 00         545           95         1996           95         1996           87         2.89           81         169.28           550         35000           550         1000           550         1996           95         1996           95         1996           95         1996           965         1996           97.75         51.28           902         802           802         1996           95         1996           965         1996           175         51.28           174         42.00           202         2058   
  | 00         545           95         1996           95         1996           87         2.89           87         2.89           81         169.28           150         35000           550         1996           155         1996           155         1996           169         28           169         35000           169         35000           169         1000           1200         1996           100         1200           1200         802           143         1.75           174         42.06           175         175           174         42.06           175         174   | 00         545           95         1996           95         1996           87         2.89           87         2.89           81         169.28           150         35500           550         35000           560         355000           50         1000           55         1996           95         1996           965         1996           97         2.92           88         1.63.28           175         51.28           900         1.900           175         51.28           100         1200           1175         1.43           50         1.43           50         1.43           50         1.43           50         1.43           50         1.43           50         1.43           50         1.43           50         1.43           50         1.43           50         1.43           50         1.43           50         1.43           50         1.43  
   | 00         545           95         1996           95         1996           87         2.89           87         2.89           81         169.28           150         35000           550         1996           95         1996           95         1996           965         1996           97.28         2.89           169.28         1.1           50         1996           90         1900           1200         2.922           3200         2.925           90         1906           1200         1906           915         1996           92         1996           93         1.43           2.00         2.050           802         802           905         1996           175         1.75           174         42.06           100         100           100         100  | 00         545           95         1996           95         1996           87         2.89           87         2.89           81         169.28           150         35000           560         1000           550         1996           95         1996           965         1996           90         2.650           35000         35000           3500         35000           90         1200           120         1200           120         1200           120         1200           120         1200           120         1200           120         1200           120         1200           120         1200           120         1200           120         1200           120         250           100         100           100         100           100         100           100         100           1175         100           100         100           100         100 <td>00         545           95         1996           95         1996           87         2.89           87         2.89           81         169.28           150         35000           550         35000           550         1996           95         1996           965         1996           90         1200           1200         2.922           90         2.928           143         2.058           175         51.28           174         42.06           175         174           174         42.06           175         1996           95         1996           175         33.23           174         42.06           1750         33.23           1750         33.23           1750         33.23           1996         1996           1996         1996           1996         1996           1996         1996           1996         1996           1996         1996           1996         1996</td> <td>00         545           00         545           95         1996           87         2.89           87         2.89           81         169.28           150         35500           550         35500           550         1996           95         1996           965         1996           97         2.89           35000         35000           3500         35000           90         1996           91         175           92         1996           93         1.43           2.72         33.200           90         1.000           175         51.28           90         1000           175         51.28           165         1996           91         166           175         33.23           175         33.23           175         5645</td> | 00         545           95         1996           95         1996           87         2.89           87         2.89           81         169.28           150         35000           550         35000           550         1996           95         1996           965         1996           90         1200           1200         2.922           90         2.928           143         2.058           175         51.28           174         42.06           175         174           174         42.06           175         1996           95         1996           175         33.23           174         42.06           1750         33.23           1750         33.23           1750         33.23           1996         1996           1996         1996           1996         1996           1996         1996           1996         1996           1996         1996           1996         1996   | 00         545           00         545
