The Country Study for Japan's Official Development Assistance to The Republic of Ghana

February 1995

The Committee on the Country Study for Japan's Official Development Assistance to The Republic of Ghana

Organized by
The Japan International Cooperation Agency
(JICA)



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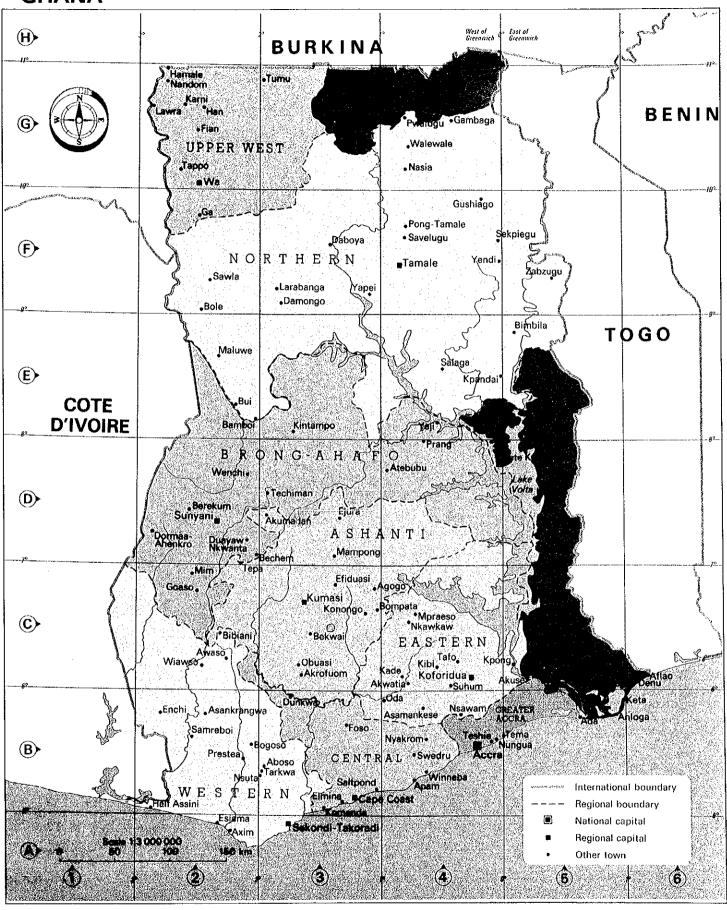
This report, a partial translation of the Japanese report excluding Chapter I-3 (Sectral Development Issues) and Chapter II-3 (Issues Concerning the Implementation Methods and Systems of Japan's Assistance) is based on the discussions and findings of the Committee on the Country Study for Japan's Official Development Assistance to the Republic of Ghana organized by the Japan International Cooperation Agency (JICA). Opinions expressed in this paper are those of the members of the Committee and do not necessarily reflect those of JICA and/or of its affiliated organizations.

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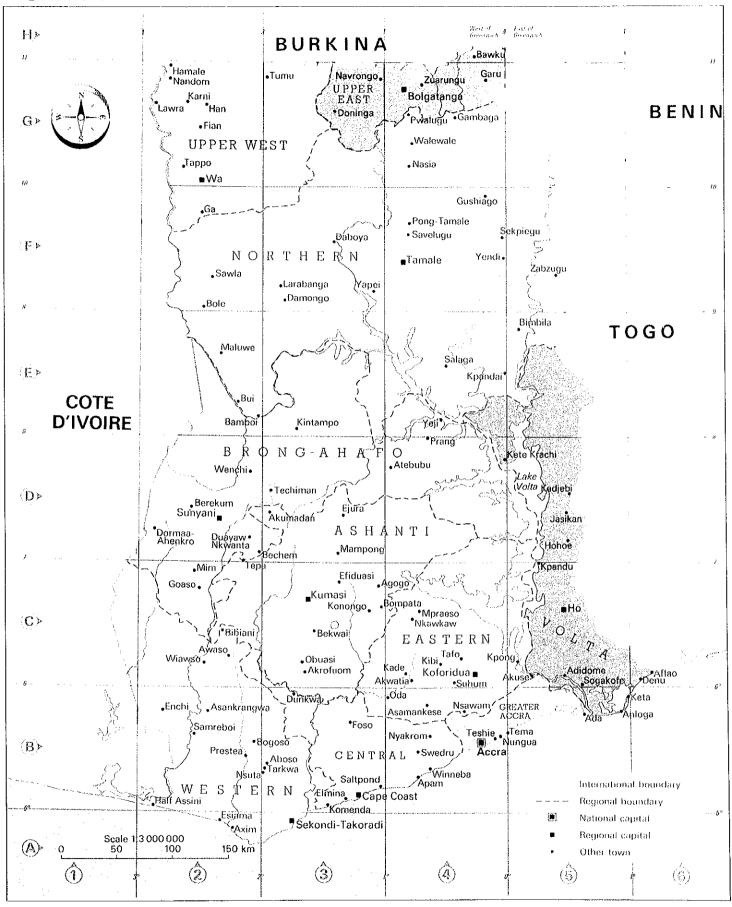


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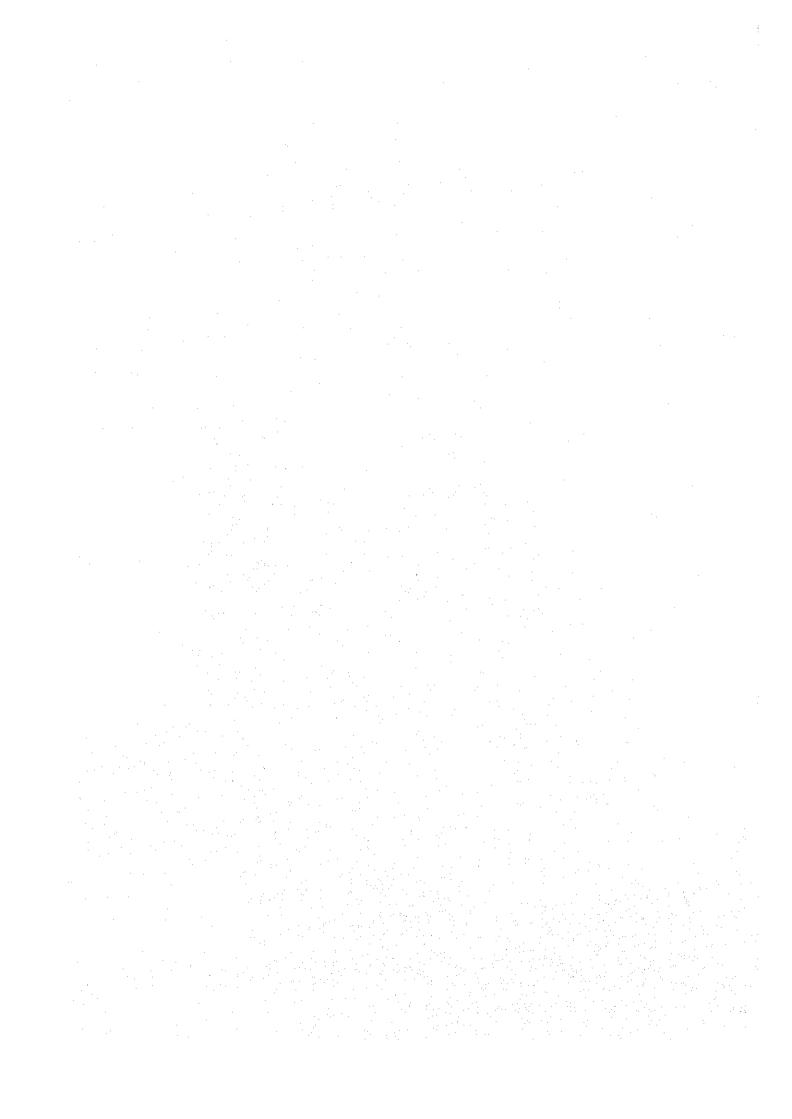


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Preface

Ghana's economy has recovered smoothly from the crisis conditions it faced in the early 1980s. Furthermore, the return to civilian rule in the early 1990s, among other factors, has contributed to the country's economic and political stability.

The public sector, though, is to be largely credited for the moderate pace of economic growth Ghana has registered to date. To be sure, several hurdles still confront Ghanaian efforts to achieve sustained growth powered primarily by the private sector. Also, for a country of its population size and economic scale, Ghana has received far more aid from the industrialized world and multilateral organizations than have other African states embarked on comparable programs of economic reform. Essentially, it appears Ghana has reached a critical turning point on its approach to the next century, a turning point demanding that it move away from its traditional aid-dependent track of stable growth and begin steering a course toward self-reliant growth aimed ultimately at shaking off its need for aid altogether.

If Japan and other donor countries are likewise aware that Ghana is entering a new phase of its development, it would seem that the time has come for them also to subject their aid policies to a thorough review.

On the whole, Japan and other aid donors must be prepared to support efforts in economic and social reform aimed at placing Ghana more firmly on a footing for self-reliant development. To that end, Japan should continue assisting Ghanaian undertakings in the arena of structural adjustment. From now on, though, it seems essential that the donor perspective on Ghana emphasize not only straight financial assistance, but also enhancements in the functional capacity of social infrastructure nationwide, as based on the cultivation of human resources and the establishment of necessary institutions. However, owing to a comparatively limited degree of experience with Ghanaian terrain and other factors, it remains doubtful whether Japan actually has the resources necessary for a realistic exploration of relevant aid options. Accordingly, I would like to emphasize the importance of heightening our awareness of the interdependent nature of our relationship with Ghana, and on that basis, striving to cultivate the human resources we will together need for these undertakings.

