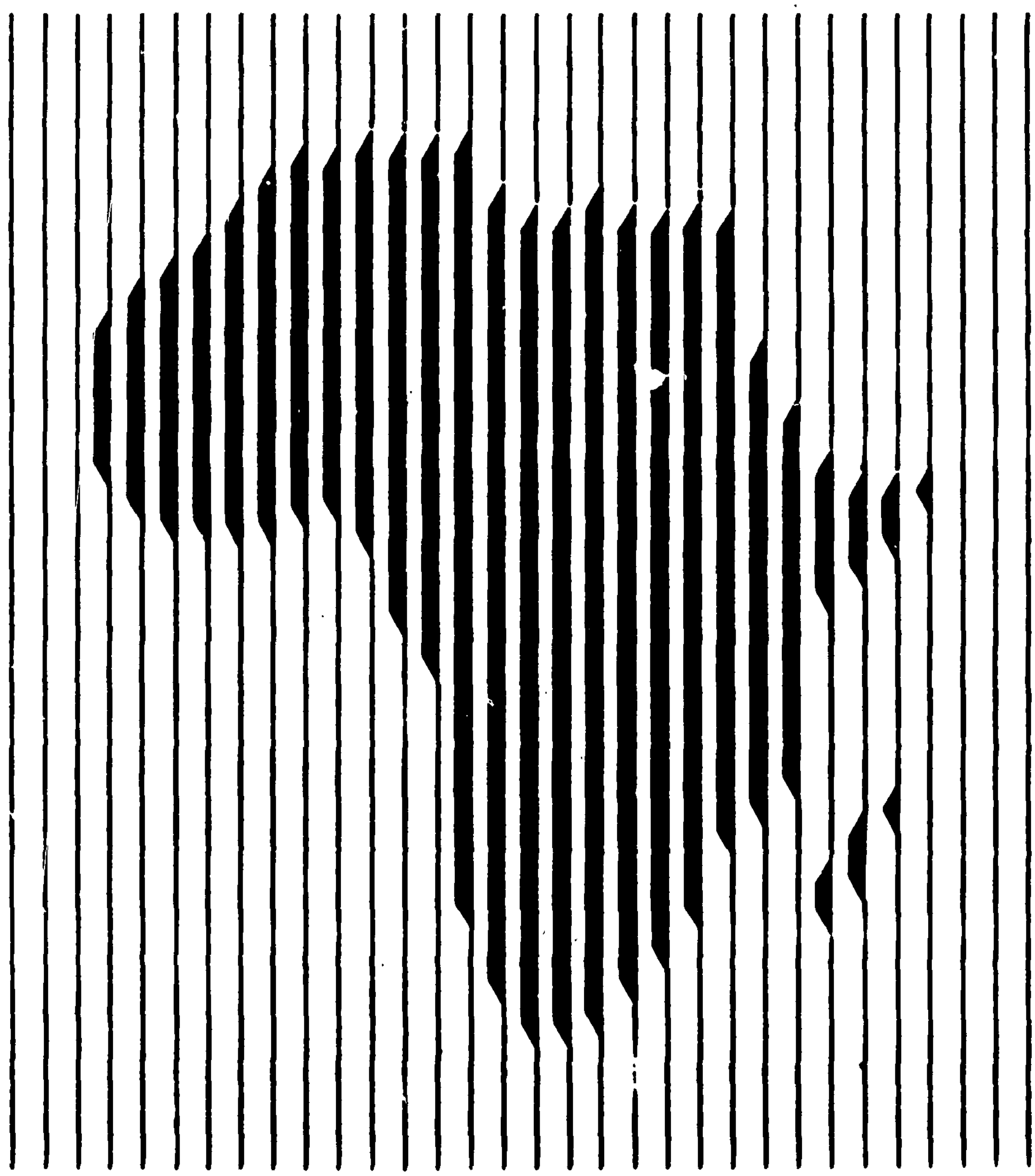
PN-ABG-826
69471

FRESH START IN AFRICA:

A.I.D. AND STRUCTURAL ADJUSTMENT IN AFRICA



JEROME M. WOLGIN

AUGUST, 1990

FRESH START IN AFRICA:
A.I.D. AND STRUCTURAL ADJUSTMENT IN AFRICA

CONTENTS

O Executive Summary

I. Introduction

II. How Africa Got Here From There

III. The Structural Adjustment Experience
- A. A Capsule History of Adjustment Programs in Africa
- B. Does Structural Adjustment Work?
- C. Why Don't Structural Adjustment Programs Lead to Even Higher Rates of Growth

IV. Structural Adjustment and Poverty
- A. Who are the Poor?
- B. Economic Behavior of the Poor
- C. What has Happened to Food Prices and the Ability of the Poor to Purchase Food?
- D. What has Happened to the Income of the Poor?
- E. What has Happened to Government Expenditures under Adjustment?

V. Why Should A.I.D. be Involved in Structural Adjustment?
- A. Economic Rationale
- B. A.I.D.'s Comparative Advantage
- C. What is the Niche A.I.D. Programs Should Occupy?
- D. How Effective Have A.I.D.'s Program Been?
  - D.1 Agricultural Market Liberalization
  - D.2 Fertilizer Market Liberalization
  - D.3 Industrial and Trade Policy Programs
  - D.4 Social Sector Reform Programs

VI. The Way Ahead

VII. ANNEX I -- A.I.D. Policy Reform Programs in Africa

VIII ANNEX II -- Statistical Annex

IX. End-Notes

EXECUTIVE SUMMARY

For six years A.I.D. has been supporting the process of structural adjustment in Africa. This paper is a critical review of A.I.D.'s experience in this arena. What has A.I.D. done, why has it done it, and what difference has it made?

A central theme of this paper is that the primary (though not the only) cause of Africa's current economic crisis is the economic policy framework that most African governments adopted. With few exceptions, these countries followed dirigiste philosophies, were unable to control public expenditures, emphasized rapid industrialization, largely through parastatals, and taxed farmers heavily. Indeed, we are not talking about marginal problems here. When money supply is growing at 50% per year, when the government is running a deficit equivalent to 10% of GDP per year, when tax revenues are below 10% of GDP, when farmers face marginal tax rates between 50% and 75%, when exchange rates are overvalued by 500%, when there is no money to buy supplies for health workers or teachers, when the structure of incentives favors cutting down gum arabic trees to use as charcoal, when 80% of the health budget is spent on urban-based curative care, when for every three farmers there is one marketing board employee, when precious resources are squandered on presidential palaces and convention centers, when public enterprises in the manufacturing sector are operating at less than 30% capacity, when the wastage and repeater rates in education are so great that 24 years of schooling are given for every student who completes primary school, it is patently obvious that something systemic is wrong.

By 1990, the vast majority of countries in sub-Saharan Africa were undertaking a structural adjustment program of one form or another with the assistance of the IMF, the World Bank, and other donors.
Since the beginning of the decade. over $28.0 billion have been committed in policy-based assistance to 36 countries of sub-Saharan Africa ($14.1 billion to 35 countries by the IMF, $6.8 billion to 35 countries by the World Bank, and at least $6.0 billion by the other donors). How effective has this assistance been? What is the record of structural adjustment in Africa? What have we learned that will enable us to design programs that are more effective?

The effectiveness of adjustment programs in Africa. The evidence on effectiveness is not at all ambiguous. Over the 1980 to 1987 period, reformers had higher rates of growth of output (2.90% to 1.00%), agriculture (4.07% to 1.38%), exports (4.08% to -1.11%) and imports (2.39% to -5.35%) than did non-reformers. Reformers also faced a somewhat more negative external environment than did non-reformers. They received less foreign borrowing as a percent of GDP although they experienced slightly smaller losses in terms of trade changes.

The clear and unmistakable conclusion from the data is that adjustment programs do work, and that they lead to substantial increases in overall growth, even when external economic events have negative impacts.

Why have adjustment programs achieved limited success? While adjusting countries did better, they did not do nearly well enough. The economic transformation of Africa is going to require growth rates well in excess of 5% of GDP until population growth rates begin to fall. Three percent growth won't cut it. African countries are in the position of Alice in Through the Looking-Glass, having to run as fast as they can just to stay in place. Why hasn't structural adjustment led to GDP growth rates of 6% or more?

Three answers suggest themselves. First, that the data are not accurately capturing the degree of economic expansion that is occurring as a result of adjustment programs. Second, it has been argued that external circumstances, coupled with the debt overhang, have led to the underfinancing of reform programs. This is certainly true, in part. While adjusting countries as a group have seen their exports grow in constant dollar terms by 4.0% a year, their imports grew by only 2.4%. The difference is (1) debt service; (2) terms of trade losses; and (3) the building up of reserves. Higher growth of imports would undoubtedly spur overall economic growth. Third, it is probably true that most adjustment programs have been relatively weak. taking much too long to implement, and leading to only partly liberalized and stabilized economies.

Structural Adjustment and Poverty. There are few subjects that have generated more heat and less light in recent years than the question of whether or not structural adjustment programs in Africa have reduced the welfare of the poor. The framework for understanding these issues is at once simple and complicated. People (including poor people) are better off when the prices of the things they sell (their labor, the services of their capital, their skills, their land, or the produce of their labor, land, etc.) go up faster than the prices of the things they buy. Their welfare also increases when the value of the services provided by the government increases faster than their tax liability.

Studies from a number of countries (Cote d'Ivoire, Ghana, Madagascar and Malawi) give us a pretty good idea about who the poor are. Broadly speaking, the poor in Africa are rural rather than urban, and self-employed rather than wage laborers. In some countries (Cote d'Ivoire and Ghana, e.g.), rural poverty is more predominant in certain geographic areas, while in others (Malawi), poverty is more broadly dispersed geographically.

One of the major criticisms of adjustment programs has been that, through devaluation, elimination of food subsidies and liberalizing markets, food prices would increase markedly, thus having negative impacts on food security for the poor. The facts speak otherwise. It seems that food prices have fallen during adjustment, rather than risen. For Ghana, Malawi, Mali, Senegal, Niger, Somalia, The Gambia, and Tanzania, real food prices stagnated or fell during adjustment. In Madagascar, Kenya and Zambia, food prices rose. Why did food prices decline under adjustment? Part of the answer was luck -- good weather and the decline in world grain prices, particularly rice. Another part of the answer is that the structure of markets before liberalization actually led to much higher marginal prices -- prices paid by the poor. Before liberalization, cheap food was available in controlled markets, but availability was limited to those groups -- the civil servants and the army -- whom the government subsidized. Illegal, black markets existed, but costs were very much higher, since traders had to pay bribes in order to stay in business. The movement to one free market increased access to food, reduced marketing costs (in part, by reducing bribes), and actually reduced prices for the poor, even while raising prices for the privileged.

The most pervasive criticism of structural adjustment has been that expenditures for health and education contract drastically during adjustment. It's important, however, to recognize that for most African countries, the role of the Government is regressive. The poor pay disproportionately more taxes and receive dispropor-
tionately fewer benefits from government programs than does the population at large. Therefore, it is not clear that a reduction in government services would have a negative impact on the poor, since they were not the prime beneficiaries of such services in the first place. On the other hand, the services that the poor do receive are likely to be the first cut.

Moreover, despite the cries of those opposed to adjustment programs, the available evidence does not permit the conclusion that adjustment programs have led to declines in social expenditures. Existing data suggests that countries are as likely to expand the share of their budget going to social services during adjustment as to contract these expenditures.

There is no clear evidence that structural adjustment programs in Africa have had, in general, negative impacts on the poor. In most countries for which we have data food prices fell after adjustment, although in some countries food prices rose. While there has been a clear reduction in real wages in the formal economy, this has little direct impact on the poor since they

rarely participate in the formal economy. There is no systematic evidence that adjustment has led to reduction in education and health spending; indeed, countries undergoing adjustment are as likely to increase these expenditures as to reduce them.

A.I.D.'s policy reform programs in Africa. Between 1984 and 1989, A.I.D. funded 42 separate policy reform programs in 22 different African countries, totaling over $760 million. A number of common themes emerge from our experience in designing and implementing these programs:

-- While there are a number of failures, by and large, the record of these programs is much better than we hoped when we started out, particularly given the nature of the problems.

-- The biggest impact from market liberalization is the reduction in marketing costs that increase incomes of both producers and consumers;

-- In most liberalization experiences, real consumer prices have fallen (this is consonant with the continent-wide data presented in Section IV);

-- Most Government monopolies were honored in the breach, and illegal parallel markets existed in most areas (Zambia is an exception) prior to liberalization. Nevertheless, the illegality of these markets substantially increased transactions costs and marketing margins;

-- Despite decades of suppression, despite poverty, despite sparse populations, despite war, there exists a broad trading community ready to enter into the input and commodity markets in most countries;

-- Most liberalized markets are competitive, with marketing margins reflecting real costs of transportation and assembly; none of these cases demonstrate the existence of a rapacious, oligopolistic private trading system;

-- The benefits from increased openness and competition in the short run are concentrated in reduced monopolistic profits. Reducing tariffs and quotas forces firms to be more competitive;

-- Opening up the economy is especially important for smaller firms, particularly the informal ones. Protection always has favored the large and inefficient over the small and efficient;

-- Even though a less regulated regime creates new opportunities, the short-run impact in the formal economy may well be negative; many inefficient firms will have to reduce operations or close, and the newly competitive ones may be slow in expanding or moving into new niches because of other policy problems or the failures of financial markets; and

-- The benefits of formality are probably much less important in Africa than they are in Latin America, largely because African governments have not been effective in suppressing illegal informal activity.

The way ahead. The best thing about these reform programs is that they foster the unleashing of individual creative energies. They breed independence and self confidence and dignity. No longer does the peasant or the blacksmith have to look to some distant capital for help; he can find it in his village, with the help of a few of his friends and colleagues. Ultimately, these programs must lead not only to the broadening of economic power, but to the broadening of political power also. That is why they are so revolutionary -- and why their ultimate success is still in doubt. This has not been a mass-based revolution. Consequently, its future remains in doubt. Always on the horizon is the counter-revolution, the return to statism.

A.I.D. sees itself as being on the front lines of this revolution for many years to come. We see ourselves as being particularly well-placed to affect the final outcome by:

(1) Helping spread participation in the reform process and in governance at large through decentralization, building constituency groups, and pushing for broader dialogue among all groups in the economy;

(2) Building the competence of the technocratic base, so as to increase the capacity of all participants to understand the benefits and costs of any particular policy option; and

(3) Continuing to educate, demonstrate, cajole, dialogue, persuade and inform policy makers on the importance of private market solutions to most economic problems.

