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PL-480: Indonesia

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I. Introduction

The purpose of this is paper to examine the PL-480 Title I program in Indonesia so as to better understand the extent to which it has contributed to the development process. This paper concentrates on the period 1982-86 since during this time significant macroeconomic issues confronted Indonesia and A.I.D. was, in light of increasingly scarce DA resources, attempting to integrate the PL-480 program more fully with other development programs and policy concerns.

The organization of this paper is as follows: Section II outlines the macroeconomic situation facing Indonesia in the early 1980's and describes the efforts at stabilization and adjustment which were undertaken by the GOI. Then the basic elements of the PL-480 program during that period are described in Section III. This includes the objectives of the program, the types and amounts commodities provided, and the uses (primarily through self help measures) of local currencies generated from Title I sales. Finally, Section IV discusses a variety of policy issues related to the Title I program. These include whether the Title I program relaxes food or foreign constraints, the appropriateness of the program in light of Indonesia's macroeconomic adjustment efforts, and the extent to which desirable policy changes have been accomplished with local currency generated by one program.

II. Macroeconomic Context:

Indonesia's economy has been subjected to several external recent years. These have slowed its development process and caused the GOI to take a number of steps aimed at stabilizing the economy and beginning the restructing process. The most important shock resulted from the softening oil market, which began in 1982 and accelerated in late 1985/early 1986. This softening led to reductions in both Indonesia's oil export price and the quantity of oil exports (due to OPEC quotas). F.O.B. oil prices, above $29 per barrel in 1981, declined to approximately one third that level in the first quarter of 1986. At the same time, oil production dropped from 1.55 mbd. in 1982 to 1.23 mbd. in 1985. Overall, the value of oil exports declined from $16.5 billion in 1981/82 to $5.2 billion (est.) in 1986/87.

The Indonesian economy also suffered from the slowdown in the international economy which occurred in the mid 1980's. This led to price declines for various non-oil exports such as LNG, primary commodities (vegetable oils, tea, aluminum), tin, and manufactured goods.[1] Overall, Indonesia's external terms of trade declined 15 percent between 1981-85, while the value of total exports fell by 26 percent.

The third external shock which significantly affected the Indonesian economy was the depreciation of the U.S. dollar against other major currencies (especially the Japanese yen) since mid 1985. This generally reduced the purchasing power of Indonesian exports (by an estimated $100 million in 1986/87), and increased the cost of its debt servicing (by $800 million in 1986/87).

As expected, the effect of these external shocks on the Indonesian economy was significant. Annual real GDP growth, which averaged 8 percent between 1970-80, actually declined between 1981-82, and amounted to only 3.3 percent for 1982-83.

[1] However, non-oil export earnings were protected to a significant extent by increases in the quantities exported (especially for manufactural goods). In fact, they were slightly higher in 1985/86 than in 1980/81.

The current account deficit grew rapidly so that for 1982/83 and 1983/84 it amounted to 8.5 percent and 6.1 percent of GNP (more than double comparable figures in the 1970's).

The concensus among the donor community appears to be that the GOI has generally responded in a timely and appropriate fashion to these events. Initial efforts, which began in 1983, have concentrated on: (a) Stablizing the economy so as to maintain a manageable BOP with a minimum cost to short-medium term growth, and (b) policy reforms aimed at efficiency gains together with greater foreign exchange earnings and domestic savings from the non-oil sector in the medium to long term.

Stabilization has focused mainly on curtailing aggregate demand to a level consistent with reduced resource availability. Between 1983/84 and 1984/85 there was severe austerity in the GOI budget and restraint on public investment. For example, as early as 1983 several large scale, import intensive, public investments were postponed or cancelled, thus producing foreign exchange saving of over $10 billion, and, development expenditures were reduced sharply, especially those not supported by external aid. Overall, the GOI budget moved from a deficit 16.3 percent of GNP in 1982/83 to a small surplus in 1984/85.

Other measures which contributed to stabilization were a rupiah devaluation, reductions in government subsides, and dramatically lower imports. Specifically, a 28 percent devaluation of the rupiah in March 1983 was coupled with efforts to maintain managed flexibility of the exchange rate and full convertibility of the rupiah. An additional 31 percent devaluation of the rupiah occurred in September, 1986. At the same time, government subsides for petroleum products, electricity, and transport were reduced; and, the valve of imports declined by more than 50 percent between 1982-86.