Japan International Cooperation Agency commissioned the establishment of the Study Committee for Development Assistance to Ghana in August 1994 and assigned it the objective of improving the effectiveness and suitability of aid from Japan, which now counts as Ghana's top aid donor. Made up of researchers from various fields, experts active in Ghana, and JICA personnel, the study committee met four times for a series of investigations into Ghanaian economic and social conditions and to explore suitable forms of Japanese aid.

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This report, the "Country Study for Japan's Development Assistance to Ghana," takes the conclusions of that exercise into account and brings together a number of recommendations based on manuscripts submitted by the committee members themselves. I sincerely hope it contributes to the effectiveness of Japanese aid to Ghana, as well as to Ghana's continued development.

I would like to take this opportunity to gratefully acknowledge the cooperation furnished by all involved in putting this report together. My sincerest thanks go to the Study committee members who worked so hard to finish their manuscripts in a short time, to the staff at the JICA Ghana Office who chased down and gathered valuable information, and to the staff at the Institute for International Cooperation, which supported our operations as Study Committee Secretariat.

February 1995

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I. The Course of Development

1. Economic and Social Conditions in Ghana: An Overview

1-1. Macroeconomy

(1) The Macroeconomic Track Record and Current Conditions

Among sub-Saharan nations, Ghana has been described as one of the most successful in implementing structural adjustments recommended by the World Bank and IMF. As macroeconomic indicators reveal, the country's GDP increased at an annual rate averaging over 4 percent in the period from 1983—when its structural adjustments began—to 1992. Essentially, Ghana sustained a growth pace of between 4 and 5 percent almost every year during that span, reversing the net decline of 3 percent it had averaged from 1980 to 1982. It also managed to put an end to the protracted deficit hitherto characterizing its fiscal balance; since 1986, the country has been running a surplus. Between 1987 and 1989, Ghana's foreign debt burden and balance-of-payments deficit reached crisis proportions. Nonetheless, the country surmounted that hurdle as well and in 1991 began raising funds on the international money market again, ending a hiatus of some 20 years. Ghana's GDP is estimated to have grown 6 percent in 1993, thanks largely to the expanded production of cocoa and gold.

However, trends of the past few years seem to leave the Ghanaian economy wanting in terms of stability. In particular, since 1983 the current account deficit in the country's balance of payments has been rising as a percentage of GDP. Exports as a share of GDP kept pace with the growth in imports up to 1989. Between 1990 and 1992, though, exports widened 16 percent, compared with a 25 percent gain in imports; that helps to explain the corresponding expansion in Ghana's current account deficit. In fact, the consumer price index, though on a downtrend, still averaged an increase above 20 percent increase on an annual basis over the same period. Furthermore, it is estimated that the inflation rate ran a high 24 percent in 1993.

The share of capital investment in GDP has been climbing, but financing for that purpose is substantially dependent on the flow of aid. From 1987 to 1989, Ghanaian private savings and fund transfers home from Ghanaians working overseas together amounted to 0.85 times the level of capital investment. From 1990 to 1992, the corresponding ratio fell sharply, to 0.41.

In terms of industrial structure, there has been little if any significant change in the total economy's weighting in farming. And manufacturing, and other productive sectors, which directly engages in production. The manufacturing sector accounted for 9 percent of GDP in the period from 1990 to 1992, a share essentially unchanged from the early 1980s. As to export structure,

between 1987 and 1990 cocoa accounted for 40-60 percent of total exports in value terms, proof that Ghana has yet to free itself from its heavy dependence on that mainstay export product. In comparison to international prices, domestic producer prices for cocoa have not climbed as much as had been anticipated, leaving growers with inadequate incentive to produce more. Although exports of gold and timber increased, manufactured goods have continued to supply practically no more than just over 1 percent of total export value since 1983. In effect, Ghana has little choice but to rely on exports of cocoa in the short run. It is worth noting, however, that given 1985 as the base year (1985=100), cocoa export volume measured a level of 129 in the period from 1987 to 1989, but then fell back sharply to 103 in the period from 1990 to 1992.

In any event, signs of structural change have begun to emerge. For instance, in 1990, exports of nontraditional products led by farm goods measured \$62 million in value, up strongly from their \$24 million level in 1986. Echoing favourable sentiment toward the country's efforts in economic reform, fund transfers from Ghanaians overseas have steadily picked up.

Outside the field of gold extraction, levels of foreign direct investment remain low; in effect, Ghana's economy is still weighted down by a heavy burden of foreign debt. Though it has been declining, in 1992 Ghana's debt service ratio measured 27 percent, a figure that is largely the outcome of debt rescheduling.

Since initiating its efforts in structural adjustment, Ghana has registered relatively bright performance in its macroeconomic fundamentals. Improvements in domestic investment and the savings rate, however, have been conspicuously slow to emerge. In effect, the problem is that the private sector has not demonstrated an adequate supply response. Indeed, if domestic investment is broken down into its public- and private-sector components (as a share of GDP), the private sector's investment rate is extremely low compared to that of the public sector.

Several factors can be cited as explanations for the low level of private-sector investment. Suspicions about the government's policies, for instance, have fed fears about pursuing new investments, per se. Shortfalls characterize various types of credit due to weakness in the country's financial sector. In addition, the savings rate is low, certain public enterprises still receive preferential treatment, and much of the country's infrastructure remains underdeveloped. To deal with these problems, in 1985 the Ghanaian government enacted a new investment code and in other ways has since taken action to remove systemic bottlenecks. Meanwhile, it has also shown headway in getting the financial sector into healthier shape, privatizing public enterprises, and pursuing infrastructure development.

Economic disparities amount to another major problem, one compounding the above situation. Though the overall economy has grown, the vast majority of Ghanaians remain mired in conditions of absolute poverty. Even in relative terms, the top 20 percent of the population in the highest income brackets earned 44 percent of all income between 1988 and 1989.

Having acquired common distinction as a veritable "Golden Triangle," the districts linking the capital of Accra and the port of Tema, the inland city of Kumasi, and the port of Takoradi on the west coast are rich in farm and mineral resources. By contrast, other areas such as the districts in the northern reaches of the country are limited in arable surface area, and thus, impoverished. In other words, serious economic disparities are evident not only between different social sectors, but between different geographic regions of the country as well.

Yet another factor influencing economic conditions is the population, which demonstrated annual growth averaging a steep 3.2 percent from 1980 to 1992. This has generated a number of problems ranging from food scarcity and a lack of basic social services to environmental depletion stemming from excessive logging, slash-and-burn farming, and other agricultural activities.

(2) Implementation of Development Programmes and Policies

In 1983, the Ghanaian government launched an Economic Recovery Programme (ERP) with the support of the World Bank and the IMF. The structural adjustment policies comprising the core of that programme have been implemented rather smoothly. Those efforts can be divided into structural adjustments for economic stabilization and structural adjustments in the strictly defined Their economic benefits have already been discussed in Section (1) preceding. As to headway in policy implementation, Ghana has done enough already in the realm of monetary policy for economic stabilization. In particular, since 1983. Ghana's currency, the cedi, has been consistently devalued as part of a drive to boost the international competitiveness of Ghanaian exports. The same point in time witnessed the start of a sharp narrowing trend in the negative margin that distinguished real interest rates, which eventually turned positive in the 1990s. That turnaround has raised hopes that the country will soon be able to mobilize savings for the purpose of development. Conversely, though, it appears the devaluation of its currency and the resulting uptrend in import prices have stoked inflation. However, due to heavy infusions of foreign aid, the devaluation of the cedi has not been effective in damping the flow of imports. In fact, so far in the 1990s, import growth has continued to outstrip export growth by a broad margin.

Structural adjustments (strictly defined) can be placed into three policy groups: open-door policies, liberalization policies for the domestic economy, and reform policies aimed at the public sector. Expressed in terms of balance-of-payments tables, open-door policies cover steps to liberalize both the service and capital accounts, not to mention the merchandise trade.

Ghana has shown satisfactory progress in several areas; in particular,

internationally it has eased or removed restrictions on imports and domestically it has scrapped price controls and other government controls. In the arena of public-sector reform steps were taken to privatize several large public ventures in 1994, including Standard Chartered Bank and six other firms in February, and Ashanti Goldfields Corporation in April.

Some efforts in public-sector reform remain insubstantial, however; for instance, the government has not reduced expenditures called for under its fiscal policies for economic stabilization. One factor substantiating that view is the growth trend since 1983 evident in the share of GDP attributable to the government's current expenditures (i.e., the government consumption component in national income accounts). From 1983 to 1986, that share averaged 8 percent, but widened to an average of 12 percent between 1990 and 1992. Expressed in terms of consumer prices, government current expenditure (consumption) expanded a real 16 percent from 1990 to 1992. In effect, key support for the 4 percent gain registered in GDP over that same period came from the government, not the private sector where benefits from the structural adjustment process had been widely expected.

Among sub-Saharan countries, Ghana ranks second only to Tanzania in number of corporations; many of those, moreover, happen to be inefficient in their operations. One reason is that the government has delayed the privatization process under pressure from vested interests. Due largely to past policies that attached special importance to the public outfits, most private-sector ventures still remain small-scale. In the years ahead, though, Ghana will have little choice but to rely on its privatized industries if it is to power growth in the manufacturing sector. In that respect, the country's own future development would appear to hinge largely on the amount of success achieved with the privatization programme now under way.