The risks here are high. But the gains are immense. Unless this second revolution is completed, Africa and its people will be marginalized, perhaps forever.

FRESH START IN AFRICA:

A.I.D. AND STRUCTURAL ADJUSTMENT IN AFRICA

I. INTRODUCTION

There is a revolution occurring in Africa today. It is a revolution in which power is being transferred from the leaders of Africa to the people of Africa. Not primarily in political terms, but in things that also matter, increased choices and opportunities. If this revolution succeeds it will finally complete the process which began with the transfer of power from European to African elites. But while the revolution is empowering the masses, it is not a mass revolution; rather, it is a revolution that has its origins in the realization by Africa's leaders the old, statist ways of doing business have failed, and that, if the empty shelves and empty coffers and empty bellies are to be filled, radical change is necessary. And so, amid the ashes of the models by which economic power was concentrated in the hands of a few, economic systems are being dismantled piece by piece, parastatal by parastatal, regulation by regulation.

The fragility of this revolution lies in both the fact that it is not a truly indigenous process and in the fact that it has concentrated only on economic policies. For technology and economy do not form the foundation of a nation, but are merely the superstructure. The foundation is made up of first, the cultural and social norms and values, and second, the political system which translates these norms into power relationships. In Africa it is very clear that economic power stems from political power and not vice versa.

Thus, a structural adjustment process which opens up economic systems and access to economic opportunity to the masses while at the same time reducing the economic well-being of the elite, is only sustainable if it is built on a more equal sharing of political power as well. The long-run success of strictly economic adjustment programs is very problematic. For economic liberalization to succeed it must be accompanied by a parallel political liberalization, and it must be primarily driven by an indigenous process that translates the aspirations of the African people into social, political and economic systems that can satisfy these aspirations.

If Africa is to move from structural adjustment in economic terms to a broader political and social revolution, the time is now. The miraculous events in Eastern Europe provide both an opportunity and a threat. The opportunity lies in the death of old ideologies and the birth of a world-wide vision that people are not to be sacrificed to an abstraction called the "State." The threat lies in a the marginalization of Africa as Europe turns inward, and the world economy becomes increasingly tri-polar -- Europe, Asia, and America -- thus excluding Africa from the resurgent world economic growth that seems likely in the 90s and beyond.

The purpose of this paper is to describe the role of the United States Agency for International Development in this revolution. What has A.I.D. done, why has it done it, and what difference has it made? The paper has five sections following this brief introduction. Section II briefly reviews African economic history in the post-colonial era, and describes the failures of the first revolution. Section III examines the impact of structural adjustment on the economies of Africa in broad, macroeconomic terms. Section IV examines the key moral issue of this revolution -- is it benefiting or harming the poor? Section V describes in considerable detail, the role of A.I.D., its programmatic activities, and the results of its programs. Finally, Section VI suggests what must be done to sustain this revolution.

II - HOW AFRICA GOT HERE FROM THERE

The famous philosopher Charlie Brown once said that there is no greater curse than "great potential." The people of Africa had every reason to believe that their independence after 60 years of European colonial rule would usher in a new age of freedom, peace, prosperity and the realization of their great potential, both individually and as nations. Now, thirty years later, after decades of civil strife and economic stagnation, these expectations have been cruelly dashed. The title of Rene Dumont's famous book, False Start in Africa, could be the epigram for the economic history of post-independence Africa.

Why, when the last thirty years have seen the greatest growth in world trade and income in recorded history, has Africa stagnated? Why, when "basket cases" such as Bangladesh and India have seen steady, if unspectacular growth, have the income and welfare of the average African not changed in thirty years? Why, when famines in China and the sub-continent are now no more than a memory, is Africa still subject to devastating drought and famine? Table I presents a comparison of the economic performance of the low income countries of Africa as compared to those of South Asia between 1965 and 1987. South Asia is experiencing steady progress, while Africa is sliding backwards.

By almost any reckoning this is a dismal record. A record of missed opportunities and shattered hopes. Three answers have been proposed to the question, "Why has Africa not developed?" To some, Africa's stagnation is best explained by external events -- high and variable real interest rates, declining terms of trade, and a world economy which has exhibited much slower growth in the 80's than the 70's. To others, it is a result of a set of geographic, cultural and technological characteristics that make the development process more difficult in Africa than in other parts of the world. These include low levels of education, sparse populations, but high rates of population growth, a broad diversity of ecological and agronomic conditions, highly variable climates, the diversity of staple food regimes (thus making a single "green revolution" breakthrough unlikely), difficult soils, etc. Finally, many continue to believe that the single most important cause of the malaise that has affected African economies has been the persistence of a set of economic policies and institutions which have encouraged government production over private production, import-substitution over export promotion, urban development over rural development, consumption over investment and debt over saving.

TABLE I: ECONOMIC PERFORMANCE OF SUB-SAHARAN AFRICA AND SOUTH ASIA LOW INCOME COUNTRIES, 1965 - 1987
(excluding NIGERIA and INDIA)
(average annual percentage change)

	SUB-SAHARAN AFRICA			SOUTH ASIA		
	1965-73	1973-80	1980-87	1965-73	1973-80	1980-87
GNP PER CAPITA GROWTH	0.8	-0.6	-2.2	0.6	2.8	2.4
INFLATION	6.7	19.3	27.5	5.3	12.4	8.2
AGRICULTURAL GROWTH	...	1.7	5.0	2.3	3.3	3.2
INDUSTRIAL GROWTH	...	8.0	1.6	3.6	7.6	7.3
GOVERNMENT GROWTH	5.6	3.7	-1.2	...	5.3	7.8
CONSUMPTION GROWTH	2.5	2.5	1.8	...	6.2	5.1
INVESTMENT GROWTH	6.3	1.6	-3.5	-0.3	9.5	3.5
EXPORT GROWTH	4.8	0.6	-1.1	-4.2	6.0	6.5
IMPORT GROWTH	2.9	1.4	-2.5	-5.3	7.5	2.4
	1965	1980	1986	1965	1980	1986
DAILY CALORIE SUPPLY	2045	2087	2052	1901	2073	2199
PRIMARY ENROLLMENT (percentage)	39	69	60	50	62	57
CRUDE BIRTH RATE (per thousand)	48	47	48	45	43	41
CRUDE DEATH RATE (per thousand)	23	19	16	20	15	13
PER CAPITA ODA ($)		24	31		14	13

Source: World Bank, Sub-Saharan Africa: From Crisis to Sustainable Growth (Washington, D.C.), 1989.

There are good reasons to believe that the first two explanations are relatively weak. It is hard to make the case that external factors were primarily responsible for Africa's economic distress. African countries receive more than four times the per capita assistance of low income countries as a whole. Moreover, for the entire period 1962 to 1987, Africa's terms of trade have been much more positive than those of low income countries in general. Indeed, since 1962, low income countries have averaged a loss in income of about 1% per year due to terms of trade changes, while low income African countries have averaged a gain of about 1% per year.[1]

Moreover, African countries found themselves losing their share of world export markets (declining from 2.4% in 1970 to 1.7% in 1985). As a result of this loss of export markets, African countries exported about $9 to $10 billion dollars less (equal to current debt service requirements), than they would have at prevailing prices if export quantities had increased by the same rate as those of other developing countries.

If the second explanation were correct, why did Mali and Burkina Faso grow while Senegal declined; why did Cote d'Ivoire grow while Ghana declined and Benin stagnated; why did Malawi, Rwanda and Burundi grow while Zambia, Liberia and Tanzania stagnated? It is difficult to associate economic performance in Africa with any set of structural characteristics (climate, population density, soils, human capital base, mineral resources, cropping mix, etc.).

On the other hand, it is much easier to link economic performance to economic policy. Excluding oil producers and countries with populations under 500,000, grouping countries on the basis of sustained growth in per capita GNP between 1961 and 1987 leads to the following:

GREATER THAN 2%	BOTSWANA, CAMEROON, CENTRAL AFRICAN REPUBLIC, KENYA, LESOTHO, MAURITIUS, SEYCHELLES, SWAZILAND
BETWEEN 0% AND 2%	BENIN, BURKINA FASO, BURUNDI, COTE D'IVOIRE, THE GAMBIA, GUINEA, MALAWI, MALI, MAURITANIA, NIGERIA, RWANDA, SIERRA LEONE, SOMALIA, TANZANIA, TOGO, ZIMBABWE
LESS THAN 0%	CHAD, ETHIOPIA, GHANA, GUINEA-BISSAU, LIBERIA, MADAGASCAR, NIGER, SENEGAL, SUDAN, UGANDA, ZAIRE, ZAMBIA

With few exceptions the countries at the top of the list followed prudent economic management (keeping fiscal deficits in check); emphasized exports; emphasized agricultural development; and were effective in mobilizing domestic savings. With few exceptions, countries at the bottom of the list were dirigiste in philosophy, were unable to control public expenditures, emphasized rapid industrialization, largely through parastatals, and taxed farmers heavily. In a study of price distortions, the World Bank ranked eight African countries (in a sample of thirty-one countries worldwide) in this order, from least distorted to most distorted:[2]

1. Malawi
3. Cameroon
8. Kenya
11. Ethiopia
17. Cote d'Ivoire
20. Senegal
28. Tanzania
31. Ghana

Note that four of the top five countries in terms of least price distortions are among the twenty-four countries with positive per capita growth, while the bottom three all experienced negative or, in the case of Tanzania, virtually zero, growth.

It was the World Bank's seminal report, Accelerated Development in sub-Saharan Africa, known as the Berg report after its principal author, Elliot Berg, that clearly stated the case for structural adjustment in Africa, as a necessary, though not sufficient condition for restarting growth. Indeed, we are not talking about marginal problems here. When money supply is growing at 50% per year, when the government is running a deficit equivalent to 10% of GDP per year, when tax revenues are below 10% of GDP, when farmers face marginal tax rates between 50% and 75%, when exchange rates are overvalued by 500%, when there is no money to buy supplies for health workers or teachers, when the structure of incentives favors cutting down gum arabic trees to use as charcoal, when 80% of the health budget is spent on urban-based curative care, when for every three farmers there is one marketing board employee, when precious resources are squandered on presidential palaces and convention centers, when public enterprises in the manufacturing sector are operating at less than 30% capacity, when the wastage and repeater rates in education are so great that 24 years of schooling are provided for every student who graduates primary school, it is patently obvious that something systemic is wrong.

Why did African Governments follow economic policies which have immiserated their people? There are probably three main reasons -- ideology, circumstance, and greed. The first generation of political leaders were naturally impatient men. They wanted to see a rapid economic transformation of their economies. So, combining the social welfare ethic of socialism, with Western economic development theories that preached import-substitution, industrialization, and State-led development, they naturally looked for short-cuts implicit in rapid industiralization. Armed with this set of ideas, they found the weak and largely non-indigenous private sectors endemic in Africa to be an inappropriate vehicle for this strategy. So they turned to the State (colonial structures, particularly agricultural marketing boards, were already in place). And as the State broadened its control over the economy it became a milk cow, siphoning income from farmer to bureaucrat, and from consumer to politician. The more distorted economies became, the more State control provided rents, and so policies born in idealism, matured in greed.

But the parasitic nature of this system began to weaken the host, and when the world economy turned downward, African economies began to sicken. Thus, the latter half of the 1980's became a period of intense structural adjustment -- which is the story of the next section.

III - THE STRUCTURAL ADJUSTMENT EXPERIENCE

A. A Capsule History of Adjustment Programs in Africa

By 1990, the vast majority of countries in sub-Saharan Africa were undertaking a structural adjustment program of one form or another with the assistance of the IMF, the World Bank, and other donors. The exceptions included the few countries which had maintained an acceptable policy framework (Cape Verde, Botswana and Swaziland), three countries whose structural weakness had not yet led to sufficient fiscal distress to embark on an adjustment program (Burkina Faso, Zimbabwe and Rwanda) and a number of countries whose economies were in great disarray and, in some cases beset by civil war, but which were unwilling or unable to make the needed policy changes (Sudan, Angola, Liberia, Ethiopia and Sierra Leone).

Since the beginning of the decade, over $28.0 billion have been committed in policy-based assistance to 36 countries of sub-Saharan Africa ($14.1 billion to 35 countries by the IMF, $6.8 billion to 35 countries by the World Bank, and at least $6.0 billion by the other donors). How effective has this assistance been? What is the record of structural adjustment in Africa? What have we learned that will enable us to design programs that are more effective?

Before answering this question, it would be well to briefly lay out the institutional and analytical framework that undergirds structural adjustment programming. To begin with it is necessary to define a few terms so that we will be using a common vocabulary.

STABILIZATION:	A set of policy reforms intended to reduce imbalances in the current account of the balance of payments and in the fiscal balance. Stabilization programs are generally designed to reduce demand in the short run, while structural adjustment programs are designed to increase supply in the medium run.
STRUCTURAL ADJUSTMENT:	Reforms of policies to make economies more flexible, more competitive, more efficient, and more equitable. Structural adjustment programs were originally designed to enable countries to better withstand external shocks such as the oil shocks of 1974 and 1978, but over time have become much more comprehensive and include a wide variety of policy issues.
SECTOR ADJUSTMENT:	A sub-set of structural adjustment which focusses on reforms required to improve productivity, efficiency and equity in a specific sector of the economy (e.g., agriculture, education, finance).

Typically, a stabilization program will include elements of expenditure reduction and expenditure switching. The central problems to be addressed are that the economy is running out of foreign exchange to pay for imports and its debt obligations, and that it is experiencing high rates of inflation. In order to deal with these problems, demand must be reduced. Expenditure reduction is accomplished through reduction in the government's deficit (through tax increases or expenditure decreases or both) and through control of money and credit, thus reducing private demand. These programs are very similar to the way in which the U.S. uses fiscal and monetary policy to deal with inflationary problems. Expenditure switching (shifting demand from foreign produced to domestically produced goods in order to reduce the disequilibrium in the current account balance of the balance of payments) is primarily accomplished by devaluation of the exchange rate, which makes foreign goods relatively more expensive.

