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101 Facts About Rice in the Philippines

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Report Highlights: Filipino consumers pay 2 or 3 times as much for rice as do Thai and Vietnamese consumers. This and 100 other facts are included in this compilation by Dr. Bruce Tolentino, et al.

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101 Facts About Rice in the Philippines

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Current Rice Prices

1. Filipino consumers suffer rice prices that are double to triple those borne by Thai or Vietnamese households.

2. As of August 2001, the wholesale price of regular-milled rice in the major Manila wet markets was P16.53 per kilo ($ .15 per pound)

3. For the same quality of rice that Filipinos consume, Vietnamese households pay only P6.36 per kilo, while Thai households pay P7.54 per kilo – less than half the prices faced by Filipino households!

4. The cheapest rice in the Philippine market is regular-milled rice sold at P14.00 per kilo by the NFA in its relatively few "rolling stores".

5. In the most depressed areas, the stocks of the NFA's rolling stores are not fully exhausted, indicating that even P14.00 is apparently expensive to the very poor!

6. The NFA now sells rice in half-kilo bags. It seems that the very poor can hardly come up with the P14.00 in cash to purchase rice a kilo at a time.

7. The gap in consumer price and producer cost between the Philippines on the high side, and Thailand and Vietnam on the low side has been growing since the mid-1980s.

8. Over the next 25 years, the requirement for rice by the population of the Philippines is expected to increase by at least 65%.

Current Production Costs

1. Filipino rice farmers incur, on the average, costs of production double to triple that of Thai or Vietnamese farmers.

2. Over the 1990s, while the population of the Philippines grew at a relatively rapid rate of over 2.3% per year, rice production grew at only 1.9% per year.

3. On the average, it costs Filipino farmers P7.45 to produce a kilo of paddy (unhusked rice).

4. As of the mid-1990s, Filipino farmers spent P5.71 to produce a kilo of paddy while Vietnamese farmers spent only P2.33 per kilo and Thai farmers P4.30 per kilo.

5. High domestic rice prices are principally traced to the continuous suppression of rice imports to levels lower than domestically desired.

6. High *palay* production costs are traceable to continued dependence on high consumer prices, exacerbated by high cost of labor, land rent and marketing of inputs and outputs.

Trends in Rice Prices

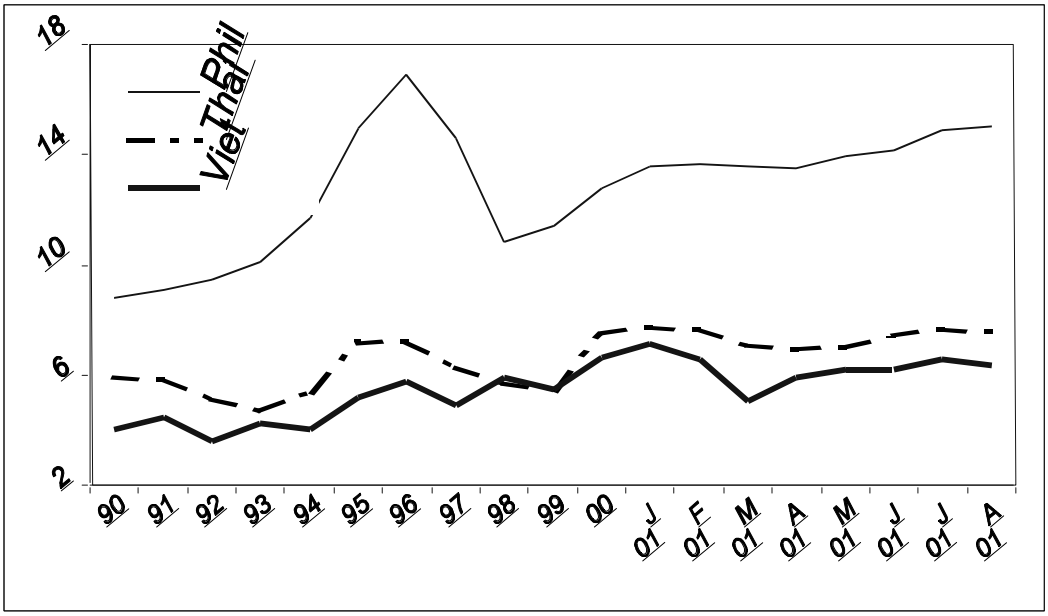
1. In rice prices and costs of production, the gap between the Philippines on the one hand and Vietnam and Thailand on the other has been growing **worse** over time.

