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SYNTHESIS REPORT ON THE
PROMOTION OF THE PRIVATE SECTOR IN CHAD

PRELIMINARY DRAFT

Sterling International Group, Inc.

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INTRODUCTION

The private sector of Chad can best be described as one having great resiliency and diligence under extreme difficulties during the course of Chad's post-colonial history. Participation in some aspect of the private sector has been the key to successful adaptation and survival through political turmoil and economically troubled times for a large number of Chadians. Participants in the private sector range from all types of individuals transacting one-time arbitraging deals in the course of meeting daily needs to the successful Trader engaging in the multinational export of livestock through traditional, unregulated channels, to the quasi-private parastatal operations that make up the larger part of the formal economy. The private sector remains one that is relatively undeveloped and operates according to traditional practices developed over years of regional arbitrage. Ties to the global market come primarily through relationships and patterns established during colonial times.

It is commonly recognized that Chad must reinvigorate the private sector to establish the prosperous development of the nation. To this end the government of Chad, in conjunction with external donor and bi- and multi-lateral agencies, has begun the process of the promotion of the Private Sector. A national seminar on this topic was held in N'Djamena at the end of May 1991. Participating in this seminar were Chadian businessmen, governmental officials, and international agency and donor representatives. Commitments to disengage the Chadian State from over-participation within the economy were expressed by government representatives and this was enthusiastically supported by the representatives of the private sector and the various donors. Recommendations to further this objective were put forth by the private sector representatives as findings of a variety of sub-commissions which were previously established for the purposes of this seminar.

The essence of the recommendations called for the reduced participation of the government in the economy as an economic actor, by reducing and clarifying the administrative, legal, regulatory, and fiscal actions of the government. Fostering business development should be the guiding principal of governmental action, rather than impeding private sector development through heavy-handed and arbitrary intercedance.

As part of the process to develop and promote the private sector in Chad, a Donor Roundtable was proposed as a subsequent step towards understanding and developing the environment for private sector reform in Chad. The Government of Chad appointed a High Committee and a Technical Assistance Cell (CTA) to focus on the subject of private sector promotion. In preparation for the roundtable, this synthesis report was conceived of and designed to serve as an incorporating report, presenting a comprehensive data set and observations regarding the Chad environment which the private sector operates in. This report is an attempt to provide such data and observations, so that the High Committee and Technical Cell will be better able to undertake the important mandate placed upon them of leading the revitalization of the private sector.

REVIEW OF PRIVATE SECTOR

Major Influences

OVERCOMING COLONIAL LEGACY

The status quo of the relatively undeveloped private sector has arisen from a variety of influences accreted over the years. The colonial legacy of neglected development of infrastructure and educational facilities, a heavily extractive tax system coupled to an administrative code designed to support such an extractive system, and a focus upon the southern portion of the country were compounded by subsequent economic and political developments. The political turbulence throughout the post-colonial era has left the private sector a nascent one that has made few investments during the many turbulent times. The great need of the various Chadian national governments to marshall funds to compensate for the lack of previous development led into a path of high levels of taxation and arbitrary regulation of the formal sector without consequence for the potential damage to the tax base.

WAR

War at various times has greatly contributed to the weakening of the environment the private sector operates in. Years of conflict reduced the rule of law to the rule of force, resulting in survival becoming the paramount need for many. Traditional trade ties, built over centuries of pattern, remained the surest economic direction to pursue for private sector participants. Pursuing modern international trade becomes close to impossible and private sector participants remain very cautious, arbitrating only that which is sure and certain. Speculative investments requiring lengthy time periods to

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mature and grow profitable do not get made in a war-torn society. Chad has been beset by armed conflict intermittently since 1979. The lack of a peaceful climate in Chad has created a vacuum which has only been partially addressed by the government through quasi-public parastatal organizations acting in some of the most important segments of the economy. The great needs of Chadian society require that the dynamic forces inherent in the economy receive the correct inducements to channel effort in a sustainable pattern. This simply means that the entrepreneurial spirit that allows so many Chadians to survive and prosper through the tumultuous times of the past decade must be encouraged to flourish. Without this, Chad will remain mired in difficult circumstances.

Private Sector Characteristics

UNDEVELOPED

The Chadian private sector reflects many of the characteristics of Chad as an independent nation, in being very poor, among the least developed in the continent, isolated, and dependent upon a very narrow economy based upon agriculture and livestock. Foreign assistance has traditionally provided all funding for development projects and has consistently provided sizable government budgetary contributions.

LIBERAL POLICIES

From the beginning Chad has maintained a liberal policy approach to free enterprise, encouraging private investment and allowing repatriation of profits, only entering into areas of the economy as demanded by national security, where national interests were seen to prevail, usually in the absence of the desired private investment. Unlike in many other African states, fervent ideological views were absent for the most part in creating Chadian governmental influence within the economy. Rather, the need for more taxes to pay for basic government operations and inhibitive investment costs led the government to become more extractive and an active player within the economy through parastatal organizations.

PRIMARY FOCI

Agriculture and livestock are the primary foci of the private sector in Chad, contributing 38% of GDP in 1990, and employing 75% of the male labor population and some 85% of the female labor population.[1] Either producing the raw materials, processing such, or servicing those that do one of the preceding, is the business of the great majority of the private sector. Modern productive facilities are concentrated either in N'Djamena or in the southern portion of the country. In agricultural production, cotton is king in Chad, being the main commodity export and providing the primary cash crop. Livestock, primarily beef on the hoof, comes next in economic importance and features predominantly in the traditional, unregulated economy. Fishing is another important economic area for the Private Sector, but is one that is almost completely left to traditional methods of production, processing, and marketing.

FOUR CATEGORIES OF PRIVATE SECTOR

The private sector in Chad can be categorized into four major categories: 1) quasi-private parastatal enterprises that consume the brunt of the economic resources

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[1] UNDP/World Bank, "African Development Indicators" (Washington, DC: UNDP/World Bank, 1992), p. 285.

available through the financial and governmental channels, often in some kind of partnership with French business interests; 2) the traditional traders, merchants, manufacturers, craftsmen, transport providers, and other small to medium sized business owners who make up the numeric core of the private sector; 3) the informal sector participants who exist marginally within the private sector, unquantifiable, constantly fluctuating in number, including in its ranks many from the second and forth categories and also those poor who are eking out a survival/subsistence existence day to day; and lastly, 4) the peasants farming for subsistence and/or cash crops, the pastoralists raising and trading livestock, and the fishermen on Lake Chad and the rivers.

INDUSTRIAL FOCUS

Within the industrial sector, agricultural materials processing accounts for almost the complete focus of production. Sugar, textiles, soap & cooking oils, tobacco products, soft drinks, beer, meat & hides, and agricultural equipment are the items of production. Most of these are produced within the parastatal enterprises. The informal sector produces a significant number of less sophisticated farming tools and implements, consumer household goods and ready-to-eat foods.

NATURAL RESOURCES

Other important items of commerce within the private sector include trade in Gum Arabic, which is collected by traditional methods and exported unprocessed, petroleum, and trade in the mineral sodium carbonate, also known as natron. This item is gathered from around Lake Chad and in wadis of Kanem Prefecture and is both traded through traditional channels to Nigeria and used domestically for a number of purposes[2]. Oil has been discovered in near Lake Chad and also in the south of the country. World Bank financing is providing for the establishment of the Sedigi micro-refinery with a pipeline to N'Djamena. The goal of the establishment of this refinery is to make Chad close to self-sufficiency in energy needs, thereby reducing the current balance deficit. The oil importing bill has equaled about 10% of GDP.[3] A consortium including the American oil companies of Exxon, Shell, and Chevron, is to share ownership (49%) with the Chadian government (51%). Operations are to be conducted by a new corporation SEERAT (Societe d'etudes et d'exploitation de la raffinerie du tchad), which will be a large addition to the ranks of the quasi-public entities in Chad.

MAJOR SUB-DIVISIONS OF ECONOMY

The two major functional taxonomic sub-divisions within the private sector are the formal and informal sectors. As in most African economies, the Chadian economy has a private sector divided into two functional divisions which follow differing behaviors in the marketplace, making very different contributions to the total economy. Each segment of the private sector responds to the existing economic and political environment in rational, if sub-optimal, actions.

In Chad the formal sector is the smaller one in providing employment and in contribution to GDP.[4] The top fourteen formal enterprises in Chad in 1990 employed a

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[2] Thomas Collelo, ed., "Chad, A Country Study" (Washington, DC: Library of Congress, 1990), p.11.

[3] World Bank, "Country Briefs" (Washington, DC: World Bank, Dec. 1990), p. 72.

[4] Jean-Francois Hennert, "The Informal Sector in Chad" (College Park, MD: IRIS, 1991), p. 22; originally from: Henry Penhuis, "La Promotion du Secteurl Informel Tchadien: Bilan-Diagnostic et Propositions d'Appui," BIT, 1990.

combined total of 4,551 employees.[5] The formal sector consists mostly of the parastatal operations, which are jointly owned by the government and private investors, with a few other businesses filling out the ranks. This sector is the primary taxpayer in Chad, being the most easily tabulated by government authorities. A graphic example of this is Cotonchad, the parastatal responsible for the cotton crop. The waxing and waning in Cotonchad's economic fortunes has a major impact upon the revenues of the government of Chad, with the cotton sector contributing some 20% of total government tax revenues.[6] During the early and mid 1980s the deteriorating performance of Cotonchad impacted severely upon the revenues of Chad.

The larger number of the organizations in existence in the private sector in Chad fall into the informal sector area. In the difficult economic and political environment present in Chad, it remains a more lucrative and efficient proposition to remain economically active outside the purview of the government legal, regulatory, and taxing agents participating in what has come to be known as the informal sector. Some studies indicate that the informal sector contributes the lion's share to the economy, better than two-thirds of the GDP.[7] To gain greater profits, and in some cases, any profits, the informal sector will undergo great difficulties to remain away from the reach of the government, staying as "invisible" as possible to the authorities. This results in a major loss of potential tax revenue for the government and an inefficient use of scarce resources.

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[5] Ibid, p. 26, Table 6.

[6] World Bank, "Country Briefs," p. 68.

[7] Hennert, "The Informal Sector in Chad," p. 4; originally from: Henry Penhuis, "La Promotion du Secteurl Informel Tchadien: Bilan-Diagnostic et Propositions d'Appui," BIT, 1990.

INTERNATIONAL TRADE TIES

The private sector's international economic ties are of two kinds, the traditionally based activity with the surrounding countries and newer links with a number of the major western countries and China. France features prominently in both the export and import areas, accounting for 52% of Chad's imports and receiving 16% of Chad's exports in 1990.[8] West Germany is Chad's largest market, getting some 24% of their production in 1990.[9] Of the surrounding countries, Cameroon, Nigeria, and CAR feature most prominently in the officially recorded trade. Nigeria is the largest participant in the unofficial livestock and fisheries trade flows. As a nation Chad has been consistently running a negative trade imbalance, due to cotton production and marketing problems, and also due to the greater portion of livestock trade taking place unofficially.

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[8] The Economist Intelligence Unit, "Cameroon, CAR, Chad Country Profile 1991-1992" (London: Business International Limited, 1992), p.75.

[9] IBID.

CONSTRAINTS INHIBITING ENTREPRENEURIAL ACTIVITY

Economic

MACROECONOMIC CONDITIONS

The current economic climate within Chad is one of tentative advances coupled to recurring problems which hinder net positive growth. Erratic but real GDP growth has occurred since 1987 but a continuing trade deficit, very low tax receipts, and negative domestic savings restrain the ability of the government to consolidate upon the positive GDP growth. Inflation is expected to remain fairly low, around 3%, and real economic growth is foreseen as approaching 3.5% if conditions improve.[10] A steady estimated population growth of 2.7% readily absorbs any additional resources generated by the economic growth. Also, the political turbulence of the past few years and the fragility of the present government add to an already difficult economic situation by increasing actual government expenditures, which fuel the on-going fiscal deficit and continue to crowd out the private sector from the small amount of credit available within the domestic financial markets. External indebtedness and non-payment of arrears remains a festering problem, keeping Chad a very long distance away from creditworthiness in the international financial markets. Though Chad's debt-service ratio is favorable, at 9.1%, given the percentage, 43.8%, of GDP the external debt obligations represent.[11] This unlikely situation is due to the high percentage of debt-load which is concessional debt. Inflation remained relatively low, between 2% and 3%, and the real growth rate was 8.4%

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[10] IRIS Team discussions with BEAC officials, N'Djamena, Chad, July 1992.

[11] Ibid.

for 1991.[12]

GOVERNMENT INSOLVENCY

The persistent insolvency of the government contributes to an economic climate where private sector participants can expect very little, if any, support from the state, and the strong likelihood of state seizure of the majority of any visible economic gains generated. Chad is wholly dependent upon foreign assistance to keep the state functioning and is under pressures from the IMF to reduce deficit spending and to increase tax revenue collection as part of their structural adjustment program. Even with such influences, budgetary deficits continue to grow larger each year, partly due to off-budget security related expenses. For the foreseeable future, Chad will remain economically dependent upon the largesse of international donors to keep concessionary credit lines available.

Recent attempts to reduce the governmental arrears by reducing the government employees' salaries have been ill-received. Strikes to protest these actions have repeatedly occurred and it is uncertain whether or not this course of action can be successfully sustained. Reducing the cost of operating the government is important to the success of the reform of the Private Sector in that this will help minimize increasing pressures to dramatically boost government revenues. This can lead to a more rational and supportive approach to taxation and fee assessment by the government that better serves progress in private sector growth than the current situation.

[12] Ibid.

PUBLIC FINANCING

Public financing requirements in Chad remain a complex and cumbersome burden upon the private sector reform process. Chad possesses one of the weakest revenue bases in Africa, getting only 9% of GNP in 1989[13] from a combination of customs revenues, taxes, and non-tax sources. Government revenues come roughly equally from taxes on goods and services, yielding 29%, from taxes on incomes and profits also generating a 29% share, from customs duties yielding 19%, and followed by non-tax revenues generating some 17%.[14] With the weak development of the private sector, the formal sector is small in number and predominantly occupied by the firms unable to "escape" to the informal sector.[15] This leaves behind firms which are quite vulnerable to heavier tax and non-tax, fee assessment loads that are sought by the government to compensate for the lack of revenues garnered elsewhere. Five parastatals bear the great burden of the taxation in Chad, Cotonchad, MCT, BdL, STT, and SONASUT, with the taxation suffered being, in order of burden, import-export duties, excise taxes, corporate taxes, and turnover taxes.[16] The burden of government revenue generation falls onto those who cannot avoid the attention of government agents. A vicious circle is perpetuated, as low revenue receipts add to greater pressures upon the government to raise revenue yields up, resulting in more government economic interference that places increased stress upon the formal sector, creating greater incentives for these entities to move to the informal sector out of the government's reach.

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[13] World Bank, "Country Briefs," p.70.

[14] IRIS Team discussions with BEAC, N'Djamena, Chad in July 1992.

[15] Hennert, p.s 5–9.

[16] Collelo, "Chad, A Country Study," p.128.

CUSTOMS FRAUD

Directly tied to this situation is the high level of customs fraud experienced by Chad. The involvement of the military since 1990 at customs checkpoints has led to a major increase in irregular customs assessments. The situation is acknowledged for what it is, but remains a politically sensitive issue. Plus, large amounts of economic activity pass over international borders completely unassessed by the customs authorities. Much of the incentive to bypass official channels comes in the form of a comparatively overvalued CFAf in relation to the Nigerian Naria. Goods purchased in Nigeria with the strong CFAf come back to Chad through traditional trade patterns and go unassessed. This also impacts strongly on the local Chadian goods producers of these same items. The Chadian produced goods are higher priced and lose market share to the imported items.

SMALL, ISOLATED MARKETS

Chad is plagued by a common problem across Africa, that of small, inefficient, and isolated markets distributed all around the country. Within Chad it is difficult to accumulate rapidly a mass market demand which would support a sophisticated manufacturing sector producing in economies of scale. The population of 5.8 million is dispersed throughout the country, with the greatest concentrations in the southern portion of the country. N'Djamena is the largest town, of approximately 600,000 people. There are only three other towns have sizes close to or above 100,000 people – Abeche, Moundou, and Sarh. None of these towns are easily accessed from one to the other. The extreme difficulties faced by Chad in their infrastructure base restrains the modernization of the economy in very severe terms. Linking the existing markets together as a greater, "Chadian" market for common, everyday mass-produced or processed products remains a significant challenge on many fronts.

LOW PURCHASING POWER

In addition to the physical linkage problems, the weak purchasing power in Chad limits the economic growth potential for these markets. With the per capita income in 1989 being just $190.00, the near-term development of vibrant, modern markets full of consumer products within Chad is extremely limited. Disposable income available for use on discretionary products is simply not present. The markets in existence focus primarily upon traditional products and the most affordable, popular modern products marketed through traditional channels. The low level of physical health and social development in Chad will also influence the market through keeping food items, clothes, education, building materials, and basic transportation among the strongest demanded products.

Resources

LEGAL, REGULATORY, AND JUDICIAL

An area not commonly considered as a resource is that of the legal, regulatory, and judicial systems. Underpinning most societies are interwoven systems of laws, regulations, and enforcement mechanisms developed over centuries which serve to underlie and support the peaceful development of that society in a semblance of order. Chad has not had the benefit of this kind of experience and lacks this most unappreciated resource of development. Participants in the private sector lack the basic protections offered in most systems of law and thereby encounter a much higher risk. The situation in Chad does not allow for recovery of acceptable returns to compensate for these greater risks, and as a result, Chad has seen little indigenous investment or development of a complex private sector.

The particularly complex and overarching legal problem of lack of enforcement of contracts and property rights has been discussed within a companion report to this synthesis report, prepared by Professor Louis Aucoin, of Boston University Law School. This property rights and judicial specialist undertook an examination of Chadian legal codes, regulations, and applications through the official and "para-official" systems currently in existence in Chad. His findings and recommendations are more fully explored within the report prepared on the subject, but merit mention within this synthesis report.

The legal, regulatory, and judicial systems within Chad operate in an environment where societal breakdown in the case of civil law and order has been more the rule for the past decade than the exception. Law is not the paramount force in the land. Power and influence reign supreme. Military courts, in some cases ad hoc, have supplanted civilian ones, leading to the rapid ercsion of supremacy for the civil code. During the 1980s the Ministry of Justice lost many of their records during the bouts of fighting. The very low level of education of the Chadian population compounds the neglect of the civil code during recent times of strife by exacerbating the problems in comprehending the outmoded, arbitrary application of French civil codes, regulations, and laws maladapted to use in Chad during the days of colonial administration and the first years of independence. Aucoin's findings indicate that the judiciary lacks independence, enforcement power, adequate pay, and professional respect. The lack of clear lines of demarcation between the various authorities also contributes to a most confusing legal situation. Corruption is rife and often there is no available avenue for legal recourse. In short, establishing legal title and successfully obtaining all necessary clearances can be an awesome, exhorbant task for the most informed, connected, and proficient Chadian who wishes to pursue developing a business in the private sector.

An additional report exploring the procedures and steps involved in registering a business has also been produced by the consultant Benjamin H. Hardy. His work focused on the simplification of the business registration process. The major recommendation offered was for the Government of Chad to eliminate certain ordinances and decrees which put in place an onerous twelve-step process, filled with redundant requirements and steep fees to be paid by not-yet existent businesses. Aspiring business people now face an intolerable burden in starting an official business as a result of mis-guided governmental action.

INFRASTRUCTURE

One of the most fundamental constraints facing participants in the Chadian private sector is the extremely low level of infrastructure development within the country. One of the basic staples of advanced infrastructure development is electricity. In Chad the available electricity is among the most expensive in Africa, costing CFAfr100/kwh compared to Nigeria's CFAfr16/kwh,[17] and is produced at only two power stations dependent upon imported oil. Communications, shipping, and travelling are expensive, difficult, and subject to major delays. As a result, firms suffer from higher rates of material loss, damage or spoilage, and disruptions of normal business patterns. This requires successful Chadian firms to carry larger inventories of inputs than competitors both in other African countries and overseas or suffer erratic production or service provision. All of these factors combine to create a major, overriding competitive disadvantage for the Chadian Private Sector.

[17] The Economist Intelligence Unit, "Cameroon, CAR, Chad Country Profile 1991-1992," p.69.

LOW INVESTMENT RATES

Directly quantifying or calculating the value of this disadvantage held by the Chadian Private Sector is extremely difficult, but an easily recognized impact of it can be seen in the very low investment rates within both the Private Sector and Public Sector. Total gross domestic investment was 10.3% of GDP in 1990, and of that total the overriding majority, 9.8%, was invested by the public sector, with the private sector contributing a minuscule 0.5%.[18]

FINANCIAL SECTOR WEAKNESS

A contributing factor to the low level of investment rates within the Private Sector is the poor state of the financial sector in Chad. The financial sector of Chad is very small and lacks the necessary resources to contribute aggressively to the growth of the Private Sector. There are just a few banks, with a limited amount of capital available, and very few potential customers who can provide the level of information required to qualify for a loan. Many of the businesses in the Chadian Private Sector lack the ability or desire to generate the financial statements necessary for evaluation by modern banks. Also, depositors are very few in number, with the larger of these, Cotonchad, also being the largest single borrower.

The few active banks in Chad include the Chad office of the Central Bank of Central Africa (BEAC), the Banque Internationale pour L'Afrique du Tchad (BIAT) which is affiliated to Meridian-Biao Bank, Banque Tchandienne de Credit et de Depots (BTCD) which is affiliated with Credit Lyonnais, and the Chadian Postal Bank. Three other banks exist but offer very little, if any, active service provision regularly: the Banque International Pour Le Commerce et L'Industrie au Tchad (BICIT), Banque de

[18] UNDP/World Bank, "African Development Indicators," p. 25.

Developpement du Tchad (BDT), and the Caisse Nationale d'Epargne (CNE). The BDT has recently been reactivated by an African Development Bank program, after a number of years of inactivity brought on due to the latest war.

The major problems faced by these banks and other members of the financial sector in Chad are a very low rate of deposits and a high concentration of loans to a few primary borrowers. Deposits have been low because of a negative real interest rate offered on deposits, a lack of security regarding deposited funds, and an absence of secrecy on depositor information. As a result, the BEAC is the largest depositor in Chad, accounting for 60% of the total financial system deposits (which were just $650 million in 1986).[19] Loan portfolio risks are concentrated on the parastatals and the government. Cotonchad is the single, largest recipient of the available credit, getting two-thirds of the loan advances made as short-term advances against crops.[20] The other major domestic credit customer is the Chadian government, as it is precluded from any international borrowings, other than concessionary offerings, due to the poor international financial rating of Chad. These two players combine to soak up the majority of the available credit in the system. The remaining sources of credit in the Chad economy are those located in the traditional, informal sector or from the VITA project. Both of these sources are extremely limited and impractical for the larger credit requirements present in modern investments.

As a result the financial sector in Chad is underdeveloped and poorly positioned to assist in funding renewed economic growth of the private sector. The official financial sector remains unable to successfully perform its basic function, that of financial intermediation between economic actors. Domestic savings will not be mobilized by the official financial sector until the real interest rates paid become positive, deposits remain

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[19] Roger B. Jantio, "Chad Financial Sector and Private Sector Financing," (College Park: IRIS, 1991), p. 2.

[20] Ibid.

securely held by banks, and bank secrecy regarding accounts becomes de riguer.

COMMUNICATIONS

Moving from the dilemmas of the financial sector to the communications sector, one can see a similarity in lack of development. Modern telecommunications in Chad are rudimentary, with four-fifths of all the country's 2,500 phone lines situated in N'Djamena. All international calls are routed through Paris and are extremely expensive and suffer from limited satellite access. Postal delivery is limited to box delivery in the major cities, and for immediate, personal, and emergency communications the National Radio Service is relied upon. Radio is the major medium of national communication in Chad, with Shortwave communications radios relied upon in areas outside N'Djamena. Print publications include an official newspaper and some irregularly published private papers. The use of advertising is extremely limited and remains largely unutilized.

TRANSPORT

The private sector in Chad is landlocked and relies upon just four primary routes of trade, two traditional routes and two modern routes of shipping for importing and exporting. The traditional routes are from N'Djamena up through the desert 3000kms north to Benghazi, Libya and east 3350kms to Port Sudan, Sudan. These routes are long, difficult journeys prohibitively expensive and slow for modern trade items. The modern routes come into Chad from either Lagos via railroad to Maiduguri in Nigeria, then onto Koussouri in Cameroon, or up 1,700kms from Douala, Cameroon via rail to Ngaoundere and onto Koussouri. Koussouri is now dependably connected to N'Djamena by a permanent road bridge built recently in the mid 1980s. Previous arrangements included first a ferry service, then later a pontoon bridge. A second permanent road bridge between Cameroon and Chad is further south in Mayo Kebbe Prefecture.

For transporting materials or people within Chad the major choice is using the roads or dirt tracks. There are no railroads, and of the 4830kms of the two primary rivers in the country, the Chari and Logone, only 2000kms are navigable year-round. Chad is one of the larger African nations, being twice as large as France but has only 1260 kilometers out of 7000kms of laterite road that could be considered all-weather. 24,000kms of seasonal dirt track canvass the country, along the traditional travel and trading routes. The 253kms of tarmac road between N'Djamena and Abeche in the east were recently put in place with French funding, and are among the most expensive in Africa. Travelling from N'Djamena to the Mayo Kebbe Prefecture along the Chadian route can take up to two or more weeks in the rainy season, but only 1.5 days if the route through Cameroon is used.

The other alternative method of travel in Chad is via aircraft. Air Tchad flies infrequently to a few of the larger cities and towns, and Air Afrique and UTA provide regular international service to N'Djamena's jetport. France is committed to upgrading the airport at Faya Largeau during the early 90s to allow both commercial and combat aircraft. The expense of airflight in Chad keeps it from being a practical choice for commercial or personal transport by all but the most wealthy. Air shipment in Chad is prohibitively expensive.

Population

EDUCATION

Compounding the lack of infrastructure development in Chad is the low level of educational preparation of the population. Chad suffers from a very under-educated populace. In 1988-1989 adult literacy was estimated at 30% of the population.[21] During this same period Chad had just 38% of their eligible children enrolled in primary school, with only 30% of those enrolled actually finishing the primary school course.[22] Secondary school enrollment saw an equal number, 7% of the eligible age group, enrolled in each of the academic and technical programs, with the number continuing on for additional tertiary-level learning shrinking to become minuscule, some 0.1% of the eligible age group, half of which do so outside Chad.[23] Of the 32,000 pupils tabulated as enrolled in secondary school in 1987, 30,000 were located in the southern prefectures, giving a higher than proportional representation to the southern region.[24] The imbalance in educational participation is as much a reflection of population distribution as it is of regional favoritism. In any case, the distribution of education opportunity in favor of the South does not contribute positively to the political situation.

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[21] UNDP, "Human Development Report 1992" (New York: Oxford University Press, 1992), Tables 5, 14, & 15.

[22] Ibid.

[23] Ibid.

[24] Economist Intelligence Unit, "Cameroon, CAR, Chad Country Profile 1991-1992," p.62.

SCARCITY OF TRAINING

With these low education levels, a scarcity of talented workers and managers are available for either private sector and public sector jobs. A graphic example of this is demonstrated by the necessary but inopportune appointment of the nation's sole petroleum management graduate, Ahmed Saleh Alhabo, previously the managing director of SEERAT (Chad's Refinery management parastatal), to become the ambassador to Moscow.[25] Unskilled labor abounds, but this type of labor cannot compare to the value-adding potential present in a better educated labor-force. Compounding the existing low education level, the official minimum wage, paid to government workers, in Chad is quite low. In 1988 it was $24.00 per month, providing little incentive for unskilled labor to pursue costly and hard to obtain additional education. Employees in the public sector also have been suffering from very late payment for their services, running three to four months late, further damaging morale and efficiency.

INCREASED MILITARIZATION

The majority of the labor force is employed primarily in agriculture, with a smaller proportion in the services (including the public sector), and a very small number in industry. This labor force is a primarily a young labor force, with over 50% under 30 years of age.[26] Providing gainful employment opportunities for the burgeoning numbers of young is a serious challenge for both the private sector and the government of Chad.

The increased militarization at the beginning of the 1990s took many of the available young men, mostly from the south, into the armed forces, hence removing them

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[25] Ibid.

[26] UNDP/World Bank, "African Development Indicators," p.s 282-3.

from the private sector labor force and putting them onto the government payrolls. Recent efforts to reduce the bloated size of the military has raised the number of eligible workers in the labor force. It will continue to do so as the program progresses, placing the private sector under even greater strain to produce additional jobs for more of the newly idled soldiers. The successful reabsorption of these soldiers back into civilian life is a most important and necessary step to create the proper atmosphere for long-term economic and political progress and stability. The difficulty of providing gainful employment to these and others in the labor force highlights the acuity of the situation in Chad.

PRIVATE SECTOR STRATEGY DEVELOPMENT

(To be inserted after CTA completes the writing)

CONCLUSION

Institutional Reform

The large task facing the private sector, government representatives, and other interested parties in Chad, such as the donor governments, organizations, and agencies, is that of restructuring the very national fabric of Chad during a crucial time in the nation's history. Chad presents a long history of contested political and economic leadership, with forced change being the more the norm than peaceful transitions. Chad needs to re-evaluate itself in light of the previous turbulent history and current fragile situation as to the veracity of the existing institutions. The call and plan to hold a National Conference is the first important step in the process of national revitalization. Establishing a political system that recognizes the diversity of interests in Chad will greatly advance the economic prospects for the country as a whole. With the political realm rooted in peaceful change, the undeveloped economy can regain the attention it demands.

Paralleling this political development is the current set of activities designed to promote the reform of the environment for the private sector. A seminar was held in May of 1991 to begin the process of national self-examination as to effective development of the private sector. The government of Chad proclaimed a committment to removing the binds and constraints on the private sector, and to let the private sector begin to respond to the myriad needs of Chadians via the free market mechanism. This committment was applauded and warmly supported by the variety of international donors and agencies present in Chad.

This synthesis report is a direct outgrowth of this movement to reform the operations and environment of the private sector in Chad. The observations made here have been put forth to clarify clearly the obstacles faced. This concluding section will review the most important obstacles and provide guidance as to reform strategies to pursue in light of Chad's particular circumstances.

LEGAL, REGULATORY, AND JUDICIAL CODES

Underlying the many obstacles inherent in the Chadian private sector environment is the lack of a predictable, quantifiably and qualitatively identifiable system of laws and regulations which are consistently and equitably enforced. Chad is a place where relationships, influence, and power determine application of existing codes in each circumstance. Chad is a country where the existing institutions of law and regulation are ill-equipped to cope with the demands of revitalizing and energizing the private sector. The necessary predictability, stability, constancy, and universal application of law to all that is inherent in the underpinnings of a viable market system remains undeveloped. Laws maladapted from old French codes are applied by judges who have no real enforcement power. Additionally, the many years of war led to the development of a parallel, ad hoc legal code administered by members of the military. Under this additional system, petitioners seeking redress simply approach the nearest military figure for an immediate rendering of justice. But no system now exists that will allow for the dependable and constant interpretation, application, enforcement, and genesis of appropriate law or regulation necessary to build a functioning modern market economy.

Under the current situation private sector practitioners cannot rely upon the due process, clear jurisdiction, consistency, or effective enforcement of the de jure law. As a result risk levels are only mitigated through relationships held with the leading power figures in the country. Influence is the de facto law. Relationships are the enforcement mechanism, in place of legal and market forces.

Reform must begin at the level of establishing the rule of law. The legal codes and regulations must be revised to reflect the needs of Chadian society and particularly the private sector. Commercial and Administrative bodies of law and codes must be clearly promulgated and delineated, and appropriate courts must be established to enforce the law in. Magistrates must be given true independence and authority to make the revised law work. Only from this can efforts proceed to facilitate development within the private sector by allowing competitive market forces to properly influence private sector behavior.

Within the establishment of the rule of law, Chad must clarify two specific areas, Private Property Rights and Contract Enforcement. These two particular areas are the most fundamental points that Chadian legal reform must encompass to be meaningful to the private sector. Without clear-cut action in these two areas, private sector activities will be hamstrung, unable to develop into the economic engine of growth. Traditional patterns of economic activity will continue to predominate and Chadian fortunes will remain bleak.

FISCAL AND TRADE REFORM

To rebuild the private sector, the government must reform the tax system by increasing the number of participants in it, rationalizing the rates and number of taxes, and ultimately boosting the total yield. Steps to this end have been taken as part of the IMF structural adjustment program, but there remains much change to implement. An adjacent area of similar concern lies in the area of business regulation. Currently the regulations to register a business are so cumbersome and filled with exhorbant fees that this step in business formulation is usually avoided. The costs of becoming officially registered far outweigh the benefits to be gained, and the government's ability to tax new businesses can not be exercised as a result.

Positive incentives must be put in place within the tax and business regulation arenas to encourage private sector members to pay their taxes and register their businesses. Enlarging the tax base must occur so as to allow for a more affordable, less onerous level of taxation to be enacted. The tax system should be used as a tool to encourage private savings within the banking system, promote the training and education of the labor force, encourage exports, and discourage monopolistic tendencies. The registration and regulation of business must be simplified and consolidated. Simply put, new businesses must see this step as one bringing benefits instead of additional difficulties. An educational program to make private sector participants aware of the benefits from the revised tax and registration codes will assist in the acceptance of reforms as the new reality.

A particular sector of the Chadian economy must also receive the attention of institutional reform, that of agriculture. The strongest possibilities for Chad to obtain a comparative advantage in international trade will be within the agricultural sector of the economy. Chad lacks many resources present in other countries, not the least of which is basic infrastructure. Given the myriad constraints faced within Chad, the strongest candidate for comparative advantage is in the restructuring of agriculture. Agriculture is the single place where the traditional patterns of trade and management could be most rapidly and successfully adapted to reflect the institutional requirements of a modern market economy.

The restructuring of agriculture should initially focus on two areas. The first and most important area for restructuring is the livestock trade. Chad's private sector and government should work to bring about the rapid development of the livestock trade, through creating better herds, minimizing restrictions on trade, and instituting a larger focus upon processing meats and skins to add value to products before they leave Chad. The second area of restructure should be the reduction of the great reliance upon cotton as the sole "cash" crop. Chad lacks any producer or marketing advantage in this crop in the current international market. To replace the reliance upon cotton as the sole cash crop the promotion of increased food marketing within and around Chad should be developed. This can be done by encouraging market forces to diversify cotton producers into a variety of internally and externally traded crops. Crops such as Gum Arabic and fish or other traditional products should be targeted for economically sound promotion efforts.

RETRENCHMENT OF GOVERNMENT TO STRICT PROVISION OF PUBLIC GOODS

One of the basic changes that is necessary for a thorough private sector reform process to take place is the pull-back of Chadian Government to the provision of the essentials of good government. These essential services include the enforcement and administration of the revised legal and regulatory codes, providing for public safety, the handling of sovereign international affairs, seeing that the citizenry have adequate educational opportunities, etc. The private sector can take over, albeit under regulation and public bidding, service provision in all feasible areas, including customs, utilities, road building and maintenance, education, medical services, etc.

An area in certain need of immediate attention is the provision of educational services to both children and adults. The educational standards in Chad are substandard, even by the standards found on the rest of the continent. The training of current and future workers, managers, and owners in the skills necessary for a dynamic private sector will have immediate dividends. The Chad government must facilitate action to establish learning as an important goal for each Chadian.

A subset of this renewed focus upon education should be the enlightened reformation of attitudes regarding the private sector, both within the public and private sectors. A complete understanding of what a "market economy" is is not held by Chadians. Many in the private sector look to the retrenchment of the government out of the economy to be a chance for them to take over the monopolistic positions. Free competition is not fully welcomed. Groups such as the Chamber of Commerce and Patronat can play a major role in leading attitude reformulation through taking a larger leadership role.

POLITICAL STABILITY

The establishment of stable, democratic government will reduce the level of uncertainty and risk now currently faced within the private sector, which precludes possibilities for serious investment either from Chadians or from foreign investors. Given the recent history of Chad, the levels of risk encountered are so high as to demand rates of return that are astronomical. The country shows the effects of this high investment risk by the extremely low standards of life experienced by Chadians. The lack of investment in Chad has kept the economy pre–modern and rooted in traditional patterns and activities. As a result Chadian living standards have remained at a pre–modern level, with little hope for improvement under the status quo.

Establishing stable and democratic government will allow for changes to take place peacefully. A reduction in the involvement of the military in the government, with a return to democratic civilian control would begin the improvement of the investment climate. Getting the disputing groups in Chadian society to recognize and honor peaceful changes in government will allow the military burden to be lightened and monies can be invested in growth–promoting activities. Chad has taken immensely important steps towards this goal, with the reductions in the size of the army and in planning the National Conference.

This report and what it represents is also a strong indication that Chadians are aware of the need for chance. The process of changing to a democratic society with a market economy is one which a number of countries are now trying for the first time. Chad has farther to go than many in achieving the goal, but also is less–handicapped with highly developed, entrenched institutions of the "old order." The process started by the public assessment that the environment for the private sector required reform and revitalization can only bring a more thriving society in the end. It is hoped this report contributes substantially to the achievement of this goal.

EXHIBIT A-1

CHADIAN PUBLIC ENTITIES

AFF - L'Abattoir Frigorifique de Farcha, or Chilled Slaughterhouse.

ATP - Agence Tchadienne de Presse, or Press Agency.

CAA - Caisse Autonome d'Amortissement, or Autonomous Amortization Fund.

CC - Chambre Consulaire, or Chamber of Commerce.

CNEAAP - Centre National d'Enseignement Artisanal et des Arts Appliques.

CNPS - Caisse Nationale de Prevoyance Sociale, or National Social Security Fund.

CNRT - Caisse Nationale de Retraite du Tchad, or National Pension Fund.

CSPC - Caisse de Stabilization du Prix du Coton, or Cotton Price Stabilization Fund.

CSPS - Caisse de Stabilization du Prix du Sucre, or Sugar Price Stabilization Fund.

FIPP - Fond d'Intervention des Produits Petroliers, or Petroleum Fund.

FIR - Fonds d'Intervention Rurale, or Rural Assistance Fund.

INT - Imprimerie Nationale du Tchad, or National Printer.

IRCT - Institut de Recherche du Coton et des Textiles Exotiques, or Cotton Research Institute.

- Laboratoires Veterinaires de Farcha, or Veterinary Laboratory.

MAIRIE - Commune de N'Djamena, or City of N'Djamena.

MAGAVET - Magasin General d'Approvisionnement en Produits Veterinaires, or General Veterinary Supplies.

OFCAR - Office des Carrieres, or Careers Office.

OFNAR - Office Nationale des Routes, or National Highways Office.

OMVSD - Office de Mise en Valeur de Sategui-Deressia, or Regional Development Office.

ONACVG - Office Nationale Conventionne des Anciens Combattants et Victimes de Guerre, or National Veterans Office.

ONAMO - Office Nationale de la Main d'Oeuvre, or National Development Office.

ONC - Office Nationale Cerealier, or National Cereal Office.

ONDR - Office Nationale de Developpement Rural, or National Office for Rural Development.

ONHPV - Office Nationale de L'Hydraulique Pastorale et Villageoise, or National Office of Pastoral and Village Water.

ONDEH - Office Nationale du Developpement de L'Horticulture, or National Horticultural Development Office.

ONPT - Office Nationale des Postes et Telecommunications, or Post and Telecommunications.

ONPIT - Office Nationale de la Promotion Industrielle du Tchad, or National Industrial Promotion Office.

ORLFM - Office de Rehabilitation des Logements des Familles Militaires, or Military Families Housing Office.

SOCAUMUT - Societe de Cautionnement Mutuel du Tchad, or Chad Association of Mutual Security of Chad.

SONAPA - Societe Nationale des Productions Animales, or National Association of Animal Producers.

UNACOT - Union Nationale des Commercants du Tchad, or Retailers and Wholesalers Union.

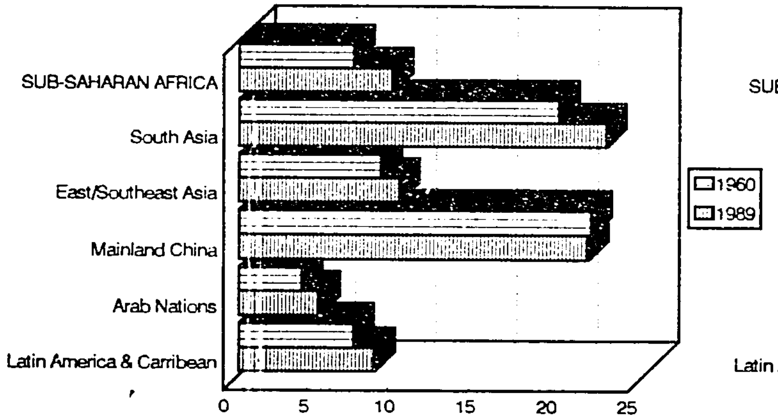
EXHIBIT B-1

36

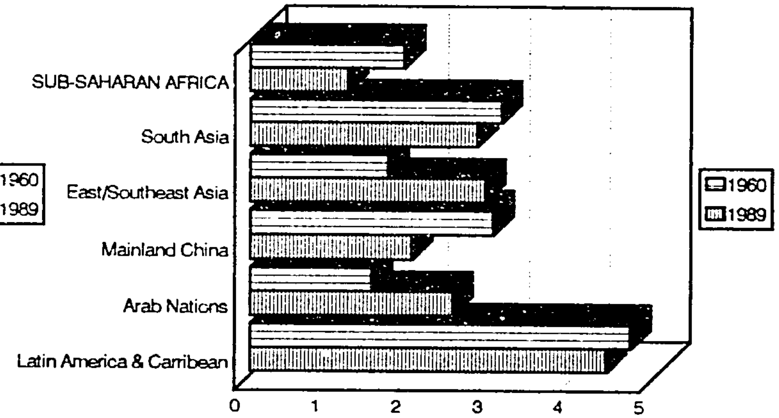
INCREASING REGIONAL ECONOMIC GAPS

(In percentages)

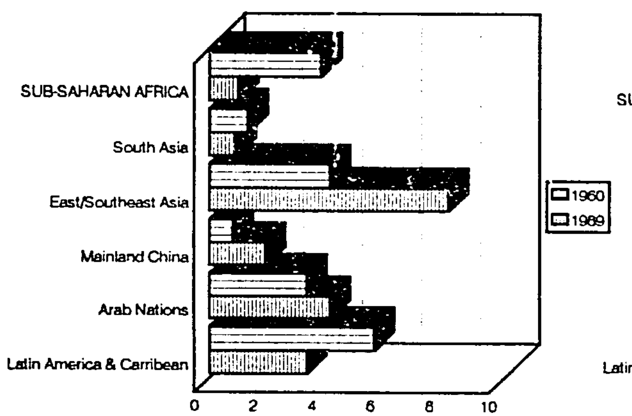
Global Population



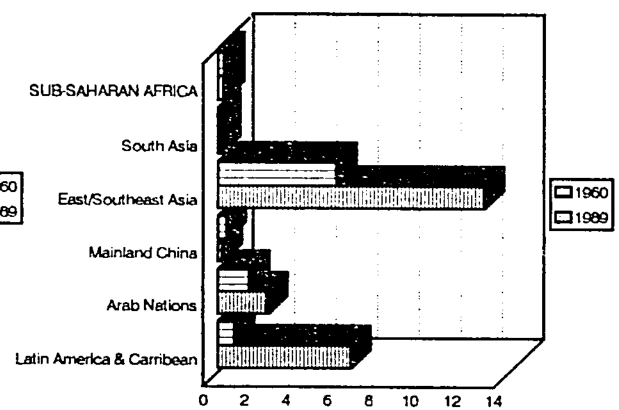
Global GNP



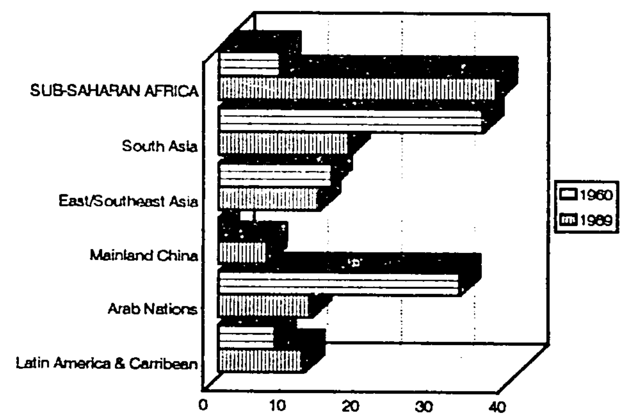
Global Trade



Global Commercial Bank Lending



ODA



Source: UNDP, "Human Development Report 1992," Table 3.8, p. 37.

