



BONN INTERNATIONAL CENTER FOR CONVERSION · INTERNATIONALES KONVERSIONSZENTRUM BONN

paper⁴

Conversion in Africa:

Past Experiences and
Future Outlook

by
Mersie Ejigu and Tekalign Gedamu

July 1996

At the time of writing, both authors were working for Transnational Development Associates, Ltd.

Copy editor: **Alisa M. Federico**

CONVERSION IN AFRICA: PAST EXPERIENCE AND FUTURE OUTLOOK

CONTENTS

INTRODUCTION	1
I. CONVERSION IN SUB-SAHARAN AFRICA: AN OVERVIEW	3
II. TRENDS AND PATTERNS OF MILITARY EXPENDITURE	7
Data Sources and Reliability.....	7
Military Expenditure: Level, Patterns and Trends.....	8
Development and Military Expenditure.....	12
Military Expenditure and Structural Adjustment Programs	13
III. SIZE AND PROFILE OF MILITARY PERSONNEL.....	16
Trends in Military Personnel	16
Profile of Combatants	17
IV. DEMOBILIZATION AND REINTEGRATION PROGRAMS	21
Objectives of Demobilization and Reintegration Programs	22
Stages of Demobilization.....	23
Review of Country Experiences.....	25

The Road Ahead	27
The Role of Planning	28
CONCLUSION	32
REFERENCES	33

APPENDICES:

Appendix I: Sub-Saharan Africa military expenditure, 1981–1990, in millions of US dollars (1988 prices)

Appendix II: Sub-Saharan Africa military expenditure 1981–1992, as percentage of GDP

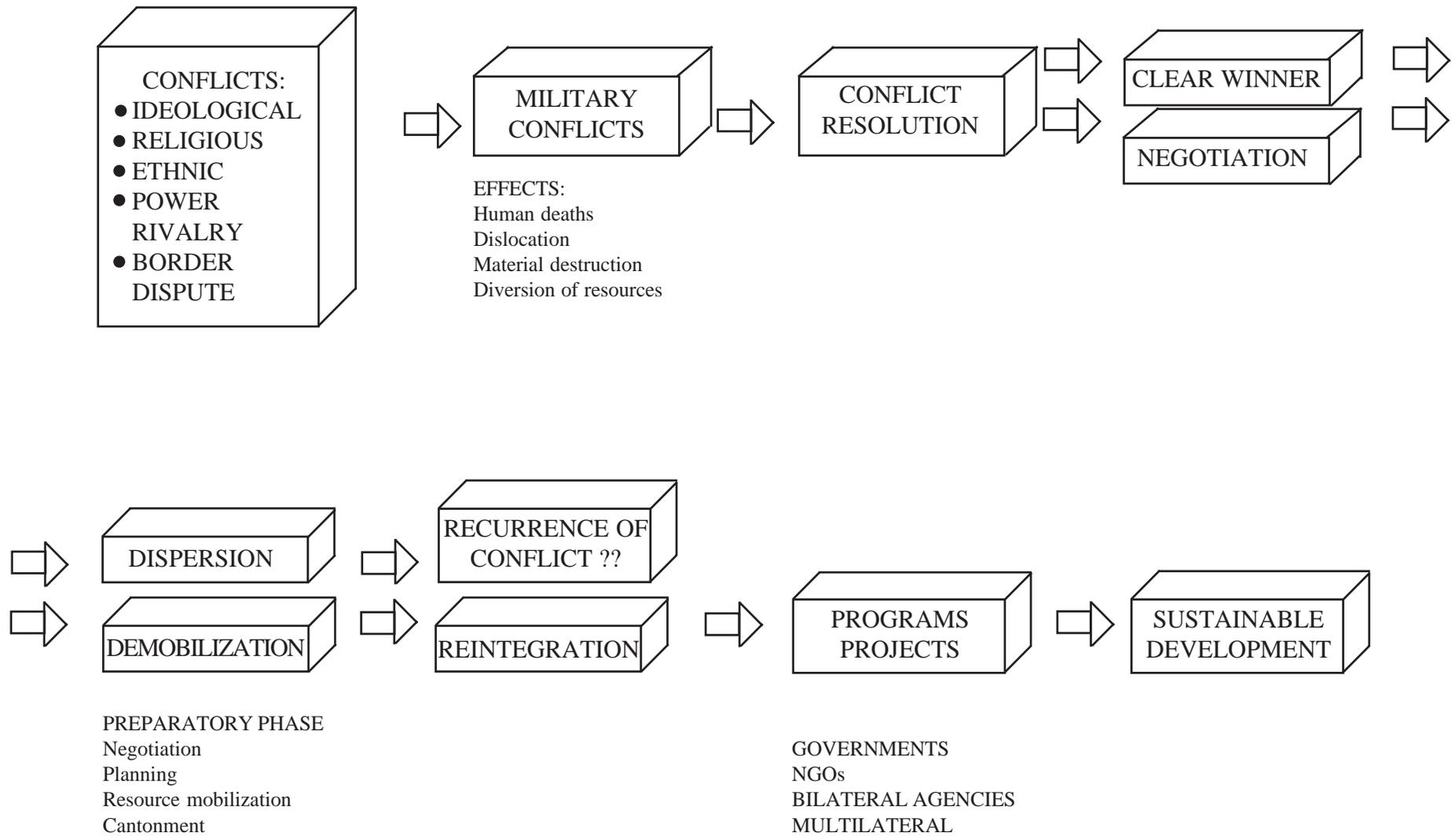
Appendix III: Military personnel in Sub-Saharan Africa, 1975–1993, in thousands

INTRODUCTION

This paper reviews the literature and information on conversion in Africa and attempts to draw conclusions that may form the basis for further research. The first substantive section provides a broad overview of the problem. The second and third analyze the trends in military expenditure and personnel over the past decades, indicating the extent of militarization in the region and the implications for demobilization and reintegration. The fourth section reviews some country experiences in demobilization and reintegration and illustrates the nature and content of demobilization and reintegration programs as well as their relationship to countries' overall strategies for long-term development. This paper is meant to be a broad overview of conversion issues in Africa. As it was written in early 1995, it does not reflect the most recent experiences and literature on demobilization in Sub-Saharan Africa.

Figure 1 visually provides the conceptual framework within which the analysis presented here has been placed. The point of departure rests on the basic causes of conflict—ideological, religious, ethnic, rivalry for political power, and border disputes. These conflicts occasionally lead to military struggle and its inevitable consequences: human casualties, destruction of social and economic infrastructure, demographic dislocations—occasionally large scale, leading to internal and external migrations—and finally the diversion of scarce resources from investment to unproductive military spending. Violent conflicts are resolved through the emergence of a clear victor on the battlefield or through agreement of the warring factions in negotiations. A victor, as well as the parties to an agreement, may proceed with instant demobilization and the dispersion of his adversary's combatants—an attractive option in the short term, as no expenses or large-scale management problems are involved, but one with long-term risks—or may choose the second option, a carefully prepared program of demobilization and reintegration of ex-combatants into the economic and social life of their communities. The link between a program of this kind and sustainable development, as well as the details of each stage of the 'conflict resolution-conversion-sustainable development' continuum, will be analyzed in the following sections.

Figure 1: THE CONFLICT RESOLUTION, CONVERSION AND DEVELOPMENT CHAIN



I. CONVERSION IN SUB-SAHARAN AFRICA: AN OVERVIEW

Conversion has traditionally been perceived as the defense and foreign policy concern of industrial countries. Consequently, discussions on the subject have focused on industrial conversion, or the restructuring of product lines from military to civilian end-users. The situation in Africa, however—with its series of military conflicts induced by intense political and ideological differences, by border disputes, and, increasingly, by ethnic strife—has brought havoc to the economies of many countries and calls for a broadening of the conversion concept.

“Sub-Saharan Africa has been the region most plagued by conflict and instability” (IISS, 1993–1994, p. 197). During the past two decades, the wars in Angola, Chad, Ethiopia, Liberia, Mozambique, Somalia, Sudan, Uganda and more recently Rwanda have left a trail of destruction of life and property—the impact will take decades to repair. Over and above the direct effects, the social and psychological costs arising from the massive dislocations of population, family separations and foregone output have been immense. The refugee population in Africa—estimated at over 6 million with an additional 17 million reported to be internally displaced (Speth, 1994)—remains the highest in the world. In addition to military conflicts, natural disasters, political instability, drought, famine, economic decline, and the burden of resettlement have compounded the challenges. The 1980s, in particular, witnessed the worst manifestations of these problems as Sub-Saharan Africa progressively slipped into recession. Conversion in Sub-Saharan Africa, therefore, must address the broader issue of the transformation from war to a peace-time economy, including demobilization, the economic and social reintegration of former combatants, the transfer of resources from defense to civilian sectors, the reconstruction of infrastructure and the restoration of security through the establishment of a more representative army and government. This paper focuses on the components of conversion that have the highest relevance for Africa’s current policy concerns.