          95         1996           87         2.89           87         2.89           81         169.28           150         35500           550         35500           550         1996           95         1996           965         1996           97         2.89           35000         35000           3500         35000           90         1996           91         175           92         1996           93         1.43           2.72         33.200           90         1.000           175         51.28           90         1000           175         51.28           165         1996           91         166           175         33.23           175         33.23           175         5645  |
|     | (inuo na) o.<br>(mt/ha) 3.35             | (1000 mt) 211      |         | (1000 mt) 40(                  | (1000 mt) 40(  | (1000 mt) 400<br>Units / Yr 199/  | (1000 mt) 400<br>Units / Yr 1999<br>(1000 ha) 1140<br>(mr/ha) 2.8  | (1000 mt) 400<br>Units / Yr 1999<br>(mt/ha) 2.81<br>(1000 mt) 32700<br>(1000 mt) 32700  | (1000 mt) 400<br>Units / Yr 1994<br>(1000 ha) 11400<br>(mt/ha) 2.87<br>(1000 mt) 32700<br>(kg) 163.87<br>(1000 mt) 33351   | (1000 mt)         400           Units / Yr         1995           Units / Yr         1997           (1000 ha)         11400           (mt/ha)         2.87           (1000 mt)         32700           (kg)         163.8'           (1000 mt)         3335(           (1000 mt)         255i  | (1000 mt)         400           Units / Yr         1995           Units / Yr         1996           (1000 ha)         11400           (mt/ha)         2.87           (1000 mt)         32700           (kg)         163.87           (1000 mt)         33350           (1000 mt)         2551           (1000 mt)         2551   | (1000 mt) 400<br>Units / Yr 1995<br>(1000 ha) 11400<br>(mt/ha) 2.85<br>(1000 mt) 32570<br>(Kg) 163.87<br>(1000 mt) 1255<br>(1000 mt) 2553<br>(1000 mt) 2553  | (1000 mt) 400<br>Units / Yr 1996<br>(1000 ha) 11400<br>(mt/ha) 2.81<br>(1000 mt) 32700<br>(1000 mt) 3355<br>(1000 mt) 1251<br>(1000 mt) 2551<br>(1000 mt) 2551<br>(1000 mt) 2551<br>(1000
mt) 2551<br>(1000 mt) 2551<br>(1000 ha) 621  | (1000 mt)         400           Units / Yr         1996           Units / Yr         1996           (1000 ha)         11400           (mt/ha)         2.81           (mt/ha)         3.250           (1000 mt)         3355           (1000 mt)         1256           (1000 mt)         1256           (1000 mt)         2551           Units / Yr         1994           (1000 ha)         2294           (1000 mt)         2551           (1000 mt)         2254           (1000 ha)         621           (1000 ha)         2.96   | (1000 mt)         400           Units / Yr         1996           Units / Yr         1996           (1000 ha)         11400           (mt/ha)         2.81           (1000 mt)         32700           (1000 mt)         33350           (1000 mt)         1256           (1000 mt)         1256           (1000 mt)         2557           (1000 mt)         2567           (1000 mt)         2567           (1000 mt)         2567           (1000 mt)         2267           (1000 mt)         2291           (1000 mt)         2301           (1000 mt)         201  | (1000 mt)         400           Units / Yr         1996           (1000 ha)         11400           (mt/ha)         2.87           (mt/ha)         32700           (1000 mt)         32350           (1000 mt)         1256           (1000 mt)         1256           (1000 mt)         1256           (1000 mt)         2581           (1000 mt)         2561           (1000 mt)         2561           (1000 mt)         2261           (1000 mt)         2261           (1000 mt)         2261           (1000 mt)         200           (kg)         500.71   | (1000 mt)         400           Units / Yr         1995           (1000 ha)         2.87           (mt/ha)         2.87           (1000 mt)         32700           (kg)         163.87           (1000 mt)         32355           (1000 mt)         33355           (1000 mt)         1255           (1000 mt)         2.967           (1000 mt)         2.97   
   | (1000 mt)         400           Units / Yr         1995           Units / Yr         1997           (1000 ha)         11400           (mt/ha)         2.87           (1000 mt)         3250           (1000 mt)         32355           (1000 mt)         1553           (1000 mt)         1256           (1000 mt)         2555           (1000 mt)         2567           (mt/ha)         2.90           (1000 mt)         2567           (1000 mt)         310           (400 mt)         310           (1000 mt)         310           (1000 mt)         310           (1000 mt)         300  | (1000 mt)         400           Units / Yr         1995           Units / Yr         1995           (1000 ha)         11400           (mt/ha)         2.87           (1000 mt)         32700           (1000 mt)         32350           (1000 mt)         32351           (1000 mt)         163.81           (1000 mt)         2.5551           (1000 mt)         2.567           (1000 mt)         2.907           (1000 mt)        