2. Prior to the mid-1980s, the gap between world rice prices and Philippine rice prices was minimal and stable. Since then the gap has gradually but continually widened.

3. World rice prices have been more stable than Philippine rice prices.

Figure 1

Domestic Wholesale Rice Prices of Rice: Philippines, Thailand and Viet Nam, Pesos Per Kilo, 1990 to August 2001



4. Between 1982 and 2000, average world prices of rice (FOB Thai 35% brokens) have been **falling** by 0.58% yearly. In contrast, Philippine wholesale prices have been **rising** by 10.60% yearly.

Dependence of the Economy on Rice

1. Compared to either Thailand or Viet Nam, the Philippines is less dependent on rice for its agricultural incomes. More agricultural land is devoted to rice in Thailand and Viet Nam than in the Philippines. Thus the scope and potential for diversification in the Philippines is greater.

2. Rice production in the Philippines has been growing at an average rate of 1.9% per year over the last decade compared to 3.0% and 5.4% for Thailand and Viet Nam, respectively.

3. The Philippine Rice Research Institute indicates that the Philippines has only exploited about a quarter of its full potential capacity in rice yields. Actual yields average only 3 tons per hectare while potential is 12 tons per hectare.

Yield Gaps

1. The experience of the 1970s and 1980s shows that Filipino farmers adopted new and improved agricultural technologies earlier and at rates faster than farmers of other countries.

2. Across Asia in general, there is a gap of 87% between the yields attained on experimental or demonstration farms and those of farmers.

3. The gap between experimental and actual yields is roughly attributed to production constraints which include: (a) Insect pests and diseases – 35%, (b) Water management – 26%, (c) Fertilizer and soil management – 21%, (d) Weeds – 9%, and (e) Seeds and seedling management – 9%.

4. There are significant interactions among the above-mentioned production constraints. The quality of water management, for example, is known to influence the level of farm inputs such as fertilizer as well as the incidence of weeds and pests.

5. Compared to Thailand and Viet Nam, Philippine rice productivity (in terms of paddy produced per hectare) has been relatively stagnant, increasing by an average of only 0.43% yearly over the last decade.

6. Thailand's rice productivity has increased by 1.24% and Viet Nam's by 3.00% yearly over the last 10 years.

Irrigation

1. The overall experience in many Asian countries indicates that the installation of irrigation brings rice yields up to about 3 tons per hectare per year.

2. In the Philippines, only about 29% (or 1.34 million hectares) of all potentially irrigable land (total 4.66 million hectares) is irrigated.
3. All relatively flat land (3% slope and below) is defined as "irrigable".
4. Per the National Irrigation Administration figures, of the total irrigated areas, about half are served by irrigation facilities classified as national (NIS). The rest is served by communal (about 30%) and private (about 20%) systems.

5. However, David (2001) estimates private, farmer-owned irrigation to be in the order of 650,000 hectares – or about 2-3 times the NIA's estimates.

6. At the peak of irrigation development in the 1970s, the NIA was able to build new irrigation facilities at the rate averaging 25,000 hectares per year.

7. During the 1980s and the 1990s, the average rate at which the NIA built new irrigation was 10,000 hectares per year.

8. The average gestation period for an irrigation system to be brought from inception to actual service is seven (7) years.

9. David (2001) estimates that it will require about 70,000 hectares of rehabilitated irrigation systems per year in order to just maintain the current level of irrigation development, to make up for accumulated neglect.

10. The average actual irrigated area of Philippine National Irrigation Systems is only about 75% of total design area.

11. NIA estimates – as of 1995 - of the cost of new NIS irrigation is about P100,000 per hectare (range from P70,000 to P180,000 per hectare). The cost of NIS rehabilitation is about P10,000 per hectare.

12. NIA estimates – as of 1995 – of the cost of new communal systems is P70,000 per hectare. The rehabilitation of existing CIS is estimated to cost P45,000 per hectare.