Conversion issues in Africa may be approached from two angles: the human dimension and the material dimension. The human dimension of conversion in Sub-Saharan Africa manifests itself in the millions of able-bodied Africans who have been demobilized *en masse* from their military duties and careers, whose physical condition ranges from the normal to the severely

disabled, who have been uprooted from their social and economic milieu, and who need to be economically and socially reintegrated into their respective communities. The benefits of reintegration may be perceived in terms of the additional stream of goods and services that they contribute to economic growth, as well as the social and political stability resulting from their disengagement from military life. The risks of unsuccessful reintegration are exemplified by the acts of social and political violence to which the ex-combatants may turn.

The material dimension of conversion manifests itself in the restructuring of military hardware, physical infrastructure (camps, clinics, training centers, etc.) serving military programs and personnel, and enterprises that produce goods and services destined predominantly for the military. Given the limited defense industrial base in most countries in Sub-Saharan Africa, this type of conversion is limited in scope, with South Africa as the one important exception.

The ongoing political and socioeconomic changes in Africa therefore place the human dimension at the forefront of the conversion agenda, in both the short and long terms. Although it is multifaceted and complex, the human dimension of conversion boils down to the issue of demobilizing former combatants and successfully integrating them into the economic and social fabric of society.

Most conflicts in Africa take place within states. The actual causes of these conflicts are many and complex, but several factors leading to military confrontation are particularly relevant to the situation in Sub-Saharan Africa.

- *Ideological conflicts.* In Africa, the question of how best to introduce the process of development has been posed in terms of the socio-political and economic systems practiced by the Western democracies (the Westminster model) and, until recently, the alternative system of the East European countries (the Soviet model). The issues of capitalism versus socialism, reform versus revolution, and single versus multi-party systems not only have been debated publicly, but have also been played out in guerrilla wars, such as in Angola, Mozambique and Ethiopia.
- *Religious conflicts.* In the Muslim countries, Islam has increasingly been seen as an alternative force for organizing social and political life, arousing the militant sentiments of

both proponents and opponents and causing a build-up of military forces and a considerable degree of social strife in a number of countries. Although the scale of military conflict cannot be compared with that in Angola, Mozambique or Ethiopia (except in southern Sudan, where conflict has both ethnic and religious dimensions), the potential for further conflict on a major scale ignited by religious fundamentalism should not be underestimated.

- *Ethnic conflicts.* The most dramatic illustration of ethnic conflict has been the civil war in Rwanda. Given the heterogeneity of African societies, and in the absence of timely remedial measures taken by responsible governments, other future trouble spots may easily be imagined.
- *Rivalry for political power.* The rivals for political power are not only those who identify themselves with a particular ethnic, religious or ideological group, but also all groups (small or large) that, in the context of underdevelopment and poverty, feel the chance to improve their material well-being lies in the control of the levers of political power. The military class is the best example. Trade unions and student movements may occasionally flex their muscles with a similar objective in mind.
- *Border disputes.* Conflicts have also been unleashed by border disputes—for example, between Ethiopia and Somalia, Chad and Libya, and Mauritania and Morocco. Furthermore, competing claims of states over water resources have often been a source of tension and potential conflict in the region.

The future of African conflicts depends largely on the extent to which societies learn and make progress in resolving political questions through dialogue and debate. It is heartening to note that many countries in the region have committed themselves to democratic and peaceful change. Programs by external donors have been put into place in support of these processes and the initial results in some cases have been encouraging. Given the nature, magnitude and likely frequency of conflicts, conversion could clearly feature as an important component of the economic and social transformation programs of a number of African countries.

Several initiatives on disarmament and development in Africa are emerging at the bilateral and multilateral levels. The Global Coalition for Africa (GCA) organized a workshop on disarmament and development in Kampala in June 1992, and another workshop in Kampala together with the Organisation for African Unity (OAU) in October 1994. The World Bank

completed a study on demobilization and reintegration in six African countries in October 1993 (World Bank, 1993). The United Nations Development Programme (UNDP) *Human Development Report 1994* also devoted a considerable section to issues of disarmament and security. The UNDP Administrator has proposed the creation of a US \$400 million¹ African Peace Fund to enable “the OAU to effectively mount preemptive responses to potential conflicts” (Speth, 1994, p. 7). The UNDP further pledged US \$4 million as seed-money and as an expression of its commitment. Of course, it remains to be seen whether or not these initiatives will be effective in clarifying the role of conversion in African policy priorities.

¹ According to the UNDP Administrator, this is about 10 percent of the US \$3–4 billion that the international community has spent on conflict resolution in the region (Speth, 1994).

II. TRENDS AND PATTERNS OF MILITARY EXPENDITURE

The breadth and depth of the conversion problem in Sub-Saharan Africa may be appreciated through the frequency of military conflicts and the burden posed by military expenditure. Changes in the level and growth rate of military expenditure and the size of armed forces over time in relation to the size of the economy also reveal the extent of the region's militarization.

Data Sources and Reliability

The issue of sources and the reliability of military expenditure data has been widely debated and documented (for an extensive discussion, see: Sen, 1992). The general perception is that reported military expenditures may not represent the true picture and are, at best, based on relatively 'soft' information. The shortcomings of the current military statistics are relevant in this context.

- *Numerous different sources.* There are several sources for military data: the Stockholm International Peace Research Institute (SIPRI), the North Atlantic Treaty Organization (NATO), the International Institute for Strategic Studies (IISS), the US Arms Control and Disarmament Agency (ACDA) and the International Monetary Fund (IMF). The intent and nature of the information vary from one source to the other, and each uses different base periods, making data comparison difficult.
- *Limited coverage.* In many developing countries, military expenditure is often funded by extra-budgetary sources that do not appear in the official records. Such funds could originate from domestic or foreign sources. Most military expenditure figures may therefore be understated, as it is difficult to have access to all sources of military data in a given country.
- *Secrecy and double-bookkeeping.* As the defense sector is politically sensitive, information is kept in confidence. The secrecy that surrounds military expenditure may in some cases encourage governments to keep two sets of accounts, one for internal purposes and the other for external observation. Moreover, military budgets are often not openly discussed, even at the cabinet level. Within the ministry of finance, only one or two officers have access to detailed information. Even here, analysis is done in aggregate and disbursements

are executed on a lump-sum basis. In Ethiopia, for example, many combatants were reported to have remained on the payroll several months, if not years, after the soldiers had died in combat.

Military Expenditure: Level, Patterns and Trends

The level of military expenditure² of African countries both in absolute terms and related to GDP is low by international standards. This masks the situation of specific countries as well as the potential for conflict when military expenditures are low. The literature suggests that factors influencing trends in African military expenditure fall into five categories.

- Political leadership changes in Africa—often characterized by violence—have been accompanied by changes in the priority accorded to military spending, through either policy shifts or changes in external security factors. For example, the astronomic growth of the defense sector in Ethiopia in the late 1970s and the 1980s may not have occurred if the political leadership had been non-military. Similarly, the arms build-up by Somalia occurred under a military government. The type of regime, therefore, influences the process of budgetary decision-making and allocation of resources.
- The level of per capita income, the general economic situation and budgetary constraints considerably influence the size of the military sector and its change over time. Given the financial squeeze arising from huge budgetary deficits, the decline in export earnings in the aftermath of the collapse of commodity agreements, and the devaluation of domestic currencies endured by many countries in Sub-Saharan Africa, affordability must have been one of the key factors in the decline of military expenditure after 1989 (see Figure 2). The discovery of oil or commodity price booms also cause shifts in defense expenditure.