Structural adjustment programs are much more comprehensive and include a host of measures. While they are complementary to stabilization programs, structural adjustment programs are much broader and are not based on a comprehensive theoretical foundation. Adjustment programs can range from trade reform to reform in the health sector. Any policy or institution that affects the efficiency or equity of the economy is grist for the structural adjustment wheel. These can be grouped into five major categories:

TRADE POLICY: Policies undertaken to open up economies, increase efficiency of import use, and increase the growth rate of and diversify exports. These policies include:

- more realistic exchange rates
- increased exchange rate flexibility
- tariff reforms; elimination of quantity restrictions on imports
- reform of processes to allocate foreign exchange to make them more transparent, flexible and market-driven
- improved marketing and improved price incentives for exports

FISCAL POLICY: Policies intended to improve the mobilization and use of public sector resources. These policies include:

- Tax reform to improve the equity and efficiency of tax policy, as well as policies to improve tax administration
- public investment reform to improve the decision-making process for choosing public investment projects
- public expenditure reforms to ensure that resources are used efficiently, and that budgetary controls are in place to enable implementation of fiscal policy
- increased use of user fees, improved collection of such fees, and increased fee schedules to reflect real costs of service provision

PUBLIC SECTOR MANAGEMENT: Policies intended to improve the efficiency and equity of public sector management. These include:

- civil service reform, including reduction of staff, increased wages, reduced hiring, etc.
- Parastatal rationalization and divestiture
- Privatization of functions such as marketing
- Improved equity and efficiency of government expenditures in such sectors as health, education, agriculture, transport, etc.

FINANCIAL SECTOR MANAGEMENT: Policies designed to increase domestic savings mobilization, and improve the efficiency and effectiveness of financial intermediation. Specific interventions include:

- interest rate liberalization
- elimination of credit controls
- improved bank supervision
- introduction of indirect instruments of monetary policy such as reserve ratios

DEREGULATION: Policies designed to reduce inefficient and unnecessary government controls over the private economy, and to develop an enabling environment for private investment. Included are:

- Decontrol of prices and wages
- Improving legal system for enforcing contracts and protecting private ownership of property
- Improving security of land tenure
- Guaranteeing repatriation of profits for foreign firms
- Reducing controls on labor mobility
- eliminating government monopolies
- improving the legal framework for natural resource conservation
- eliminating or reducing bureaucratic controls on investment, establishment or expansion of businesses, etc.

By and large, structural adjustment programs have followed a certain sequence, beginning first with the major macroeconomic questions -- fiscal policy, trade policy and decontrol of agriculture -- and then proceeding to problems of tax reform, financial sector reform, privatization, civil service reform, improved efficiency and equity of government expenditures and improving the legal structure.

Historically, the IMF played the key role in stabilization programs, while the World Bank took the lead in structural adjustment. Between 1980 and 1983, the IMF loaned over six billion SDRs to 25 different sub-Saharan countries. These loans were intended to help governments respond to the world economic downturn following the second oil shock. All of these loans were provided at market rates with short maturities. Because of the structural problems in these economies, African economies were unable to respond to stabilization programs alone. In fact, the IMF loans became part of the problem, rather than the solution, as economies did not grow fast enough to generate the foreign exchange needed to repay IMF loans, and by the end of the decade the IMF was receiving more in reflows than it was lending.

In late 1985, the IMF responded to this problem by agreeing to establish a structural adjustment facility (SAF) for low income, primarily African countries. This SAF would rechannel IMF trust fund receipts and provide highly concessional, medium-term assistance, instead of the high cost, short-maturity money provided by traditional stand-bys. The U.S. proposed, and the World Bank and the IMF agreed, to develop better coordination among all donors working in the area of structural adjustment, through a coordination process called the Policy Framework Paper (PFP), which would be jointly developed by the recipient government, the IMF and the World Bank. No SAF agreement could go forward without a PFP.

Finally, the World Bank launched its Special Program of Assistance (SPA) to debt-distressed low-income countries in sub-Saharan Africa. The purpose of the SPA was to bring bilateral donors into the adjustment process by (1) ensuring there was sufficient funding to sustain adjustment and (2) improve the quality of adjustment programs by increasing donor coordination. In the end, donors pledged $5.8 billion in support of structural adjustment in sub-Saharan Africa through the SPA program for the years 1988-90.

With all this money going to support adjustment programs, and with adjustment programs being carried on in most of the countries of sub-Saharan Africa, it is striking that the issue is far from closed, and that adjustment continues to have a number of serious detractors. The criticisms of current adjustment programs center about four basic arguments: (1) adjustment programs don't work; (2) adjustment programs are not sufficient; (3) adjustment programs have adverse effects on the poor; and (4) adjustment programs are not politically sustainable. We will focus on the first two questions for the rest of this section, and discuss the third question in the two following section, and discuss the last question in the concluding section.

B. Does Structural Adjustment Work?

1989 saw an unseemly debate between the World Bank and the U.N. Economic Commission for Africa (ECA) as to whether or not the evidence demonstrated that structural adjustment was leading to increased growth. It has been clear for some time that the supply response of African countries to policy reform has been much more sluggish than many had hoped, and that adoption of a reform program did not necessarily lead to rapid growth.[3] It is also clear that there are some important methodological difficulties in attempting to disentangle the effects of structural adjustment from the effects of weather and war, as well as from the effects of changes in world prices and from increases or decreases in foreign aid.[4]

However, the evidence is not at all ambiguous. For example, look at the data presented in Table II. We have divided our sample into two groups of countries: (1) Those which were undertaking adjustment programs and (2) those which did not undertake adjustment programs. Many countries fall into both groups, adjusting for part of the period and not adjusting for the rest of the period. The data presented below represent annual averages for those years countries either were or were not adjusting. For example Ghana was not in a reform program for the years 1980 to 1982, but was a reformer for the years 1983 to 1987.

TABLE II: AFRICAN ECONOMIC PERFORMANCE UNDER ADJUSTMENT
(ANNUAL AVERAGE, 1980 to 1987)

	WHILE IN REFORM PROGRAM	WHILE NOT IN REFORM PROGRAM
GROWTH OF GDP (%)	2.90	1.00
AGRICULTURAL GROWTH (%)	4.07	1.38
RESOURCE BALANCE (% of GDP)	6.79	9.69
TERMS OF TRADE (% change)	-1.56	-2.88
FISCAL DEFICIT (% of GDP)	-5.74	-7.39
CREDIT EXPANSION (%)	16.26	25.85
NOMINAL EXCHANGE RATE (1980=100)	45.88	79.42
INFLATION RATE (%)	20.04	24.56
GROWTH OF IMPORTS (%)	2.39	-5.35
GROWTH OF EXPORTS (%)	4.08	-1.11

SOURCE: Calculated from data presented in UNDP/World Bank, African Economic and Financial Data (1989). Data present unweighted averages.

Clearly reformers had higher rates of growth of output, agriculture, exports and imports than did non-reformers. Table II also presents data on two key variables which represent the external economic environment -- the resource balance (or the degree of foreign saving as a percentage of GDP), and the annual average change in the terms of trade. While reformers experienced slightly less negative terms of trade changes than did non-reformers, they also received less foreign capital flows. In other words, reformers built up less debt than non-reformers, even while experiencing higher rates of growth. In key macroeconomic performance variables, reformers had lower fiscal deficits, lower rates of increase of domestic credit, and much higher nominal devaluations of their exchange rate. They also experienced slightly lower inflation rates.

To further test these results, regression analysis was performed to attempt to disentangle the effects of adjustment programs from those of external events such as changes in the terms of trade or levels of foreign savings. The results are presented in Annex II. Suffice to say that these results reconfirm the importance of being in an adjustment program as a determinant of both economic growth rates and agricultural growth rates. Being in an adjustment program leads to a rate of overall growth that is two percent higher, and to a level of agricultural growth that is three and a quarter percent higher than not being in an adjustment program. Clearly external economic events are important as well; an increase in foreign savings equal to one percent of GDP leads to an increase of one-tenth a percent of GDP growth, while a decline in the terms of trade of, say 10%, would lead to a decline in the overall growth rate of 0.9%.

> The clear and unmistakable conclusion from the data is that adjustment programs do work, and that they lead to substantial increases in overall growth, even when external economic events have negative impacts.

This is consistent with the World Bank's review of adjustment programs world-wide, which states that adjustment programs led to an increase in growth rates of 2% per year compared with 1981-84, increased the domestic savings rate by 4 percentage points and increased export to GDP ratios by 5%.[5]

C. What Keeps Structural Adjustment Programs from Leading to Even Higher Rates of Growth?

While adjusting countries did better, they did not do nearly well enough. The economic transformation of Africa is going to require growth rates well in excess of 5% of GDP until population growth rates begin to fall. Three percent growth is unacceptable.

African countries are in the position of Alice in Through the Looking-Glass, having to run as fast as they can just to stay in place. Why hasn't structural adjustment led to GDP growth rates of 6% or more?

Four answers suggest themselves. First, the data are not accurately capturing the degree of economic expansion that is occurring as a result of adjustment programs. There are good reasons to believe that this answer is valid, at least in part. Much of the economic activity in Africa occurs in the "informal" economy -- small, private non-agricultural firms producing everything from tools to furniture to retail services to construction to transport. In repressed economies, this sector seems to be the most vital, and as access to foreign exchange opens up, and as agricultural incomes increase in response to improved marketing and higher cash crop prices, the informal sector expands rapidly. Very little of the growth in this sector is captured by current data systems. Yet, increasingly, we are seeing estimates that the informal economy may be as large as one-quarter to one-half of the entire economy.

Second, many economists have argued that while structural adjustment is necessary, it is far from sufficient, and the more traditional constraints of sparse populations, high rates of population growth, low levels of infrastructure, lack of educated and trained people, etc., are limiting the growth response of African economies. Indeed, the economic crisis has seen a substantial deterioration in economic and social infrastructure. It is very difficult to disentangle the effects of policy from those of scarce capital. The issue is really whether or not policy failures have pushed economic activity well below what it would have been if policies had been more appropriate. If this is true, then one would expect that there would be fairly sizeable jumps in production and income in the first years of an adjustment program as producers began to move output back to full capacity levels. Once full capacity is approached, then the other capital and technology constraints kick in.

Certain stylized facts suggest themselves:

1. In many African countries, economic decline has persisted over a long period of time, despite substantial new investments;

2. In the formal sector, most factories and other businesses run at much less than 50% capacity;

3. Unemployment and underemployment are thought to be endemic; and

4. In many, though certainly not all, African countries, there are substantial tracts of underutilized land.

Taken together, these facts suggest that African land, labor and capital are capable of producing outputs much in excess of what are currently being achieved. (It is also true that, particularly with respect to import-substituting manufacturing, portions of the existing capital stock are inappropriate under new incentive regimes). While there are undoubtedly exceptions, it is not likely that most African economies are currently producing at full capacity, and there are still large gains to be enjoyed from improving the efficiency of resource use.

Third, it has been argued that external circumstances, coupled with the debt overhang, have led to the underfinancing of reform programs. This is certainly true, in part. While adjusting countries as a group have seen their exports grow in constant dollar terms by 4.1% a year, their imports grew by only 2.4%. The difference is (1) debt service; (2) terms of trade losses; and (3) the building up of reserves. While import and export performance is much better in adjusting than non-adjusting countries (the latter showing declines in imports of 5.4% per year and in exports of 1% per year), the sluggish growth of imports is undoubtedly impeding overall economic growth.

Finally, it is probably true that most adjustment programs have been relatively weak, taking much too long to implement, and leading to only partly liberalized and stabilized economies. If we look at four key measures (exchange rate policy, fiscal policy, monetary policy, and agricultural policy), we can get some idea of how strong or weak adjustment programs have been in Africa. Only two-thirds of the programs have led to freely convertible foreign exchange regimes, and including the CFA countries, fully half of the reforming countries have seriously overvalued exchange rates. Tax collection remains a problem for many African countries, with less than half of the reformers collecting 20% or more of GDP as tax revenues. About half the countries have been unable to reduce their fiscal deficits below 5% of GDP, and less than half have been able to reduce monetary growth rates to less than 10% per year. Finally, in the agricultural sector, parastatals still play an important role in marketing in two-thirds of the reforming countries. Indeed, parastatal divestiture has gone very slowly.

Several problems stand out:

1. the overvaluation of the CFA franc;
2. the shortfall in tax revenues in the majority of African countries;
3. the failure to reduce fiscal deficits to reasonable levels;
4. the failure to control monetary policy in non-CFA countries;
5. the continued control of export marketing by parastatal organizations; and
6. the continued lack of mutual confidence between the government and the private sector.

In addition, whole areas of policy have yet to be effectively addressed. With the exception of Senegal, no adjustment program has addressed labor issues; corruption and control of investment licensing has been largely ignored by adjustment programs; and much remains to be done in the area of legal structures for contract enforcement.

In summary, adjustment programs have led to accelerated growth, particularly if one takes cognizance of the growth that is uncounted in the informal sector. However, the impact of these programs has been muted because of external factors, such as deterioration in the terms of trade and high levels of debt service, and by the fact that adjustment programs in Africa have not been as comprehensive and as deep as they needed to be if they were to engender a substantial and immediate supply response. Finally, adjustment programs have not been accompanied by a structural change in the attitudes of both the public and private sectors, and thus has not led to a resurgence of private investment in the formal sector.

However, the most vocal criticism of adjustment programs is not that they haven't worked, but that they have worked too well, leading to decreased welfare for the poorest and most vulnerable segments of the population. This question will be addressed in the next section.

IV. STRUCTURAL ADJUSTMENT AND POVERTY

There are few subjects that have generated more heat and less light in recent years than the question of whether or not structural adjustment programs in Africa have reduced the welfare of the poor. The Secretary General of the United Nations has stated the concerns of many people very clearly:

> The implementation of structural adjustment programs has given rise to general concerns. The limited objectives and short-term perspectives of these programs are sometimes viewed, by African countries and others, as being at variance with the objectives of more balanced long-term development. Their human and social costs have often been seen as out of proportion with their real or intended benefits. The most vulnerable population groups, in particular women, youth and disabled and the aged, have been severely affected, directly and indirectly, by such measures as the withdrawal of subsidies on staple food items, the imposition of limits on wage increases at below the inflation rate, the retrenchment of civil servants and private sector personnel frequently belonging to the lowest salary categories, and the cutting of expenditures on social services, including health and education and basic infrastructure. Access to food has become more difficult for large segments of the population, with the result that malnutrition has increased, particularly among children, infants and pregnant women.[6]

However, serious studies of the available evidence fail to document the propositions put forth by the United Nations. For example,

> What is remarkable is that the best data on children's status in most of the countries reviewed, that on infant and child mortality -- shows continued declines nearly everywhere. Nutritional status indicators also typically show improvement and so do school enrollment figures, despite downturns in governmental expenditures on health and education in some countries.[7]

and

> Adjustment programs may have deleterious effects on health and nutrition, but the empirical evidence presented to date is not very convincing due to confusion among levels, trends, and deviations from the trends and questionable data interpretations.[8]

and

> There is no evidence, at least on a regional basis and for countries with reliable data, of a slowdown in the pace of decline in child mortality. In fact the decline in child mortality appears to have accelerated in sub-Saharan Africa, despite the poor economic performance of many countries.[9]

and

> Certainly any conclusion about the impact of economic adjustment in developing countries on health and nutrition must be tentative at this time because of the conceptual and empirical problems in assessing such effects...[D]emonstrable impact on health and nutrition has been surprisingly limited. This assessment contrasts sharply with the view [of UNICEF] that the pervasiveness of multiplied negative effects of economic adjustment policies on health and nutrition in developing countries has been demonstrated systematically. The available systematic evidence does not support such an assertion.[10]

The framework for understanding these issues is at once simple and complicated. People (including poor people) are better off when the prices of the things they sell (their labor, the services of their capital, their skills, their land, or the produce of their labor, land, etc.) go up faster than the prices of the things they buy. Their welfare also increases when the value of the services provided by the government increases faster than their tax liability.