EXHIBIT B-2

CHAD EXCHANGE RATES

CHAD Franc/U.S. Dollar	1985	1986	1987	1988	1989	1990	1991
Period Average of Market &/or Official Rate, per U.S. Dollar	449.26	346.3	300.54	297.85	319.01	272.26	282.11

Source: IMF, "International Financial Statistics, June 1992," p.146.
Note: Chad Franc is rigidly fixed to French Franc, as part of West African "Franc Zone," with 1 FF = 50 CFAf.

EXHIBIT B-3

CHADIAN NOMINAL INTEREST RATES

(In Percentage)	1985	1986	1987	1988	1989	1990	1991
Rediscount Rate	9	8	8	9.5	9.5	....	....
Deposit Rate	5.5	5.5	5.33	4.31	4.25	....	....
Lending Rate	11.5	11	10.5	10.79	11.5	....	....

Source: IMF, "International Financial Statistics, June 1992," p. 146.
Note: Rates are time period averages, except for the Rediscount rate, which is end of period.

EXHIBIT B-4

CHAD INTEREST RATE STRUCTURE
(% per year)

Adjustment Date:	1/88	9/88	7/89	9/90	1/91	4/91
Central Bank (BEAC)						
Rate on Treasury Advances	4.5	4.5	4.5	5.5	5.5	6.5
Preferential Rate	6	6.5	6.5	ended	ended	ended
Penalty Rate on Treasury	5.5	5.5	5.5	6.5	6.5	7.5
Penalty Rate on Banks	16	16	16	16	16	16
Basic Rediscount Rate	9	9.5	10	11	11	10
Commerical Banks						
Lending Rates						
Preferential Rate	7-10	7.5-10.5	7.5-10.5	ended	ended	ended
Regular Rate	11-15	11.5-15.5	11.5-15.5	13-17	18.5 Max.	18.5 Max.
Deposit Rates						
Demand Deposits	1.25-3	1.25-3	1.25-3	1.25-3	...	...
Time Deposits	2-5	2-5	2-5	2-5	7.5 Min.	7.5 Min.
Certificates of Deposits	3.25-6.25	3.25-6.25	3.25-6.25	3.25-6.25	7.5 Min.	7.5 Min.
Saving Deposits	4.25	4.25	4.25	4.25	7.5	7.5

Source: Data provided by BEAC in interviews with IRIS Team, N'Djamena, July 1992.

EXHIBIT B-5

CHADIAN BALANCE OF PAYMENTS

(In millions of U.S. Dollars)	1985	1986	1987	1988	1989
Current Account, nie	-87.2	-59.4	-25.5	25.5	-55.9
Merchandise: Exports fob	61.8	98.6	109.4	145.9	155.4
Merchandise: Imports fob	-166.3	-212.1	-225.9	-228.4	-240.3
Trade Balance	-104.5	-113.5	-116.5	-82.5	-84.9
Services: Credit	32.6	44.5	70.4	78.7	42.3
Services: Debit	-153.9	-165.7	-198	217.9	-210
Income: Credit	5	3.5	2.9	2.1	1.3
Income: Debit	-7.3	-12.4	-13.1	-15.5	-10.8
Private Unrequited Transfers	6.8	-5.4	-9.8	-17.1	-20.2
Official Unrequited Transfers, nie	133.9	189.5	238.5	277.7	226.3
Direct Investment, nie	53.4	27.8	0.2	-12.6	6.2
Portfolio Investment, nie	....	....	....	....	....
Other Capital, nie	16.2	5.1	8.5	36.9	55.8
Resident Official Sector	17.8	17.6	38.2	46.1	79
Deposit Money Banks	-4.3	14.1	4.2	1.9	-3.1
Other Sectors	2.7	-26.6	-34	-11.1	-20.2
Net Errors and Omissions	-5.5	9.7	16.5	-83.7	23.7
Overall Balance	-23.2	-16.8	-0.3	-33.8	29.7
Reserves and Related Items	23.2	16.8	0.3	33.8	-29.7
Reserve Assets	18.6	17.5	-25	14.8	-41.3
Use of Fund Credit and Loans	2.5	-2.2	6.6	-2.3	6.9
Liab.Const.Fgn Auth. Reserves	-0.4	-1.5	0.5	....	....
Exceptional Financing	2.4	2.9	18.3	21.3	4.6

Source: IMF, "International Financial Statistics, June 1992," p. 145.

EXHIBIT B-6

BASIC CHADIAN ECONOMIC DATA FOR 1987-1991

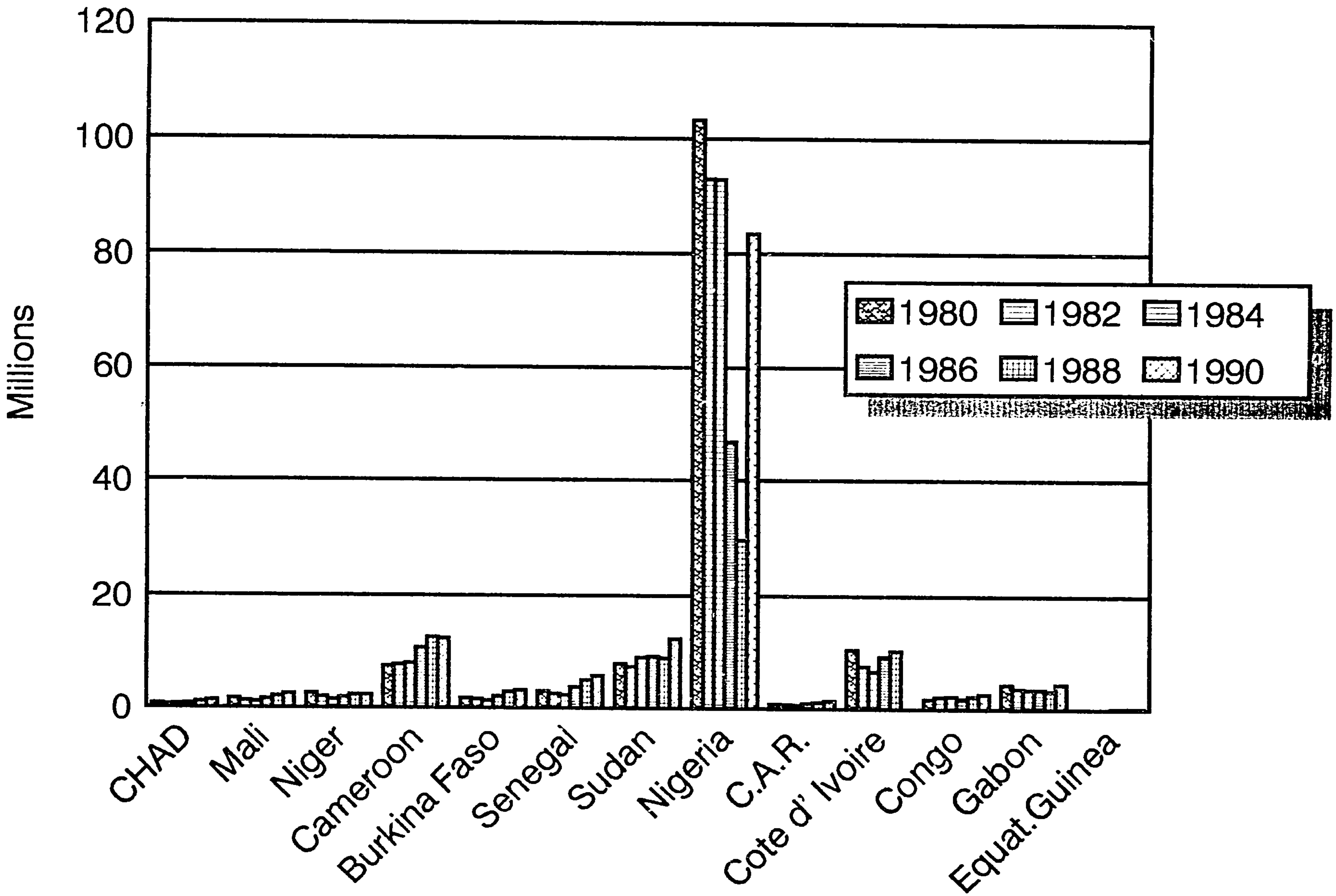
	1987	1988	1989	1990	1991 est.
Gross Domestic Product (current)					
Total (billions of CFAf)	246.1	310.8	321.9	330.2	365.9
% Annual Growth Rate					
Nominal	-5.4	26.3	3.6	2.6	10.8
Real	-2	15.5	4.8	-0.5	8.3
GDP deflator	-3.5	9.3	-1.2	3.1	2.3
Operations of Central Government (billions of CFAf)					
Revenues	19.5	24.8	28.8	31.6	31.2
Expenditures	82.3	84.1	105	107.7	112.2
Overall Deficit (committments)	-62.8	-59.3	-76.2	-76.2	-81
Change in Arrears (decrease is -)	0.6	-1.1	-6.2	2.6	10.7
Overall Deficit (cash)	-62.3	-60.4	-82.4	-73.6	-70.2
External financing	61.6	62.1	79.7	71.4	70.9
Gross Dispersements	61.2	61.7	80.2	72.4	73.2
Amortization Paid	-1.1	-1	-1	-1	-2.3
Rescheduling	1.5	1.4	0.5	...	...
Domestic Financing (net)	0.7	-1.8	2.7	2.2	-0.7
Overall Deficit (committments) (as % of GDP)	-25.5	-19.1	-23.7	-23.1	-22.1
Credit & Money Supply (billions of CFAf)					
Net Foreign Assets	9.2	14.1	24.2	33.5	35.2
Domestic Credit	77.9	71.4	61.7	53.8	58.2
Net claims against Gov't.	3.7	-1.5	3.6	2.4	0.4
Private Sector Credit	74.2	72.9	58.2	51.4	57.9
Money and Quasi-money	75.4	69	70.8	70.1	78
Money and Quasi-money (as % of GDP)	30.6	22.2	22	21.2	21.3

Source: Data provided by Chadian Authorities in IRIS interviews, N'Djamena, July 1992.

EXHIBIT B-7

GROSS DOMESTIC PRODUCT, CURRENT 1987 PRICES/EXCHANGE RATES

(IN MILLIONS OF U.S. DOLLARS)



Source: UNDP/World Bank, "African Development Indicators," p.20.

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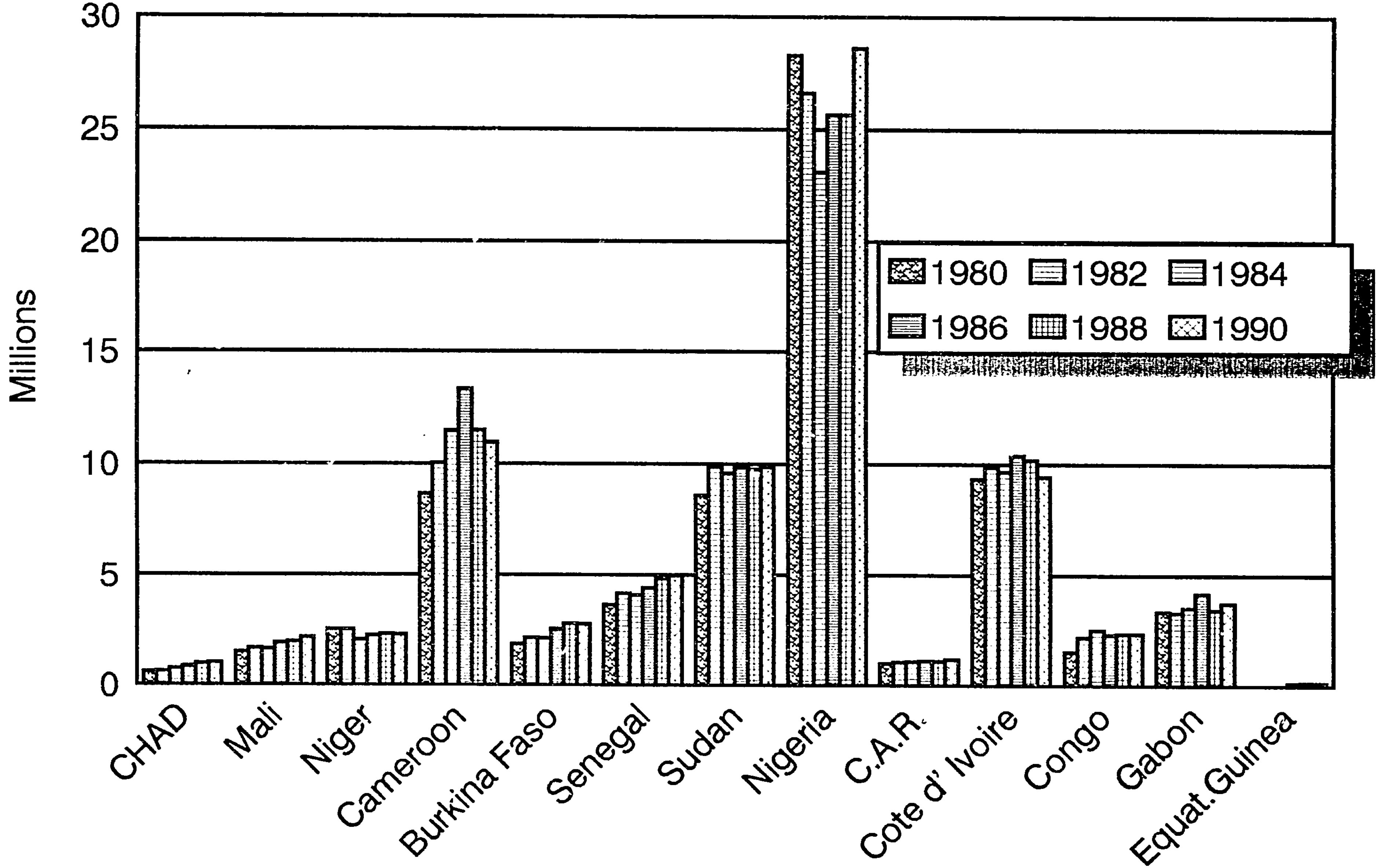
GROSS DOMESTIC PRODUCT, CONSTANT 1987 PRICES/EXCHANGE RATES

(IN MILLIONS OF U.S. DOLLARS)



Source: UNDP/World Bank, "African Development Indicators," p.16.

EXHIBIT B-9

CHADIAN GROSS DOMESTIC PRODUCT FOR 1987-1991 BY SECTOR OF ORIGIN

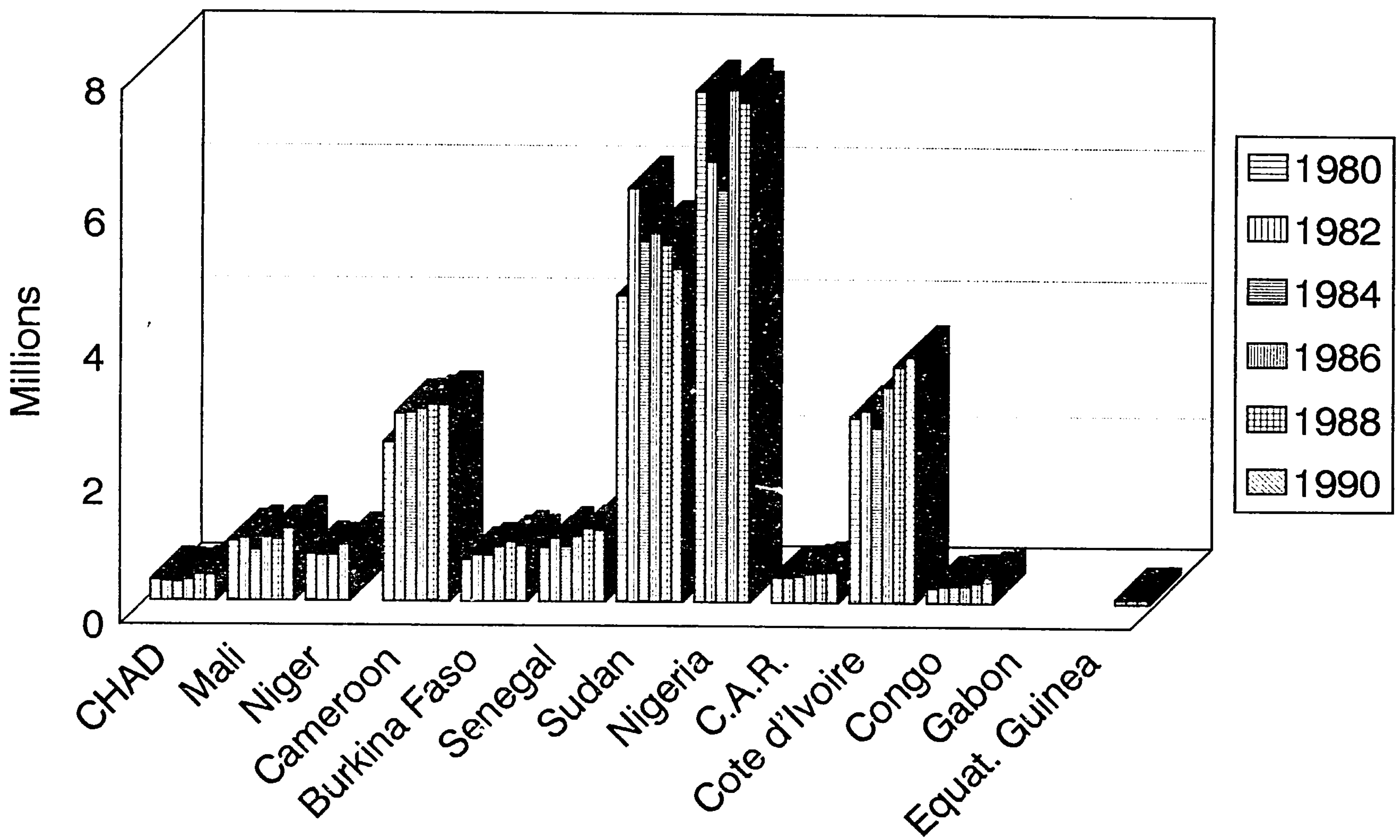
	1987	1988	1989	1990	1991 est.
Primary Sector	67426	82191	78989	71951	93667
Agriculture	44567	58585	54492	44430	65454
Food Crops	39781	53443	48838	38491	57371
Cotton	4786	5142	5654	5939	8083
Livestock	22859	23606	24497	27521	28212
Secondary Sector	24993	28020	35698	38261	32104
Manufacturing Industries	21556	24433	31380	34335	28155
Cotton Processing Portion	4125	5828	6911	7069	7349
Construction & Public Works	1965	2021	2199	2102	2016
Mining, Water & Electricity	1472	1566	1671	1824	1933
Tertiary Sector	69605	75930	80181	82053	86492
Commerce, Transport, & Communications	50424	56034	60383	60369	64591
Other Services & Government	19181	19896	19798	21684	21901
GDP at Factor Costs	162023	186141	194868	192264	212263
Indirect Taxes (net)	8248	10539	11369	12956	10018
GDP at 1977 Market Prices (Base Year)	170271	196680	206237	205220	222371
Implicit GDP Deflator (Index)	144.5	158	156.1	160.9	164.5
GDP at Current Market Prices	246127	310843	321943	330215	365867

Source: Data provided by Chadian Authorities in IRIS Interviews, N'Djamena, July 1992.

EXHIBIT B-10

VALUE ADDED IN AGRICULTURE

(In millions of U.S. Dollars, at constant 1987 prices/exchange rates)



Source: UNDP/World Bank, "African Development Indicators," p.17.

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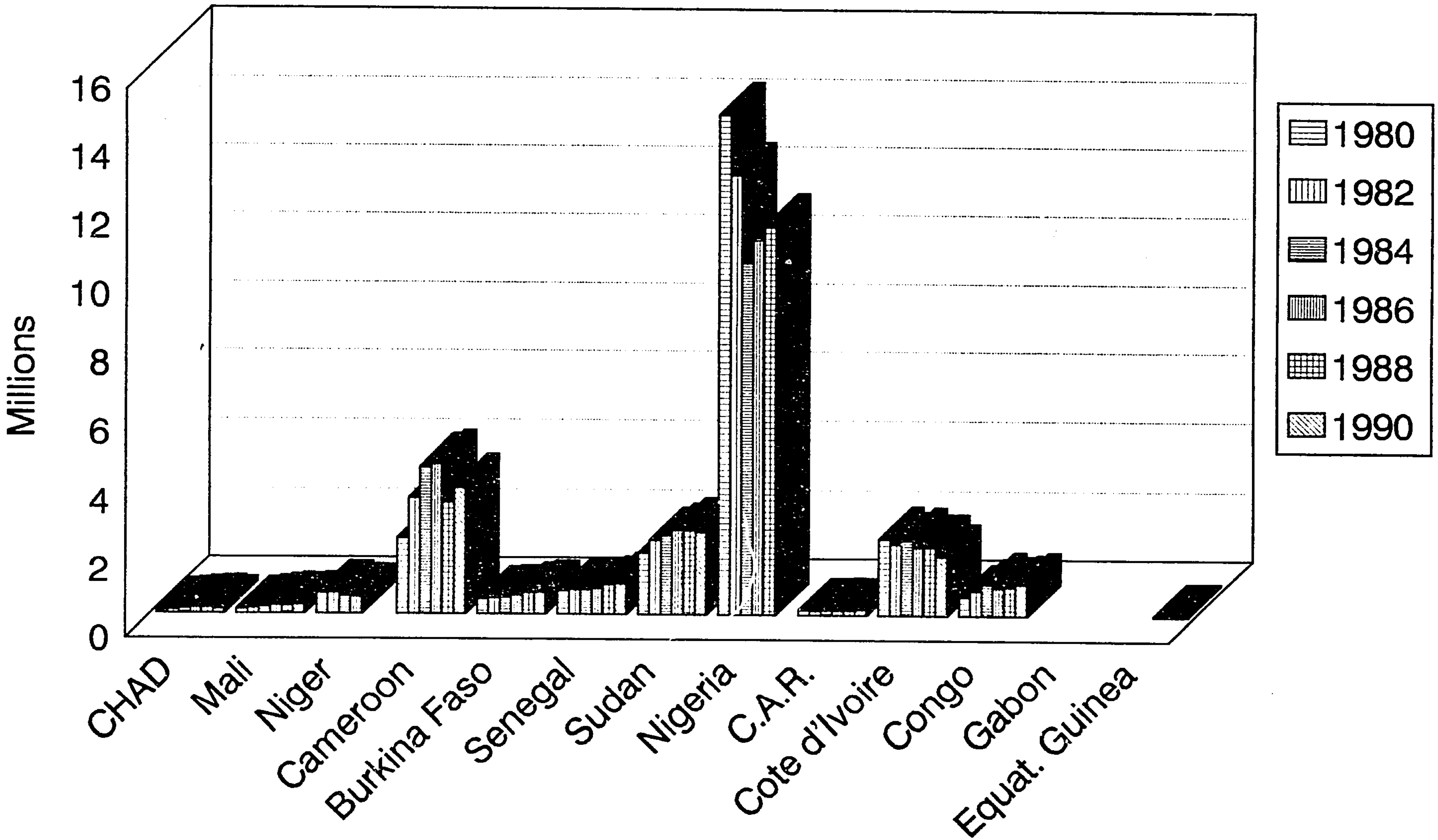
EXHIBIT B--11

VALUE ADDED IN INDUSTRY

(In millions of U.S. Dollars, at constant 1987 prices/exchange rates)



Source: UNDP/World Bank, "African Development Indicators," p. 18.

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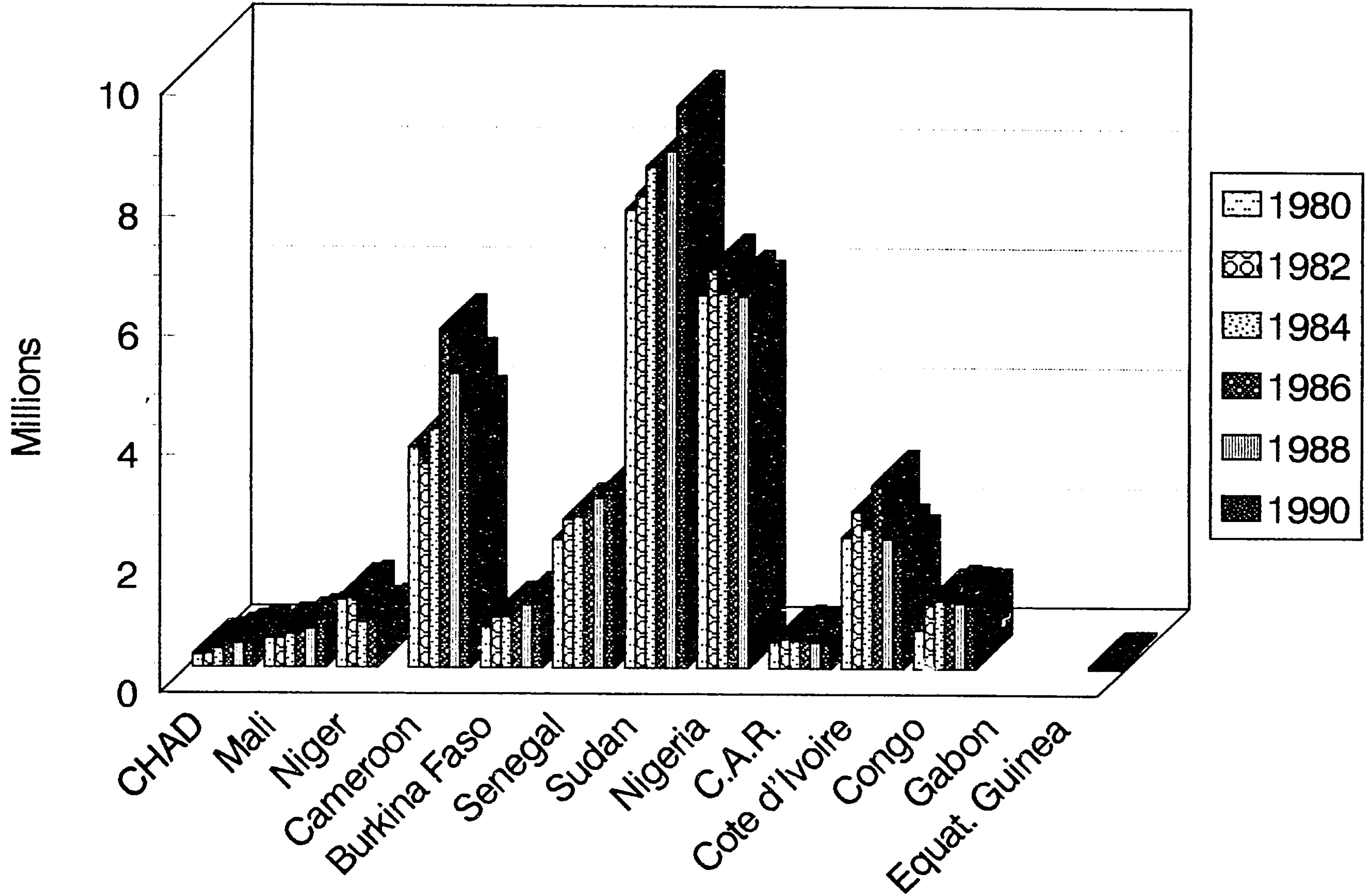
EXHIBIT B-12

VALUE ADDED IN SERVICE

(In millions of U.S. Dollars, at constant 1987 prices/exchange rates)



Source: UNDP/World Bank, "African Development Indicators," p. 19.

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EXHIBIT B-13

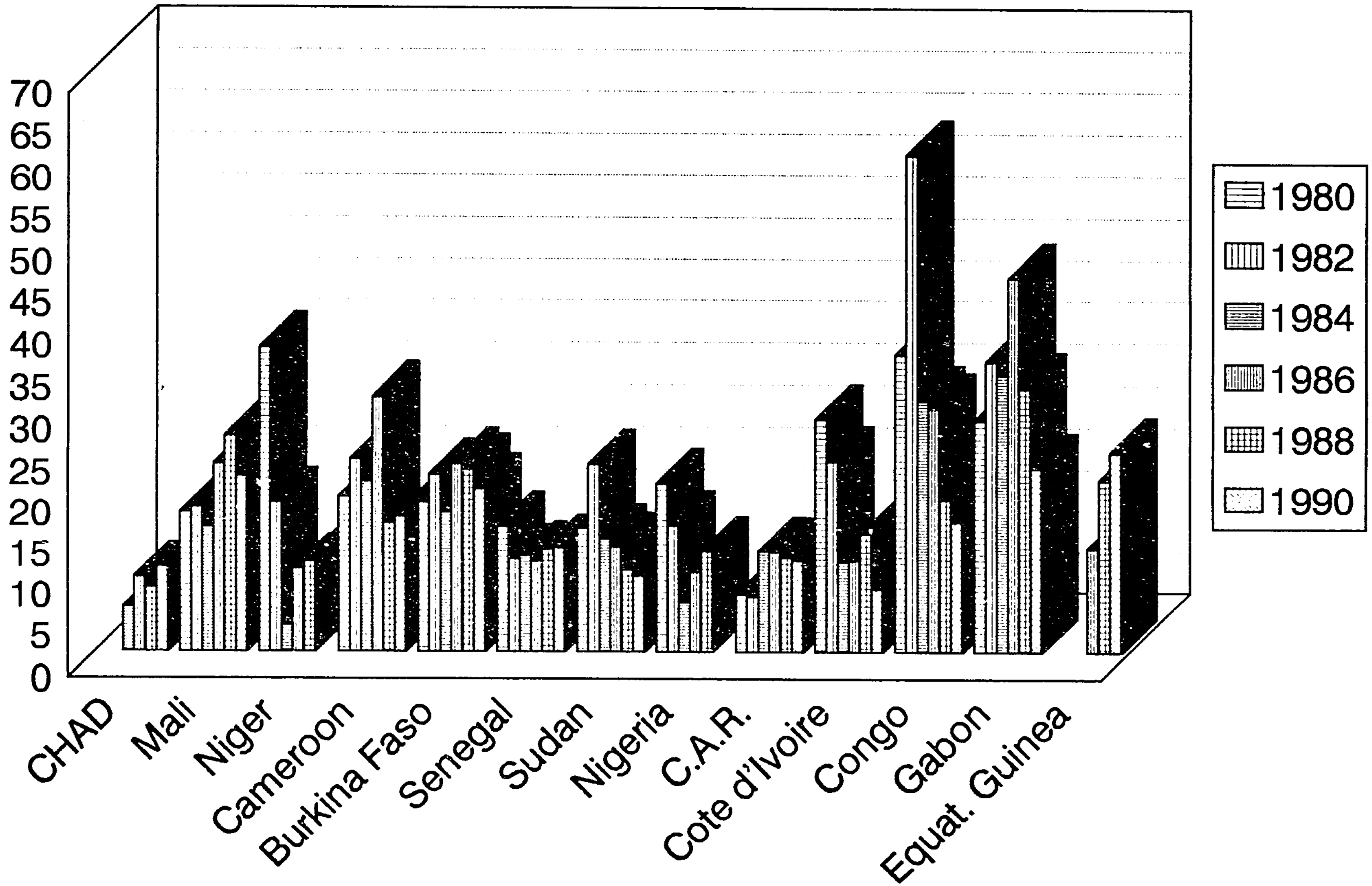
PERCENTAGE SHARE OF GLOBAL FOREIGN DIRECT INVESTMENT

Recipient Regions:	'80-'84	'88-'89
-All Developing Countries	25.2	16.9
-Least Developed Countries	0.4	.1
-AFRICA	2.4	1.9
-Latin America & Carribean	12.3	5.8
-East/Southeast/South Asia	9.4	8.8

Source: UNDP, "Human Development Report 1992," p. 52.

GROSS DOMESTIC INVESTMENT

(As percentage of GDP)



Source: UNDP/World Bank 1992, "African Development Indicators," p. 23.

EXHIBIT B-15

GROSS PUBLIC INVESTMENT

	(As percentage of GDP) 1980	1982	1984	1986	1988	1990
CHAD	...	...	5.2	8.7	7.5	9.8
Mali	...	...	...	...	...	...
Niger	...	...	...	...	...	...
Cameroon	10.1	15.5	...	...	...	...
Burkina Faso	...	10.5	12.2	15.5	13.8	9.3
Senegal	5.9	3.9	4	4	3.9	3.8
Sudan	7	5.2	4	...	...	...
Nigeria	...	9.6	3.6	6.4	7.2	...
C.A.R.	...	...	...	...	...	...
Cote d'Ivoire	9	6.8	4.6	3.6	4.1	2.2
Congo	...	...	...	...	...	...
Gabon	8.9	12.3	8.2	12.6	2.5	4.2
Equat. Guinea	...	...	...	9.1	16.5	17.2

Source: UNDP/World Bank 1992, "African Development Indicators," p. 24.

EXHIBIT B-16

GROSS PRIVATE INVESTMENT

	(As percentage of GDP)					
	1980	1982	1984	1986	1988	1990
CHAD	...	...	0.3	0.4	0.4	0.5
Mali	...	...	...	...	11.2	13.1
Niger	...	...	...	...	...	...
Cameroon	7.9	6.6	...	...	...	...
Burkina Faso	...	9.5	5	7.6	8.6	8
Senegal	9.8	8.2	8.3	8	8.6	8.9
Sudan	4.5	12.9	11.6	...	...	...
Nigeria	...	5.5	2.4	3.1	4.5	...
C.A.R.	...	...	...	2.5	1.8	1.7
Cote d'Ivoire	17.1	14.9	7.7	8.3	6.9	6.3
Congo	...	...	...	...	...	...
Gabon	18.4	20	22.9	32.1	30.7	18.2
Equat. Guinea	..	..	..	3.5	4.5	7.1

Source: UNDP/World Bank 1992, "African Development Indicators," p. 25.

EXHIBIT B-17

NET FOREIGN DIRECT INVESTMENT

(In millions of U.S. Dollars, at current prices/exchange rates)

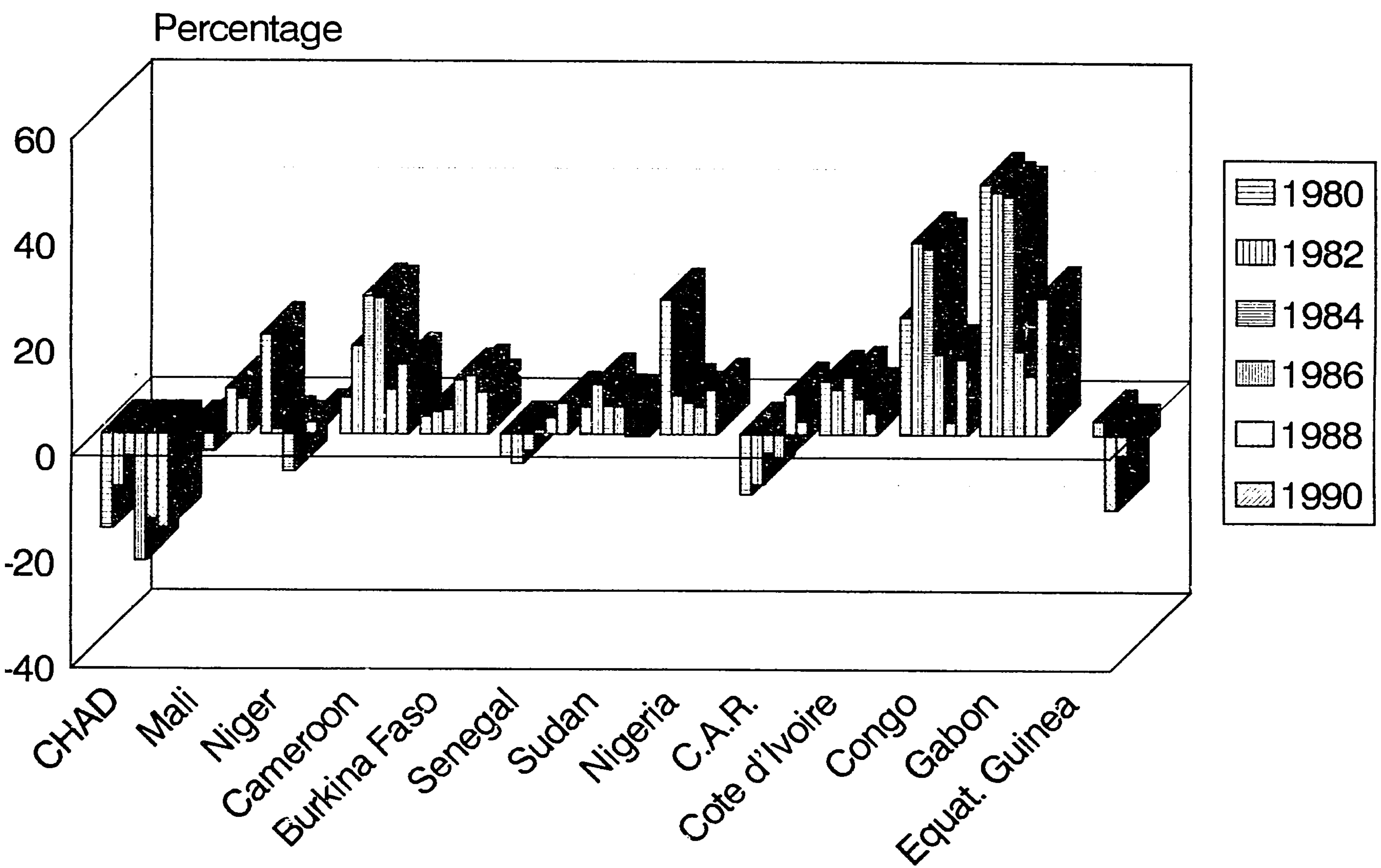
	1980	1982	1984	1986	1988	1990
CHAD	0	0	9	28	-13	19
Mali	2	2	10	-8	1	-6
Niger	44	25	-1	...	...	...
Cameroon	105	28	92	0	34	33
Burkina Faso	0	2	2	3	2	2
Senegal	13	10	27	-13	0	-18
Sudan	0	0	0	0	0	0
Nigeria	-740	433	200	167	377	588
C.A.R.	5	9	5	7	-13	...
Cote d'Ivoire	95	47	22	71	56	-48
Congo	40	35	35	22	9	-1
Gabon	24	127	5	104	121	-77
Equat. Guinea	...	...	...	0	0	10

Source: UNDP/World Bank 1992, "African Development Indicators," p. 70.

EXHIBIT B-18

GROSS NATIONAL SAVINGS

(As percentage of GDP)



Source: UNDP/World Bank 1992, "African Development Indicators," p. 263.

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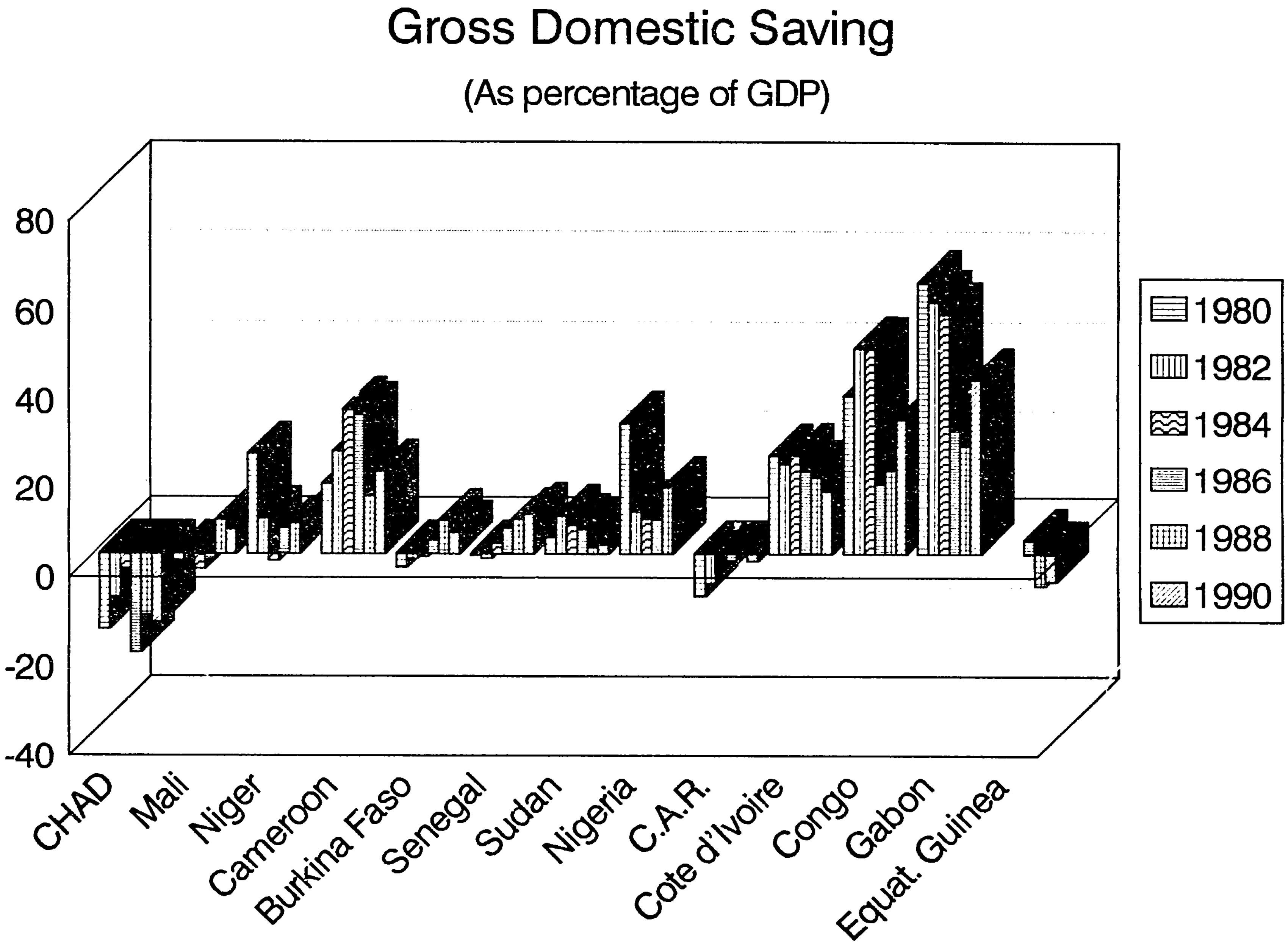
EXHIBIT B-19



Source: UNDP/World Bank 1992, "African Development Indicators," p. 26.

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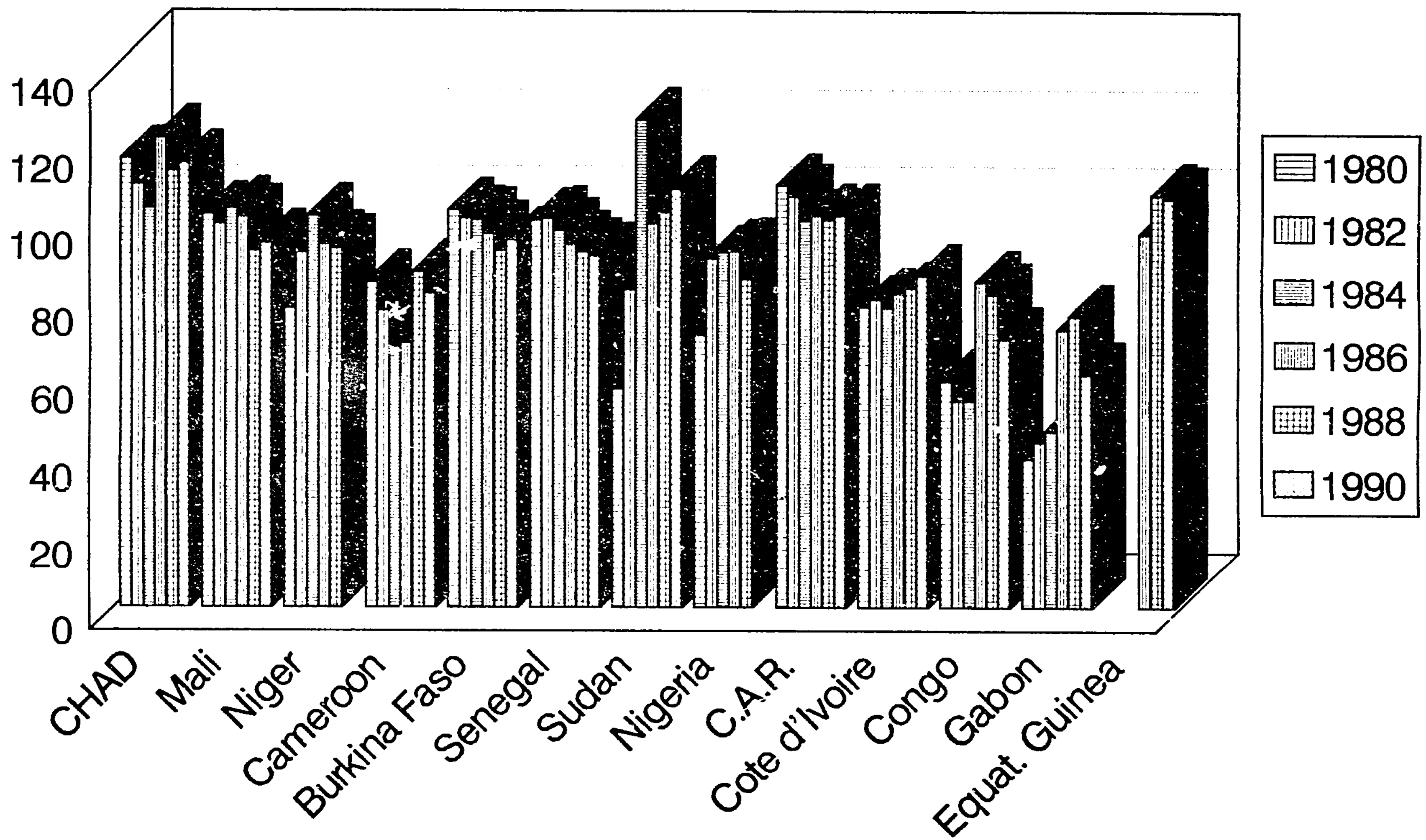
EXHIBIT B-20

TOTAL CONSUMPTION

(In percentage)

55



Source: UNDP/World Bank, "African Development Indicators," p.21.