In the arena of market liberalization, government licensing frameworks for investment have had a restrictive impact, effectively blocking increases in the level of overall investment. The lack of transparency in screening procedures for foreign investment, together with a generally cool Ghanaian position on sales of land and other assets, are among problems effectively stifling investor interest in the country.

Finally, though the country in November 1987 announced and adopted a Programme of Actions to Mitigate the Social Costs of Adjustment (PAMSCAD) aimed at alleviating the impact of structural adjustment on the poor, insufficient budget funding has hampered the programme's progress.

As to development-programme frameworks, in line with the implementation of its structural adjustment programme Ghana adopted a 3-year programme of public works investment. That action signifies that the country had finally established a framework for the formulation of public works projects adapted to changes in the economy and consistent with goals of the structural adjustment

programme (strictly speaking, a policy framework paper [PFP] hammered out collectively by the Ghanaian government, World Bank, and IMF).

For the 3-year period from 1993 through 1995, 70 percent of the investment programme budget has been allocated to economic infrastructure projects. Areas receiving heaviest emphasis include roads (22 percent of total public works investment), transportation and communications (17 percent), energy (16 percent), and waterworks (11 percent). The bulk of the programme has been focused in projects for infrastructure maintenance and repair, particularly of roadways, the objective being to secure those elements of economic infrastructure essential to supporting the effectiveness of the structural adjustment process.

Other areas of spending priority include education (7 percent), agriculture (5.5 percent), natural resources (5 percent), and public health (4 percent). Substantial levels of spending have also been allocated to social services and productive sectors.

Initially, financing which supported the structural adjustments went forward under IMF supervision on the understanding that Ghana was by and large capable of repaying its debts. Accordingly, short-term standby loans were approved for the country in 1983, 1984, and 1986, followed by medium-term Structural Adjustment Facility and Extended Fund Facility financing in 1987, then Enhanced Structural Adjustment Facility financing in 1988. Since 1991, though, Ghana has been taken off IMF supervision, the reason being that it is considered to have surmounted the crisis conditions once posed by its balance-of-payments deficit.

Financing from the World Bank began with the approval of Sector Adjustment Loans (SECALs): in 1983 and 1985 for the imports aimed at reconstruction, in 1984 for the promotion of exports, in 1986 for manufacturing and education, in 1988 and 1992 for the financial sector, in 1990 for education again, and in 1992 for agriculture. It also approved Structural Adjustment Loans (SALs) for economy-wide undertakings in 1987, 1989, and 1991. As these details suggest, Ghana has received extensive and sustained financial aid in a broad number of fields.

1-2. Politics and Government Administration

(1) Overview

The decade stretching from the mid-1980s has witnessed a series of sweeping reforms on the economic front, coupled with far-reaching efforts toward change in the political and administrative arenas. Ghana's politics and government administration were marred by turbulence, instability, and corruption in the years following independence. Given that this was the single largest factor

behind the country's economic decline, demands for economic reconstruction and reform came as no surprise. Politically, Ghana gradually regained a measure of stability under the rule of a Provisional National Defense Council (PNDC). Ultimately, in accord with a new constitution, elections were held in late 1992, returning the country to civilian rule in January 1993. As measures in the general quest for economic reform, Ghana has moved administratively to overhaul its civil-service system and is exploring approaches that will enable it to more-efficiently utilize its limited fiscal resources. Given the multitude of hurdles it still faces, though, it apparently will be some time before the country finds lasting solutions within reach. Indeed, the regional decentralization programme Ghana has been pursuing since 1988 could be in danger of becoming little more than an empty shell unless the country finds the financial and human resources that decentralization itself entails.

(2) Political Stability and the Shift to Civilian Rule

If anything, turbulence and instability, as exemplified by repeated military coups, counts as the chief feature distinguishing Ghanaian politics over the quarter-century from the end of Kwame Nkrumah's administration to the debut of the PNDC. During that span, the country turned to civilian rule on two occasions; however, in both cases, the civilian administrations were deposed by the military before completing their term in office. This disconcerting shift from one administration to the next, together with the inconsistencies characterizing their economic management and policies on development, bore distinction as the single largest determinant behind the economy's deterioration.

The PNDC-led administration came into being at the end of 1981, when signs of rapid economic deterioration had become distinct. Conditions of serious instability ruled at the outset, for not only did the new government have a weak base of popular support, but internally it was marred by dissension over issues on economic policy. Ultimately, though, the socialist factions were purged from positions of power, enabling the government to push ahead decisively with economic reforms insisted on by the IMF. As a result, the economy moved back onto a sharp recovery track in 1984, a development that in turn fostered gradually solidifying support for the administration and its policies. Inspired by the democratization movement in Eastern Europe, calls for a return to civilian rule mounted in 1990. They lacked critical mass, however; the drive to transfer power back to civilian hands was thus led by the administration itself.

The head of the PNDC was Jerry Rawlings. Rawlings himself ran for and won presidential office in the civilian elections held in late 1992, effectively sustaining his position at the helm of government. Consequently, though the shift back to civilian rule ushered in a new government framework, the personalities and policies of the former military administration remained largely in place. Although one must avoid making hasty judgements on the basis of

a single election, through that election, the military administration that had ruled until then succeeded in winning the public's confidence and this thereby apparently enabled the new Rawlings administration to further solidify its base of support, at least for the near term. Considering, though, that economic reform was not even an issue during the elections, chances were that the administration would continue with the policy course established prior to the election.

(3) Destabilizing Factors

That is not to say, however, that destabilizing factors no longer exist. It is too early to say whether the new political system has taken root, given that the opposition parties have boycotted parliamentary elections. At the least, it is imperative that the next round of elections take place with the participation of the opposition. Though the prospect seems much more remote than in earlier days, rumors of another military coup remain widespread. Ethnic animosities in Ghana have not been that inflamed to date. Nonetheless, there is ample reason to believe that an election outcome could fan ethnic rivalries. For one thing, the country's political parties have all cultivated strong bases of support in particular districts or among different ethnic groups, and in many cases, have established alliances with influential figures in those districts or groups in order to garner votes.

Another factor that cannot be ignored is the potential obstructive impact the electoral system could have on the process of economic reform. Blatantly profit-oriented motives have coloured Ghanaian elections in the past. In the last election as well, there were some indications of a resumption in traditional forms of collaboration driven by expectations of post-election favours: political donations and soliciting of block votes, for instance. In 1992, civil-servant pay hikes and shrinking tax revenues helped fuel a steep surge in Ghana's fiscal budget deficit. There is sufficient reason to believe, though, that these developments were the manifestation of pre-election political maneuvering. Though the administration reversed itself and shifted to belt-tightening policies immediately following the elections, that kind of political logic runs counter to the original goals of economic reform; accordingly, its degree of influence is something that will have to be observed.

In any event, the direction of the economy itself will fundamentally be key to whether the new political system takes root, or whether the country can maintain a climate of political stability over the longer term. Since 1984, the economy has been growing faster than the population, but the question is whether it can keep up with the population's growth rate on into the future or not. Also, should the country's economic pie continue expanding at its marginal pace, how that pie is distributed will be another question bearing deep implications. The reason, essentially, is that any over-concentration of the economy's benefits in a particular district or social class could easily become another factor capable of spurring social and political unrest. To date, the

benefits and costs of economic reform have been rather unequally allocated. In the 1992 presidential election, that fact was made quite obvious by the urban vote, which was deeply divided between Rawlings and the opposition candidates.

(4) Administrative Issues

Due to the inefficiency of some administrative organs, the government is sometimes unable to adequately fulfill its stated role. Administrative inefficiency stems from many factors, most of which are deep-rooted and apparently difficult to solve. To be sure, as one element of its programme of economic reforms, the government has begun moving to overhaul various administrative divisions. This amounts, however, to a parallel quest for two different goals essentially difficult if not impossible to reconcile: namely, fiscal spending cuts and improved administrative performance. In reality, accomplishments so far demonstrated in curtailing expenditures by and large have not brought any gains in administrative efficiency.

When it gained independence, Ghana enjoyed higher educational standards than its neighbours; in that sense, Ghana enjoyed a comparative advantage in terms of human resources. However, progressive economic downswings eventually weakened the country's educational standards and contributed to brain drain as highly skilled individuals left in search of employment abroad. These trends in turn had a severe undermining impact on the quality of Ghana's civil servants and educators. Although the revival in the economy has prompted some expatriates to return home, Ghana still faces a shortage of people with the professional skills essential to efficient administrative operation.

Even so, in large measure the country clearly has too many civil servants and workers on public company payrolls. That redundancy is essentially the vestige of a drive initiated in the mid-1970s toward bigger government and the establishment of several new public ventures. In particular, Ghana witnessed a steep annual 14 percent surge in the ranks of its civil servants between 1975 and 1982. As it happens, many were appointments to superfluous posts obtained through personal connections. This saddled the country with a huge number of under-qualified individuals, many of whom filled low-level civil-servant positions. In addition, payrolls existed for quite a number of shadow employees, as well. As to be expected, the resulting government bloat fuelled a ballooning trend in the fiscal budget deficit and inhibited private investment.

To deal with these exigencies, and as one underpinning of its quest for economic reform, in the late 1980s Ghana took steps to overhaul its civil-service framework. First of all, it moved to cut payroll expenditures overall by discharging redundant workers: mid- and low-level civil servants in particular. At the same time, though, it sought to improve benefits offered by high-level posts and attract better-qualified individuals to them by widening the layers of pay-scale differentiation.