There are three reasons why the linkage between policy change and changes in prices or wages or taxes or government expenditures is not nearly as simple as it first seems. First, policy changes have direct and indirect impacts, and while it's relatively easy to measure the direct impacts, indirect impacts by their very nature are hard to track. Second, ceteris are never paribus. Exogenous variables (the weather, war, world copper prices, the U.S. budget deficit, etc.) are always changing and intermediating the linkages between a policy change and its outcome. Finally, the real issue is between what happens when policies change compared to what happens when they don't. A country can decide to continue to run deficits in its balance of payments. At some point, foreigners cease lending, foreign exchange becomes scarce, and black markets arise. The question to be addressed is one economists call "the counterfactual." The appropriate comparison is not between what happens after an exchange rate is adjusted versus what the situation was before adjustment; rather one needs to compare what happens after an exchange rate is adjusted to what the situation would have been if no adjustment had been made.

To be more concrete, take the example of Madagascar. It is clear that the adjustment program beginning in 1983, which eliminated rice price controls, reduced and eliminated rice subsidies and was marked by substantial devaluations, led to acontraction in income for most groups. However, it is important to remember that all Malagasy incomes had been raised to unsustainable levels by foreign borrowing, and the decline was inevitable as those debts came due. Thus, the adjustment program only provided a structure for the contraction that inevitably was going to take place; adjustment meant that the contraction could take place in an orderly fashion, and that recovery would be quicker, and more sustainable.[11]

We are not yet at the point where we can answer the complicated questions. A.I.D. is funding a major research effort with Cornell University which is intended to develop methodologies that can answer these complex questions and start providing these answers. Nevertheless, we do know enough about the characteristics of poverty in Africa and the characteristics of adjustment programs to begin to answer the simple questions concerning the impact of adjustment programs:

1. What has happened to food prices and the ability of the poor to purchase food?

2. What has happened to the income of the poor?

3. What has happened to government expenditures in the social sectors?

A. Who are the Poor?

Studies from a number of countries (Cameroon, Cote d'Ivoire, Ghana, Madagascar and Malawi) give us a pretty good idea about who the poor are. Broadly speaking, the poor in Africa are rural rather than urban, and self-employed rather than wage laborers. In some countries, large proportions of the poor are concentrated in certain geographic regions, while in others they are spread more or less uniformly throughout the country. The following country profiles may be instructive:

CAMEROON:[12] Despite its relative prosperity, Cameroon still possesses large pockets of poverty. Approximately 40% of the population have per capita incomes lower than $225 per year. These people spend up to 60% of their incomes on food. Over 90% of the poor live in rural areas, concentrated primarily in savannah and high plateau areas. Over 80% of the poor heads of households have no education, and almost 90% are employed in the agricultural sector.

COTE D'IVOIRE:[13] While Cote d'Ivoire is a relatively urbanized country for Africa (41%), nevertheless, the poor (for our purposes we will define the "poor" as being the poorest 30% of the population) remain concentrated in rural areas. Six out of seven of the poor live in rural areas; of the poorest 10%, 19 out of 20 live in rural areas. Moreover, about 75% of the poor live in two geographic areas -- the East Forest and the Savannah. In those two regions, fully half of the households are found in the bottom 30% of income for the country as a whole. The poor are largely self-employed (95%) farmers (87.5%). Only 1.5% of the poor are employed either by the government or by parastatals, while another 3% are employed in the formal private sector. Over 70% of the poor receive some of their income from the sale of cash crops (cocoa, coffee, oil palm or cotton). Finally, the average income of the poor in Cote d'Ivoire exceeds the average income of a large number of African countries (including for example Mali, Malawi, Burundi)

GHANA:[14] Ghana's economic decline has meant that poverty is more pervasive in urban areas than it is in Cote d'Ivoire. While 50% of the population live in rural areas, 63% of the poor people (bottom 30%) live in rural areas. Almost half of the households in the Savannah region can be classified as poor, while in the other regions, it is less than one-fourth. As in Cote d'Ivoire, the vast majority (86%) of the poor are self-employed, with government and parastatal employees making up 8% of the poor. Cocoa farmers make up 17.5% of the poor (as opposed to 18% of the total population, while other farmers make up 62% of the poor (as opposed to 45% of the population as a whole). Interestingly, only 1.7% of the poor are classified as unemployed. The incomes of the poor in Ghana are about one-half of the incomes of the poor in Cote d'Ivoire.

MADAGASCAR:[15] Madagascar is much less urbanized than Cote d'Ivoire (19% of households live in urban areas), so it is not surprising that rural people comprise the vast majority (88%) of the one-third of the population which lives below the poverty line. There are no data currently on the geographic spread of poverty, though it is clear that incomes are lower in two of the six administrative districts. Not surprisingly, most of the heads of households (87%) in rural areas classify themselves as farmers; the median income of farmers is about 25% less than that of other occupations. In urban areas, it is the self-employed (artisans and the producers of small services) who have the lowest incomes.

MALAWI:[16] Poverty is pervasive in Malawi and affects all groups, such as smallholders, informal sector workers, and estate employees. Comparative data for chronic malnutrition show Malawi's levels higher than those for any other country in Africa for which comparable data exist. Some data suggest that the most vulnerable smallholder groups are those headed by females or by older couples with no children at home. It is clear that the average urban income is up to ten times the average rural income.

B. Economic Behavior of the Poor

As we have seen, poverty in Africa is largely a rural phenomenon. In some countries, such as Cote d'Ivoire and Ghana, rural poverty is more predominant in certain geographic areas, while in others, such as Malawi, poverty is more broadly dispersed geographically. Evidence from a number of studies conducted by Michigan State University and by the International Food Policy Research Institution (IFPRI) provides a number of insights into rural poverty:

1. The idea of the subsistance farmer, unconnected to the market, is largely a myth. Most rural households have multiple sources of income, with farming for market or for own consumption frequently providing less than 50% of income;[17]

2. There are as many farm families who are net purchasers of food as there are who are net sellers (see Table III);[18]

3. A substantial proportion (65%) of the food consumed by poor rural households comes from own production.[19]

TABLE III: SALES AND PURCHASES OF FOOD

COUNTRY	CROP	NET BUYERS	NO MARKET INVOLVEMENT	NET SELLERS
			(% of households)	
MALI (1985-86)	Coarse Grain	39	13	48
SENEGAL (1986-87)	Coarse Grain	30	40	29
SOMALIA (1986-87)	Maize	61	0	39
RWANDA	Beans	73	5	22
(1986-87)	Sorghum	66	9	33
ZIMBABWE (1984-85)	Maize (Communal Sector)	15-25	18-30	67-45

SOURCE: Weber, et. al. "Informing Food Security Decisions in Africa: Empirical Analysis and Policy Dialogue, (Michigan State University Department of Agricultural Economics Staff Paper No. 88-58, p. 3.

C. What has happened to food prices and the ability of the poor to purchase food?

One of the major criticisms of adjustment programs has been the belief that through devaluation, elimination of food subsidies and liberalizing markets, food prices would increase markedly, thus having negative impacts on food security for the poor. The facts speak otherwise. Purchased food is a relatively small portion of the poor's budget (typically, food expenditures equal 65% of total expenditures and purchased food equals 35% of total food expenditures, so that purchased food equals 23% of total expenditures). This means that a 45% increase in real food prices would be needed to reduce the real income of the poor by 10%.

However, it seems that food prices have fallen during adjustment, rather than risen. For Ghana, Malawi, Mali, Senegal, Niger, Somalia, The Gambia, and Tanzania, real food prices stagnated or fell during adjustment. In Madagascar, Kenya and Zambia food prices rose.[20]

Why did food prices decline under adjustment? Part of the answer was luck -- good weather and the decline in world grain prices, particularly rice. Another part of the answer is that the structure of markets before liberalization actually led to much higher marginal prices -- which are the prices paid by the poor. Before liberalization, cheap food was available in controlled markets, but availability was limited to those groups -- the civil servants and the army -- whom the government subsidized. For example, while 88% of poor households in Madagascar are located in rural areas, rural households received 4kg of subsidized rice per capita, while urban households received 114 kg per capita. Moreover, richer urban groups received 45% more in subsidized rice per capita than did poorer groups.[21] Illegal, black markets existed where costs were very much higher, since traders had to pay bribes in order to stay in business. The movement to one free market increased access to food, reduced marketing costs (including bribes), and actually reduced prices for the poor, even while raising prices for the privileged.

D. What happened to the incomes of the poor?

This is a much harder question to answer, given current information. In the first round of effects, those poor smallholders who produce export crops (such as cocoa producers in Ghana and Cote d'Ivoire) are likely to benefit. These benefits may be small, however, if the poor are unable to obtain needed inputs, such as fertilizer. While it is clear that real wages have fallen in the formal sector, and particularly among civil servants, this contraction has little direct impact on the poor, since less than 5% of the poor work in the formal economy. Thus, the poor are unlikely to be affected by contractions in civil servant or formal private sector employment.

The indirect effects of adjustment may be more important. Much of the poor receive part of their income from the informal sector, and there are some strong indications (see the section on Senegal in Part V of this essay), that the informal sector grows under adjustment programs as government regulation is reduced and access to foreign exchange is broadened.

E. What happens to Government expenditures under adjustment?

The most pervasive criticism of structural adjustment has been that expenditures for health and education contract drastically during adjustment. It's important, however, to recognize that, for most African countries, the role of the Government before structural adjustment has been regressive. The poor paid disproportionately more taxes and received disproportionately fewer benefits from government programs than did the population at large. For example, in Cote d'Ivoire, only 12% of household members in poor families attend primary school, while for the non-poor, 20% do. For secondary schools, the numbers are 2.4%

of poor households and 6.6% of non-poor households. Similarly, only 5% of the poor who were sick visited a doctor (over the 4 weeks prior to the survey), while 21% of the non-poor did.[22]

Therefore, it is not clear that a reduction in government services would have a negative impact on the poor, since they were not the prime beneficiaries of such services in the first place. On the other hand, the services that the poor do receive are likely to be the first cut.

Despite the cries of those opposed to adjustment programs, the available evidence does not permit the conclusion that adjustment programs have led to declines in social expenditures. The facts are that, for thirteen African countries undertaking adjustment programs in the 1980's for which data are available (see Table VI):[23]

-- health expenditures as a percentage of total discretionary government expenditure (i.e., government expenditures after interest payments have been subtracted out) increased in six and decreased in seven;

-- real health expenditures also increased in six and decreased in seven;

-- education expenditures as a percentage of total discretionary government expenditure increased in six countries, decreased in six countries and remained constant in one others;

-- real education expenditures increased in six countries and decreased in seven others; and

-- in three countries real education and health expenditures both rose, in four countries real education and health expenditures both fell, and in six countries one rose while the other fell.

TABLE VI: HEALTH AND EDUCATION EXPENDITURES AFTER ADJUSTMENT

	HEALTH EXPENDITURES		EDUCATION EXPENDITURES	
	(1980 =100)			
	before adjustment	after adjustment	before adjustment	after adjustment
Cote d'Ivoire	96.6	93.3	116.0	129.6
Ghana	67.7	146.3	56.2	110.8
Kenya	91.4	103.3	91.1	114.1
Madagascar	82.4	89.5	95.9	89.4
Malawi	85.2	79.7	102.8	110.3
Mauritius	108.4	118.0	104.4	98.4
Niger	84.3	88.3	63.1	58.2
Nigeria	123.1	74.1	140.0	92.2
Senegal	100.0	117.2	100.0	102.3
Tanzania	101.5	91.5	99.9	91.5
Togo	98.3	87.3	124.5	99.5
Uganda	158.2	96.5	144.0	151.5
Zambia	101.5	82.9	109.5	93.0
SIMPLE MEAN	99.9	97.5	103.6	96.0

Source: David Sahn, "Fiscal and Exchange Rate Response in Africa: Considering the Impact Upon the Poor (forthcoming).

There is no clear evidence that structural adjustment programs in Africa have had, in general, negative impacts on the poor. In most countries for which we have data, food prices fell after adjustment, although in some countries food prices rose. While there has been a clear reduction in real wages in the formal economy, this has little direct impact on the poor since they rarely participate in the formal economy. There is no systematic evidence that adjustment has led to reduction in education and health spending; indeed, countries undergoing adjustment are as likely to increase these expenditures as to reduce them.

V. WHY SHOULD A.I.D. BE INVOLVED IN STRUCTURAL ADJUSTMENT?

The preceding sections have made the case (1) that structural adjustment in Africa is necessary; (2) that it has had a beneficial effect on African economic growth; and (3) that there is no evidence that these programs have had a negative impact on the poor in Africa. Even if all this were true (and we believe it is), it still does not necessarily mean that A.I.D. should be involved in the adjustment process. Shouldn't adjustment be left to the World Bank and the IMF, institutions with the requisite expertise and resources, and A.I.D. concentrate on more traditional project activities in agriculture or human resource development? With A.I.D. becoming increasingly marginalized as a donor in Africa (less than 6% of total economic assistance to sub-Saharan Africa), with real assistance levels falling, with A.I.D. now the seventh or eighth largest donor, what impact can A.I.D. have on a structural adjustment process that costs billions?

There are two fundamental reasons which argue for A.I.D.'s continued involvement in the structural adjustment process. The first is macroeconomic -- the need for substantial flows of foreign exchange to increase the levels of imports available to reforming economies. The second reason is more subtle -- A.I.D.'s position as an agency of the U.S. Government, its access to the particular expertise and genius of American scholars and businessmen, and its style of operation, which depends on maintaining resident missions in each country of emphasis, gives A.I.D. comparative advantage in the area of supporting policy reform.