EXHIBIT B-21

GENERAL GOVERNMENT CONSUMPTION

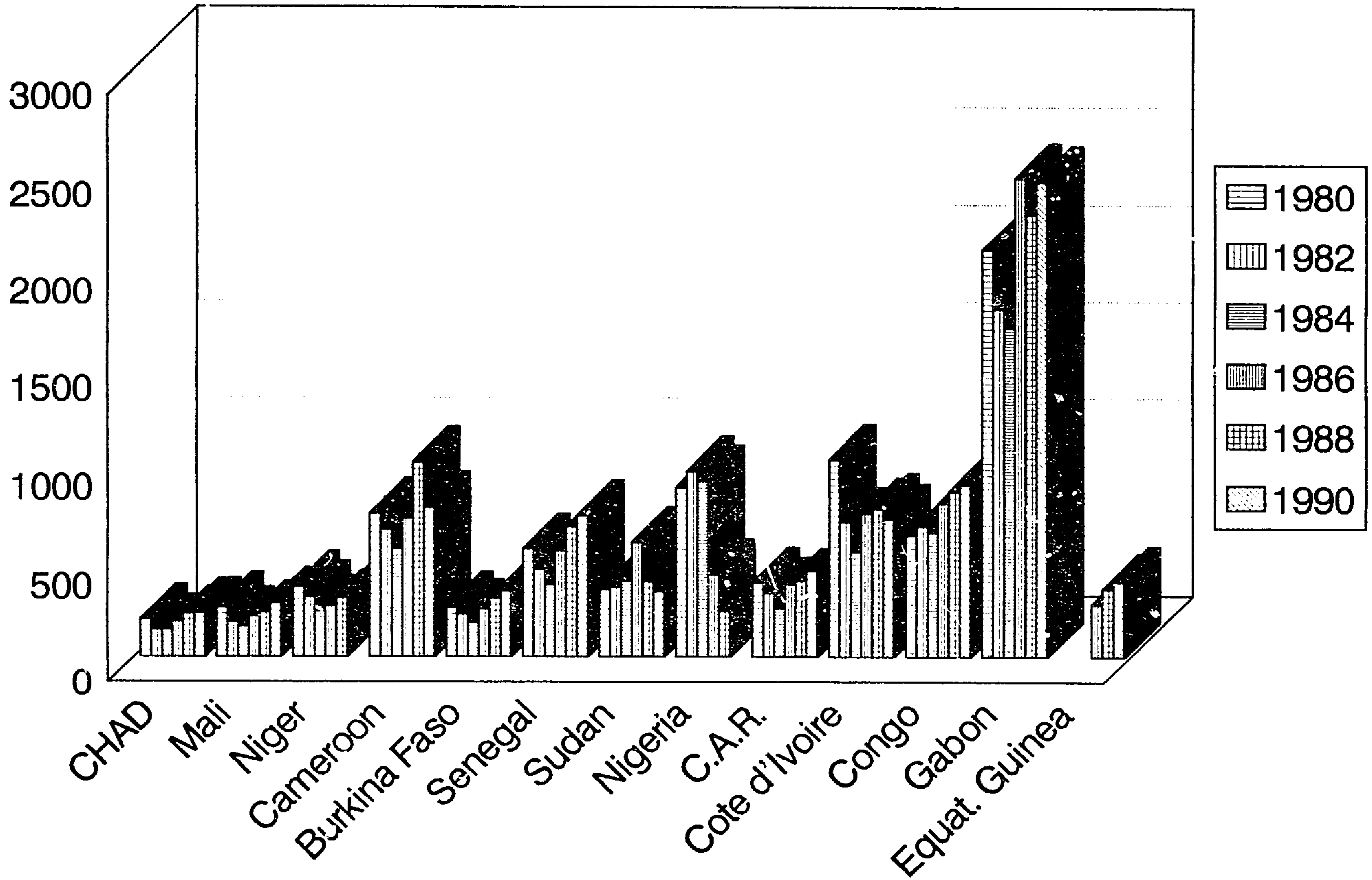
(As percentage of GDP) Countries:	1980	1982	1984	1986	1988	1990
CHAD	...	7.8	14.2	19.8	17.9	22.9
Mali	10.4	9.8	10.8	11	11.3	11
Niger	10.3	11.7	10.2	11.5	10.4	...
Cameroon	8.7	8.7	9.4	8.7	11.3	11.7
Burkina Faso	9.6	14.4	13.6	12.9	12.7	12.9
Senegal	22	18.2	18.5	15.4	14.7	14.3
Sudan	16	10.8	9.7	13.6	14	14.2
Nigeria	8.9	11.4	13.2	11.8	11.2	...
C.A.R.	15.1	15.9	14.2	15	13.3	13.6
Cote d'Ivoire	17.8	17.2	15.3	15.2	17.2	18
Congo	17.6	13.5	14.8	25	21	18.6
Gabon	13.2	15.7	18.5	25.3	23.4	19
Equat. Guinea	...	...	...	28.9	36.6	34.2

Source: UNDP/World Bank, "African Development Indicators," p.22.

EXHIBIT B-22

TOTAL CONSUMPTION PER CAPITA

(In current U.S. Dollars)



Source: UNDP/World Bank 1992, "African Development Indicators," p.33.

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EXHIBIT C-1

CHAD CENTRAL GOVERNMENT OPERATIONS, 1987-1991

(in millions of CFAf)	1987	1988	1989	1990	1991
Total Revenues	19471	24775	28809	31567	31239
Tax Revenues	13794	19010	23019	25204	22950
Income Tax	3494	4314	6289	6572	8040
Tax on Goods & Services	3223	5588	7319	8534	8037
Tax on International Trade	5092	6940	6917	7692	5229
Other	1985	2168	2494	2406	1643
CAA Revenues	4060	4789	3844	5068	3703
Nontax Revenues	1617	976	1947	1295	4586
Total Expenditures	82312	84077	105038	107719	112200
Current Expenditures	27712	30972	42236	47678	52628
Wages & Salaries	11325	12363	17452	20555	20828
Materials & Supplies	3886	4014	6263	8146	8896
Interest Due	875	896	876	1902	3584
Transfers	2058	1199	3279	2980	2720
Other	...	2503	4432	4530	600
Defense	9567	9997	9933	9566	16000
Current Deficit (committments)	-8241	-6197	-13426	-16111	-21389
Investment Expenditures	54600	53105	62802	60041	59572
Domestically Financed	...	225	1209	450	700
Foreign Financed	54600	52880	61593	59591	58872
Overall Deficit (committments)	-62841	-59302	-76228	-75152	-80961
Change in Payment Arrears	567	-1055	-5210	2558	10728
External	65	322	75	848	3203
Domestic	502	-1377	-6285	1710	7525
Overall Deficit (cash)	-62274	-60357	-82438	-73594	-70234

	1987	1988	1989	1990	1991
Financing	62274	60357	82438	73594	70234
External (net)	61614	62114	79732	71402	70885
Grants	53909	48715	57767	48303	51690
Budgetary	6609	8525	14109	11258	14161
Loans	7300	12963	22437	23546	21462
Budgetary	...	245	4502	1600	119
Amortization Due	-1098	-973	-959	-1047	-2267
Reduction in Arrears (-)	138	469	-22381	-13521	...
Debt Relief/Rescheduling	1305	967	22868	13521	...
Domestic (net)	661	-1757	2707	2192	-651
Banking System	-498	-1707	3059	3153	-518
Central Bank (BEAC)	-402	-1501	3848	3973	-301
Commercial Banks	-96	-206	-789	-820	-217
Nonbank Sector	1159	-50	-352	-961	-133
Additional Finance Requirement	...	...	...	...	...

MEMORANDUM ITEMS: (in % of GDP)	1987	1988	1989	1990	1991
Revenue	7.9	8	8.9	9.6	8.5
Current Expenditures	11.3	10	13.1	14.4	14.4
Current Deficit	-3.3	-2	-4.2	-4.9	-5.8
Overall Deficit, less grants	-25.5	-19.1	-23.7	-23.1	-22.1
Materials Expenditures, as % of current expenditures	14	13	14.8	17.1	16.9
Petroleum Tax Revenue (in millions of CFA)	753	3476	4222	4600	3470

Source: Data provided by Chadian Authorities in interviews with IRIS Team, N'Djamena, July 1992.

EXHIBIT C-2

CHAD CENTRAL GOVERNMENT OPERATION INDICATORS, 1987-1991

(% of GDP)	1987	1988	1989	1990	1991 estimated
Total Revenues	7.9	8	8.9	9.6	8.5
Tax Revenues	7.3	7.7	8.3	9.2	7.3
Taxes on Income and Profits	1.4	1.4	2	2	2.2
Taxes on Goods and Services	1.3	1.8	2.3	2.6	2.2
Taxes on International Trade	2.1	2.2	2.1	2.3	1.4
CAA Revenues	1.6	1.5	1.2	1.5	1
Nontax Revenues	0.7	0.3	0.6	0.4	1.3
Total Expenditures	33.4	27.1	32.6	32.6	30.7
Current Expenditure	11.3	10	13.1	14.4	14.4
Wages and Salaries	4.6	4	5.4	6.2	5.7
Materials and Supplies	1.6	1.3	1.9	2.5	2.4
Interest Due	0.4	0.3	0.3	0.6	1
Transfers	0.8	0.4	1	0.9	0.7
Other (mostly off-budget military)	3.9	4	4.5	4.3	4.5
Current Deficit (commitments)	-3.3	-2	-4.2	-4.9	-5.8
Investment Expenditures	22.2	17.1	19.5	18.2	16.3
Overall Deficit	-25.5	-19.1	-23.7	-23.1	-22.1
Changes in Payment Arrears	0.2	-0.3	-1.9	0.8	2.9
Overall Deficit (cash)	-25.3	-19.4	-25.6	-22.3	-19.2

Source: Data provided by Chadian Authorities in interviews with IRIS, July 1992.

EXHIBIT C-3

CHAD CENTRAL GOVERNMENT OPERATION INDICATORS, 1987-1991

(% annual change)	1987	1988	1989	1990	1991 estimated
Total Revenues	9.7	27.2	16.3	9.6	-1
Tax Revenues	17.1	33.3	12.9	12.7	-12
Taxes on Income and Profits	4.6	23.5	45.8	4.5	22.3
Taxes on Goods and Services	6.8	73.4	31	16.6	-5.8
Taxes on International Trade	-17.4	36.3	-0.3	11.2	-32
CAA Revenues	170.7	18	-19.7	31.9	-26.9
Nontax Revenues	-35.3	-39.6	99.4	-33.5	254.1
Total Expenditures	15.1	2.1	24.9	2.6	4.2
Current Expenditure	10.8	11.8	36.4	12.9	10.4
Wages and Salaries	18.2	9.2	41.2	17.8	1.3
Materials and Supplies	-4.5	3.3	56	30.1	1.3
Interest Due	-17	2.3	-2.2	117	9.2
Transfers	55.9	-41.8	173.6	-9.1	88.4
Other (mostly off-budget military)	...	...	...	...	...
Current Deficit (commitments)	13.5	-24.8	116.7	20	32.8
Investment Expenditures	17.5	-2.7	18.3	-4.4	-0.8

Source: Data provided by Chadian Authorities in interviews with IRIS, July 1992.

EXHIBIT C-4

CHAD CENTRAL GOVERNMENT EXPENDITURES, 1987-1991

	1987	1988	1989	1990	1991 estimated
(in millions of CFAf)					
Total Expenditures	82312	84077	105038	107719	112200
Current Expenditures	27712	30972	42236	47678	52628
Wages and Salaries	11325	12363	17452	20555	20828
Materials and Supplies	3886	4014	6263	8146	8866
Scheduled interest	875	896	876	1902	3584
Transfers	2058	1199	3279	2980	2720
Other, including military	9567	12500	14365	14096	16600
Investments	54600	53105	62802	60041	59572
(as % of total)					
Total Expenditures	100	100	100	100	100
Current Expenditures	33.7	36.8	40.2	44.3	46.9
Wages and Salaries	13.8	14.7	16.6	19.1	18.6
Materials and Supplies	4.7	4.8	6	7.6	7.9
Scheduled Interest	1.1	1.1	0.8	1.8	3.2
Transfers	2.5	1.4	3.1	2.8	2.4
Other, including military	11.6	14.9	13.7	13.1	14.8
Investments	66.3	63.2	59.8	55.7	53.1

Source: Data provided by Chadian Authorities, interviewed by IRIS Team, N'Djamena, July 1992.
Note: Amounts include both CAA & Treasury receipts.

EXHIBIT C-5

CHAD CENTRAL GOVERNMENT REVENUES, 1987-1991

(In million of CFAf)	1987	1988	1989	1990	1991 estimated
Total Revenues	15411	19986	24966	26449	27536
Tax Revenues	13794	19010	23019	25204	22950
Taxes on Income and Profits	3494	4314	6289	6572	8040
Individuals	1870	2386	4421	4762	5201
Firms	1624	1928	1867	1811	2839
Employer's Payroll Tax	397	435	502	669	901
Taxes on Goods and Services	3223	5588	7319	8534	8037
Turnover Tax	1204	1264	1858	2334	2538
Tax Unique	1592	1364	1868	2119	2384
Other	428	2960	3593	4081	3116
Petroleum	...	2043	3103	3598	2820
Taxes on International Trade	5092	6940	6917	7692	5229
Imports	4827	6553	6393	6873	4794
Exports	168	253	223	277	371
Other	97	135	300	542	64
Other Revenues Not Specified	1587	1733	1993	1737	743
Nontax Revenues	1617	976	1947	1295	4586
Property Incomes	338	150	221	304	2305
Administrative Fees	104	104	197	499	462
Nonindustrial Sales	553	416	517	253	420
Other	914	522	570	492	335
BEAC Profits	261	200	442	...	1485

Source: Data provided by Chadian Authorities in interviews with IRIS Team, N'Djamena, July 1992.

Note: Amounts do not include receipts of CAA.

EXHIBIT C-6

CHAD CENTRAL GOVERNMENT REVENUES, 1987-1991

(As % of total)	1987	1988	1989	1990	1991 estimated
Total Revenues	100	100	100	100	100
Tax Revenues	89.5	95.1	92.2	95.1	83.3
Taxes on Income and Profits	22.7	21.6	25.2	24.8	29.2
Individuals	12.1	11.9	17.7	18	18.9
Firms	10.5	9.6	7.5	6.8	10.3
Employer's Payroll Tax	2.6	2.2	2	2.5	3.3
Taxes on Goods and Services	20.9	28	29.3	32.2	29.2
Turnover Tax	7.8	6.3	7.4	8.8	9.2
Tax Unique	10.3	6.8	7.5	8	8.7
Other	2.8	14.8	14.4	15.4	11.3
Petroleum	...	10.2	12.4	13.6	10.2
Taxes on International Trade	33	34.7	27.7	29	19
Imports	31.3	32.8	25.6	25.9	17.4
Exports	1.1	1.3	0.9	1	1.3
Other	0.6	0.7	1.2	2	0.2
Other Unspecified Revenues	10.3	8.7	8	6.6	2.7
Nontax Revenues	10.5	4.9	7.8	4.9	16.7
Property Incomes	2.2	0.8	0.9	1.1	8.4
Administrative Fees	0.7	0.5	0.8	1.9	1.7
Nonindustrial Sales	3.6	2.1	2.1	1	1.5
Other	5.9	2.6	2.3	1.9	1.2
BEAC Profits	1.7	1	1.8	...	5.4

Source: Data provided by Chadian Authorities in interviews with IRIS Team, N'Djamena, July 1992

Note: Amounts do not include receipts of CAA.

EXHIBIT C-7

TAXES ON INTERNATIONAL TRADE & TRANSACTIONS

(As percentage of total government revenues)

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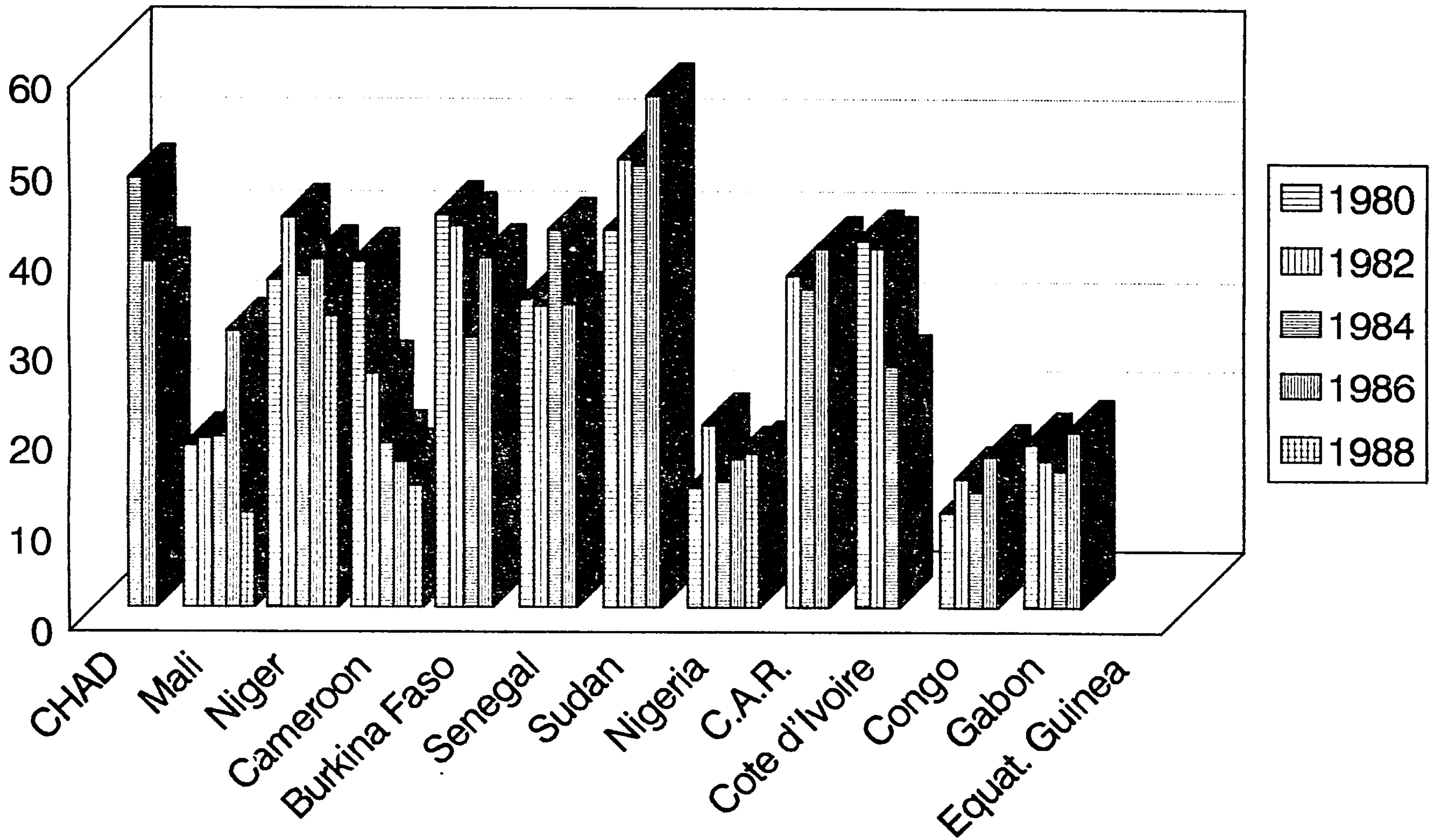
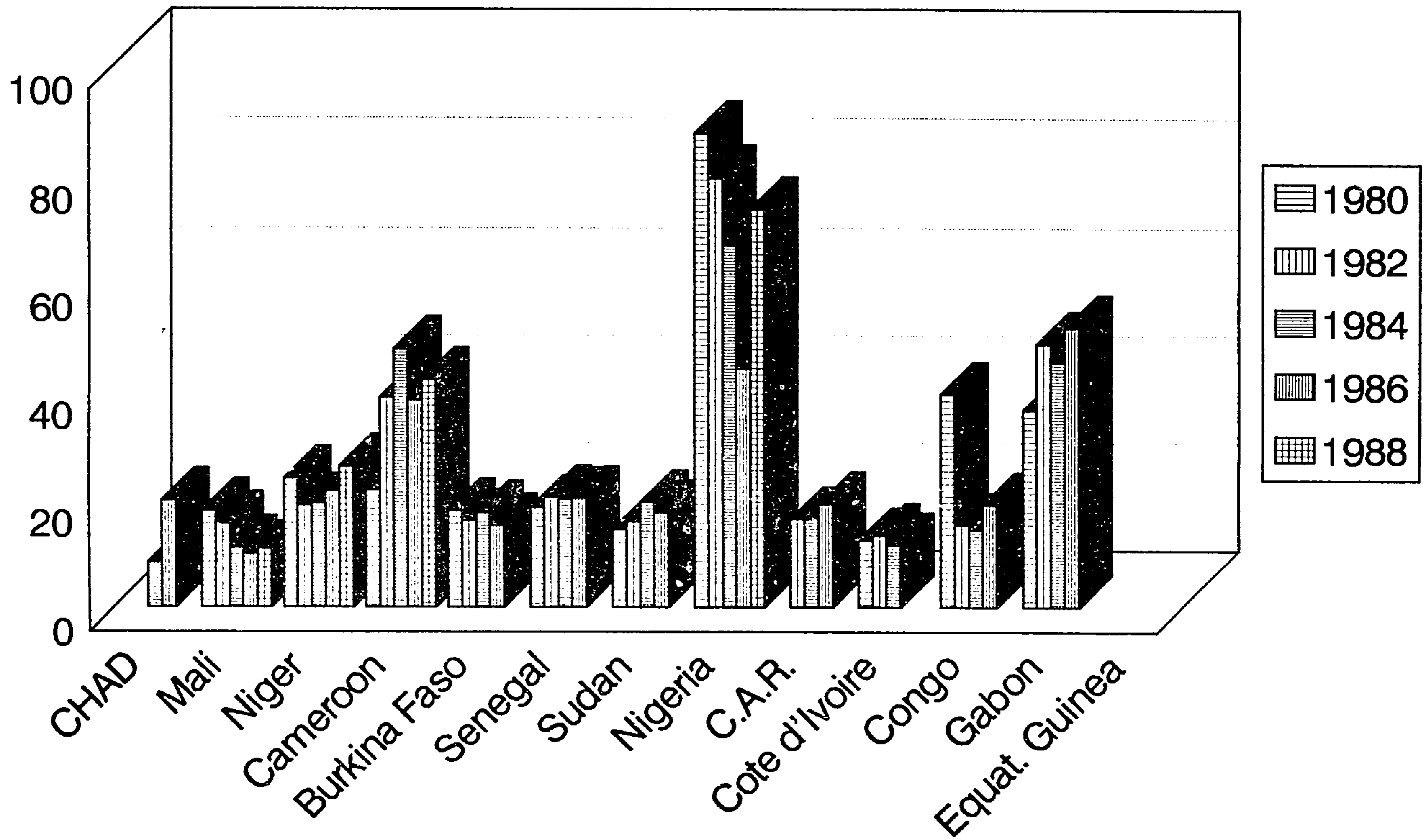


African Development Indicators," UNDP/World Bank 1992, p. 179.

EXHIBIT C-8

TAXES ON INCOME & PROFITS

(As percentage of total government revenues)



Source: UNDP/World Bank, "African Development Indicators," p. 178.

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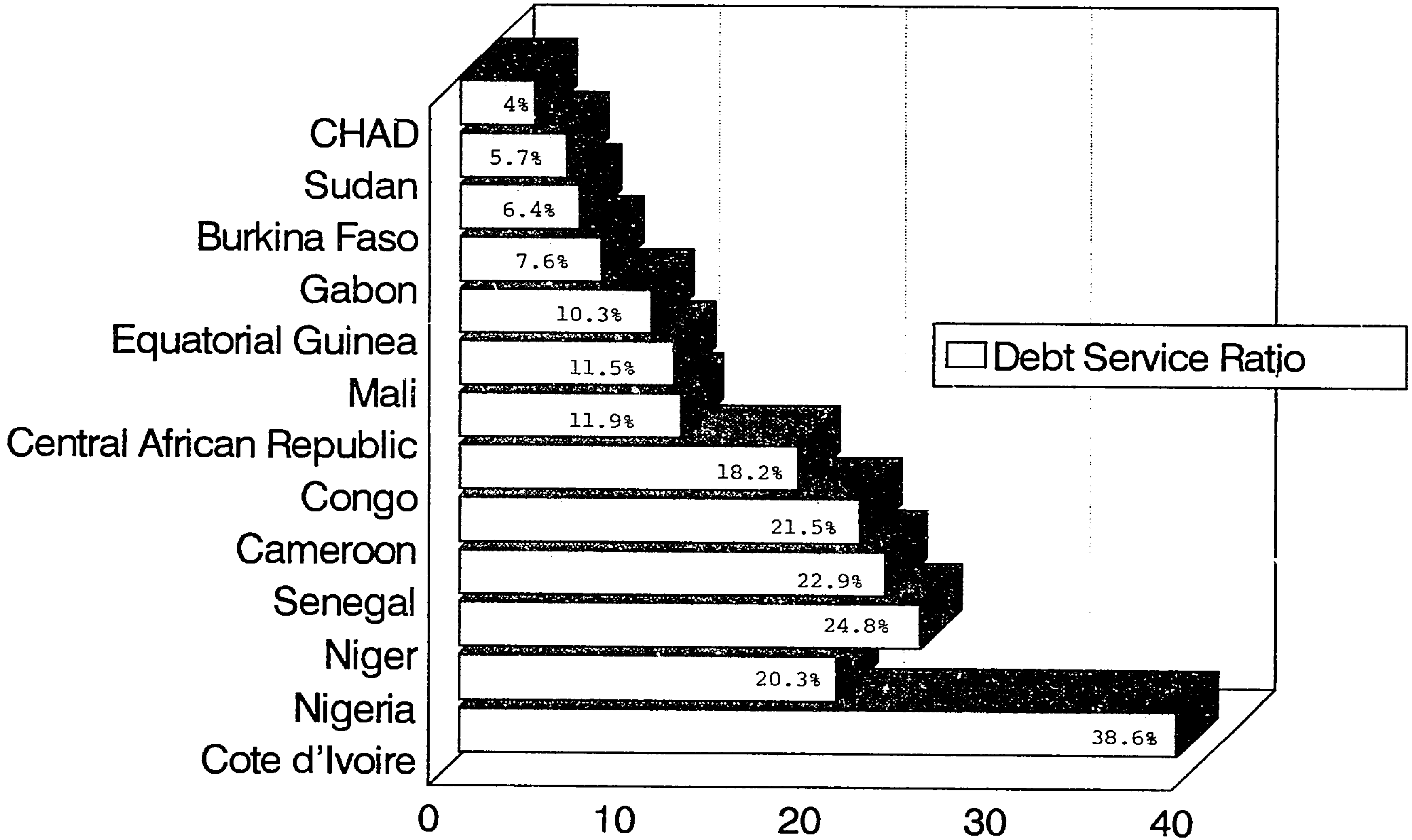
EXHIBIT D-1

DEBT SERVICE AS A SHARE OF EXPORTS

OR DEBT-SERVICE RATIO, 1990



Source: World Bank, "World Debt Tables, 1991-92."
Note: Ratio is - Total Debt Service /Exports of Goods & Services.

EXHIBIT D-2

EXTERNAL PUBLIC DEBT OUTSTANDING, 1990
(In millions of U.S. Dollars)

Equatorial Guinea	206
CHAD	430.4
Burkina Faso	750
Central African Republic	816
Niger	1587
Mali	2306
Gabon	2945
Senegal	3014
Congo	4380
Cameroon	5014
Sudan	9652
Cote d'Ivoire	14422
Nigeria	34100

Source: World Bank, "World Debt Tables 1991-92".

EXHIBIT D-3

USES OF IMF CREDITS, IN 1990
(In millions of U.S. Dollars)

Burkina Faso	0
Nigeria	0
Equatorial Guinea	5.8
Congo	11
CHAD	30.5
Central African Republic	37
Mali	69
Niger	85
Cameroon	121
Gabon	140
Senegal	314
Cote d'Ivoire	431
Sudan	956

Source: World Bank, "World Debt Tables 1991-92."

EXHIBIT D-4

STRUCTURE OF OUTSTANDING DEBT, BY CREDITORS, 1990
(In millions of U.S. Dollars)

	PRIVATE SECTOR CREDITORS:						PUBLIC SECTOR CREDITORS:					
		Non	Publically	Types of			Total	Multi-	Types of Multi's		Bilateral	
	Total	Guaranteed	Guaranteed	Pub. Guaranteed			Public	lateral	Concess-	Noncon-		Concess-
COUNTRIES	Private	Private	Private	Bonds	Comm Bks.	Oth.Sources			ional	cessional		ional
CHAD	8.5	0.0	8.5	0.0	0.0	8.5	421.9	317.9	310.9	7.1	103.9	67.0
Mali	18.0	0.0	18.0	0.0	2.0	16.0	2306.0	870.0	856.0	14.0	1418.0	1375.0
Niger	376.0	261.0	115.0	0.0	114.0	1.0	1211.0	702.0	652.0	50.0	509.0	178.0
Cameroon	1228.0	230.0	998.0	0.0	324.0	674.0	3787.0	1297.0	375.0	922.0	2490.0	1069.0
Burkina Faso	38.0	0.0	38.0	0.0	1.0	37.0	712.0	656.0	484.0	81.0	147.0	138.0
Senegal	241.0	60.0	181.0	0.0	85.0	96.0	2773.0	1368.0	1159.0	209.0	1405.0	827.0
Sudan	2151.0	496.0	1655.0	0.0	1651.0	4.0	7501.0	1724.0	1569.0	155.0	5777.0	2903.0
Nigeria	16168.0	391.0	15777.0	0.0	5842.0	9935.0	17933.0	3726.0	115.0	3612.0	14206.0	519.0
C.A.R.	23.0	1.0	22.0	0.0	0.0	22.0	794.0	466.0	441.0	235.0	327.0	270.0
Cote d'Ivoire	7576.0	4372.0	3204.0	0.0	2818.0	386.0	6846.0	2701.0	321.0	2380.0	4145.0	1859.0
Congo	1241.0	0.0	1241.0	0.0	882.0	359.0	3139.0	582.0	168.0	414.0	2657.0	1493.0
Gabon	707.0	0.0	707.0	0.0	247.0	461.0	2237	320.0	32.0	288.0	1918.0	803.0
Equat. Guinea	17.8	0.0	17.8	0.0	0.0	17.8	188.3	66.6	57.5	9.2	121.6	66.8

Source: World Bank, "World Debt Tables, 1991 - 1992."

EXHIBIT D-5

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STRUCTURE OF OUTSTANDING DEBT, BY DEBTORS, 1990

DEBTORS: COUNTRIES	Total Private Sector Debt	Total Public Sector Debt	Total Public Sector Debt Components: Central Government	Regional & Local Gov't.	Central Bank	Official Devel. Bank	Public Corporation
CHAD	0.2	430.2	388.4	0.6	0.0	1.1	40.2
Mali	6.0	2300.0	2267.0	1.0	0.0	21.0	11.0
Niger	264.0	1323.0	1232.0	0.0	0.0	38.0	53.0
Cameroon	361.0	4655.0	4110.0	0.0	0.0	12.0	533.0
Burkina Faso	1.0	749.0	709.0	0.0	0.0	6.0	34.0
Senegal	97.0	2916.0	2728.0	0.0	0.0	9.0	179.0
Sudan	496.0	9156.0	9053.0	0.0	0.0	[illegible]	103.0
Nigeria	391.0	33709.0	30381.0	1524.0	0.0	181.0	1623.0
Central African Rep.	2.0	814.0	708.0	0.0	0.0	1.0	105.0
Cote d'Ivoire	4375.0	10048.0	9305.0	0.0	0.0	88.0	655.0
Congo	0.0	4382.0	3689.0	2.0	0.0	95.0	596.0
Gabon	2.0	2943.0	2762.0	0.0	0.0	3.0	178.0
Equatorial Guinea	0.0	205.9	192.7	0.0	10.8	0.4	2.0

World Bank, "World Debt Tables, 1991 - 1992. In millions of U.S. Dollars.

EXHIBIT D-6

TOTAL GOVERNMENT CREDIT

		(In percentage of annual change)					
	level in 1980	1980	1982	1984	1986	1988	1990
CHAD	11405	0.3	-5.6	-24.7	290.6	-141.3	-171.9
Mali	55935	1.6	23.3	-8.1	-1.6	-18.1	-40.4
Niger	-7492	-67.3	-647.7	23.2	-27.9	8.9	7.9
Cameroon	-52809	34.9	-13.5	-31.4	-125.4	100.7	73.3
Burkina Faso	-3380	45.6	-63.4	-10	26.7	11	5.9
Senegal	28673	52.8	90.3	12.7	1.9	4	-15.3
Sudan	1141	65.9	13.6	12.6	37.5	4.8	16
Nigeria	3539	6.8	64	15.2	2.9	29.9	69.1
C.A.R.	12874	10.8	-17.5	-6.2	29	-8.6	-29.1
Cote d'Ivoire	-54654	-52	25.2	11.8	10.3	49	-11.4
Congo	22657	7.3	333.3	107.9	12.1	57.9	-17.6
Gabon	30588	-1.8	1488.4	-16.4	208.6	23.1	-39.1
Equat. Guinea	...	...	...	...	-5.7	2.1	-24.1

Source: UNDP/World Bank 1992, "African Development Indicators," p. 52.
Note: 1980 levels are in millions of national currency.

EXHIBIT D-7

TOTAL DOMESTIC CREDIT

	level in 1980	(In percentage of annual change) 1980	1982	1984	1986	1988	1990
CHAD	4884	-1.3	-4.5	24.8	22.5	-8.3	-25.4
Mali	137926	5.2	14.7	-15.8	8.6	-21.4	-16
Niger	82308	55.6	28	-8.1	0.6	-16.3	-14
Cameroon	363804	27.8	32.2	4.5	19.3	-7.1	-1.6
Burkina Faso	56507	3.7	13.4	-1.8	1.9	6.9	-6
Senegal	293567	17.2	19.6	2.7	0.9	6.9	-8
Sudan	1955	34.4	25.1	15.3	35.4	17.4	...
Nigeria	10689	23.4	36	10.3	14.1	26	34.3
C.A.R.	36342	33.4	6.5	-2.7	3.4	-0.7	-2.4
Cote d'Ivoire	835066	23.2	6.8	0.5	4.3	5.8	-7.2
Congo	78653	17.9	53.2	28.8	2.4	3.2	-4.2
Gabon	173174	12.1	-9.8	12.4	17.3	-4.4	-14.4
Equat. Guinea	...	...	...	...	13.5	-2.3	-5.6

Source: UNDP/World Bank 1992, "African Development Indicators," p. 50.
Note: 1980 levels are in millions of national currency.

EXHIBIT D-8

PUBLIC ENTERPRISE SHARE OF OUTSTANDING DOMESTIC CREDIT

(In percentage)

	1980	1982	1984	1986	1988	1990
CHAD	...	...	...	...	...	33.5
Mali	...	...	...	...	...	...
Niger	27.3	23.9	19	28.5	...	
Cameroon	...	...	...	...	...	17.5
Burkina Faso	...	...	...	...	...	...
Senegal	39.5	39.1	26.1	...	...	...
Sudan	21.3	28.8	13.6	20.4	18.1	...
Nigeria	...	...	...	...	...	...
C.A.R.	...	...	...	...	...	21.1
Cote d'Ivoire	...	...	...	...	...	...
Congo	...	...	...	...	...	12.3
Gabon	...	...	...	...	...	5.9
Equat. Guinea	...	...	...	...	...	5.7

Source: UNDP/World Bank, "African Development Indicators," p. 263.

EXHIBIT D-9

TOTAL PRIVATE SECTOR CREDIT

		(In percentage of annual change)					
	level in 1980	1980	1982	1984	1986	1988	1990
CHAD	37479	-1.8	-4.1	41.5	15.5	-1.7	-4.8
Mali	81992	7.8	8.7	-22.8	18.1	-24	-0.2
Niger	88814	18.5	8.3	-12.9	9.2	-4.1	...
Cameroon	416613	28.7	21.3	-0.3	12.3	0.9	0.8
Burkina Faso	58026	5.5	14.4	-2.8	6.4	8.4	-1.3
Senegal	261519	16.8	8.1	-0.7	0.2	7.9	-5.6
Sudan	526	14.1	34	18.7	26.8	19.8	...
Nigeria	6744	31.6	18.5	6.8	30.2	16.4	9.1
C.A.R.	23468	50.2	24.2	-0.7	-8.7	4.2	-3.5
Cote d'Ivoire	866500	11.9	6	-2.1	2.1	-0.1	-5.8
Congo	55996	22.8	39.2	18.8	0.8	-6.2	6.5
Gabon	142586	15.6	8.2	9.9	10.9	-12.9	0.9
Equat. Guinea	...	...	...	...	28.1	-4.6	1.1

Source: UNDP/World Bank 1992, "African Development Indicators," p.51.
Note: 1980 levels are in millions of national currency.

EXHIBIT D-10

CHAD BANK CREDIT TO PRIVATE SECTOR BY SECTORAL DISTRIBUTION, 1987-1990

	1987		1988		1989		1990	
	Value	Percent	Value	Percent	Value	Percent	Value	Percent
Short-Term Credits:								
Agriculture	136	0.2	134	0.2	134	0.3	713	1.8
Food Processing	3964	6.2	2748	4.8	842	1.6	1768	4.4
Textile Manufacturing	1728	2.7	1535	2.7	1418	2.8	1406	3.5
Other Manufacturing	763	1.2	36	0.1	790	1.5	4458	11.3
Public Utilities	17	...	63	0.1	51	0.1	...	...
Public Works & Construction	1016	1.6	1313	2.3	1239	2.4	1354	3.4
Commerce (Retail and Wholesale)	7210	11.3	5167	9	6905	13.4	9517	23.7
Fuel Imports and Distribution	1730	2.7	2939	5.1	1857	3.6	3330	8.3
Cotton Export Activities	39312	61.7	18688	32.4	17390	33.8	13188	32.8
Transportation	651	1	706	1.2	662	1.3	655	1.6
Services	1451	2.3	782	1.4	2449	4.8	2262	5.6
Unallocated	812	1.3	917	1.6	367	0.7	1458	3.6
TOTAL:	58790	92.2	35028	60.9	34104	66.3	40109	100
Medium & Long-term Credits:								
Agriculture	15	...	15	...	15	...	15	0.1
Food Processing	1467	2.3	690	1.2	1924	3.7	2441	16.5
Textile Manufacturing	117	0.2	209	0.4	106	0.2	735	5
Other Manufacturing	94	0.1	110	0.2	302	0.6	540	3.7
Public Utilities	...	...	...	...	...	...	...	...
Public Works & Construction	111	0.2	96	0.2	67	0.1	60	0.4
Commerce (Retail and Wholesale)	210	0.3	410	0.7	500	1	685	4.6
Fuel Imports and Distribution	395	0.6	315	0.5	270	0.5	137	0.9
Cotton Export Activities	526	0.8	18842	32.7	13374	26	8304	56.2
Transportation	112	0.2	116	0.2	117	0.2	131	0.9
Services	703	1.1	348	0.6	647	1.3	367	2.5
Unallocated	1136	1.8	1505	2.6	56	0.1	1353	9.2
TOTAL:	4886	7.6	22656	39.3	17378	33.7	14768	100
COMBINED TOTAL:	63676	100	57684	100	51482	100	54877	100

Source: Data provided by Chadian & BEAC Authorities in interviews with IRIS, N'Djamena, July 1992.

EXHIBIT D-11

CHAD AUTONOMOUS AMORTIZATION FUND (CAA), OPERATIONS IN 1987-1991

(In millions of CFAf)	1987	1988	1989	1990	1991 estimated
Revenues	4060	4789	3844	5068	3703
Cottonseed Oil & Soap	495	394	561	447	380
Beer	917	809	961	837	780
Loans	310	256	239	232	260
Transport	362	338	239	600	597
Petroleum	753	1434	1119	1002	650
Loan & Arrears Recovery	380	1104	141	1245	550
Other Taxes	843	454	584	705	486
Expenditures	3173	5444	7365	4694	6003
Current Expenditures	1648	3777	5677	3297	3736
Salaries	20	20	26	28	40
Materials and Supplies	34	35	41	36	52
Equipment and Maintenance	...	281	163	...	...
Subscriptions	719	...	...	...	...
Short-term Debt Repayment	...	2545	4733	1456	600
Interest and Charges	875	896	713	1778	3044
Current Balance	2412	1012	1834	1771	-33
Amortization	1525	1668	1688	1397	5567
Overall Deficit (-)	887	-655	-3522	374	-2300
Financing	-887	655	3522	-374	2300
Change in Arrears(Increase+)	263	791	-22381	-12673	3203
Principal	198	469	-14259	-10143	1646
Interest	65	322	-8122	-2530	1557
Change in Bank Deposits (Increase -)	-1149	-136	3035	-1222	-903
Debt Rescheduling	...	...	22868	13521	...

Source: Data provided by Chadian Authorities in interviews with IRIS team, N'Djamena, July 1992.