The first action, termed "Redeployment Programme," instituted annual cuts in redundant positions, beginning with the dismissal of 11,000 shadow employees in 1986. In the two-year period extending from 1989 through 1990, 26,000 civil servants and teachers were let go; as a result, the total civil-servant work force (excluding teachers) shrank from over 120,000 to under 110,000. Though the government is striving to help dismissed workers find new employment or return to agricultural activities in rural districts, urban job prospects remain bleak; as a consequence, many former government employees have opted to take up farming. Payroll cuts have also been pursued at many public enterprises; the public cocoa corporation in particular has seen heavy cutbacks. Though public opposition to these actions was initially anticipated, little has been observed. Hence, overall, the redeployment programme has progressed rather smoothly. On the other hand, difficulty in paying retirement allowances has become a major roadblock to privatization at many targeted public corporations.

In the meantime, headway has been shown toward improving the pay scale for civil servants. In 1986, a differential of four-to-one distinguished salaries for high-level and low-level civil servants; by 1991, that differential had been widened to ten-to-one. As one result, hiring of college graduates is up, particularly at the Ministry of Finance and Economic Planning.

Corruption and rent-seeking constitute another serious administrative issue. The Rawlings administration has taken a hard line on corruption, though; in addition, it appears the abolition of various economic controls, coupled with steps to improve benefits for high-level civil servants, has diminished opportunities as well as the motivation to engage in corrupt activities. However, given the cultural complications (namely, those having to do with the idea of distinguishing between private and official business, and meeting one's obligations to the community and society) the problem itself will be extremely difficult if not impossible to uproot.

(5) Efforts in Decentralization

Ghana is administratively divided into ten regions and 110 districts. Besides splitting the former Upper Region into Upper Eastern and Upper Western Region, the PNDC government created a large number of new districts. As elsewhere, the drive to decentralize has grown prominent in Ghana, too. Enacted in 1988, the Local Government Law aims to promote decentralization and establish administrative structures finely tailored to local needs. Among the more noteworthy actions, district assemblies have been accorded broad powers, including the authority to prepare and implement their own development programmes and raise the funds necessary for that purpose.

In reality, though, most district assemblies face severe shortages of the resources and manpower essential to the provision of finely tuned adminis-

trative services for development; this problem is especially prevalent in the economically and socially disadvantaged northern reaches of the country. What is more, citizens are able to pick only two out of every three parliamentarians through direct elections; the central government itself appoints the remaining third and governors. Also, development programmes must have the central government's go-ahead before they can move forward. Therefore, the central government still retains strong powers of control. As these circumstances suggest, achieving decentralization in the true sense of the term will demand efforts to reinforce administrative capabilities and enforcement frameworks at the local level, followed by the transfer of real power from the hands of the central government. However, in its June 1994 audit report on district assemblies, the country's Audit General gives a bleak portrayal of prospects for actually achieving these goals.

The report discloses, for instance, that tax collectors in eight of the 12 districts comprising the Central Region had been implicated in cases involving the embezzlement of public funds. It adds that many districts, having failed to curtail current expenditures, had used up over 80 percent of their budget allocations and accordingly shifted the burden to their development budgets, thus leaving many development projects in a state of neglect. On top of this, it notes that two-thirds of the region's districts failed to submit their annual budget reports on time, and that many of those reports were riddled with errors.

Unquestionably, in a country like Ghana, local government has an extremely important role to play in economic and social development affairs. Given current conditions, though, one must question the significance of striving for decentralization in the first place, not to mention whether local government fulfills an adequate role at this time. In effect, Ghana's most serious administrative ills are to be found at the regional level.

2. Development Issues

2-1. Restrictive Factors in Development Process

First of all, the scale of the country's foreign debt burden has become a restrictive factor. Moreover, Ghana does not have a sufficiently established industrial base that could help it pay off that debt in the short term. In other words, it has limited domestic resources available for mobilization toward development-oriented goals. Accordingly, efforts to eventually put the economy on a sustainable growth track will demand continued aid.

Second, Ghana does not currently enjoy advantageous conditions on the international market. Ghana's chief export is cocoa. However, given that production by other nations is up, the international outlook for cocoa prices does not appear very bright. Further, now that countries in East Asia and

Eastern Europe are leading the developing world's rapid drive toward economic liberalization, there is not that much potential for new, large-scale investments of North American or European capital in Ghana.

In view of these developmental constraints and future prospects, Ghana's number-one problem is the languishing state of its productive sector. Though they could be counted on to help the country build foreign-currency reserves, they are currently characterized by low productivity and a lack of diversification in products and export structure. As a consequence, Ghana is unable to pay off its foreign debt, and does not have an industrial base strong enough to power self-sustained economic development even with the help of external borrowings. It also lacks the domestic resources to fully finance its infrastructure needs or the provision of basic social services. Farming is one sector that is demonstrating growth in exports of nontraditional goods. Nonetheless, those exports so far account for a small share of the total; consequently, the country is still dependent on exports of cocoa, an item distinguished by low productivity growth. Although manufacturing supplies just under 10 percent of the country's GDP, its products want international competitiveness and account for only a little over 1 percent of total exports. Most foreign investment flowing into the country is focused in mining ventures. With this production structure, cocoa, gold, and timber now account for the vast bulk of exports. Therefore, the Ghanaian economy is easily impacted by fluctuations in international prices for these three export items.

Accordingly, instability in macroeconomic fundamentals counts as the second-biggest problem. Expectations are that the external debt will continue to weigh down heavily on Ghana for some time to come. Therefore, in the short term, the balance-of-payments deficit will effectively inhibit the country's economic development. With economic liberalization, imports have increased. However, due to the above-cited weaknesses in productive sectors, exports cannot be expected to demonstrate significant gains any time soon.

The unbalanced nature of economic development counts as Ghana's third-biggest problem. To be sure, in general macroeconomic terms, the country's efforts in structural adjustment appear to be succeeding. Nonetheless, half the population lives in absolute poverty and has yet to benefit significantly from those gains. Though Ghana has demonstrated comparatively fast economic growth since 1983, the poor are not an active part of the development process.

In addition to the production-related issues listed thus far, Ghana faces yet a fourth serious problem: inadequacies in the provision of public education, public health and medical care, and other social services. As human resources development supported by good basic education demands a lengthy period to obtain results, Ghana's economy could ultimately be adversely impacted unless proper priorities are set. Under the Economic Recovery Programme launched in 1983, Ghana placed its policy priorities on improvements in its economic sectors, but at the expense of education and other social services. Under the

second phase of the ERP (1987-1989), though, the government came under pressure to take action toward remedying social inequalities. Living standards remain generally poor. One legacy of the colonial period is that Western settlers pursued comparatively less production-related activity than was witnessed in East Africa. Annual population growth in Ghana averaged a relatively fast 3.2% between 1980 and 1992. Action is needed to curb that pace; otherwise, the burgeoning population could become a drag on the country's future economic development.

2-2. Development issues

(1) The Cultivation of Industries that Can Contribute to an Improved Balance of Payments

In the short run, the task of servicing its external debt means that Ghana will have few resources available that it can devote to development-oriented goals. For that reason, it must strive for efficient resource allocation through continued efforts in structural adjustment. Toward that end, it will be crucial to push ahead firmly with the adoption of new products (including crops) and technologies, strategies to lure in foreign capital, and the promotion of exports. Over the longer term, however, the task of bringing its structural adjustments to culmination and putting the economy on a path of sustainable growth will demand that Ghana cultivate industries capable of earning foreign exchange. Given its present level of economic development, Ghana for that purpose will have to depend on productive sectors: namely, agriculture, mining, and manufacturing.

In the short or medium term, those goals will require that the country strive to revitalize the large private corporations that handle its three key exports: cocoa, gold, and timber. Deregulation will be essential to that undertaking. It will also be necessary to improve management at inefficient public enterprises, which comprise a significant share of the productive sector. In some cases, depending on the firm, privatization will be the answer. However, privatization and the introduction of foreign capital must be pursued in a manner that does not stifle native capital formation. First of all, though, Ghana must cultivate new industries capable of supporting the domestic economy. Toward that end, it must explore ways to lift the domestic savings rate as a means of generating investment resources. This in turn will demand efforts to expand short- and long-term credit through enhancements to the country's financial sector. On that note, it will be essential over the longer term to nurture small or medium-sized businesses, and for Ghanaians themselves to improve overall productivity in productive sectors, and to diversify the structure of production. As it happens, the government has begun extending financial assistance to Ghanaian corporations through a 10 billion cedi Business Assistance Fund set aside under the fiscal 1994 budget.

Developing human resources for Ghana's productive sectors will demand refinements in vocational training and secondary school education over the medium and longer term. In the years ahead, rising labour costs will likely decrease the international competitiveness of products from East Asia and other developing areas of the world that are currently the chief targets of foreign investment. It is therefore crucial that Ghana move to develop its supply of skilled human resources now if it is to provide incentives to multinational capital interests that come in search of more-competitive sites for their manufacturing bases.

