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# Of Coconuts and Kings: The Political Economy of an Export Crop

James K. Boyce

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## ABSTRACT

The Philippines is the world's leading coconut exporter. The benefits of this trade for Filipino producers have been circumscribed by declining terms of trade in the world market and by highly unequal distribution of coconut-sector income at home. A case study of the Philippine coconut trade illustrates the crucial importance of linkages between wealth and power in determining the size and distribution of income in export agriculture.

'The time has come,' the Walrus said,  
    'To talk of many things:  
of shoes — and ships — and sealing wax —  
    Of cabbages — and — kings —  
And why the sea is boiling hot —  
    And whether pigs have wings.'

Carroll (1922: 186)

## INTRODUCTION

**In the world coconut market, the Philippines is king.** The country accounts for more than half of world exports, and hence is sometimes termed the 'Saudi Arabia of coconut oil', a label which understates its market share but overstates its market power. The ability of the Philippines to act as a 'price-maker' in the world coconut market is severely constrained by the existence of natural and synthetic substitutes. The prices of these substitutes — and therefore the price of coconut oil — are strongly influenced by policies of other governments, including protection for domestic oilseed producers and environmental regulation of the production

and consumption of synthetics. In the world of international commerce, the coconut king wields little power. Moreover, to say that the Philippines is the coconut king is not to say that all Filipinos in the coconut industry dine at the royal table. On the contrary, the relations of production and exchange in the Philippine coconut industry have brought poverty to many and fortunes to a few.

This article investigates the political economy of coconuts in the Philippines. Section I provides a brief historical overview, followed by an examination of the terms of trade on the world market and the competition from natural and synthetic substitutes in Section II. Section III looks at the relations of production in coconut agriculture. Section IV describes the relations of exchange, manipulation of which became the primary vehicle for concentration of the income generated in the coconut sector during the Marcos era. Section V offers some concluding remarks.

A central theme of the paper is the importance of linkages between wealth and power in determining the size and distribution of income in export agriculture. In the simplified world of economics textbooks — where endowments and technology are exogenous, markets are perfect and externalities do not exist — interactions between wealth and power are of no importance. In the real world of coconuts, however, they matter a great deal.

### THE COCONUT SECTOR: AN OVERVIEW

In the Philippines, as in many Asian, African and Latin American countries, export agriculture has historically been the single most important locus of interaction with the world economy. In the mid-1960s, sugar, coconuts and forestry accounted for 80 per cent of Philippine export earnings; coconuts alone accounted for 33 per cent (see Table 1). Their share declined over time owing to adverse price trends and export diversification, but in the mid-1980s coconut products remained the Philippines' single most important export, accounting for 12 per cent of total earnings.

Growth in agro-forestry exports has long been a central element of the country's economic development strategy. The World Bank (1973: 19) placed 'expansion of agricultural exports' alongside food-grain self-sufficiency as the major goals for Philippine agriculture. Juan Ponce Enrile, who served as Defence Minister and as a senior

Table 1. *Major Agricultural and Forestry Exports from the Philippines, 1962-85 (US\$ Million FOB Value)<sup>a</sup>*

| Product                    | 1962-6 | 1967-71 | 1972-6 | 1977-81 | 1982-5 |
|----------------------------|--------|---------|--------|---------|--------|
| Coconut products:          | 239    | 217     | 444    | 850     | 614    |
| Copra                      | 153    | 107     | 148    | 101     | 13     |
| Coconut oil                | 56     | 78      | 230    | 575     | 461    |
| Other <sup>b</sup>         | 30     | 32      | 66     | 174     | 140    |
| Sugar and sugar products   | 150    | 175     | 470    | 451     | 320    |
| Forestry products          | 184    | 267     | 317    | 426     | 316    |
| Total exports              | 724    | 973     | 2120   | 4537    | 5012   |
| Coconut share in total (%) | 33.0   | 22.2    | 20.8   | 18.7    | 12.2   |

<sup>a</sup>Quinquennial averages; <sup>b</sup>desiccated coconut and copra meal or cake.

Sources: Calculated from data in National Economic and Development Authority (1976: 423; 1986: 362-3).

coconut industry official under former President Ferdinand Marcos, predicted in 1980 that '25 per cent of Philippine growth in the next twenty to thirty years will come from coconuts'.<sup>1</sup>

Coconut production in the Philippines beyond domestic needs dates from 1642, when a Spanish edict required each 'indio' to plant 100-200 coconut trees to provide caulk and rigging for the colonizers' galleons. Large-scale exports of copra (dried coconut meat from which oil is extracted) began in the late nineteenth century, in response to demand from European and North American manufacturers of margarine and soap. The first mills for extraction of coconut oil in the Philippines were established early in the twentieth century. The United States became the largest market for Philippine coconut oil, and gave it preferential tariff treatment until 1974. Copra continued to predominate in trade with European countries, owing to tariffs on oil which were imposed to protect European millers.<sup>2</sup> After the Second World War, the primary uses of coconut oil in the world economy shifted from edible to non-edible industrial

products, such as soap, detergents, cosmetics, explosives and pharmaceuticals.<sup>3</sup>

In the early 1960s, two factors boosted the Philippine coconut industry. The first was the devaluation of the peso in 1962 by almost 100 per cent, which brought windfall profits to agro-exporters (Legarda, 1962; Treadgold and Hooley, 1967). The second was the introduction of large ocean tankers for the transport of coconut oil, a technological breakthrough which cut shipping costs and set the stage for the Philippines to move up the processing ladder from the export of copra to the export of oil.<sup>4</sup> At the same time, the 'green revolution' in rice agriculture saved the country's land frontier for non-rice uses.<sup>5</sup>