A. The Macroeconomic Rationale

Almost all adjustment programs take place in an economy in crisis. Typically, the core of that crisis is a shortage of foreign exchange, and a substantial disequilibrium in the balance of payments. The stabilization phase of the adjustment program includes demand contraction and exchange rate devaluation, both of which are painful and politically difficult. This is why adjustment programs are accompanied by balance of payments support. The more donors are able to support adjustment programs with untied foreign exchange, thus increasing the supply of resources, the less contraction and the less devaluation that is necessary. This, in turn, means that a sharper adjustment can take place accompanied by a quicker recovery with less political cost.

As the adjustment program moves into the growth phase, foreign exchange availability remains important. Typically, economies are still running at well below full capacity, and the shortage of foreign exchange for raw materials and spare parts is particularly onerous. Adjustment frees up the market by providing access to foreign exchange, eliminating price controls, etc. But the new high cost of foreign exchange makes adjustment very expensive, and acts as a brake on rapid growth. With export prices stagnant or falling, and with debt service so onerous, African countries are going to need substantial inflows of untied balance of payments assistance for five to ten years, until their own export industries are restructured and debt servicing problems reduced.

The World Bank's Special Program of Assistance (SPA) has as its purpose mobilizing substantial amounts of balance of payments or import support for adjustment programs in the debt-distressed countries of sub-Saharan Africa. While few donors, by themselves, have sufficient resources to make a difference, the bilateral community, as a group, has resources which dwarf those of the World Bank. The mobilization of these resources in support of adjustment programs is absolutely necessary if these programs are to succeed, and if Africa is to get moving again. Because the influence of the United States is substantially greater than its aid levels would lead one to expect, it is very important that we participate in this process.

B. A.I.D.'s Comparative Advantage

Moreover, we have something vital to add to this process. With few exceptions, the other bilateral donors lack the economic expertise or interest to provide substantive advice on the reform process. Without A.I.D., there would be only one voice in adjustment matters, that of the Bretton Woods Institutions. The Bible says that in the multitude of counsellors there is safety (Prov. 11:14). Despite the acknowledged competence of the World Bank and the IMF, there is much benefit for African Governments to be able to hear another voice on these matters.

Unlike the Fund and the Bank, A.I.D. maintains substantial resident missions which have, perhaps, a greater sensitivity to the social, cultural, and political nuances of African societies. The presence of A.I.D. staff, and their almost daily dialogue with African Governments, also leads to a different and more collegial modus operandi from that of the World Bank and IMF. An example of this difference was pointed out in a recent evaluation of an A.I.D. policy reform program in Mali:

> "U.S. assistance was particularly critical in the early years of the EPRP [Economic Policy Reform Program]. At that time negotiations with the IBRD on structural adjustment had bogged down, and the IMF standby was collapsing. The U.S. presence and continued support gave an otherwise beleaguered GRM [Government of the Republic of Mali] an important psychological lift.

> The project [the Mali African Economic Policy Reform Program] is seen as very human, "structural adjustment with a human face"...The Malian and American managers are viewed as concerned about what happens to public sector employees...The open office doors of project managers are also cited. People interviewed spoke highly of the assistance. One participant called it "a people project" rather than "a bricks and concrete" project.[24]

Finally, the United States Government is the most consistent and vigorous proponent of free market solutions to economic problems. American economists have been trained in a long tradition of neoclassical analysis, examining market failures and the role of government in dealing with these failures. American businessmen provide a deep wellspring of experience and information on how businesses can thrive in an unregulated market environment. With all this knowhow, and with the special interest of the United States in promoting liberal, market-led economic systems, it is particularly appropriate that the United States should be the leading bilateral donor supporting structural adjustment.

C. What Niche should A.I.D. Programs Occupy?

Between 1985 and 1989, A.I.D. has funded 27 separate policy reform programs in 22 different African countries. The total life-of-project cost of these programs equals $760 million [see Annex I]. In addition, A.I.D. used PL480 Title I and II programs and Food for Progress to support policy reforms in agriculture in seven countries. A number of common themes emerge from our experience in designing and implementing these programs:

-- By and large, these programs are limited to sectoral adjustment problems; we do not see ourselves as being in the macroeconomic adjustment business;

-- The hallmark of A.I.D. policy reform programs is the way in which they integrate resources -- dollars, food assistance, local currencies, studies, training and technical assistance -- to help African Governments implement reform programs they have already decided to undertake;

-- There is virtually no sectoral issue that isn't grist for our mill. We have undertaken programs in agricultural marketing; agricultural input marketing; private sector deregulation; transport and rural roads; finance; public administration; privatization; natural resource management; decentralization; small and medium enterprise; trade policy; education; health; and population;

-- More and more, these programs are emerging out of the problems encountered in, and the understanding of those problems emerging from, from our traditional project assistance portfolio.

-- Many, if not most, of these programs are associated either directly or indirectly with World Bank adjustment programs;

-- The World Bank programs may be envisioned as being horizontal cuts across the broader parts of the economy, while A.I.D.'s more modest efforts are frequently vertical cuts, going deeper into one specific sector; and

-- World Bank programs typically require Governments to undertake certain actions which the Bank periodically monitors; A.I.D. helps Governments implement their reforms by providing technical advice and studies to weigh options. and by targetting part of its assistance to address some of the costs of adjustment.

D. How Effective Have A.I.D.'s Programs Been?

Many of A.I.D.'s programs are now sufficiently mature to be subjected to hard evaluation. While there are a number of failures, by and large, the record of these programs is much better than we hoped when we started out, particularly given the nature of the problems. In examining these programs, we will group them into four categories: (1) agricultural market liberalization; (2) fertilizer market liberalization; (3) trade and industrial policy; and (4) social service restructuring. These four groups cover about 85% of all of our AEPRP/DFA reform programs. Moreover, all of the PL480 programs fall into these groups as well. If we understand how these programs have worked, we'll understand by and large how A.I.D.'s reform programs have worked in Africa.

D.1 Agricultural Market Liberalization

The most important policy area in terms of number of programs in which A.I.D. has been involved is the liberalization of agricultural markets. African governments, like their colonial predecesors, created parastatal marketing monopolies, set producer and consumer prices, interfered with private trade, and frequently subsidized urban consumers. As a result, the costs of marketing skyrocketed, private sector marketing declined and black markets mushroomed. Governments soon realized that they could afford neither the subsidies nor the market inefficiencies, and that they were killing the golden goose, the peasant farmer.

We will examine the following programs: the Mali Title II Section 206 Grain Market Liberalization Program; The Gambia Title II

Section 206 Rice Market Privatization Program; the Madagascar Food for Progress Rice Market Liberalization; the Zambia Multi-Channel Agricultural Marketing Program; the Togo Cereals Export Liberalization Program; the Niger Agricultural Sector Development Grant; the Uganda Non-traditional Export Promotion Program; and the Mozambique Private Sector Rehabilitation Program. [Not included because the programs are too new are the FY1988 agricultural export liberalization programs in Madagascar, Niger, and Guinea-Bissau].

The Mali Cereals Marketing Restructuring Program:[25] In many ways, this is the most unique policy reform program in A.I.D.'s portfolio. It represents an attempt by the ten major food aid donors in Mali to join forces to help reduce the risk to Mali of liberalizing a cereals market that was highly overregulated. A parastatal called OPAM was the only legal buyer of grains, and buying and selling prices were fixed. Private trade was repressed by the economic police, although OPAM never controlled more than 20-40% of the market. The liberalization effort, itself, was based on a number of incorrect assumptions: (1) Mali would always have a food deficit; (2) official producer prices matter; and (3) most farmers are net sellers.

The intention of PRMC (the French acronym by which the multi-donor program was known) was to raise prices to farmers, thus encouraging more production and stabilizing food supplies. In fact, the program took place during a time of good harvests and most grain was already being sold on the black market at relatively high prices; liberalization actually led to a fall in prices, given the good rains.

There were three beneficial impacts of the program:

(1) The operating deficit of OPAM declined from $8.7 million in 1981/82 to $2.8 million in 1985/86. Storage and waste losses fell from about 12% of grain stocks to 2.5% for domestic grains and 5% for imports.

(2) Private trade expanded and the transactions costs associated with such trade were reduced. This is difficult to quantify, but a survey of 118 grain wholesalers in 1985 revealed that 39% had entered the trade since liberalization. There was also an increase in specialization and a decrease in risk premiums.

(3) The majority of consumers, who were formerly excluded from the OPAM distribution system, benefitted. This is particularly true of rural households, the majority of whom are net buyers of grain, who can now buy in neighboring

villages (formerly they had to spend several days travelling to an OPAM warehouse, obtain necessary signatures, and stand in line) in small lots, and on credit.

Clearly, the Malian Government and the donors did not understand the structure of grain markets in Mali. They did realize that the existing system wasn't working and needed to be fixed. They also were willing to stick with the program over a long period of time (10 years) and to adjust the reforms to new information.

The Gambia Title II Rice Market Privatization Program: Between 1986 and 1989, A.I.D. provided 24,000 tons of rice (worth $6.2 million) to the Government of The Gambia as part of a policy reform program which supported the liberalization of the rice market and reforms in the groundnut trade. In the rice sector, the Government agreed to decontrol prices and to allow private importation and trade. In the groundnut sector, an export tax of 12% was eliminated, the groundnut parastatal divested itself of a number of other business assets, and a plan was set forth for privatization of groundnut marketing. As of this writing, the private sector can compete in all areas of the marketing chain except export, and a plan is in place for privatization of this last remaining function in five years.

For the most part, liberalization has resulted in reduced government subsidies, abundant supplies of rice, and prices that have increased less than luxury food prices (beef) and more than local grains. Since 1985, rice imports have increased 80%, most of which is re-exported to Senegal, providing important tax revenues. On the other hand rice liberalization has had limited impact on domestic production.

The Madagascar Food for Progress Rice Liberalization Program: "In the early 1980's, Madagascar's rice sector was characterized by stagnating production, large consumer subsidies, an inefficient public marketing system and growing rice imports."[26] Producer prices were fixed well below import parity, consumers with access to official rice were subsidized and marketing was an official monopoly of the Government. Demand for subsidized rice increased, while marketing through official channels declined, so that by 1982 the Government imported one-fourth of the rice consumed.

Beginning in 1983, the Malagasy Government switched directions, raising consumer and producer prices.[27] Market liberalization proceeded in stages between 1983 and 1987. A.I.D. began assisting this liberalization process in 1986 with a three year Food for Progress grant. The purpose of this grant was to provide rice to constitute a buffer stock to give the Government some assurance that it could intervene in the market if supplies became too scarce or prices too high.

The liberalization was a great success. The number of private rice mills doubled in five years, as did the number of registered rice assemblers. While nominal rice prices increased by 35% between 1984 and 1988, real prices increased by 48% between 1984 and 1986, but then plummetted in 1987 and 1988 to 80% of the 1984 level. On the other hand, real prices to farmers increased by 29% between 1984 and 1988. The difference is the substantial decline in marketing margins. In 1984, farmers received 41% of the retail price, whereas by 1988 they received 66%.

Nevertheless, a number of caveats should be mentioned. Domestic production has not increased any faster during liberalization than it did prior to liberalization. This is due to a number of factors, including: lack of technological change, problems in input delivery, and some lack of confidence in the way in which the new marketing arrangements will operate. A more lasting problem is the Government's reluctance to give up the advantages of providing cheap food. The firm PROCOOPs, widely considered to be controlled by the ruling party, imported large stocks of rice from North Korea, and distributed these stocks in some urban areas at below market prices. As a result of these imports, and large carryover stocks, deliveries under the A.I.D. Food for Progress program were suspended after one year, since Madagascar no longer needed food aid rice.

The Zambia Multi-Channel Agricultural Marketing Program (ZAMCAM):[28]

In 1984, realizing that its copper-based economy was on the verge of collapse, Zambia entered a major reform program with the IMF and the World Bank. One key issue was maize and fertilizer marketing. Producer prices had long been suppressed, food and fertilizer prices subsidized, and all maize and fertilizer marketing controlled by government parastatals. This marketing system was extraordinarily inefficient, with stories of farmers being unpaid and crops rotting at storage depots common.

Yet agricultural marketing was central to structural adjustment, for Zambia's future lay in agriculture, not in copper, and that meant that changes in producer incentives and in marketing systems were essential for long-run growth. A.I.D. joined with the World Bank in developing a marketing reform program that was to lead to elimination of food and fertilizer subsidies, and the development of private agricultural trade in parallel with the official system.

After the first round of subsidies was removed, the Government stumbled in its attempt to partially decontrol maize meal prices. It was so inept in its implementation of maize pricing and subsidy policies, that the maize mills, both public and private, refused to operate, and hoarding of stocks became commonplace. The result was food riots in the copper belt in which fifteen people were killed. Five months later, alarmed at the rapid devaluation of the kwacha (itself driven by a rapidly expanding money supply as the government financed its expenditures on subsidies and other unaffordable items), Zambia announced its abandonment of the IMF/IBRD program.

A.I.D. disbursed the first seven million dollars of the ZAMCAM program, after compliance by the Government of Zambia with first tranche conditionality. The remaining $18 million has yet to be disbursed. What went wrong? In the first place, the adjustment effort Zambia was undertaking was extraordinarily difficult. Given the fall in copper revenues, real incomes, particularly for the urban worker, were bound to decline, and in fact declined by as much as 50%. [At this date, Zambia's per capita income has fallen from $450 to $250, and it is now considered a low income country]. The likely beneficiaries were the farmers who had no political voice. So the politics of the reform program were daunting, and few observers gave the chance of success at better than 50:50. But secondly, the Zambians were woefully weak in implementation, and made innumerable mistakes, of which maize pricing was only one. In retrospect, all the donors should have provided much stronger hands-on help in implementing the reform program. It is interesting to note that, as Zambia once again enters into an adjustment adventure, the Government has appointed a Canadian as Director of the Reserve Bank of Zambia.

While A.I.D. was actively involved in dialogue with the Government throughout this period, it seems clear that much more technical assistance was needed, both in the agricultural ministry and in the Central Bank.

<u>The Togo Cereals Export Liberalization Program</u>:[29] In 1986, A.I.D. and the Government of Togo reached agreement on a program whereby A.I.D. would provide $7 million in budget support (for agricultural credit and rural roads) and $850,000 in technical assistance (designed primarily to set up a market information system) as part of program supporting the liberalization of Togo's cereal export trade. The Government of Togo had banned cereal exports in order to make sure that adequate supplies of grains were present in Togo to meet domestic demand. However, A.I.D. believed, and convinced the Togo Government, that export trade would increase prices to producers, giving them an incentive to increase production and would, in the long run, increase food security.

A.I.D. discussed these issues with the World Bank which agreed to support the A.I.D. initiative. A complex system of export licenses was put in place, with the number of licenses to be granted depending on market information on domestic production, stocks, and demand. The Togolese Government met the letter of the conditions precedent for disbursement, but few licenses were ever granted.