EXHIBIT D-12

CHAD AUTONOMOUS AMORTIZATION FUND (CAA) REVENUES, 1986-1990

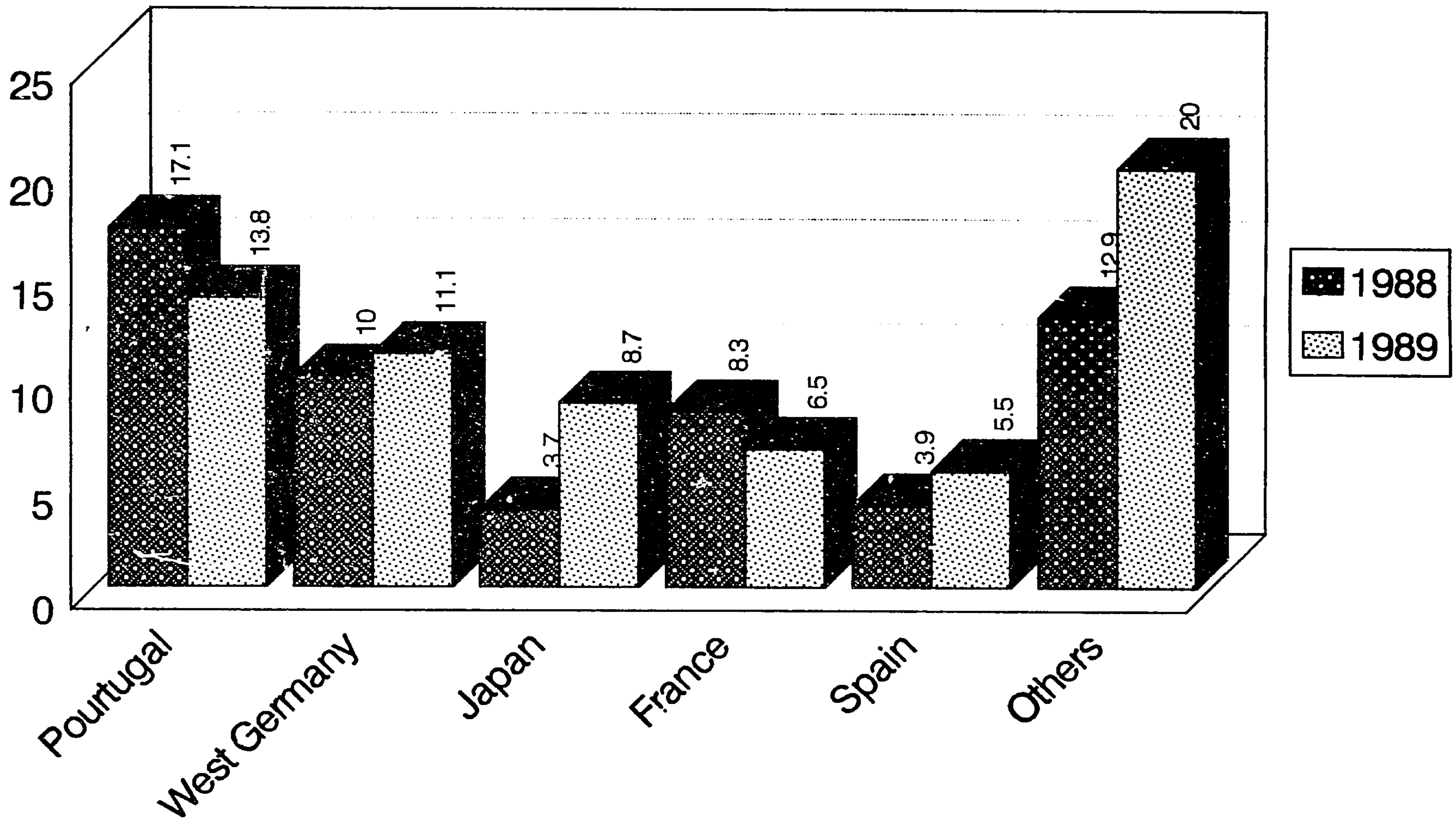
(In millions of CFAf)	1986	1987	1988	1989	1990
Taxable Items & Payers:					
Cottonseed & Peanut Oils, Cotonchad	53	315	297	352	280
Soap, Cotonchad	27	180	97	209	167
Beer, BDL	728	317	809	961	837
Cigarettes, MCT	78	126	117	124	205
Sugar, SONASUT	112	65	41	73	83
Loans, Commercial Banks	213	310	224	239	232
Soft Drinks, BGDT	14	68	66	69	98
Turnover Tax, CTT	26	362	338	239	600
Cattle Exports, SOTERA	1	72	94	90	143
Fuel Imports, Petroleum Fund	16	753	1434	1119	1002
Imported Alcoholic Beverages, Various Importers	38	50	36	20	10
Miscellaneous Taxes on Variety of payers	124	462	133	208	166
Arrears Recovery	71	380	1104	141	1245
TOTAL:	1501	4060	4790	3844	5068

Source: Data provided by Chadian Authorities in interviews with IRIS, N'Djamena, July 1992.

EXHIBIT E-1

CHAD EXPORTS f.o.b., BY DESTINATION

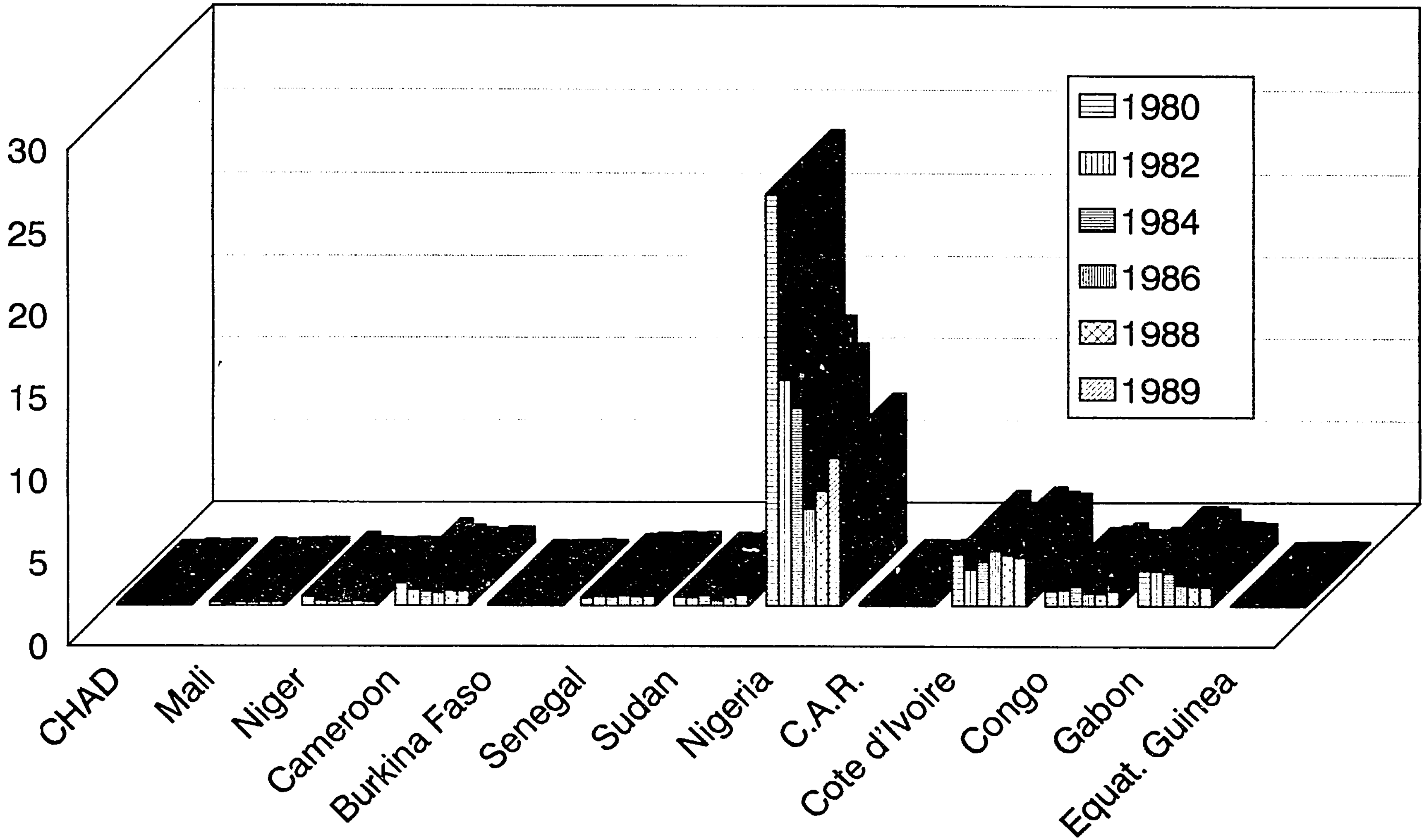
Recipient Countries (U.S.$Millions)



Source: Economist Intelligence Unit, "Cameroon, CAR, Chad Country Report, No.2-1992," appendix 3.

TOTAL VALUE OF MERCHANDISE EXPORTS
(In millions of U.S. Dollars)

79



Source: UNDP/World Bank 1992, "African Development Indicators," p. 78.

EXHIBIT E-3

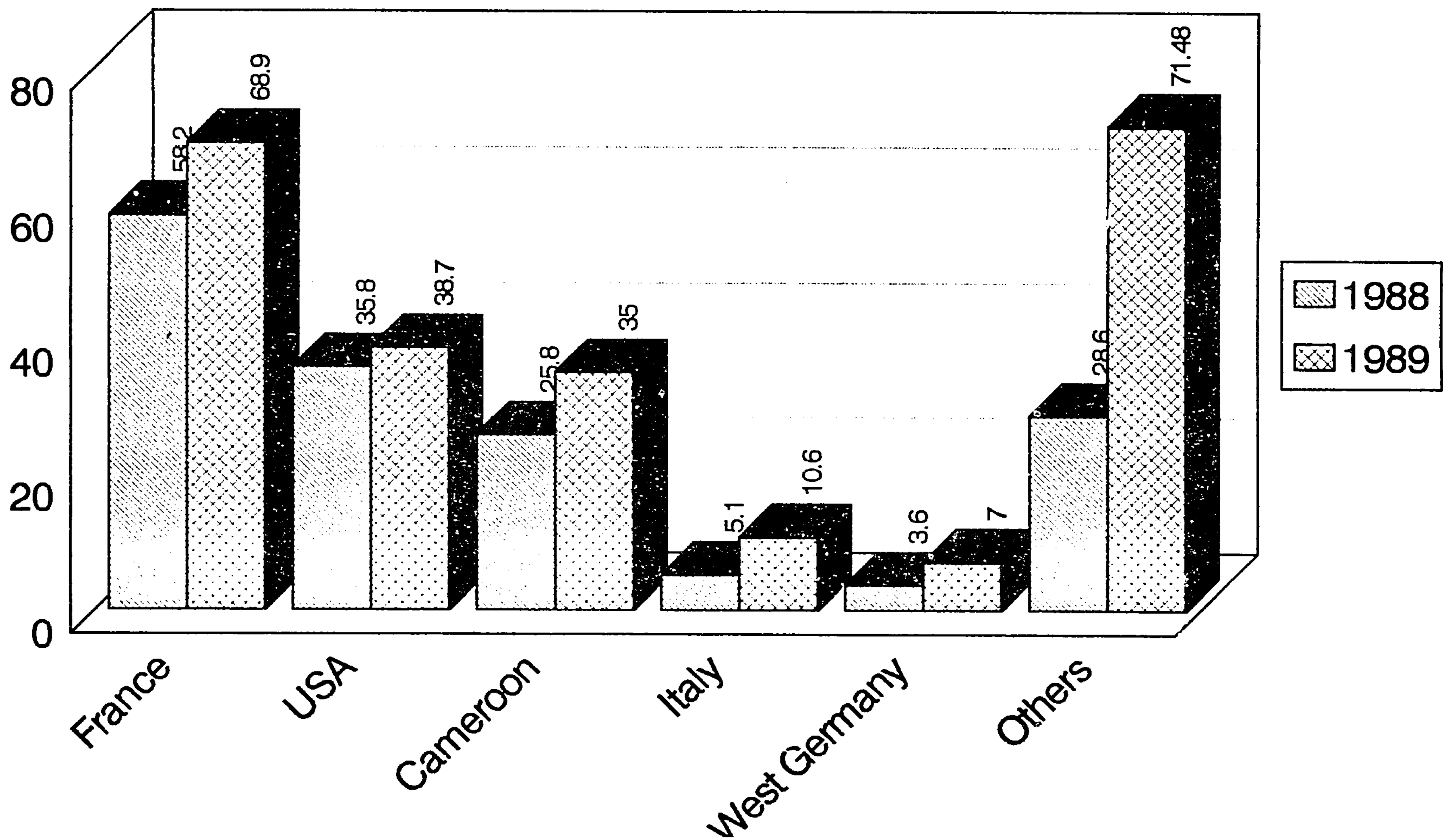
EXPORT DUTIES

	(As percentage of total government revenue) 1980	1982	1984	1986	1988	1990
CHAD	...	...	16.6	0.7	...	...
Mali	3.5	1.9	6.5	5.7	5.8	...
Niger	4.1	5.3	5.8	5.2	...	...
Cameroon	9.8	4.3	2.1	1.9	6.2	...
Burkina Faso	2.9	1.5	1.5	1.4	...	...
Senegal	1.8	0.8	0.3	0.1	...	...
Sudan	1.7	4	1.6	1.7	...	...
Nigeria	0	0	0	0.2	0	0
C.A.R.	...	9.8	10.4	6.1	...	...
Cote d'Ivoire	9.9	9.1	7.6	...	...	...
Congo	0.2	0.1	0.1	0.1	0.3	0
Gabon	2.2	1.2	1.1	1	...	...
Equat. Guinea	...	...	...	...	...	...

Source: UNDP/World Bank 1992, "/African Development Indicators," p. 181.

CHAD IMPORTS c.i.f., BY ORIGINATION

Exporting Countries (U.S.$Millions)



Source: Economist Intelligence Unit, "Cameroon, CAR, Chad Country Report, No.2-1992," appendix 3.

EXHIBIT E-6

TOTAL VALUE OF MERCHANDISE IMPORTS

(In millions of U.S. Dollars)

	1980	1982	1984	1986	1988	1989
CHAD	74	109	182	288	419	435
Mali	440	332	368	496	513	500
Niger	594	466	285	330	375	370
Cameroon	1602	1211	1106	1705	1271	1320
Burkina Faso	358	346	253	405	489	410
Senegal	1052	992	1010	961	1180	1150
Sudan	1576	1285	1147	961	1060	1210
Nigeria	15025	15003	5868	4029	3800	3600
C.A.R.	81	127	87	252	201	150
Cote d'Ivoire	3015	2090	1511	2054	2340	2380
Congo	545	744	595	576	544	524
Gabon	674	723	888	866	930	950
Equat. Guinea	26	42	25	41	30	31

Source: UNDP/World Bank 1992, "African Devalopment Indicators," p. 79.

EXHIBIT E-7

IMPORT DUTIES

	(As percentage of total government revenues) 1980	1982	1984	1986	1988
CHAD	...	...	31	37.7	...
Mali	13.8	16.7	11.8	24.5	5.1
Niger	31.5	38.1	31.1	33.5	...
Cameroon.	28.3	21.6	15.8	14.1	2.6
Burkina Faso	38	38	26.3	34.5	...
Senegal	32.4	32.7	41.4	33.6	...
Sudan	40.1	45.7	37.3	54.9	...
Nigeria	13.1	20.1	13.9	16.2	17
C.A.R.	...	27.1	25.1	33.7	...
Cote d'Ivoire	30.8	30.8	19.1	...	25.9
Congo	10.5	14.2	12.8	16.7	27.4
Gabon	15.8	14.9	14	18.4	...
Equat. Guinea	...	...	...	...	...

African Development Indicators," UNDP/World Bank 1992, p. 180.

EXHIBIT F-1

AGRICULTURAL LAND USAGE IN 1988

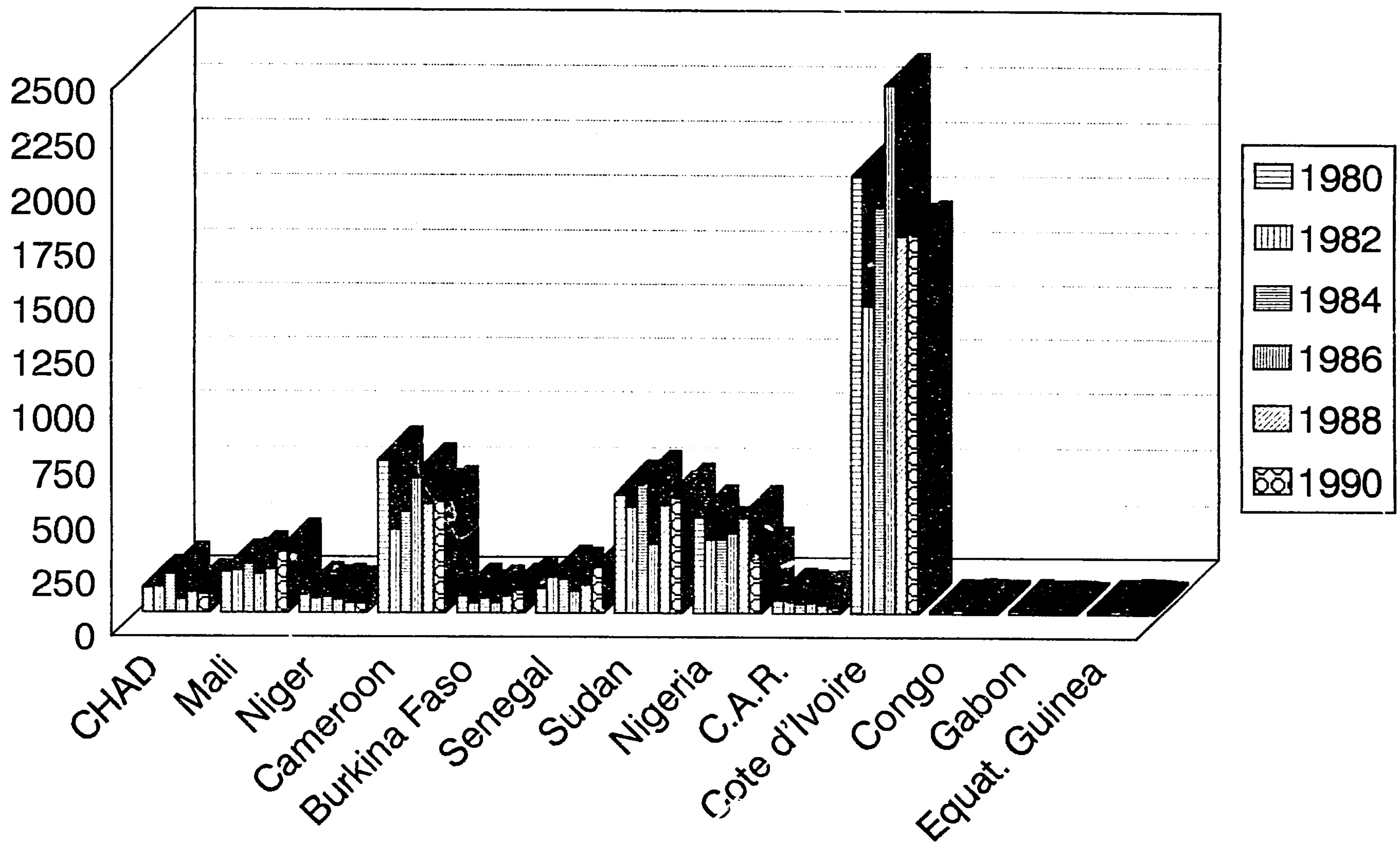
(000 Ha)	Total Land Area	Amount Arable	Permanently Cropped	Permanent Pasture
CHAD	125920	3200	5	45000
Mali	122019	2090	3	30000
Niger	126670	3600	...	9270
Cameroon	46540	5930	1068	8300
Burkina Faso	27380	3551	13	10000
Senegal	19253	5220	6	5700
Sudan	237600	12450	58	56000
Nigeria	91077	28800	2535	20990
C.A.R.	62298	1920	86	3000
Cote d'Ivoire	31800	2420	1240	3000
Congo	34150	144	24	10000
Gabon	25767	290	162	4700
Equat. Guinea	2805	130	100	104

Source: UNDP/World Bank 1992, "African Development Indicators," p. 344

EXHIBIT F-2

TOTAL VALUE OF AGRICULTURAL EXPORTS

(In millions of U.S. Dollars, at current prices/exchange rates)



Source: UNDP/World Bank, "African Development Indicators," p. 230.

EXHIBIT F-3

FORESTS/FUELWOOD DATA

	% of Total Land Area Forested 1990	Annual Deforestation Rate 1980-90	Fuelwood Production Annual % Change 1977-87
CHAD	12	.6	2.5
Mali	6	.5	3
Niger	2	2.6	3.2
Cameroon	49	.8	3.1
Burkina Faso	17	1.7	2.5
Senegal	57	.5	2.8
Sudan	20	1.1	3.4
Nigeria	17	2.7	4.1
Central African Republic	58	3.2	3.2
Cote d'Ivoire	31	5.2	4.4
Congo	63	0.1	3
Gabon	80	0.1	1.6
Equatorial Guinea	68.2	0.2	1.4

Source: UNDP,"Human Development Report 1992," p.s 172-3.

EXHIBIT F-4

CHAD FORESTRY PRODUCTION, ROUNDWOOD REMOVALS

('000 cubic meters)	1986	1987	1988
Sawn Logs, etc.	2	2	2
Other Industrial Wood Products	514	527	540
Fuel Wood (green, charcoal)	3136	3211	3292
TOTAL:	3652	3740	3834

Source: "Africa, South of the Sahara," p. 362.
Original source FAO estimates.

EXHIBIT F-5

PRINCIPAL CROPS IN CHAD

(In "000 metric tons)	1987	1988	1989
Wheat	3	2	2
Paddy Rice	42	74	57
Maize	34	34	16
Millet & Sorghum	518	697	546
Other Cereals	28	40	56
Potatos	15	18	18
Sweet Potatos	44	46	46
Cassava	305	330	330
Yams	230	240	240
Taro	9	9	9
Dry Beans	42	42	42
Other Pulses	18	18	18
Peanuts in shell	96	79	80
Sesame Seed	10	8	12
Cottonseed	75	80	70
Lint Cotton	48	53	51
Dry Onions	14	14	14
Other Vegetables	60	60	60
Dates	32	32	32
Mangos	32	32	32
Other Fruit	50	52	52
Sugar Cane	290	290	290

Source: "Africa, South of the Sahara 1992," p.362.
Original source FAO statistics & estimates.

EXHIBIT F-6

CHAD LIVESTOCK PRODUCTS & FISHERIES YIELD

(In '000 metric tons)	1986	1987	1988	1989
Total Meat	...	63	64	67
Beef & Veal	...	38	39	41
Mutton & Lamb	...	9	9	10
Goats' Meat	...	8	8	8
Poultry Meat	...	4	4	4
Cow Milk	...	108	111	111
Sheep Milk	...	8	8	8
Goat Milk	...	13	13	14
Butter	...	0.3	0.3	0.3
Hen Eggs	...	3.2	3.2	3.4
Cattle Hides	...	7	7.2	7.3
Sheep Skins	...	1.8	1.9	1.9
Goat Skins	...	1.5	1.5	1.5
Freshwater Fish (livewgt)	110	110	110	...

Source: "Africa, South of the Sahara 1992," p. 362, original-FAO estimates.

EXHIBIT F-7

CHAD MEAT PRODUCTION, SLAUGHTERED, 1986-1990

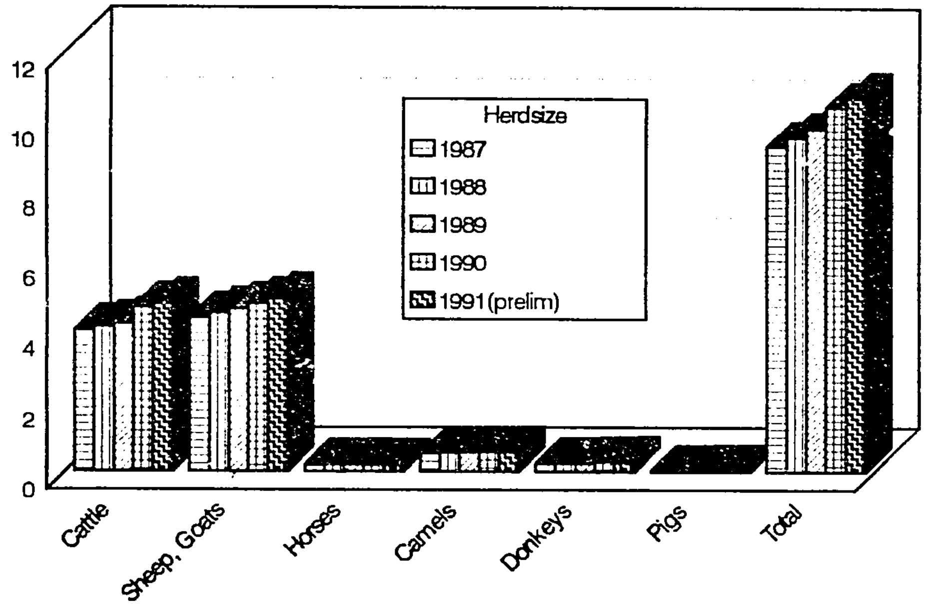
In '000 of head	1986	1987	1988	1989	1990 estimated
Cattle	65.9	75.7	78.3	66	95
In N'DJamena	40.5	49.7	57.4	47.6	67.4
Sheep, Goats	124.1	165.6	174.1	185.3	197.7
In N'DJamena	44.9	56.1	70.2	89.4	106
Camels, Horses, & Pigs	4.5	4	3.8	2.2	2.8
Total:	194.5	245.3	256.2	253.5	297.5
'000 Metric Tons Total: (of N'DJamena)	7.3	8.3	9.1	8.5	8.5

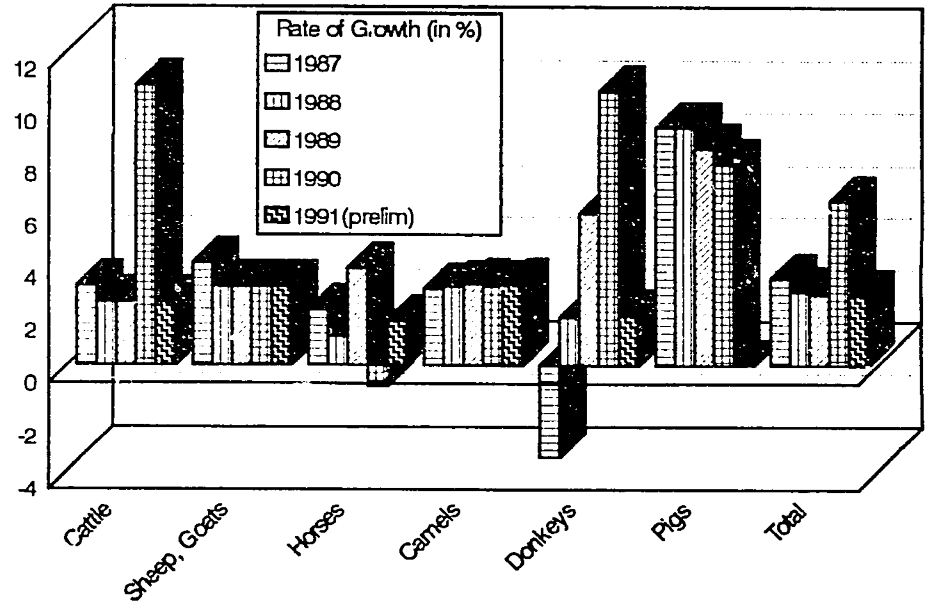
Source: Data provided by Chadian Authorities in interviews with IRIS, N'DJamena, July 1992.

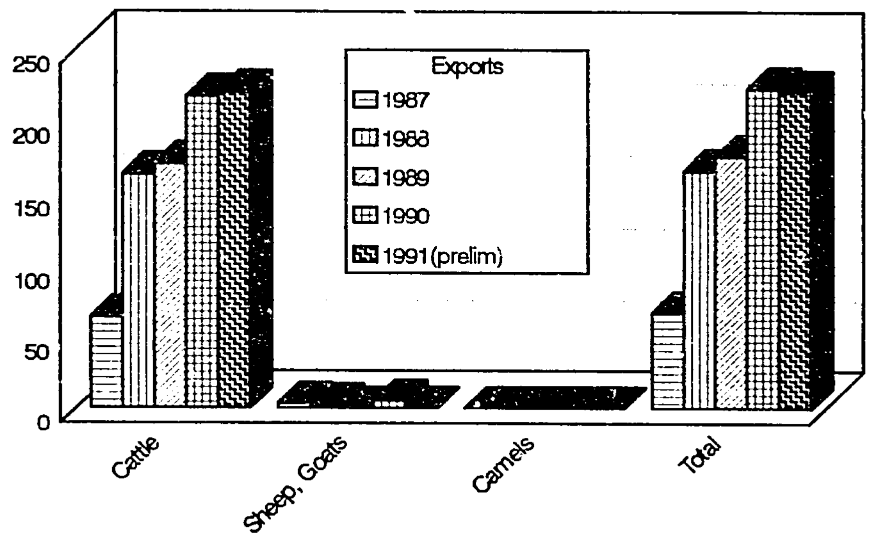
EXHIBIT F-8

CHADIAN LIVESTOCK POPULATION, EXPORTS FOR 1987 - 1991
in '000 of heads

91





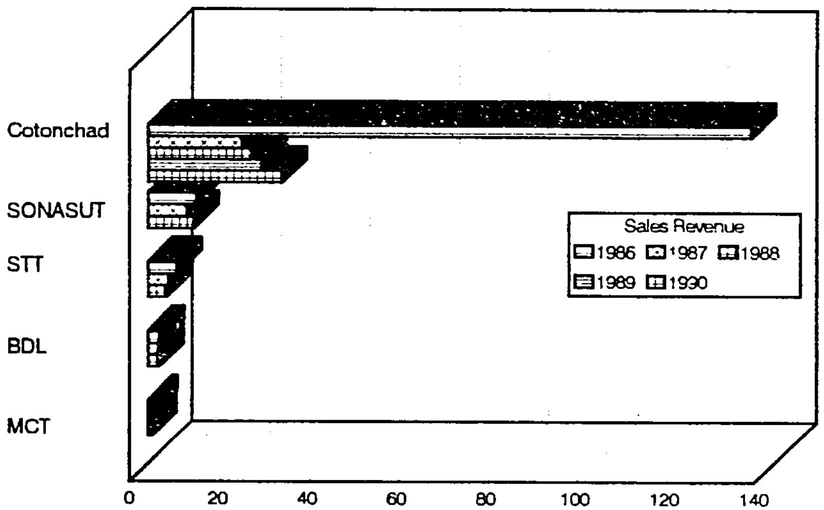


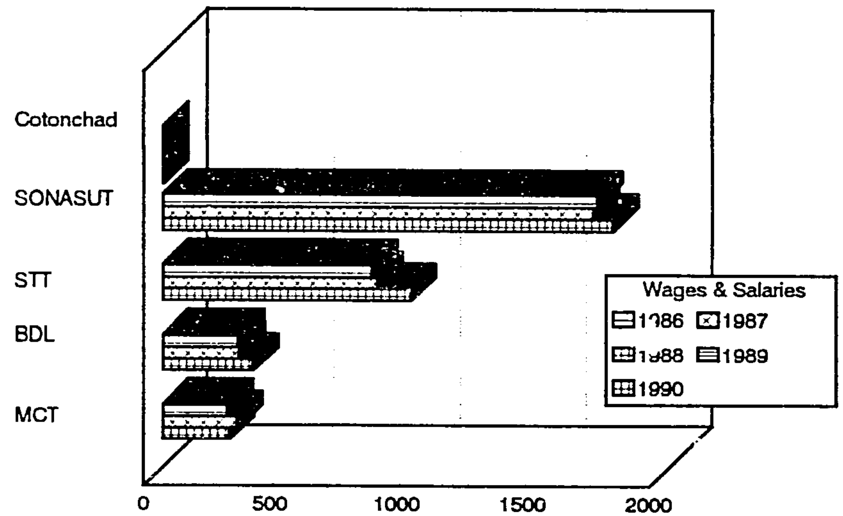
Source: Data provided by Chadian Authorities in IRIS interviews, N'Djamena, July 1992.

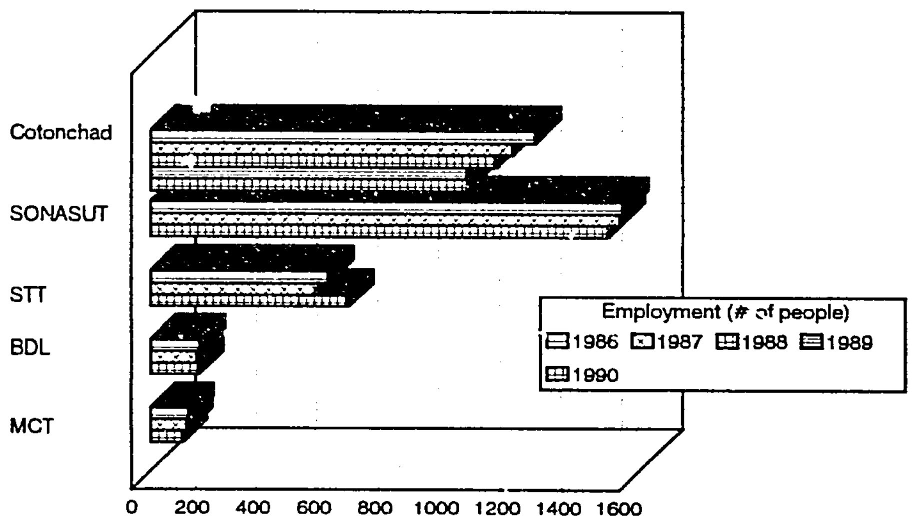
EXHIBIT G-1

MAJOR INDUSTRIAL FIRMS STATISTICS, 1986-1990

(In millions of CFAf)







Source: Data provided by Chadian Authorities in interviews with IRIS, N'Djamena, July 1992.

EXHIBIT G-2

CHAD AGRICULTURAL INDUSTRY OUTPUT, 1987-1991

	1987	1988	1989	1990	1991 estimated
('000 hectoliters)					
Beer	107.1	109	114.7	116	140
Edible Oil	97.7	108.4	126.6	90.5	79.4
(million of packages)					
Cigarettes	9.9	10.2	9.3	12.4	22.4
(millions of meters)					
Textiles	10	6	10.3	3.4	3
('000 metric tons)					
Sugar	22.1	25.7	39.7	46.9	24.5

Source: Data provided by Chadian Authorities in interviews with IRIS, N'Djamena, July 1992.

EXHIBIT G-3

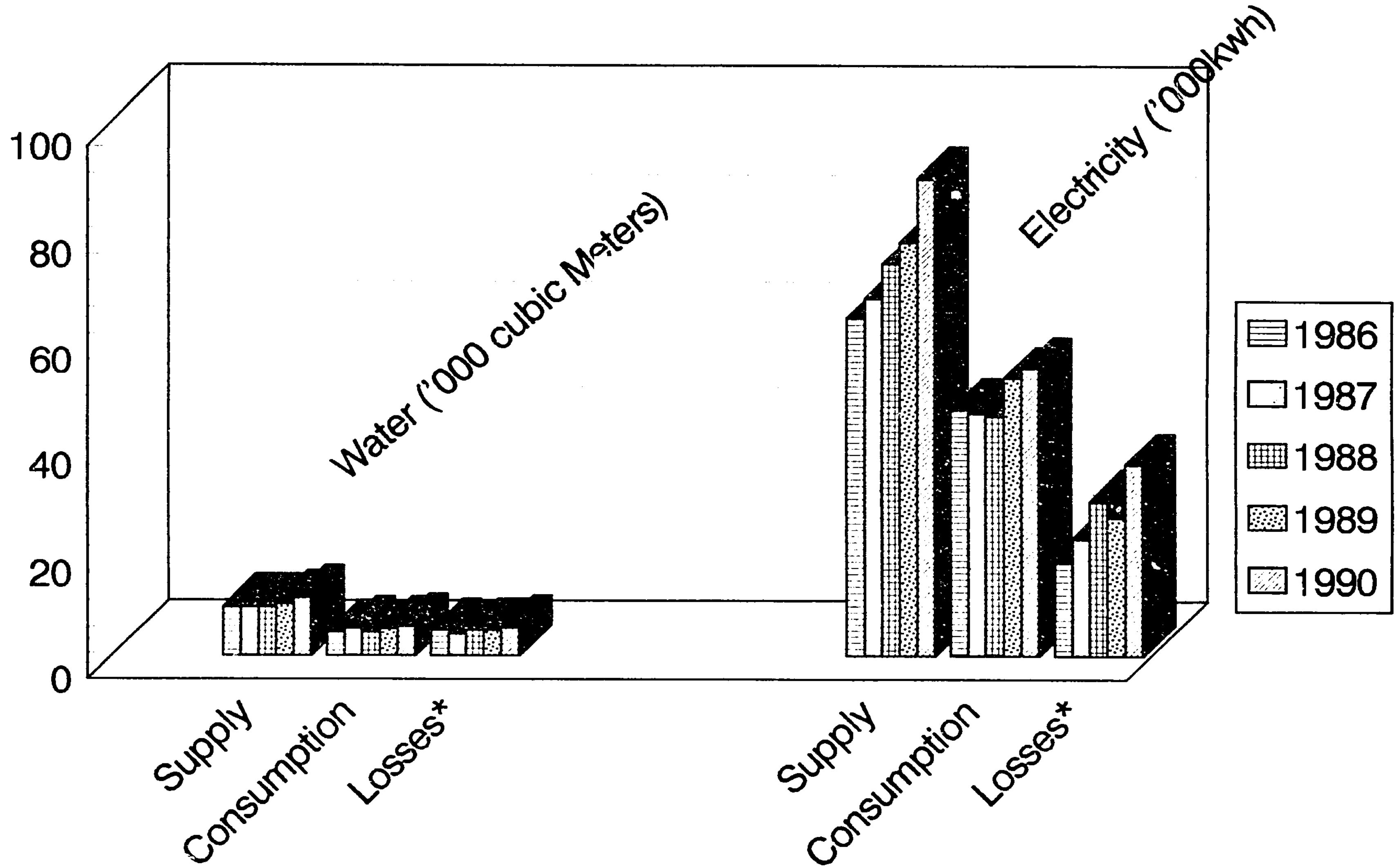
COMMERCIAL ENERGY CONSUMPTION PER CAPITA

(Kgs of oil equiv.)	1965	1989	Annual Rate of Change '80-'89
CHAD	....	17	0.2
Mali	14	24	2.6
Niger	8	40	3.1
Cameroon	67	141	5.5
Burkina Faso	7	17	....
Senegal	79	153	-1.1
Sudan	67	57	1
Nigeria	34	135	5.5
Central African Republic	22	36	6.5
Cote d'Ivoire	101	168	2.4
Congo	90	211	4
Gabon	153	1155	3
Equatorial Guinea	....	....	....

Source: UNDP, "Human Development Report 1992," p.s 172-3.

EXHIBIT G-4

CHAD WATER & ELECTRICITY SUPPLY/CONSUMPTION, 1986-1990



95

Source: Data provided by Chadian Authorities in interviews with IRIS, N'Djamena, July 1992.
Note: Losses are due to inaccurate measuring procedures and distribution losses.

EXHIBIT G-5

CHAD CIVIL AVIATION TRAFFIC, SCHEDULED SERVICES

('000)	1985	1986	1987
Kilometers flown	2000	2000	2000
Passenger-km	241000	249000	221000
Freight ton-km	19000	17000	16000
Mail ton-km	1000	1000	1000

Source: "Africa, South of the Sahara," p. 364.

EXHIBIT G-6

CHAD TOTAL MOTOR VEHICLES IN USE, 1985

	1985
Private Cars	2741
Buses, Trucks, Coaches	4000
Tractors	711
Scooters, Motorcycles	3442
Trailers	977
TOTAL:	11871

Source: "Africa, South of the Sahara," p. 364.

EXHIBIT H-1

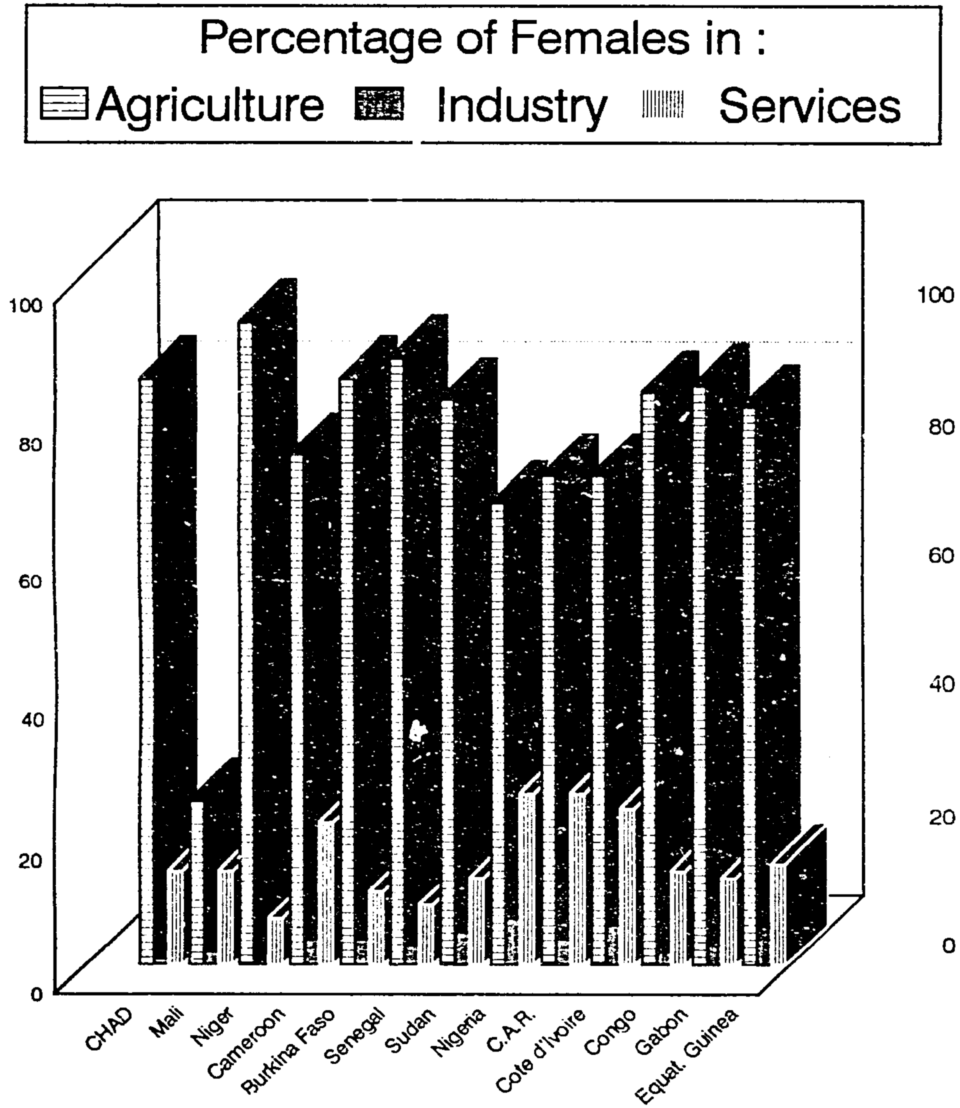
CHAD PRIVATE SECTOR LABOR FORCE ACTIVITY, BY SEGMENT & GENDER

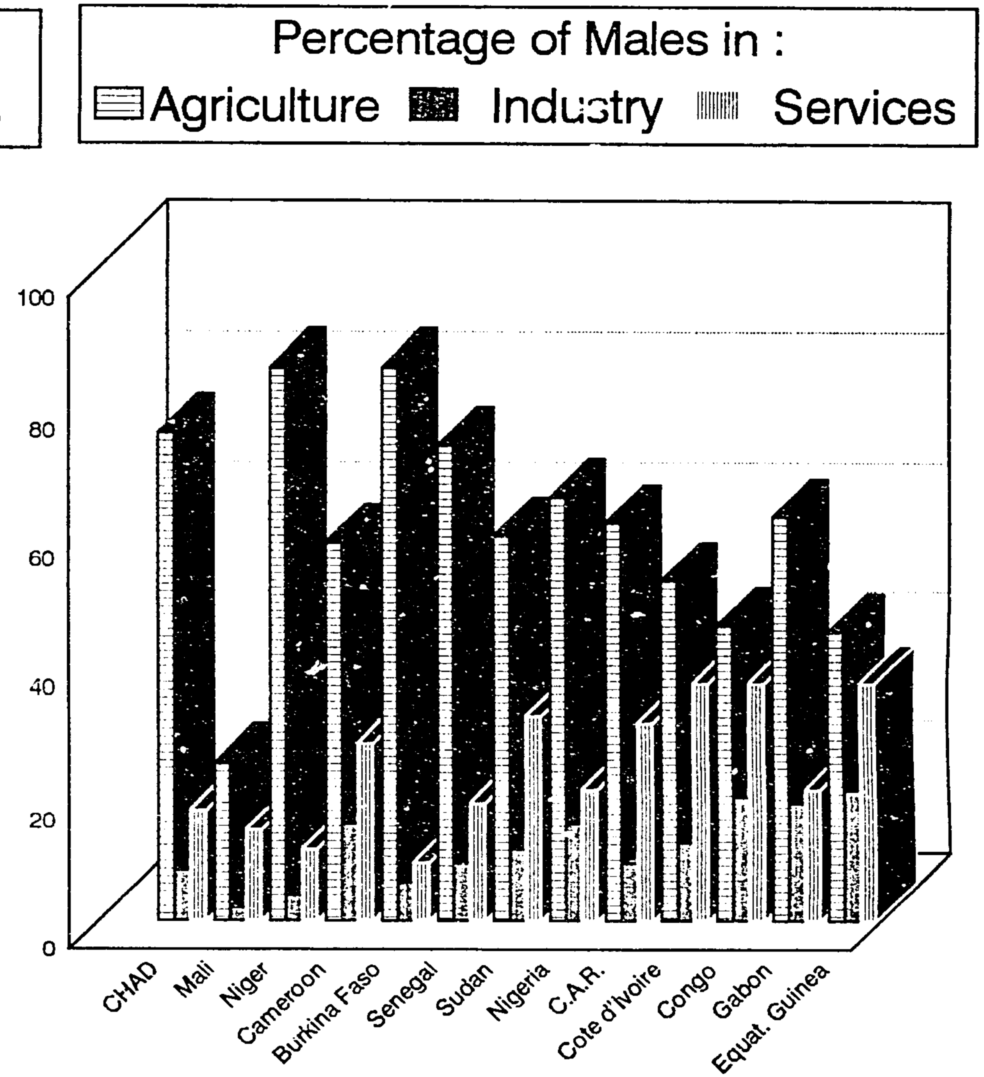
Segment (in '000s during mid-1980)	Male	Female	Total
Agriculture	1043	318	1361
Industry	72	4	76
Services	154	44	197
Total	1269	366	1635

Source: "AFRICA, South of the Sahara 1992," p.361 (original source ILO documents, using projections).