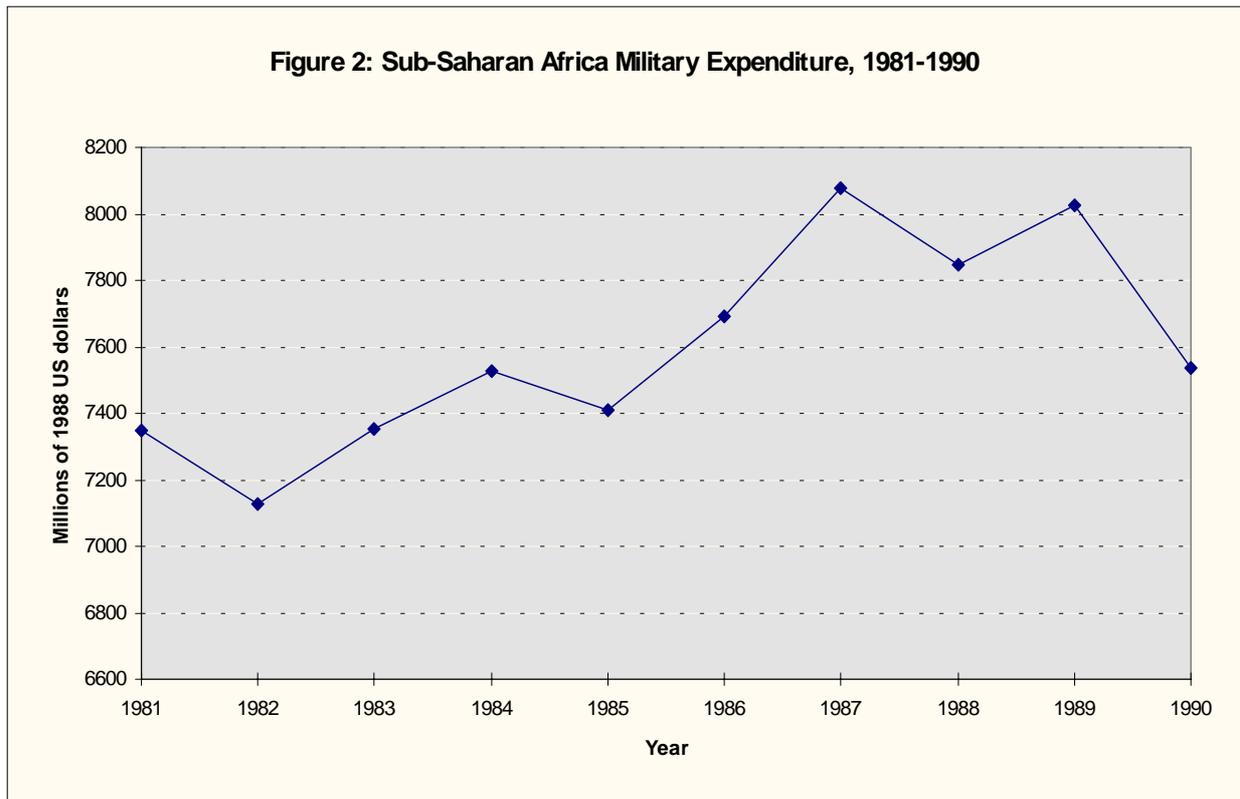
² Military expenditure, as used here, refers to that defined by NATO as: “all current and capital expenditure on the armed forces, in the running of defense departments and other government agencies engaged in defense projects as well as space projects; the cost of paramilitary forces and police when judged to be trained and equipped for military operation; military R&D, tests and evaluation costs; and costs of retirement pensions of service personnel, including pensions of civilian employees. Military aid is included in the expenditure of the donor countries. Excluded are items on civil defense, interest on war debts and veterans' payments” (Sen, 1992, p. 3). Both IISS and SIPRI follow NATO's definition of military expenditure, as opposed to the IMF's definition. The main difference between the NATO and IMF definitions lies in the treatment of military aid, which is explicitly treated by NATO as a military expenditure of donor countries and hence is excluded from data for recipient countries. In the case of the IMF, such aid is included in the recipient's military expenditure figures.

Gabon is a good example; its relatively high military burden of 4.8 percent in 1990 can only be explained by large oil revenues.

- Psychological factors, or the political leadership's understanding of real and perceived external threats, also influence military expenditure. The military capabilities of neighboring countries are a source of threat. Thus, Tanzania built its army in the late 1970s and intervened in Uganda due to the threat posed by Idi Amin. Similarly, Chad constructed its army in reaction to Libya. Each government's perception of its adversaries and the behavior of its allies and neighbors have contributed to changes in the level and make-up of the military sector.
- Global developments and military alignments also affect expenditures. The Cold War arms race, military aid, and the role of the superpowers considerably influenced both the size and the growth of the military sector during the 1970s and 1980s. The reduction in East-West tension and the move towards democratically elected governments has since helped to reduce military expenditures. Related to this issue is the general view that military spending is affected by the actions and preferences of external patrons or dominant suppliers of major weapons systems. Easy access to military equipment through concessional loans and grants has obviously encouraged countries to expand their armies. This was particularly true in the case of countries allied with the former Soviet Union. A good example is Somalia, which built up its military strength to very high levels in the early 1970s through Soviet aid. This encouraged Somalia to wage war on Ethiopia. Later, the Soviets shifted to the Ethiopian side and provided massive military assistance to repulse the Somalis.
- Border disputes and civil wars have been a factor in changing both the volume and structure of military expenditure. A cursory review of the military expenditure trends in the Appendix demonstrates the sudden rise in the level of military expenditure and military burden following military conflicts. The aftermath of a protracted guerrilla war is another factor explaining large defense expenditures when farmers are transformed into a sizable standing army, as in the case of Zimbabwe (West, 1992, p. 113).

In the previous section, we have indicated the shortcomings of the available data on military expenditures, particularly in Africa. With the appropriate questions concerning the reliability of the data, the SIPRI data show that military spending in Sub-Saharan Africa increased in the early 1980s, reaching a high of over 8 billion US dollars in 1987. The major contributors to this increase were Angola, Ethiopia and South Africa. In the late 1980s it has been on a

downward trend (see Figure 2). Information from other sources indicates that this decline has continued since 1990.



Source: See Appendix I

The recent decline in military expenditures may be attributed to two primary factors: the improvement in the international security environment and the decreasing affordability of military equipment against a backdrop of economic and budgetary difficulties. The end of the Cold War—and with it, the superpower rivalry in enticing dependent states through military assistance—has created a favorable climate for a reduction in military expenditures (e.g., Ethiopia, Angola and Somalia). It would be premature to say that the problem has completely disappeared, but for the time being, there is relief for Africa.

A country's financial situation obviously affects its military capability, and many African countries are not in a position to commit public funds to military spending on a large scale. Nonetheless, one should not lose sight of the circumstances in which politics overtake economics. Defense spending may rise (and do so quickly) even in a situation of economic distress if countries feel they are faced with an external threat (real or imagined) or an internal problem that prompts aggrieved groups to rise up in arms. Any number of patriotic

arguments will be advanced to demand sacrifices from the population. This is precisely the way in which military expenditures have soared in some countries over the last two decades.

Over and above the level and changes in military expenditure, such indicators as the military burden and the size and changes in the number of armed forces (see Section III) show the extent of militarization and consequently the importance of conversion in Sub-Saharan Africa. The military burden, defined as the share of military expenditure in GDP, is often used as a measure of the capacity of an economy to bear the costs of the military sector. The military expenditure/GDP ratio for Sub-Saharan Africa from 1972–1990 was the second lowest (3.2 percent) and well below the world average of 5.1 percent (Hewitt, 1993, p. 3). Details of trends in the military burden in Sub-Saharan Africa indicate a decline over the past decade, although there are considerable differences among countries. This low level partly reflects the low level of income of African countries and their consequently limited capacity to finance the highly capital- and foreign exchange-intensive military sector. There appears to be no correlation, however, between the level of the military burden and frequency of armed conflicts, and this does not signify that Africa is less militarized than other regions. “Out of 30 major conflicts in the Third World in 1989, nine, or approximately 30 percent, were fought in Sub-Saharan Africa” (Deger and Sen, 1991, p. 24). Furthermore, disaggregation of the data at the country level reveals that some African countries—e.g., Angola and Ethiopia—have among the highest military burdens in the world.

**Table 1:
Military Burdens of Selected Countries in Sub-Saharan Africa, 1975–1992**

	<i>1975</i>	<i>1980</i>	<i>1985</i>	<i>1990</i>	<i>1992</i>
Angola	n.a.	12.8	28.4	35.5	n.a.
Chad	2.7	n.a.	6.0	5.6	2.6
Ethiopia	4.5	8.5	8.9	9.0	20.1
Gabon	0.8	2.1	2.6	4.8	n.a.
Mozambique	n.a.	7.0	10.4	10.6	10.2
Somalia	n.a.	4.9	3.8	3.9	3.6
Tanzania	3.8	4.0	3.8	3.9	3.6
South Africa	3.4	3.9	3.7	4.3	3.0
Sudan	2.4	2.3	2.6	n.a.	n.a.
Zambia	2.9	3.5	2.4	3.8	2.6
Zimbabwe	4.3	7.1	5.7	6.8	4.3

Source: IISS.

Development and Military Expenditure

Much has been written on the impact of defense spending on economic growth, especially in the industrial countries. There is no doubt of the stimulus that military research and development (R&D) and defense expenditures provide to economic expansion. New products and processes over a wide range of economic activities can be traced to defense expenditures, with engineering, transportation, health and aviation as the primary examples. No doubt there have also been opportunity costs; whether the benefits outweigh the costs, however, is a question that continues to be debated. In the case of the African continent, that question is less daunting—although empirical studies have not yet been made on any significant level, it seems evident that military expenditures have not yielded significant long-term benefits for economic growth.

First and foremost, there is hardly a country outside South Africa in which R&D for defense has amounted to any significant level. Second, and again with the exception of South Africa and perhaps Nigeria, local capabilities in the assembly or manufacture of weapons systems are negligible. Imports, and not domestic manufactures, are the predominant source for weapons—as in the case of capital goods in the non-military sector. There are instances in which the military stimulates other sectors of the economy—for example, the supply of managerial and skilled manpower, which moves from the military to the civilian sector. Nevertheless, there is no ‘military–industrial complex’ and consequently little stimulus that military spending gives to either industrial growth or the economy as a whole.

Thus, common sense and general observation indicate that Sub-Saharan Africa's experience in military spending over the last two decades has on the whole been costly, if not disastrous. Ethiopia, Eritrea, Mozambique, Angola, Liberia, Somalia, Sudan, Uganda, Tanzania, and, more recently, Rwanda—without neglecting the struggle of Zaire toward independence—all have seen large-scale destruction (or retrogression) in the condition of their social and economic infrastructure, loss of human lives on a significant scale, massive internal and external migration, and serious dislocation of their rural economies. The repeated shortages in agricultural output over the last twenty years in such countries as Ethiopia/Eritrea, Somalia and Sudan have been partly due to the high cost (both human and economic) paid by the agricultural sector. Non-quantifiable indirect costs (psychological and social scars, the loss in community cohesion) as well as opportunity costs have also been immense.