3101           (kg)         50.71           (1000 mt)         3101           (1000 mt)         3101           (1000 mt)         3101           (1000 mt)         3001  | (1000 mt)     400       Units / Yr     1996       Units / Yr     1996       (mt/ha)     2.87       (mt/ha)     2.87       (1000 mt)     3355       (1000 mt)     3335       (1000 mt)     1256       (1000 mt)     1256       (1000 mt)     2565       (1000 mt)     2567       (1000 mt)     2007       (1000 mt)     2007       (1000 mt)     1400   | (1000 mt)         400           Units / Yr         1995           (1000 ha)         11400           (mt/ha)         2.87           (mt/ha)         32700           (mt/ha)         2.87           (1000 mt)         32700           (1000 mt)         3256           (1000 mt)         1256           (1000 mt)         2557           (1000 mt)         260           (1000 mt)         260           (1000 mt)         20,07           (1000 mt)         310,07           (1000 mt)         90,07           (1000 mt)         150           (1000 ha)         150  
   | (1000 mt)         400           Units / Yr         1995           Units / Yr         1995           (1000 ha)         11400           (mt/ha)         2.87           (1000 mt)         32700           (1000 mt)         32350           (1000 mt)         153.81           (1000 mt)         1256           (1000 mt)         2553           (1000 mt)         2563           (1000 mt)         2607           (1000 mt)         1400           (1000 mt)         3107           (1000 mt)         1400           (1000 mt)         150           (mt/ha)         1.33           (mt/ha)         1.33  
  | (1000 mt)         400           Units / Yr         1995           (1000 mt)         2.87           (mt/ha)         2.87           (1000 mt)         3250           (1000 mt)         32351           (1000 mt)         32355           (1000 mt)         153.81           (1000 mt)         32557           (1000 mt)         12557           (1000 mt)         2557           (1000 mt)         2557           (1000 mt)         1267           (1000 mt)         2557           (1000 mt)         1400           (1000 mt)         1501           (1000 mt)         1501           (1000 mt)         1001           (1000 mt)         1001           (1000 mt)         1031   | (1000 mt)     400       Units / Yr     1995       Units / Yr     1996       (1000 mt)     2.87       (1000 mt)     2.83       (1000 mt)     3270       (1000 mt)     153.81       (1000 mt)     163.81       (1000 mt)     1256       (1000 mt)     1256       (1000 mt)     2567       (1000 mt)     2567       (1000 mt)     260.75       (1000 mt)     1400       (1000 mt)     1400       (1000 mt)     3106       (1000 mt)     3107       (1000 mt)     1400       (1000 mt)     1400       (1000 mt)     1267       (1000 mt)     20.75       (1000 mt)     21.77       (1000 mt)     21.77       (1000 mt)     21.76   
  | (1000 mt)         400           Units. / Yr         1996           (1000 mt)         2.87           (1000 mt)         3270           (1000 mt)         3270           (1000 mt)         2.83           (1000 mt)         2.87           (1000 mt)         3256           (1000 mt)         1256           (1000 mt)         2557           (1000 mt)         2567           (1000 mt)         2567           (1000 mt)         260.75           (1000 mt)         260.75           (1000 mt)         260.75           (1000 mt)         1400           (1000 mt)         1267           (1000 mt)         20.75           (1000 mt)         21.04           (1000 mt)         21.74  | (1000 mt)     400       Units / Yr     1996       Units / Yr     1996       (1000 mt)     2.87       (mt/ha)     2.87       (1000 mt)     3355       (1000 mt)     3355       (1000 mt)     1256       (1000 mt)     1266       (1000 mt)     1267       (1000 mt)     2.90       (rmt/ha)     2.90       (1000 mt)     1360       (1000 mt)     2017       (1000 mt)     217       (1000 mt)     261   
   | (1000 mt)     400       Units. / Yr     1996       Units. / Yr     1997       (1000 mt)     2.87       (1000 mt)     3270       (1000 mt)     3256       (1000 mt)     153.81       (1000 mt)     3256       (1000 mt)     1256       (1000 mt)     1256       (1000 mt)     1256       (1000 mt)     1267       (1000 mt)     1267       (1000 mt)     1306       (kg)     50.75       (1000 mt)     1400       (1000 mt)     1400       (kg)     50.75       (1000 mt)     1400       (1000 mt)     21.74   | (1000 mt)         400           Units / Yr         1995           Units / Yr         1996           (mt/ha)         2.87           (mt/ha)         2.87           (1000 mt)         3356           (1000 mt)         2.87           (1000 mt)         2.87           (1000 mt)         2.87           (1000 mt)         2.87           (1000 mt)         2555           (1000 mt)         1256           (1000 mt)         2567           (mt/ha)         2.90           (1000 mt)         1360           (1000 mt)         1300           (1000 mt)         1400           (1000 mt)         1300           (1000 mt)         201           (reg)         201           (root mt)         251           (1000 mt)         251  | (1000 mt)         400           Units. / Yr         1995           Units. / Yr         1996           (1000 mt)         2.87           (1000 mt)         3270           (1000 mt)         3256           (1000 