The increased profitability of coconut exports stimulated rapid acreage growth. From one million ha in the 1950s, the area planted to coconut rose to 2 million ha by 1971, and to 3 million ha by 1979 (see Table 2). Much of this growth occurred on the land frontier, notably on logged-over virgin lands in Mindanao (Tiglaio, 1981: 58). Coconut yields stagnated, however, at about one metric tonne per ha (see Table 2), reflecting low input use and a lack of investment in the replanting of ageing trees.<sup>6</sup>

Coconut yield stagnation is sometimes attributed to the low prices received by growers, but the fact that farmgate prices were attractive enough to stimulate acreage expansion suggests that the explanation lies elsewhere. One possible factor is inadequate investment in coconut research and extension. Hicks and McNicoll (1971: 205-6)

Table 2. *Area, Yield and Output of Coconut, 1962-85 (Output in Raw Nuts)<sup>a</sup>*

|  | 1962-6 | 1967-71 | 1972-6 | 1977-81 | 1982-5 |
|--|--------|---------|--------|---------|--------|
| Area (000 ha)                                      | 1475   | 1880    | 2253   | 2996    | 3210   |
| Yield (mt/ha)                                      | 1.0    | 0.9     | 1.1    | 1.4     | 1.0    |
| Output (000 mt)                                    | 1523   | 1704    | 2461   | 4244    | 3264   |
| Value (m pesos)                                    | 626    | 1053    | 2367   | 6513    | 8512   |
| Coconut share in total<br>crop output<br>value (%) | 20.4   | 16.8    | 14.9   | 19.0    | 14.4   |

<sup>a</sup>Quinquennial averages.

Sources: Calculated from data in National Economic and Development Authority (1976: 134-53; 1986: 266-75).

stated that 'practically no basic research has been directed toward developing a higher yielding coconut palm'. They attributed this to the fact that, unlike other tree crops in tropical agriculture, coconuts 'have always been a smallholders' crop, and few growing interests are large enough to justify expensive research'. Precisely for this reason, however, most crop improvement research throughout the world is conducted by public sector institutions rather than by private growers. Relatively low investment in coconut research and extension in the Philippines therefore may reflect the political weakness of small growers and the existence of other political priorities among the larger growers.

In a review of Philippine agricultural research, Evenson et al. (1980: 26) noted that in the case of coconuts, 'Few varietal advances appear to have been made over the past 50 years or so.' In its 'Green Paper' for the new Aquino government, the Agricultural Policy and Strategy Team of the University of the Philippines (1986: 249) reported that 'no more than two agronomists with a doctorate degree are working on coconut plant breeding in the country'. The Team also reported (p. 499) that research expenditures on coconut from 1974 to 1984 were, on average, only 28 per cent of those on sugar-cane.<sup>7</sup> The primary coconut crop improvement initiative under the Marcos government was a programme to replace older trees with the new, higher-yielding, 'Mawa' (Malayan × West African) hybrid, touted as the coconut equivalent of IRRI rice. It was not a great success. The Mawa hybrid, although shorter than traditional varieties, also has a shorter root system which makes it unable to withstand typhoons. The traditional tall varieties bend with the high winds, but Mawa topples and dies, a short-coming which greatly limits its potential geographic range in the Philippines.

Critics perceived the replanting programme as a vehicle for private gain rather than for the public good. A special tax levied on coconut growers (described in more detail in Section IV) was used to finance the purchase of Mawa seed from a farm owned by 'coconut king' Eduardo Cojuangco, a close associate of President Marcos.<sup>8</sup> The seedlings were then distributed to the growers, who received subsidies (financed by the levy) for replanting costs. According to Jose V. Romero Jr, chairman of the Philippine Coconut Authority under the Aquino government, 'In many cases the growers just banked the money and threw away the seedlings. Cojuangco's aim was just to get the government to buy his

production, and then let the government dump it' (pers. comm., J.V. Romero, Manila, 25 January 1989). In marked contrast to the spread of IRRI rice, the Mawa variety remains a rare sight in the Philippine countryside.<sup>9</sup> The Agricultural Policy and Strategy Team of the University of the Philippines (1986: 249) claims that government funding for coconut breeding research was 'abruptly discontinued by the Philippine Coconut Authority when the MAWA variety was first earmarked for exclusive use in the replanting program, for now obvious reasons'.

The 1970s saw a boom in coconut oil milling in the Philippines, and a shift from copra to oil in the composition of the country's coconut exports (see Table 1). The milling boom was encouraged not only by reduced shipping costs, but also by government policies. These included higher export tariffs on copra (Tiglao, 1981: 30), and investment incentives which in the end led to the creation of substantial excess capacity in the milling industry.<sup>10</sup>

#### TERMS OF TRADE

Movement in the external terms of trade — the prices of exports relative to the prices of imports — is a crucial aspect of any nation's interactions with the world economy. For the Philippines, this trend has been quite adverse. Power (1983: 9) remarks, 'Few countries in the world have suffered as much from the movements of international prices.'<sup>11</sup> Terms of trade for coconut oil are reported in Table 3. In 1985 each barrel of coconut oil exported by the Philippines bought less than half as much in imports as it had in 1962. The decline in the terms of trade was by no means smooth, however, as prices fluctuated greatly, transmitting instability from the world economy to the Philippine economy.