Conversion in Sub-Saharan Africa provides an opportunity to reverse this process of destruction and decay, to strengthen weakened community, social, and national bonds, to restore a sense of shared values and benefits, and to provide a collaborative, constructive future in place of the slaughter, misery and destruction that currently provide grist to the world's mass media mill.

Military Expenditure and Structural Adjustment Programs

Since the beginning of the 1980s, stabilization programs supported by the IMF and adjustment programs by the World Bank have been introduced in several countries. The objectives of these programs have been many: strengthening productive capacity, restoring fiscal and monetary equilibrium, raising savings and investment, reducing inflation, and improving efficiency of production and resource allocation through correcting cost-price distortions. By the mid-1980s, the number of countries that had launched adjustment programs in Sub-Saharan Africa had reached 29 (Husain and Faruqee, 1994). The results of adjustment programs in Africa, however, remain mixed. Some reports (World Bank, 1993) indicate improvements in the macroeconomic environment, in agricultural policies, and in deregulating and liberalizing markets. Nonetheless, social unrest has been reported in several countries, which have imposed civil service lay-offs and reduced educational and health services. One should note that UNICEF's major study, *Adjustment with a Human Face*

(Cornia et al., 1987), gained wide publicity for uncovering the adverse social consequences brought about by adjustment programs.

Although cuts in military expenditures during adjustment programs may appear inevitable, the evidence presented in a UNICEF/SIPRI study in the early 1990s (Deger and Sen, 1991) demonstrates that some countries either have allocated a greater role to the military—ostensibly in response to the increased demand for military security—or have protected defense expenditures from the fiscal squeeze. “Out of the five Sub-Saharan African countries that suffered the most dramatic declines in per capita GDP as well as per capita health and education expenditures in the early 1980s, three increased their military expenditure at the same time. These are Ghana, Sudan and Togo” (Deger and Sen, 1991, p. 31). In others, on the other hand, the situation scarcely changed.

There are two methods through which this military expenditure inertia occurs. The first possibility is ‘protection’ of military expenditure from the fiscal squeeze brought on by adjustment programs. As the primary objective of adjustment programs is to restore budgetary equilibrium—i.e., between government expenditure and revenue—the funds allocated to non-productive sectors such as education and health are often reduced and public enterprises are divested or privatized. As these structural changes occur, the share of defense spending in central government expenditure remains stable in response to pressures by the defense establishment. An important conclusion of the UNICEF/SIPRI study is that “within a sample set for Sub-Saharan Africa in 1980-86, defence was more often protected than either health or education” (Deger and Sen, 1991, p. 32). As figures for military expenditure are likely to be understated compared to those of health and education, the extent of protection of the military sector may be even stronger than is currently recognized.

The second option is ‘resilience,’ which occurs when aggregate government expenditure falls but the share of defense in central government expenditure (CGE) increases simultaneously. The concept of resilience is different from that of protection in that, in a budget squeeze environment, the share of defense spending grows in the former case but remains unchanged in the latter. De Masi and Lorie (1988) analyzed data from government financial statistics (IMF and SIPRI data for three years prior to adjustment) and concluded that most developing countries exhibited resilience in military spending during IMF-supported programs. Similarly, the UNICEF/SIPRI study concluded that between 1978 and 1984, nine countries

(Gabon, Ghana, Ivory Coast, Sierra Leone, Somalia, Tanzania, Togo, Uganda, and Zambia) demonstrated resilience towards military spending as the share of defense in CGE went up while CGE was reduced in response to IMF-sponsored stabilization programs (Deger and Sen, 1991, p. 32).

Although there is a need for further research, it is clear that military expenditure exhibits resilience and enjoys protection during adjustment. This implies that conversion programs could indeed contribute to improvement in the design and impact of structural adjustment programs by bringing issues related to military expenditures to the forefront and creating an enabling environment to tackle the root causes of protection and resilience.

III. SIZE AND PROFILE OF MILITARY PERSONNEL

Trends in Military Personnel

The total number of military personnel³ in Africa declined from 3.2 per thousand people in 1983 to 2.5 in 1993 (ACDA, 1995). In absolute numbers, the size of the armed forces in Africa increased from 1,464,000 in 1983 to 1,558,000 in 1993. In Sub-Saharan Africa, the number increased, according to ACDA, from 1,026,000 in 1983 to more than 1,100,000 in the period 1986–1990. Subsequently, it decreased to 1,032,000 in 1993. The figures in Table 2 illustrate the position of Africa as a whole with respect to the armed forces of the rest of the world. Africa's number of military personnel per thousand inhabitants is the second lowest figure in the world. On the other hand, one should not lose sight of Africa's small economic size. Furthermore, most countries in Sub-Saharan Africa showed increases in the number of military personnel over the past decade (see Appendix III).

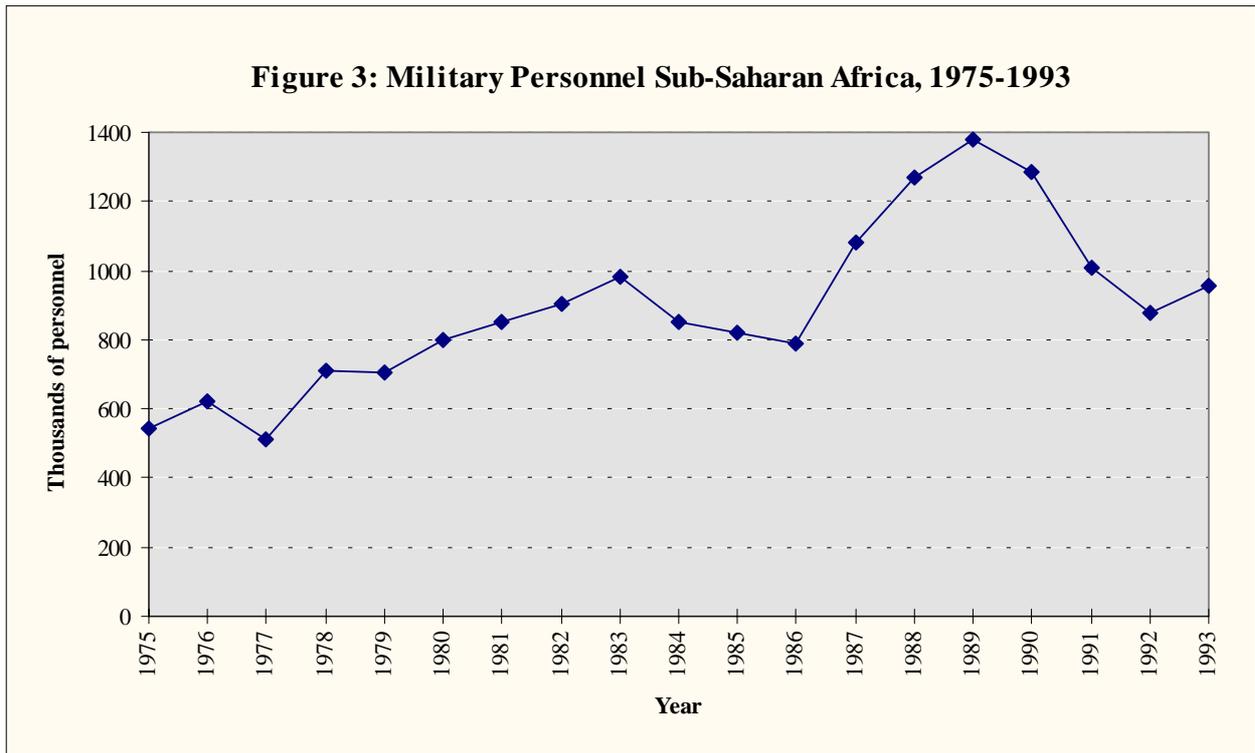
**Table 2:
World Armed Forces and Armed Forces per Thousand Inhabitants in 1993**

	<i>Armed forces (in thousands)</i>	<i>Population (in millions)</i>	<i>Armed forces per thousand people</i>
Africa	1558	618	2.5
Sub-Saharan Africa	1032	506	2.0
East Asia	7813	1871	4.2
South Asia	2059	1209	1.7
NATO	4913	697	7.1
Eastern Europe	3864	348	11.1
OPEC	1892	460	4.1

Source: ACDA, 1995, Table I

Data for the individual countries must be treated with care; several weaknesses of data on the military have been pointed out above. According to IISS figures, Ethiopia has maintained the largest army in the region since 1980—it peaked at 438,000 in 1989. Estimated at 120,000 in 1993, Ethiopia's army still remains the largest in Sub-Saharan Africa. Sudan's armed forces, estimated at 118,500, are the second largest.

³ The term military personnel refers to members of the military establishment, excluding reservists. One should note that the reliability of the figures on armed forces is often questionable, as they tend to overstate the size of personnel (due to the 'show of force' syndrome exhibited by the military in many developing countries).



Source: See Appendix III

Figure 3 depicts the trend in military personnel levels during the period under review. The sharp rise in the late 1980s is partially due to the large increases in the armed forces of Ethiopia and Angola. Since 1989, however, there has been a considerable overall decline.

