



AID TO AGRICULTURE: REVERSING THE DECLINE

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**FOOD POLICY REPORT
THE INTERNATIONAL FOOD
POLICY RESEARCH INSTITUTE**

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The International Food Policy Research Institute was established in 1975 to identify and analyze alternative national and international strategies and policies for meeting food needs in the world, with particular emphasis on low-income countries and on the poorer groups in those countries. While the research effort is geared to the precise objective of contributing to the reduction of hunger and malnutrition, the factors involved are many and wide-ranging, requiring analysis of underlying processes and extending beyond a narrowly defined food sector. The Institute's research program reflects worldwide interaction with policymakers, administrators, and others concerned with increasing food production and with improving the equity of its distribution. Research results are published and distributed to officials and others concerned with national and international food and agricultural policy.

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PREFACE

International development initiatives go through fashions, which change rapidly in our globally linked "information society." These fashions can create interesting and useful new ideas, but they also can be dangerous when they undermine the foundations of appropriate long-term strategies. Such is the case with the recent decline in attention by aid agencies and developing-country governments to agricultural development initiatives.

This report addresses the downward trend in agricultural development assistance and indicates why the promotion of agricultural growth remains critical for many developing countries. It identifies what needs to be done to reverse these trends.

Total investment in agriculture is what matters most. But because external assistance is a large share of the total agricultural investment budget of many developing countries, this report focuses discussion on aid. And as developed countries adjust priorities for aid spending, they send signals to policymakers in developing countries too.

This report was prompted by accumulating indications that external assistance to agricultural development in developing countries has declined since the early 1980s. Such a decline would be justifiable if their food situation were improving, their rural poverty were diminishing, and they were becoming more capable of meeting their needs for public goods essential for agricultural growth. But in many developing countries the food situation is deteriorating, rural poverty

is increasing, and agricultural growth is stagnating. This report examines why there has been a shift in development policies.

Many individuals and institutions provided helpful advice and information and comments on earlier drafts of this report. They include Guenter Gruner of the European Community; Michel Petit of the World Bank; Wilhelm Suden of the German Ministry for Economic Cooperation (BMZ); Thomas Engelhardt and Hans-Wilhelm von Haugwitz of the Deutsche Gesellschaft für Technische Zusammenarbeit (GTZ); Stuart Callison and John Stovall of the United States Agency for International Development (USAID); Michael Lipton of the Institute of Development Studies (University of Sussex); and Per Pinstrup-Andersen, Nurul Islam, Stephen Vosti, and Peter Hazell of the International Food Policy Research Institute (IFPRI). Cornelia Weevers of the Organization for Economic Cooperation and Development (OECD) and Diana Paoella from the Food and Agriculture Organization of the United Nations (FAO) provided some data on agricultural development assistance. DorSati Madani, while at IFPRI, provided excellent research assistance to the study.

This report is drawn from a study undertaken by IFPRI entitled "Underrated Agriculture: Increasing Need but Declining Aid for Agriculture in Low-Income Countries."¹ IFPRI gratefully acknowledges financial support of the Federal Republic of Germany through the GTZ for the study on which this report is based.

PAYOFFS TO INVESTMENT IN AGRICULTURE

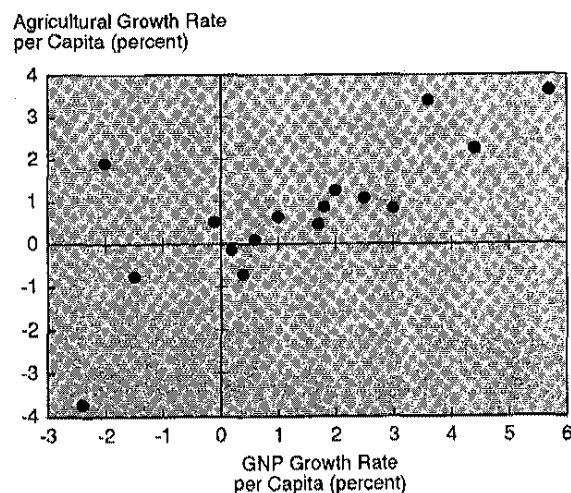
Agriculture is central to economic growth and development in low-income countries, particularly the least-developed countries. It provides food, generates employment and income, and is a powerful engine of growth. Through its linkages to industry and services generated directly and indirectly through production, consumption, and employment of the farm population, agricultural growth generates sizable employment, income, and growth in the rural nonfarm and urban economies.² Because poverty in most low-income countries is concentrated in rural areas, agricultural growth is critical for alleviating poverty and improving household food security. Moreover, sustained agricultural growth restrains excessive migration of rural poor people into cities in search of jobs.

Few low-income countries have achieved rapid nonagricultural growth without corresponding rapid agricultural growth (Figure 1). Most of the developing countries that grew rapidly during the 1980s experienced rapid agricultural growth in the preceding years. For instance, China's astonishing annual growth rate of 9.5 percent in the 1980s was stimulated by agricultural policy reform and support of the farm sector in the late 1970s and early 1980s. Indonesia's annual agricultural growth of 4.3 percent during 1965-80 facilitated annual GDP growth of 5.5 percent during 1980-90. Thailand's agricultural growth of 4.6 percent per year during 1965-80 contributed to annual GDP growth of

7.6 percent in 1980-90.³ While quite different policies may have led to these associations in each case, the relationship between agricultural growth and overall economic growth is generally strong in low-income countries and strongest in the poorest countries.