EXHIBIT H-2

SECTOR STRUCTURE OF LABOR FORCE, BY GENDER, IN 1987





Source: UNDP/World Bank 1992, "African Development Indicators," p. 285.

EXHIBIT H-3

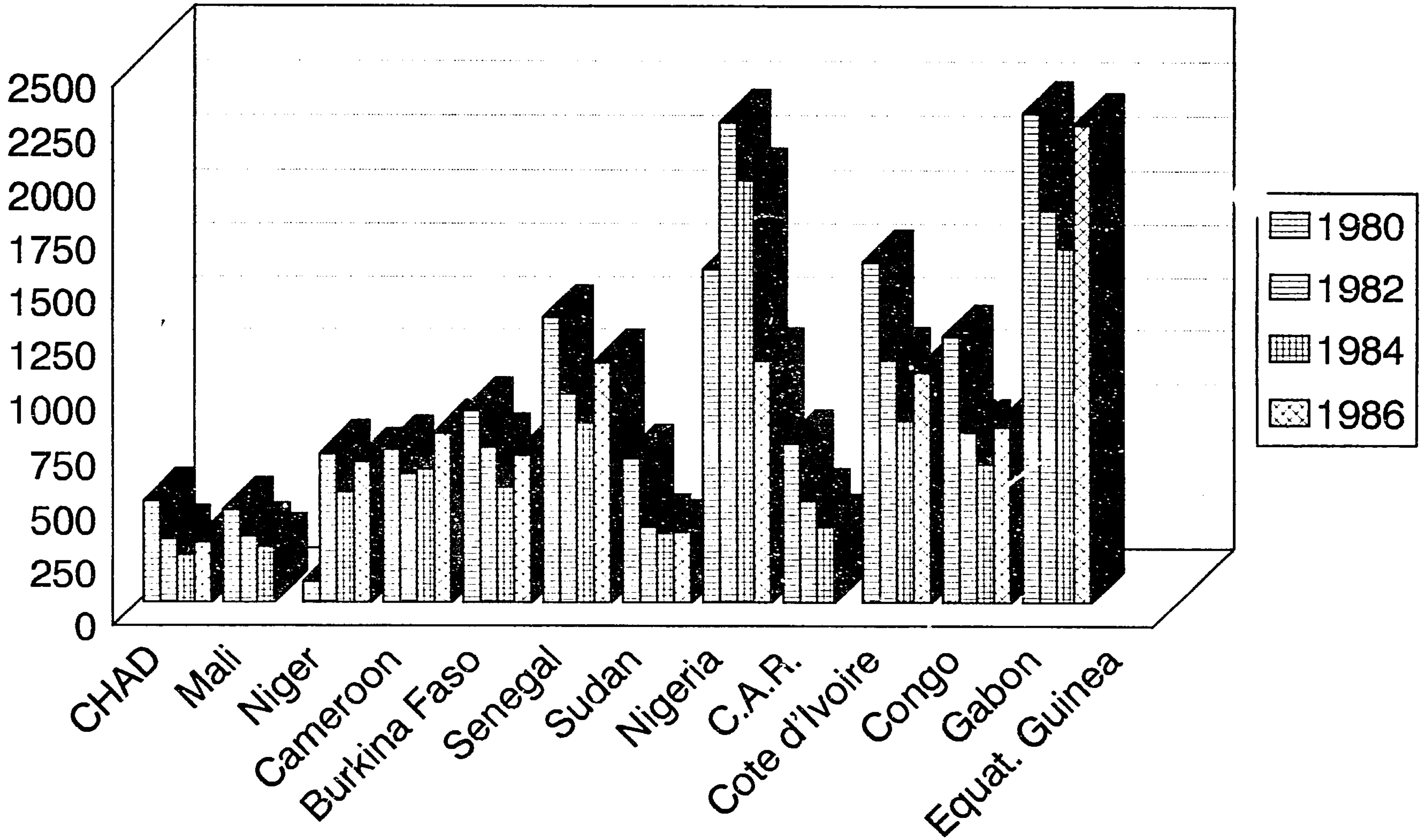
NUMBER, GENDER AND AGE STRUCTURE OF TOTAL LABOR FORCE

Countries:	Number in '000s, 1990	% of Females	Age Grouping Percentages ('86-'89) 0-19	20-29	30-39	40-49	50-59	60+
CHAD	1971	21.1	23.7	27.6	20.8	14.1	8.7	5.1
Mali	2959	16.2	...	...	...	...	...	...
Niger	3619	46.7	...	...	...	...	...	...
Cameroon	4365	[illegible].3	...	...	...	...	...	...
Burkina Faso	4167	46.2	...	...	...	...	...	...
Senegal	3192	39.3	32.6	23.7	18.1	11.1	7.8	6.6
Sudan	8078	21.9	...	...	...	...	...	...
Nigeria	41857	34.8	7.9	21.9	26.1	22.8	13.5	7.9
C.A.R.	1384	45.7	...	...	...	...	...	...
Cote d'Ivoire	4599	34.2	...	...	...	...	...	...
Congo	781	38.8	...	...	...	...	...	...
Gabon	536	37.3	...	...	...	...	...	...
Equat. Guinea	182	39.9	...	...	...	...	...	...

Source: UNDP/World Bank 1992, "African Development Indicators," p.s 282-3.

EXHIBIT H-4

ANNUAL MINIMUM WAGE LEVELS
(In U.S. Dollars at official exchange rate)



Source: UNDP/World Bank, "African Development Indicators," p. 287.

EXHIBIT H-5

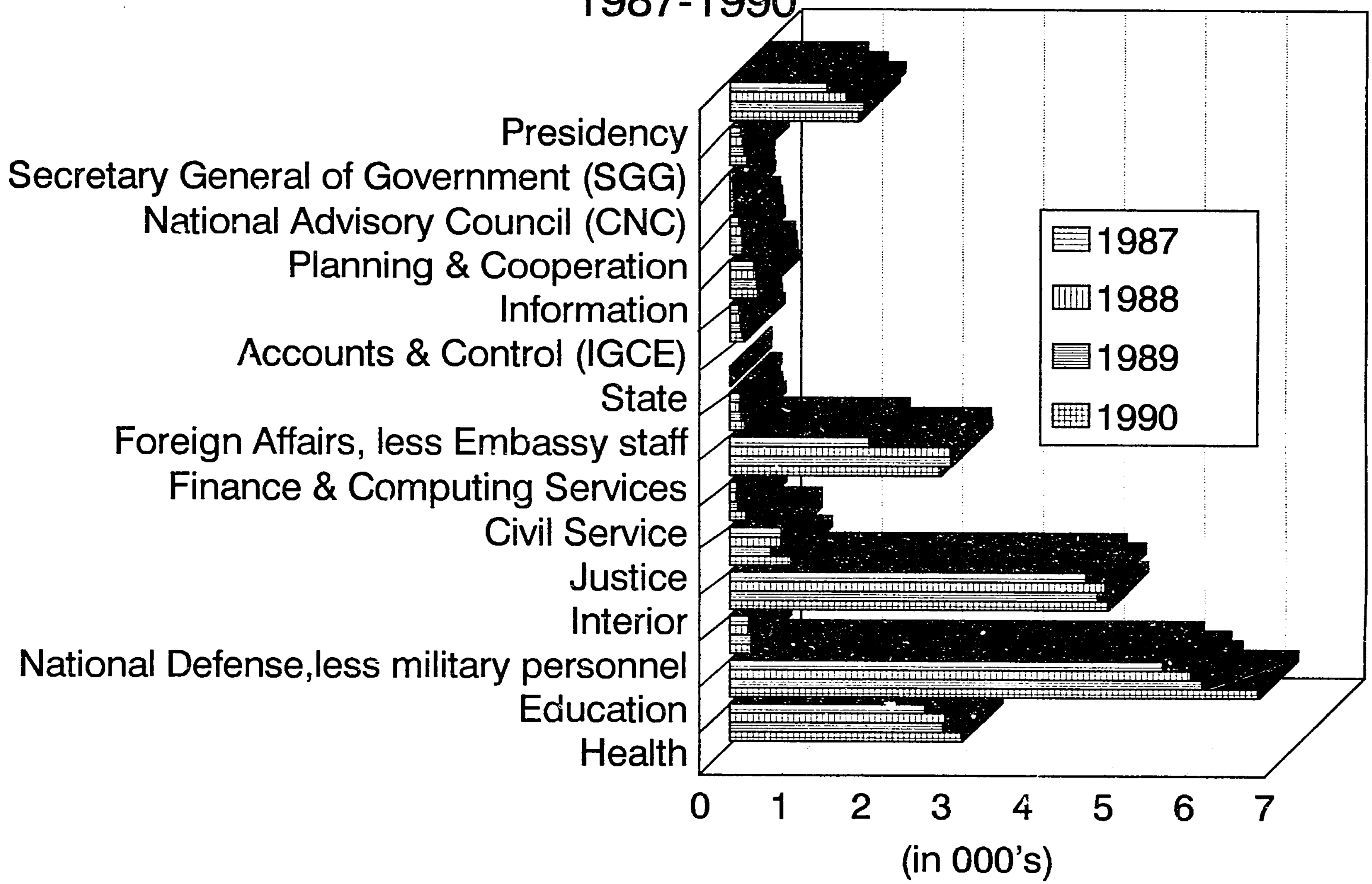
CHAD CENTRAL GOVERNMENT EMPLOYMENT STATISTICS, 1987-1990

	1987	1988	1989	1990
Presidency	1201	1442	1663	1596
Secretary General of Government (SGG)	129	153	179	216
National Advisory Council (CNC)	44	44	47	56
Planning & Cooperation	116	141	153	174
Information	300	320	334	347
Accounts & Control (IGCE)	114	128	140	171
State	...	...	11	6
Foreign Affairs, less Embassy staff	132	119	145	186
Finance & Computing Services	1727	2734	2749	2612
Civil Service	89	86	101	203
Justice	640	636	508	762
Interior	4411	4650	4552	4678
National Defense, less military personnel	240	245	270	261
Education	5369	5712	5857	6552
Health	2422	2677	2644	2874
Social Affairs	296	340	385	483
Labor	45	74	75	104
Natural Disaster Relief & Food Security	67	59	56	53
Agriculture	1206	1239	1202	1213
Livestock	845	870	823	969
Tourism	1106	1140	1089	1011
Culture	205	246	289	267
Commerce & Industry	110	135	161	180
Mines & Energy	80	87	96	117
Public Works	512	463	402	291
Post & Telecommunications	17	18	19	61
Transportation	40	44	54	67
Higher Education	...	...	54	308
Urbanism & Habitat	...	...	15	82
TOTAL:	21463	23802	24073	25900

Source: Data provided by Chadian Authorities in Interviews with IRIS Team, N'Djamena, July 1992.

EXHIBIT H-5a

CHAD CENTRAL GOVERNMENT EMPLOYMENT STATISTICS, 1987-1990



Source: Data provided by Chadian Authorities in interviews with IRIS Team, N'Djamena, July 1992.

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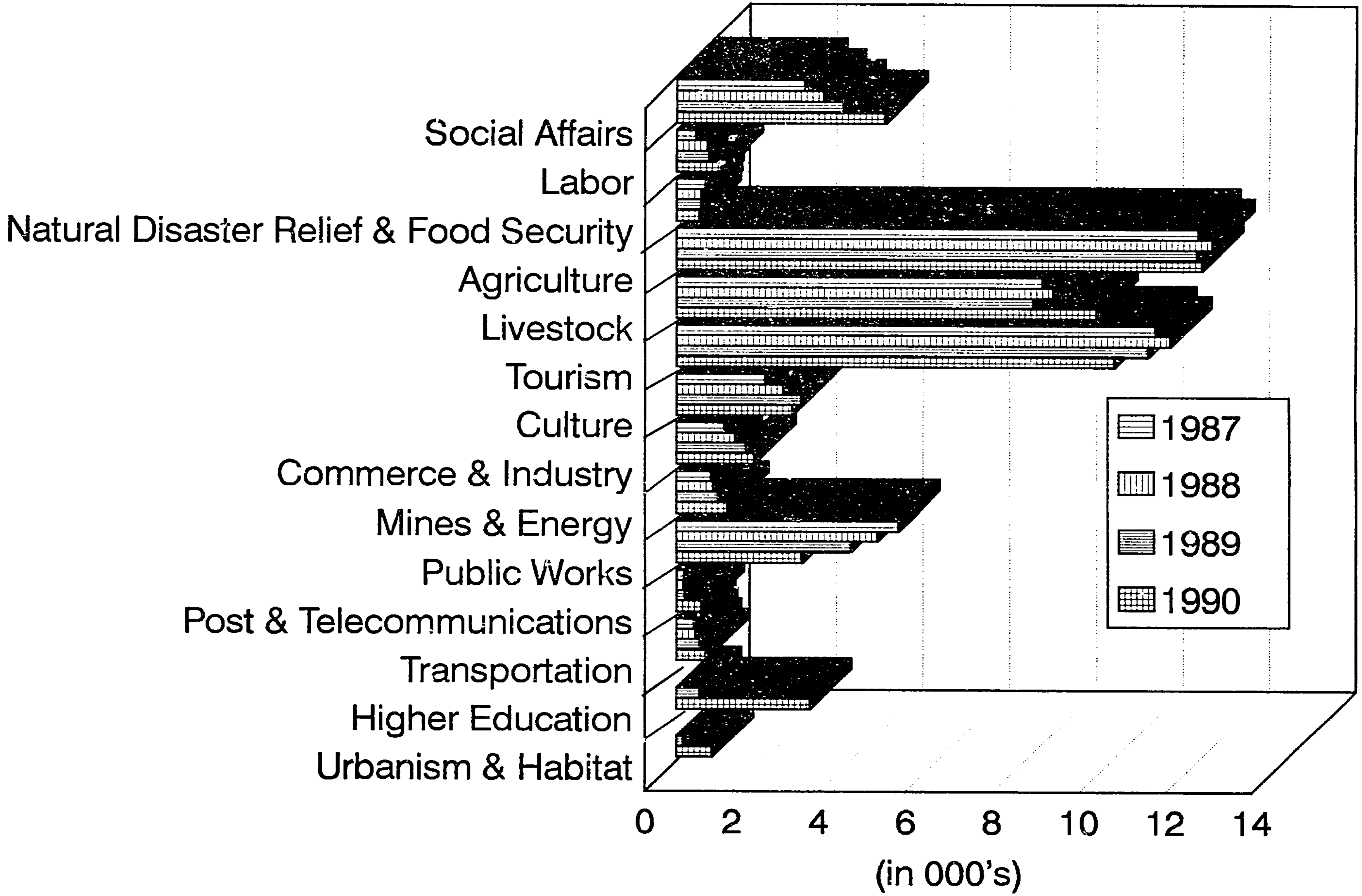
CHAD CENTRAL GOVERNMENT EMPLOYMENT STATISTICS, 1987-1990

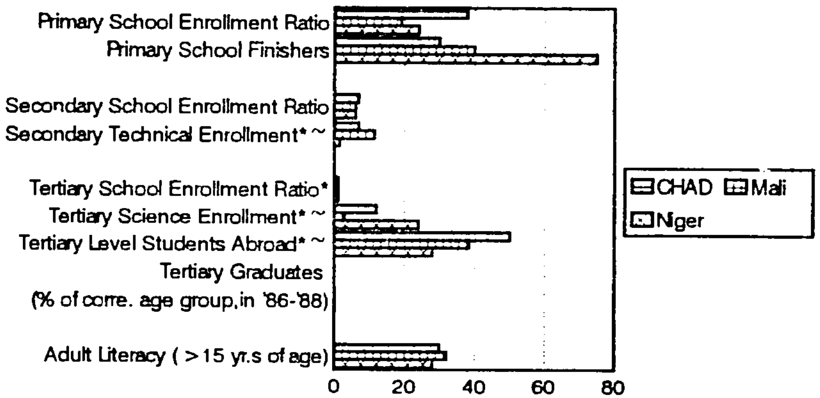


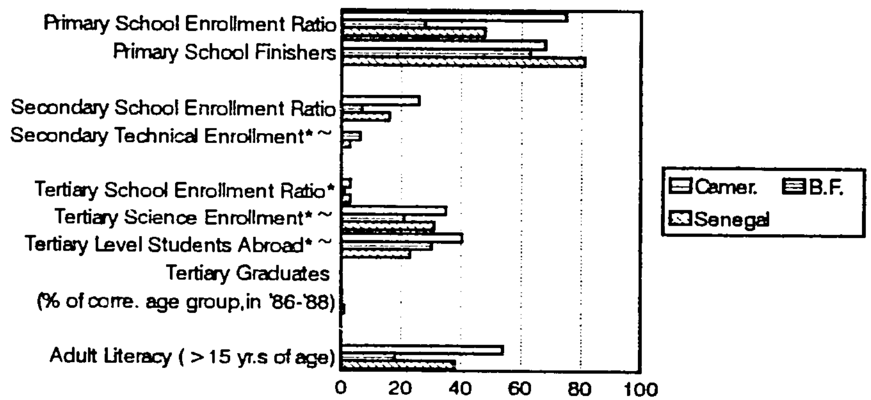
Source: Data provided by Chadian Authorities in interviews with IRIS Team, N'Djamena, July 1992.

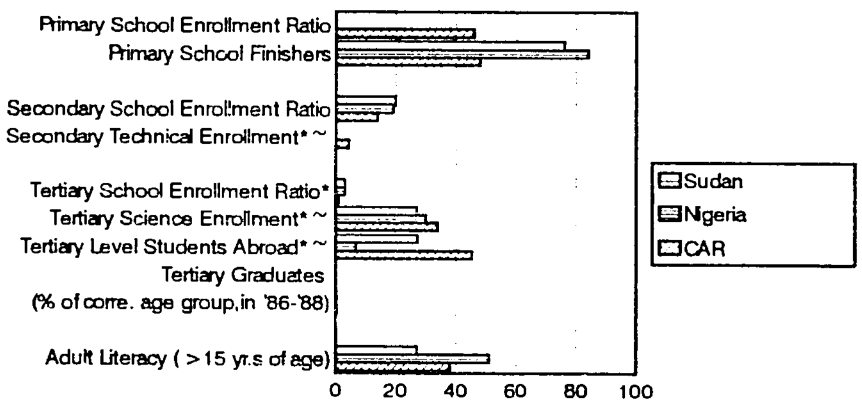
EXHIBIT H-6

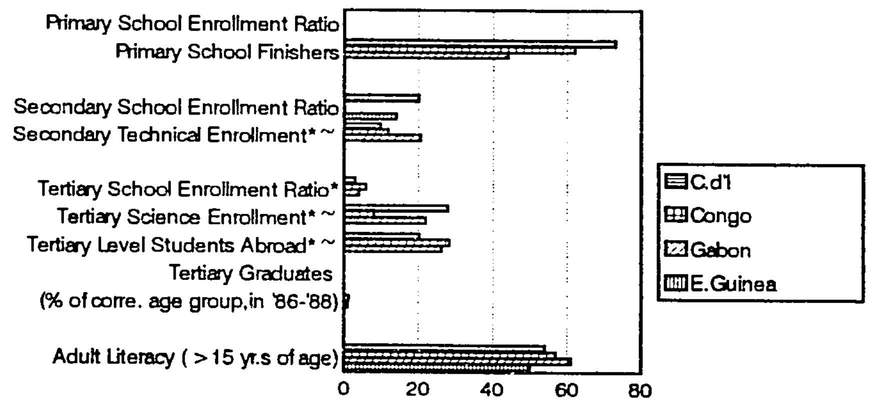
EDUCATIONAL PREPARATION , 1988-89

(In % of relevant population)









(* = 1987-38.)
(~ = as % of relevant academ. level)

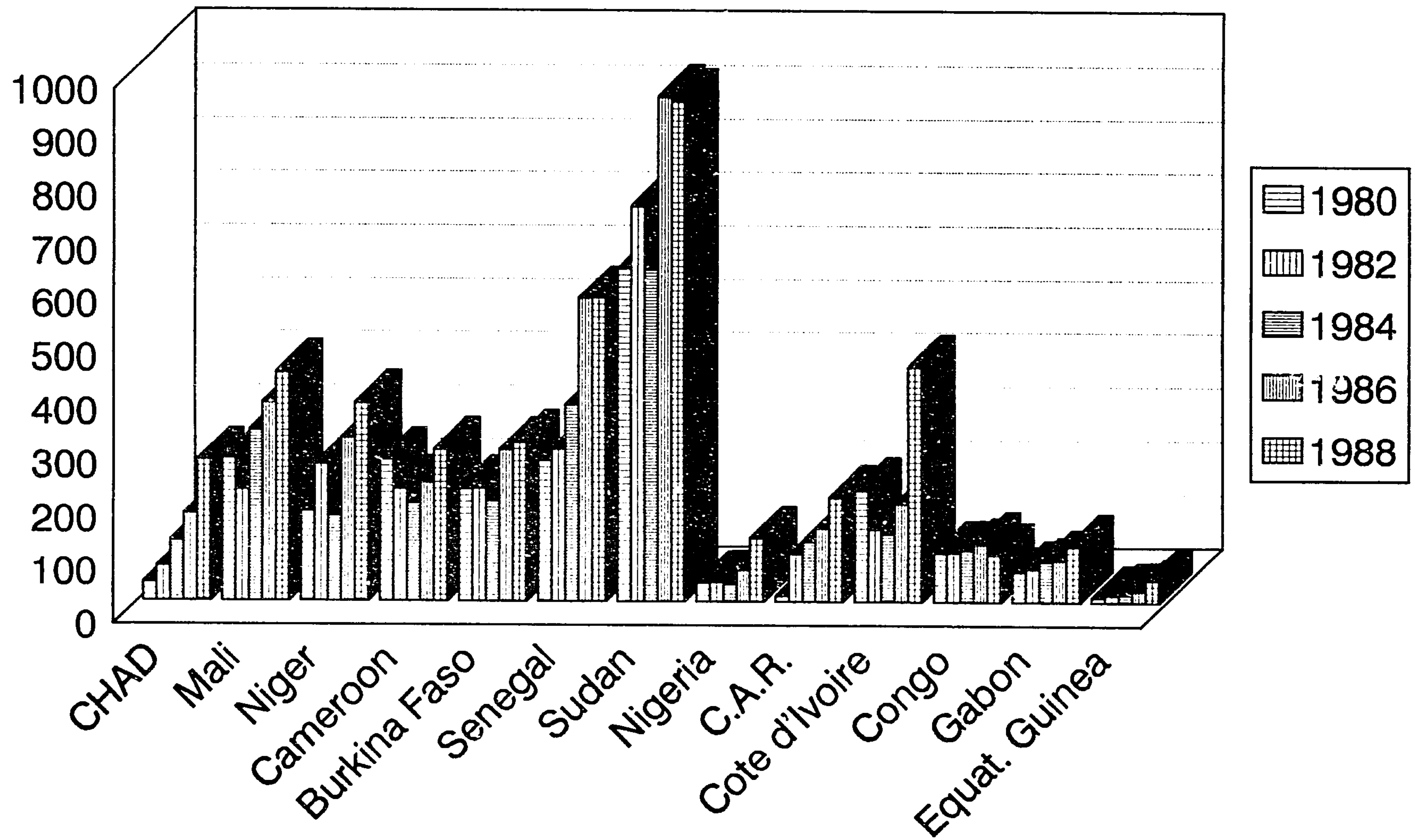
Source: UNDP,"Human Development Report 1992," Tbl.14 - p. 154-5, Tbl.15 - p. 156-7, Tbl. 5 - p. 136-7.

EXHIBIT I-1

TOTAL NET ODA FROM ALL DONORS

(In millions of U.S. Dollars, at current prices/exchange rates)

106



Source: UNDP/World Bank 1992, "African Development Indicators," p. 294.

EXHIBIT I-2

NET ODA FROM ALL DONORS AS SHARE OF RECIPIENT GDP

	(Percentage of GDP)				
	1980	1982	1984	1986	1988
CHAD	4.9	11	17.8	21.9	25.1
Mali	16.4	17.1	30.3	24.4	22
Niger	6.7	13.1	11	16.5	15.9
Cameroon	3.5	2.7	2.3	2.1	2.2
Burkina Faso	12.4	13.7	14.6	14	10.8
Senegal	8.7	11	15.8	15.1	11.4
Sudan	9.2	9.4	7.1	6.8	10.1
Nigeria	0	0	0	0.1	0.4
C.A.R.	13.9	12	17.8	14	17.8
Cote d'Ivoire	2	1.8	1.9	2	4.3
Congo	5.4	4.3	4.5	6	4
Gabon	1.3	1.7	2.2	2.3	3.3
Equat. Guinea	...	...	...	20.7	33.4

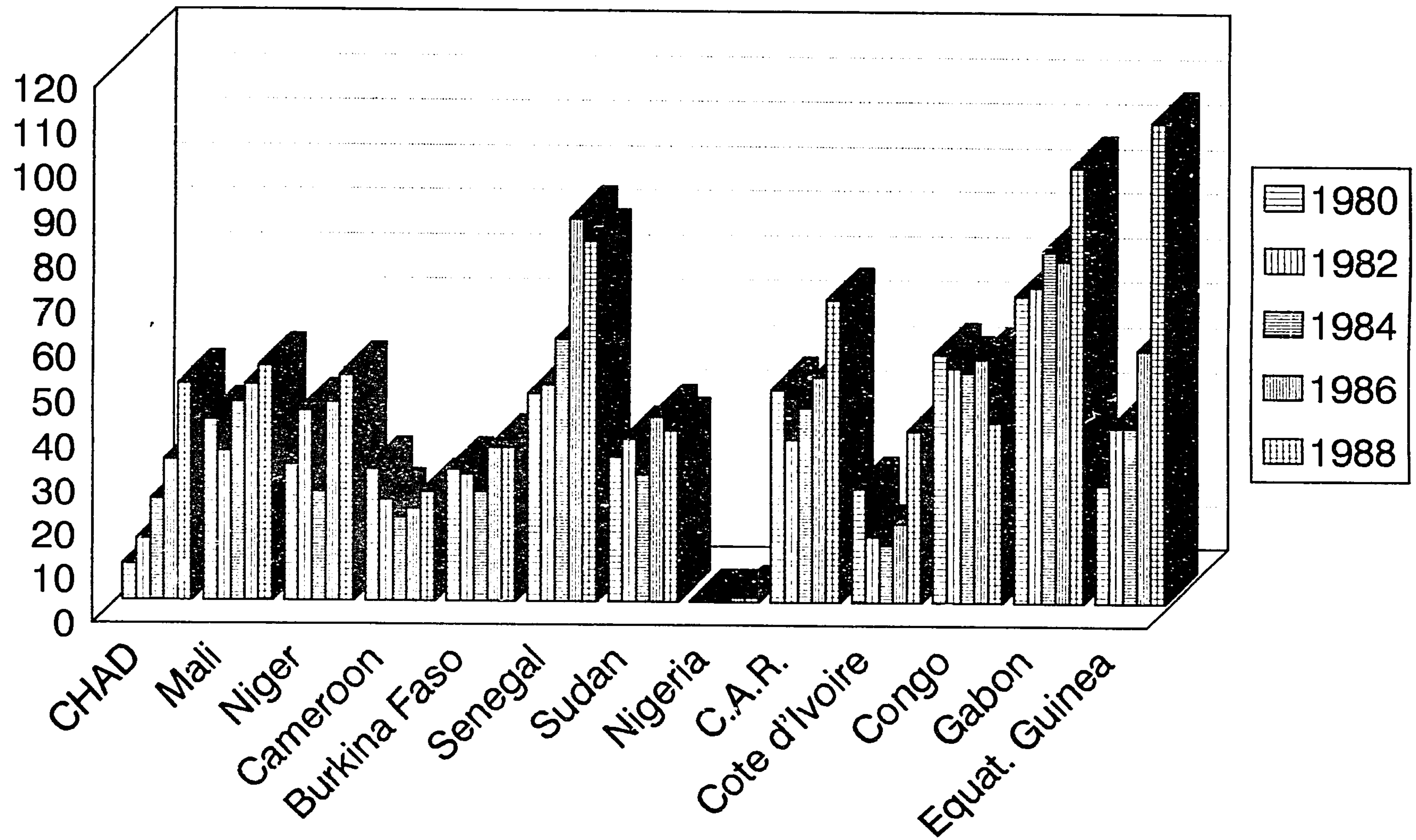
Source: UNDP/World Bank 1992, "African Development Indicators," p. 298.

EXHIBIT I-3

NET ODA PER CAPITA FROM ALL DONORS

(In U.S. Dollars at current prices/exchange rates)

108



Source: UNDP/World Bank 1992, "African Development Indicators," p. 304.

EXHIBIT-I-4

PUBLIC INVESTMENT BUDGET, BY DONOR

(As percentage of total)

	1986	1987	1988	1989	1990	1991 provisional
IBID/IDA	6.9	5.9	16.1	11.2	19.5	19
France	23.1	32.3	21.8	30.7	27.4	27.1
African Dev. Bank	4.5	1.1	1.3	2.1	2.7	12.7
European Econ. Comm.	15.6	15.9	19.7	14.1	8.1	8.2
UNDP & UN org.s	11.8	14.8	11.5	13.4	17.7	14.9
Italy	9.3	13.1	10.3	9.9	4.6	1
West Germany	5.8	1.9	3.6	3.3	2.8	3.6
United States	13.2	5.2	7.8	3.9	7.4	5.3
Switzerland	1.8	1.8	1.7	3.9	3	2.3
Netherlands	0.7	2.3	4.3	1	1.1	1.5
China	0	0.7	0.1	3.7	0.4	0.3
Saud'i Arabia	0	0.3	0.4	0.5	1.5	0.6
Spain	0	0	0	1.2	1.8	0.4
Islamic Dev. Bk.	0.4	0.8	0.6	0.1	0.6	0.5
Cen. African Dev.Bk.	1.2	0.4	0.1	0.2	0.3	0.3
Egypt	0	0	0.5	0.2	0.4	0.6
Kuwait	0	0	0	0	0	0
Arab Bk.Eco.Dev.Af.	0	0	0	0	0	0.2
Canada	0	0.2	0.2	0.3	0.3	0.3

Source: Data provided by Chadian Authorities in interviews with IRIS team, N'Djamena, Chad, July 1992.
Note: totals may not add up to 100% due to rounding.

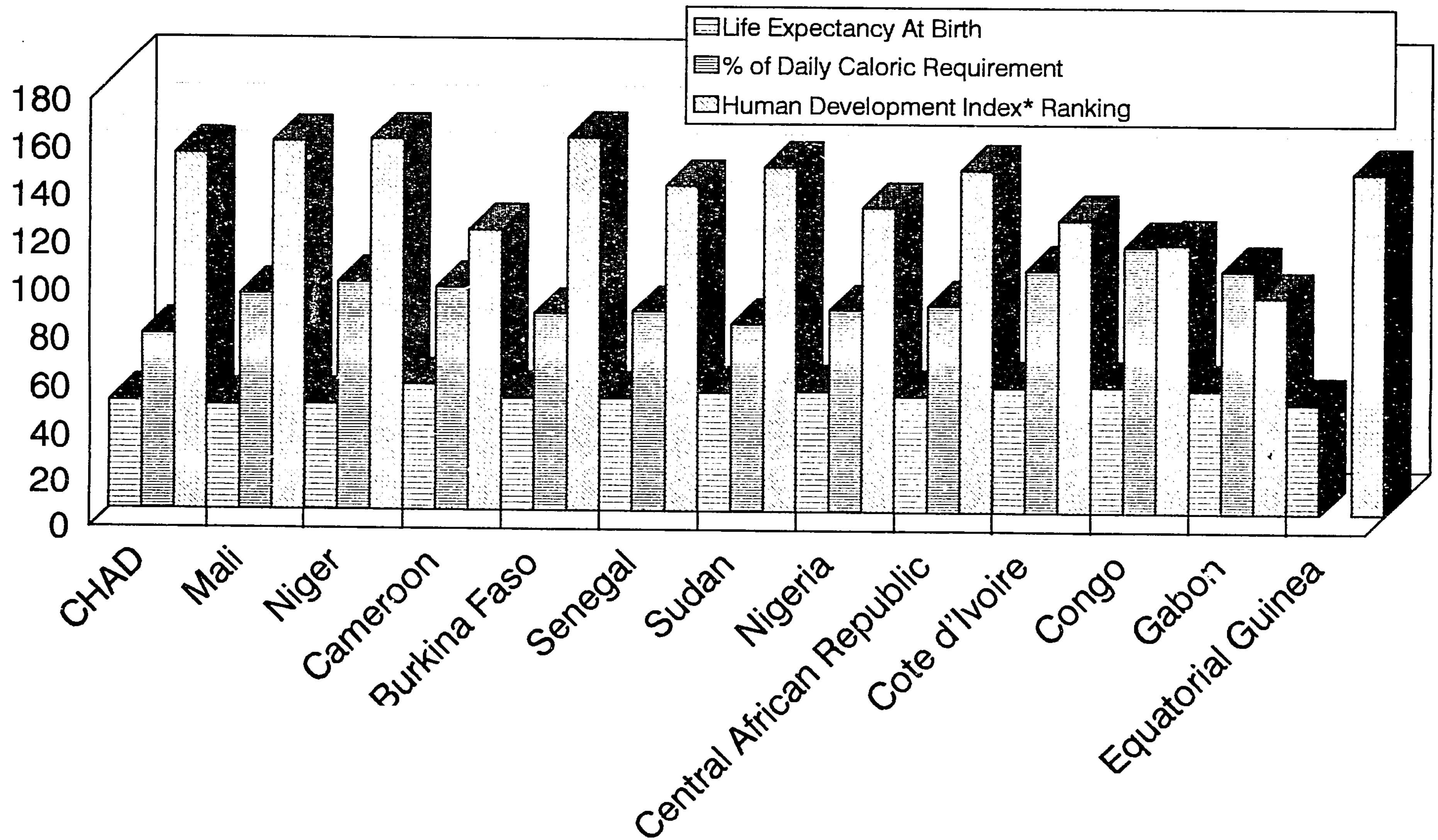
EXHIBIT J-1

LEADING SOCIAL INDICATORS IN 1990

	Infant Mortality Rate	Crude Death Rate	Crude Birth Rate	Fertility Rate	Population Growth Rate
CHAD	127	19	44	5.8	2.6
Mali	164	20	51	7.1	3.2
Niger	130	20	52	7.1	3.4
Cameroon	90	14	47	6.9	3.6
Burkina Faso	133	18	47	6.5	3.0
Senegal	84	17	45	6.3	2.9
Sudan	104	15	44	6.4	2.9
Nigeria	101	15	48	6.7	3.3
Central African Republic	100	17	45	6.2	3.0
Cote d'Ivoire	92	14	50	7.4	3.9
Congo	69	14	46	6.3	3.4
Gabon	99	16	41	5.2	3.2
Equatorial Guinea	122	19	44	5.9	2.6

Source: UNDP, "Human Development Report 1992," p.s 170-1, except IMR, from p.s 148-9.

OTHER SOCIAL INDICATORS



Source: UNDP, "Human Development Report 1992," p.130-1; HDI Ranking is from p.s 128-9.
Note: The "Human Development Index" is a UNDP newly-designed, composite social indicator based upon 1) Life Expectancy at Birth, 2) Educational Attainment Level, & 3) Real GDP per capita. Countries with the lowest rankings (single digit numbers) are doing the best in providing for human needs.

EXHIBIT J-3

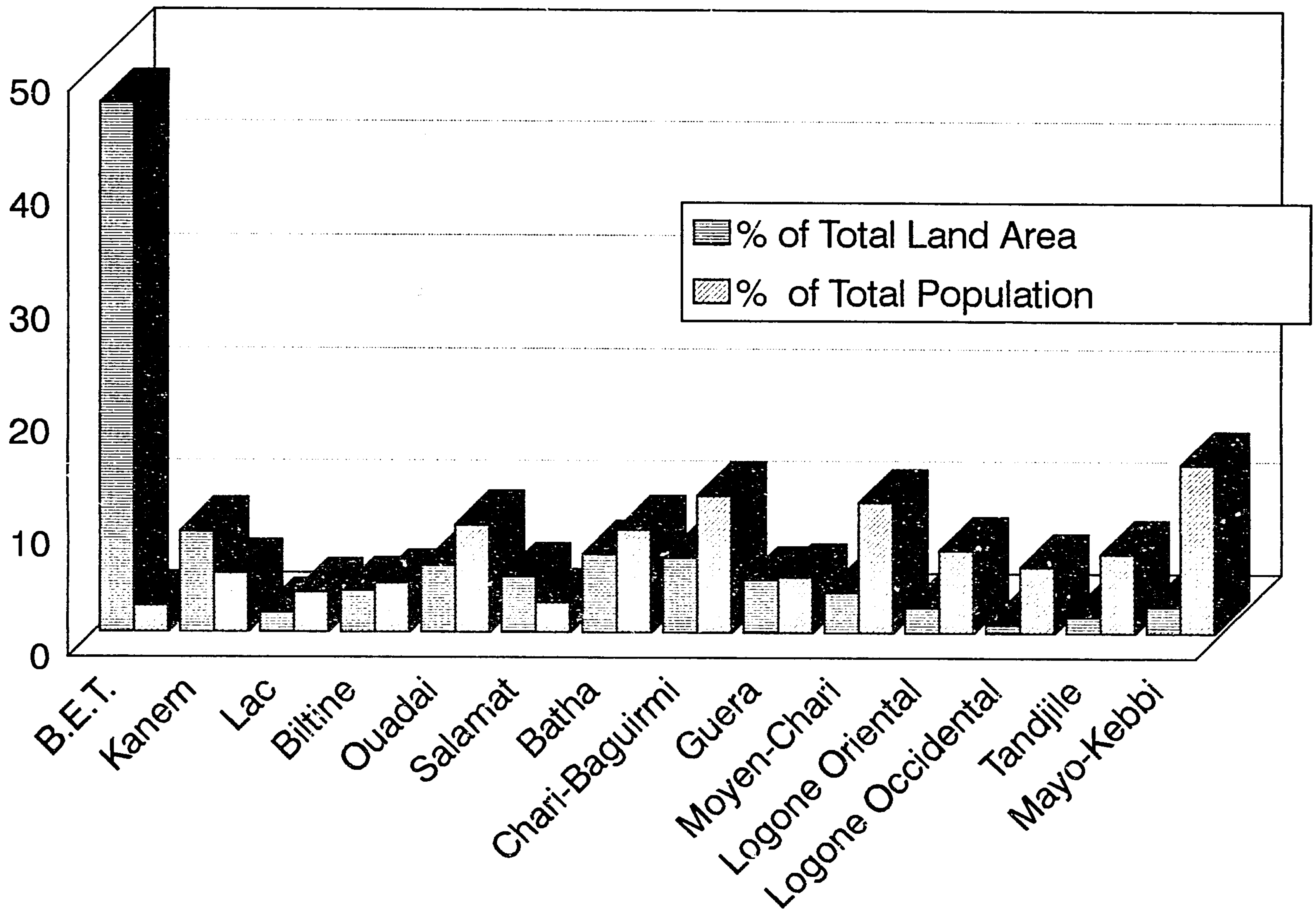
COMPOSITION OF CHADIAN ETHNIC GROUPS, IN 1964

	Total Number of Individuals (000s)	Percentage of population
Southern		
Sedentary Groups	1,139	34.2
Sara	800	24
Mboum, Laka	112	3.4
Moundang	90	2.7
Toubouri	75	2.2
Massa (Banana)	50	1.5
Others	12	0.4
Seden. & Seminomadic		
Sahelian Groups	902	26.8
Maba	170	5
Bulala, Kuka	80	2.5
Haddad	100	3
Dadjo	65	2
Massalit	48	1.5
Moubi	25	0.8
Zaghawa, Bideyat	40	1.2
Hadjeray	87	2.6
Kenembu	60	1.8
Budouma	20	0.6
Kotoko	7	0.2
Barma	35	1.1
Massalat	23	0.7
Others	142	3.7
Nomadic Groups	614	18
Toubou	122	3.9
Arabs	460	14
Fulani	32	.1
Other Groups	645	19.5
TOTAL**	3,300	100

Source: Samuel Decalo, 2nd edition 1987, "Historical Dictionary of Chad," p. xxiv.

Note: Orig. author's note indicated that there has never been an accurate census in Chad, and for 1st edition of late 70s recommended using a 1.48 multiplier to get rough approximation of the current population for 1978.

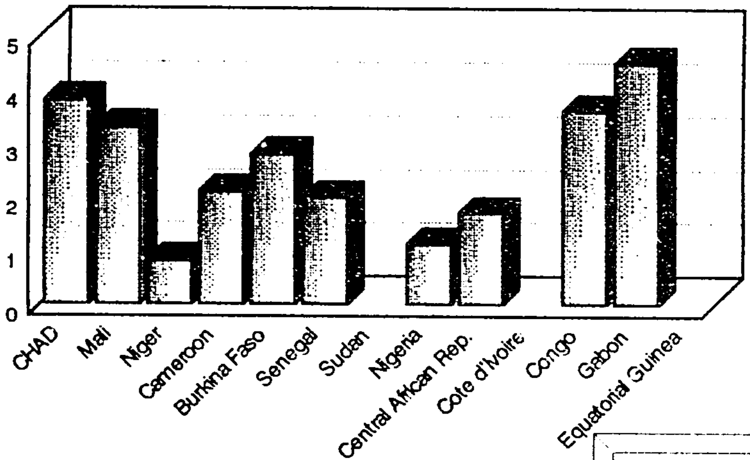
DEMOGRAPHIC DISTRIBUTION



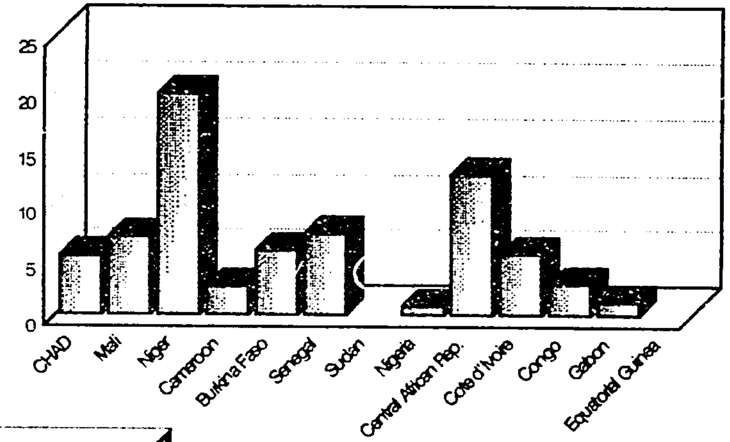
Source: Samuel Decalo, 2nd edition 1987, "Historical Dictionary of Chad," p. xxiii.