Profile of Combatants

There is no reliable statistical information on the skill profile of the armed forces. Given the agrarian nature of most African economies coupled with a low level of literacy, it may be assumed that most combatants are of peasant origin with a low level of professional skills. “Survey data examined for the case studies suggest many former combatants lack basic education, marketable job skills, and for some, the social skills needed for successful economic and social integration” (World Bank, 1993, p. xi).

**Table 3:
Profile of Combatants in Angola, Mozambique and Zimbabwe**

<i>Angola: Government soldiers</i>	<i>Angola: UNITA forces</i>	<i>Mozambique: Government soldiers</i>	<i>Zimbabwe: ZANLA/ZIPRA combatants in 1980</i>
--	---------------------------------	--	---

<ul style="list-style-type: none"> * Normally live in areas other than home region * 54% are under 25 years old * 75% are career soldiers * 83% expressed interest in assistance to reintegrate through training or acquiring new skills 	<ul style="list-style-type: none"> * Generally operate closer to home district * Generally travel with families * Live in less urbanized areas * Have lived in non-monetized economy, in camps * Strict discipline 	<ul style="list-style-type: none"> * 60% age 25–34 * 72% have seven years of service or more * 42% are single * 63% have basic education * Most common occupation prior to army was agriculture (55%) 	<ul style="list-style-type: none"> * 50% age 20–25 * 70% are single * 13% have no previous education; 69% have part/full primary school * 75% have no previous employment or are unskilled
--	---	--	--

Source: World Bank, 1993, p. 56

The range of services provided by the military other than combat duties includes electronics, electricity, general repairs, mechanics, vehicles, administration, public health, and surveying and drawing. Some military personnel therefore possess skills that would enable them to be productive in civilian sectors. Available information does not permit a detailed analysis of the occupational classification of service personnel and its implications for demobilization and reintegration. Given the relatively low level of literacy and technological development in Africa, however, the percentage of technically skilled military personnel is unlikely to be higher than in South Korea, where Ball found that “only about 20 percent of the servicemen discharged from the armed forces each year at the beginning of the 1970s could be considered ‘technically skilled manpower’” (Ball, 1992, p. 60).

The military sector may have contributed to the supply of technical manpower in countries such as Ethiopia and Nigeria. Airline pilots, sailors in commercial shipping lines, and skilled workers in the electronics, automotive, shipbuilding, heavy construction, and civil engineering industries have received their initial training in the armed forces. There is not, however, sufficient evidence to analyze the nature and extent of the spin-off effects of skills acquired in the military sector. Here again, Ball (1992) argues that even in countries such as Korea and China, which have procured large amounts of sophisticated military equipment, only a small proportion of the armed forces can be defined as technically skilled—implying that the spin-off effects are limited. Even if the skills exist, retraining would be required in many cases upon demobilization.

Child soldiers (15 years and under) allegedly have been deployed in several guerrilla and conventional wars in Africa. A World Bank study (1993) confirms the involvement of child soldiers in the case of Angola, where 54 percent of MPLA forces were reported to be under 25 years of age. In Uganda during 1981–1986, according to Dodge and Raundalen (1991), child soldiers were reported in combat, although the National Resistance Army (NRA) has claimed that they were never pressed into actual fighting. When the war was over, the Prime Minister's Office estimated that 3,000 remained in the army, including about 500 young girls.

In Mozambique, the recruitment of children into the Mozambican National Resistance (MNR) army was achieved through capture, intimidation and brute physical and psychological force (Dodge and Raundalen, 1991). In Ethiopia, child soldiers were widely reported to have been deployed on both sides of the Ethiopia/Eritrea conflict. Various reports show conscription of children as young as 12 or 13, far below the legal conscription age of 18. The kidnapping of children is reported to have been widely practiced; school boys were seized in the streets and taken to the front after brief military training.

Dodge and Raundalen further argue that the prevalence of child soldiers in Mozambique, Uganda, Angola, and Chad indicates that some soldiers are familiar with only a 'military' lifestyle; some may have lost their social roots, and many have foregone opportunities for formal education or for accumulation of assets. The prevalence of child soldiers influences considerably the design and content of demobilization and reintegration programs; as this group may have lost its family attachment, possesses no skills and considers fighting a way of life, demobilization and reintegration programs must consider cultural and social orientation programs.

Data on the gender of military personnel is also insufficient—the actual numbers are rarely provided. Nonetheless, gender is obviously an important factor in the design and content of demobilization and reintegration programs, since the factors for successful integration into the economic and social life of civilian society tend to be different for men and women.

IV. DEMOBILIZATION AND REINTEGRATION PROGRAMS

As we have seen, military expenditure and the numbers of military personnel declined in Sub-Saharan Africa in the late 1980s and early 1990s. Efforts toward the peaceful resolution of conflicts and disputes have been a principal feature of recent UN operations, and similar efforts are being undertaken by regional organizations (such as the OAU) and individual countries. While these may go some way toward avoiding or reducing the frequency of conflicts, it would be unrealistic to dismiss the possible occurrence of new conflicts and military confrontations. Demobilization and reintegration of former combatants will consequently be a continuing concern. Even if military conflicts were to decline substantially in the future, well-designed and implemented demobilization and reintegration programs addressing current conflicts have the potential to preempt a recurrence of the problem and lay the ground for sustainable national reconciliation, reconstruction, and lasting stability. They are therefore an essential aspect of the transition to peace, especially if conflicts and confrontations linger under conditions of declining economic opportunities.

Sub-Saharan African countries in which demobilization and reintegration programs are part of a national reconstruction plan fall into three categories:

- Those that are experiencing war or conflict (Angola, Liberia, Somalia)
- Those in which wars have ended but demobilization and reintegration have not been carried out systematically or adequately (Ethiopia, Eritrea)
- Those countries that have demobilized forces and are currently implementing some sort of reintegration program (Mozambique, Uganda)

Demobilization may be defined as the process by which the armed forces of government and/or opposition or factional forces (such as guerrilla armies) either downsize or completely disband. The downsizing may be in response to a reduction in the threat to national security or a result of other changes in policy, such as budgetary constraints. Reintegration refers to programs of cash compensation, training, or income generation intended to increase the potential for economic and social absorption of ex-combatants and their families or other displaced persons into the socioeconomic life of their communities.

Objectives of Demobilization and Reintegration Programs

Demobilization and reintegration may have four (interrelated) objectives:

- *Political objective.* Proper demobilization and successful reintegration into civic society help improve governance, lay the ground for participatory development, and assist in sustaining peace. A restructured defense force following a demobilization and reintegration program also provides an opportunity to improve the representation of different social groups and civil-military relations in general.
- *Security objective.* Demobilization may help to control arms circulating in urban and rural areas and defuse tension. Absorbing ex-combatants into the regular economic and social activity of the country prevents their engagement in socially undesirable activities. In ethnically fragmented and religiously polarized societies, ex-combatants may easily be pushed into crime or political violence.
- *Economic objective.* Demobilization and reintegration programs help ensure that combatants return to productive life, increase social and economic stability and minimize unemployment. Moreover, in countries in which skilled manpower is a constraint, demobilization and reintegration programs provide limited opportunities to use or upgrade skills that are applicable to civilian life.
- *Fiscal objectives.* Successful demobilization should assist in the reduction of the defense budget and facilitate the transfer of budgetary resources to more productive sectors of the economy. It is not always the case that savings arising from a downsized defense budget are available for non-military expenditures, however. Resources mobilized under wartime or emergency situations will obviously not be fully available for public expenditures in a peacetime environment. Nevertheless, savings may provide a potential stimulus to growth.

While the above are the main objectives of all demobilization and reintegration programs, the priorities, the method of achieving these objectives, and the stages of demobilization may differ among countries.

Stages of Demobilization

Demobilization and reintegration, as processes through which governments reduce the burden of military expenditures and maximize the peace dividend, may be divided into several phases.

The **preparatory phase** encompasses the whole range of activities from peace negotiations to preparing plans for demobilization, encamping and registering combatants, mobilizing resources to finance demobilization and reintegration programs and publicizing subsequent programs.

- *Negotiations.* In the cases of Uganda and Ethiopia—in which the guerrilla army was victorious—the decision to demobilize systematically or not rested with the victorious party. In cases in which negotiations lead to a settlement, the decision to demobilize and the *modus operandi* will usually form part of the negotiations. For example in Angola and Namibia, where opposing forces reached agreement, the decisions concerning the reduction of the armed forces, whom to demobilize, and what benefits to offer were an important component of the peace negotiations. A peace agreement is the *sine qua non* for successful demobilization and reintegration, and honoring the peace accord is a litmus test for the political commitment of the parties concerned. Without such an agreement and a climate of confidence and mutual trust, disarmament and demobilization can hardly be implemented.
- *Planning.* A comprehensive plan that encompasses all stages of demobilization and reintegration of ex-combatants is essential. The planning phase enables the analysis of possibilities and constraints. Systematic planning helps establish realistic targets, forecast available human, material and financial resources, and ensure a smooth transition from war to peace. A demobilization and reintegration plan should briefly outline current and future courses of actions and priorities, and should be prepared in a relatively short period of time.
- *Resource mobilization.* Given resource constraints, mobilization of financial resources is an important component of the preparatory phase. External resource mobilization is often a long, drawn-out process that involves formulating convincing projects, making appeals to funding agencies, and negotiating with relevant authorities. Funding agencies, in turn, must convince their respective authorities. The lead time between commitments to disbursement may last a year or two. Although the involvement of donor agencies and

NGOs in the peace negotiations may help in shortening the lead time, programs may initially have to be based on domestic resources, even if these are modest.