The agricultural sector in many low-income countries, particularly the least-developed countries, is large; neglecting it adversely affects the rest of the economy. It is difficult, if not impossible, to stimulate sustained economic growth in the least-developed countries without first moving the largest sector, agriculture.

Figure 1—Agricultural growth and economic growth in low-income developing countries, 1965-89



Source: World Bank, *World Development Report 1991* (New York: Oxford University Press, 1991).

Note: Countries are Bangladesh, Burundi, China, Ghana, India, Indonesia, Kenya, Malawi, Mali, Nepal, Niger, Nigeria, Pakistan, Sri Lanka, Tanzania, and Zambia.

ROLE OF AID IN AGRICULTURAL INVESTMENT

Agriculture is also the largest private business sector in low-income countries. For agricultural growth, market-friendly national macroeconomic and trade policies are necessary. But to a large extent the forces that stimulate agricultural growth, including research for technological innovation, extension, infrastructure, and finance, depend on sustained long-term public action, which is critical for profitable private investment.

International development cooperation that draws on international know-how can help overcome domestic financial, technical, and human resource constraints that hamper the ability of developing-country governments to

provide the required public goods. This is the key rationale for international assistance to agricultural development. Improvements in the world food situation during the past three decades are more the result of external financial assistance to agricultural development than of food aid.

But what is the most appropriate level of assistance to agriculture in the 1990s? It depends on the economic returns to such investments and on the projected need for food, which will be driven by population and income growth and by the nature and level of assistance to the poor. It also depends on economic growth in developing countries and their ability to assume the funding burden.

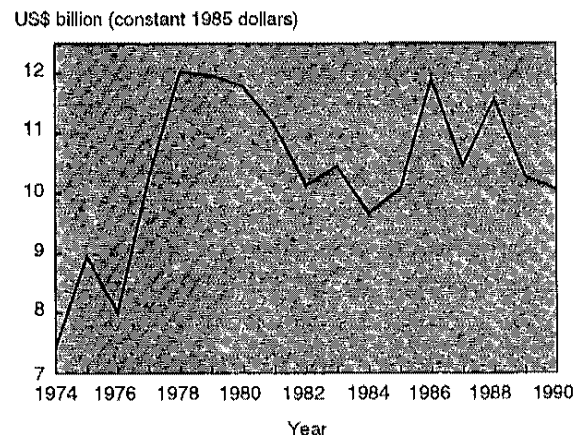
CHANGING PATTERNS OF EXTERNAL ASSISTANCE TO AGRICULTURE

External assistance to agriculture in low-income countries totaled about US\$10 billion in 1990.⁴ About \$5.5 billion, or 55 percent, originated from multilateral institutions, and about \$4.6 billion from bilateral donors. The share of agriculture in total development assistance was about 14 percent.⁵

Major changes have taken place in the size, pattern, and use of agricultural assistance since the mid-1970s.⁶ Following the 1973/74 food crisis, external assistance to agriculture in low- and middle-income countries increased rapidly (Figure 2). Concerned about high food prices and impending food shortages, donors expanded their aid commitments to agriculture⁷ by more than 30 percent (adjusted for inflation) between 1975 and 1980. However, in the first half of the 1980s,

slow growth in the industrialized countries and declining total aid flows led to a decline in agricultural assistance (Tables 1 and 2).

Figure 2—Total assistance to agriculture, 1974-90



Source: See Table 1.

Table 1—Agricultural development assistance by bilateral and multilateral donors, 1980-90

Organization	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990
	(US\$ million, in 1985 dollars)										
World Bank	4,491	4,427	3,420	3,976	3,580	3,749	4,699	2,772	4,089	3,030	3,012
OECD countries (bilateral)	3,645	3,225	2,839	3,255	2,733	3,375	3,498	3,680	4,435	3,488	3,607
Inter-American Development Bank	809	813	460	526	892	821	624	632	319	539	263
African Development Bank ^a	213	215	247	282	205	424	596	842	381	488	563
Asian Development Bank ^b	617	647	661	710	663	718	622	639	620	797	674
European Communities	429	342	391	385	328	334	500	897	694	680	735
Organization of Petroleum Exporting Countries											
Bilateral	174	379	861	238	269	192	263	123	121	266	223
Multilateral	174	205	200	241	261	267	419	259	197	243	150
International Fund for Agricultural Development	586	297	488	273	196	184	128	209	160	208	287
United Nations Development Programme	265	255	221	182	146	146	170	135	163	171	173
Consultative Group on International Agricultural Research	156	154	160	177	178	170	188	191	193	184	175
Food and Agriculture Organization of the United Nations	147	160	152	154	166	175	182	175	170	168	190
Total	11,706	11,072	10,100	10,398	9,619	10,055	11,891	10,453	11,544	10,263	10,051
Bilateral ^c	4,248	3,946	4,091	3,877	3,331	3,901	4,262	4,699	5,251	4,433	4,566
Multilateral ^d	7,458	7,127	7,023	6,520	6,288	6,153	7,629	5,754	6,293	5,830	5,486

Sources: World Bank, Agriculture and Rural Development Department; Organization for Economic Cooperation and Development, Statistics Department; Inter-American Development Bank Annual Report; African Development Bank Annual Report; Asian Development Bank Annual Report; European Communities, Statistics Department (Lomé countries); EC Annual Report 1990; and Food and Agriculture Organization of the United Nations, Statistics Department.