These stabilizations efforts appear to have been relatively successful. The current account deficit declined from 6.1 percent of GNP in 1983/84 to 2.3 percent of GNP in 1984/85, and then to 2.1 percent of GNP in 1985/86 despite a 19 percent fall in export earnings between 1984/85 - 1985/86.[2] This deficit rose to 4.1 percent of GNP for 1986/87 (est.) due to the world oil market collapse. Meanwhile, positive economic growth was maintained, albeit at significantly slower rates (GDP increased by 6.6 percent and 1.1 percent in 1983/84 and 1984/85 respectively) than had been attained earlier.

A vanity of efforts aimed at longer term structural adjustment have also been undertaken. These have focused on opening up the economy, mobilizing domestic resources (largely through tax reform), diversifying and increasing its export base, reducing constraints on the efficient allocation of resources and encouraging private sector investment. The Indonesian economy has historically been relatively inward looking. Many high cost domestic industries were protected by a variety of trade barriers. Efforts have begun to lower these barriers. Non-tariff barriers, such as import quantity restructions (quotas), on many traded industrial items have been replaced with tariffs, which will (hopefully) be lowered and unified over time. Moreover, the GOI adopted in May 1986 measures designed to provide internationally prices imported imputs to exporters.

Indonesia's dynamic growth in the 1970's and early 1980's was primarily driven by large increases in energy product exports. In example, the value of such exports more than tripled between 1974/75 - and 1980/81; and by the early 1980's, they accounted

[2] This decline was due mostly to a reduction in the value of oil exports. The value of non - oil exports (primary commodities, metals, manufactural goods) remained roughly constant during this period, despite a softening export market, due to an increase in the quantity of such exports.

for roughly 75-80 percent of total exports. However, this heavy reliance on a single type of export left Indonesia very vulnerable to external shocks - a fact amply demonstrated by the events described above. As a result, the GOI has adopted a policy aimed at promoting non-oil exports. These include agricultural commodities, raw materials, and manufactured products.

Some of the steps taken to encourage non-oil exports (and efficient investments in general) include simplified investment procedures, improved export and credit facilities, removal of regulatory ceilings on interest rates and bank credit, reform of customs, post, and shipping procedures, liberalized rules for foreign investment, and (as discussed above) initial steps to reduce import restrictions.

These efforts appear to have met with resonable initial success. Non - oil exports accounted for over 31 percent of total exports in 1984/85 and 56 percent in 1985/86 (est.), up from 23 percent in 1980/81 despite declining commodity prices in world markets).

Interestingly, manufactured exports were the principal source of this non - oil export growth. Their value almost quadrupled between 1980-85, and their share of total exports grew from 2 percent to 11 percent. This pattern continued after 1985, with manufactured exports growing by 14 percent between 1985/86 - 1986/87.

III. The PL-480 Title I Program

To understand the thrust of the Title I program, it is useful to place it in the context of recent developments for the agricultural sector in Indonesia. Thus this section first provides an overview of that sector in the 1980's and then describes the specifics of the Title I program for the same period.

Agriculture remains the predominant economic activity in Indonesia for most people. It accounted for about 24 percent of GDP in 1985 (down from approximately 38 percent in 1974), and for 55 percent of total employment in 1982. In rural areas, where 75 percent of the population lives, agriculture is even more important - providing for 60 percent of employment on Java and 75 percent on the outer islands in 1982.

Agriculture in Indonesia is dominated by the production of rice, which accounts for about 30 percent of agricultural GDP. Rice production in 1985 was approximately 26.3 million tons, which was sufficient to meet all domestic needs. This amounted to more than 40 percent of Indonesia's gross agricultural output. In fact, rice production has been a major success story in Indonesia - increasing at more than 5 percent per year between 1972-84 due to both the adoption of high yield varities and (to a lesser extent) increases in the area cultivated. Yields for other staple food crops (corn, cassava, sweet potatoes, and soya beans), have also grown rapidly - averaging 3.5 percent per year since 1970. Such crops account for 20 percent of total agricultural output. Other important agricultural outputs are cash crops (rubber, palm oil, coconut, cane sugar, and spices), and fish products. The agricultural sector also plays an important role in Indonesia's foreign trade. For example, agricultural products (excluding timber) in 1985 accounted for more than 37 percent of non-oil exports, while imports of food made up roughly 7 percent of non-oil imports in the same year.