mt)         3256           (1000 mt)         3256           (1000 mt)         1556           (1000 mt)         2567           (1000 mt)         1267           (1000 mt)         2567           (1000 mt)         2567           (1000 mt)         2007           (1000 mt)         2007           (1000 mt)         2104           (1000 mt)         2174           (1000 mt)         2174 | (1000 mt)     400       Units. / Yr     1990       Units. / Yr     1990       (mt/ha)     2.87       (mt/ha)     2.87       (1000 mt)     3355       (1000 mt)     16.3.81       (1000 mt)     3355       (1000 mt)     1256       (1000 mt)     1256       (1000 mt)     1256       (1000 mt)     1266       (1000 mt)     1266       (1000 mt)     1266       (1000 mt)     2007       (1000 mt)     2007       (1000 mt)     2176       (1000 mt)     2176       (1000 mt)     2176       (1000 mt)     256       (1000 mt)     267   |
|     | (E-U-IIa-Sp) (I<br>Yield (EU-Ita-Sp) (rr | Production (1) (1) |         | Exports (EU-Ita),<br>Indica (1 | Exports (EU-Ita), (1)                                      | Exports (EU-Ita),<br>Indica (1<br>Variable U  | Exports (EU-Ita),<br>Indica (EU-Ita),<br>Variable Ur<br>Area Harvested (1<br>Vield   | Exports (EU-Ita),<br>Indica (U-Ita),<br>Variable U-I<br>Area Harvested (1<br>Yield (1<br>Production (1  | Exports (EU-Ita),<br>Indica (EU-Ita),<br>Variable UI<br>Area Harvested (1<br>Yield (1<br>Production (1<br>Per-capita Use (k<br>Total Consumption (1  | Exports (EU-Ita),<br>Indica (EU-Ita),<br>Variable UI<br>Area Harvested (1<br>Yield (1<br>Per-capita Use (k<br>Total Consumption (1<br>Net Imports (1   | Exports (EU-Ita),<br>Indica (1)<br>Variable UJ<br>Area Harvested (1<br>Yield (1)<br>Production (1)<br>Per-capita Use (1)<br>Per-capita Use (1)<br>Net Imports (1)<br>Net Imports (1)   | Exports (EU-Ita),<br>Indica (U-Ita),<br>Variable U-I<br>Area Harvested (1<br>Yield (1<br>Per-capita Use (k<br>Total Consumption (1<br>Net Imports (1<br>Ending Stocks (1<br>Variable U   | Exports (EU-Ita),<br>Indica (U-Ita),<br>Variable U-<br>Verea Harvested (1<br>Yield (1<br>Production (1<br>Per-capita Use (k<br>Total Consumption (1<br>Net Imports (1<br>Net Imports
(1<br>Net Imports (1<br>Area Harvested (1)  | Exports (EU-Ita),<br>Indica (U-Ita),<br>Variable U-U<br>Yield (1<br>Yield (1<br>Per-capita Use (1<br>Net Imports (1<br>Net Imports (1<br>Net Imports (1<br>Variable U-   | Exports (EU-Ita),<br>Indica     (1)       Variable     U       Vield     (1)       Yield     (1)       Per-capita Use     (1)       Net Imports     (1)       Net Imports     (1)       Variable     U   | Exports (EU-Ita),         Indica       UI         Variable       UI         Yield       (1)         Yreaduction       (1)         Production       (1)         Net Imports       (1)         Net Imports       (1)         Variable       Ui         Variable       Ui         Variable       Ui         Variable       Ui         Production       (1)         Variable       Ui         Per Capita Use       (1)         Variable       Ui         Per Capita Use       (1)         Variable       Ui         Per Capita Use       (1)  | Exports (EU-Ita),<br>Indica (EU-Ita),<br>Variable UJ<br>Vrield (1<br>Yield (1<br>Production (1<br>Net Inports (1<br>Variable UJ<br>Variable UJ<br>Variable UJ<br>Variable UJ<br>Variable UJ<br>Variable UJ<br>Variable UJ<br>Variable UJ<br>Variable UJ  
  | Exports (EU-Ita),         Indica       (1)         Variable       U         Yrield       (1)         Yrield       (1)         Per-capita Use       (k         Total Consumption       (1)         Variable       U         Variable       U         Variable       U         Variable       U         Variable       U         Variable       (1)         Production       (1)         Net Imports       (1)         Net Imports       (1)  | Exports (EU-Ita),<br>Indica       (1)         Variable       U         Vreid       (1)         Yreid       (1)         Yreid       (1)         Per-capita Use       (k         Total Consumption       (1)         Variable       U  
      Variable       U         Variable       U         Variable       U         Variable       U         Variable       (1)         Production       (1)         Production       (1)         Production       (1)         Production       (1)         Production       (1)         Production       (1)         Net Imports       (1)         Net Imports       (1)         Net Imports       (1)  | Exports (EU-Ita),         Indica       U         Variable       U         Vield       (1         Yreaduction       (1         Production       (1         Yreaduction       (1         Variable       U   | Exports (EU-Ita),         Indica       U         Variable       U         Vield       (1)         Yield       (1)         Production       (1)         Production       (1)         Variable       U         Variable       U <td>Exports (EU-Ita),         Indica       U         Variable       U         Variable       U         Variable       U         Vield       (1         Production       (1         Net Imports       (8)         Per-capita Use       (8)         Net Imports       (1         Vield       (1         Variable       U         Yield       (1         Vreat Harvested       (1         Vield       (1         Per Capita Use       (8)         Variable       (1         Variable       (1</td> <td>Exports (EU-Ita),<br/>Indica       (1)         Variable       U         Yield       (1)         Yread Harvested       (1)         Yread Larvested       (1)         Variable       U         Net Imports       (1)         Variable       U         Yield       (1)         Per Capita Use       (k         Total Consumption       (1)         Variable       U         Yield       (1)         Peroduction       (1)         Yrea Harvested       (1)         Yrea Harvested       (1)         Yrea Harvested       (1)         Yrea Harvested       (1)</td> <td>Exports (EU-Ita),<br/>Indica       (1)         Variable       U         Variable       U         Yield       (1)         Per-capita Use       (3)         Net Imports       (4)         Variable       U         Vred Harvested       (1)         Per Capita Use       (8)         Vield       (1)         Per Capita Use       (1)         Vred Harvested       (1)         Production       (1)         Production       (1)         Production       (1)         Yield       (1)         Per Capita Use       (1)         Yield       (1)         Production       (1)         Yrea Harvested       (1)         Yield       (1)         Per Capita Use       (2)         Production       (3)         Productin Use       (4)      &lt;</td> <td>Exports (EU-Ita),         Indica       U         Variable       U         Vield       (1         Yread Harvested       (1         Yreaduction       (1         Yreaduction       (1         Yreaduction       (1         Yreaduction       (1         Per-capita Use       (k         Variable       U         Yreaduction       (1         Yreaduction       (1         Variable       U         Varea Harvested       (1</td> <td>Exports (EU-Ita),<br/>Indica       (1)         Variable       U         Vreid       (1)         Yreid       (1)         Yreid       (1)         Yreid       (1)         Yreaduction       (1)         Yreaduction       (1)         Variable       U         Per Capita</td> <td>Exports (EU-Ita),<br/>Indica       U         Variable       U         Variable       U         Yreld       (1)         Yreld       (1)         Per-capita Use       (3)         Net Imports       (4)         Variable       U         Variable       U         Net Imports       (1)         Variable       U         Variable       U         Variable       U         Variable       U         Variable       U         Variable       U         Yield       (1)         Per Capita Use       (1)         Variable       U         Vield       (1)         Per Capita Use       (1)         Yield       (1)         Net Imports       (1)         Per Capita Use       (1)         Net Imports       (1)</td> <td>Exports (EU-Ita),         Indica       U         Variable       U         Vield       (1)         Production       (1)         Production       (1)         Variable       U         Variable       (1)         Vet Imports       (1)         Variable       U         Variable       U         Variable       U         Variable       U         Variable       U</td> <td>Exports (EU-Ita),<br/>Indica       Ur         Variable       Ur         Yreld       (1)         Yreld       (1)         Production       (1)         Yreld       (1)         Net Imports       (1)         Yreld       (1)         Net Imports       (1)         Net Imports       (1)         Net Imports       (1)         Variable       U         Natiable       U         Variable       U         &lt;</td> <td>Exports (EU-Ita),<br/>Indica       U         Variable       U         Vield       (1)         Yreaduction       (1)         Yreaduction       (1)         Production       (1)         Variable       U         Per Capita Use       (r         Variable       U         Variable       U         Ver Capita Use       (r         Variable       U         Variable       U         Variable       U         Variable       U</td>  | Exports (EU-Ita),         Indica       U         Variable       U         Variable       U         Variable       U         Vield       (1         Production       (1         Net Imports       (8)         Per-capita Use       (8)         Net Imports       (1         Vield       (1         Variable       U         Yield       (1         Vreat Harvested       (1         Vield       (1         Per Capita Use       (8)         Variable       (1   
   | Exports (EU-Ita),<br>Indica       (1)         Variable       U         Yield       (1)         Yread Harvested       (1)         Yread Larvested       (1)         Variable       U         Net Imports       (1)         Variable       U         Yield       (1)         Per Capita Use       (k         Total Consumption       (1)         Variable       U         Yield       (1)         Peroduction       (1)         Yrea Harvested       (1)         Yrea Harvested       (1)         Yrea Harvested       (1)         Yrea Harvested       (1)   
  | Exports (EU-Ita),<br>Indica       (1)         Variable       U         Variable       U         Yield       (1)         Per-capita Use       (3)         Net Imports       (4)         Variable       U         Vred Harvested       (1)         Per Capita Use       (8)         Vield       (1)         Per Capita Use       (1)         Vred Harvested       (1)         Production       (1)         Production       (1)         Production       (1)         Yield       (1)         Per Capita Use       (1)         Yield       (1)         Production       (1)         Yrea Harvested       (1)         Yield       (1)         Per Capita Use       (2)         Production       (3)         Productin Use       (4)      <  | Exports (EU-Ita),         Indica       U         Variable       U         Vield       (1         Yread Harvested       (1         Yreaduction       (1         Yreaduction       (1         Yreaduction       (1         Yreaduction       (1         Per-capita Use       (k         Variable       U         Yreaduction       (1         Yreaduction       (1         Variable       U         Varea Harvested       (1   