^a Figures for 1980 and 1981 were extrapolated from total bank lending in respective year and relative share of agriculture in 1982.

^b Figures for 1980-1989 are three-year moving averages.

^c Bilateral includes Organization for Economic Cooperation and Development (bilateral), Organization of Petroleum Exporting Countries (bilateral), and European Communities.

^d Multilateral includes World Bank, Inter-American Development Bank, African Development Bank, Asian Development Bank, Organization of Petroleum Exporting Countries (multilateral), International Fund for Agricultural Development, United Nations Development Programme, Consultative Group on International Agricultural Research, and Food and Agriculture Organization of the United Nations.

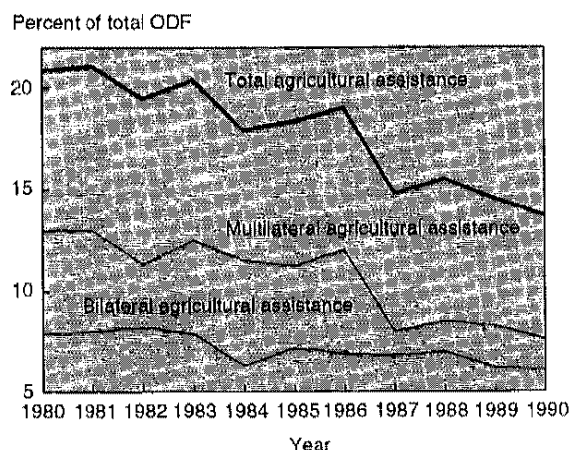
Table 2—Bilateral official agricultural development assistance, grants, and loans of OECD countries, 1980-90

Country	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990
	(US\$ million, in 1985 dollars)										
Australia		58	59	29	50	44	61	41	51	75	55
Austria		2	3	3	1	2	5	5	9	8	8
Belgium		21	10	9	24	30	44	68	52	35	44
Canada	1	302	95	237	222	277	161		219	181	121
Denmark		23	67	49	24	67	58	75	153	100	38
Finland		16	16	24	23	26	50		51	71	102
France	3	403	384	500	293	378	459	502	584	430	527
Germany	5	331	272	274	221	250	333	438	465	261	352
Ireland						3	4	4	4	3	3
Italy		32	116	197	154	144	355	543	432	386	268
Japan	4	513	421	387	513	699	491	627	1,031	681	1,023
Netherlands	3	304	175	180	138	100	283	377	282	293	217
New Zealand		16	12	4	6	11	5	4	6		2
Norway		82	62	53	83	68	59	53	37	71	47
Sweden		87	86	70	73	67	13	107	63	101	126
Switzerland		62	44	68	40	79	75	88	101	94	84
United Kingdom	1	76	71	103	128	84	89	124	126	133	201
United States	1,4	897	948	1,082	740	1,037	950	623	769	565	388
Total	3,6	3,224	2,839	3,254	2,733	3,375	3,498	3,680	4,435	3,488	3,607

Source: Organization for Economic Cooperation and Development, Statistics Department.

Commitments to agriculture picked up again in 1986 as the World Bank and regional banks^b sharply increased their lending to agriculture. However, this rebound did not so much represent a marked increase in assistance, compared with the level at the beginning of the decade, as it did a reversal of the decreased levels of 1982-85. Moreover, the increase was in nonconcessional, or general, lending; concessional lending (including grants) continued to decline. In 1987, agricultural assistance again declined, even as total development assistance significantly increased, driving down agriculture's share in total aid (Figure 3). There was a second rebound in 1988, again led partly by the World Bank and partly by bilateral donors such as Japan, which increased its agricultural commitments by 64 percent.

Figure 3—Share of agriculture in total assistance by bilateral and multilateral donor agencies, 1980-90



Source: Computed from Table 1.

Note: ODF = official development finance (total assistance).

The 1988 assistance level was not maintained, and the 1980s ended with a clear downward trend in aid to agriculture, even as donors actually increased total assistance to developing countries by 5 percent between 1987 and 1990. Recent developments in project funding, personnel, and reorganization at major donor agencies suggest that this downward trend will continue in the 1990s.

Thus, after rapidly increasing in the 1970s, external assistance to agriculture in low-income countries leveled off and, in fact, declined during the 1980s, from about US\$12 billion to \$10 billion (in constant 1985 U.S. dollars). The share of agriculture in total development assistance declined from 20 percent in 1980 to 14 percent in 1990.

For many developing countries, the decline of external agricultural assistance in the first part of the 1980s was moderated to some extent by a strong U.S. dollar during that period, which increased its purchasing power on international markets. But by the end of the decade, a weakened dollar exacerbated the observed decline in the absolute volume of agricultural aid.

Less Aid but More Donors

Although the contribution of major donors declined during the 1980s, other donors entered the aid arena. Among the multilateral donors, the regional banks, some United Nations agencies, and the Organization of Petroleum Exporting Countries (OPEC) maintained or expanded their share of total agricultural assistance. The World Bank sharply cut its lending to agriculture.⁹ As a group, multilateral institutions reduced their agricultural assistance commitments from US\$7 billion to less than \$6 billion (in constant 1985 U.S. dollars), lowering their share of total

agricultural assistance from 64 to 55 percent over the decade.