To a certain extent, the decline and instability of coconut and other agricultural export prices can be understood as an outcome of market forces. An overabundance of agricultural commodities on the world market and intense competition among producing countries have been general features of the post-war era. Moreover, agricultural commodities have long served as the textbook examples of the boom-and-bust price cycles which competitive markets can engender. The markets for Philippine agricultural exports are also characterized, however, by pervasive 'imperfections', and the

Table 3. *Terms of Trade for Philippine Coconut Oil, 1962-85*

| Year | (1972=100)                           |                          | Terms of trade |
|------|--------------------------------------|--------------------------|----------------|
|      | Coconut oil<br>export<br>price index | Import<br>price<br>index |                |
| 1962 | 119.9                                | 71.4                     | 167.9          |
| 1963 | 133.7                                | 76.2                     | 175.5          |
| 1964 | 145.4                                | 76.8                     | 189.3          |
| 1965 | 159.8                                | 78.1                     | 204.6          |
| 1966 | 134.2                                | 79.4                     | 169.0          |
| 1967 | 142.3                                | 81.2                     | 175.2          |
| 1968 | 166.9                                | 80.7                     | 206.8          |
| 1969 | 140.1                                | 82.7                     | 169.4          |
| 1970 | 160.4                                | 93.5                     | 171.6          |
| 1971 | 143.9                                | 95.5                     | 150.7          |
| 1972 | 100.0                                | 100.0                    | 100.0          |
| 1973 | 198.8                                | 128.8                    | 154.3          |
| 1974 | 508.1                                | 211.6                    | 240.1          |
| 1975 | 208.7                                | 219.6                    | 95.0           |
| 1976 | 192.4                                | 217.2                    | 88.6           |
| 1977 | 296.8                                | 241.2                    | 123.1          |
| 1978 | 338.7                                | 245.8                    | 137.8          |
| 1979 | 512.6                                | 270.1                    | 189.8          |
| 1980 | 342.6                                | 358.6                    | 95.5           |
| 1981 | 284.3                                | 398.6                    | 71.3           |
| 1982 | 241.5                                | 340.5                    | 70.9           |
| 1983 | 286.8                                | 342.4                    | 83.8           |
| 1984 | 547.2                                | 386.7                    | 141.5          |
| 1985 | 295.7                                | 363.8                    | 81.3           |

*Sources:* Calculated from data in National Economic and Development Authority (1976: 426-8, 434; 1986: 364-5, 377).

unfavourable price movements reflect the interplay of economics and politics on a world scale.

The terms of trade for coconut were relatively stable in the mid-1960s, declined from 1968 to 1972, and then rose sharply in 1973 and 1974 – notwithstanding the petroleum import price increase of those years – thanks to a boom in the coconut market. This initiated several years of extraordinary price instability. Nominal coconut prices dropped to less than half the 1974 level in 1976, then doubled by 1979, and then collapsed again.<sup>12</sup> Meanwhile

the Philippines faced an inexorable rise in nominal import prices. Hence, in spite of several ups and downs, the overall trend in the terms of trade was negative.<sup>13</sup>

This deterioration continued an earlier trend. Coconut prices moved generally downward after the Second World War: the world price of coconut oil had fallen from 26 US cents per pound in 1948 to 11 cents by 1962 (UNECAFE, 1969: 86). Between 1950 and 1962, the ratio of Philippine export prices to Philippine import prices had declined by 24 per cent.<sup>14</sup> Price instability is also a longstanding feature of the Philippine engagement with world markets. The price of coconut oil fell an astonishing 90 per cent in the post-war depression of 1921–2, and again by 70 per cent between 1928 and 1934 with the onset of the Great Depression (Tiglaio, 1981: 3, 6).

Although it is by far the world's largest coconut exporter, the Philippines exercises little market power owing to the availability of close substitutes. 'Coconut oil is a minor oil locked in a competitive battle', Hicks (1967: 212) observed, 'not so much with other producers of coconut oil but with other sources of oil.' Soyabean oil, groundnut oil, cottonseed oil, lard and tallow are among the major competitors in edible uses such as margarine and cooking oil. Petroleum-based synthetics are the major competitors in non-edible uses such as the manufacture of detergents, cosmetics, explosives and pharmaceuticals. Demand for coconut oil, and for the copra from which it is extracted, is therefore highly price-elastic.

The downward trend and instability of coconut prices can be explained primarily in terms of the world supply of competing substitutes. Producers of edible oils in the industrialized countries receive subsidies and other protection from their respective governments. The effect of these policies is to increase the world supply of edible fats and oils, eroding the competitive position of Philippine coconut oil, and depressing world prices for all freely-traded fats and oils. The introduction of petroleum derivatives as substitutes for coconut oil in industrial uses began on a large scale in the late 1960s. In this case, an important constraint on the competitiveness of coconut oil has been the failure of market prices to capture the negative externalities in the production and use of the synthetics. Even within the Philippines, there are complaints that coconut oil-based soap 'is being replaced by petro-based detergent which is polluting our waterways' (Abadilla, 1987: 4). Here, as in a number of other sectors of the world economy, neglect of the social costs of pollution confers an illusion of efficiency upon the products of the petrochemical industry.<sup>15</sup> In addition, Hicks (1967: 201) noted 'an



alarming contrast between the resources, research, and investment applied to the problem of reducing the cost of synthetic oils and the general neglect of the really substantial cost-reducing potential of natural oil'. This contrast reflects profound differences in the size and power of their respective producers. Large firms in the petroleum sector have the capacity not only to finance research and development, but also to internalize much of the resulting benefit streams. Natural oil producers must rely on public sector research, which has often been minimal.

Preferential trading arrangements with the United States played a key historical role in the growth of Philippine coconut exports in the face of the competitive and politicized world market for edible oils. The terms of Philippine access to the US market have reflected the balance among the competing interests of US edible oil producers, US firms engaged in the milling and export of coconut oil in the Philippines and US industrial consumers of coconut oil, all of which generated conflicting demands (Hicks, 1967: 135). The resulting tariff policies protected US edible oil producers from foreign competition, but applied substantially lower duties to Philippine oils than to those of other countries (Hicks, 1967: 52-80; UNECAFE, 1969: 56-7).

US tariff and commercial policy has been described as 'the most important factor in stimulating the expansion of the Philippine coconut industry' in the colonial period (Hawes, 1987: 61). The Philippines continued to receive preferential access to the US market after independence under the United States-Philippine Trade Agreement of 1946 and the Laurel-Langley Agreement of 1955. This special treatment was gradually reduced, however, and finally terminated in 1974 with the expiration of the Laurel-Langley Agreement. Stripped of this protection, the Philippine coconut industry became fully exposed to competition from producers of substitutes in the world market.