Two additional steps will be critical to the creation of a climate that will help to improve Ghana's productive sectors over the long run. One is infrastructure development. In the short run, priority should be placed on the rehabilitation of roads and other existing infrastructure, and on institution-building for more efficient management and operation of existing facilities. Further, to avoid growth in its external debt, Ghana should pursue new projects in infrastructure development that afford a major, positive impact on exports and industrial output. Secondly, to respond quickly and effectively to changes in the economic climate, Ghana must learn to be more effective in formulating and implementing public investment programmes and other development projects. Further, the country should work long-term to develop the human resources who will be involved in the promotion of new industries and the administration of development projects, per se.

However, Ghana has limited economic resources available for development. Therefore, to foster growth in the national economic pie, it is crucial that it focus its investment priorities in regions where economic activity is strongest and in underdeveloped regions that possess major potential.

(2) Rural Development and Poverty Alleviation

Current conditions seem to rule out the possibility, in the short or medium term, of Ghana paying off its outstanding external debt or pushing exports beyond the corresponding growth pace in imports. Population growth and urbanization are likely to aggravate the country's poverty-related difficulties. Therefore, while cultivating industries capable of promoting export growth, Ghana will need to pursue antipoverty measures. Furthermore, until its political systems become fully democratized, Ghana should probably also devote its energies to antipoverty measures aimed at preventing the democratization process from being blunted by the social and political impact of structural adjustment.

It should be noted, however, that structural adjustments have already made more headway in Ghana than in other African states. Therefore, the focus of Ghanaian antipoverty measures should be placed on harnessing the productive potential of the impoverished classes and fostering their participation in the development process. That focus means that development priorities should be placed on the rural communities in which the vast majority of impoverished citizens live.

First of all, steps are needed to bolster social services that have suffered to the advantage of the structural adjustment process. This is something that must be acted on immediately, for the benefits of human resources development will not emerge in the short-term. At present, it is the government's view that Ghana has moved from economic reconstruction into a phase aimed at fostering new economic growth. On that understanding, it has made human resources development a top priority of its economic reform policies for sustainable growth.

In education, the priorities of government policy should be shifted from higher education to primary education, and in public health and medical care, from sophisticated medical treatments to preventive care. Echoing efforts already under way to eliminate inefficiency in the educational arena, in 1987 the government launched a new programme of educational reforms designed to foster the spread of basic education.

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II. Framework for Japan's assistance to the Republic of Ghana

1. Basic Direction of Japanese Aid

As noted earlier, Ghana has implemented a structural adjustments with the advices from the World Bank and IMF, and is working to build a more market-driven economy. Further, it is striving in earnest to establish a pluralistic political democracy based on a multiparty system. However, none of these goals can be achieved quickly; though the country has already posted some notable success, it still confronts an array of difficult hurdles. As their basic goal in providing aid, donors such as Japan must assist Ghana in its pursuit of these economic and social reforms. On that understanding, Japan should continue giving support to Ghana's structural adjustment policies.

In subjecting the basic direction of Japanese aid to practical scrutiny, the following points deserve special attention.

Cultivating a healthy private sector will be essential to the promotion of a market economy, and small-scale farming and small or medium-sized nonfarm businesses will comprise its core. Further, steps must be taken to create an environment conducive to the utilization of the productive potential of Ghana's human capital, which will assume a leading role in industrial production. Therein lies the role of government administration. Accordingly, in exploring the basic direction of aid, it is important to pursue the natural synergy of a two-pronged approach comprising human resources development and the creation of a viable business climate. The task of creating a viable business climate demands not only administrative reform, but also an emphasis on assisting Ghana's self-reliant efforts to revitalize its economy by placing priority on the maintenance and enlargement of existing infrastructure.

In view of the above points of emphasis, and in line with Chapter I, Section 2, "Principal Challenges and Basic Direction of Development," this chapter will explore the basic direction of Japanese aid from two fundamental perspectives, and arrange them in terms of the short-, medium-, and long-term challenges faced in each area of aid. In this paper, however, aid priorities will be ordered in terms of Ghanaian development challenges deserving sustained aid over the short term (2 years), medium term (5 years), and long term (10 years).

Basic Direction Number One: The Industrial Development that Contributes to Sustainable Growth

For now, Ghana should continue to receive non-project financing aimed at compensating for the deficit in its balance of payments. Further, until the country moves forward to self-sustained growth, it will require continued support for its efforts in structural adjustment. Actions to strengthen the functional capacities and internal structures of its public institutions including ministries and agencies will also demand assistance. Ghana may need aid programmes that will help it formulate development plans and direct foreign aid to specific geographical zones on a priority basis.

It will be vital to draw up medium- and long-term development programmes that incorporate an emphasis on the cultivation of small or medium-sized business enterprises as the foundation for the future sophistication of Ghana's industrial structure. Toward that end, Japanese aid should begin with support for the formulation of programmes aimed at cultivating the industrial base in selected fields and geographical zones.

Aid issues are addressed below in terms of two production sectors: (1) infrastructure development and mining and manufacturing industry, and (2) agriculture, forestry, and fisheries.

(1) Infrastructure Development and Mining and Manufacturing Industry

In the arena of infrastructure development, for now, more priority should be given to transport infrastructure than to communications or electric power. Though enhancements in the latter two areas will be essential to advances in the manufacturing sector, transport infrastructure improvements will boost the international competitiveness of Ghana's primary-product exports. Still, to offset the currently tight conditions characterizing electricity supply and demand, urgent action is needed to lift operating efficiency at existing power plants. Next to transport infrastructure, priority should go to communications: not only to rehabilitate existing facilities but to pursue the development of new communications systems outright. Financial aid should be extended for the construction of new power-generation plants in anticipation of long-term growth in demand stemming from efforts to promote manufacturing ventures. In addition to enhancements in hardware, infrastructure development will demand improvement of organizational structures and the human resources to run it.

Efforts to develop the mining industry essentially should be led by the private sector. Aid for that undertaking will likely be indirect and have its priorities focused chiefly on enhancements in infrastructure. Experience-based Japanese technical cooperation with work aimed at improving industrial productivity and strengths in management and market surveys will probably be anticipated as a means of helping Ghana build competitive new manufacturing industries to support its economy in the years ahead. Lifting productivity, however, will demand not only the introduction of new manufacturing technologies, per se, but also an intensive pursuit of advances in systems of quality control. That latter task will call for the transfer of expertise that enables Ghanaian exporters

and manufacturers to develop a better grasp of conditions in overseas markets and fine-tune their manufacturing processes in response.

Pollution from mining runoff has taken on serious proportions in Ghana. Steps to deal with that as well as the pollution likely to result from the construction of new power plants and manufacturing operations in the years ahead will demand active levels of assistance backed by the lessons of Japanese experience in this area.

(2) Farming, Forestry, and Fisheries

In the near term, to help minimize damage and losses to agricultural products before they reach the marketplace, Japan should assist in market surveys, efforts to better understand distribution and retailing systems, and work to build modern storage and processing facilities. Over the medium and longer term, the goals of product diversification and heightened productivity will demand improvements throughout the farm sector as a whole. As one form of aid toward these ends, Japan should cooperate in the formulation of a national agriculture development programme as well as master plans for undertakings in irrigation, forestation, and other sub-sector projects. Further, assistance occasionally combined with financial support will be needed for research and development on specific agricultural technologies for production, storage, and processing, and on comprehensive agriculture-related themes that encompass other sectors.

Descrification in Ghana's northern reaches and soil deterioration of farmland have become especially severe problems. Assistance aimed at dealing with such natural-resource issues also deserves Japanese cooperation.

Basic Direction Number Two: Improved Social Services and Wider Participation by the Poor in the Development Process

Certain segments of Ghana's population have been adversely impacted by the structural adjustment process or have yet to share in any of its benefits. It is therefore crucial that future efforts in aid be pursued from the viewpoint of promoting wider participation by these classes in the development drive, and as they are the human capital that will be responsible for shaping Ghana's long-term future. Aid priorities are addressed below in terms of three dimensions: social development, human resources development, and the provision of public health and medical care.

(1) Social Development

Social disparities exist on several levels in Ghana, and steps to remedy them should not be forgotten in the drive for heightened economic growth. The disparities can be roughly broken down into three types: those between rural and urban zones, between different areas, and between the sexes. Unless action is taken to alleviate them, they will likely have a negative impact on Ghana's long-term development.

Research on specific agricultural technologies supportive of small-scale farming ventures and of women in rural communities, as well as programmes aimed at fostering the spread of such technologies, demands Japanese assistance in terms of both financing and personnel. Furthermore, improving the quality and quantity of social services in impoverished urban zones will, at a macroeconomic level, require the formulation of master plans for waterworks and solid waste-management plants, together with broad-ranging aid for its institution-building. On a smaller scale, several impoverished urban zones could conceivably be selected as targets for assistance to be furnished in tandem with a variety of other aid schemes.

Priority should likewise be placed on developing all types of basic social infrastructure and supplying materials and equipment for that purpose. To facilitate better access to education, health care, and other social services and link economic activities in rural and urban zones, it will also be necessary to supply strategic aid for the construction of feeder roads, albeit with due attention to conditions characterizing the country's national highway network. This will ensure that rural farmers and women enjoy the benefits of structural adjustment efforts.

(2) Human Resources Development

In striving to lay the groundwork for undertakings aimed at securing and training the human resources that will bear the task of cultivating new industries in the years ahead, it is imperative that emphasis be placed on education.

Work to improve basic education will be of top priority. In rural areas, it is currently difficult to impart fundamental scholastic abilities on the basis of school education alone. For that reason, community and home-based education, including programmes for adults, will be vital. Given the strained state of government finances, long-term, sustained programmes in basic education are now considered mandatory. Taken together, these factors suggest Japanese aid should place priority on basic education, with assistance in the provision of educational facilities and equipment, and teacher training.