13. New, private irrigation systems are estimated to cost around P35,000 per hectare.

14. The NIA is able to collect only an average of 58% of Irrigation Service Fees (ISF).

15. The current ISF rates were set in 1974 and have never been revised. The ISF was scrapped then reimposed at a reduced rate during the Presidency of Joseph Estrada.

The NFA and Regulation of the Rice Industry

1. By law – Presidential Decree 4 (1972), only the National Food Authority (NFA) may import rice. The NFA has the monopoly of all rice imports.

2. The Government sets the total limit on rice imports – the quantitative restriction (QR) on rice imports.

3. The NFA may also issue licenses to private sector businesses to import rice. However, such imports have been limited to special grades of rice and have totaled a maximum of only 25,000 MT.

4. The NFA regulates all participation in rice trade. Licensing of traders is provided by the

NFA on a line-by-line basis. That is, a license must be secured for each type of rice marketing and trading function: milling, transport, wholesale, retail, etc.

5. In 2001, citing anti-smuggling reasons, the NFA re-imposed the regulation that requires all domestic rice shipping and movements of 300 sacks and above to be covered by an NFA permit, obtained from the NFA for a fee.

6. The NFA procures paddy (unhusked) rice from traders and farmers, and sells milled rice to traders and consumers. The conversion rate of paddy to rice is 0.65%.

7. Currently the NFA procures paddy at a national price of P9.00 per kilo in the wet/ main harvest season (September to February) and at P10.00 per kilo in the dry/ secondary harvest/ lean season (March to August).

8. NFA has procured only 2.8% of total Philippine paddy production and 5.3% of marketable surplus over the past ten years.

9. Only about 67,000 farmers (or 3% of all rice farmers) directly benefited from the NFA's paddy price support system – on the average each year over the last 10 years.

10. The NFA also provides "incentive fees" for paddy that is sold by cooperatives, delivered to the NFA warehouse instead of having to the picked up from the farmers' fields, and for paddy that meets maximum moisture content – i.e., has been properly dried.

11. The NFA releases (sells) regular milled rice at a national price of P13.00 to wholesalers (TRDP and rolling stores) and P14.00 to wholesalers in regular outlets.

NFA Rice Imports

1. When the NFA imports rice, it makes a profit. When the NFA procures paddy from Filipino farmers, it loses money.

2. Currently imported regular milled rice is sold by NFA to wholesalers at P15.00 per kilo.

3. In recent years, the Philippines has been the largest single importer of Viet Nam's rice exports.

4. Per the National Customs and Tariff Code, a tariff of 50% is levied on rice imports.
5. When the NFA imports rice, the tariff is waived or (permanently) deferred.

6. In the 6 years from 1995 to 2000, the tariff revenues foregone on NFA imports have totaled almost P24 billion, or an average of P4 billion per year.
7. The annual average of P4 billion in foregone revenues due to tariff free rice importations of the NFA is about 60% of the 1999 DA budget on rice and corn or about 38% of the total budget on agriculture and fishery.

Table 1

Estimated Foregone Tariff Revenue From NFA Rice Imports, 1995 - 2000

Year	Imports '000 MT	Estimated Landed Cost, At Pier, Pesos[1]	Foregone Tariff Revenue, 50%, Pesos[2]
1995	263	1,936,440,035	968,220,017
1996	862	6,231,380,135	3,115,690,068
1997	722	5,252,081,506	2,626,040,753
1998	2,171	22,224,322,998	11,112,161,499
1999	834	6,854,197,517	3,427,098,758
2000	617	4,553,684,958	2,276,842,479
TOTAL			**23,526,053,575**

[1] FOB price (Thai 35% brokens) X imports volume X exchange rate
[2] Waived due to policy on government importation

8. When the NFA imports rice, it is able to take advantage of low world rice prices. The NFA thus purchases and imports rice at the low world price and sells it at the NFA rice release price and still makes a substantial margin.

Cost of National Rice Price Interventions

1. The NFA strategy is often described as "*buy high, store long, sell low*". The NFA buys paddy from farmers at above-market prices, mills the paddy into rice, holds stock for at least nine months, then sells rice at below-market prices.

2. It is estimated that the NFA loses about P7.00 per kilo of paddy rice that it handles from procurement, milling, storage then wholesale release.

3. In 1999, the total budget of the Philippine Department of Agriculture (including its attached agencies and bureaus) on rice and corn was about P6.7 billion, but excluding the cost of the rice price interventions implemented by the NFA.