#### RELATIONS OF PRODUCTION

'Coconut farms' are a distinct entity in Philippine agriculture, since coconut is often a farm's primary or sole crop, rather than one component of a diversified crop mix. A 1978 survey of coconut farms by the Ministry of Agriculture found an average total cropped area of 4.9 ha, of which 4 ha were under coconuts.<sup>16</sup> In recent years the intercropping of coconut with other crops, such as coffee, abaca

and lanzones, has been increasing, but monoculture remains the rule.

The 4 ha average conceals significant farm-size disparities among coconut farms. The 1971 agricultural census found that the largest 10 per cent of coconut farms, with 10 ha or more, accounted for 42 per cent of total coconut area (Cornista and Pahn, 1987: 23). The expansion of coconut acreage sparked by the 1962 decontrol of foreign exchange occurred primarily in the larger farm-size classes. A survey conducted by Nyberg (1968: 51-2) found that 84 per cent of new plantings were on farms of 10 ha or more, and that 'essentially no new plantings were being made on farms smaller than two hectares'.

The census data on farm-size distribution obscure the degree of concentration in coconut lands, since they refer to operational holdings rather than to ownership. For example, Hayami et al. (1990: 118) report that in an upland coconut village in Quezon a single landlord owned all the land and cultivated it by means of share tenants; the agricultural census would record each tenant's holding as a separate farm. Estimates of the extent of tenancy vary widely, from 22 to 68 per cent of all coconut farms (Cornista and Escueta, 1983: 4-5). Tenancy is reportedly more widespread in the coconut regions of southern Luzon than in the newer, and typically larger, coconut farms of Mindanao. Coconut landlords include middle-class professionals, teachers, managers and military officers, many of them absentees (Putzel and Cunningham, 1989: 13-15). Share tenancy is most common, with considerable variation in both the share and the responsibilities of the tenant. Variants include a 50-50 division of the copra with the tenant bearing all expenses in Quezon, or a 60-40 split in favour of the landowner if the latter bears certain expenses; a 2/3-1/3 division in favour of the landowner in Albay, again with the tenant bearing all expenses; and, in Laguna, a one-seventh share of the green nuts to the tenant whose job is simply to protect the trees and to clear the land between them (Cornista and Escueta, 1983: 5-6; pers. comm., L.B. Cornista, Manila, 24 January 1989).

Although family and exchange labour remain important on the smaller coconut farms, Cornista and Escueta (1983: 2) report an increasing use of hired labour in production activities. Government surveys conducted in 1974-8 indicate that hired labour accounted for 61 per cent of total labour inputs on coconut farms (Tiglaio, 1981: 38-40). David (1977) similarly estimates that in 1976 hired

labourers accounted for 65 per cent of the 1,550,000 persons 'engaged in the actual act of farming on a coconut farm', and that of the remainder, 32 per cent were tenants and 3 per cent were owner-operators.<sup>17</sup>

Hired labourers are paid mainly on a piece-rate basis, which reduces the need for supervision and facilitates the use of family helpers by the hired worker (Tiglao, 1981: 44). Official data indicate that their *daily* wages tend to be slightly higher than those for agricultural labourers in rice, corn and sugar-cane cultivation (World Bank, 1985: 29). This may reflect longer working days, the use of family helpers by coconut workers and perhaps higher daily earnings to compensate for fewer days of employment, since the average *annual* earnings of coconut labourers are among the lowest of any occupational group in the country (Cornista and Escueta, 1983: 10-11).

Unlike hired labourers in the other major export crops, coconut workers are generally unorganized, with 'no channel for the articulation of their interests and needs'. Nevertheless some coconut labourers have developed 'means of sharing poverty' at the local level, including the rotation of limited employment, the formation of work groups in which remuneration is shared equally among members and the inclusion in such groups of non-members in dire need of employment (Cornista and Escueta, 1983: 12-13). In addition, Hawes (1990) reports that in some areas the coconut workers have been organized by the National Democratic Front.

Tiglao (1981: 51) estimates that gross farm income from copra production is, on average, partitioned as follows: 50 per cent to the owner of the land as ground rent; 11 per cent to the farm operator as profit; 37 per cent to wage and family labour; and 2 per cent to cover non-labour production costs. These must be regarded as rough approximations, which would vary from farm to farm and from year to year depending, for example, on the farmgate price of copra.<sup>18</sup> There is little doubt, however, that returns to land typically exceed returns to labour in coconut production. The pattern of ownership of coconut land is therefore a critical determinant of income distribution in the sector.

There is no evidence of economies of scale in coconut cultivation. Agricultural census data reveal no correlation between farm size and the number of nuts per tree.<sup>19</sup> Data published by the Philippine Coconut Authority (1988: 102) indicate that yields in Mindanao, where average holdings are larger, tend to be higher than in Luzon,

where average holdings are smaller, but Habito (1987b: 2) points out that environmental conditions are more favourable in Mindanao, and that the trees there are generally younger and hence more productive. On the basis of interviews in coconut-growing areas of Luzon, Hayami et al. (1990: 117) report that intercropping is more common and more intensive on small family farms than on larger wage-labour farms. This may reflect lower costs of labour and supervision on smaller farms.<sup>20</sup> One constraint on the spread of intercropping, however, has been the fear of landlords 'that if they allow farmworkers to inter-crop these areas with vegetables and other food crops, they may lose control of the land' (Putzel and Cunningham, 1989: 35). In some cases, according to Habito (1987a: 206), 'landlords actually prohibit their tenants from intercropping'. Because of these tensions over property rights, as well as the more widely recognized incentive problems, share tenancy poses 'a barrier to increased productivity on coconut farms' (Habito, 1987a: 220).<sup>21</sup>

In spite of its image as a smallholder's crop, then, coconut production in the Philippines is typically characterized by a dichotomy between ownership of land and labour on it. Land ownership in the coconut sector is more widely dispersed than in other major export crops in the Philippines, but most coconut labourers do not own the land on which they work. The result is not only inequitable, but also possibly inefficient.