MILITARY EXPENDITURES

Military Expenditures, as % of 1989 GNP

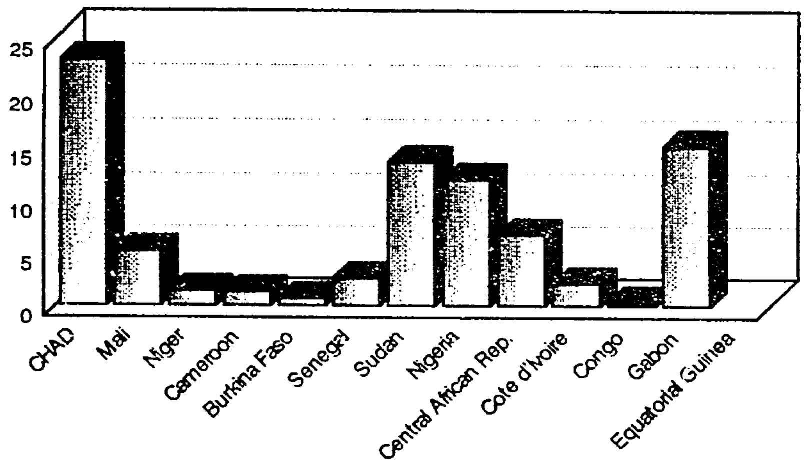


Official Development Aid Received, as a % of Military Expenditures

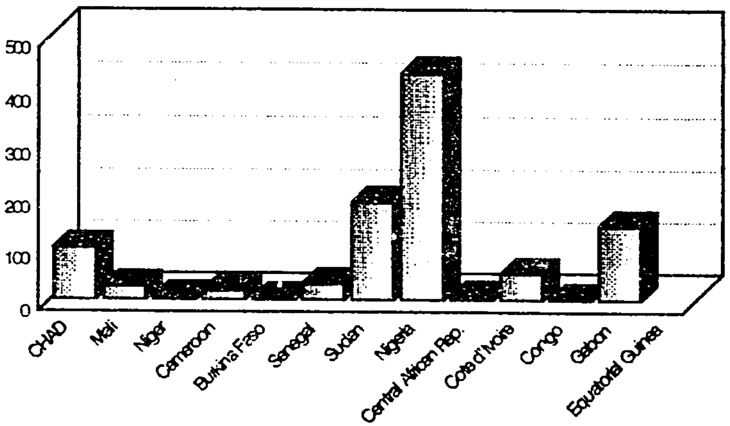


1989 Imports of Weaponry

As % of Imports



In Million of U.S. Dollars

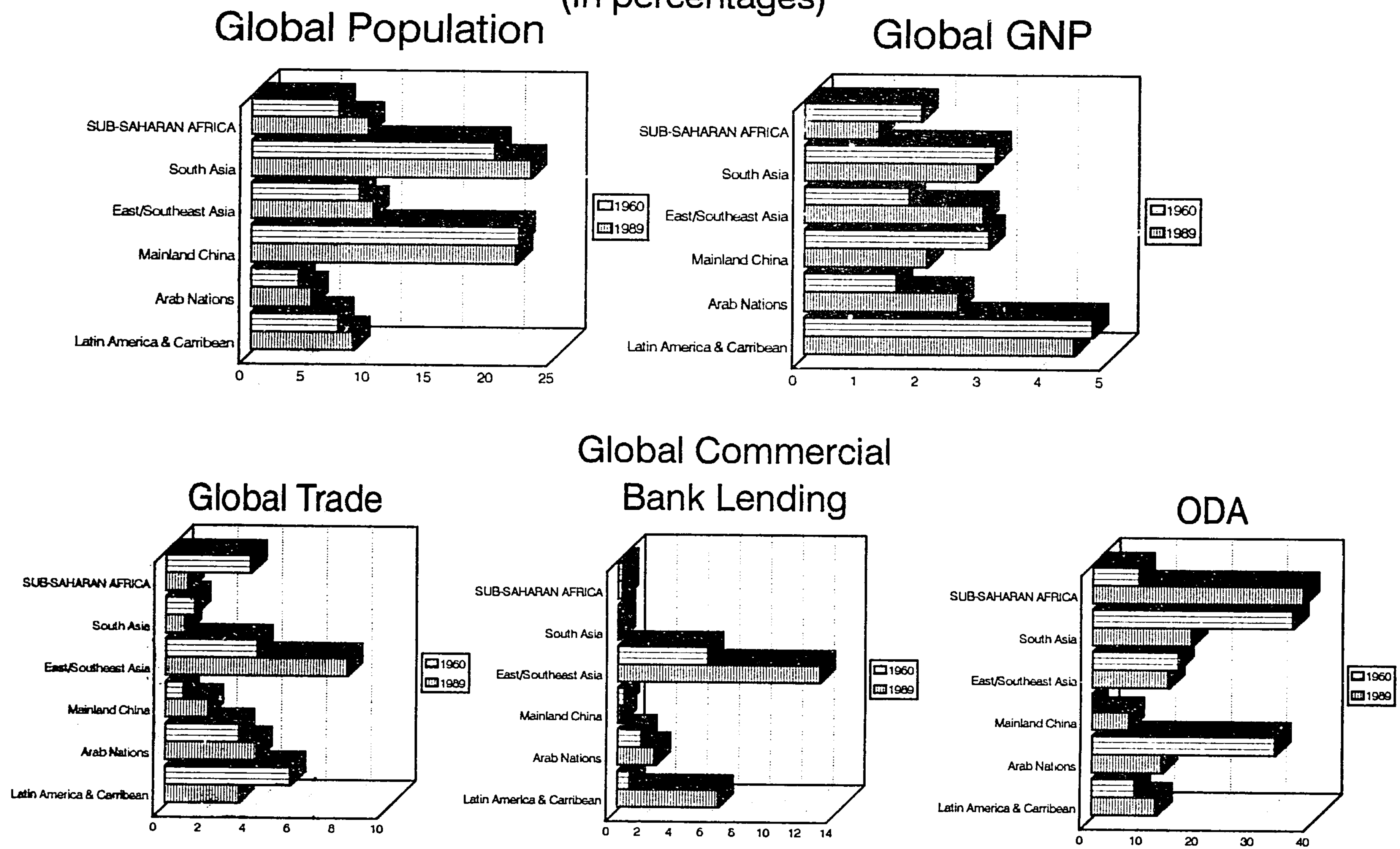


Source: UNDP, "Human Development Report 1992," Table 20, p.s 166-7.

EXHIBIT B-1

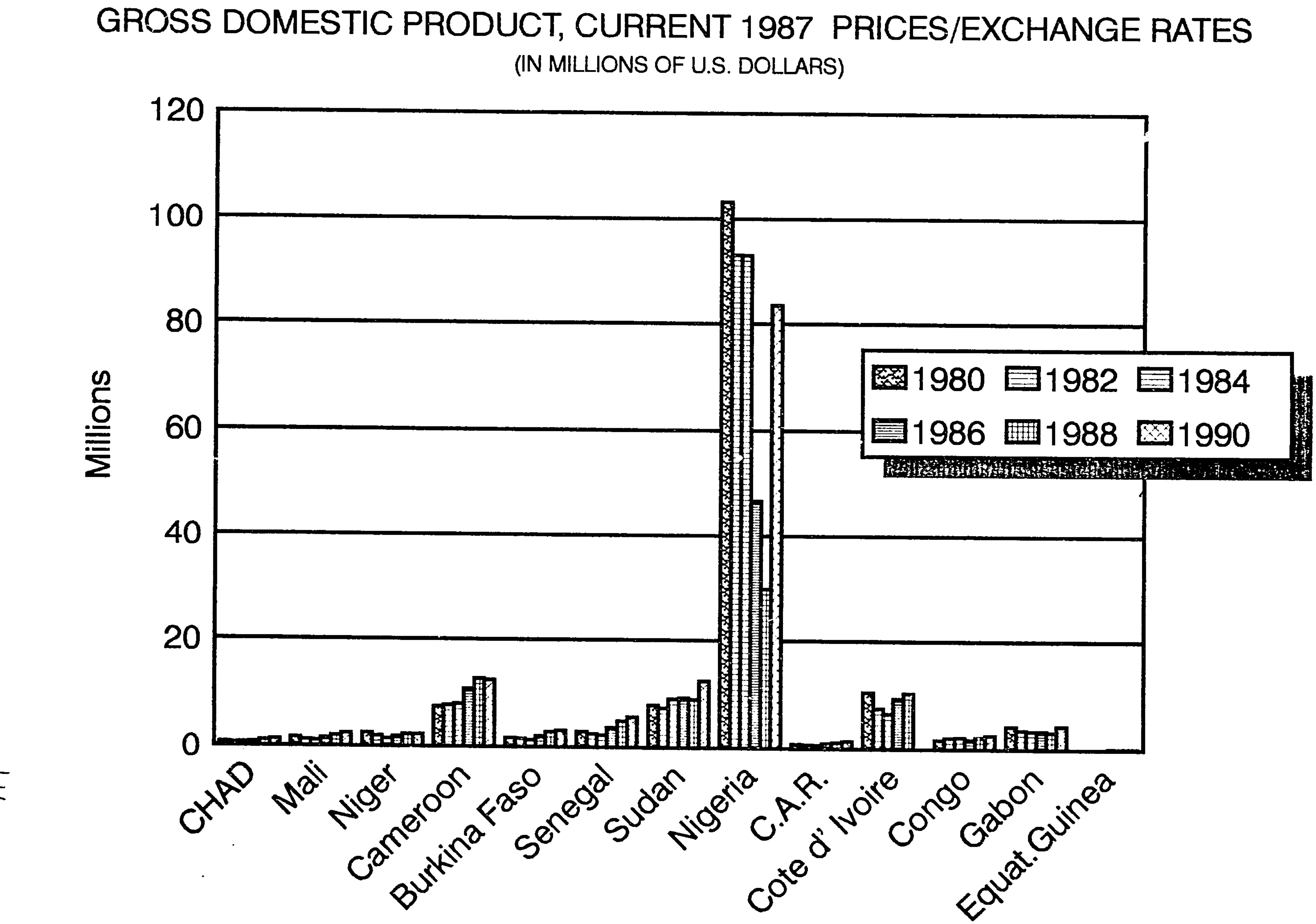
INCREASING REGIONAL ECONOMIC GAPS

(In percentages)



Source: UNDP, "Human Development Report 1992," Table 3.8, p. 37.

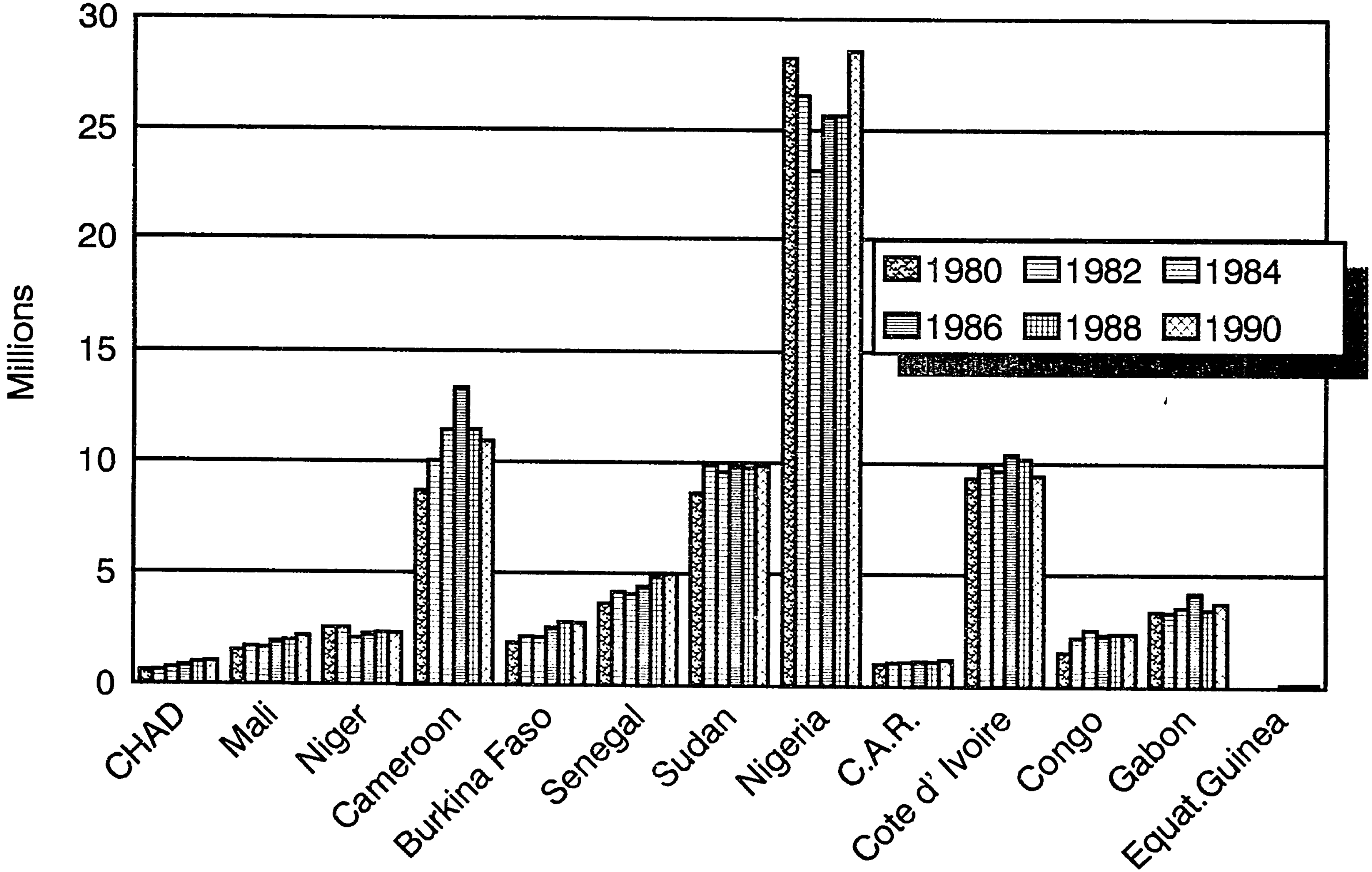
EXHIBIT B-7



Source: UNDP/World Bank, "African Development Indicators," p.20.

GROSS DOMESTIC PRODUCT, CONSTANT 1987 PRICES/EXCHANGE RATES

(IN MILLIONS OF U.S. DOLLARS)



Source: UNDP/World Bank, "African Development Indicators," p.16.

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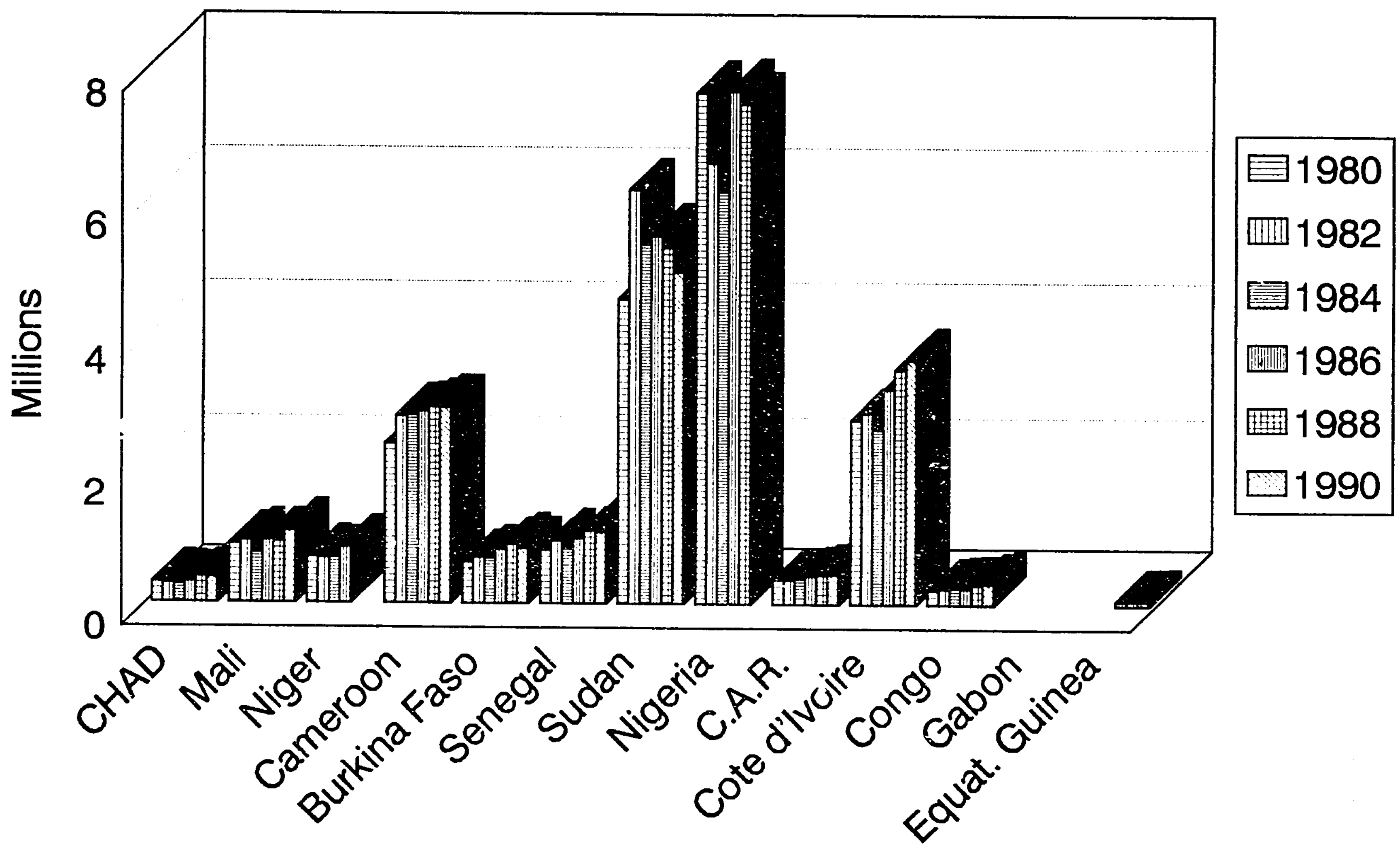
EXHIBIT B-10

VALUE ADDED IN AGRICULTURE

(In millions of U.S. Dollars, at constant 1987 prices/exchange rates)



Source: UNDP/World Bank, "African Development Indicators," p.17.

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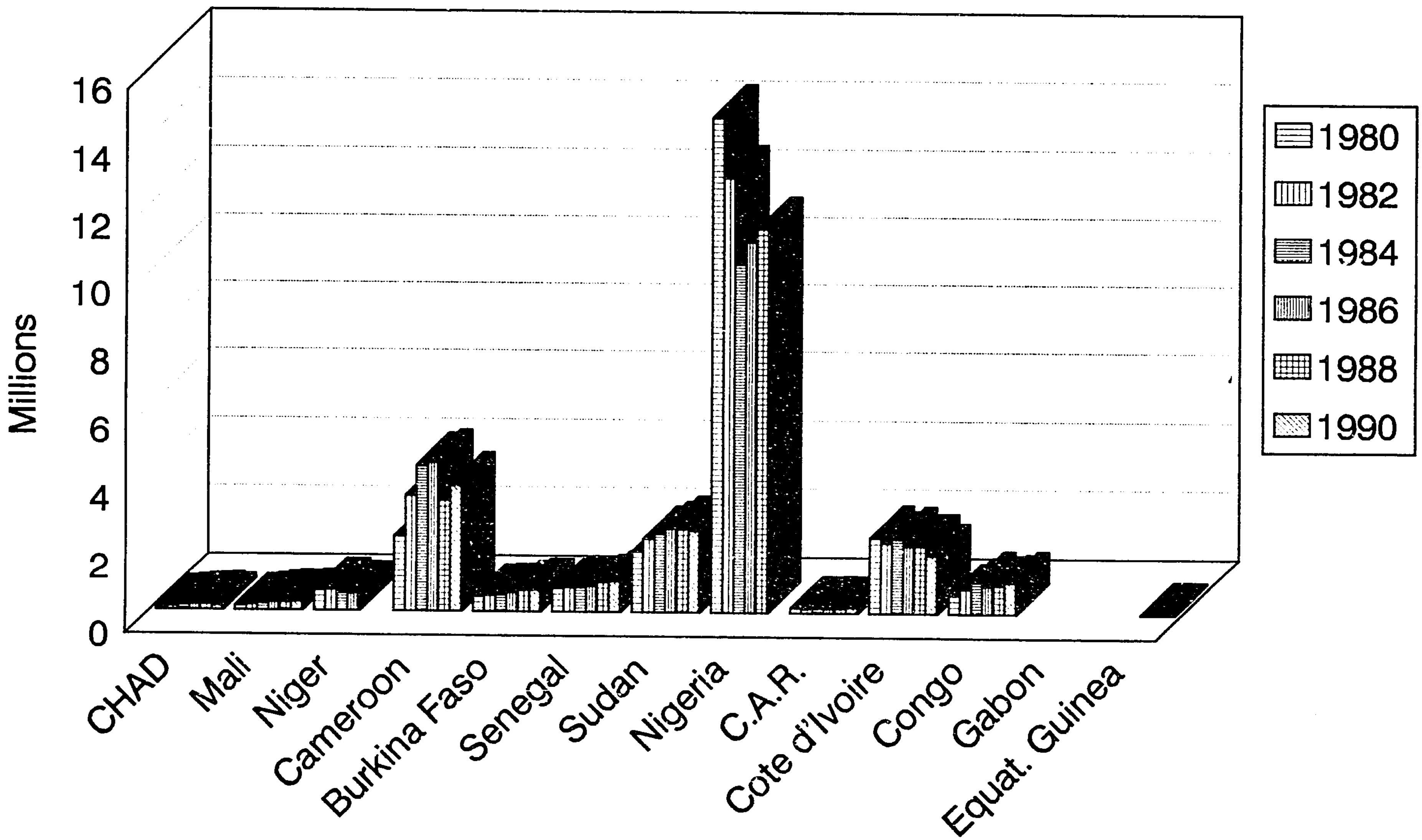
VALUE ADDED IN INDUSTRY

(In millions of U.S. Dollars, at constant 1987 prices/exchange rates)

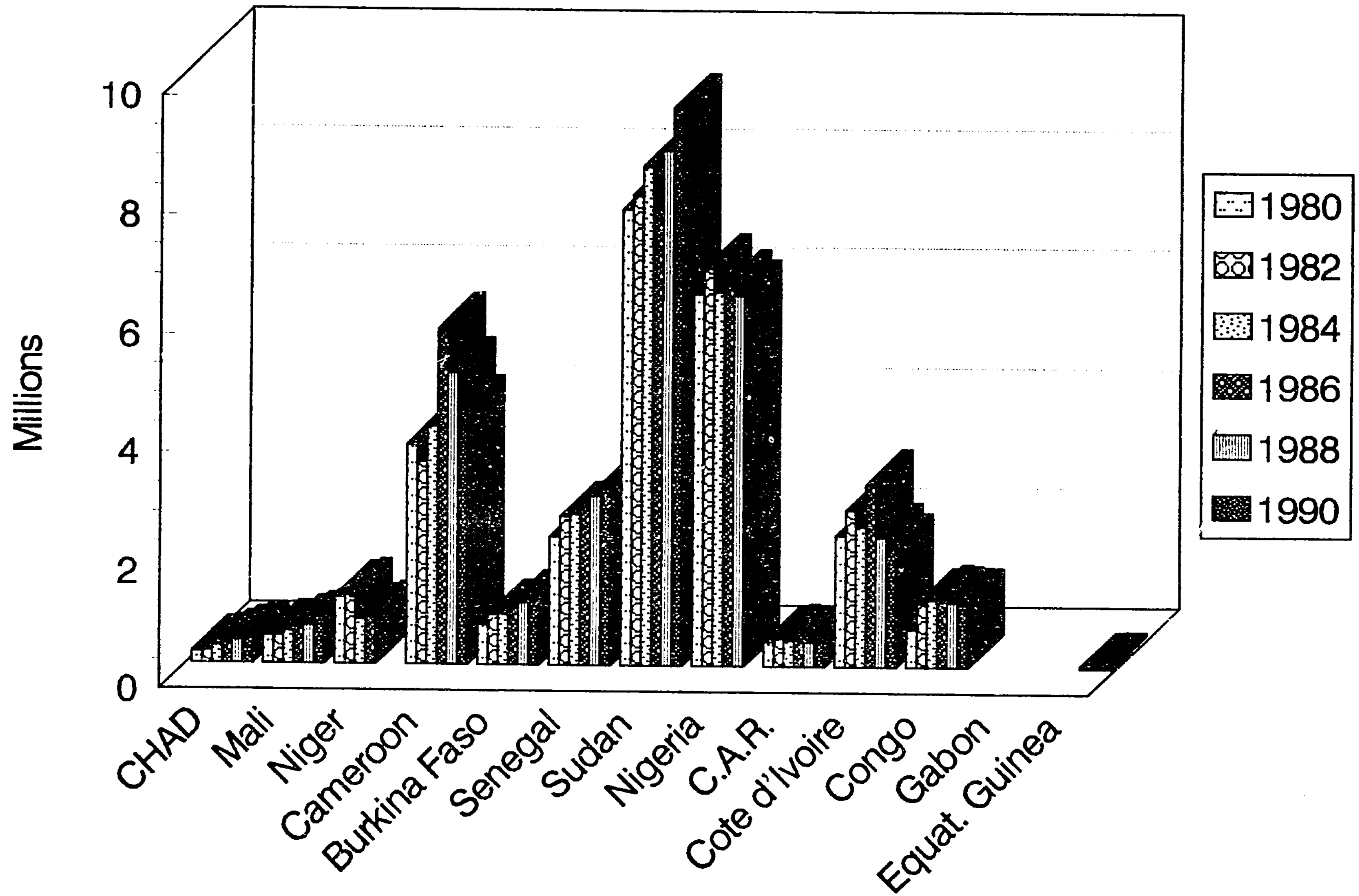


Source: UNDP/World Bank, "African Development Indicators," p. 18.

EXHIBIT B-12

VALUE ADDED IN SERVICE

(In millions of U.S. Dollars, at constant 1987 prices/exchange rates)

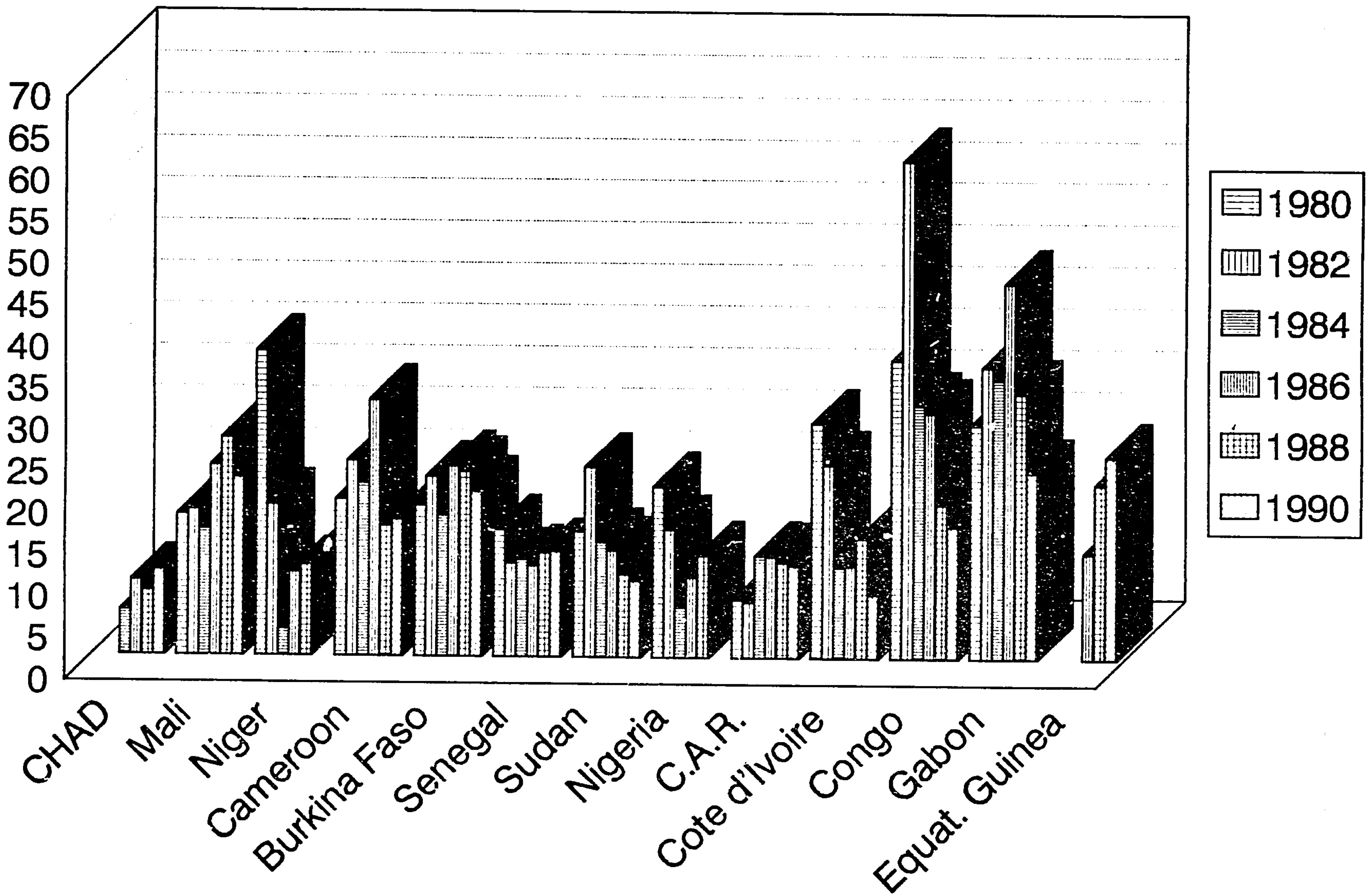


Source: UNDP/World Bank, "African Development Indicators," p. 19.

EXHIBIT B-14

GROSS DOMESTIC INVESTMENT

(As percentage of GDP)

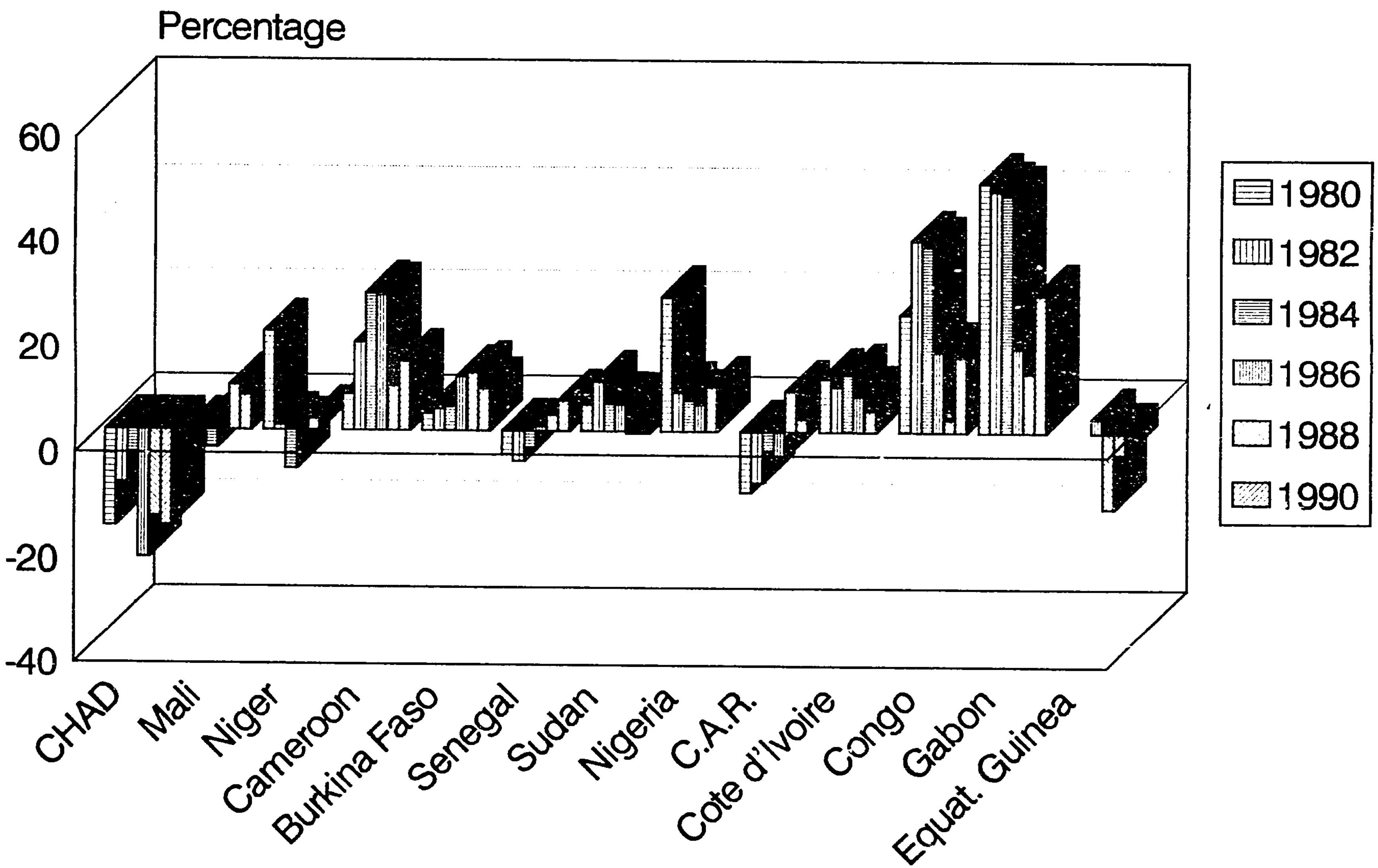


Source: UNDP/World Bank 1992, "African Development Indicators," p. 23.

EXHIBIT B-18

GROSS NATIONAL SAVINGS

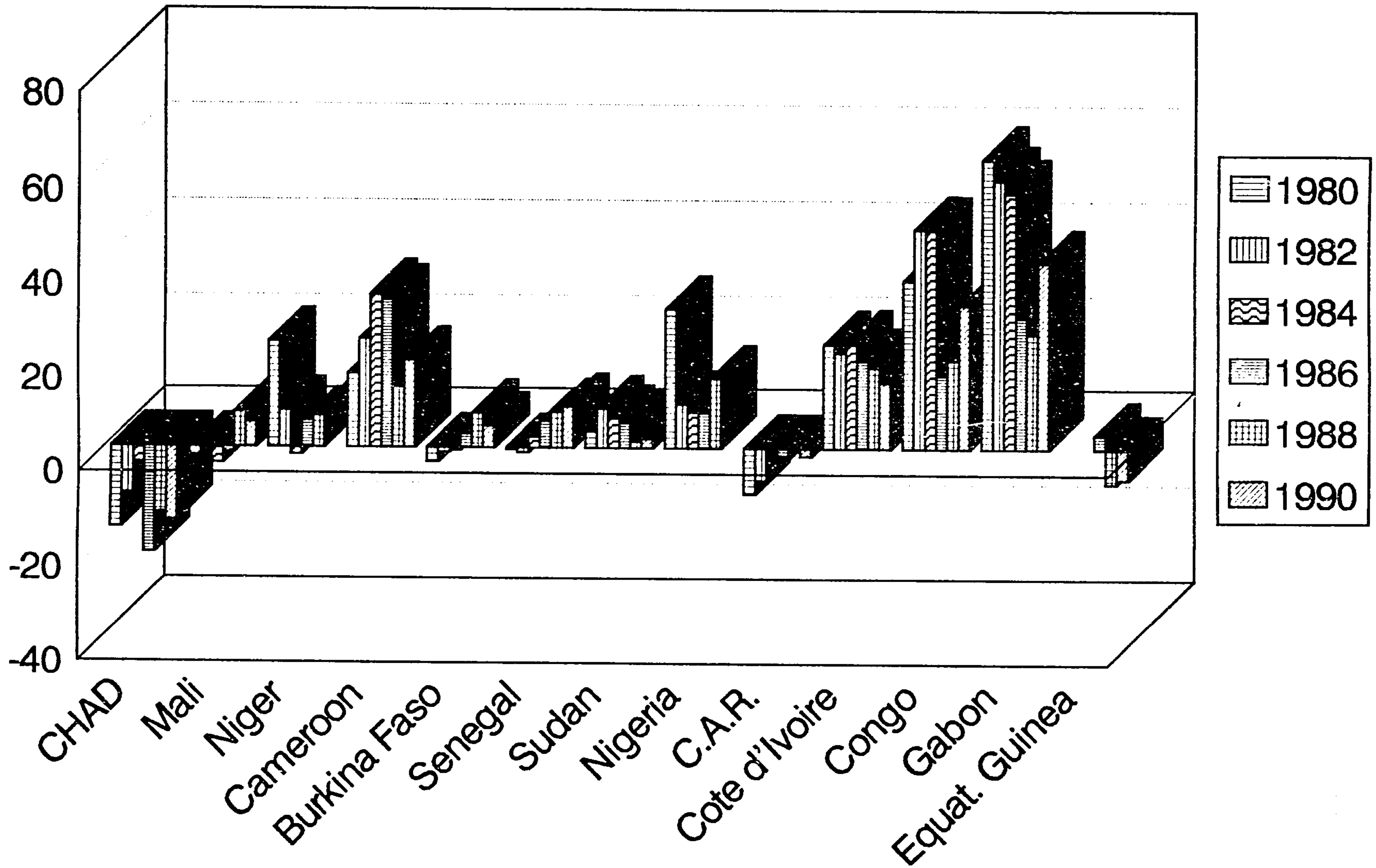
(As percentage of GDP)



Source: UNDP/World Bank 1992, "African Development Indicators," p. 263.

Gross Domestic Saving

(As percentage of GDP)

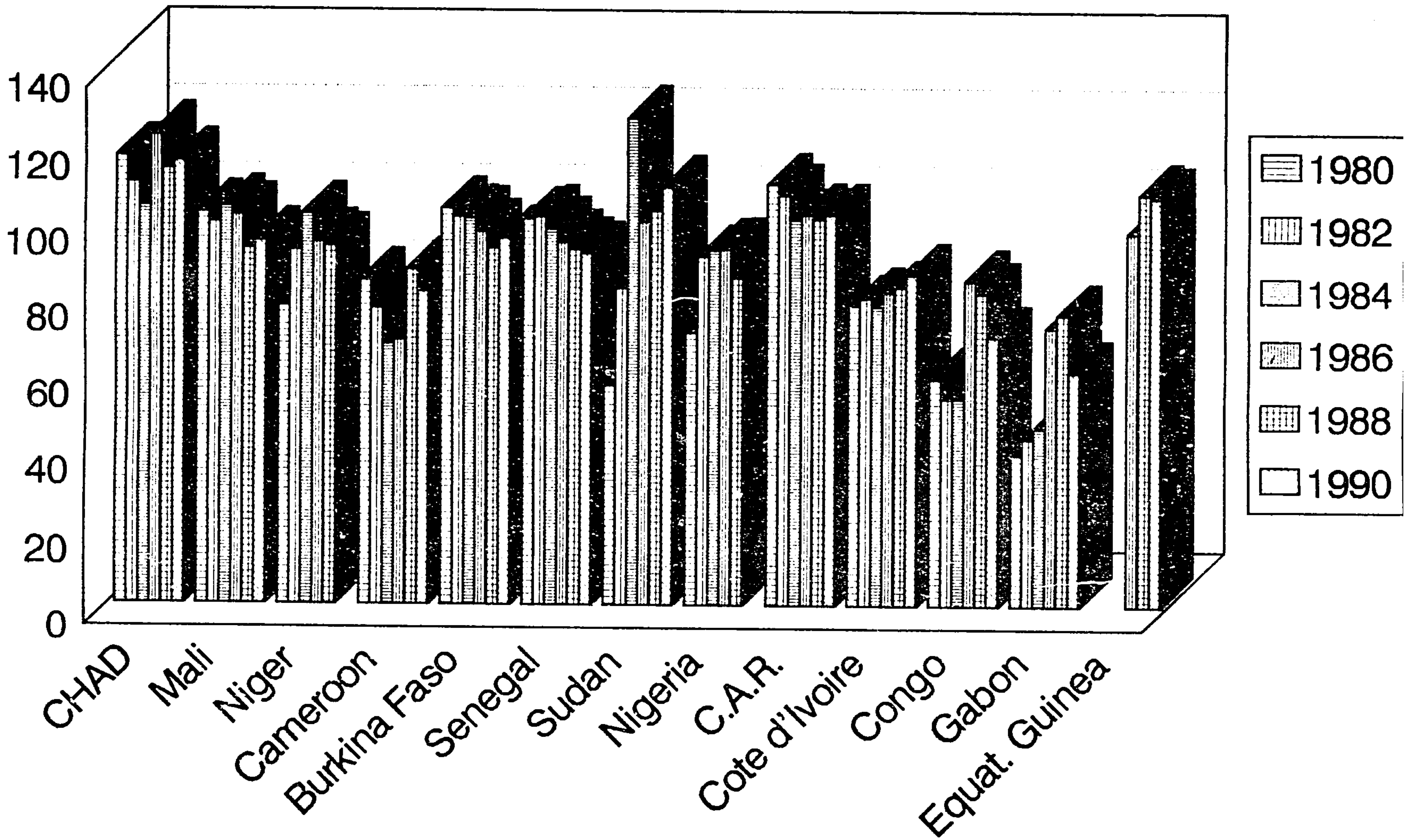


123

Source: UNDP/World Bank 1992, "African Development Indicators," p. 26.

TOTAL CONSUMPTION

(In percentage)

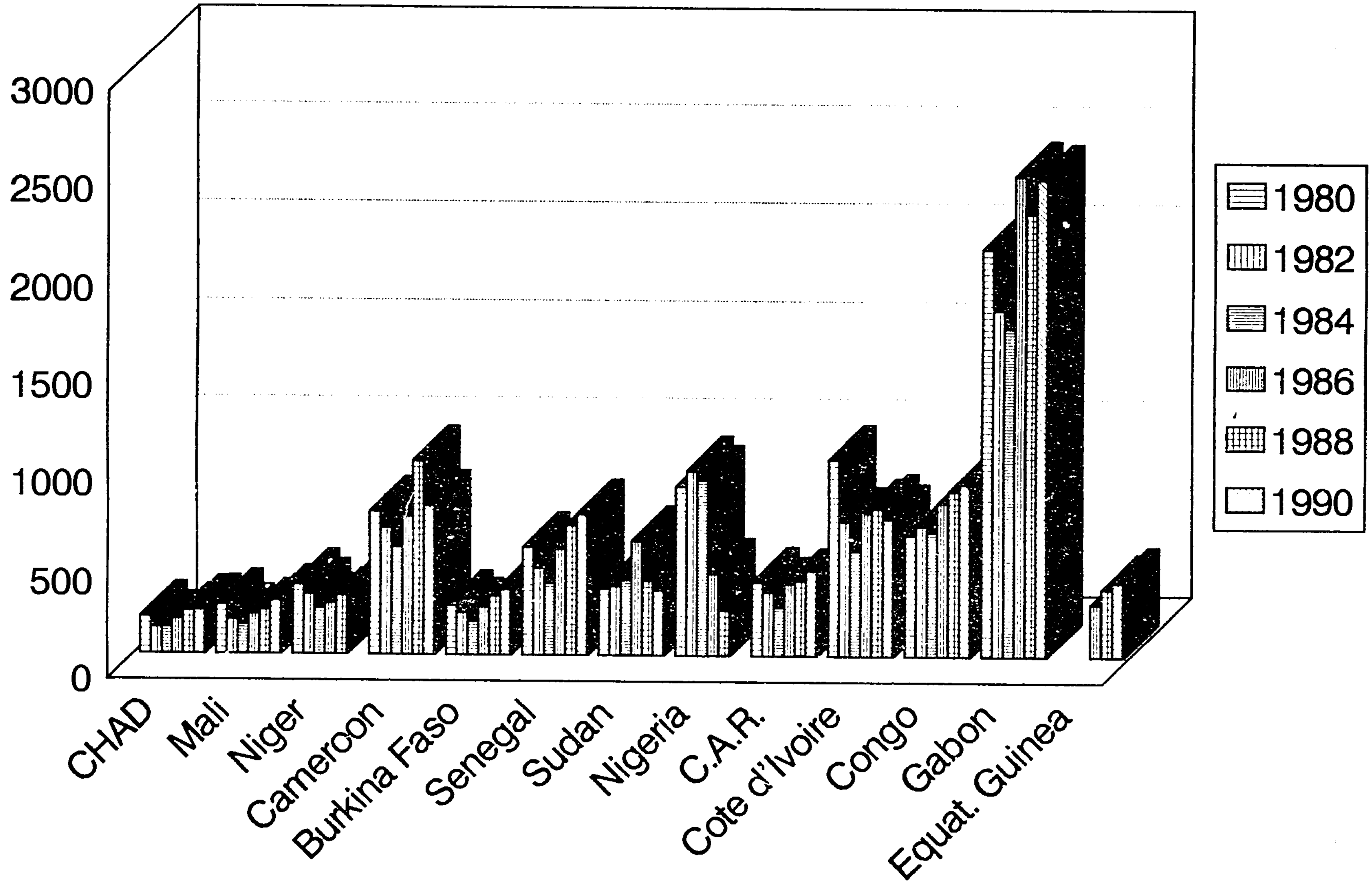


Source: UNDP/World Bank, "African Development Indicators," p.21.