- *Cantonment or assembly.* This stage involves encamping combatants in barracks, publicizing the demobilization program, directing combatants to report to assembly points and providing transportation. During cantonment, combatants are disarmed and complete necessary registration and documentation that give them civilian status upon their release. Obviously, salaries and adequate food, clothing, shelter and medical care need to be provided as well. Efficient management of this stage is crucial for the success of subsequent phases.

Demobilization follows cantonment, and is accomplished step by step over the course of several months. Obviously, the faster this is completed the better, as remaining in camps for long can be frustrating for ex-combatants. Demobilization is clearly a difficult phase, as the experiences of such countries as Zimbabwe, Namibia and Uganda demonstrate.

In the **reintegration** phase the ex-combatants are expected to assimilate into the wider population and rejoin civilian society. The reintegration phase is perhaps the most complex one, as it requires psychological adjustment of ex-combatants and their active participation in the economic and social activity of society.

The demobilization and reintegration of former combatants have proven to be both lengthy and difficult—partly as a result of the substantial number of military personnel involved, partly due to limited institutional capacity for coordination, planning and implementation of the activities, and partly because resources available for military objectives are not necessarily available for postwar reconstruction and development. Nonetheless, both the direct and indirect costs of not demobilizing and not supporting reintegration appear far greater in the medium and long term.

Dispersion occurs when the government in power disbands ex-combatants of the opposition geographically over a short period, often without any kind of compensation, in order to reduce political tension. Dispersion, in a sense, is the antithesis of the demobilization and reintegration process. Although questionable from the social, political and economic point of

view, there may be short-term political advantages. Many experts argue that the medium- and long-term costs of dispersion far outweigh its short-term benefits.

Review of Country Experiences

Half a dozen countries in Africa have undertaken demobilization and reintegration programs of varying scope and duration since the late-1980s. Due to limited studies and evaluations of the results, however, an adequate assessment of their experiences would at this stage be incomplete. Nevertheless, the following preliminary observations may be made based upon the current state of knowledge.

Among the few countries that have dispersed combatants with very little assistance for reintegration is Ethiopia. Shortage of resources was probably a principal factor in this decision. When its prolonged civil war ended, the country's per capita income was among the lowest in Africa, its agricultural economy had been ravaged by successive periods of drought and its major export crop (coffee) had been hit by years of depressed prices. Another factor may have been the lack of political motivation to demobilize and reintegrate approximately half a million men and women. The priority of those who took power may have been to transform their own guerrilla force into a regular army to replace the much larger force, which had collapsed—as much through its own internal weakness as by the more determined drive of the guerrilla fighters. A third factor may have been the lack of appreciation of the importance, economically and politically, of demobilization and reintegration programs by a guerrilla group that had been isolated from the cross currents of international dialogue on development and political issues. Whatever the reasons, dispersion presented itself as the more attractive option over the shorter term. The longer-term consequences of a large army of unemployed ex-combatants that does not appear to have been systematically disarmed remain to be seen.

With respect to demobilization and reintegration programs, the African experience has been mixed. Several factors lie behind the success or failure of demobilization and reintegration programs (World Bank, 1993). The first is the political backdrop in which demobilization and reintegration programs take place. A government in power—as in the case of Uganda—formulating and executing a demobilization and reintegration program within a fairly

manageable and predictable environment is quite different from negotiating a demobilization and reintegration program with a political adversary as part of an overall settlement and implementing it jointly during a war-to-peace transitional period—as in Mozambique and Angola. The second factor is the need to have fairly specific and feasible objectives. Fiscal objectives (a visible reduction in defense spending) and economic objectives (a relative increase in development expenditures) are examples. The choice of a clear indication of targeted groups who will be the beneficiaries of a demobilization and reintegration program (such as ex-combatants and their families), as opposed to a non-targeted program that will benefit ex-combatants and their dependents but will not be closed to others, is another example. Decisions on these strategic objectives depend on whether ex-combatants are treated as a group with special needs, whether their group is more important than others in terms of national security considerations, and whether such targeted programs are effective.

The third factor is advance planning and coordination. There are usually many actors in a demobilization and reintegration program (governments, the military, donor agencies, NGOs) as well as a number of elements to coordinate. In addition, the lead time for certain inputs is long. Advance planning is therefore essential. Whenever advance planning and coordination have been well executed, results have been positive. When the reverse was the case, inefficiencies and delays have resulted (see below).

Fourth, initial surveys—i.e., prior to demobilization or during encampment—on the number and profile of combatants have enabled certain countries (such as Uganda) to identify problems such as HIV-infected persons that require special care and attention. Such surveys have also permitted the formulation of community-based programs when large numbers of ex-combatants are expected in a specific locality. The absence of such surveys has reduced the effectiveness of demobilization and reintegration programs.

Finally, where donor and NGO support has been forthcoming and where these groups have worked in a coordinated manner with governments, results have been relatively positive. Finance is always a hurdle, and donor support is vital. NGOs have been valuable partners not only because they have provided funding, but also because they have been important providers of services—transportation to camps, distribution of food, medical care, training and job counseling in countries such as Zimbabwe and Namibia.

Overall, it is likely that the net benefits of demobilization and reintegration programs have been significant. In Zimbabwe, for instance, 83 percent of former combatants found employment or were being trained five years after the conclusion of the program (although more than half of the former combatants who found jobs were absorbed into the civil service and the military). Thus, indications exist that conversion programs—if well designed and executed—do bring net benefits, that governments in the process of implementing demobilization and reintegration programs should persist, and that those without demobilization and reintegration programs should consider them in the context of their overall program of development. Clearly, those reaching the end of long years of conflict must recognize that demobilization and reintegration programs will be a major agenda item for post-war reconstruction.

The Road Ahead

It is vital to take a holistic approach to conversion as an integral part of the development process. A lesson may be drawn from the African experience that conversion programs must be viewed not as distinct and independent programs but rather as part and parcel of the national development policy/program at both the macro and microeconomic levels. In its review of the Namibian and Angolan experiences, the World Bank (1993) argued that treating demobilization and reintegration as independent programs may have been among the factors that contributed to setbacks in the demobilization endeavor.

Another lesson that may be learned is that the demobilization, reintegration and development continuum requires a planning process that is forward looking and provides a framework for rational decision-making. Such planning involves setting goals and elaborating the methods of achieving these goals. The formulation and implementation of a plan that will help achieve an effective and efficient demobilization and reintegration demands adequate capacity at the national, provincial, district and community levels. Indeed, for the whole range of activities—from preparation to implementation—the role of the government is crucial. It is important to designate an institution well placed within the political hierarchy to be responsible for demobilization and reintegration.

Although the primary responsibility for implementing demobilization and supporting reintegration rests with governments, donor agencies and NGOs have a supportive role. African donor agencies in particular (especially the African Development Bank, ADB), which have not been active in the past, need to reorient their programs in this direction. Demobilization and reintegration programs have, thus far, rarely been perceived as an opportunity for creating jobs, investing in infrastructure, and providing training—all of which fall within their mandate. Thus, the NGO community—and especially the African NGOs—must be involved: in part because of their knowledge of local conditions, in part because of their commitment, and finally because of the potential for a greater impact on demobilization and reintegration programs that their partnership with their foreign counterparts could provide.

The Role of Planning

A critical issue raised during African demobilization and reintegration programs is the lack of enough time to carry out the entire planning process. Undoubtedly, well-prepared plans have better chances for realization than plans formulated in a rush. Yet during an immediate post-war period, the country concerned may not possess the necessary institutions with clearly defined responsibilities and the trained manpower to prepare sound, feasible and internally consistent plans. Nonetheless, some kind of plan, however crude, is generally better than no plan. As the experience suggests, the best approach may be to initiate quarterly plans and then gradually move to bi-annual, yearly and medium-term plans.

The comprehensive approach to demobilization and reintegration planning has several stages, the first of which is the ‘problem identification’ or ‘diagnosis’ stage, which involves the collection and analysis of relevant data. Plans, in order to be realizable, must be based on reliable data in terms of the number, socioeconomic profile, career aspirations and intended place of settlement of the different forces. The experience in Africa suggests that such information is often lacking, leading to delays and inefficiencies.

Based on the problems identified, the next task is to set broad objectives and goals for demobilization and reintegration in the light of national development strategies. This stage, often referred as the ‘pre-plan,’ is performed by either the national planning office or by the

government agency responsible for the coordination of demobilization and reintegration. It is also at this stage that the relationship between structural adjustment programs and demobilization programs is clarified. The ‘plan preparation,’ or third stage, is entirely the responsibility of the ministry or agency responsible for demobilization and reintegration. It involves exploring different options and establishing detailed targets for demobilization and reintegration—including determining where ex-combatants will be moving, the financing of projects and programs, and the type and duration of retraining programs.