#### RELATIONS OF EXCHANGE

The overt aim of the Marcos regime's development strategy for export agriculture was growth in output and export earnings. Behind the scenes, however, the regime aggressively pursued another agenda: the redistribution of income to favoured individuals. Most notably, Marcos deployed state power to put control of the country's top agricultural exports, coconut and sugar, securely into the hands of presidential 'cronies'. The result was a dramatic redivision of the agro-export income pie, with bigger slices for the privileged few and smaller slices for the rest.

Most copra in the Philippines is purchased from the growers by *barrio* (village) traders, who then sell it to town-based buyers, who in turn sell to the coconut mills and copra exporters. In the 1960s, according to Cernohous, there were more than 250,000 producers, roughly 10,000 *barrio* buyers, 3,400 town buyers, and fewer than

50 exporters and oil crushers. Superimposed on this pyramid was a network of credit ties, binding individuals at each layer to those above them. 'The trade is financed from the top of the channel down, with many a town buyer actually being a mere agent of either an exporter or crusher, and most barrio buyers being sub-agents of town buyers.' The result was a pattern of market power in which 'middlemen are essentially price takers *vis-à-vis* the group immediately above them, while at the same time being price makers *vis-à-vis* the group immediately below them' (Cernohous, 1966: 74).

The mass of producers, of course, are simply price takers. Nyberg (1968: 52) reported that large coconut plantations often received prices 10–20 per cent higher than those received by small growers, perhaps by virtue of scale economies in marketing and their ability to bypass the lowest link in the marketing chain. In addition, small coconut farmers often have relatively little bargaining power owing to their lack of storage facilities, their need for cash, and their indebtedness to the buyer. The growers' lack of timely price information also enhances the monopsony power of the buyer, though Cernohous (1966: 76) noted, 'even where the information reaches the farmer, in the absence of an actual competitive bid, it probably does not significantly alter his relative bargaining position.'

In some barrios there is only one buyer. Where there are several, the ability of growers to choose freely among them is often constrained by *suki* relationships, personalized ties between the grower and the barrio trader-creditor, which are social as well as economic. These ties do not completely subordinate the grower to the buyer, but neither is the grower completely free. Cornista (1981: 350) reports, on the basis of fieldwork in two Laguna villages, that a grower is obliged to sell to the *suki* buyer once the latter has extended credit.<sup>22</sup> If the buyer consistently offers an unfavourable price, however, the grower 'would seek out new buyers after paying his loan'. The extent of market power hence would hinge on the grower's ability to repay any accumulated debts to the copra buyer.

The sharp increase in coconut acreage in the 1960s and 1970s brought new buyers into the market, perhaps resulting in a diminution of local-level market power. Improved price information reduced the buyer's advantage in bargaining with individual growers. In some cases, a new practice has emerged in which several potential buyers submit sealed bids to the grower, who then can select the highest offer. Cornista reports that this practice, known

in Laguna as *subasta*, is confined to big coconut growers and remains less prevalent than individual bargaining. Moreover:

To counteract the effects of *subasta* the buyers agreed to allow one of them (usually the biggest *kapitalista*) to outbid the rest. The profits which accrued from the transaction were divided equally among them. In a way, a monopsonistic situation resulted. (Cornista, 1981: 340)

In the two villages studied by Cornista, this collusion eventually broke down as 'a number of coconut buyers started to act independently'.

The major change in coconut marketing during the Marcos era, however, was a dramatic concentration of market power at the top. This was achieved by the open exercise of political muscle. In the name of 'vertical integration' and 'rationalization', the Philippine coconut industry was consolidated under a single entity with effective control over virtually all copra purchases and over the production and sale of coconut oil on the domestic and export markets. The takeover was engineered by a series of Presidential Decrees.<sup>23</sup> The three key steps were the imposition of levies on all coconut production, the creation of a bank in which these monies were deposited interest-free and the purchase by that bank of the bulk of the country's oil-milling capacity. In theory, all of this was done for the benefit of the coconut growers, the nominal 'owners' of the assets purchased with the levies. In practice, the main beneficiaries were a few close political associates of President Marcos, notably 'coconut king' Eduardo Cojuangco and Defence Minister Juan Ponce Enrile.

The first levy, imposed by legislative action in 1971, was to be used to provide credit to growers, to invest in the industry, and to finance the Philippine Coconut Producers' Federation, known as COCOFED, an association of large coconut landowners which had lobbied for passage of the law. A second, much larger levy was imposed by Presidential Decree in 1973. Known as the Coconut Consumers Stabilization Fund (CCSF) levy, its initial rationale was to subsidize domestic consumption of coconut products at a time of unprecedented high prices. In the next two years further decrees expanded the uses of the CCSF levy to include the establishment of Cojuangco's hybrid coconut seed farm and the acquisition of a commercial bank 'for the benefit of the coconut farmers'.