The Togo program design was seriously flawed. In the first place, the designers never came to terms with the fact that the official ban on exports was widely ignored, as traders frequently exported grains across porous borders. Clearly, the illegality of these transactions raised costs, but it is unclear how much would be saved by legalizing the export trade. Secondly, the design was based on the experience of the crop year 1985/86 when substantial exportable surpluses existed. Not once in the subsequent harvests have the exportable surpluses of grains exceeded 10,000 metric tons. The economic impacts of the program have been minimal.

Moreover, there was a substantial disconnect between A.I.D. and the Togolese Government. The Government never did buy into the idea of a free market in grains, believing food security was too important to be left to the market. They believed that this program provided a mechanism for more efficient management of the grain market, and viewed export licensing as a final step rather than an intermediate step to full liberalization.

The Uganda Non-Traditional Export Promotion Program: In 1988, A.I.D. granted the Government of Uganda $15 million as part of a program to increase non-traditional exports and farm incomes. The Government created a mechanism whereby exporters of non-traditional commodities (everything but coffee) could retain foreign exchange. In 1988, non-traditional exports equaled $15,000,000. In 1989, the first year of the program, export licenses were issued for $72,000,000 worth of exports. While actual exports are likely to be much lower than $72,000,000, there is evidence, though no good data, that non-traditional export volumes have doubled.[30] These included such commodities as maize, hides and skins, cotton, tea, beans, flowers and horticultural crops. About half of these exports are destined for African markets, and half for European markets.

The Mozambique Private Sector Rehabilitation Program:[31] Beginning in 1984, A.I.D., through a series of commodity import programs, has provided over $60 million of assistance to the commercial farming sector of Mozambique. The commodities -- seeds, fertilizer, tractors, agricultural implements, and transport equipment -- have been the means by which commercial farming in three key areas of Mozambique has been revitalized. Connected with these inputs has been an agreement with the Government of Mozambique to eliminate price controls on a number of key commodities -- fruits and vegetables and roots and tubers -- and to allow private trade in these commodities. The Government has also moved to reduce the acreage of state farms and to allow expansion of private farming.

The importance of this program is much greater than its apparent impact. The Government remains concerned about the predatory behavior of private traders, and has claimed that both producers and consumers suffered from liberalization. A study by A.I.D and the World Bank goes a long way to debunk these fears. Both producers and consumers have benefited. Real consumer prices have declined while real producer prices have increased. Trader margins are reasonable, given the perishable nature of the commodities.

What is important is the demonstration that private marketing works. At some future date, when the fighting in Mozambique comes to an end, the economy will return to normalcy. It is vitally important that Mozambique be ready to encourage private trade in maize and other basic food crops.

The Niger Agricultural Sector Development Grant:[32] The Niger Agricultural Sector Development Grant (ASDG) was the first comprehensive sector adjustment program funded by A.I.D. in Africa. Begun in 1984, it consisted of $40 million in budget support and $4 million in technical assistance. The budget support was used to fund investments in the agriculture and rural development sector.

The reform program was comprehensive and included the following elements:

-- reduction of input subsidies to 15%;
-- increased private sector marketing of agricultural inputs;
-- abandonment of uniform national grain pricing;
-- expanded private sector marketing of grains;
-- creation and expansion of village level grain banks; and
-- reduction of regulations on cowpea and livestock exports.

The Government of Niger wholeheartedly implemented these reforms. There is little doubt that private trade in agricultural inputs and commodities has expanded substantially. The drain on government resources in operating the parastatals involved in grain and input marketing has been reduced by perhaps $10 million per year. The ASDG design, unfortunately, did not do an adequate job of tracing household level data, so that it is difficult to determine what has happened to producer and consumer income as a result of this program.

One other difficulty needs to be mentioned. The long term sustainability of the ASDG program depends on the creation of a strong, independent cooperative movement to represent farmers' interests and to give farmers market power and economies of scale. The transformation of the existing, highly centralized, highly politicized cooperative structure into one that is member controlled has been slow in coming.

<u>Conclusions</u>:

While these programs have not all been successes, it is clear that the successes outnumber the failures by a factor of about three to one. Several conclusions stand out:

-- The biggest impact from market liberalization is the reduction in marketing costs that results in the increase of incomes of both producers and consumers;

-- In most liberalization experiences, real consumer prices have fallen (this is consonant with the continent-wide data presented in Section IV);

-- Most Government monopolies were honored in the breach, and illegal parallel markets existed in most areas (Zambia is an exception) prior to liberalization. Nevertheless, the illegality of these markets substantially increased transactions costs and marketing margins;

-- Despite decades of suppression, despite poverty, despite sparse populations, despite war, there exists a broad trading community ready to enter into the input and commodity markets in most countries; and

-- Most liberalized markets are competitive, with marketing margins reflecting real costs of transportation and assembly; none of these cases demonstrate the existence of a rapacious, oligopolistic private trading system.

D.2 Fertilizer Market Liberalization

The case for liberalizing fertilizer markets is similar to that for liberalizing agricultural markets in general. There is an important twist, however. Governments which have kept commodity prices low attempt to redress the balance by subsidizing fertilizer. The economic case for fertilizer subsidies is based on the idea that adopting new technologies is risky, and that conservative farmers will adopt this important technology more slowly if they have to pay full price for fertilizer. The subsidy was justified as a temporary measure needed to promote agricultural intensification. While this idea has merit, the problem is in the execution. Limited government budgets lead to limited resources for subsidies, which lead to limited importation of fertilizer. So less fertilizer is available, and since it is underpriced, it is rationed, frequently to the politically powerful, not to the economically needy.

A.I.D. has supported a number of fertilizer liberalization programs. We will examine four -- programs in Malawi, Kenya, Guinea and Cameroon. The Ghana program is too new to review at this time.

The Malawi Fertilizer Subsidy Removal Program:[33] In 1985, A.I.D. and the Government of Malawi agreed on a three-year, $15 million program to reduce fertilizer subsidies from 27% to 12%. This was not an easy decision for the government to undertake. The most important economic and political issue in Malawi is food security. The Government was wary of any policy change that might threaten overall production of maize and force Malawi to become an importer of maize. They were also concerned about the squeeze an increase in fertilizer prices would put on agricultural incomes. In addition to reducing fertilizer subsidies, the program called for the gradual shift from low analysis to high analysis fertilizers (HAF), fertilizers with greater quantities of nutrients per kilogram.

The first two tranche releases went smoothly, with the subsidy reduced to 17% and the shift to HAF effectively implemented. Indeed, 1986 was a year of bumper harvests. However, in 1987, a number of factors suggested to the Government that their goal of food security might be threatened. First, the price of fertilizer shot up in terms of Malawi kwacha. This was due to higher purchase costs and to a substantial devaluation of the kwacha. Second, Mozambiquan refugees poured across the border into Malawi (as many as 30,000 a month) seeking safety from the fighting in Mozambique. These refugees were expected to increase the demand for food. Third, the quantity of maize marketed by smallholders through official channels fell markedly.

The Government felt that it could not pass on to farmers the full increase in fertilizer costs under these circumstances, and the fertilizer subsidy rose to its original level of around 27%. After long discussions between A.I.D. and the government, in which A.I.D. pointed out that the shortfall in maize marketing was more likely to be due to the decline in the price of maize relative to that of groundnuts and other crops, rather than to any increase in fertilizer price, A.I.D. and the Government of Malawi agreed that the conditions for the release of the third tranche of $5,000,000 had not been met, and those monies were deobligated.

The subsidy reduction objectives of the Fertilizer Subsidy Removal Program were not met. However the shift to HAF exceeded expectations. In 1985, about 50% of the fertilizer nutrients were imported as HAF; by 1988, that number increased to 72%. This shift saved the economy about $5,000,000 in 1987/88, and more in each subsequent year. So even if the subsidy removal program has stalled, the shift to high analysis fertilizer has had benefits well in excess of the $10,000,000 cost of the program.

The Kenya Fertilizer Marketing Development Program:[34] Between 1984 and 1988, A.I.D. financed the importation into Kenya of 167,000 metric tons of fertilizer worth about $49,000,000. Coupled with these imports was a program designed to eliminate the Government monopoly on import and marketing. The existing Government monopoly had limited the amount of fertilizer imported, created an artificial scarcity, and not surprisingly led to the allocation of fertilizer to the more affluent and influential farmers. As in other state-controlled fertilizer distribution systems, fertilizer frequently arrived too late for maximum impact.

It is clear that, as a result of this program, more fertilizer is available to more farmers at a relatively lower price and in a more timely manner. The percentage of farmers who used fertilizers increased from 10% at the beginning of the program to almost 50% in 1988. Recently, the Government has agreed to completely decontrol fertilizer prices, and while there is still substantial Kenyan Government involvement in the fertilizer marketing system, total liberalization is likely to be in place by the end of 1991.

The Cameroon Fertilizer Sub-Sector Reform Program (FSSRP):[35] In 1987, the Government of Cameroon agreed to develop a reform program in the fertilizer sub-sector. Prior to this time, fertilizer importation and distribution had been the province of several parastatals. As in other countries, the result had been high marketing costs, limited quantities, late arrival, and a drain on the government budget. The FSSRP was designed to shift total responsibility for fertilizer importing and marketing to the private sector over a period of three years. In the first two years of the program, delivery times were cut in half (from twelve months to six months) and the government's outlays for subsidies cut by 75% (from ($20 million to $5 million). More importantly, the marketing margins declined from $283 per ton in 1987 to $49 per ton in 1989. Some of this remarkable reduction was due to gains in efficiency as distribution was moved from the public to private sectors; however, most of the savings came from the elimination of the subsidy as a source of illegal income for workers in the parastatal distribution system.

The Guinea African Economic Policy Reform Program:[36] In 1986 A.I.D. decided to support a very strong macroeconomic adjustment program being undertaken by the Government of Guinea. A.I.D.'s program focussed on the input delivery system and, in particular, on the divestiture or closing of the two moribund parastatal companies involved in distribution of fertilizer (SEMAPE) and agricultural inputs (AGRIMA). Fertilizer use in Guinea was minimal, most of it supplied by donors for specific projects. Unlike Malawi, Kenya or Cameroon, it was not felt that this program would result in major savings. What was hoped, however, was that the program would create the institutional and psychological climate for the development of a private sector distribution system as Guinea's agriculture responded to the new liberalized climate.

In the end, the Government found itself unable to privatize or divest itself of the two parastatals even though they had no effective economic function. It is widely believed that the reluctance of the government to meet the conditions precedent of this AEPRP grant have to do with profits which SEMAPE and AGRIMA provide for certain key officials. As a result, A.I.D. has decided to deobligate the second tranche of $5,000,000 and to terminate the program.

Conclusions:

In many ways, the conclusions derived from our fertilizer programs are not much different from those of the agricultural liberalization programs:

-- Private marketing is substantially more efficient than public sector marketing, and the efficiency gains of privatization can amount to 25% of the total cost;

-- The available evidence suggests that private markets are competitive and efficient;

-- Privatization is extremely complicated and difficult. (The reader is referred to an excellent paper by U.S.A.I.D. economist in Cameroon, Tham Truong.[37]); and

-- Not all donors have bought into the A.I.D. view of fertilizer subsidies and marketing, and some donor programs actually work at cross purposes to what we have been trying to achieve. This makes the task of donor coordination much more important and much more difficult.

D.3 Industrial and Trade Policy Programs

By and large, industrial policy in Africa has centered around protecting a few, largely parastatal, inefficient, import-competing industries. African trade regimes have been inward, rather than outward looking. Most research over the last decade has suggested that outward looking, export-promoting regimes grow faster (and more equitably) than inward-looking, import-substituting regimes.[38] Even worse, most African trade regimes reflect special interests, quantity restrictions, and severe distortions. Price controls are pervasive, as are regulatory and administrative impediments to new investors. A.I.D. programs in this area focus on access to foreign exchange (Malawi); tax reform and decontrol of prices (Mali); reduction of administrative regulations (Burundi, Mali and Rwanda); and tariff and trade reform (Mauritius, Senegal and Zaire). Most of these programs (the exceptions being Mali and Rwanda) were part of a parallel financing operation with the World Bank. We will examine all of the above programs, except the Malawi program which was initiated only in late 1988 and the Burundi program which began in late 1989.

Mauritius Policy Reform Program:[39] It is difficult to separate the effect of this FY 1985 program from a broad series of measures which the Government of Mauritius has undertaken since 1983. What is clear is that the $5,000,000 program was successfully implemented, and that Mauritius has the fastest growing economy in sub-Saharan Africa (excluding diamond-rich Botswana). The backbone of this growth has been manufactured exports, both products from the export processing zone and from the economy at large.

Zaire Economic Policy Reform Program:[40] This $15,000,000 program, approved in 1986, was aimed at 1) maintenance of existing liberal exchange rate and import policies; 2) reduction of export taxes and simplification of export procedures; and 3) tariff simplification to lower the average and variation in effective rates of protection. Zaire has complied with all conditions and covenants. The impact of these reforms is difficult to disentangle from a series of other macropolicy issues. Export taxes have been eliminated, tariffs reduced, and export procedures simplified. Anecdotal evidence suggests that competition has increased, and a number of inefficient firms closed. After declining to a 15 year low in 1982, manufactured output has increased by over 5% per year in real terms. Private sector employment has also been growing very quickly. It would require much better information than we have to determine what the cause of this good performance has been.

Senegal Economic Policy Reform Program:[41] By the mid-1980s, it had become apparent that the industrial sector of Senegal, long the beneficiary of a trade and tax regime that exploited both agriculture and the consumer, was becoming an increasingly untenable burden for the Senegalese economy. Accordingly, the Government of Senegal embarked on what was called the New Industrial Policy, designed to increase competitiveness in the industrial sector and to set the stage for renewed dynamism in the economy at large. In 1986, A.I.D. supported this new program with a $15,000,000 African Economic Policy Reform Program (AEPRP), designed to reduce trade barriers and to reform the tax system.

All of the trade reforms were implemented over the period 1986-88, while a new tax system was instituted in 1988. What happened? The available evidence suggests that tariff reduction and import liberalization did produce a shock to the industrial sector. Equally important, fraud in under-invoicing imports led to even lower real tariff rates. These changes, coupled with declines in domestic demand, led to a shake-out of Senegalese industry. The formal industrial sector had a difficult time adjusting to the new competitiveness of cheap imports, and its ability to adjust was further constrained by administrative impediments and labor legislation which made hiring permanent employees very risky (firms had limited ability to fire anyone).