Bilateral donors slightly increased their overall commitments to agriculture during the 1980s, from US\$4.3 billion to \$4.6 billion. Changing priorities led to major shifts among bilateral donors. The United States reduced agricultural aid to the extent that its share of total bilateral agricultural aid steadily decreased from more than 30 percent in the early 1980s to less than 15 percent in 1989/90. In 1987, Japan overtook the United States as the largest single bilateral donor to agriculture. By 1990, one-quarter of total bilateral agricultural assistance came from Japan. Italy and several smaller European countries also significantly expanded their agricultural aid programs.

Regional Distribution

A greater share of agricultural assistance was redirected to Africa during the 1980s. Africa's share of such assistance increased from 22 percent in 1980 to 31 percent in 1990.¹⁰ Given the concentration of poor countries in Africa, this may be a justifiable change in relative allocations. Over the same period, Latin America's share decreased from 24 to 15 percent. South and East Asia and the Pacific continued to capture the lion's share of all assistance for agriculture, between 40 and 50 percent, with the share slightly increasing toward the end of the decade. The Near East's share hardly changed.

Subsectoral Distribution

A smaller share of total agricultural assistance was allocated to land and water development activities, including irrigation, in the second half of the 1980s.¹¹ Cuts were also made in

assistance to research, rural development initiatives, and extension. Macroeconomic reforms and agro-industrial development—activities that affect farmers only indirectly—received sizable attention, following a drop in their share in the mid-1980s. Support for structural adjustment efforts steadily increased from 1 percent in 1982 to 10 percent in 1989. The livestock, forestry, and fishery subsectors received slightly more

emphasis toward the end of the 1980s.

While it seems appropriate that assistance be cut back to those parts of the agricultural sector that have a less than satisfactory record of success, it is worrisome that assistance to research, rural development, and extension, with a proven record of high returns, was cut back as well. Cutting this assistance may seriously affect the long-term growth potential of agriculture.

TRENDS AND OUTLOOKS FOR MAJOR DONORS

World Bank and Regional Development Banks

World Bank assistance to agriculture declined during the 1980s. Only in 1986 did agricultural commitments in real terms exceed their 1980 level. As World Bank total lending increased during the 1980s, the share of agricultural aid declined from 30 percent in 1980 to 19 percent by the end of the decade. Nevertheless, the Bank remains the largest single donor to agriculture, providing about 30 percent of all agricultural assistance to low-income countries in 1989/90, though at the beginning of the 1980s its share had been almost 40 percent. However, the World Bank has recently made a commitment to increase agricultural lending activities.

The World Bank changed its agricultural lending policy during the 1980s. Agricultural loans were linked to major economic reforms made by developing countries. Adjustment loans that were quickly disbursed became more common and important. During 1986-88 these loans accounted for 20.8 percent of agricultural lending; for 1989-91 they accounted for 15.6

percent. Meanwhile, lending to area development and irrigation/drainage, or project-specific lending, fell from 33.8 percent of all agricultural assistance in 1980-89 to 20.8 percent in 1989-91.¹² As the need for structural adjustment loans increased during the 1980s, agricultural projects lost out.

Various other factors led to the downturn in agricultural lending by the World Bank.¹³ Pessimistic price projections for agricultural commodities at the beginning of the 1980s made a number of agricultural investment projects suddenly economically nonviable and less attractive. Relative to other sectors, agricultural projects required more expert time for project preparation, supervision, and follow-up, and constraints on staff resources led to slow loan disbursements. Poor performance records for some agricultural projects, in the absence of strong institutions to implement them, diminished incentives to pursue agricultural projects, particularly in Africa. Concerns over macroeconomic policy and disagreements with local governments over policy and institutional reform delayed project formulation in many countries.

Combined, the Asian Development Bank (AsDB), the African Development Bank (AfDB), and the Inter-American Development Bank (IADB) provided about 15 percent of total agricultural assistance to developing countries during the 1980s.

During most of the 1980s, the AsDB generally kept its agricultural lending at or slightly above the 1980 level of US\$620 million (in constant 1985 U.S. dollars).¹⁴ As total AsDB lending increased by more than 60 percent during the decade, the share of agriculture fell from around 34 percent during the early and mid-1980s to 25 percent in 1989, and up again to 31 percent in 1990.

The AfDB significantly increased its lending to agriculture from around US\$240 million in the early 1980s to almost \$600 million in 1990.¹⁵ This increase coincided with an expansion of overall lending by AfDB during the decade. Consequently, the share of agriculture in total lending, which had reached about 39 percent in the mid-1980s, stabilized at only 20 percent during 1988-90.

The IADB lent as much as US\$809 million in 1980 and US\$892 million in 1984 to agriculture, but since then its commitments have decreased substantially to \$263 million in 1990.¹⁶ Relative to total lending, which varied widely and plunged deeply from 1987 to 1989, the absolute decrease in agricultural lending appears less striking, and agriculture's share in total lending remains between 17 and 23 percent.

United Nations Agencies and the CGIAR

The International Fund for Agricultural Development (IFAD), which deals only with agriculture, reduced its assistance

from about US\$600 million in 1980 to about \$130 million in 1986, and only recently has there been an upswing to about \$300 million in 1990. The United Nations Development Programme (UNDP) substantially reduced its agricultural activities between 1980 and 1984, stabilizing at around 60 percent of its 1980 level of about \$260 million for the rest of the decade. FAO increased its expenditures during the decade, from about \$150 million to about \$200 million. Funding for the Consultative Group on International Agricultural Research (CGIAR), a worldwide network of research institutions that seek to improve the productivity of agriculture, forestry, and fisheries, expanded slightly during the 1980s as the CGIAR obtained responsibilities in new areas, but it decreased in real terms in the early 1990s.