The United Coconut Planters' Bank (UCPB), with Cojuangco as president and Enrile as chairman of the board, soon became one of

the largest commercial banks in the Philippines.<sup>24</sup> The interest-free deposit base provided by levy funds gave the bank a unique advantage. In January 1979, UCPB acquired Legaspi Oil Company, which milled a quarter of all Philippine coconut oil exports, in 'one of the largest corporate takeovers in Philippine history' (Tiglaio, 1981: 88). Later in the same year UCPB bought Granexport Corporation from the US firm Cargill. These and other mills were placed under the control of the newly formed United Coconut Oil Mills (UNICOM), which by 1980 had cornered more than 80 per cent of the country's entire oil-milling capacity.<sup>25</sup>

Overcapacity in coconut milling, which had been stimulated by government Board of Investment incentives in the 1970s, contributed to the willingness of firms to sell out to UNICOM. An added push came from a 1978 Presidential Decree, which provided that subsidies funded by the CCSF levy would be provided only to mills owned and controlled by 'the coconut farmers', that is, by the UCPB and UNICOM. According to a US Embassy cable, for the Filipino owners of relatively small mills, 'It was sell or else!' Large foreign mills were not subjected to 'direct pressure', but 'were simply put in a position where the owners believed that it was in their best interest to sell' (US Embassy, 1980: 11). President Marcos characterized these developments as a historic triumph for the coconut growers: 'For half a century, the coconut farmers were the forgotten men of the country. Now you are no longer just coconut planters, you are bankers, owners of a coco mill complex' (quoted by Tiglaio, 1981: 92).

A rather different picture emerges from other sources, among them US government cables obtained under the Freedom of Information Act. A May 1980 cable, marked 'confidential', offered the following candid assessment:

Since martial law was declared in September 1972, the coconut industry has been steadily brought under the influence of a small group of people, chief among whom are [name deleted] and Eduardo 'Danding' Cojuangco, both men long and close political associates of President Marcos. The prime motivation appears to be near total control of the coconut industry. There are four reasons which might explain why President Marcos would implicitly support, and even aid and encourage [names deleted], men whom he trusts in this effort.

- First, control of the coconut industry provides President Marcos [deleted] with additional political and financial leverage to remain in power.
- Second, control of the industry by men close to the President denies that control to anyone else.
- Third, Marcos appears to use this method to reward his associates in the

business community, the military and the bureaucracy.

— Finally, control of the industry has allowed the Philippines to attempt to better its terms of trade for coconut oil sold on the world market. (US Embassy, 1980: 1-2)<sup>26</sup>

The total 'surplus' extracted from coconut producers by the Marcos-Cojuangco-Enrile combine was substantial indeed. A 1984 US Embassy cable reported that total collections levied on coconut producers since 1973 amounted to 9.26 billion pesos, equivalent to more than US \$1.1 billion at prevailing rates of exchange. In addition, UNICOM used its control over prices to establish profit margins of two or three pesos per kilo of copra, compared to a 'good' normal margin of fifty centavos; the Embassy calculated that in 1983 alone, each peso of margin netted UNICOM an extra US \$214 million. At the same time, the Embassy reported that UNICOM officially undervalued its coconut oil exports, the difference between the actual and stated value being 'deposited in dollar accounts abroad or used to fund various Cojuangco projects'. The cable reported that, on top of these exactions, 'Cojuangco has found many indirect methods of profiting from the monopoly'. For example, equipment and materials purchases by UNICOM were routed through a company operated by Cojuangco's son, who 'takes a ten per cent commission on all purchases' (US Embassy, 1984: 11, 14, 15).

The Embassy estimated that the income personally accumulated by Cojuangco through the coconut industry ranged 'from several hundred million dollars to over a billion' (US Embassy, 1984: 16). It also reported that:

Cojuangco supports the President in many different ways. It is generally believed that Cojuangco shares the spoils of the coconut monopoly with the President, although details of amounts and methods of payment are lacking. It is rumored that he handles some of the President's own investments. As a regional KBL chairman [Marcos's political party] in Central Luzon, Cojuangco is responsible for keeping the party faithful in line and for promoting KBL victories at the polls . . . On a more personal level, Cojuangco offered Leer [sic] jets as wedding presents for Irene Marcos [the President's daughter] and her spouse when they were married last year. President and Mrs. Marcos eventually received the gifts when the newlyweds declined them. (US Embassy, 1984: 20)

Some of the wealth extracted from the coconut sector was used to enter other industries via takeovers of existing firms. For example, Cojuangco purchased large blocks of stock in the San Miguel



Corporation, the largest private corporation in the Philippines and the largest food and beverage firm in Asia, and became its vice-chairman (US Embassy, 1984: 17).<sup>27</sup> A substantial fraction was undoubtedly transferred abroad, a component of the estimated US \$20 billion in capital flight from the Philippines from 1962 to 1986 (Boyce, 1990: 51).

The coconut cabal was much less successful in wielding market power to secure higher prices for coconut oil abroad, owing to the ease of substitution among competing oils. An attempt to establish a 'COCOPEC' cartel failed completely; in the words of the US Embassy (1984: 13-14) cable, 'All UNICOM got for its efforts was anti-trust suits in the US.'<sup>28</sup> The takeover of the coconut industry thus did nothing to enlarge the Philippine economic pie, but only changed the way it was sliced.

Within the Philippines, there was little organized resistance to the takeover. This was due in part to the poverty and geographic dispersion of the coconut growers, but outright intimidation also played a role. In July 1982, former Vice-President Emmanuel Pelaez, the leading critic of the coconut monopoly in the Philippine legislature, was seriously wounded and his driver killed in an ambush.<sup>29</sup>

The most influential opposition came instead from the World Bank, which pressed for a 'return of market forces' to the coconut industry (US Embassy, 1984: 25). The International Monetary Fund likewise is reported to have demanded the dismantling of UNICOM as a condition for a standby credit. In response, a January 1985 Presidential Decree abolished UNICOM and replaced it by a 'cooperative endeavor' with sole legal authority to export coconut oil (Espiritu, 1987). The very limited nature of this reform is evident from an August 1985 US Embassy memorandum which reported that 'current members of the coconut exporters cooperative have agreed to give Danding Cojuangco 32 centavos per kilogram of coconut oil exported and 20 centavos per kilogram of other coconut product exports', and that the money 'will be used for the coming elections'. The memorandum added, 'Cojuangco has sole control of the money and no audit is made' (US Embassy, 1985: 2).