   | Exports (EU-Ita),<br>Indica       (1)         Variable       U         Vreid       (1)         Yreid       (1)         Yreid       (1)         Yreid       (1)         Yreaduction       (1)         Yreaduction       (1)         Variable       U         Per Capita  | Exports (EU-Ita),<br>Indica       U         Variable       U         Variable       U         Yreld       (1)         Yreld       (1)         Per-capita Use       (3)         Net Imports       (4)         Variable       U         Variable       U         Net Imports       (1)         Variable       U         Variable       U         Variable       U         Variable       U         Variable       U         Variable       U         Yield       (1)         Per Capita Use       (1)         Variable       U         Vield       (1)         Per Capita Use       (1)         Yield       (1)         Net Imports       (1)         Per Capita Use       (1)         Net Imports       (1)  | Exports (EU-Ita),         Indica       U         Variable       U         Vield       (1)         Production       (1)         Production       (1)         Variable       U         Variable       (1)         Vet Imports       (1)         Variable       U         Variable       U        
Variable       U         Variable       U         Variable       U  | Exports (EU-Ita),<br>Indica       Ur         Variable       Ur         Yreld       (1)         Yreld       (1)         Production       (1)         Yreld       (1)         Net Imports       (1)         Yreld       (1)         Net Imports       (1)         Net Imports       (1)         Net Imports       (1)         Variable       U         Natiable       U         Variable       U         <  | Exports (EU-Ita),<br>Indica       U         Variable       U         Vield       (1)         Yreaduction       (1)         Yreaduction       (1)         Production       (1)         Variable       U         Per Capita Use       (r         Variable       U         Variable       U         Ver Capita Use       (r         Variable       U         Variable       U         Variable       U         Variable       U   |

						Table 36.	Japan Ric	e Supply	and Utiliz	ation							
Variable	Units / Yr	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Area Harvested	(1000 ha)	2118	1977	1781	1723	1665	1633	1613	1594	1573	1561	1578	1554	1531	1507	1483	1460
Yield	(mt/ha)	4.62	4.76	4.85	4.88	4.91	4.94	4.97	4.99	5.02	5.05	5.08	5.11	5.14	5.17	5.20	5.23
Production	(1000 mt)	9781	9413	8628	8403	8170	8060	8010	7961	7902	7888	8021	7946	7870	7792	7713	7634
Per capita use	(kg)	74.10	73.47	72.65	71.99	71.47	71.00	70.54	70.11	69.62	69.13	68.61	68.06	67.51	66.96	66.41	65.85
Total Consumption	(1000 mt)	9300	9250	9177	9124	9088	9057	9026	8995	8955	8910	8858	8799	8740	8680	8619	8557
Exports	(1000 mt)	200	300	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Imports	(1000 mt)	450	600	531	606	682	758	773	789	804	820	837	854	871	888	906	924
Net Imports	(1000 mt)	250	300	531	606	682	758	773	789	804	820	837	854	871	888	906	924
Ending Stocks	(1000 mt)	2614	3077	3059	2944	2707	2468	2225	1979	1730	1529	1529	1529	1530	1530	1531	1531
					Tat	ie 37. Sot	uth Korea	Rice Supl	oly and Ut	ilization							
Variable	Units / Yr	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Area Harvested	(1000 ha)	1056	1050	1081	1038	1045	1055	1044	1026	1011	666	066	991	983	976	967	959
Yield	(mt/ha)	4.45	5.07	4.61	4.61	4.63	4.68	4.69	4.69	4.70	4.71	4.72	4.72	4.73	4.74	4.74	4.75
Production	(1000 mt)	4694	5320	4983	4789	4843	4934	4892	4816	4751	4702	4668	4679	4649	4619	4586	4550
Per capita use	(kg)	114.15	110.81	108.70	106.61	104.57	105.06	104.02	102.29	100.71	99.43	98.06	97.43	96.24	95.01	93.72	92.40
Total Consumption	(1000 mt)	5200	5100	5054	5006	4958	5029	5025	4985	4949	4926	4897	4902	4880	4853	4824	4792
Imports	(1000 mt)	115	77	77	88	107	105	132	162	192	220	224	224	227	230	233	237
Exports	(1000 mt)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Net Imports	(1000 mt)	115	11	11	88	107	105	132	162	192	220	224	224	227	230	233	237
Ending Stocks	(1000 mt)	615	912	918	788	781	792	791	785	779	776	771	772	769	764	760	755
					•	Table 38. 1	Taiwan Rio	ce Supply	and Utiliz	ation							
Variable	Units / Yr	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Area Harvested	(1000 ha)	363	348	324	334	298	285	274	262	250	242	236	230	226	223	221	219
Yield	(mt/ha)	4.18	4.08	4.08	4.09	4.17	4.22	4.26	4.30	4.34	4.37	4.39	4.43	4.48	4.51	4.55	4.58
Production	(1000 mt)	1517	1420	1323	1367	1245	1201	1165	1126	1084	1056	1036	1022	1012	1007	1005	1006
Per capita use	(kg)	68.79	66.37	65.16	63.38	61.56	59.63	57.60	55.46	53.24	51.53	50.22	49.22	48.45	47.86	47.42	47.08
Total Consumption	(1000 mt)	1479	1440	1426	1399	1371	1338	1303	1265	1223	1193	1171	1156	1146	1140	1138	1138
Net Imports	(1000 mt)	-185	-88	66	110	121	132	132	132	132	132	132	132	132	132	132	132
Ending Stocks	(1000 mt)	268	160	156	233	228	223	217	211	204	199	195	193	191	190	190	190
					Table	39. Rest o	of the Wor	Id Rice Si	pply and	Utilizatio	c						
Variable	Units / Yr	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Area Harvested	(1000 ha)	29228	29282	29234	29403	29490	29523	29692	29871	30041	30213	30383	30558	30729	30902	31075	31248
Yield Droduction	(mt/ha) (1000 mt)	1.62	1.58 16252	1.67	1.70	1.72	1.75 E1E1E	1.76	1.78 52254	1.80 E4110	1.82 54000	1.84 EE0E1	1.86 EE742	1.88 57670	1.89 50510	1.91 E0444	1.93
Total Consumption	(1000 mt)	58620	57678	57277	58245	59334	60290	61345	62387	63304 63304	64294	65181	66214	67211	68202	69191 69191	70158