Even taken together, the UN agencies that specialize in agriculture (FAO, IFAD, and World Food Programme [WFP]) do not command a substantial share of aid to agriculture. Because of their expertise, however, they should be in a position to play an appropriate strategic role in support of agricultural development assistance. Yet, this role, urgently needed in the 1980s, was impaired by competition between some of the institutions and by lack of coordination.

Japan

With its decade-long interest in development assistance, Japan is one of the few donors to have increased funds earmarked for agricultural projects. Unlike several bilateral donors, Japan kept its commitments (in real terms) to agriculture above its 1980 level for most of the decade and has

maintained a share of agriculture in total aid of 10-12 percent. In the early 1990s, Japan emerged as the leading bilateral donor to the agricultural sector in low-income countries and is expected to continue its agricultural assistance at an unchanged or even increased level.

United States

Assistance by the United States to agriculture in low-income countries has been declining since 1980, when U.S. commitments were at their highest.¹⁷ The decline accelerated in 1988, and by 1990, agricultural commitments were one-half those of 1988 and about one-quarter those of 1980. From 20 percent of total U.S. aid in 1980, agriculture accounted for only 11.3 percent in 1985 and 5.2 percent in 1990. USAID's agricultural assistance fell from US\$1,251 million in 1985 to \$815 million in 1990 (in nominal dollars). Moreover, agriculture represented over 50 percent of total USAID development assistance in 1982 but only 30 percent in 1991.¹⁸

There are several factors underlying this trend. There is a perceived lack of leadership and interest in agricultural issues within USAID. No agency-wide strategy paper or policy guideline exists to address priorities and critical issues in agriculture. Agricultural funding from the more long-term-oriented Development Assistance Fund (including the Development for Africa Fund) has rapidly decreased, from 54 percent in 1980 to 33 percent in 1990. In 1991/92 about 40 percent of the agriculture budget came from the Economic Support Fund and the Special Activities Initiative, which are short-term budget-support facilities for

politically important troubled countries.¹⁹ This shift in funding sources has made agricultural aid more volatile and less efficient.

Germany

German aid to agriculture has fallen since 1987, and was lower in 1990 than in 1980. Funds for agricultural technical assistance (crop production, livestock, agricultural services) further decreased between 1990 and 1992 by 17 percent.

The reduced aid allocations to agriculture are partly the result of decreased emphasis on integrated rural development projects with strong agriculture components, which are being replaced by administrative support projects to promote regional planning. Similarly, capacity-building projects, such as increased support for university education, are supplanting some direct investments in rural areas and agriculture.²⁰

European Community

Unlike assistance from some other donors, bilateral assistance channeled through the European Community continues to emphasize agriculture and rural development. The share of projects supporting rural production in the ACP countries²¹ increased from 30 percent in 1980-85 to 40 percent in 1985-89. At the same time, there was a significant increase in funding of integrated rural development at the expense of more specific support to crop and livestock production. It appears that the strong focus on assistance for rural areas and the food sector will continue during 1990-95.

DEVELOPING-COUNTRY RESPONSES

How declining external assistance affects agricultural development in developing countries depends to a large extent on the reactions of these countries to the cutbacks. Do local governments increase their recurrent and investment budgets for agriculture in order to substitute for reduced donor contributions? This partly depends on whether external assistance was used to expand agricultural investment or whether it was used as an opportunity to divert local government funds to other activities. An added complication is the structural adjustment programs that many developing countries had to adopt during the 1980s. These programs typically caused significant reductions and shifts in public budgets, the effects of which are difficult to distinguish from the effects of cutbacks in agricultural assistance.

A review of 18 countries for which there are comparable statistics indicates that in nine countries there was a decline in agricultural investment and in seven there was almost no change (Table 3). Only two countries showed a substantial increase in the spending on agriculture. In Ghana, for instance, the share of expenditures on agriculture in total government expenditures declined from around 12 percent in 1980-81 to around 4 percent in 1987-88. Bangladesh, Brazil, India, Indonesia, Mali, Mexico, Tunisia, and Venezuela also reduced the percentage spent on agriculture in the 1980s.²² There were several factors behind declining support to agriculture. With the move to major macroeconomic reforms, agriculture ministries generally experienced a loss of power vis-à-vis finance ministries, which then translated into reduced budgetary support for agricultural

Table 3—Support to agriculture by selected developing countries

Country	Agriculture Expenditure Share of Total Expenditure (Latest Year) ^a (percent)	Change Since the Early 1980s
Bangladesh	4.2	-
Brazil	1.7	-
Burkina Faso	5.1	-
Costa Rica	4.1	+
Egypt	4.9	-
Ghana	3.5	+
India ^b	13.7	-
Indonesia ^b	8.3	-
Kenya	14.6	+
Malawi ^b	12.2	-
Mali	4.8	-
Mexico	2.9	-
Morocco	5.5	-
The Philippines	6.6	-
Thailand	9.7	-
Tunisia	8.1	-
Venezuela	3.0	-
Zimbabwe	11.1	-

Source: International Monetary Fund, *Government Finance Statistics Yearbook* (various years).

^a Mostly 1990; some are 1989 figures.

^b Consolidated General Government.

- = Significant decline.

+ = Significant increase.