Further, it seems imperative that the curricular content of secondary and higher education be more reflective of actual conditions in Ghana and oriented toward the training of human capital essential to the cultivation of new industries. Toward that end, it will be necessary to consider steering aid toward selected goals, such as the training of technical specialists, or into selected fields such as medical care or agriculture, manufacturing, and other productive sectors.

In the arena of educational administration, education reforms should be continued, and decentralization should be pursued. As one element of Japanese aid, it will be necessary to consider deploying advisers to help with the formulation of education development plans.

(3) Public Health and Medical Care

In the immediate term, infrastructure development programmes will be essential to upgrading basic health care and public hygiene in rural communities. To that end, Japanese aid should be focused in the construction of small-scale health clinics, wells that provide safe water supplies, and access roads to existing facilities.

However, as with human resources development, it will be necessary to furnish sustained, long-term aid aimed at generating fundamental solutions to Ghana's health-care problems. Improved maternal and child health care and family planning aimed at solving population issues, efforts to prevent the spread of infectious disease (particularly AIDS), and improved nutrition for women and children in poverty groups all count as goals deserving special priority. To tackle these priorities on a comprehensive basis, Japanese aid should probably assume a project-type approach focused chiefly in northern area that are home to similar target groups. Ghana needs research that is closely coupled with health-care administration. For that reason, it also seems imperative that Japan work closely with Ghana's Ministry of Health to continue providing and developing assistance in areas of health-care research that have been pursued to date.

2. Aid Priorities

2-1. The Macroeconomy and Development Programmes

(1) Long-Term Aid Priorities

A. Cultivating Small and Medium-sized Enterprises

Manufacturing still accounts for a marginal share of Ghanaian economic activity. So far even in the 1990s, manufactured goods have amounted to no more than just over 1 percent of the country's total exports. In fact, as trends since the 1960s illustrate, Ghanaian industrial structure remains heavily weighted in agricultural products and timber processing. Structural adjustments, however are currently under way, and steps to open up the market to imports have driven many domestic manufacturers out of business. As a result, hopes are now pinned on luring in more foreign investment.

Export prices for farm produce cannot be expected to improve significantly

in the future (World Bank projections). That prospect demands that Ghanaian industrial structure shift from primary industries to a more sophisticated level focused in manufacturing. Though the Ghanaian government did establish a business assistance fund for the cultivation of new industries under its fiscal 1994 budget, action from a long-term perspective is needed to foster the development of small and midium-sized enterprises.

Deregulation and other steps toward the creation of suitable conditions for these efforts are moving ahead under the country's structural adjustment drive. Hence, for now, Japanese aid should begin with assistance in putting together industrial promotion programs limited to selected industrial sectors or geographical areas. In pursuing development studies for that purpose, it would appear emphasis should be placed on third-country programs of cooperation that utilize the capabilities of existing R&D organizations, the International Institute of Tropical Agriculture (IITA), or other institutions. This will likely count as the first step toward the establishment of comprehensive industrial promotion programmes after Ghana has completed its structural adjustment process. Other, specific actions will include development financing for micro, small and medium-sized business ventures, as outlined below.

B. Supporting the Financial System

Poor access to financing has emerged as one of the chief obstacles inhibiting efforts aimed at spurring private-sector investment. In view of the lessons learned from aid programs to date, revolving funds based on two-step loans appear to be an effective means of dealing with that particular situation. Japan has substantial experience in providing such types of financial assistance, mainly to recipients in Southeast Asia. Accordingly, expectations are that it could furnish effective and efficient assistance of this kind to Ghana, including help on related matters of a technical nature. Realistically, though, the effectiveness of this type of aid depends on the level of maturity attained by the financial institutions toward which it will be mostly directed. At this stage, Ghana does not seem ready for such aid, for its financial system is still underdeveloped compared with recipient countries in Asia.

Nonetheless, Ghana is pushing forward with work to develop and modernize its financial sector, as one of its structural adjustments. It is likely that Japan will keep an eye on progress in that area and on that basis explore the potential for providing such forms of aid at some point in the future. At present, financing the development of micro, small and medium-sized enterprises with a share of the counterpart funds resulting from structural-adjustment financing would seem worthy of Ghanaian consideration.

C. Strengthening Development-Project Planning and Implementation at the Local-Government Level

Approximately half the Ghanaian population lives in conditions of absolute poverty; further, the majority of impoverished citizens inhabit rural farm communities. Improving income levels and the quality of life for this segment of the population will first demand action to strengthen the administrative ability of local governments in handling development projects.

In particular, aid for that purpose would be expected to comprise the establishment of frameworks for project planning, implementation, monitoring, and appraisal, together with technical cooperation aimed at bolstering the ability of local governments to perform their duties in each of those areas. Japan Overseas Cooperation Volunteers could conceivably be dispatched as advisers in these undertakings. Moreover, the overall effectiveness of such work would be heightened if it were limited to selected areas: for instance, the Western Region and Northern Region (see (2)-D in the section below).

(2) Short-Term Aid Priorities

A. Nonproject Financing for Structural Adjustments Aimed at Compensating for the Current Deficit in Ghana's Balance of Payments

Having observed a certain measure of success with Ghanaian structural adjustments initiated at the macroeconomic level in 1983, since the late 1980s the World Bank has shifted emphasis to sector adjustment loans (SECALs).

Therefore, to encourage sector-level adjustments, financing aimed at compensating for the current deficit in Ghana's balance of payments should be extended in coordination with World Bank loans. Such financing will be needed until levels of foreign private-sector investment and financing in Ghana show substantive growth. Loan assistance will be the preferable mode of aid, given that Ghana has already weathered its debt crisis.

Macroeconomic stability will clearly be a condition for future, sustained economic growth in Ghana. Indeed, that condition will demand continued assistance with the structural adjustment process until Ghana has moved its economy onto a footing for self-sustained growth. Ghana is one target of the Special Programme of Assistance for Low-Income Debt-Distressed Countries in Sub-Saharan Africa (SPA). Hence, loan assistance coordinated with other donor countries and under that programme framework will likely be effective.

B. Strengthening Policy Formulation and Development-Project Planning and Implementation at the Central-Government Level

Ghana's Ministry of Finance and Economic Planning and the World Bank are currently responsible for everything to do with the formulation of public-

works investment projects. However, sectoral government offices and the public institutions under their supervision generally do not command sufficient ability or expertise in the arena of development project planning or implementation.

Therefore, it would seem expedient to furnish technical cooperation designed to bolster the ability of central government agencies to perform their duties in project planning, implementation, monitoring, and appraisal, and to help establish frameworks essential to those goals. As it happens, coordination between different sectoral agencies is poor; gathering even basic information remains a task largely beyond their capability. Consequently, they also need assistance in gathering information that is currently accessible, and computers should be considered one of the tools for that venture. However, should Ghanaian government authorities prove unreceptive to the idea of foreign nationals becoming directly involved in their project affairs, it would be advisable that aid in this area be limited to technically oriented services involving the use of computers. Examples would include the input of data on the details of each project, or the compilation of databases that could be used to monitor project progress. Potential targets of such assistance would include government ministries and agencies concerned with those fields that have received substantial levels of Japanese aid to date: for instance, education, public health and medical care, transport, and construction.

Further, it would appear the success of privatization programmes now in progress will be instrumental in determining whether public companies ultimately privatized become investment targets at the outset. Feedback on problems with privatization efforts to date, as well as conditions confronting private-sector firms, should be reflected in current privatization programmes. Further, long-term sector-specific policies should be established and privatization targets and schedules set on the basis of those policies. The World Bank is now exploring approaches to maximize the effectiveness of privatization. Japan, for its part, needs to draw on its own experience, become actively involved in dialogue on this issue, and ensure that the outcome of that involvement is effectively reflected in future privatization programmes. Tangible steps would conceivably include technical cooperation with programme formulation and the co-financing with the World Bank.

C. Applying East Asian Development Experiences

Ghana and other African countries have demonstrated interest in learning more about the development experiences of East Asia (including Southeast Asia). The experiences of the fast-growing East Asian region would be of informative value to Ghana, an agrarian-led country with an as yet relatively unsophisticated industrial structure. Comparisons with East Asia pervade the "Ghana 2000 and Beyond" paper issued by the World Bank in 1993. Sectors given close attention include manufacturing and agriculture, as embodied in

the Green Revolution.

Japanese aid in this area could conceivably comprise lectures and seminars by instructors on short-term assignments to Ghana; training programmes in Japan and other East Asian countries for Ghanaian government officials, private-sector business people, and educators alike; and basic research aimed at identifying areas where the East Asian experience has applicable value. In particular, experiences with industrial cultivation and human resources development should be shared with Ghana.

D. Formulating Comprehensive Development Programs for Specific Regions

Prioritized allocation to specific regions would be one desirable means of more effectively and efficiently capitalizing on limited development and aid resources. Examples of regions deserving such priority include the northern area, which remains underdeveloped in practically every respect, and the Western Region, which has earned World Bank recognition as an underdeveloped area that nevertheless possesses enormous potential.

Development undertakings in the country's northern area will demand a long-term commitment. Japan, however, has little experience with the terrain or climate; hence, in pursuing comprehensive development programs for the northern zones, it would be advisable to utilize the services of a third-country expert organization such as the International Institute of Tropical Agriculture (IITA).