As a result, some formal sector businesses closed operations. These were largely firms which had been in trouble and were dealt a knock-out blow by the now more competitive environment. However, while the formal sector suffered, the informal sector prospered. For example, cheaper prices for imported spare parts have led to the growth of the informal service industry in appliance and automobile repair, at the expense of protected dealer outlets. In almost every sub-sector, informal enterprise has competed successfully with both the formal sector and with the flood of imports. Moreover, the new reforms have contributed to price stability, as the cost of living for modern consumption rose only 2.3% in 1987 and declined 0.4% in 1988, while that for traditional consumption declined 4.1% in 1987 and 1.8% in 1988.

Mali Economic Policy Reform Program:[42]: The AEPRP in Mali, began in 1985 with a grant of $18,000,000, had two complementary purposes: (1) redirecting Government of Mali expenditures towards non-wage items by reducing hiring and encouraging voluntary retirement, and (2) improving the environment for private sector investment and growth so that the retirees would have other income-earning opportunities. We will only focus on the second purpose. In accord with the AEPRP, the Government of Mali:

-- decontrolled most prices;
-- reduced taxes;
-- simplified business registration requirements; and
-- made more transparent the rules under which business operates.

The price decontrol program has had considerable impact. Contrary to expectations, elimination of controls led to price reductions rather than price increases. Overall, prices fell 13.2% in 1987, and a survey of 100 formal sector concerns found that 75% either kept their prices constant or reduced them. Tax reductions also had a positive effect. Survey results indicated that 16% of the firms said that tax cuts were instrumental in their making new investments, while another 27% said that they had hiked employment, at least partly in response to the reduction in the payroll tax. The new commercial code has also had some impact. Over 1355 firms in Bamako were registered at the end of 1988, a 370% increase since 1985. An additional 267 firms have registered by October, 1989.

While the benefits of registration are not always obvious (they include more clout for firms when they are involved in legal disputes, and possibly a lower tax rate), clearly the entrepreneurs believe registration is worthwhile.

We have not been able to quantify the benefits of this improved business climate. Overall, Mali's economy is hardly booming, and the macroeconomic picture dampens benefits that might be reaped by an improved microeconomic environment. Nevertheless, changes of this type set the stage for long-run sustained growth.

Rwanda Policy Reform Initiatives in Manufacturing and Employment (PRIME):[43]: A.I.D. approved the $12,000,000 PRIME program in 1985. The purpose of the program was to "level the playing field between small and medium enterprises on the one hand and large enterprises on the other." The mechanisms for doing this were: (1) expanding credit opportunities through broadening access to the credit guarantee fund; (2) draft a new investment code making registration easier and giving more incentives to SMEs (small and medium enterprises); (3) decontrol many prices; and (4) undertake a study of investment incentives.

This program had little or no impact for a number of reasons. First, there was substantial miscommunication between the Government of Rwanda, which saw the program as a reward for past liberal policies, and A.I.D., which saw the program as a mechanism for further reform. Second, while the A.I.D. design was based on the best possible information, this turned out to be inadequate. The changes proposed had little real impact on the business environment. Third, the design confused policy promulgation with policy implementation; while policy pronouncements were present, implementation was often absent.

The technical assistance from the program was useful, and has led to a number of studies which can form the basis for a real reform program in this area, when the Government is ready.

Conclusions:

It is considerably harder to trace the impacts of broad reform programs, such as those affecting industrial and trade policy, than it is for more narrow efforts, such as those in a sub-sector, such as fertilizer. Nevertheless, certain conclusions emerge:

-- The benefits from increased openness and competition in the short run are concentrated in reduced relative prices. Reducing tariffs and quotas forces firms to be more competitive;

-- Opening up the economy is especially important for the smaller firms, particularly informal ones. Protection always has favored the large and inefficient over the small and efficient;

-- Even though a less regulated regime creates new opportunities, the short-run impact in the formal economy may well be negative; many inefficient firms will have to close or reduce operations, and the newly competitive ones may be slow in expanding or moving into new niches because of other policy problems or the failure of financial markets; and

-- The benefits of formality are probably much less important in Africa than they are in Latin America, largely because African governments have not been effective in suppressing illegal and extra-legal informal activity.

D.4 Social Sector Reform Programs:

It should not be surprising that African governments' ability to provide social services has been eroding during the present economic crisis. The demographic nightmare of an ever younger and more dependent population coupled with stagnating fiscal resources has put extreme pressure on these budgets. Equally important, existing resources are used badly. Schools report substantial dropout and repeater rates; teachers are forced to teach with only the most rudimentary of books and supplies (less than $1 per student per year); clinics without medicines are rife; professionals are overworked and underpaid and frequently depend on private practice.

Finally, social service programs are inequitable. The majority of resources are programmed into low return, high cost services for the elites -- hospitals and universities. Service systems for the masses are almost always short-changed, even though evidence shows that they have the highest rates of return. A.I.D.'s programs in this area are aimed at improving efficiency, increasing cost recovery in elite services, and redistributing resources to primary education and to preventive, primary health care.

A.I.D. has been involved with social sector adjustment programs only since 1989. Consequently, there is little to report on in the way of evaluable experience. Nevertheless, it might be useful to examine a few program designs so that the purposes and mechanisms of restructuring the social sectors might become clearer.

<u>Kenya Health Sector Reform Program</u>: The Kenya health sector is heavily skewed towards financing curative care in a few hospitals, notably Kenyatta National Hospital in Nairobi. The aim of the program is to redress this balance by shifting resources toward rural, preventitive care. In order to do this, more of the burden for paying for curative care must be shifted to the consumers, who by and large, come from the middle and upper classes. However, the quality of health care provided at institutions like Kenyatta Hospital, has deteriorated greatly over the past decade, and the

quality must be upgraded if consumers are to be expected to pay for it.

The A.I.D. program is designed to upgrade health care quality at Kenyatta Hospital, create wards where these higher quality services are paid for by consumers, establish a national health care insurance system that will increase the capacity of consumers to pay for these services, and use the freed up resources to subsidize rural health care clinics.

Nigeria Health Care Program: Like Kenya, most of Nigeria's health care budget has gone to support urban-based curative care. Over the past few years, Nigeria has tried to decentralize governmental authorities, including health care, to local authorities. These local authorities are responsible for drawing up plans for expanding preventive health care. However, financing for these clinics has been unavailable. A.I.D.'s program is to help finance a transition of government budgetting, so that more of the Federal Government of Nigeria's health care budget is passed on to local authorities for rural health care.

Mali Education Sector Reform Program: The education system of Mali is a shambles. Primary school participation rates lie below 30%. Because of drop-outs and repeats, it takes an average of twenty-four years of schooling to produce a single graduate. A.I.D., working together with the World Bank and France, is financing a major restructuring of Mali's education system, shifting resources from tertiary to primary education, improving efficiency, and, most important, increasing community control.

Recent reports from Mali are very encouraging. Two elements of the program -- training and a movement to greater parental involvement, are already being implemented. A.I.D. experts found a Ministry of Education in complete disarray. A major training program was developed, and well-trained personnel who had been merely picking up their paychecks (and those often very late), because they had not been given any meaningful work, are now working ten-hour days six days a week. Teachers and administrators, hungry for training, have come hundreds of miles at their own expense to audit training courses. Parents have mobilized over six million CFA ($200,000) for purchase of equipment and books. When the Ministry requested the parents turn the money over to it, the parents refused, demanding that the Government present them with a list of goods to be purchased instead. A moribund system is beginning to be revitalized.

These programs represent radical restructuring. They eat away at many elite privileges, and thus are hard to implement quickly. Yet, given the financial crisis and the demographic realities, only through dramatic increases in efficiency and equity can social sectors in Africa be expected to provide the necessary investments in human capital. And these investments constitute the absolute bedrock foundation for future development. Nothing we do will be more important than this.

VI. THE WAY AHEAD

A.I.D.-supported adjustment programs in Africa have been the most successful part of A.I.D.'s portfolio. Somewhere between two-thirds and three-quarters of these programs are clear successes. They have resulted in two main accomplishments. First, they have reduced waste. From Cameroon, where privatizing fertilizer marketing has saved over $5,000,000 a year in wasteful parastatal marketing costs to Malawi, where shifting fertilizer types resulted in similar savings, market-determined outcomes reduce waste. In a resource-scarce continent like Africa, waste of these magnitudes is obscene. But the second impact is even more important, for these reforms have opened up opportunity. Access to foreign exchange, and hopefully to medical care and to credit, will no longer be limited to the rich and the powerful, but be available to everyone.

An example from Senegal is illustrative of the dynamism and freedom that the movement from government to private initiative is bringing. Beginning early in the 1980s, A.I.D. and the World Bank supported the abolition in Senegal of a series of huge parastatal institutions called Rural Development Organizations. These paternalistic organizations provided extension services, bought all crops, managed irrigation schemes, provided fertilizer and seeds on credit, and were the mechanism for commercialization of agriculture. Big, unwieldy, shot through with fraud and abuse, removed from the farmers and highly centralized, these dinosaurs died when their appetites exceeded the ability of the environment to feed them with enough resources to stay in business.

Nothing was put in their place. Marketing and input delivery was to be private. Without the help of the Government or the donors, farmers began organizing themselves into associations. Over 6000 of these rural organizations have been created since 1985 to handle everything from marketing to input delivery to natural resource management to community development to forestry. And while the donors scratched their heads to determine what crops should replace groundnuts, as world markets stagnated and soil fertility declined, farmers planted fruit trees and cabbages and onions, and all manner of things.

The best thing about these reform programs is that they foster the unleashing of individual creative energies. They breed independence, self confidence and dignity. No longer does the peasant or the blacksmith have to look to some distant capital for help, he can find it in his village, with the help of a few of his friends and colleagues. Ultimately, these programs must lead not only to the broadening of economic power, but to the broadening of political power also. That is why they are so revolutionary -- and why their ultimate success is still in doubt.

This revolution threatens a generation of accumulated political and economic power. In most countries, the elite, largely the politicians, the military and the bureaucracy, have acted like a parasite feeding on the economy. In the 1980s, this parasitic disease brought the patient close to death. And so the parasites have been forced to hibernate, to move into the shadows, while the patient slowly recovers its strength. But another feeding frenzy is possible. Unlike in Eastern Europe, the African revolution has proceeded from the top down, and there has been no fundamental change in the political system.

This has not been a mass-based revolution. Consequently, its future remains in doubt. Always on the horizon is the counter-revolution, the return to statism.

A.I.D. sees itself as being on the front lines of this revolution for many years to come. We see ourselves as being particularly well-placed to affect the final outcome by:

(1) Helping spread participation in the reform process and in governance at large through decentralization, building of constituency groups, and pushing for broader dialogue among all groups in the economy;

(2) Building the competence of the technocratic base, so as to increase the capacity of all participants to understand the benefits and costs of any particular policy option;

(3) Continuing to educate, demonstrate, cajole, dialogue, persuade and inform policy makers on the importance of private market solutions to most economic problems.

(4) Strengthening the capacity of non-governmental institutions to analyze problems, mobilize opinion and enter into political and economic discussions with governments.

These processes have already begun to bear fruit. Perhaps the most exciting example to date is the Segou Roundtable on Local Level Natural Resource Management in the Sahel. This Roundtable, jointly sponsored by the CILSS and the Club du Sahel brought together senior African officials, donors and leaders of local, rural communities throughout the Sahel. After numerous studies (commissioned by A.I.D. and other donors) it had become clear to most experts that the real solutions to the problem of desertification were not technical, but economic, political and legal.

What was needed primarily was security of land tenure and much greater local autonomy. Farmers were afraid to improve their land because they rightly expected that improved land would become acquisition targets of government officials. Moreover, it became clear that the central government was more often part of the problem rather than part of the solution. In fact, "the premise of the eight points in the Segou Declaration is that the public sector will achieve a higher rate of return on its investment by systematically enhancing the capacity of local communities to take the initiative.[44]

It is a long way from understanding a problem to working out solutions to it. But the Segou Roundtable has laid the groundwork for a more effective tri-partite relationship -- donors, governments and local communities -- in dealing with the basic issues of development.

Not all structural adjustment issues (for example, exchange rates) are as amenable to local participation. But many are. Aside from natural resource management issues, social sector adjustment programs, agricultural liberalization, community level public works are all areas where greater local participation is needed. A.I.D., like most donors, has systematically failed to include local communities in the design of development activities. We need more Segous, more Mali education programs designed to increase local authority control over primary education, more Nigeria health programs designed to increase local authority over health care.

Decentralization must be accompanied by broadening the capacity of affected groups to articulate their concerns to the government. For Government to be responsive, it must hear many voices. A second task is to strengthen the wide range of non-profit non-governmental organizations in their ability to analyze problems and communicate issues. A.I.D. has done some modest work with Chambers of Commerce in the past, but sees this field as ripe for the harvest. We intend to work hand in hand with these organizations in the future, expanding their capacity to inform and affect public policy.

Together with the World Bank and other donors, we are about to embark on a major effort, the African Capacity Building Initiative, to upgrade the economic management and analytic skills of both the public and private sectors. This increased capacity is sorely needed if governments are to make choices more rationally. Even more important this strengthening is needed if Governments are to assume a more equal footing in their policy dialogue with the donors. With few exceptions

(Tanzania and Kenya), African governments do not have a strong enough analytical capacity to dispute the technical basis of World Bank/IMF programs. Without such expertise the programs will continue to be donor designed and donor driven. Increased African ownership is a necessary prerequisite for sustainability.

A.I.D is also working at changing its style of policy dialogue. The goal is to become more collegial in our dealing with policy issues. We have recently funded a pilot project to help African Governments develop the capacity to implement complicated policy changes. We sponsor conferences intended to get African leaders and technocrats from various countries to share experiences in adjustment, and to meet with private sector entrepeneurs so as to broaden each group's appreciation of the problems and constraints that the other group faces.

These are just a few of the ways in which the structural adjustment process is evolving from a donor-designed attempt to deal with an economic crisis to a more collegial, more participatory approach to development in all its aspects. This shift to a new phase requires more humility, more wisdom, and more care than the more strictly economic adjustment that has characterized the first phase. The way ahead is not easy. There are daunting technical, economic and political issues. In the end success or failure will be the result of the actions of the people of Africa and their leaders. That is as it should be.