± = Barely any change.

activities. In some instances, when donors cut assistance to agriculture, recipient countries were unable to provide substitute funding.

In Brazil, total support to agriculture clearly dropped during the first half of the 1980s, rapidly increased during 1985-87, and then sharply decreased again by the end of the decade.²³ Among the components of agricultural support, support to science and technology increased during 1980-83,

decreased during the next five years, and then rose substantially to the end of the decade. Support for irrigation increased steadily from 1985. No trend is discernable for agricultural extension. These types of long-term support actually increased in real terms for 1980-90. However, they were dwarfed by government expenditures on purchases of food for public stocks and provision of highly subsidized agricultural credit (it is questionable whether these items should be considered as support to agriculture, but they are, nevertheless, in the budget). Brazil followed a "tax and compensate" form of government intervention in the agricultural sector from 1950 to the mid-1980s, which

appears to have generally hindered agricultural performance.²⁴

There were several countries, including Burkina Faso, Egypt, Malawi, Morocco, Pakistan, the Philippines, and Thailand, that did maintain a constant share of total government expenditure to agriculture during the 1980s. However, except for Malawi and Thailand, most of these countries spent a pretty low proportion of their government expenditures on agriculture (about 5 percent) in the first place.

Only in two countries did the share of government expenditure on agriculture rise during the 1980s, but to low levels: from about 3 percent to 4 percent in Costa Rica and from about 7 percent to 11 percent in Kenya.

REASONS FOR THE DECLINE

Declining external assistance to agriculture has economic, political, and bureaucratic explanations.

Economic Causes

Some types of agricultural development activities such as area development and livestock, especially in Africa, did not pay off—partly due to donor countries' own agricultural trade policies—and, therefore, donors turned elsewhere. However, this broad conclusion cannot be generalized and is not justified by a review of World Bank projects in agriculture and rural development, which indicates that while many such projects performed poorly, many others performed at least as well as projects in other sectors. The proportion of World Bank agricultural projects performing satisfactorily has declined, but so has the proportion of all projects performing satisfactorily; thus, poor performance is

not restricted to agricultural projects alone. During 1987-90, the proportion of agriculture and rural development projects rated satisfactory declined from 60 to 52 percent, whereas the proportion of all projects rated satisfactory declined from 72 to 64 percent.²⁵

Moreover, the positive economy-wide effects of the "green revolution" and innovations in crop and seed technology, many of which were stimulated and supported by development assistance, have been repeatedly and successfully demonstrated in many developing countries. In India and Bangladesh, agricultural support through investment in new technology has led to growth elsewhere in the economy.²⁶ The new seed technology has substantially reduced poverty, especially through price and employment effects on the nonfarm population.²⁷

Many donors, in fact, concluded that agricultural projects were generally sound, but would have performed better if implemented under better macroeconomic conditions. As has been mentioned in the case of the World Bank, this spurred their desire to promote policy and governance reforms. Donors gave priority to macroeconomic reforms. Loans and aid were redirected to support reform programs, leading to a reduced emphasis on project lending.

Political Causes

Pressure groups in both donor and recipient states compete for development assistance. In the 1980s there were three major political forces at work that help explain the downward trend of assistance to agriculture.

Domestic Farm Groups' Interests

In response to increased competition and deteriorating international commodity prices, farm groups' interests in donor countries shifted their objectives from only seeking subsidies to opposing funding for agricultural assistance to low-income countries. This shift was the result of weakened political support for maintaining large direct subsidies to farmers. Efforts were also made to increase the use of foreign assistance to promote short-run export enhancement for developed countries. Examples of this included the export enhancement program in the U.S. Farm Bill of the 1980s, which promoted cereals and oilseeds, and the promotion of wheat exports by European countries. Farm organizations pressed for allocating food aid to countries that could absorb agricultural exports, even when these countries were not likely to use savings resulting from food aid to develop domestic substitute crops.

Egypt, for instance, was a favorite target for subsidized wheat exports. When some developing countries attempted to improve their domestic food production situation, they were impeded. For example, when Nigeria wanted to reduce dependency on wheat imports through a quota and to raise local cereal production, trade sanctions against Nigeria were sought. Any agricultural assistance to perceived "competitors" abroad was attacked.²⁸

International Lending Interests

The rise in Third World debt contributed to the shift to structural adjustment and policy-based lending and reduced the power of agricultural ministers in low-income countries. The World Bank and other bilateral donors accelerated conditional lending to help low-income countries "reform" their macroeconomic policies in the 1980s. Lending institutions believed that macroeconomic adjustments, such as eliminating overvalued exchange rates, would have a greater positive effect on agriculture than providing the same funds for the agricultural sector in the absence of reform. They believed that improvements in the macroeconomic environment would indirectly support agricultural development in low-income countries.²⁹ They argued that without major economic reforms, agricultural projects would not be able to cover their costs, would not have acceptable internal rates of return, or would not generate growth in other sectors of the economy. These arguments helped justify the shifts in allocating aid to central governments rather than tying them to direct agricultural investments.

Declining Returns to Agriculture

Declining international commodity prices affected the revenues

governments could derive from agriculture, and pressure to liberalize trade rules, eliminate overvalued exchange rates, and reduce subsidies led to smaller gains to governments from agriculture. Consequently, many low-income country governments began to withdraw state responsibility from agriculture. The interest of government officials to invest in agriculture, either for personal or public interest reasons, also receded. The benefits of agricultural production could no longer be used to solicit rural political support, for instance.