In the short term, development programs that stress direct economic benefits would be the sensible choice for the Western Region. In view of Ghana's level of ability to utilize aid, its progress in gathering essential background data, and other details influencing the feasibility of implementation, it is recommended that the Western Region be given top priority, with projects in the northern part coming next. One likely undertaking in the Western Region would be to conduct a comprehensive development survey of the region bounded by the two railways connecting Takoradi port with Kumasi and Accra. The Western Region has extensive manganese and gold deposits, forest resources, and farmland in cocoa and other crops. Accordingly, it would be advisable to lay emphasis on infrastructure development aimed at better utilizing these resources, rural development backed by long-term vision, and environmental protection for sustainable growth, and in line with that multifaceted focus strive to put together an exhaustive development strategy, identify priority fields, and select promising projects.

The establishment of such programs would allow for consistency in the implementation of future projects. In addition, future Japanese aid could be based on the findings of development surveys such as the one cited above.

E. Fostering Dialogue and Bolstering Strengths in Project Formulation

(i) Fostering Improved Understanding of Japanese Aid Strategies

Seeking Japanese assistance with quality projects will demand that Ghana have a good understanding of Japanese aid strategies. In some respects, though, that understanding appears to be lacking at Ghanaian government liaison offices and other agencies concerned. This situation suggests Japan should use opportunities to satisfactorily explain its aid strategies to Ghanaian authorities.

(ii) Bolstering Strengths in Project Formulation

Ghana's Ministry of Finance and Economic Planning is the government's window of contact for the reception of foreign aid. However, it suffers weaknesses in administration and in its ability to screen prospective aid projects. Also, one problem on the part of donor nations is the lack of coordination on aid projects.

The following measures would appear to have value from the standpoint of remedying the above situation and identifying or formulating quality aid projects in the future.

- a. Dispatch individual experts to give advice on macroeconomic themes in the Ministry of Finance and Economic Planning, and foster a climate for closer, sustained dialogue between the ministry and the Japanese Embassy and JICA office in Ghana.
- b. Under Japanese initiative, within the Ministry of Finance and Economic Planning, establish a council for "donor-nation liaison and coordination" led by the above-mentioned experts and assign it the tasks of aid-project screening and coordination. This arrangement would enable the Ministry to tie its Public Investment Programme to more-practical, more-viable development projects, and would be an extremely valuable service to Ghana and donor nations alike.

2-2. Infrastructure

Expectations are that official aid, and official development assistance in particular, will be chiefly effective in priming heightened levels of private investment. Japan should extend aid that helps to cultivate a peripheral climate for such investment. Focusing its aid priorities in transportation, communications, energy, and other areas of basic infrastructure will for that reason be crucial.

(1) Long-Term Aid Priorities

Thanks in part to enthusiastic assistance from donor nations, Ghana now

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has a fairly well-developed transportation infrastructure focusing on its road system. Nonetheless, weaknesses characterizing its institutions responsible for implementation have been cited as partial bottlenecks to infrastructure project effectiveness. That state of affairs would seem to demand that Japan actively strive to help those institutions strengthen their financial health and cultivate needed human resources. Japan would conceivably provide this form of advisory or soft support through the dispatch of experts and instructional programmes for trainees. In addition to technical experts, though, there would also be value in exploring the prospect of dispatching financial experts or economists trained in the formulation of road development programmes.

In the energy arena, Ghana should pursue several objectives: namely, (i) supply-side stability (e.g., by diversifying its sources of generated power or establishing oil stockpiling facilities); (ii) expanded supply capacity (e.g., by developing gas and oil resources or building new or rehabilitating old powerplant facilities); and (iii) more-efficient energy utilization. Among these initiatives, efforts to build oil-stockpiling facilities and other strong income-generating structures, or to exploit new energy resources, would essentially have to be financed on a commercial basis with private-sector capital. Moreover, it should be noted that projects aimed at lifting energy efficiency appear to be difficult as targets for official aid. Conversely, over the longer term, the country's existing power grid will not likely be able to meet growth in electricity demand driven by the economic expansion now under way. Given that prospect, Japan will probably place stress on the construction of new power plants reflecting anticipated growth in demand, and strive to help Ghana stabilize and expand the capacity of its energy supplies. In view of the scale of that initial investment and the length of gestation required before results emerge, low-interest loan assistance would appear to be an appropriate approach. Pursuing these undertakings at the regional level will probably demand that priority be placed on the Western Region, considering that no power-generation facilities have been sited there so far. Aside from contributing to Ghana's total electric supply capacity, power-plant projects in the Western Region will also be effective in minimizing the power loss stemming from the long-distance transmission of electricity from the eastern area.

Power-plant projects in Ghana would also conceivably contribute indirectly to environmental improvements, for the transition to widened electricity consumption can be expected to curb reliance on firewood and charcoal. To be sure, though, due to their atmospheric emissions of soot and oxides of nitrogen and sulfur, conventional forms of power generation will also have a negative impact. Naturally, that means adequate attention will have to be given to the environment. Japan, of course, should assume an active role in future environmental projects. However, in doing so, it will find it essential to choose between grant or loan assistance, depending on project scale and content.

(2) Short- and Medium-Term Aid Priorities

During the transitional phase leading up to the development of new manufacturing industries, the Ghanaian economy will have little choice but to maintain its dependence on cocoa and other farm products, along with mineral products, as leading sources of foreign exchange. Accordingly, from that perspective, it would appear more emphasis should be placed for now on the development of transportation infrastructure rather than manufacturing-oriented communications or electrical power infrastructure, the reason being that gains in the former could be expected to strengthen the international competitiveness of the above-cited primary goods through reductions in shipping costs. It is also worth noting in this regard that support for infrastructure projects in the transportation sector would have a beneficial ripple effect on other economies, for Ghana's transportation network also functions as a pipeline for exports from and imports into Burkina Faso and other neighbouring, backwater countries.

It is difficult to provide assistance every year to all the countries in Africa that deserve it. For that reason, cooperating in Ghanaian and other priority recipient-country projects that afford benefits to other countries as well should be one of Japan's goals. As in the past, grant-based assistance likely will be the aid strategy of choice for projects essentially aimed at improving rural roads and urban roads and bridges. Loan-based assistance, however, would probably be considered appropriate for efforts to improve trunk highways, port and harbour facilities, airports, and other structures demanding a comparatively heavy initial investment.

At the next stage, emphasis should be placed on the development of communications infrastructure. In contrast to transportation infrastructure, Ghana's communications network remains sorely deficient. Consequently, in addition to work aimed at repairing and improving existing facilities, projects to build new switchboard exchanges, lay more transmission lines, and in other ways augment the country's communications grid appear mandatory. In view of their potential earnings power, projects in communications infrastructure essentially will be targets of aid in the form of loan assistance.

As to electric power, poor rainfall has contributed to strained supplies. To cope for the time being and take emergency action aimed at solving its current capacity shortfall, Ghana is now preparing projects to build barge-based generating plants. Active Japanese cooperation with those projects and with work to improve the country's existing power plants would be of value.

One portion of aid under the SPA framework is designed to improve Ghana's balance of payments during the structural adjustment process. Another portion, though, has been allocated to "sector investment," which is aimed at heightening the effectiveness of investment by consolidating project aid from various donors on a sectoral basis and linking it clearly to the public-works budgeting process. Given that the Japanese government has been an enthusiastic proponent of

this arrangement, Japanese aid aimed at actively pursuing infrastructure projects through that same scheme would appear worthwhile. As it happens, the Ghanaian government is presently putting together a highway development programme that will draw on the above framework. Assistance in that undertaking is one action Japan should seriously explore.

2-3. Mining and Manufacturing

(1) Long-Term Aid Priorities

Mining currently accounts for a larger share of total exports than does manufacturing. Nonetheless, growth in the manufacturing sector will be essential to the accelerated and ultimately sustained growth of Ghana's economy overall.

The manufacturing sector faces several problems: externally, in terms of high interest rates and an influx of secondhand goods, and internally, in terms of weaknesses in technology and management and a lack of market orientation.

External problems should be addressed by Ghanaian government policy, and are not matters in which Japan would normally be directly involved. However, public-private sector ties did contribute significantly to the advances posted by Asia's NIEs. On that note, Japan could furnish indirect assistance by drawing Ghanaian attention to the importance of strong public-private sector ties, and of effective policy management based on those ties. As one action along these lines, Japan could actively express its views on proposed modifications in government policy whenever it participates in co-financing the World Bank's structural adjustment programme.

Erasing internal bottlenecks, on the other hand, is an area where Japan possesses significant experience as well as expertise that may seem unconventional by Western standards. One possible strategy would be for Japan to continue providing technical cooperation aimed at addressing technical deficiencies in Ghana's manufacturing sector, yet going beyond that scope and employing public financing to dispatch private-sector management consultants who could help with the bottlenecks in management and market orientation. Dispatching private consultants in private companies, though, could prove troublesome if not impossible, given the nature of public aid programmes. Still, it does seem feasible provided the targets are state-run companies prior to privatization, or the assistance would have an impact on an entire sector. In addition to the dispatch of experts, as outlined in the cooperative strategy ventured above, invitations to trainees would also prove effective. Since 1989, the World Bank has been pursuing a programme for the introduction of quality-control circles in Burkina Faso. Intensive training courses in Japan are one element of that programme. Training programmes of this kind could be readily undertaken within the context of conventional technical cooperation frameworks for Japanese bilateral aid. What is more, it is anticipated they would be highly effective as undertakings in assistance that draw on Japan's own special strengths and comparative advantages.