In the 1970's and early 1980's, the GOI's agricultural policy focused on achieving rice self-sufficiency. As discussed above, this was attained roughly by 1985 in large part because of increased inputs of high yield seeds and fertilizers, together with technical assistance to farmers, and a combination of rice price supports and input subsides for fertilizers, water, and credit[3]

[3]Demand and supply projections suggest that Indonesia will probably be able to maintain its rice self-efficiency through the 1990's.

Since 1984, however, the GOI has begun to emphasize an agricultural strategy aimed at reducing subsides and diversifying into corn, soya, vegetables, livestock, and various cash crops (which currently have yields that are generally lower than elsewhere is South Asia). This approach can contribute significantly to rural employment and income, and strengthen Indonesia's foreign exchange position by either producing more exports (especially for rubber, coffee, vegetable oil, and fish products), or by lessening reliance on inputs.

The quantities and values of agricultural commodities supplied recently to Indonesia under the PL-480 Title I program are summarized in Table 1 and data on total Indonesian imports of the same commodities are presented in Table 2. Between 1976-83, rice was the principal commodity supplied (although significant quantities of wheat were also provided). This is consistent with Indonesia's role as a net rice importer during that period. The quantities of rice supplied under Title I accounted for a relatively small fraction of Indonesia's total rice imports varying between 11.3 percent in 1979 and 19.5 percent in 1978. Since 1984, the principal commodity supplied through the Title I program has been wheat, which is not grown domestically, but rather is being imported in rapidly increasing amounts, milled domestically, and then used to meet the demand for bread products.[4]

The uses of local currency generated by the Title I program have undergone considerable evolution in recent years. Up through FY 82, the Title I program was the responsibility of the Embassy Agricultural Attache, and was apparently viewed as having primarily a political and commercial orientation (see

[4]Title I inputs of wheat have helped to maintain a U.S. presence in this internationally competitive market.

the mission's ABS for FY 84). That is, the program was viewed as a symbol of U.S. support for the GOI in general, and its development efforts in particular; and, resulting local currencies were used to augment the GOI budget.

The AID mission assumed direct responsibility for the Title I program in FY 83 and began to link it more closely with policy concerns.[5] Specifically, the mission began to cooperate more closely with the GOI to establish specific, verifiable self-help measures (SHMs) to be funded by the local currencies generated by Title I sales. These SHMs were, in general, aimed at improving the production, distribution, and storage of agricultural commodities. Specific SHMs by year, and the levels of funding associated with them, are summarized in Table 3.

There has been a general trend over time to link these SHMs more directly with DA funded project activities (either as follow on activities, or as direct support of on-going projects), to establish more exact bench marks against which to evaluate the progress of such SHMs, and to view Title I activities as an additional way of involving the mission in important policy issues.

This trend has culminated in the mission's current proposal to integrate the Title I program with its agriculture and rural sector policy support program. This program's objective is to contribute to the growth of rural employment and incomes by addressing constraints on agricultural diversification and financial market development. Specific policy concerns include: reduction of pesticide subsides, agricultural input

[5]This was likely the result of both an increasing agency focus on the programming of local currencies and the reductions in DA which the mission experienced during this period (with the resulting need to more effectively utilize the limited resources available to it).

trade reforms, reduction of transportation and licensing costs associated with secondary crop processing and trade, and improvements in the efficiency of rural capital markets. The program is to be financed through a combination of DA resources ($43 million, converted to local currency) and a GOI contribution from Title I local currency of $19 million during IFYs 1987/88 and 1988/89. Funding will be split between the Ministries of Agriculture and Finance.

IV. Policy Isues:

Net benefits of Title 1: Since 1984, the Title I program has primarily supplied wheat to Indonesia. This in not grown domestically; and, the Title I quantities account for a relatively small percentage of annual imports (see Table 2). Moreover, domestic imports and consumption of wheat do not appear highly correlated with Title I supplies. All this suggests that the Title I program supplied quantities of a commodity which would likely have been imported anyway. Thus the net effect of the program is to provide Indonesia with additional foreign exchange.