Bureaucratic Causes

There were also three major bureaucratic forces that affected external assistance to agriculture in the 1980s: organizational restructuring, staff reductions, and organizational politics.

Organizational Restructuring

Organizational restructuring in major donor agencies such as USAID, the World Bank, and GTZ shifted discretionary power from functional units such as agriculture to regional units. In the World Bank, for instance, following reorganization in the mid-1980s, agricultural specialists and projects were incorporated fully within the regional and country departments. Consequently, instead of agricultural projects in various parts of the world competing with each other, agricultural projects competed with industry or energy projects in individual

countries. In USAID, regional bureaus were given greater control over budgets, while functional bureaus were reduced in size and authority. The result for agriculture was that important decisions were often made by generalists, who became the major policy-shapers at country or regional levels.

Agricultural Staff Reductions

A major barrier to the design and implementation of successful agricultural projects was a decline in the number of agricultural specialists in donor agencies.³⁰ While donor agencies recognized a need to better address the technical aspects of agricultural projects, since the 1980s the trend has been for fewer specialized staff. The World Bank, in particular, allowed a damaging diminution of technical capability in agriculture and rural development.³¹

Organizational Politics

There was a perception that agricultural projects would fail or only pay off in the long run and that such "failure" would negatively affect careers in the bureaucracy. In addition, organizational rewards in the major donor agencies seldom went to units and individuals who maintain a specialty. In some agricultural units it was also difficult to promote agricultural growth as the centerpiece of a sustainable poverty alleviation strategy when new "themes" became more competitive.

PROSPECTS FOR THE FUTURE

Population Growth and Food Needs

Despite the addition of over 1.8 billion people to the world's population in the

past 25 years, global per capita food supplies have risen, primarily because of the success of agricultural research and development investments. However, per capita food supplies in

many low-income countries have barely increased, and about 790 million people currently are undernourished.³²

Demands for food have been partially met by food imports, but even though developing countries as a whole doubled their per capita imports between the early 1960s and the late 1980s, they were not successful in filling the widening gap between supply and need.

The world's population, currently about 5.3 billion, is projected to grow to 6.3 billion by the year 2000 and to 8.5 billion by 2025.³³ Meeting future world food demands will require production to increase continuously. Unless a major change in trade and aid patterns occurs, much of the increase in needed food production will have to be produced by developing countries themselves.

Currently, developing countries are not expected to meet the projected demand. Technically, they could meet their food needs by purchasing surpluses from industrialized countries, but they lack the financial resources. Developing countries must be helped to grow their own food, not only to meet their projected food needs, but also to create jobs and economic growth.

The problem is particularly acute in Sub-Saharan Africa, where the food situation is expected to worsen in the coming years as the gap between supply and need widens.³⁴ Filling the projected gap in Sub-Saharan Africa's basic food staples would require the annual production growth rate to more than double, which is unlikely at the present time.

Increasing Yields Critical

Future growth in food supplies must come from yield-increasing technological change. Expanding production into new areas has reached

its limits. Agriculture has already moved into marginal zones, including high-altitude watershed zones, drought- and desertification-prone areas, and rain forests, where sustainable production is not feasible with current levels of technology and where there are long-term negative environmental consequences. Technological change and education will contribute more to growth than area, population, and capital expansion.³⁵

Increasing yields per unit of land will require new technological innovations that are effectively disseminated to farmers. Achieving higher yields is increasingly difficult. The yield growth rates for rice in Asia, for instance, declined sharply in the 1980s, from an annual growth rate of 2.6 percent in the 1970s to 1.5 percent in 1981-90. At the same time, the top yield levels achieved on research station test plots have been declining, and the gap between yields at research stations and those in farmers' fields has narrowed. This suggests that there is little prospect for increasing yields through current technologies.³⁶

Maintaining and accelerating yields will be difficult without a concerted national and international effort. A sustained green revolution requires a sustained investment for these purposes. The international agricultural research system that forms the CGIAR has a key role to play in meeting this need. International and national agricultural training institutions and universities have a long-term role to play in providing the skilled manpower to accelerate technological innovation. Farmers need to be educated so they can implement the more skill-intensive technologies that will produce higher yields.

If not pursued in a sustainable manner, the costs to the environment of increasing agricultural output over

the foreseeable future will be great. And the major environmental strains of agricultural growth will be borne by the developing countries. Global responsibility is needed to develop the

complex and expensive technologies required for sustainable agricultural production. Such technologies cannot be developed by individual developing countries alone.

CONCLUSIONS

Support for sustainable agricultural growth and development in low-income countries, particularly the poorest countries, has not kept pace with the ability to meet challenges arising from current and future food insecurity, increased land scarcity, and a diminishing natural environment base. Agricultural growth is vital for these countries to not only meet these challenges but to also stimulate economy-wide growth. There are several priorities for reversing the decline in agricultural aid to low-income countries.

- Make agriculture a high priority in the 1990s and beyond. Fashions in international development agencies risk diverting the attention of developing-country governments away from agriculture. National development policies supportive of agriculture are of primary importance for agricultural growth. Even after a decade of reform, in many countries the response of agriculture to macroeconomic policy changes has been modest.
- Increase financial support for sustainable agricultural growth and development in low-income countries, particularly yield-increasing technological change, agricultural research, rural infrastructure, and training. Encourage development of entrepreneurial talent and provide key inputs to agriculture, including irrigation, fertilizer, and seeds.