Net Imports Ending Stocks	(1000 mt)	12551 5371	10033 4078	8908 4582	8422 4660	8580 4747	8821 4823	9029 4908	9216 4991	9259 5064	9385 5144	9388 5214	9555 5297	9662 5377	9763 5456	9856 5535	9921 5613
	···· >>> /		>	1222	~~~~	:	242	222							222	~~~~	2.22

					Ap	pendix Ta	ble 1. Pop	oulation								
Country/Yr	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
						(Pe	rcentage C	hange fro	m Previou	s Year)						
United States	1.04	1.01	0.98	0.95	0.92	0.90	0.88	0.87	0.85	0.84	0.83	0.83	0.83	0.83	0.83	0.83
Thailand	1.60	1.22	1.16	1.09	1.02	0.95	0.84	0.68	0.52	0.35	0.19	0.20	0.20	0.20	0.20	0.20
Pakistan	3.00	1.93	2.56	2.56	2.56	2.70	2.83	2.81	2.80	2.78	2.77	2.75	2.74	2.73	2.72	2.71
Myanmar	1.87	2.10	2.10	2.10	2.10	2.10	2.10	2.10	2.10	2.10	2.10	2.10	2.10	2.10	2.10	2.10
Vietnam	2.20	1.71	1.66	1.60	1.54	1.49	1.44	1.41	1.38	1.34	1.31	1.28	1.28	1.28	1.28	1.28
China	1.20	1.03	0.98	0.93	0.88	0.83	0.78	0.74	0.71	0.69	0.66	0.65	0.65	0.65	0.65	0.65
India	2.40	1.77	1.73	1.69	1.64	1.60	1.56	1.53	1.50	1.47	1.44	1.41	1.41	1.41	1.41	1.41
Australia	1.30	1.28	1.20	1.13	1.06	1.01	0.98	0.95	0.93	0.90	0.88	0.86	0.86	0.86	0.86	0.86
Egypt	2.10	1.92	1.89	1.87	1.85	1.82	1.81	1.80	1.79	1.77	1.75	1.73	1.73	1.73	1.73	1.73
Argentina	1.40	1.11	1.10	1.09	1.08	1.07	1.05	1.04	1.03	1.02	1.00	0.99	0.99	0.99	0.99	0.99
Uruguay	-0.32	0.63	0.95	0.31	0.62	0.31	0.31	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30
Japan	0.32	0.32	0.33	0.33	0.33	0.32	0.30	0.28	0.25	0.21	0.17	0.13	0.13	0.13	0.13	0.13
Indonesia	1.58	1.56	1.54	1.52	1.49	1.47	1.44	1.42	1.39	1.36	1.33	1.30	1.30	1.30	1.30	1.30
Iraq	2.99	3.38	3.27	3.17	3.07	2.98	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Iran	2.17	2.16	2.15	2.13	2.14	2.12	2.11	2.10	2.10	2.10	2.10	2.10	2.10	2.10	2.10	2.10
Saudi Arabia	2.50	3.28	3.27	3.26	3.26	3.26	3.26	3.26	3.26	3.27	3.28	3.29	3.29	3.29	3.29	3.29
European Union	0.33	0.31	0.30	0.28	0.27	0.25	0.23	0.21	0.19	0.17	0.15	0.13	0.13	0.13	0.13	0.13
South Korea	1.04	1.03	1.02	1.00	0.97	0.95	0.92	0.88	0.85	0.82	0.79	0.76	0.76	0.76	0.76	0.76
Taiwan	0.94	0.91	0.89	0.86	0.84	0.82	0.8.0	0 79	0 77	0.76	0 74	071	0 71	0 71	071	071
Brazil	1.26	1.20	1.14	1.08	1.01	0.94	0.90	0.88	0.86	0.84	0.81	0.79	0.79	0.79	0.79	0.79
				Appe	ndix Table	2. Real G	ross Dom	estic Pro	duct (GDF	6						
Country/Yr	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
						(Pe	rcentade C	hande fro	m Previou	s Year)						
						•		n n n		(						
United States	3.00	2.20	2.40	2.30	2.30	2.20	2.20	2.20	2.20	2.20	2.10	2.10	2.10	2.10	2.10	2.10
Thailand	8.60	7.40	8.30	8.10	7.90	7.80	7.80	7.70	7.60	7.30	7.10	7.00	7.00	7.00	7.00	7.00
Pakistan	4.70	5.40	4.90	5.90	6.10	6.20	6.10	5.90	6.00	6.10	6.20	6.00	6.00	6.00	6.00	6.00
Myanmar	2.47	2.47	2.47	2.47	2.47	2.47	2.47	2.47	2.47	2.47	2.47	2.47	2.47	2.47	2.47	2.47
Vietnam	10.50	10.20	10.10	9.70	9.40	9.50	9.50	9.50	9.50	9.50	9.50	9.50	9.50	9.50	9.50	9.50
China (GNP)	10.20	9.50	9.60	9.20	8.90	8.60	8.60	8.50	8.40	8.30	8.20	8.10	8.40	8.40	8.40	8.40
India	7.10	6.50	6.90	6.80	6.90	7.00	6.90	7.20	7.10	7.30	7.40	7.20	7.20	7.20	7.20	7.20
Australia	3.20	3.60	3.00	3.40	3.40	4.30	3.70	3.50	3.50	3.40	3.40	3.40	3.40	3.40	3.40	3.40
Egypt	4.60	2.90	3.60	3.70	4.50	4.50	4.50	4.50	4.50	4.50	4.50	4.50	4.50	4.50	4.50	4.50
Argentina	-4.40	3.00	4.70	4.90	4.10	4.00	3.40	5.60	5.60	4.90	4.70	4.60	4.60	4.60	4.60	4.60
Uruguay	2.40	0.50	3.50	2.60	3.00	3.00	1.90	1.90	1.90	1.90	1.90	1.90	1.90	1.90	1.90	1.90
Japan	0.80	3.80	2.10	3.20	2.90	2.60	2.50	2.30	2.50	2.40	2.40	2.40	2.40	2.40	2.40	2.40
Indonesia	8.10	8.00	7.70	7.60	7.10	6.70	6.30	6.10	5.90	5.60	5.60	5.50	5.50	5.50	5.50	5.50
Iran	2.50	2.10	2.60	2.80	2.60	3.10	3.30	3.30	3.30	3.30	3.30	3.30	3.30	3.30	3.30	3.30
Saudi Arabia	-0.10	1.80	2.40	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
European Union	2.80	1.40	2.20	2.60	2.40	2.40	2.40	2.50	2.40	2.30	2.20	2.20	2.20	2.20	2.20	2.20
South Korea	9.00	6.6U	6.70	6.60	6.40	6.20 0.10	6.00 2,20	6.10 0.10	5.90	5.60	5.60	5.70	5.70	5.70	5.70	5.70
Ialwan Brazil	6.1U 4.10	6.UU 2.80	6.1U	6.5U 5.10	6.3U 4.20	6.40 7.30	6.4U 4.60	6.4U 7.60	6.40 5.40	6.40 3 70	6.4U 3.70	0.40 3.90	6.4U 3.90	6.40 3.90	6.4U 3.90	6.40 3.90

				Appenc	lix Table 3	. Gross D	omestic F	roduct (G	iDP) Defl	ator						
Country/Yr	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
						(Pe	rcentage (	change fro	m Previor	is Year)						
United States	2.00	2.40	2.40	2.60	2.50	2.70	2.80	2.80	2.80	2.80	2.80	2.80	2.80	2.80	2.80	2.80
Thailand	6.30	5.40	5.60	4.80	4.70	4.70	4.70	4.70	4.70	4.70	4.70	4.70	4.70	4.70	4.70	4.70
Pakistan	12.10	9.60	10.40	8.80	9.10	8.20	8.20	8.00	7.90	7.80	7.70	7.60	7.60	7.60	7.60	7.60
Myanmar	5.66	5.66	5.66	5.66	5.66	5.66	5.66	5.66	5.66	5.66	5.66	5.66	5.66	5.66	5.66	5.66
Vietnam	17.40	17.80	15.40	13.70	10.70	10.00	9.50	9.50	9.50	9.50	9.50	9.50	9.50	9.50	9.50	9.50
China	13.50	7.40	11.40	11.10	10.90	10.60	9.00	7.90	6.80	5.80	5.70	5.70	5.70	5.70	5.70	5.70
India	4.00	4.10	5.00	6.60	6.30	6.20	6.20	6.20	6.20	6.20	6.20	6.20	6.20	6.20	6.20	6.20
Australia	2.60	2.80	2.40	2.80	2.60	2.70	2.50	2.20	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50
Egypt	12.00	8.40	8.00	8.40	8.40	8.40	8.40	8.40	8.40	8.40	8.40	8.40	8.40	8.40	8.40	8.40
Argentina	5.00	2.50	3.10	3.00	4.70	5.40	8.30	8.30	8.30	8.30	8.30	8.30	8.30	8.30	8.30	8.30
Uruguay	30.10	30.10	24.40	24.90	22.50	15.20	17.10	17.10	17.10	17.10	17.10	17.10	17.10	17.10	17.10	17.10
Japan	-0.50	-0.30	0.30	0.80	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10
Indonesia	7.90	7.80	7.80	7.80	6.90	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00