Once the plan is prepared by the responsible agency, it must be submitted to the ministry of planning or finance to ensure that the resources required will be forthcoming. This stage of planning, called ‘plan elaboration,’ involves determining whether the plan is consistent with national development goals, whether the targets are realistic in the light of available resources and whether it is politically and economically feasible. The plan is then submitted for ‘adoption.’ The final stage is ‘implementation and follow-up.’ The former requires the support of various ministries, the private sector, NGOs and administrative units in provinces, while the follow-up is primarily done by the agency directly responsible. Again, the ability to use the results of evaluation and monitoring to improve subsequent plans is crucial.

Throughout the process, planning must take into account various constraints: political, economic, social, cultural and administrative. Demobilization and reintegration must command the full commitment of the top political and military leadership, a secure environment for the implementation of demobilization must exist and political bodies must respect technical decisions. For example, the decision of where to locate projects should be based, to the greatest extent possible, on objective criteria rather than on the preferences of a specific group of ex-combatants. Economic constraints may be considerable; the economies of Sub-Saharan African countries are characterized by low per capita income, low marginal and average rates of saving and investment, high level of indebtedness, chronic budgetary and balance of payments difficulties, and weak infrastructure. As a result, the absorptive capacity of the economy to provide productive employment to ex-combatants is limited, even if resources are available. This problem is often exacerbated by the low skill level and lack of experience of ex-combatants. An administrative constraint results from the multiplicity of institutions involved in demobilization and reintegration: ministries of defense, agriculture, industry, education, health, finance, transport, and planning. As there is likely to be no strong

central government at the time of demobilization, clearly defining the responsibilities of each institution, holding them accountable for their actions and in general coordinating their activities becomes an enormous task.

A crucial aspect of demobilization and reintegration support is the creation of employment opportunities for the demobilized personnel. The capacity to create jobs, however, is a function of several factors: age, literacy levels, skill and experience, availability of finance, markets for the products, etc. Strategies and programs must therefore be designed to respond to specific country situations. Nevertheless, a few illustrative points may be offered regarding the kinds of programs and projects that would emerge from such conversion strategies.

- *Training and retraining.* Higher and specialized professional skills are required for filling particular roles within organizations and in-service training activities are required for the performance of role-specific activities. Two types of training programs may be initiated—one focuses on training ex-combatants to acquire skills necessary for employment in existing state or private-sector production and service sectors, while the other enables them to be self-employed.
- *Improving access of former combatants to capital, land and technology.* Management and accounting programs are needed for those who could be self-employed.
- *Specific projects.* These include: (1) employment generation—in particular, initiating public works programs (road construction, reforestation, dam construction, etc.) with the goal of utilizing skills of military personnel and removing infrastructure bottlenecks in these countries; (2) projects for unskilled military personnel who, through specially designed training programs, are prepared for employment; (3) projects for disabled former combatants; (4) transformation of military infrastructure into community projects or development centers; and (5) restructuring of existing military industries in response to economic and social development programs of high national priority (e.g., poverty alleviation) or for the benefit of former combatants.

CONCLUSION

The end of the Cold War has brought new challenges and opportunities to the African region. Conversion issues today are of considerable relevance for Africa. As the prevailing global political environment encourages the peaceful resolution of conflicts, the transformation from a war to a peace economy is expected to be an important societal concern. Conversion programs are mechanisms for effecting this transformation. Conversion facilitates the use of resources saved from reductions in military expenditures for investment in the civilian sector, lays the basis for sustainable peace, and has the potential to contribute to the improvement of welfare of the population.

Given the limited industrial base in Sub-Saharan Africa (outside South Africa), conversion issues in Africa essentially converge around demobilization and reintegration. Demobilization and reintegration programs have two goals—one immediate, the other longer term. The immediate goal is to reintegrate ex-combatants into the socioeconomic fabric of their communities; the longer-term goal is to promote sustainable human development. Conversion may be perceived not only as a tool for the transition from war to peace and from investment in the military to investment in more productive sectors, but also as a means of encouraging the rational and sustained use of resources.

Among the lessons to be learned from the demobilization and reintegration experience of war-torn countries has been that successful demobilization and reintegration requires strong political commitment from all concerned parties, adequate prior planning, and the availability of adequate financial, technical and material resources. Given the diverse interests of political authorities and competition for resources among various development programs, a conversion program can best succeed only if perceived as an integral part of national development programs. Clearly, a first step in any serious undertaking would be to create an awareness among policy-makers of the importance of conversion.

REFERENCES

- ACDA. See: US Arms Control & Disarmament Agency
- Ball, Nicole. 1992. "Adjusting to Reductions in Military Expenditure and Defense Procurement." In Lamb, 1992, pp. 53–78.
- Cornia, G., R. Jolly and F. Stewart, eds. 1987. *Adjustment with a Human Face, Vol. I: Protecting the Vulnerable and Supporting Growth*. Oxford: Clarendon Press.
- De Masi, Paula and Henri Lorie. 1988. *How Resilient are Military Expenditures in the Context of Fund-Supported Programs?* IMF Working Paper. WP/88/48. Washington, DC: IMF.
- Deger, Saadat and Somnath Sen. 1991. *Arms and the Child: A SIPRI report for UNICEF on the impact of military expenditure in Sub-Saharan Africa on the survival, protection and development of children*. UNICEF Staff Working Papers No. 9. New York: UNICEF
- Dodge, Cole P. and Magne Raundalen. 1991. *Reaching Children in War: Sudan, Uganda and Mozambique*. Bergen, Norway: Sigma Vorlag.
- Hewitt, Daniel P. 1991. *Military Expenditure: International Comparison of Trends*. IMF Working Paper. May. Washington, DC.
- _____. 1993. *Military Expenditures 1972–1990: The Reasons Behind the Post 1985 Fall in World Military Spending*. IMF Working Paper WP/93/18. Washington, DC: IMF.
- Husain, Ishrat and Rashid Faruqee, eds. 1994. *Adjustment in Africa: Lessons from Country Case Studies*. World Bank Regional and Sectional Studies. Washington, DC: World Bank.
- IISS. See: International Institute for Strategic Studies
- International Institute for Strategic Studies (IISS). Annual. *Military Balance*. London: Brassey's.
- Lamb, Geoffrey with Valeriana Kallab, ed. 1992. *Military Expenditure and Economic Development, A Symposium on Research Issues*. IBRD Discussion Papers No. 185. Washington, DC: World Bank, December.
- Sen, Somnath. 1992. "Military Expenditure Data for Developing Countries." In Lamb, 1992, pp. 1–18.
- SIPRI. See: Stockholm International Peace Research Institute
- Speth, James Gustav. 1994. *Africa: Conflict Prevention and New Development Initiatives*. Speech by the UNDP Administrator at The African-American Institute, New York, 24 May.
- Stockholm International Peace Research Institute (SIPRI). 1975–1993. *SIPRI Yearbook*. Oxford: Oxford University Press.
- UNDP. See: United Nations Development Programme
- United Nations Development Programme (UNDP). 1994. *Human Development Report 1994*. Oxford: Oxford University Press.
- US Arms Control & Disarmament Agency (ACDA). 1995. *World Military Expenditures and Arms Transfers 1993–1994*. Washington, DC: Government Printing Office.



West, Robert L. 1992. "Determinants of Military Expenditure in Developing Countries: Review of Academic Research." In Lamb, 1992, pp. 113–146.

World Bank. 1993. *Demobilization and Reintegration of Military Personnel in Africa: The Evidence from Seven Country Case Studies*. Discussion Paper. Report No. IDP 130, October.

Appendix I: Sub-Saharan Africa military expenditure, 1981-1990, in millions of US dollars (1988 prices)

Country	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990
Angola	502	502	777	1065	1144	1152	1152	872	781	703
Benin	29	40	44	41	43	43	35	38	32	32
Botswana	30	24	24	27	30	42	75	50	46	48
Burkina Faso	42	43	41	42	39	60	53	54	54	54
Burundi	30	34	31	33	34	38	29	23	28	28
Cameroon	133	225	296	311	341	336	303	262	168	191
Central African R.	18	20	23	22	19	18	18	19	18	18
Chad	-	-	61	59	54	62	39	67	55	60
Congo	60	78	81	84	91	91	91	69	76	78
Côte d'Ivoire	117	124	122	121	121	121	127	122	124	124
Ethiopia	469	475	496	486	420	490	611	680	756	786
Gabon	117	114	117	118	134	139	129	134	128	122
Ghana	23	23	16	20	39	42	44	23	32	32
Kenya	243	247	231	190	160	214	238	222	222	220
Liberia	67	58	30	30	29	26	28	27	20	25
Madagascar	50	44	40	39	37	39	33	28	26	23
Malawi	44	33	26	22	21	30	25	24	25	24
Mali	39	42	42	44	51	47	47	60	67	67
Mauritania	71	56	50	-	-	-	-	-	-	-
Mauritius	5	3	3	3	3	3	3	5	5	5
Mozambique	61	58	55	53	42	36	75	101	107	94
Niger	15	13	14	14	15	16	17	18	-	-
Nigeria	914	717	616	347	346	322	248	283	267	310
Rwanda	45	42	40	35	38	43	40	37	39	39
Senegal	120	111	106	103	95	90	95	100	95	100
Sierra Leone	24	19	12	9	6	8	4	4	5	5
Somalia	60	49	57	41	29	28	36	21	20	20
South Africa	3003	2970	2956	3137	3036	3139	3355	3468	3808	3407
Sudan	194	163	191	242	216	208	239	215	271	216
Swaziland	13	15	13	12	10	9	8	10	10	9
Tanzania	144	127	109	98	97	121	146	164	175	175
Togo	25	22	21	24	30	31	44	44	44	43
Uganda	82	83	116	185	190	104	128	80	40	40
Zaire	34	69	32	57	48	44	46	35	39	39
Zambia	140	120	109	84	69	130	121	87	49	49
Zimbabwe	387	364	353	331	334	371	394	400	395	350
Total	7350	7127	7351	7529	7411	7693	8076	7846	8027	7536

For the years marked in gray, a SIPRI figure is not available; the figure of the previous year has been used.