In sum, the market structure of the Philippine coconut industry underwent a major concentration at the top during the 1970s and early 1980s. The primary motive for this transformation, and its major effect, was redistribution of the income generated by the country's leading agricultural export. The beneficiaries were a handful of politically powerful individuals. The losers included millers

and traders driven out of the industry, and above all the coconut growers, who experienced an intensification of the monopsonistic environment in which they sold their product.<sup>30</sup>

### CONCLUDING REMARKS

The story of the Philippine coconut industry reveals two limitations of comparative advantage as a guide to trade strategy. The first was discussed in Section II: the dynamic phenomena of declining terms of trade and price instability. The second was discussed in Sections III and IV: within a country, one person's advantage can be another's disadvantage.

On the world stage, the coconut king wields little power, owing to competition from natural and synthetic substitutes. In recent decades, the size of the Philippine coconut-earnings pie has dwindled. Governmental support to competing oilseed producers in other countries, failure to internalize the external costs of synthetics, and relative neglect of research and development in coconuts and coconut products have contributed to this result.

With little leverage in the international arena, the coconut king in the Marcos era turned his entrepreneurial talents to extracting more tribute from his subjects at home. 'It was our best and brightest, Harvard-trained lawyers, against the no-read-no-writes, the fourth-grade dropouts', explains Philippine Coconut Authority Chairman Jose V. Romero Jr (pers. comm., Manila, 25 January 1989). Like the walrus in Lewis Carroll's *Through the Looking Glass*, the architects of the coconut monopsony cloaked their predations with sanctimonious expressions of concern for the welfare of their victims. But here, as elsewhere, the Marcos regime demonstrated that the pursuit of self-interest does not necessarily advance the public interest.

Of course, the distributional outcome recounted above is not inherent in export agriculture. Land reform and market reform could redirect income to those whose labour produces the crops. However, the external constraints imposed by the world market would remain. Hence a case can be made not only for redistribution, but also for diversification via allocation of land and labour to other uses.<sup>31</sup>

Coconut 'rent seeking' in the Marcos era not only exacerbated economic and political inequalities, but also can be understood, at

least in part, as a *consequence* of these inequalities. Unchecked by a more equitable distribution of wealth and power, the ruling élite was free to pursue its self-interest even at the expense of the public interest. A comparison between the Philippines and its East Asian neighbours may be instructive in this regard. China, Japan, Korea and Taiwan are by no means models of pure egalitarianism, but after the Second World War each had a redistributive land reform which broke the power of the landed oligarchy. In the Philippines this historic task has yet to be accomplished.

The Marcos regime has passed into history, but the entrenched interests in the Philippine coconut economy have proven quite resilient. Six years after Marcos's downfall, export agriculture in the Philippines remains virtually untouched by land reform. Although the Aquino government quickly moved to dismantle the coconut monopsony, the fate of the coconut levy funds, now valued at 30 billion pesos (more than US \$1 billion), remains undecided (Malabed, 1991: 6). Juan Ponce Enrile and Eduardo Cojuangco Jr are reported to be 'back into the coconut business' in the provinces of Batangas and Quezon, respectively (Cloa, 1991: 5). In the looking-glass world of the political economy of coconuts, Humpty Dumpty may indeed be put together again.

#### NOTES

This article draws on my book, *The Philippines: The Political Economy of Growth and Impoverishment in the Marcos Era* (forthcoming, Macmillan). I am grateful to the Development Centre of the Organisation for Economic Co-operation and Development which commissioned that book; to the Joint Committee on Southeast Asia of the Social Science Research Council and American Council of Learned Societies for additional support; and to Craig Nelson of the National Security Archive in Washington, DC, for assistance in obtaining documents released under the US Freedom of Information Act. For thoughtful comments on earlier drafts, I am indebted to Howarth Bouis, Gary Hawes, José E.R. Ledesma, James Putzel and three anonymous referees of this journal. Responsibility for the views expressed here and for any errors is mine alone.

1. 'Enrile Cites Scheme for Coconut Industry', *Business Day* (Manila), 14 April 1980, p. 3, cited by Tadem (1980: 43).

2. Copra is allowed to enter Europe duty free, while coconut oil is subject to tariffs ranging from 5 to 15 per cent (Canlas and Albuero, 1989: 84). Hicks (1967: 89) reported similar rates in the 1960s.

3. For details, see Tiglao (1981) and Hawes (1987: 59-68). On uses of coconut oil, see also Woodruff (1979: 112-23).

4. The freight rate for Philippine coconut oil to the US Pacific coast, for example, dropped from US \$26 per ton to US \$9 (Hicks, 1967: 160-1; see also Tiglaio, 1981: 24).

5. Some observers like Hooley and Ruttan (1969), Barker (1978) and Kikuchi and Hayami (1978) saw the 'closing of the land frontier' in the Philippines in the 1950s and 1960s. But while rice acreage levelled off after 1960, acreage under export crops grew rapidly. For discussion, see Boyce (forthcoming: Chapter 3).

6. The reliability of the official data on coconut yields is open to question. Alternative estimates by the Philippine Coconut Authority indicate that average yields fell from 1.2 mt/ha in the 1960s to 0.7 mt/ha in the 1980s (Galang, 1988: 72).

7. This may overstate the effective investment in coconut research, since much of the expenditure was channelled through the Philippine Coconut Authority, which tended to devote its research to 'buildings, public relations and funds' (Evenson et al., 1980: 27).

8. The farm was on Bugsuk island, off the southern tip of Palawan. Cojuangco acquired most of the island in a trade with the Philippine government, giving up one ha in Tarlac province for every three in Bugsuk. 'In retrospect', a US Embassy (1980: 5-6) cable remarked, 'the trade appears particularly attractive, since most of the rice land in Tarlac subsequently came under the President's land reform program.'