EXHIBIT B-22

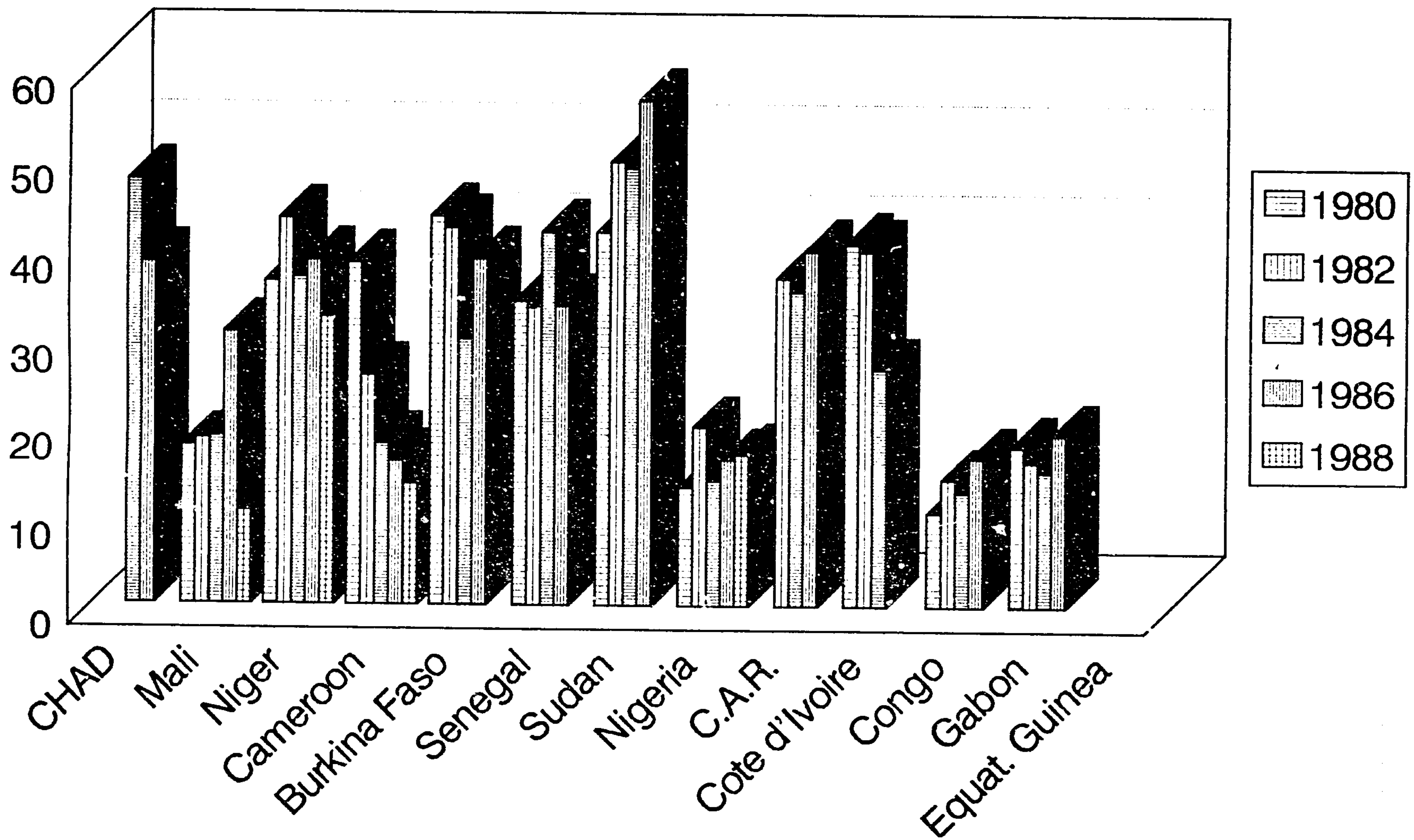
TOTAL CONSUMPTION PER CAPITA

(In current U.S. Dollars)



Source: UNDP/World Bank 1992, "African Development Indicators," p.33.

TAXES ON INTERNATIONAL TRADE & TRANSACTIONS
(As percentage of total government revenues)



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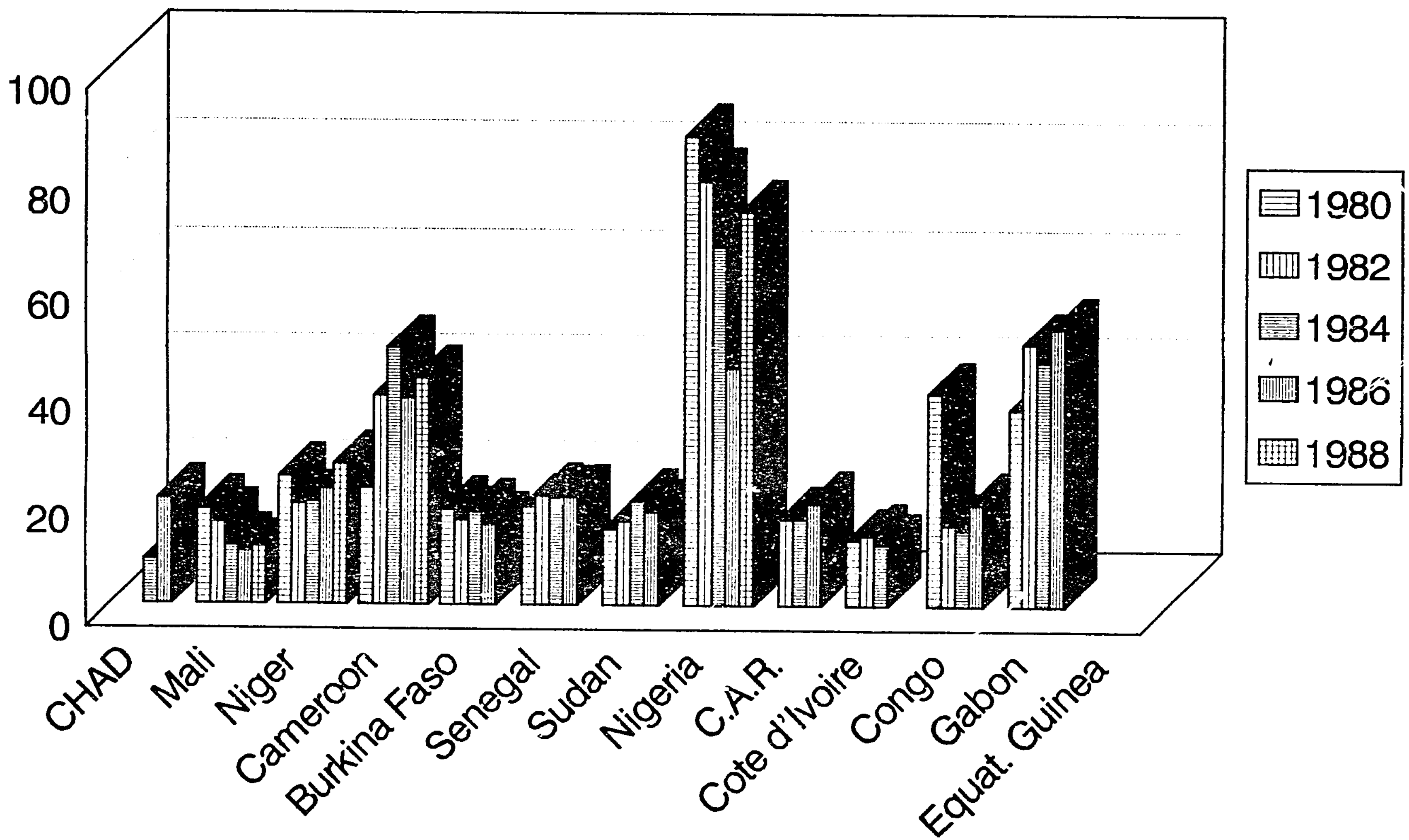
African Development Indicators," UNDP/World Bank 1992, p. 179.

EXHIBIT C-8

TAXES ON INCOME & PROFITS

(As percentage of total government revenues)



Source: UNDP/World Bank, "African Development Indicators," p. 178.

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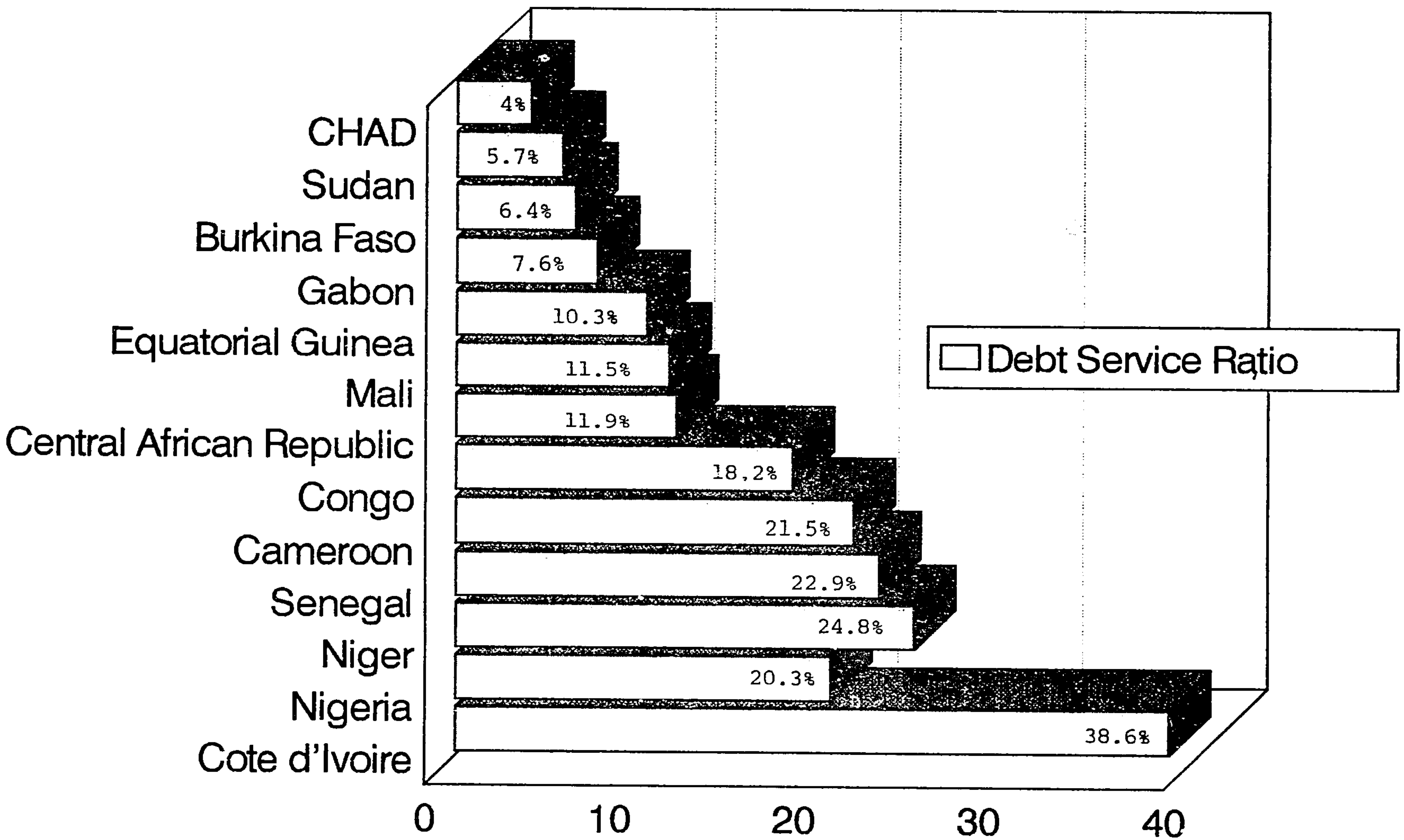
EXHIBIT D-1

DEBT SERVICE AS A SHARE OF EXPORTS

OR DEBT-SERVICE RATIO, 1990

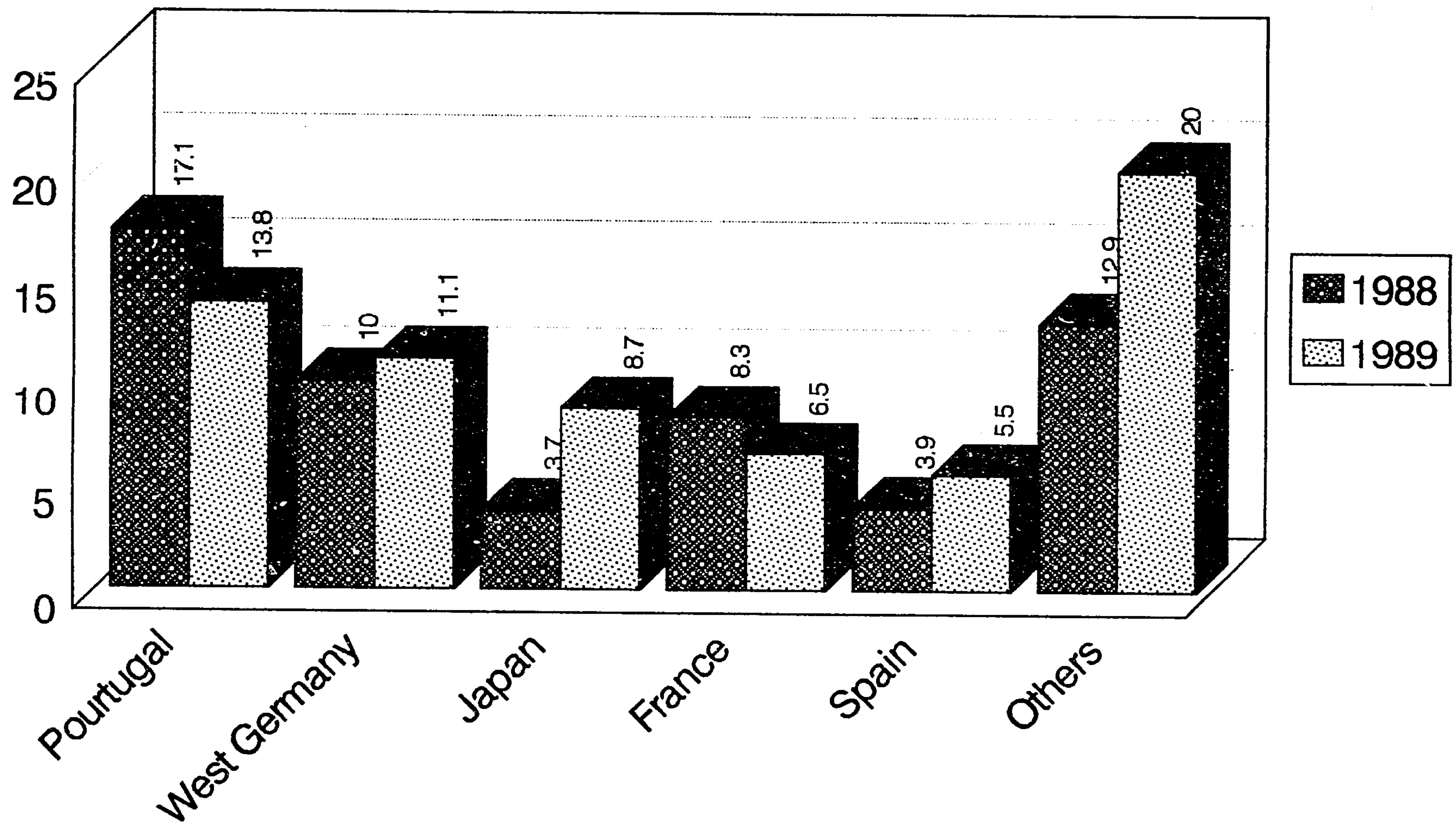


Source: World Bank, "World Debt Tables, 1991-92."
Note: Ratio is - Total Debt Service /Exports of Goods & Services.

EXHIBIT E-1

CHAD EXPORTS f.o.b., BY DESTINATION

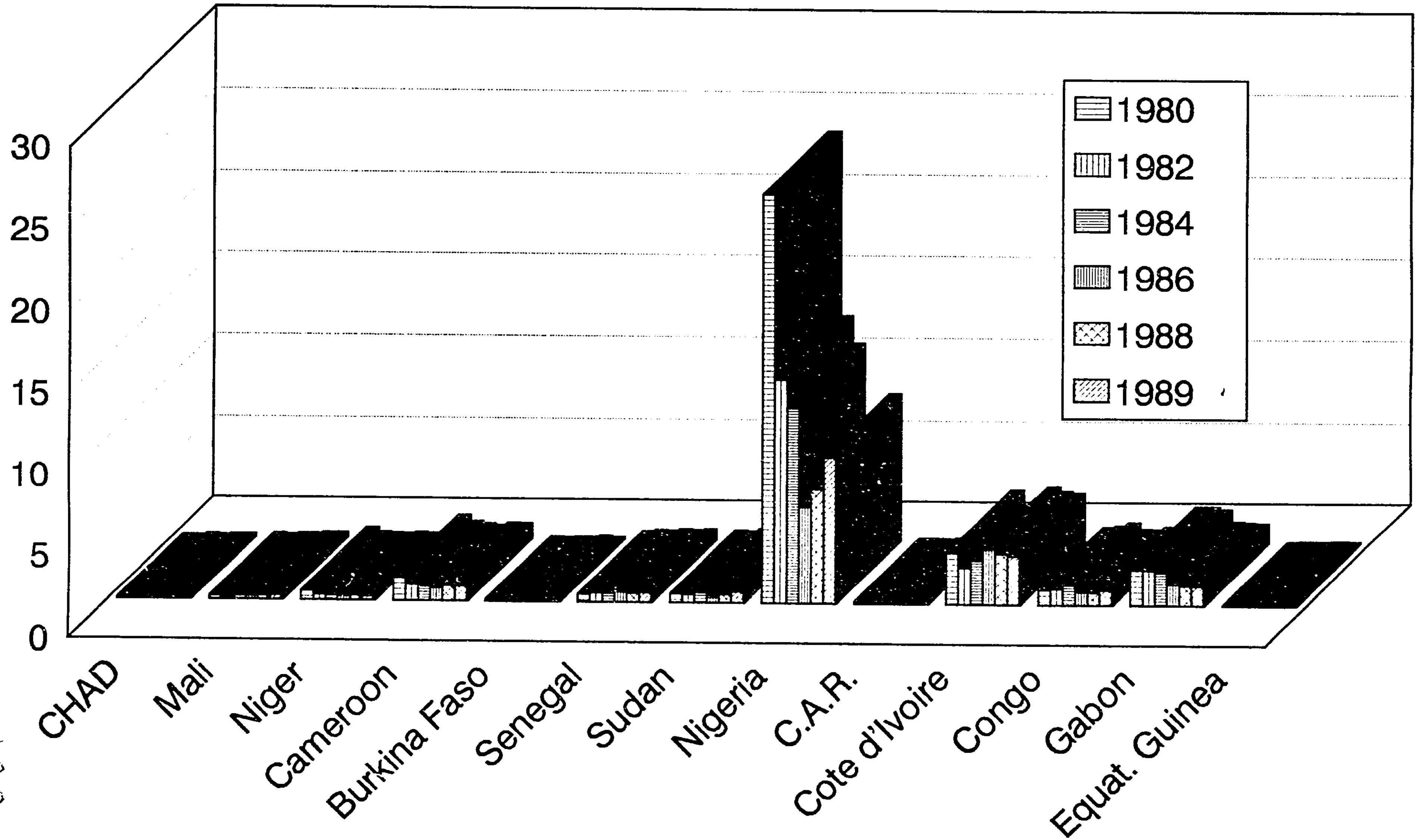
Recipient Countries (U.S.$Millions)



129

Source: Economist Intelligence Unit, "Cameroon, CAR, Chad Country Report, No.2-1992," appendix 3.

TOTAL VALUE OF MERCHANDISE EXPORTS
(In millions of U.S. Dollars)

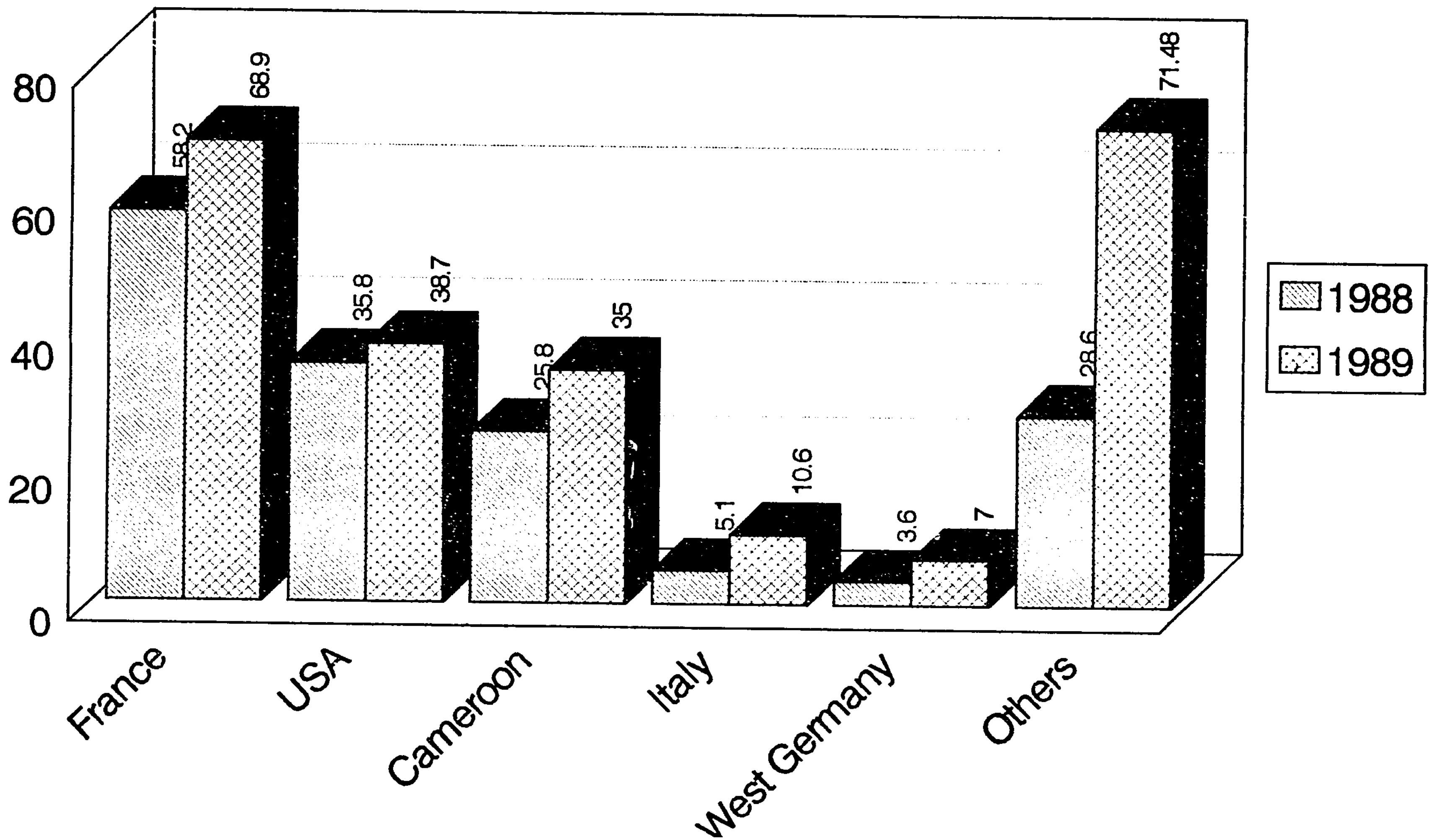


Source: UNDP/World Bank 1992, "African Development Indicators," p. 78.

EXHIBIT E-5

CHAD IMPORTS c.i.f., BY ORIGINATION

Exporting Countries (U.S.$Millions)

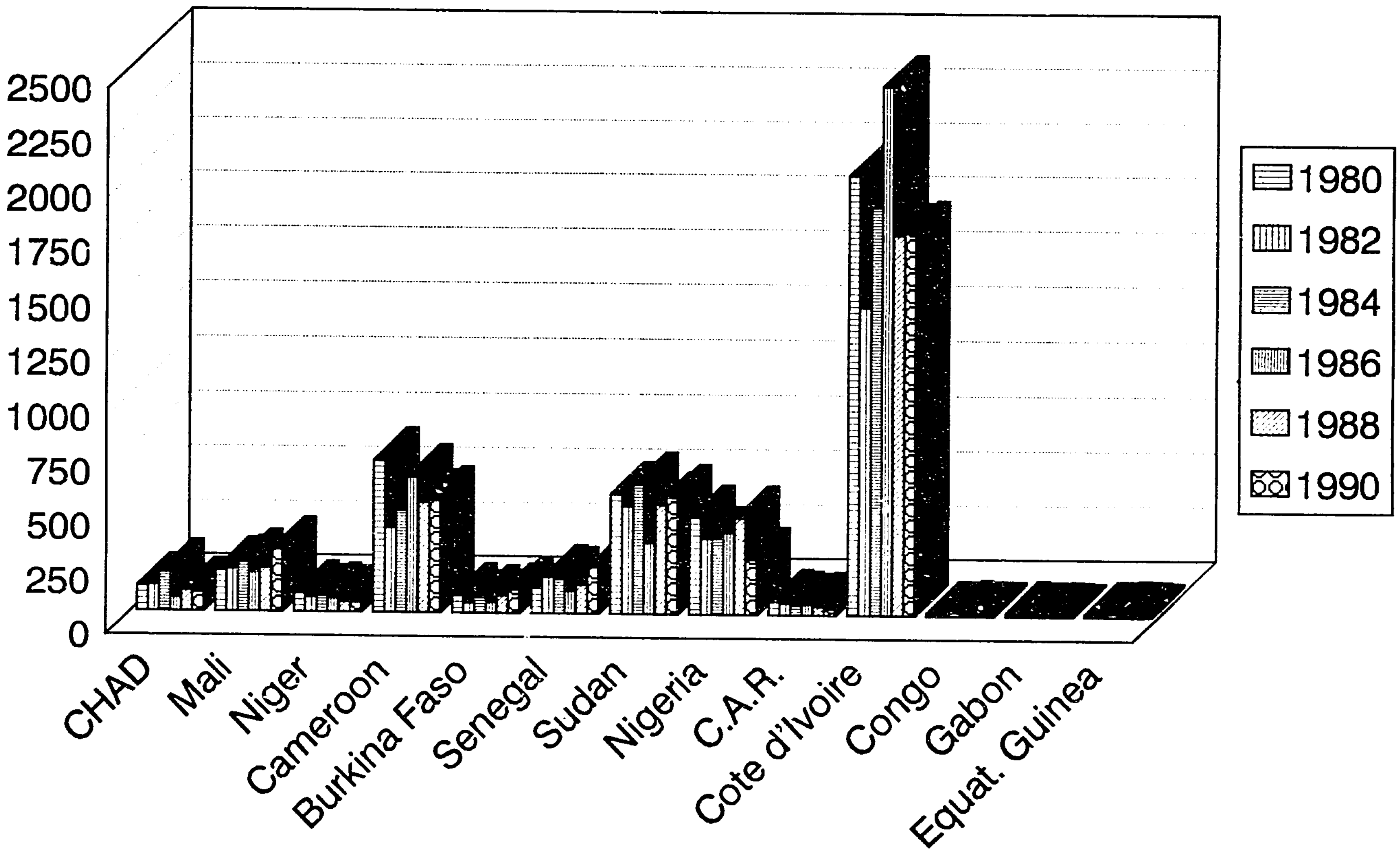


Source: Economist Intelligence Unit, "Cameroon, CAR, Chad Country Report, No.2-1992," appendix 3.

EXHIBIT F-2

TOTAL VALUE OF AGRICULTURAL EXPORTS

(In millions of U.S. Dollars, at current prices/exchange rates)



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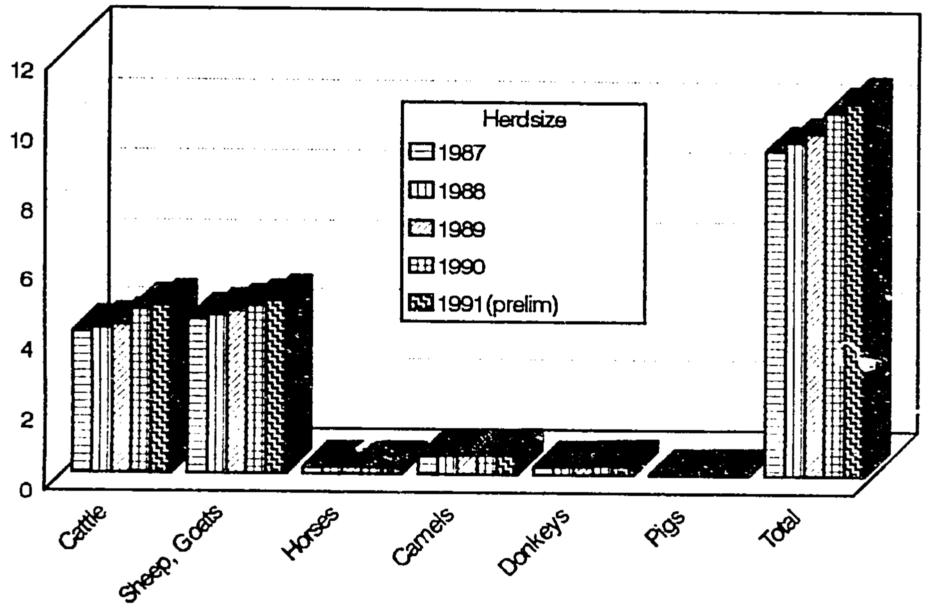
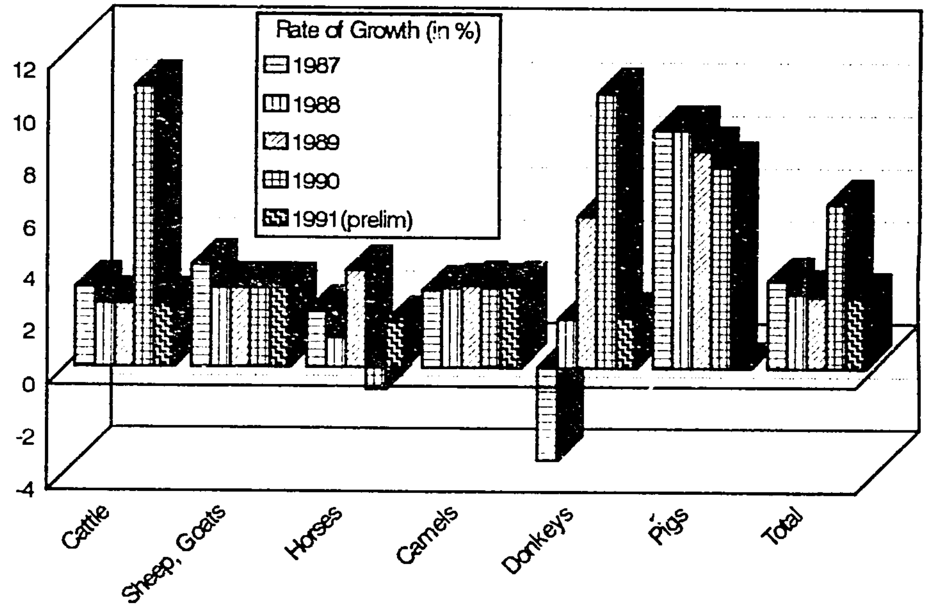
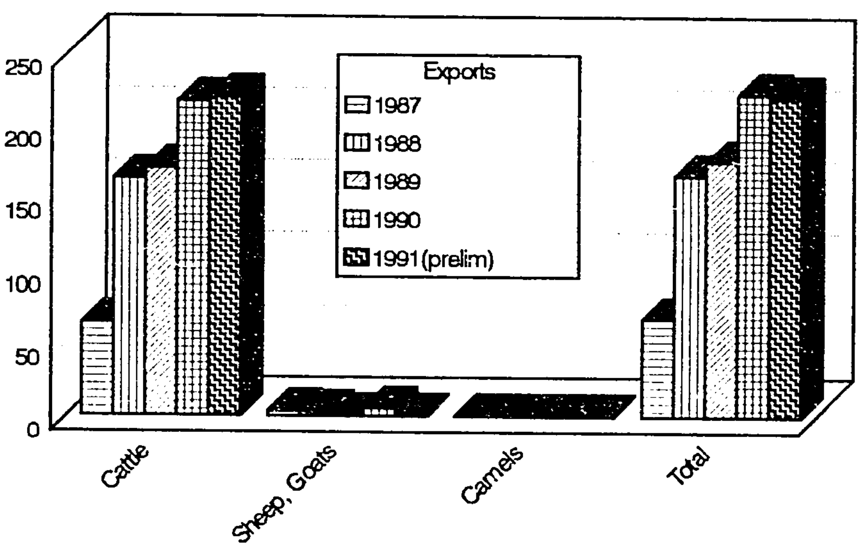
Source: UNDP/World Bank, "African Development Indicators," p. 230.

CHADIAN LIVESTOCK POPULATION, EXPORTS FOR 1987 - 1991
in '000 of heads



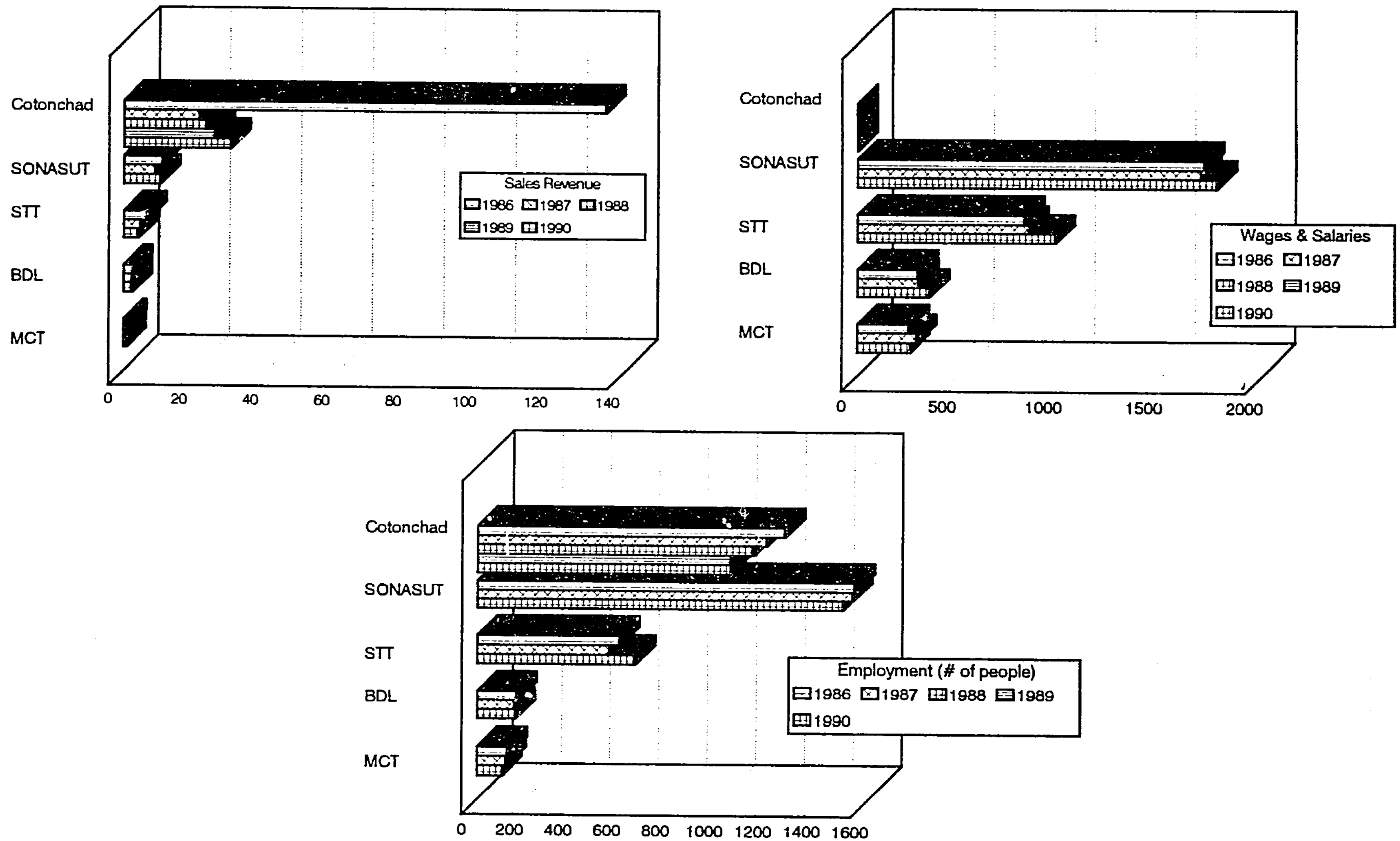




Source: Data provided by Chadian Authorities in IRIS interviews, N'Djamena, July 1992.

EXHIBIT G-1

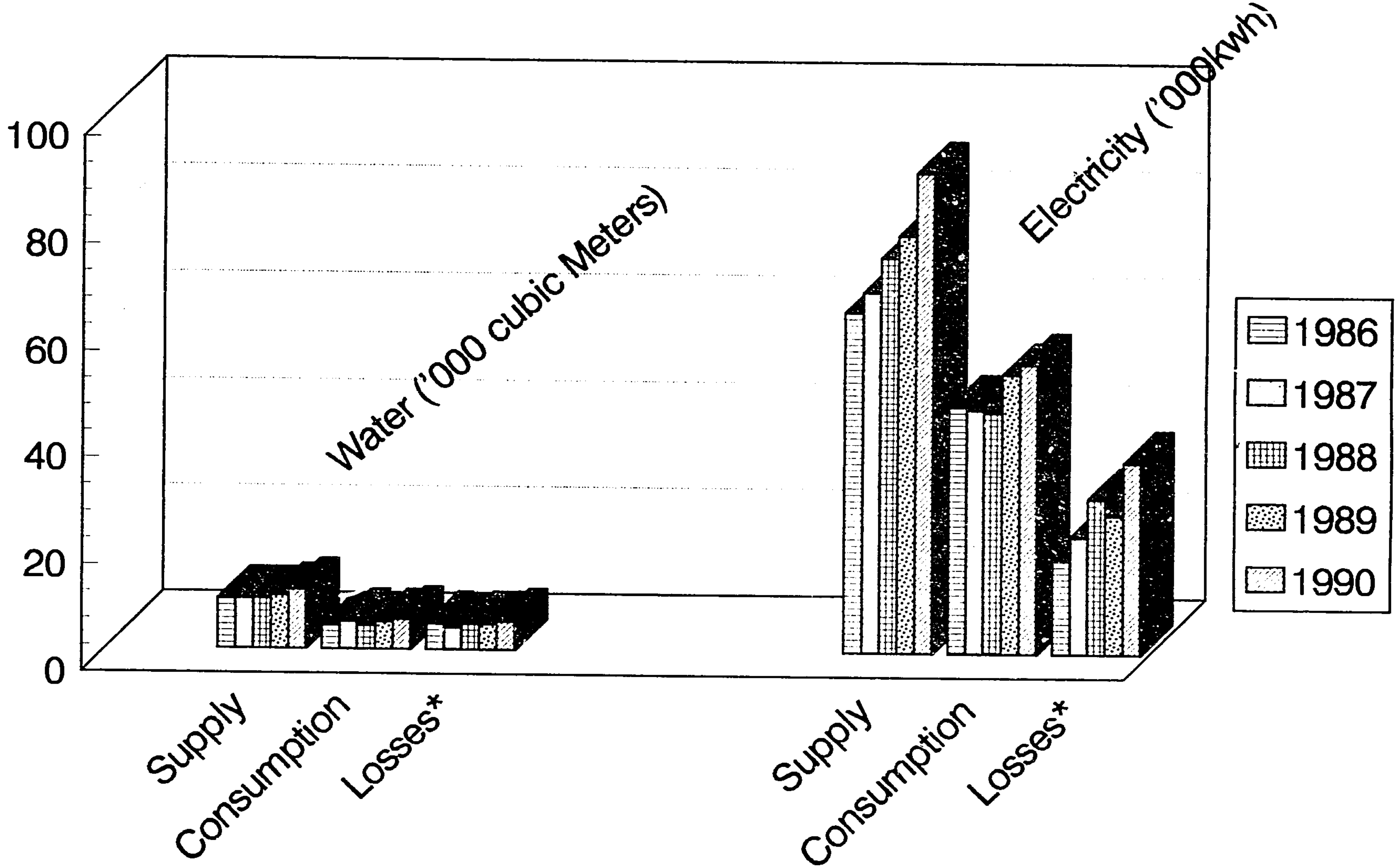
MAJOR INDUSTRIAL FIRMS STATISTICS, 1986-1990
(In millions of CFAf)



Source: Data provided by Chadian Authorities in interviews with IRIS, N'Djamena, July 1992.

EXHIBIT G-4

CHAD WATER & ELECTRICITY SUPPLY/CONSUMPTION, 1986-1990



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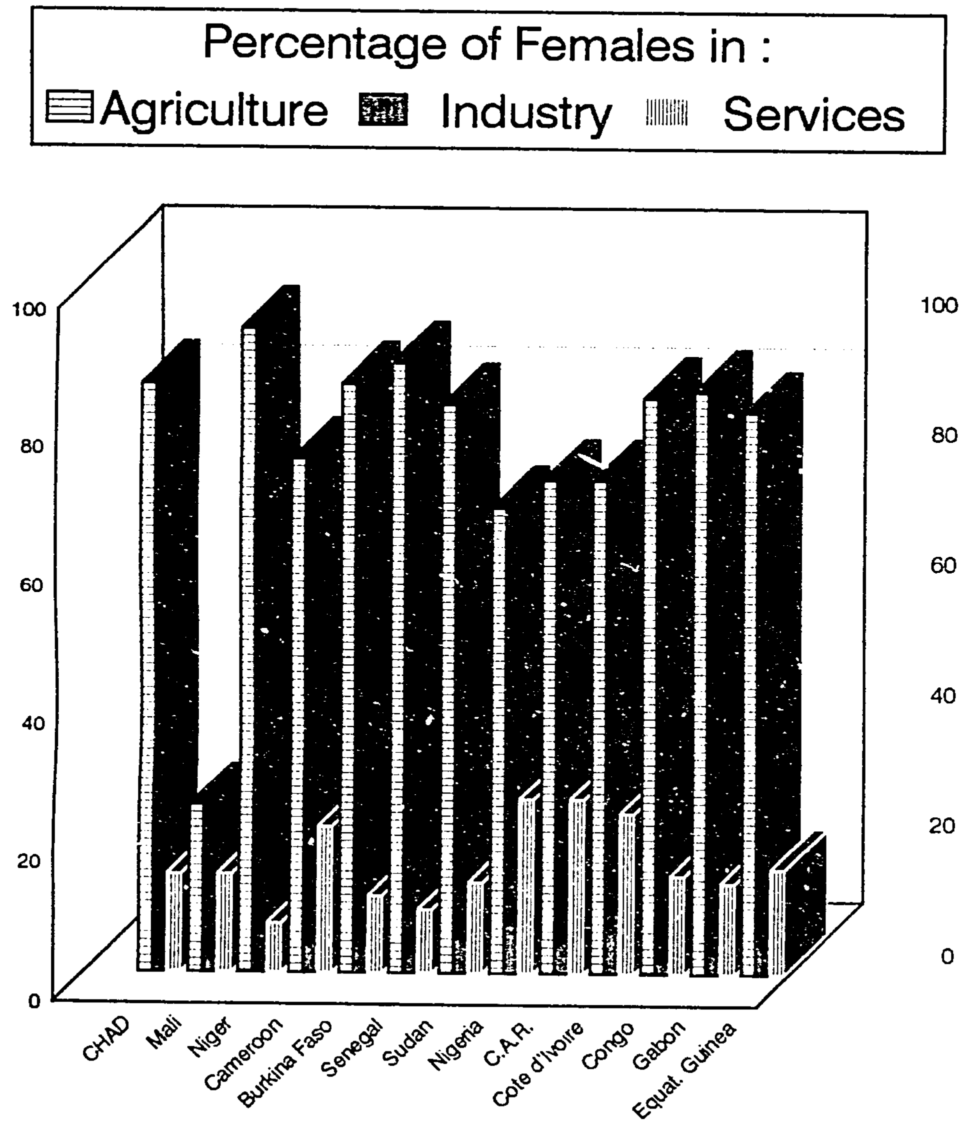
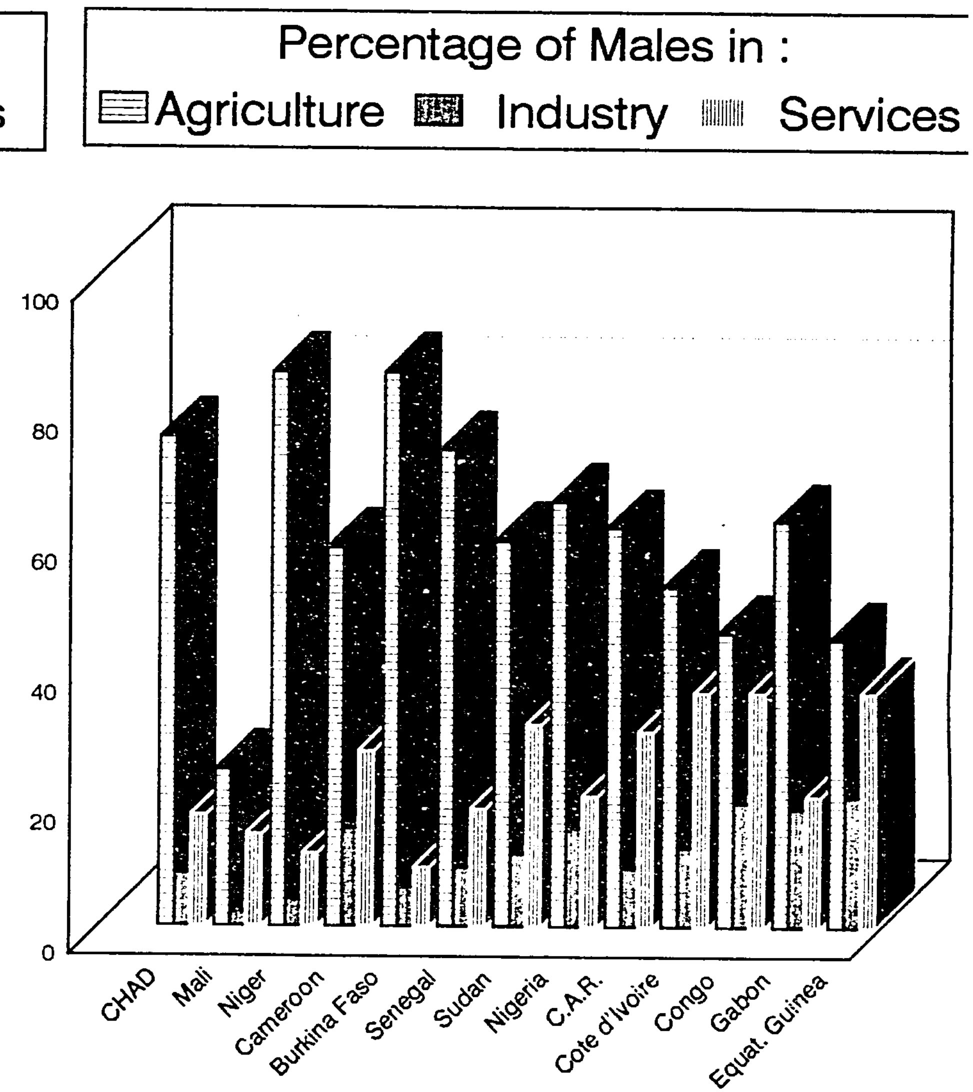
Source: Data provided by Chadian Authorities in interviews with IRIS, N'Djamena, July 1992.
Note: Losses are due to inaccurate measuring procedures and distribution losses.