Efficiency of foreign exchange: As outlined in Section II, Indonesia has adopted since 1983 a macroeconomic policy aimed at stabilization and adjustment. The hallmarks of this policy include budget austerity, pricing reform/subsidy reduction, lessening of trade barriers, and diversification of the economy. This policy has generally received praise from the development community since it represents an attempt to ensure that increasingly scarce resources are used more efficiently, while at the same time laying the ground work for a more stable long-run growth. In this context, Title I support of these economic reform program seems strongly justified, (especially if it can be used to encourage continued opening of the economy).

Incentive Effects: To analyze the incentive effects of the Title I program, one should consider the markets which might be affected by wheat imports. In Indonesia, wheat and rice are apt to be (imperfect) substitutes for each other. Products made from wheat are likely preferred to rice by a certain category of generally higher income, more urban, consumers for reasons of status and convenience. Both rice and wheat are currently sold at world prices. Inputs into rice produiction are generally priced efficiently - although pesticides remain subsidized. Overall, there is no clear reason to expect that Title I imports produce significant distortions in the agricultural market. Moreover, the private sector is used to mill and market the imported wheat[6].

Uses of local currencies:

a. additionality and appropriateness of SHMs:

The extent to which local currencies have been programmed has increased considerably. By the mission's own admission (Jakarta 09597), A.I.D. played a minor role in the programming of local currencies prior to 1983. Local currencies simply supplemented the GOI budget. Thus there was no way to ensure "additionality" with respect to SHMs. Since then, the mission has worked much more closely with the National Planning Board (BULOG) to develop SHMs. In 1985 and 1986, for example, mission staff worked with line ministeries to help plan 14 of 17 SHM's. This should help ensure (but does not guarantee) the "additionality" of SHM's.

Virtually all SHMs in recent years have been concentrated in the rural/agricultural sector. This focus is consistent with recent (FY 85 and FY 86) CDSSs, which have stressed *inter alia* increasing productive off farm employment and strengthening food production and resource management.

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[6] However, all flour mills are owned by relatives of the President.

Policy dialogue: As discussed above, the mission in recent years has increasingly viewed the programming of local currencies as an important means of accomplishing specific objectives and affecting policy dialogue at the sectoral level. SHMs have progressed from providing GOI budget support, to complementing existing DA-funded projects (some of which had policy content and some which did not), to being an integral part of a proposed policy reform program. More generally, the Title I program is now viewed by the mission as providing access to BULOG, which plays a key role in agricultural policy and planning.

The extent to which various SHMs have actually helped achieve the underlying policy objectives remains unclear. A recent GAO report found that bench marks established for various SHMs have in some cases been relatively vague and unquantified, thus making monitoring diffcult. Moreover, the mission had not established a formal monitoring proceedure for the SHMs. Finally, GOI progress reports were not always adequate detailed, timely, or properly audited.[7]

Ability to plan the use of local currencies: The use of local currencies to help accomplish policy and developmental objectives requires a smooth working relationship between USAID and relevant ministries of the host government (which owns the funds), and careful planning. Yet planning may be difficult in an environment where allocations of Title I commodities are subject to relatively sudden and large variations (especially towards the end of a fiscal year). This problem has confronted the Title 1 program in Indonesia in recent years.

[7] In addition, there has not been a recent attempt to evaluate the impact of the Title I program.

Table 1: PL-480 Title I Assistance to Indonesia, 1976-85

FY	Wheat 000MT	Wheat $000	Rice 000MT	Rice $000
1976	100.0	15,600	385.4	86,600
1977	283.5	32,064	369.9	93,664
1978	182.0	20,600	350.0	115,100
1979	272.0	37,100	245.0	67,200
1980	112.0	19,800	237.0	81,500
1981	49.2	10,000	77.0	40,000
1982	104.0	17,500	--	--
1983	87.8	15,000	65.4	20,000
1984	142.0	25,000	53.8	15,000
1985	259.0	40,000	--	--
Totals	1,591.5	232,664	1,783.5	519,064