9. This may be fortunate, as the prospect of widespread adoption raised serious concerns about genetic vulnerability to crop disease epidemics (Banzon and Velasco, 1982: 43-4; Sangalang, 1987: 226-7). For further discussion of the hybrid replanting programme, see Tiglaio (1981: 61, 85, 95-6), Sangalang (1987) and Habito (1987a: 195-202).

10. Hawes (1987: 63-8) attributes this overcapacity to 'faulty planning by technocrats in government', and notes that a number of the new mills ultimately 'renege on their loan payments and closed down'. An additional reason may have been the opportunities for profit and capital flight afforded by the procurement of milling equipment; see Boyce (1990: 40-1, 71-2).

11. Measures of changes in terms of trade are notoriously sensitive to choice of the time period. Josling (1984: 10) reports that in the period 1970-9, the decline in the purchasing power of Philippine agricultural exports was about average for 79 developing countries.

12. These fluctuations are even more dramatic in the monthly price data. Between January 1973 and December 1976, for example, coconut oil soared from US \$168 per metric tonne to a peak of US \$1,138 (in April 1974), and then dropped to US \$305 (Hawes, 1987: 70).

13. Between 1962 and 1985, the exponential trend for coconut oil prices (deflated by the import price index) was *minus* 3.6 per cent per year; for copra it was *minus* 4.8 per cent (growth rates estimated by ordinary least squares).

14. Calculated from data in NEDA (1976: 434); see also Tryon (1967). This figure refers to all Philippine exports, but as noted above these were predominantly agricultural and forestry products.

15. Commoner (1990: 53) remarks, 'Nearly all the products of the petrochemical industry are substitutes for perfectly serviceable preexisting ones.'

16. Cited by Hawes (1987: 57). In sandy, coastal zones this tendency towards monoculture reflects the special characteristics of soils, but in other places food crops such as rain-fed rice or white corn would be among the feasible alternatives.

17. Cited by Guerrero (1985: 23-5). Mangahas (1985: 212-13) presents unpub-

lished national sample survey data indicating that hired labourers accounted for a somewhat lower proportion, 48 per cent of the labour force in coconut farming in 1975.

18. Tiglao's estimates are derived from data for the mid-1970s. Annual data on real wages of coconut labourers presented by the World Bank (1985: 29) for the years 1970-82 show a near-zero growth trend and much less instability than copra prices. The elasticity of the real wage with respect to the real price of copra for these years is  $-0.01$  (estimated using the ratio of the nominal copra price index to import price index as reported in Table 3). There is thus little evidence that copra price movements 'trickle down' to coconut labourers.

19. For 1980 data, see Hayami et al. (1990: 117).

20. Ofreneo (1980: 104) remarks that many small owner-operators in the Philippines continue to grow coconuts even though they 'would be registering net losses if their unpaid labour and that of their families were included in the computation' of farm income when valued at the market wage. The same finding in Indian farm management studies in the 1950s sparked the development of the theoretical literature on the inverse relation between farm size and land productivity (Sen, 1962).

21. However, in Laguna and Cavite, where proximity to the Manila market opens profitable opportunities for intercropping with fruit trees, landowners have planted lanzones using hired labour, often with no involvement of the coconut tenant (pers. comm., L.B. Cornista, Manila, 24 January 1989).

22. Similarly, in a 1977-8 survey of coconut marketing in southern Mindanao, the Ministry of Agriculture found that 50 per cent of producers obtained cash advances from copra buyers, 'thereby depriving them of the opportunity to sell at higher prices offered by other buyers' (Valiente et al., 1979: 2). Also see Tiglao (1981: 67).

23. For more detailed accounts, see Tiglao (1981: 80-92), Sacerdoti (1982), Clarete and Roumasset (1983: 14-21) and Hawes (1987: 68-80).

24. A US Embassy (1980: 7) cable ranked UCPB fourth among domestic private banks in liquid assets, third in deposits, fourth in net worth, and first in total investment.

25. This control was subsequently consolidated further. A 1984 US Embassy cable reported: 'UNICOM mills, those which have toll [oil?] crushing contracts with UNICOM, and those which "cooperate" with UNICOM, account for more than 85 per cent of the country's crushing capacity. Even the "independent mills" are constrained by PCA [Philippine Coconut Authority] regulations to course their coconut oil exports through UNICOM. Copra exports are prohibited completely' (US Embassy, 1984: 4). Canlas and Alburo (1989: 93) report that by 1983 UNICOM directly controlled 93 per cent of milling capacity.

26. The deleted name is evidently former Defence Minister Juan Ponce Enrile, whose name inadvertently was not blacked out on page 6 of the same document.

27. With annual sales of US \$653 million, San Miguel ranked 125th among Third World public and private corporations in 1984 (*South*, 1984).

28. For details, see Bonner (1987: 326-30).

29. The US Embassy (1984: 23) reported to Washington, 'It was universally assumed that Cojuangco was behind the attempt on Pelaez's life.'

30. After the collapse of the Marcos regime, the spread between farmgate and mill-gate copra prices dropped, suggesting that by the mid-1980s monopsony had intensified at the local level, too. Philippine Coconut Authority (1988: 138) data indicate that the average spread declined from 1.70 pesos per kilogram in 1983-5 to

58 centavos in 1987. With total annual production of 2 million metric tonnes, this difference would amount to 2.25 billion pesos, or more than US \$100 million, per year. See also Lopez (1987).

31. In its 'Green Paper' for the Aquino government, the Agricultural Policy and Strategy Team (1986: 263) concluded: 'Now is the time to introduce diversification in the Philippine agricultural sector to correct the overdependence on a few export crops and to avoid a position of vulnerability.'

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**James K. Boyce** is based at the Department of Economics, University of Massachusetts, Amherst, MA 01003, USA. He is the author of *The Philippines: The Political Economy of Growth and Impoverishment in the Marcos Era* (forthcoming, Macmillan).