SECTOR STRUCTURE OF LABOR FORCE, BY GENDER, IN 1987

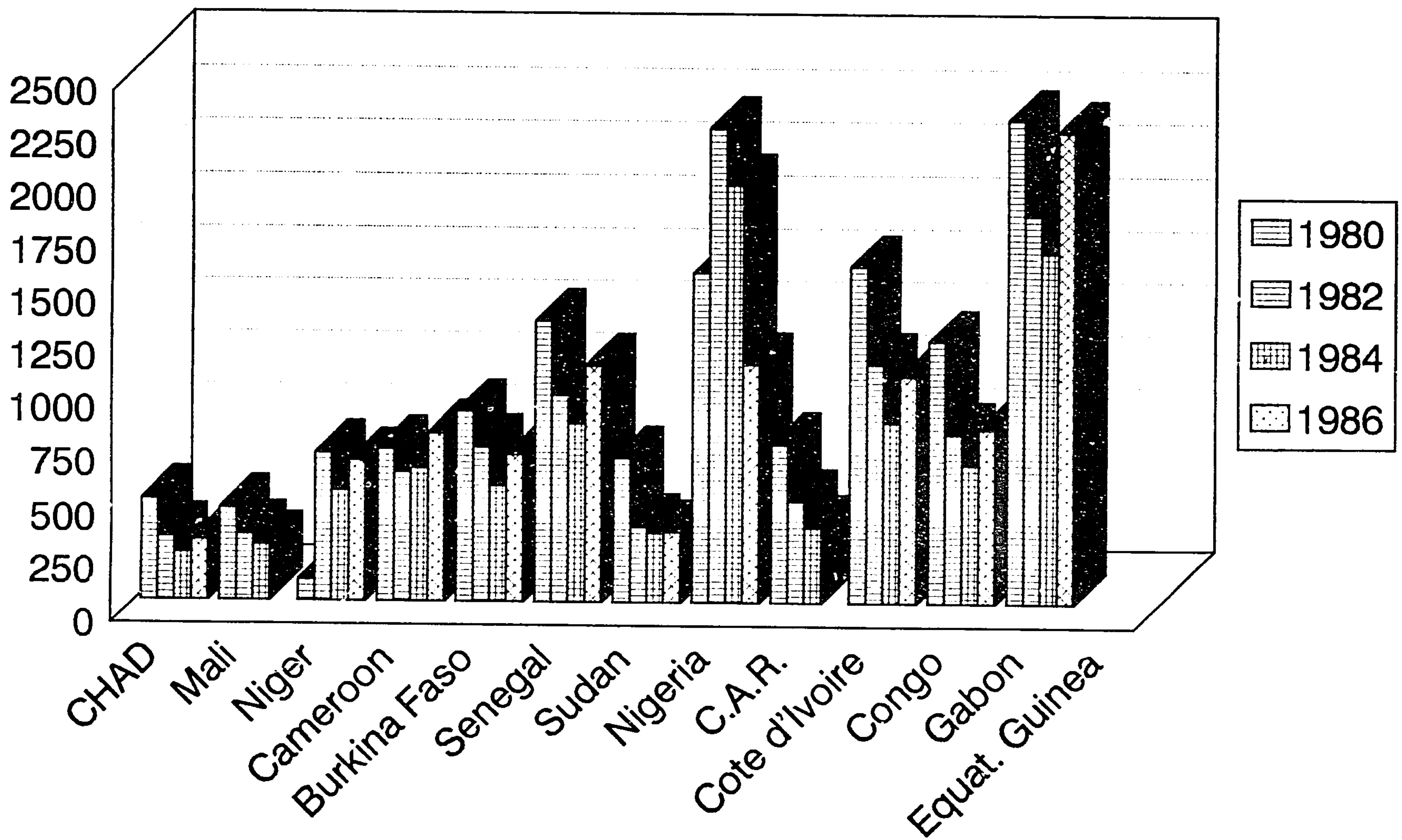




Source: UNDP/World Bank 1992, "African Development Indicators," p. 285.

EXHIBIT H-4

ANNUAL MINIMUM WAGE LEVELS
(In U.S. Dollars at official exchange rate)



Source: UNDP/World Bank, "African Development Indicators," p. 287.

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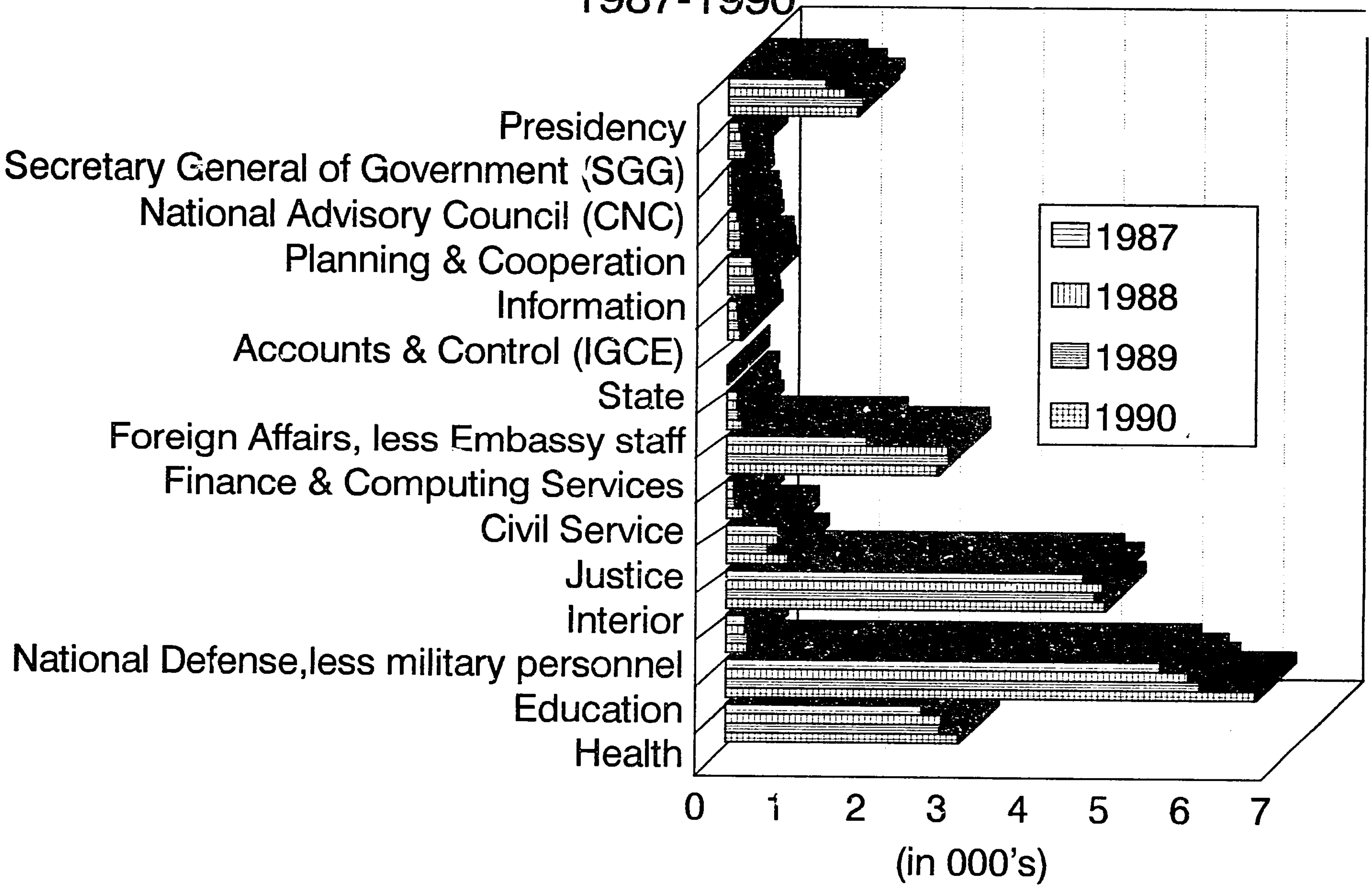
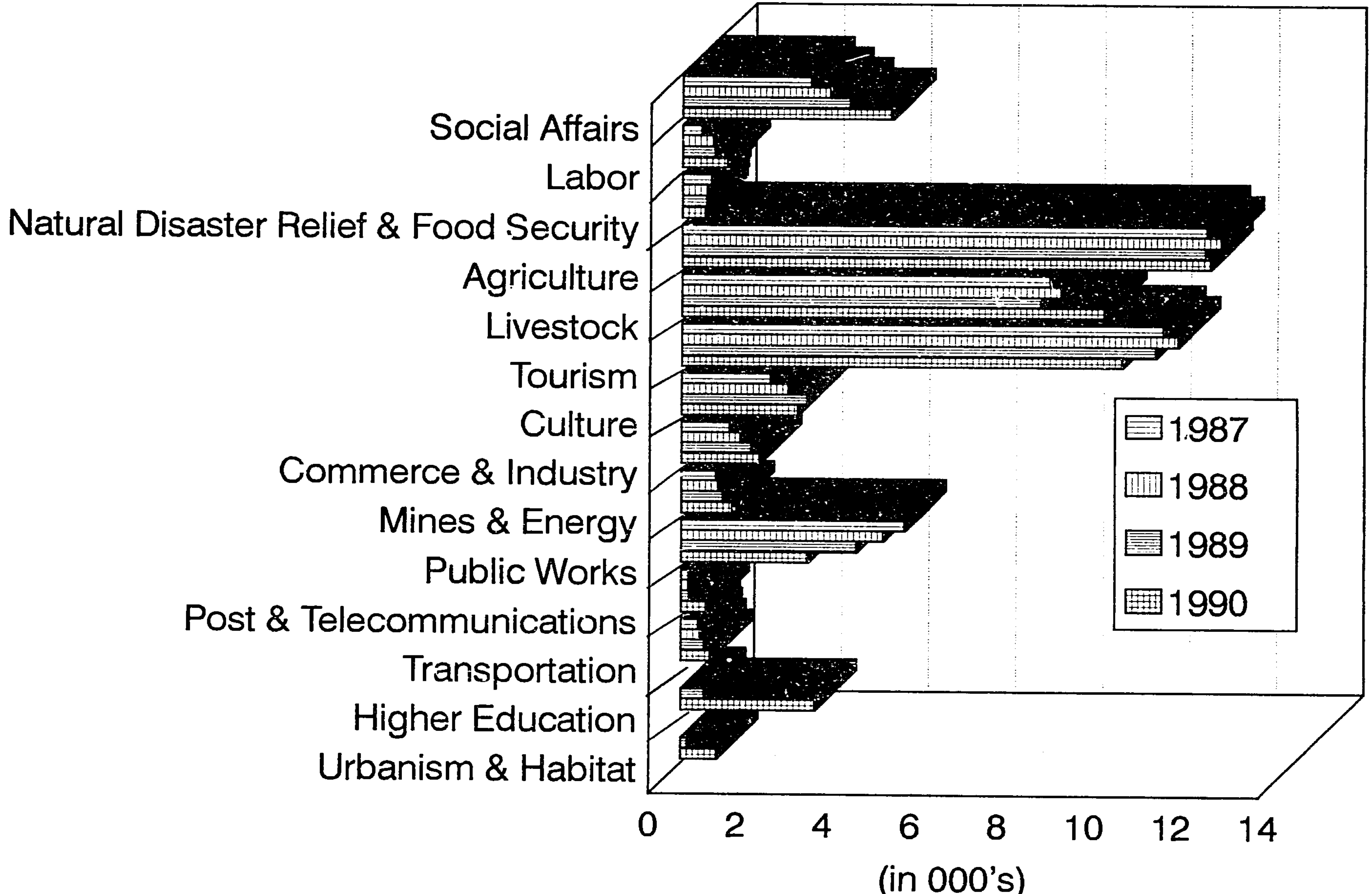
CHAD CENTRAL GOVERNMENT EMPLOYMENT STATISTICS, 1987-1990



Source: Data provided by Chadian Authorities in interviews with IRIS Team, N'Djamena, July 1992.

EXHIBIT H-5b

CHAD CENTRAL GOVERNMENT EMPLOYMENT STATISTICS, 1987-1990



Source: Data provided by Chadian Authorities in interviews with IRIS Team, N'Djamena, July 1992.

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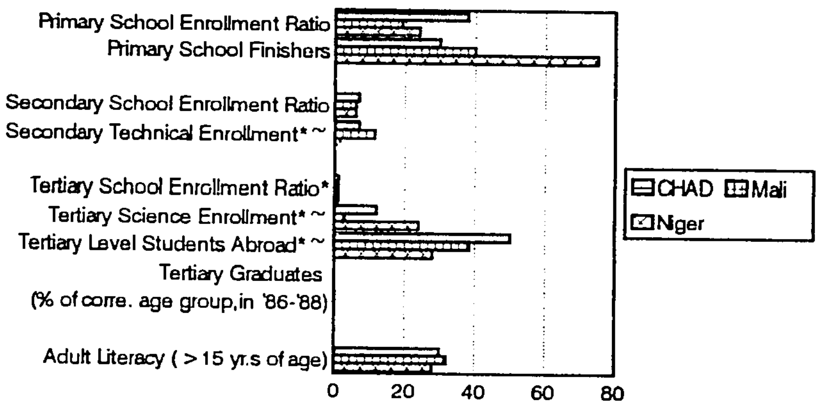
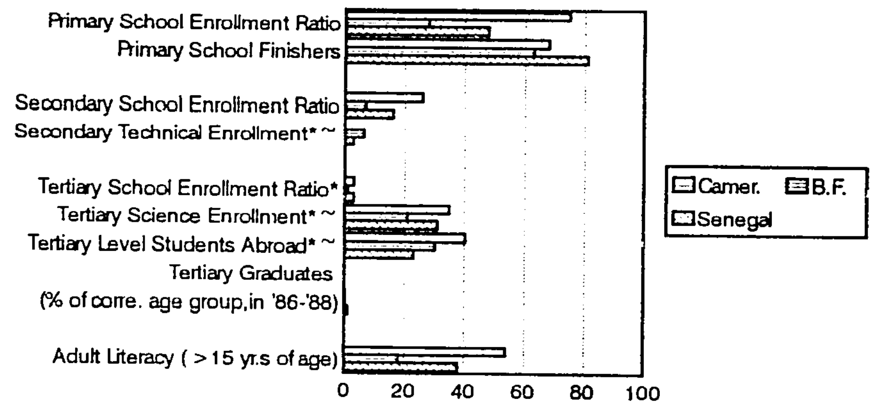
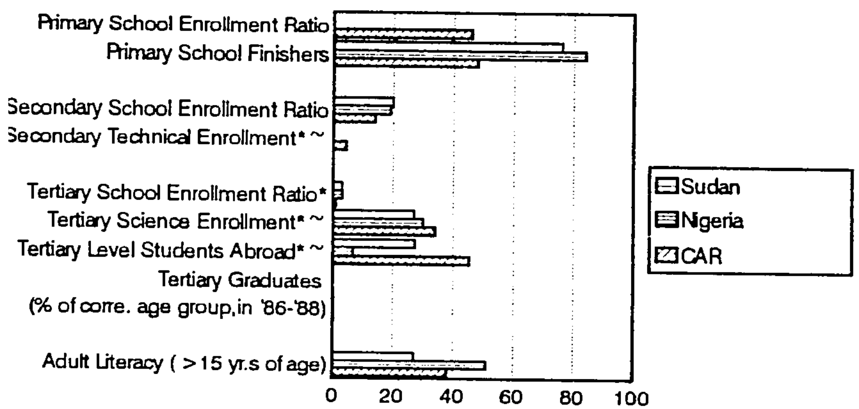
EXHIBIT H-6

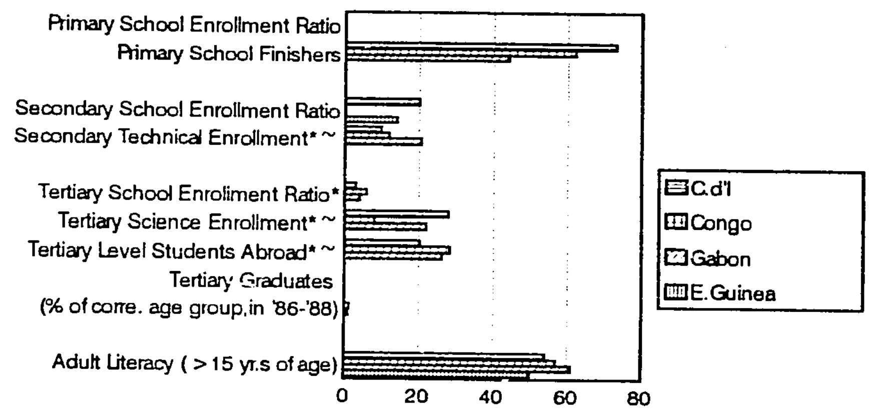
EDUCATIONAL PREPARATION , 1988-89

(In % of relevant population)









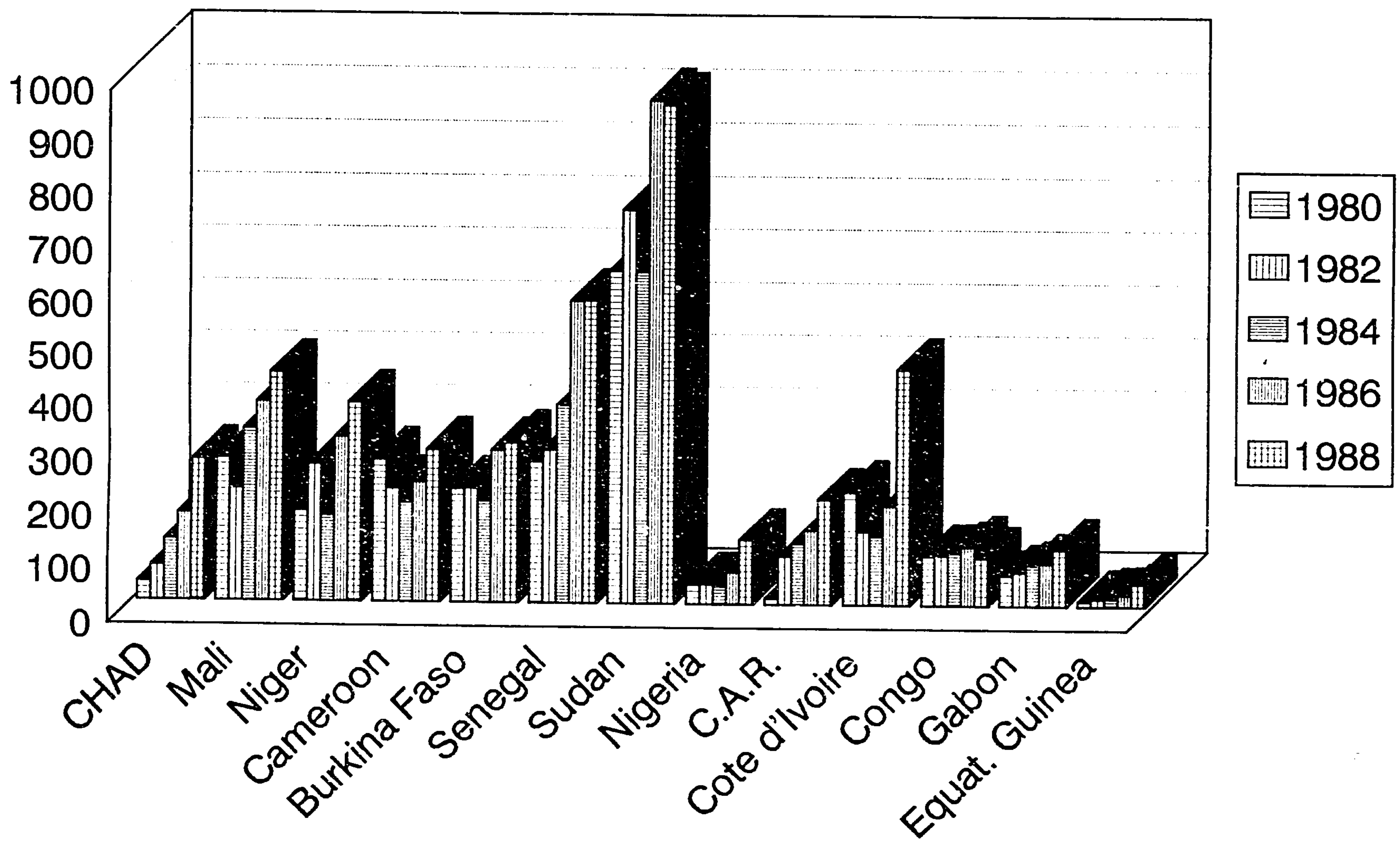
(* = 1987-88.)
(~ = as % of relevant academ. level)

Source: UNDP,"Human Development Report 1992," Tbl.14 - p. 154-5, Tbl.15 - p. 156-7, Tbl. 5 - p. 136-7.

EXHIBIT I-1

TOTAL NET ODA FROM ALL DONORS

(In millions of U.S. Dollars, at current prices/exchange rates)



Source: UNDP/World Bank 1992, "African Development Indicators," p. 294.

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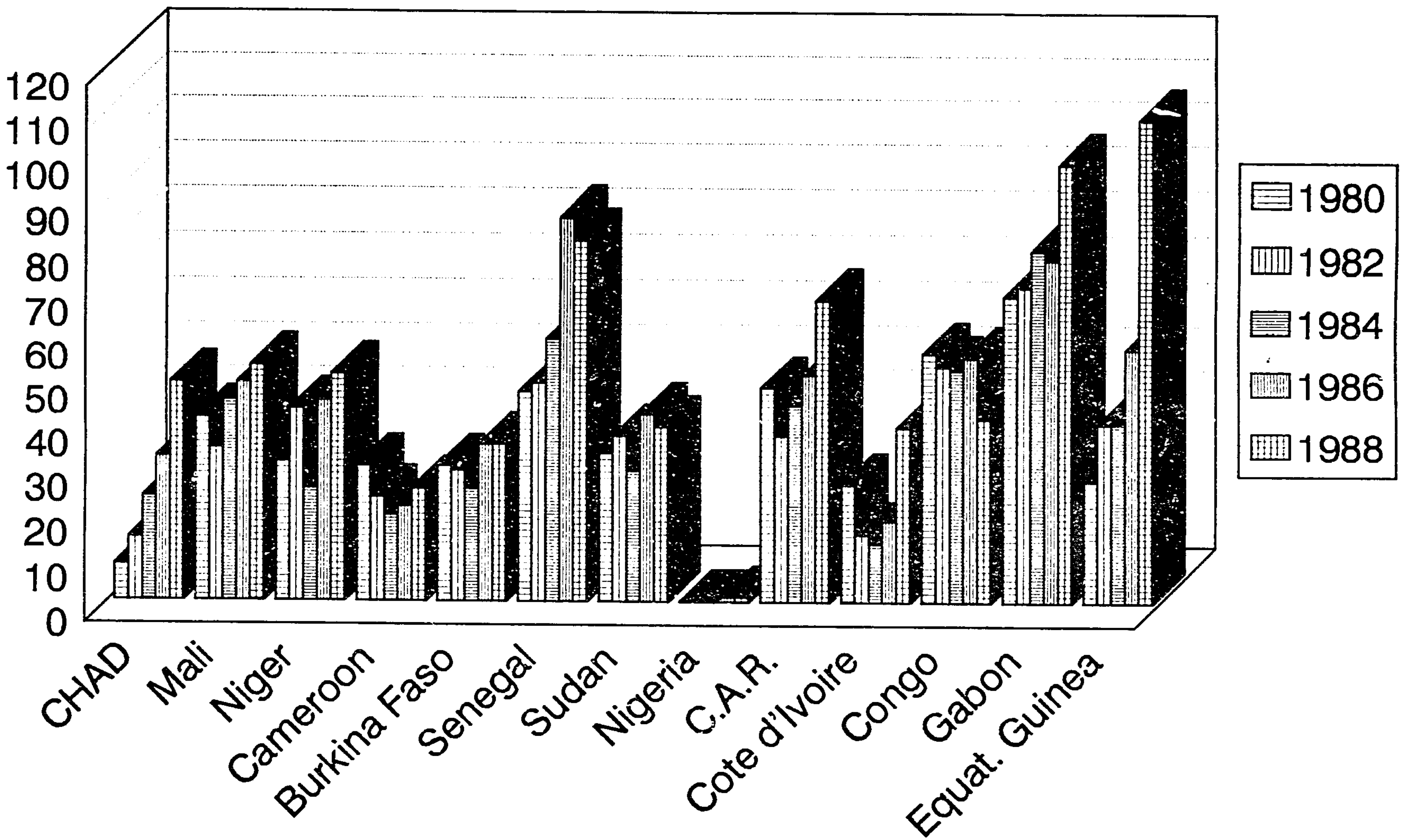
EXHIBIT I-3

NET ODA PER CAPITA FROM ALL DONORS

(In U.S. Dollars at current prices/exchange rates)

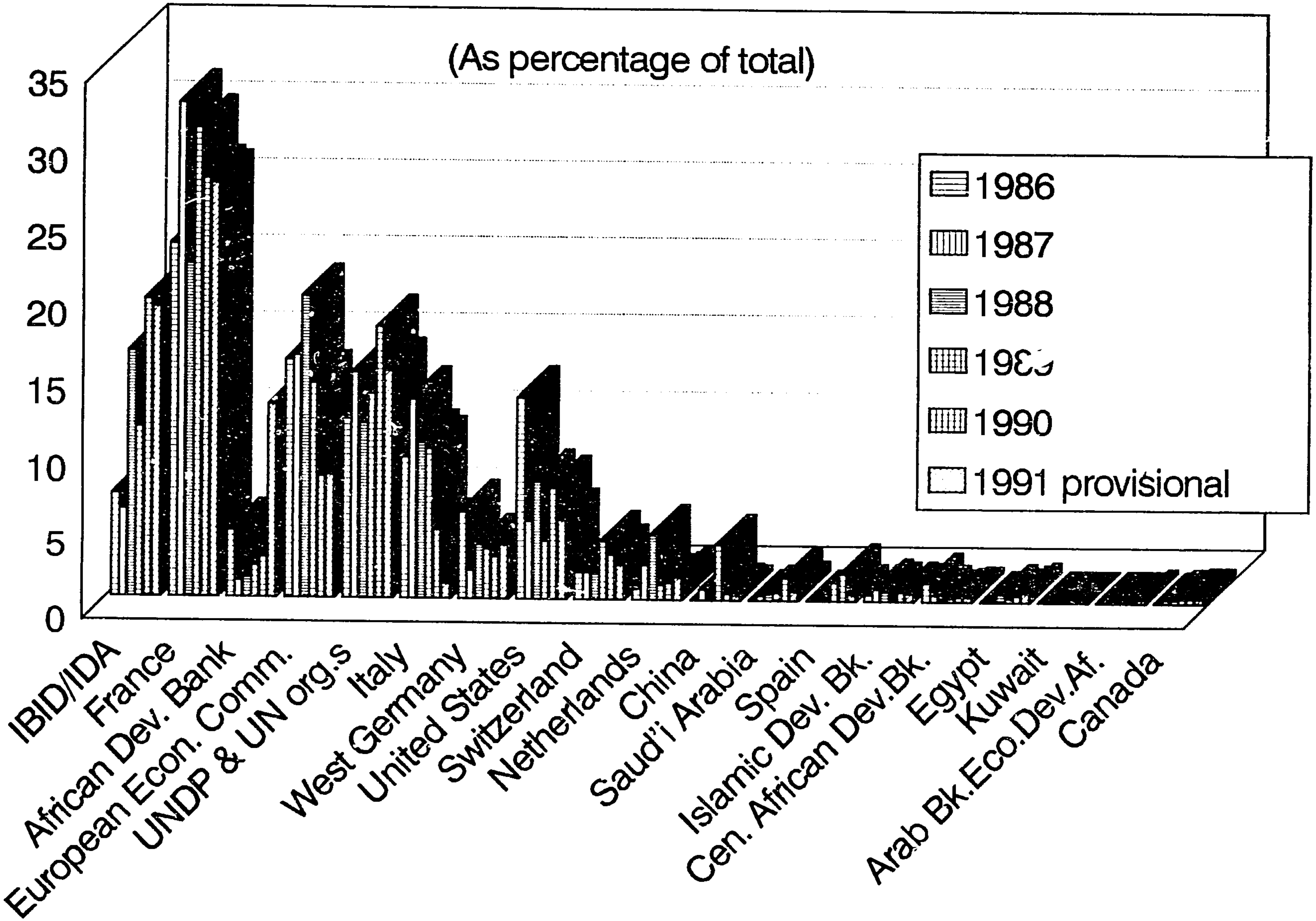


Source: UNDP/World Bank 1992, "African Development Indicators," p. 304.

e-1

EXHIBIT I-4

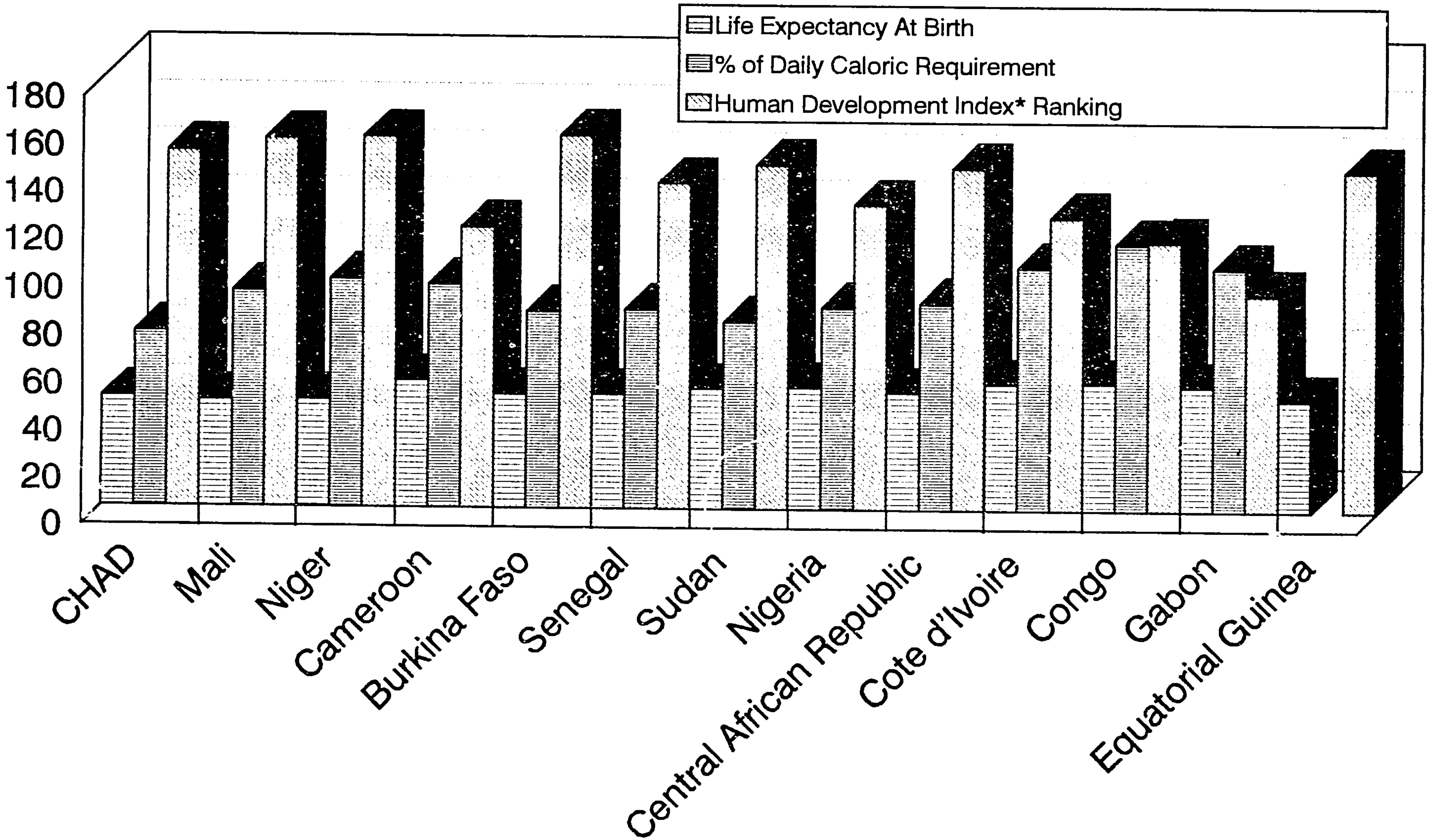
PUBLIC INVESTMENT BUDGET, BY DONOR



Source: Data provided by Chadian Authorities in interviews with IRIS team, N'Djamena, Chad, July 1992.
Note: totals may not add up to 100% due to rounding.

EXHIBIT J-2

OTHER SOCIAL INDICATORS

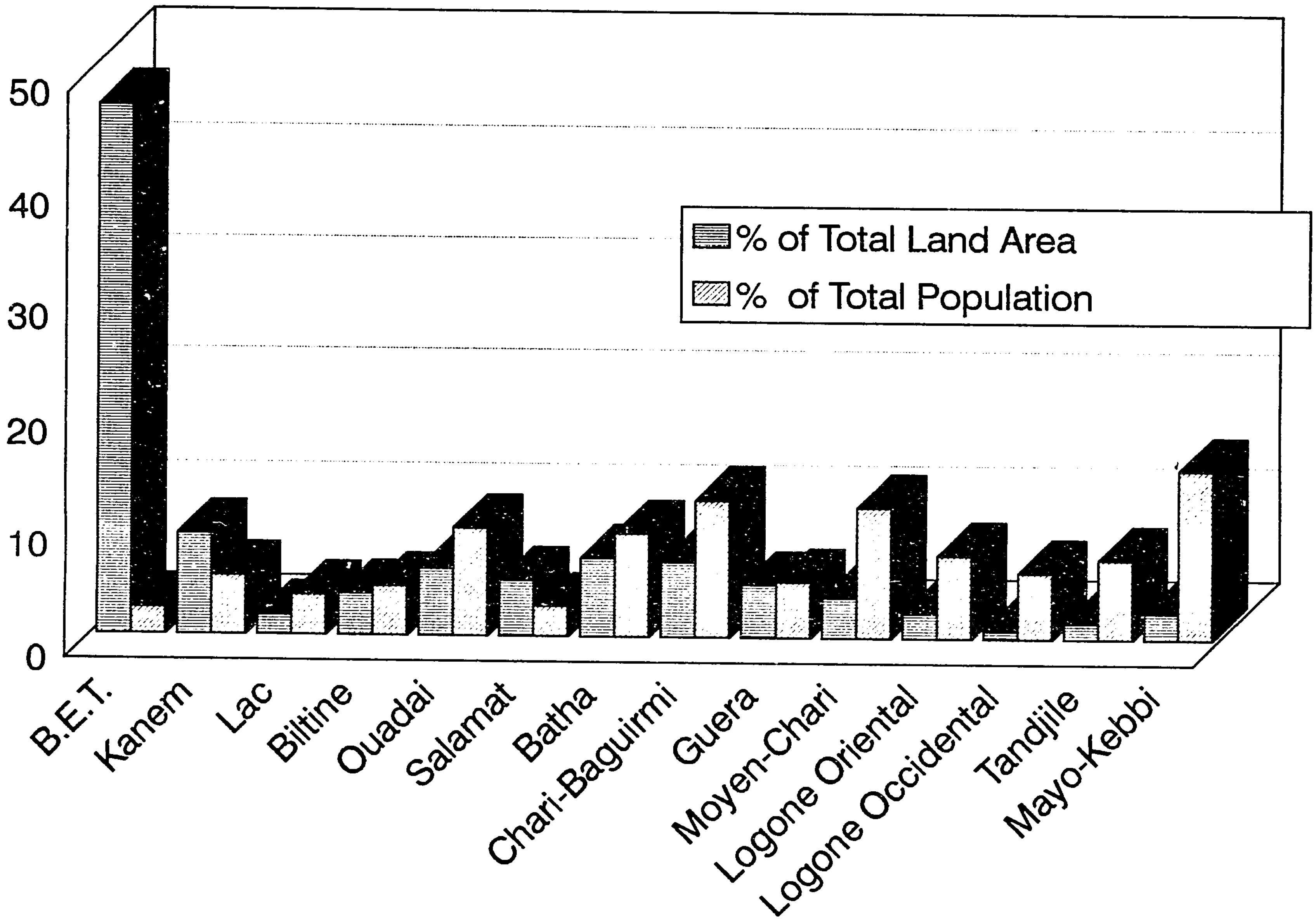


Source: UNDP, "Human Development Report 1992," p.130-1; HDI Ranking is from p.s 128-9.

Note: The "Human Development Index" is a UNDP newly-designed, composite social indicator based upon 1) Life Expectancy at Birth, 2) Educational Attainment Level, & 3) Real GDP per capita. Countries with the lowest rankings (single digit numbers) are doing the best in providing for human needs.

EXHIBIT J-4

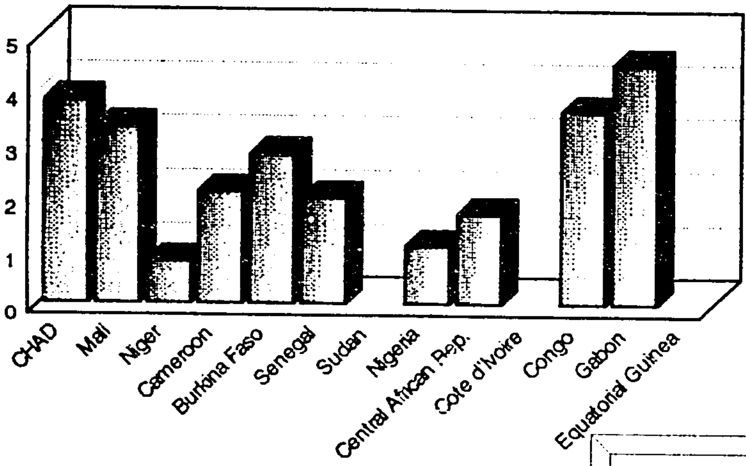
DEMOGRAPHIC DISTRIBUTION



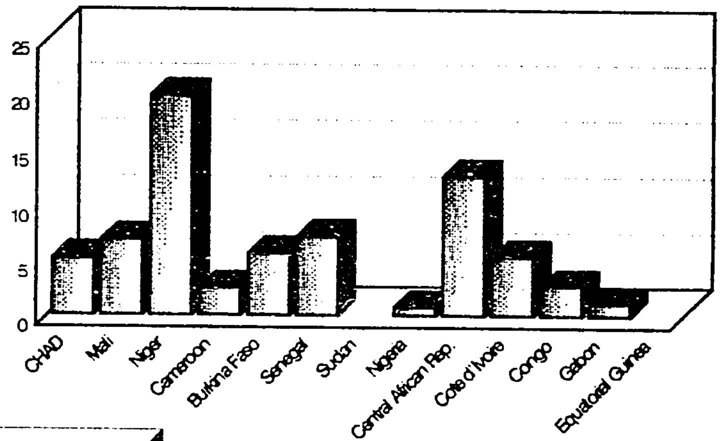
Source: Samuel Decalo, 2nd edition 1987, "Historical Dictionary of Chad," p. xxiii.

MILITARY EXPENDITURES

Military Expenditures, as % of 1989 GNP

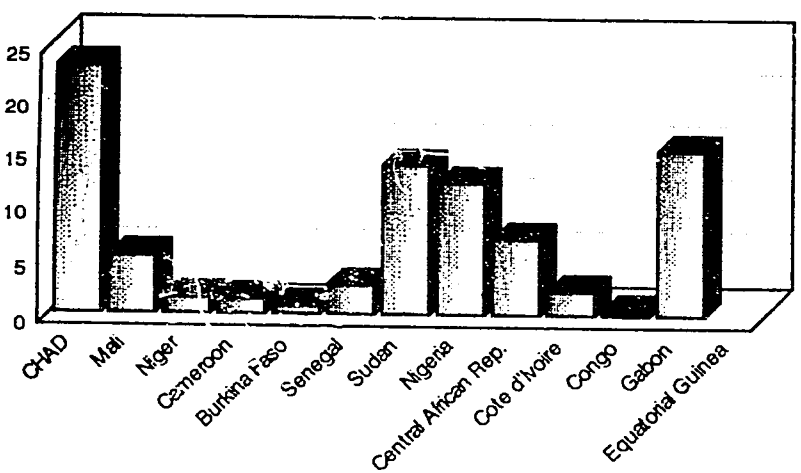


Official Development Aid Received, as a % of Military Expenditures

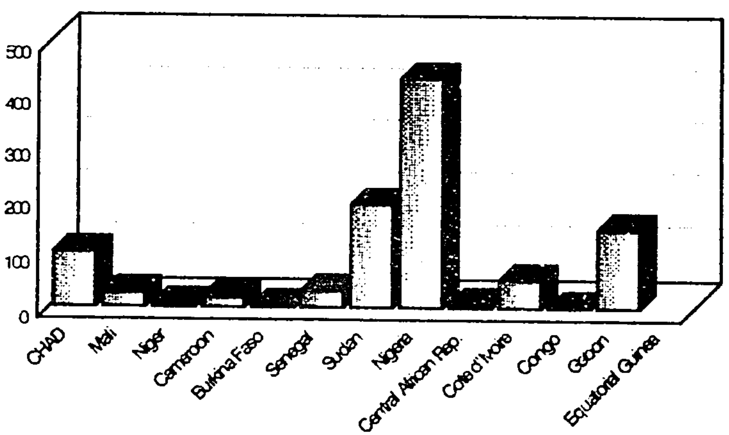


1989 Imports of Weaponry

As % of Imports



In Million of U.S. Dollars



Source: UNDP, "Human Development Report 1992," Table 20, p.s 166-7.