Iran	35.50	35.90	25.30	20.60	17.50	10.50	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00
Saudi Arabia	4.40	0.90	0.80	2.00	2.30	2.30	2.30	2.30	2.30	2.30	2.30	2.30	2.30	2.30	2.30	2.30
European Union	2.10	5.30	4.90	0.10	0.80	2.40	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50
South Korea	5.40	6.00	5.20	4.90	4.70	4.70	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00
Taiwan	2.10	2.50	2.70	2.80	2.70	2.90	2.80	2.80	2.80	2.80	2.80	2.80	2.80	2.80	2.80	2.80
Brazil	70.70	18.60	13.20	11.60	10.60	10.10	12.20	12.20	12.20	12.20	12.20	12.20	12.20	12.20	12.20	12.20
				A	ppendix <b>T</b>	able 4. Co	onsumer F	rice Inde	x (CPI)							
Country/Yr	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
						(Pe	rcentage (	hange fro	m Previou	is Year)						
United States	2.85	2.80	2.60	2.60	2.40	2.50	2.70	2.70	2.70	2.70	2.70	2.70	2.70	2.70	2.70	2.70
Thailand	5.80	5.90	5.40	5.30	5.20	5.10	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00
Pakistan	13.00	10.20	10.10	9.50	9.60	9.40	9.20	9.20	9.20	9.20	9.20	9.20	9.20	9.20	9.20	9.20
Myanmar	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00
Vietnam	12.70	10.60	10.00	9.50	9.40	8.10	7.90	7.90	7.90	7.90	7.90	7.90	7.90	7.90	7.90	7.90
China	16.70	9.30	11.00	12.40	12.10	11.70	9.80	9.80	9.80	9.80	9.80	9.80	9.80	9.80	9.80	9.80
India	10.00	8.00	8.10	7.50	7.30	7.30	7.20	7.20	7.20	7.20	7.20	7.20	7.20	7.20	7.20	7.20
Australia	4.60	3.10	2.80	3.60	3.90	3.10	2.80	2.80	2.80	2.80	2.80	2.80	2.80	2.80	2.80	2.80
Egypt	8.30	12.00	8.60	7.80	6.40	5.10	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00
Argentina	3.40	0.20	2.50	3.10	4.00	4.60	6.30	6.30	6.30	6.30	6.30	6.30	6.30	6.30	6.30	6.30
Uruguay	30.10	30.10	27.60	24.30	15.50	17.40	16.20	16.20	16.20	16.20	16.20	16.20	16.20	16.20	16.20	16.20
Japan	-0.10	0.10	0.70	1.60	2.00	2.10	2.20	2.20	2.20	2.20	2.20	2.20	2.20	2.20	2.20	2.20
Indonesia	9.40	8.20	8.60	8.50	8.40	8.20	8.10	8.10	8.10	8.10	8.10	8.10	8.10	8.10	8.10	8.10
Iraq	4.20	4.20	4.20	4.20	4.20	4.20	4.20	4.20	4.20	4.20	4.20	4.20	4.20	4.20	4.20	4.20
Iran	49.70	45.60	30.20	21.30	13.40	9.10	8.50	8.50	8.50	8.50	8.50	8.50	8.50	8.50	8.50	8.50
Saudi Arabia	4.90	1.20	1.70	1.80	1.00	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
European Union	3.30	2.50	2.60	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50
South Korea	4.50	5.10	5.20	5.40	5.40	5.10	5.10	5.10 0.10	5.10 0.10	5.10	5.10	5.10 0.10	5.10	5.10	5.10	5.10
laiwan	3.70	3.00	3.40	3.40	3.30	3.50	3.40	3.40	3.40	3.40	3.40	3.40	3.40	3.40	3.40	3.40
Brazil	76.80	19.50	14.00	11.2U	10.10	9.60	9.60	9.80	9.80	9.80	9.80	9.80	9.80	9.80	9.80	9.80

					Apper	ndix Tabl	e 5. Excha	inge Rate	*							
Country/Yr	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
						(Pe	rcentage C	Change fro	m Previou	s Year)						
Thailand	-0.60	1.50	0.60	0.30	0.30	0.20	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10
Pakistan	2.30	10.20	6.90	5.80	4.20	4.30	4.30	4.30	4.30	4.30	4.30	4.30	4.30	4.30	4.30	4.30
Myanmar	-1.59	-1.59	-1.59	-1.59	-1.59	-1.59	-1.59	-1.59	-1.59	-1.59	-1.59	-1.59	-1.59	-1.59	-1.59	-1.59
Vietnam	3.90	4.10	4.50	4.70	4.60	4.70	4.40	4.40	4.40	4.40	4.40	4.40	4.40	4.40	4.40	4.40
China	-3.10	0.10	3.20	2.90	2.80	3.00	2.90	2.90	2.90	2.90	2.90	2.90	2.90	2.90	2.90	2.90
India	6.60	8.40	7.10	4.60	4.30	4.20	4.40	4.40	4.40	4.40	4.40	4.40	4.40	4.40	4.40	4.40
Australia	-1.30	-5.10	2.00	1.70	4.00	2.10	1.80	1.80	1.80	1.80	1.80	1.80	1.80	1.80	1.80	1.80
Egypt	0.20	2.60	2.60	2.00	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50
Argentina	0.10	-0.10	0.00	0.00	0.00	0.00	4.50	4.50	4.50	4.50	4.50	4.50	4.50	4.50	4.50	4.50
Uruguay	0.00	0.00	20.00	17.71	15.93	12.98	12.16	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
Japan	-8.00	14.50	2.70	06.0	-1.80	-1.00	-1.00	-0.90	-0.80	-0.70	-0.60	-0.50	-0.50	-0.50	-0.50	-0.50
Indonesia	4.10	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
Iraq	2.17	0.00	0.00	0.00	0.00	0.00	00.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	00.0	0.00
Iran	44.70	20.00	1.40	1.50	1.40	0.90	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80
Saudi Arabia	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
European Union	-4.63	4.40	4.90	3.20	06.0	-0.60	-0.60	-0.60	-0.60	-0.60	-0.60	-0.60	-0.60	-0.60	-0.60	-0.60
South Korea	-4.00	3.70	-1.90	-0.90	-0.80	-0.90	-0.90	-0.90	-0.90	-0.90	-0.90	-0.90	-0.90	-0.90	-0.90	-0.90
Taiwan	0.40	2.60	-0.80	-1.60	-0.30	-0.40	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10
Brazil	43.70	9.70	15.00	10.50	13.00	14.40	12.60	15.10	14.50	13.90	13.30	12.70	12.70	12.70	12.70	12.70
* Relative to the U.S. dollar.																

#### English/Metric Conversion Table

English to Metric			Metric to English		
to convert from	to	multiply the English unit by	to convert from	to	multiply the metric unit by
Length			Length		
miles	kilometers	1.61	kilometers	miles	0.62
yards	meters	0.91	meters	yards	1.09
feet	meters	0.31	meters	feet	3.28
inches	centimeters	2.54	centimeters	inches	0.39
Area and Volume			Area and Volume		
sq yards	sq meters	0.84	sq meters	sq yards	1.20
sq feet	sq meters	0.09	sq meters	sq feet	10.76
sq inches	sq centimeters	6.45	sq centimeters	sq inches	0.16
cu inches	cu centimeters	16.39	cu centimeters	cu inches	0.06
acres	hectares	0.41	hectares	acres	2.47
Liquid Measure			Liquid Measure		
cu inches	liters	0.02	liters	cu inches	61.02
cu feet	liters	28.34	liters	cu feet	0.04
gallons	liters	3.79	liters	gallons	0.26
quarts	liters	0.95	liters	quarts	1.06
fluid ounces	milliliters	29.57	milliliters	fluid ounces	0.03
Weight and Mass			Weight and Mass		
pounds	kilograms	0.45	kilograms	pounds	2.21
ounces	grams	28.35	grams	ounces	0.04
Temperature			Temperature		
F	С	5/9(F-32)	c c	F	(9/5)C+32