*Sources: Annual CPs and FVA/FFP/I

Table 2: Indonesia: Selected Grain Imports, 1976-84

	Wheat[a]		Rice		Title 1 Assistance (in $) as % of Imports	
FY	10^3MT	$\$10^3$	10^3MT	$\$10^3$	Wheat	Rice
1976	967.3	75,227	1301.2	450,086	20.7	19.2
1977	756.8	40,736	1973.4	678,004	78.7	13.8
1978	795.9	78,619	1841.6	591,505	26.2	19.5
1979	772.3	91,170	1922.0	596,303	40.07	11.3
1980	1486.4	163,426	2011.7	690,424	12.1	11.8
1981	1419.7	152,273	538.3	206,386	6.6	19.4
1982	1488.5	151,561	309.6	103,144	11.5	--
1983	1743.9	334,726	1168.8	384,029	4.5	5.2
1984	1447.8	279,000	414.3	132,064	9.0	11.4

[a]Includes both wheat and wheat flour.

*Source: FAO

Table 3: Indonesia Title 1 Self-Help Measures

Fiscal Year		
1981	1. Agricultural research	2. Agricultural education
	3. Increased supply of agricultural inputs	4. Irrigation Infrastructure and O&M.
	5. Financial Support of extension service	6. Improved market and stabilization programs
	7. Promote secondary crops	
1982	1. Improved marketing for agricultural commodities	2. Improved ground water irrigation
1983	1. Same as #1. in FY '82 ($3.5 M)	2. Cooperative distribution kiosks ($13.7 M)
	3. Increased role of women in development ($4.3 M)	4. Increased role of PVOs in rural development ($2.4 M)
1984	1. Rural electric cooperatives ($5.4 M)	2. Same as #3 FY '83 ($5.04 M)
	3. Irrigation rehabilitation ($7.26 M)	4. Luwu road maintenance ($.9 M)
	5. Cooperative warehouses and kiosks ($5.4 M)	
1986	1. Padat Karya Gaya Baru (roads, water resources, flood dikes ($5M)	2. Applied agricultural research ($0.8 M)
	3. Research and community service development ($1M)	4. Bogor Agricultural Institute ($2M)
	5. S&T for rural development ($1M)	6. Cooperative agribusiness enterprise development ($4M)
	7. Small and Medium scale irrigation ($5.6 M)	8. Rural roads ($4.6 M)
1987	1. Expand rural banking services	2. Strenghthen capital markets
	3. Strenghthening capability of Ministry of Finance to undertake policy analysis	

Table 4: Selected BOP Indicators at Current Market Prices, 1975/76 - 1985/86
($ million)

	1975/76	1976/77	1977/78	1978/79	1979/80	1980/81	1981/82	1982/83	1983/84	1984/85	198
xports	7,283	9,213	10,861	11,370	18,510	22,885	22,994	18,672	19,817	20,400	18
nports (incl net NFS)	7,707	9,297	10,686	11,493	13,205	17,589	22,339	19,655	17,611	17,300	14.
esource Balance	-424	-84	175	-123	5,305	5,296	424	-3,667	2,206	3,100	2.
A Balance	-729	-741	-624	-1,109	2,251	-2,207	-2,719	-7,134	-4,219	-1,800	-1.
A/GDP	n/a	n/a	n/a	-2.1	2.9	-2.4	-3.3	-8.5	06.0	-2.0	-

*Source: World Bank

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Table 5: Agriculture and GDP Growth, Constant 1983 Prices, 1978-85
(Rp. billion)

	1978	1979	1980	1981	1982	1983	1984	1985	1986 (est.)
Agriculture									
- GDP from agriculture	14381.2	15338.1	16399.2	17187.0	17370.9	17696.2	18673.2	19170.8	19343.3
- Percent growth	--	6.7	6.9	4.8	1.1	1.9	5.5	2.7	0.9
- GDP from farm food crops	8399.8	8855.9	9661.1	10639.1	10736.0	11057.4	11876.2	11918.7	--
- Percent growth	--	5.4	9.1	10.0	1.0	3.0	7.4	0.36	--
GDP	58189.9	61770.0	66674.8	71613.1	71377.2	73697.6	78213.8	79046.0	80943.1
- Percent growth	--	6.2	7.9	7.4	-0.01	3.3	6.1	1.1	2.4
- Agricultural sector as percent GDP	24.7	24.8	24.6	24.0	24.3	24.0	23.9	24.3	23.9

**Source: World Bank

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