4. The national government supports the losses incurred by NFA by providing it with budget support and authority to borrow from commercial banks. In 2000, about One Billion Pesos was provided to the NFA from the national budget. The NFA was also allotted a total borrowing limit of P20 Billion.

5. The general appropriations for the DA budget for *MakaMasa* (or *GMA CARES*) Program for Rice and Corn for 2001 is set at P2.21 billion.

Table 2

Cost of National Rice Price Interventions, *1996-98, in Billion Pesos*

Component	1996	1997	1998
General Appropriations Subsidies and Equity to NFA	1.2	1.6	1.3
Borrowing by NFA from Commercial Banks	(1.7)	2.3	4.9
Foregone Tariff Revenue on NFA Imports	4.3	3.3	3.6
Estimated Welfare Loss to Farmers	12.9	8.4	3.8
Estimated Welfare Loss To Consumers	14.1	13.4	5.3
Total cost of Rice Policy Society	30.7	29.0	18.2

Rice Smuggling

1. Since rice prices in the Philippines are so much higher than rice prices from exporting countries like Viet Nam and Thailand, it is particularly profitable to smuggle rice into the country, despite the risks of being caught and penalized.

2. World rice prices have fallen steadily over the past decade. In contrast, Philippine rice prices have climbed fairly rapidly. These trends have provided greater incentives and rewards for importers and smugglers.

3. The enforcement of anti-rice smuggling rules and regulations is very weak, given the archipelagic nature of the country and the poor resources provided to enforcement authorities.

4. When rice is found to be smuggled, it is confiscated and later sold by the government in the domestic market. Thus even smuggled rice still adds to total domestic rice supply.

International Trade in Rice and WTO and ASEAN

1. The Philippines is one of only three countries worldwide which were granted exemptions in 1995 from the removal of QRs on rice, using under Annex 5 of the WTO agreement. The others were Japan and South Korea.

2. In April 1999 Japan gave up its QR for a high tariff rate on rice. South Korea has already announced it is ready to give up rice QRs. The Philippines will soon be the only country still claiming exemption from the tariffication of rice QRs.

3. The exemption from the tariffication of rice QRs expires on December 31, 2004.
4. Currently the Philippines is the only country in ASEAN that still uses QRs to protect its rice sector.

Table 3

Country WTO Commitments on Tariffs on Rice

	Base Rate (%)	Bound Rate (%)	Implementation Period
Thailand	**58**	**52**	**1995-2004**
Philippines	**Exempted**	**Exempted**	**1995-2004**
Malaysia	**45**	**40**	**1995-2004**
Myanmar		**10**	**1995**
India	**0**	**0**	
Indonesia	**180**	**160**	**1995-2004**
China	**150**	**114**	**1995-2004**
Bangladesh		**50**	**1995**

Source: Schedules of Market Access Concessions, Marrakesh Protocol, 1994

Typical Filipino Rice Farmer, As of 2000

1. There are about 2.1 million rice farmers in the Philippines.

2. The 1991 Census of Agriculture and Fisheries counted 2.37 million rice farms in the Philippines.

3. The average rice farmer owns and tills about 1.5 hectares of irrigated rice land.

4. Seventy five percent of the country's rice fields are exclusively devoted to rice farming.

5. Eighty percent of the income of the average rice farmer comes from rice. The other major income source is off-farm employment.

6. Of the farmer's family, only one is employed outside the farm.

7. Half of all farmers use the carabao for farm work.

8. Three-quarters of farm labor is hired from outside the family.

Rice Prices and Labor and Farmer Unrest

1. Eighty percent of Filipino households (10 million out of 12 million households) devote at least half of their expenses to food.
2. The poorest Filipinos spend at least two-thirds (66%) of the total household income on food.

3. Rice is the staple food item of more than 90% of all Philippine households, and takes up about a quarter (25%) of household total food budgets of Filipino families.

4. Food prices are an important component of the administrative wage-setting process in the Philippines. Thus the upward trends in rice prices have exacerbated labor unrest and

continuing pressure for legislated wage increases.

5. Rice farmers and their families are also disadvantaged from high rice prices. Rice farmers sell most of their rice produce at harvest-time. They generally need the cash and do not have enough storage space to store rice for consumption the rest of the year.