ANNEX I

A.I.D. DOLLAR POLICY REFORM PROGRAMS IN AFRICA

COUNTRY	FUNDING SOURCE	NPA OR PROJECT	REFORM AREA	COMMITMENT (million dollars)	
BOTSWANA(88)	DFA	NPA	Population	3.0	0.9
CAMEROON(87)	AEPRP/DFA	NPA	Fertilizer Marketing	20.0	7.6
CAMEROON(88)	DFA	Project	Ag Policy/statistics	12.0	0.4
GAMBIA (84)	DA	Project	Econ/Financial Analysis	4.5	3.0
GAMBIA (87)	AEPRP	NPA	Agricult. Marketing	6.0	4.0
GAMBIA (87)	DA	Project	Economic Policy Studies	0.9	0.1
GHANA (88)	DFA	NPA	Fertilizer and Seed	20.0	5.9
GUINEA (86)	AEPRP	NPA	Agricultural Inputs	10.0	5.0
GUINEA (86)	DA/DFA	Project	Economic Studies & TA	9.0	0.8
BISSAU (89)	DFA	NPA	Ag Export Marketing	5.8	0.0
KENYA (89)	ESF/DFA	NPA	Fertilizer Marketing	46.1	0.0
KENYA (89)	AEPRP	NPA/Proj	Health Financing	15.0	0.0
LESOTHO (88)	AEPRP/DFA	NPA/Proj	Ag Marketing/NRM	15.0	0.3
MADAGASC(88)	AEPRP/DFA	NPA/Proj	Ag Export Marketing	33.8	8.0
MALAWI (85)	AEPRP	NPA/Proj	Fertilizer	15.0	9.2
MALAWI (86)	DA	NPA/Proj	Parastatal Divestiture	15.5	15.4
MALAWI (88)	AEPRP/DFA	NPA/Proj	Small Enterprise Policy	36.6	15.0
MALI (85)	AEPRP	NPA/Proj	Fiscal Policy	25.5	23.9
MALI (85)	DA/DFA	NPA/Proj	Cereals Marketing	1.6	1.1
MALI (89)	AEPRP	NPA/Proj	Basic Education	10.0	0.0
MAURTIUS(85)	AEPRP	NPA	Tarriff Reform	5.0	5.0
MOZAMBIQ(84)	ESF	NPA	Agricultural Marketing	55.3	42.1
MOZAMBIQ(89)	DFA	NPA	Agricultural Marketing	45.6	0.0
NIGER (84)	DA/ESF	NPA/Proj	Ag Marketing, Inputs	52.9	42.6
NIGER (86)	DA	NPA/Proj	Health Financing	17.2	3.5
NIGER (88)	AEPRP/DFA	NPA	Agricult. Exports	13.3	4.4
NIGER (88)	DFA	Proj	Policy TA and Studies	1.7	0.1
NIGERIA (89)	AEPRP/ESF	NPA	Health Financing	36.0	0.0
RWANDA (85)	AEPRP	NPA/Proj	Small Enterp. Policy	12.0	7.1
RWANDA (86)	DA	Project	Ag statistics	7.0	2.5
SENEGAL (86)	AEPRP	NPA/Proj	Tax and Trade Reform	15.0	14.3
TANZANIA(87)	AEPRP/DFA	NPA	Rural Road Maintenance	42.0	9.1
TOGO (86)	AEPRP	NPA/Proj	Agric Export Marketing	7.9	3.6
UGANDA (88)	AEPRP/DFA	NPA/Proj	Agric. Export Marketing	14.0	0.3
ZAIRE (86)	AEPRP	NPA/Proj	Trade Policy	15.0	12.6
ZAIRE (86)	DA	Project	Agric. Policy/Planning	14.5	3.6
ZAIRE (89)	DFA	NPA/Proj	Financial Markets	40.0	0.0
ZAMBIA (85)	AEPRP	NPA	Maize/Fertilizer Markets	25.0	6.4
ZAMBIA (87)	DA/DFA	Project	Agric. Policy/Planning	12.4	5.1
REGIONAL(85)	DA	Project	Sahel Policy Analysis	8.0	3.5
REGIONAL(88)	DFA	Project	Population Policy	6.0	1.2
REGIONAL(88)	DFA	Project	Policy Reform & Poverty	9.5	1.4
TOTAL				760.6	269.0

ANNEX II

STATISTICAL ANNEX

The issue of separating the effects of policy changes on growth from the effects of a number of other variables such as weather, world prices and interest rates, foreign aid, etc. The debate between the World Bank and the UN Economic Commission for Africa also concerned issues such as whether or not to treat each country as an equal observation or to weignt each observation by the size of the economy; whether it is preferable to compare post-and pre-adjustment experiences for a set of countries, or adjusting vs. non-adjusting countries. Many of these issues are theological in nature. What we have decided to do is the following:

1) Divide the sample into adjusting and non-adjusting countries with adjustment defined as actually receiving a World Bank structural adjustment or sectoral adjustment loan. This means that countries such as Sierra Leone and Zimbabwe appear as non-adjustors in our sample.

2) Take the average annual value for each variable for the time period considered, which is defined as those years when a country was under an adjustment program. Thus Ghana appears as a non-adjustor for the years 1980 to 1982, and as an adjustor from 1983 to 1987.

3) Exclude very small countries (less than 500,000) from the sample, oil exporting countries, and those non-adjusting countries which had high growth rates throughout the period (Burkina Faso and Botswana). These are listed on the following page under the country category, OTHERS.

4) Use dummy variables to take into account the differing international economic conditions in the latter part of the period from those in the early part. If the data stems from the 1980-84 period then the dummy EARLY receives avalue of 1; if the data comes from the 1985-87, the dummy LATE receives a value of 1; if the data covers the whole period then neither dummy receives a value of 1.

All data are taken from the World Bank's African Economic and Financial Data. The country groupings are as follows:

ADJUSTORS		NON-ADJUSTORS		OTHERS
BURUNDI	(86-87)	BENIN	(80-87)	ANGOLA
CAR	(86-87)	BURUNDI	(80-85)	BOTSWANA
COTE D'IVOIRE	(80-82,87)	CAR	(80-85)	BURKINA FASO
GAMBIA	(86-87)	COTE D'IVOIRE	(83-86)	CAMEROON
GHANA	(83-87)	ETHIOPIA	(80-87)	CHAD
KENYA	(80-87)	GAMBIA	(80-85)	COMOROS
MADAGASCAR	(85-87)	GHANA	(80-82)	CONGO
MALAWI	(80-87)	LESOTHO	(80-87)	DJIBOUTI
MAURITANIA	(85-87)	LIBERIA	(80-87)	EQUAT. GUINEA
MAURITIUS	(80-87)	MALI	(80-87)	GABON
NIGER	(86-87)	MAURITANIA	(85-87)	GUINEA
SENEGAL	(80-87)	NIGER	(86-87)	GUINEA-BISSAU
SUDAN	(80-83)	RWANDA	(80-87)	MOZAMBIQUE
TANZANIA	(86-87)	SIERRA LEONE	(80-87)	NIGERIA
TOGO	(85-87)	SUDAN	(84-87)	SAO TOME/PRIN
UGANDA	(82-84)	TANZANIA	(80-85)	SEYCHELLES
ZAIRE	(86-87)	TOGO	(80-84)	SOMALIA
ZAMBIA	(85-87)	UGANDA	(80,81,85-87)	SWAZILAND
		ZAIRE	(80-85)	
		ZAMBIA	(80-84)	
		ZIMBABWE	(80-87)	
		MADAGASCAR	(80-84)	

The results are as follows:

$$\underset{(1.636)}{\mathrm{GDPGRO} = 0.280} + \underset{(0.755)}{2.110^{*}}\ \mathrm{STATUS} + \underset{(0.042)}{0.092^{*}}\ \mathrm{RESBAL} + \underset{(0.064)}{0.090}\ \mathrm{TOFT} +$$

$$\underset{(.057)}{0.047}\ \mathrm{INVRATE} - \underset{(0.692)}{1.230}\ \mathrm{EARLY} - \underset{(0.795)}{1.073}\ \mathrm{LATE} \quad (\text{R Squared} = 0.477)$$

and

$$\underset{(2.024)}{\mathrm{AGGRO} = -1.096} + \underset{(0.934)}{3.277^{*}}\ \mathrm{STATUS} + \underset{(0.052)}{0.036}\ \mathrm{RESBAL} + \underset{(0.079)}{0.038}\ \mathrm{TOFT} +$$

$$\underset{(0.070)}{0.100}\ \mathrm{INVRATE} + \underset{(0.856)}{1.083}\ \mathrm{EARLY} + \underset{(0.985)}{0.084}\ \mathrm{LATE} \quad (\text{R Squared} = 0.444)$$

where GDPGRO = average annual growth rate of GDP
AGGRO = average annual growth rate of agricultural output
STATUS = 1 when adjusting, 0 otherwise
RESBAL = resource balance as a percent of GDP
TOFT = average annual percentage change in terms of trade
INVRATE= investment as a percentage of GDP
EARLY = 1, if covers 1980 to 1985 period, zero otherwise
LATE = 1, if covers 1985 to 1987 period, zero otherwise

and the numbers in parentheses are standard errors.

ENDNOTES

1. The World Bank, Sub-Saharan Africa: From Crisis to Sustainable Growth Washington, D.C.), 1989, pp. 24.

2. The World Bank, World Development Report, 1985. (Washington, D.C., 1985), p. 54.

3. The World Bank, Adjustment Lending: An Evaluation of Ten Years of Experience (Washington, D.C., 1988), p. 3, ff.

4. See, for example, the discussion in The World Bank, Report on Adjustment Lending II: Policies for the Recovery of Growth (Washington, D.C., 1990), PP. 23-25.

5. ibid, p. 18

6. Kakwani, Makonnen and van der Gaag, "Structural Adjustment and Living Conditions in Developing Countries," (unpublished manuscript, 1989), p. 5.

7. ibid, p. 6.

8. ibid, p. 6.

9. ibid, p. 6.

10. Jere Behrman, "The Impact of Economic Adjustment Programs," in Bell and Reich, Health, Nutrition, and Economic Crises (Dover, Mass.: Auburn House, 1988), p. 133.

11. Dorisch, Bernier and Sarris, "Macro-economic Adjustment and the Poor: The Case of Madagascar," (unpublished manuscript, 1990), pp. 96-153.

12. Sara Lynch, "The Socioeconomic Characteristics of Poverty and Income in Cameroon," (unpublished manuscript, 1990).

13. Paul Gleuwe, "The Distribution of Welfare in the Republic of Cote d'Ivoire in 1985," World Bank, LSMS Working Paper No. 29, 1987, pp. 36-61, and Paul Gleuwe and Dennis de Tray, "The Poor during Adjustment: A Case Study of Cote d'Ivoire, World BanK: LSMS Working Paper No. 47, 1988, pp. 10-28.

14. World Bank, "Ghana, Structural Adjustment for Growth," Report No. 7515-GH, January, 1989, PP. 28-33.

15. Dorisch et. al., op. cit., pp. 74-95.

16. Sahn, Arulprasgasam and Merid, "Policy Reform and Poverty in Malawi: A Survey of a Decade of Experience," (unpublished manuscript, 1989), pp. 7 -48.

17. see, for example, Reardon, Matlon and Delgado, "Coping with Food Insecurity at the Household Level in Drought-Affected Areas of Burkino Faso," World Development, (January, 1990).

18. Weber, et. al. "Informing Food Security Decisions in Africa: Empirical Analysis and Policy Dialogue, (Michigan State University Department of Agricultural Economics Staff Paper No. 88-58, p. 3.

19. See, for example, Greuwe and de Tray, op. cit., p. 26.

20. David E. Sahn, "Fiscal and Exchange Rate Reforms in Africa: Considering the Impact upon the Poor," (unpublished manuscript, 1989), pp. 93-105.

21. Dorosh et. al., op. cit.

22. Greuwe and de Tray, op. cit., pp. 27-29.

23. Sahn, op. cit., pp. 58-59.

24. Rugh, Cashion, Harrison and Mulligan, "Mali: Economic Policy Reform program," A.I.D. Project Impact Evaluation Report (forthcoming), 1989, p. 17.

25. Staatz, Dione and Dembele, "Cereals Market Liberalization in Mali," World Development, (May, 1989), pp 703-718.

26. Dorosh et. al., op. cit., p. 96.

27. Rassas, Rebeneravio and Meserve, "Evaluation of the Food for Progress Rice Program in Madagascar," U.S. Agency for International Development, 1988, p. 17-29.

28. U.S. Agency for International Development, "Economic Policy Reform in Zambia (1982-1987)," March, 1989, pp. 1- 27.

29. U.S. Agency for International Development, "African Economic Policy Reform Program: Interim Evaluation of Togo's Cereals Export Liberalization Program," 1988, pp. 6-15.

30. Atherton, Costello, Herlehy and Lieberson, "Uganda, the Non-Traditional Export Promotion Reform Program: Impact Assessment," A.I.D. Program Impact Evaluation Report (forthcoming), 1990.

31. World Bank, "Mozambique Agricultural Sector Survey," Report No. 7094-MOZ, 1988, pp. 111-131.

32. U.S. Agency for International Development, "Final Evaluation: Agriculture Sector Development Grant," 1989, pp. 5-60.

33. Sahn, Arulprasgasam and Merid, op. cit., pp. 151-163.

34. United States Agency for International Development, "Kenya: Fertilizer Marketing Program Impact Study," 1988, pp. 26-40.

35. Diane Blane, M. Fuchs-Carch, D. Hess and J. Seifert, "Cameroon: The Fertilizer Sub-Sector Reform Program," (draft) 1990.

36. U.S. Agency for International Development, Evaluation of the Impact of a First Grant under the African Economic Policy Reform Program (AEPRP) in Guinea, 1988.

37. Tham Truong, "Privatization of Cameroon's Subsidized Fertilizer Subsector: The Implementation Process," (unpublished manuscript), 1989.

38. Anne Krueger, ed., Trade and Employment in Developing Countries, vol. III (Chicago: University of Chicago Press, 1981).

39. United States Agency for International Development, "Mauritius: A Review and Assessment of Recent Economic Policy Reforms," 1987, PP. 4-13.

40. United States Agency for International Development, "Final Evaluation of USAID/Kinshasa's African Economic Policy Reform Program Structural Adjustment Support Grant," 1989, pp. 22-29.

41. Lowenthal, Chambas, Lewis and Smith, "Tax Reform in Senegal, 1986-1990: The Impact of the African Economic Policy Reform Program on the Implementation of Senegal's New Industrial Policy," A.I.D. Project Impact Evaluation Report (forthcoming), 1990, pp. 6-23.

42. Rugh, et. al., op. cit., pp., 5-16.

43. U.S. Agency for International Development, "Policy Reform Initiatives in Manufacturing and Employment (PRIME): Evaluation Report," 1987, pp. 31-32.

44. Asif Shaikh, "The Segou Roundtable on Local Level Natural Resources in the Sahel," 1989.