Investments in training, education, and institution-building are important for improving agricultural performance and, hence, for expanding the scope of agricultural investment in developing countries.

- Strengthen the capabilities of low-income countries to develop and implement food and agricultural policies. The strategic capabilities of agriculture-related UN agencies also need to be strengthened. The agricultural development scene is confronted with the problem of fewer resources, a larger number of actors, and a leadership vacuum. This may be a recipe for disarray in agricultural development strategy, especially as the decline in external financial assistance to agriculture may have been paralleled by a loss of managerial, technical, and strategic capabilities for agricultural support at the global level. To call for increased aid allocations by major donors in favor of agriculture is not enough.
- Recognize and overcome political and bureaucratic obstacles to increased agricultural lending. Economic and other factors that condition lending are intertwined. More qualified staff, enhanced status for work in agriculture, and control of pressures from special interest groups are required. Attention to these constraints must not be confined to donor agencies,

but must extend to the recipient countries, where it is also necessary to correct the reward structures and the influence of pressure on those in charge of allocating domestic public expenditures to agriculture.

The last major boost to agriculture came in the aftermath of the 1973/74 world food crisis. That food crisis resulted from an unfortunate coincidence of a policy-induced drawdown of stocks in major exporting countries (for example, the United States), unexpected purchases by the

U.S.S.R., and droughts in Africa and South Asia. The world food situation remains vulnerable to such coincident events, especially given the fundamental economic policy changes now under way in the Commonwealth of Independent States. It is not difficult to construct scenarios for the 1990s that could lead to comparable crises, and it can only be hoped that major adjustments in development assistance priorities will be made regardless of such potential crises. The current poverty and food security problems in developing countries are crises enough.

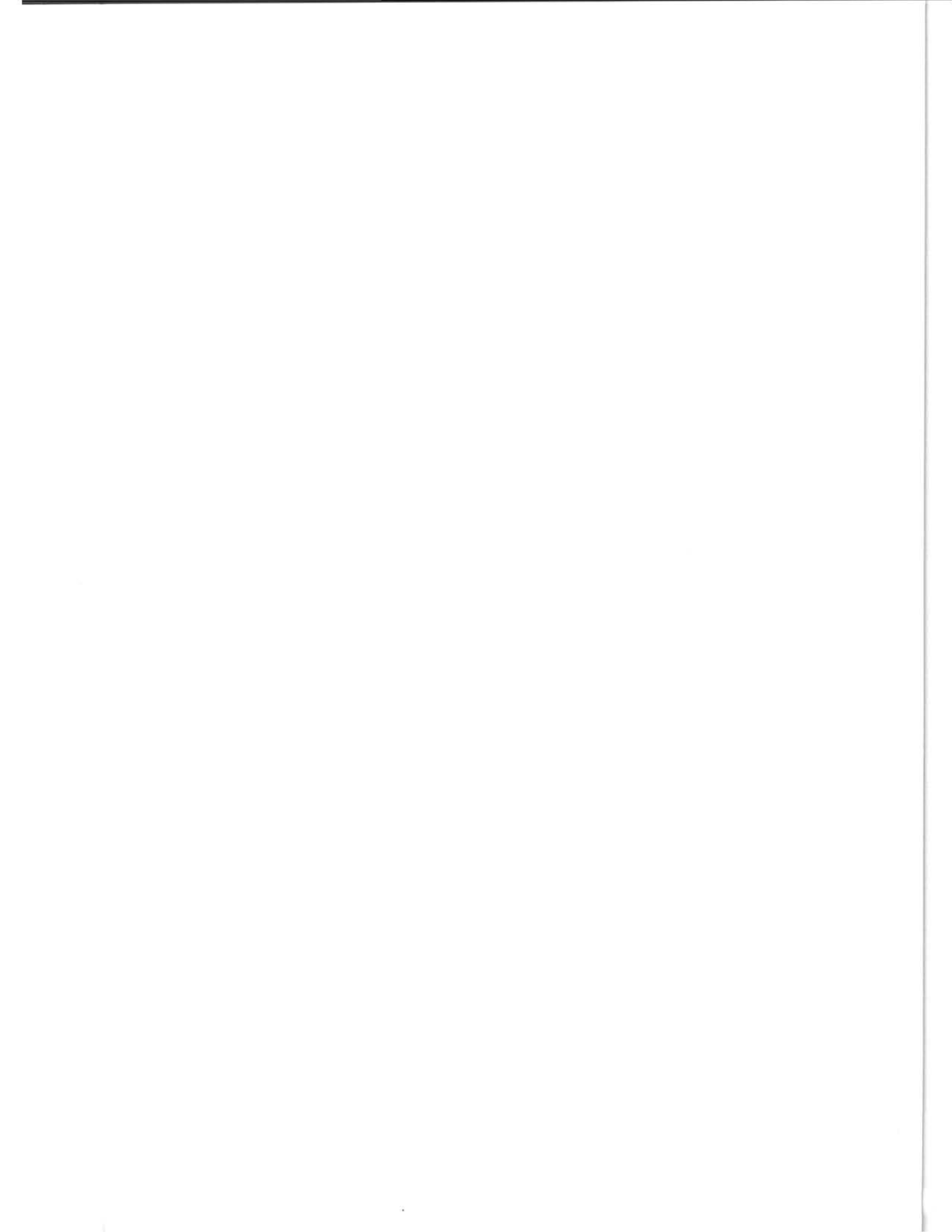
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