6. 85% of all Filipinos, and 78% of all rural households source their household rice from the open market.

7. The proportion of all households benefiting from rice sold at subsidized (relative to domestic) prices by the National Food Authority is a small minority of the total population.

Rice Prices and Rice Consumption

1. 1. Cross-country evidence shows that Filipinos eat much less rice than do the citizens of other Asian countries.

Table 4

Per Capita Consumption of Rice, Selected Asian Countries, Kilos per year

Country	Rice Consumption, Kilos/ head/ year
Bangladesh	**150**
Cambodia	**169**
Indonesia	**149**
Laos	**172**
Malaysia	**92**
Myanmar	**213**
Philippines	**95**
Thailand	**109**
Vietnam	**165**

Source: RiceFactsIndex, www.riceweb.org

2. According to the NFA, Filipinos consume 103 kilos of rice per capita per year.

3. Per the RiceWeb, Filipinos consume 95 kilos of rice per capita per year. This comes to about 260 grams of milled rice – or about three cups of milled rice per day – or a cup of milled rice per meal.

4. The Vietnamese consume up to 165 kilos of rice per capita per year, and the citizens of Myanmar eat as much as 213 kilos of rice per capita per year!

Deepening Hunger and Malnutrition

1. The nutritional status of Filipino children is tracked by the National Nutrition Surveys (NNS) of the Food and Nutrition Research Institute. These surveys indicate that the incidence of child malnutrition has been quite high and even worsened between 1993 and 1998.

2. In 1993 some 8.4% of all children 0-6 years old were underweight, 5.6% were stunted, and 6.2% were wasted.

Table 5

Child Malnutrition, Philippines, 1993 and 1998, In %

	1993 *(Children 0-6 Years)*	**1998 (*Children 0-5 Years***
Underweight	**8.4**	**9.3**
Stundted	**5.6**	**n.a.**
Wasted	**6.2**	**7.2**

Source: ***National Nutrition Surveys***

3. However the 1998 NNS found 9.3% of all children aged 0-5 to be underweight, and 7.2% to be wasted.

4. A principal cause of malnutrition is low calorie intake. Even as early as 1993 it was already determined that in general, Filipinos had access to only 88% of their Recommended Daily Allowance (RDA) in caloric intake. The basic source of calories in the Filipino diet is rice. In general, Filipinos derive 41% of their calories from the consumption of rice.

5. Low calorie intake is associated with low rice consumption. In the last ten years domestic rice retail prices have increased relatively rapidly, undoubtedly leading to reduced consumption, specially among the less-able family members – particularly children and infants.

Welfare Losses Due to High Rice Prices and Interventions

1. A distinguishing feature of contemporary Thai and Vietnamese cost of living is very cheap food – relative to the Philippines. This has become increasingly evident since the 1980s as Vietnam and Thailand adopted market-oriented economic policies and invested heavily in their agriculture and rural sectors.

2. The average Filipino household of six (two adults and four children) consumes 570 kilos of rice per year. At the prevailing Philippine prices, this average Filipino family spends P10,000 per year on rice. However, at Vietnamese prices, the budget required is only P3,500, implying a savings of P6,500 per year!

3. Economists have estimated that for the years 1996 – 1998 alone, the total cost to Philippine

society of the policy of rice price interventions implemented by the NFA averaged about P26 Billion per year.

Sources of Information

AGILE Project
Asian Development Bank
Bangko Sentral ng Pilipinas
Bureau of Agricultural Statistics
Bureau of Agricultural Research
Civil Service Commission
Department of Agriculture
Department of Budget and Management
Department of Finance
Food and Agriculture Organization
Food and Nutrition Research Institute
International Food Policy Research Institute
International Rice Research Institute
Ministry of Agriculture and Rural Development, Viet Nam
National Economic and Development Authority
National Food Authority
National Irrigation Administration
National Nutrition Council
National Statistical Coordination Board
National Statistics Office
Philippine Institute for Development Studies
Philippine Rice Research Institute
RiceWeb
Social Weather Stations
Thailand National Statistics Office
United Nations
United Nations Development Programme
University of the Philippines at Los Banos
University of the Philippines School of Economics
USAID
Vietnam Economic Times
World Bank
World Trade Organization