Source: SIPRI, 1991

Appendix II: Sub-Saharan Africa military expenditure as percentage of gross domestic product, 1981-1992

Country	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
Angola	13,8	11,9	16,5	22,0	28,4	28,4	-	21,5	20,0	35,5	35,5	-
Benin	1,8	1,9	2,2	2,0	2,0	1,9	2,0	2,0	-	-	1,1	1,3
Botswana	3,7	2,7	2,4	2,4	2,1	2,7	4,1	2,7	2,5	4,1	3,2	3,1
Burkina Faso	2,8	3,0	2,9	3,0	2,5	3,5	3,0	2,8	-	2,8	3,4	4,3
Burundi	3,0	3,5	3,1	3,2	3,0	3,4	2,7	2,2	-	-	-	-
Cameroon	1,1	1,7	2,2	2,1	2,2	2,1	2,1	2,1	-	1,3	1,6	-
Central Africa R.	2,1	2,0	2,6	2,3	2,0	1,8	1,7	1,8	-	-	-	2,0
Chad	-	7,0	7,8	5,7	6,0	4,0	-	-	-	5,6	-	2,6
Congo	2,1	2,3	2,3	2,3	2,6	4,0	-	3,2	-	-	-	3,8
Côte d'Ivoire	1,1	1,1	1,1	1,1	1,0	1,0	1,2	1,2	-	2,0	-	0,8
Ethiopia	8,4	8,4	8,4	9,0	8,9	8,9	10,0	12,2	13,5	9,0	8,9	20,1
Gabon	2,4	2,4	2,6	2,3	2,6	4,0	4,3	4,5	-	4,8	3,7	-
Ghana	0,7	0,7	0,5	0,6	1,0	0,9	0,9	0,5	0,6	0,8	0,7	0,8
Kenya	3,6	3,8	3,6	2,9	2,4	2,9	3,0	2,6	2,5	3,5	2,7	2,8
Liberia	4,8	4,3	2,3	2,4	2,3	2,2	-	-	-	-	-	-
Madagascar	3,0	2,7	2,4	2,3	2,2	2,2	1,8	1,4	1,3	1,4	1,2	1,1
Malawi	3,3	2,4	1,9	1,6	1,5	1,8	1,6	1,7	1,6	1,4	1,1	1,4
Mali	2,4	2,4	2,4	2,7	2,3	-	-	3,2	-	-	2,9	2,9
Mauritania	7,6	6,9	5,7	-	-	-	-	-	-	-	-	-
Mauritius	0,4	0,3	0,3	0,2	0,2	0,2	0,2	0,2	0,3	-	0,4	0,4
Mozambique	8,0	10,7	12,1	11,7	10,4	-	-	-	-	10,6	9,5	10,2
Niger	0,7	0,6	0,7	0,7	0,7	0,8	0,8	0,8	0,8	1,0	0,9	1,0
Nigeria	2,3	1,8	1,9	1,3	1,2	1,2	0,7	0,9	0,9	0,9	0,8	0,7
Rwanda	2,0	2,0	1,9	1,6	1,6	1,9	1,8	1,7	1,7	1,7	6,9	6,8
Senegal	2,8	2,8	2,7	2,7	2,5	2,2	2,0	2,0	-	1,9	1,9	2,1
Sierra Leone	1,0	0,8	0,7	0,7	0,6	1,1	0,8	0,5	0,6	0,7	-	-
Somalia	4,3	3,4	3,8	2,7	1,8	1,8	1,8	3,0	-	-	-	-
South Africa	4,0	4,1	4,0	4,0	4,1	4,2	4,5	4,6	4,7	3,9	3,6	3,0
Sudan	2,0	1,7	2,1	3,9	2,6	2,1	-	2,0	-	-	-	-
Swaziland	2,2	2,9	2,6	2,3	1,8	1,7	-	-	-	-	-	-
Tanzania	4,3	4,2	3,9	3,8	3,8	4,7	4,7	5,2	6,9	3,9	4,6	3,6
Togo	2,4	2,3	2,2	2,3	2,6	2,5	2,6	3,2	-	-	3,1	-
Uganda	3,8	2,7	3,0	5,0	5,9	3,8	3,5	1,7	0,8	2,1	2,6	2,9
Zaire	1,3	1,0	1,4	1,5	3,5	2,0	3,1	2,0	3,9	-	-	2,9
Zambia	4,4	4,1	3,9	3,0	2,4	3,7	3,2	3,2	-	3,8	3,8	2,6
Zimbabwe	6,4	5,7	5,7	6,2	5,7	6,2	6,5	7,3	7,9	6,8	6,0	4,3

Source: 1981-1989: SIPRI Yearbook 1993; 1990-1992: IISS.

Appendix III: Military Personnel in Sub-Saharan Africa, 1975-1993, in thousands

Country	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984
Angola	-	30	30	33	33	40	40	37,5	37,5	40
Benin	1,7	1,7	-	2,2	2,3	2,2	2,2	3,2	3,1	3,3
Botswana	-	-	-	-	-	1	2	3	3	3
Burkina Faso	2,1	3,1	-	8,1	8,1	4,1	4,1	-	3,8	3,8
Burundi	-	-	-	4,5	4,5	5	5	5,2	5,2	5,2
Cameroon	5	5,6	-	6,1	6,1	8,5	8,5	7,3	7,3	7,3
Central Africa R.	-	-	-	1,2	1,2	1,2	2	2,3	2,3	2,3
Chad	4	4,7	-	5,2	5,2	5,2	4,2	3,2	4,2	-
Congo	5,5	7	7	7	7	7	7,5	8,7	8,7	8
Côte d'Ivoire	4,1	4,1	-	5	5	5	5	5,1	5,1	-
Ethiopia	44,8	50,8	50,8	93,5	93,5	221,6	230	250,5	300	300
Gabon	-	-	-	1,3	1,3	1,3	1,3	2,2	2,2	4,9
Ghana	15,5	17,6	17,6	17,7	17,7	20	20	14,6	12,6	10
Guinea	5,7	5,9	-	8,9	8,9	8,7	8,7	9,9	9,9	-
Guinea-Bissau	-	-	-	-	-	6,1	6,1	-	5,7	6,1
Kenya	7,6	7,6	7,6	9,1	9,1	12,4	12,8	16,6	16	13,7
Liberia	5,2	5,2	-	5,2	5,3	5,3	5,3	5,4	5,6	-
Madagascar	4,8	4,8	-	10,5	10,5	10,5	10,5	20,9	21,1	21,1
Malawi	1,6	2,3	-	2,4	2,4	5	5	4,7	4,7	-
Mali	4,2	4,2	-	4,2	4,2	4,5	4,5	5	4,9	-
Mauritania	1,3	4,8	-	4,5	12,5	9,5	9,5	8,5	8,5	8,5
Mozambique	-	-	-	21,2	21,2	24	22	21,6	12,7	14
Namibia	-	-	-	-	-	-	-	-	-	-
Niger	2,1	2,1	-	2,1	2,1	2,2	2,2	2,2	2,2	-
Nigeria	208	230	230	231,5	231,5	173	173	138	133	133
Rwanda	3,8	3,8	-	3,7	3,8	3,8	3,8	5,2	5,2	-
Senegal	5,9	6	6	6,5	6,5	8,4	8,4	9,7	9,7	9,7
Sierra Leone	2,1	2,2	-	2,2	2,2	3	3	3,2	3,1	-
Somalia	23	25	25	51	51,5	46,5	50	62,6	62,6	62,5
South Africa	50,5	51,5	51,5	65,5	65,5	63,3	63,3	81,4	82,4	-
Sudan	48,6	52,6	-	-	-	-	56	-	58	58
Swaziland	-	-	-	-	-	-	-	-	-	-
Tanzania	14,6	14,6	14,6	26,7	26,7	51,7	51,7	40,4	40,4	40,4
Togo	1,8	2,3	-	-	3	3,3	3,3	3,6	5,1	-
Uganda	21	21	21	21	21	21	21	20	15	18
Zaire	43,4	43,4	43,4	33,4	33,4	-	-	26	26	26
Zambia	5,8	7,8	7,8	14,3	-	14,3	-	14,3	14,3	14,3
Zimbabwe	-	-	-	-	-	-	-	63	41,3	41,3
Total	543,7	621,7	512,3	708,7	706,2	798,6	851,9	905	982,4	854,4

Source: IISS, 1975/76-1994/95

For the years marked in gray, IISS data is not available; the figure of the previous year has been used.