Ghana's manufacturing sector is under pressure not only to expand output, but to add extra value through improvements in product quality. From that perspective, steps to improve quality-control frameworks and introduce technical enhancements at each manufacturing stage would afford immediate results and should be firmly pursued. Toward this end, it is crucial that Ghanaian exporters and manufacturers accurately gauge conditions in overseas markets and ensure that their observations are reflected in their manufacturing processes. Nevertheless, parallel efforts will also be needed to enlighten Ghanaians about the importance of such measures in general.

(2) Short- and Medium-Term Aid Priorities

Ghana's mineral resources count as a precious source of foreign exchange. As such, active efforts to tap into and further exploit those resources are needed. Nonetheless, this is a field that should be primarily developed on a commercial basis. Still, Japan probably will be positioned to cooperate indirectly through an emphasis on infrastructure development.

In the manufacturing sector, efforts to establish policy on the cultivation of small and medium-sized enterprise should be initiated soon. Potential Japanese aid to that end could include assistance with fact-finding surveys demanded by the policymaking process, as well as the dispatch of experts equipped to help Ghana capitalize on Japanese experience in the formulation of industrial policy. Privatized companies will play an instrumental role as key targets of investment in the manufacturing sector. That prospect effectively highlights the value of supplying technical and financial assistance to privatization programmes now under way, albeit shaped by due attention to their viability. (See 2-1. (2) E. earlier in this chapter.)

2-4. Agriculture, Forestry, and Fisheries

Aid priorities in the agriculture, forestry, and fishery industries will include the following.

Comprehensive assistance in water basin environmental development will be another area with a bearing on other sectors besides agriculture, forestry, or fisheries. Desirable aid programmes for each of the above priority areas are outlined below.

(1) Long-Term Aid Priorities

A. Formulation of Agricultural Policy

Ghanaian agricultural policy is shaped on the basis of a medium-term agricultural development programme put together and supported by the World Bank. Currently, the country is engaged in policy revisions and has initiated work on a programme that will be effective to the year 2025. Japanese aid to date in this sector has been concentrated in local technical cooperation led by experts and Japan Overseas Cooperation Volunteers. It would be advisable to review experiences out in the field, note problems with agricultural policy under the structural adjustment process, spotlight possible countermeasures, and assist their implementation. One approach, for instance, would be to dispatch agricultural policy advisers in the Ministry of Food and Agriculture's Policy Planning, Monitoring, and Evaluation Department (PPMED). As it happens, cooperation volunteers have been assigned positions in that department's agricultural statistics office in the past.

B. Strengthened Capabilities in Agricultural Research

The four Ghanaian universities that currently run schools of agriculture have very limited supplies of equipment and materials that students can utilize for experimentation. On top of that, almost all the agricultural research labs run by the Council for Scientific and Industrial Research (CSIR) are hampered by aging facilities; though there is no scarcity of researchers, per se, research activity itself has languished. One scientific journal went out of publication in the late 1970s due to financial difficulties. In view of this situation, there is hope that Japan will extend needed aid in coordination with Ghana's National Agricultural Research Project (NARP). The CSIR's Crop Research Institute and Food Research Institute, the Ivory Coast's West African Rice Development Association (WARDA), and Nigeria's IITA count among the international counterparts Japan could conceivably step up its cooperation with in the field of agricultural research.

In the interest of cultivating human resources who will be responsible for leading tomorrow's aid programmes in Africa, Japan should strive to have as many of its researchers as possible take part in these cooperative ventures. It has been reported that the Thai Ministry of Agriculture and Cooperative's Department of Land Development and Department of Agronomy are preparing to launch full-fledged programmes of aid for agricultural development in tropical Africa. In that respect, it also would seem worthwhile to explore the feasibility of pursuing cooperative research through third-country training programmes or as a form of "South-South" cooperation led by joint Japanese-Thai teams.

(2) Medium-Term Aid Priorities

A. Irrigation Infrastructure Development

Japan is currently aiding a mini-project led by Ghana's Irrigation Development Centre, but that venture is slated to reach completion at the end of 1995. Therefore, as future aid in this area, Japan could continue providing technical cooperation or begin working on master plans for improvement of existing farm-irrigation projects put together by Ghana's Irrigation Development Corporation. Furthermore, future irrigation projects should be carried through on the basis of grant aid, yet with as much priority as possible on small-scale undertakings. Though Ghana is a potential producer of rice and sugar, its dependence on imports of these items has heavily drained its foreign reserves. Given that situation, it seems advisable that Japan furnish technical and financial assistance particularly in the area of rice production.

B. Marine Product Storage and Processing

In Tema, port improvements have been launched with grant aid to set up small-scale harbour facilities that small fishing communities can operate. Financial assistance for the construction of marine product storage and processing facilities also would be beneficial. However, in that undertaking it will be important to consider small-scale facilities that fishing communities can fully handle.

C. Promotion of Nontraditional Farm Exports

Ghana has a tropical climate, relatively rich soils, and capable farm-management personnel. Japan is prepared to supply aid aimed at drawing on these strengths, improving the productivity of vegetable- and fruit-growing operations as well as the quality of the crops themselves, and promoting exports not only to neighbouring countries but also to the European market.

(3) Short-Term Aid Priorities

A. Promotion of Suitable Crop Strains; Utilization of Productivity-Enhancing Factors

Ghana faces the difficult task of improving farm productivity while working to curb the amount of land in cultivation and prevent soil deterioration.

Selecting high-yield strains and cultivating their seed would be a first step in that undertaking. Seed production has been a USAID priority. However, Ghana currently has no more than one or two experts in rice breeding and seed stock production. Consequently, it has requested that Japan extend technical cooperation to the Kpong Agricultural Research Station run by the University of Ghana. To that end, Japan could dispatch experts to assist in

selecting suitable strains and raising seed stock.

The next step would likely involve efforts to boost farm productivity through injections of fertilizer, agri-chemicals, and modern farm machinery. Ghana is still completely dependent on imports for its supplies of such factor inputs. Partly for that reason, Ghanaians have strongly applauded grant aid for increased food production and expressed hopes that it will be widened. In taking that step, however, Japan should study the feasibility of dispatching experts in Ghana to instruct farmers there in proper methods of handling and applying fertilizer and other farm supplies and equipment. Furthermore, expanding such aid would demand the utilization of available counterpart funds resulting from grant aid for increased food production, together with adequate levels of monitoring.

B. Development of Infrastructure for Storage, Processing, and Distribution

Ghana has already requested grant aid for the purpose of building food storage and warehousing facilities in market distribution centres. It would likely be more beneficial, however, to pursue such work in tandem with yen loan-backed projects for highway construction and projects utilizing rehabilitation loan. Projects aimed at laying branch access roads to farm communities also deserve study. Other potential forms of aid would include assistance in NGO-driven efforts to encourage wider utilization of small-scale warehousing facilities in agricultural districts, and the dispatch of experts and Japan overseas cooperation volunteers to assist the CSIR's Industrial Research Institute in projects for the development of appropriate technologies.

Small-scale, rural crop processing operations in Ghana are focused almost entirely in a few scattered corn mills, rice mills, and sugar-cane presses. The CSIR's Food Research Institute, however, is researching ways to foster other forms of crop processing. Human resource and financial assistance for that research and its dissemination would be productive.

In striving to boost exports of farm goods, preference would likely go to the following: the revival of cocoa yields; investigations into the comparative advantages of cola nut, papaya, pineapple, and other nontraditional farm exports; the development of harvest storage and processing facilities as well as distribution infrastructure; and the introduction of quality-control programmes.

C. Expanded Support Services for Farm Communities

Steps to create organizational frameworks aimed at affording farmers broader access to financing will be crucial. It will be worthwhile in that effort, moreover, to consider drawing on counterpart funds resulting from grant aid for increased food production.

Ghana has witnessed an outpouring of popular support for stronger steps toward pushing agrarian reform. Efforts in human resources development and improvements in mobility and other organizational functions have been urged. With assistance from NGOs, Ministry of Food and Agriculture's Extension Department has launched a retraining programme at the University of Cape Coast for agrarian-reform personnel. Japan could supply technical and financial assistance for strengthened coordination between research and dissemination of its results.

Various aid organizations run apiary and mushroom farming operations aimed at boosting the incomes of women in rural communities. Assisting women in earning more cash income through such nontraditional farm ventures is important. However, given the many uncertainties about profitability and the technologies involved, such assistance should be pursued only after thorough study aimed at identifying which products and business formats have promise.

D. Promotion of Dairy Farming

Japan currently has aid personnel stationed at several Ghanaian cattlebreeding farms. Continued technical cooperation to such facilities would be worthwhile. In addition, aid could also be provided for the construction of silos to store feed during the dry season, and of basic facilities for the production and storage of hay.

E. Promotion of Timber Processing

To protect its forest resources, Ghana has placed restrictions on reckless logging activities. Further, it has adopted policies aimed at generating more foreign exchange through higher value-added processing of its timber products. Accordingly, it seems imperative that Japan provide technical and financial assistance for improved woodworking technologies and the production of plywood, furniture, and other wood products.

2-5. The Environment

(1) Long-Term Aid Objectives

A. Forest Preservation and Measures Against Desertification

Given that Ghana's forest resources and the problems they face differ by ecological zone, it will be necessary to take action after clearly identifying the challenges that should be addressed in each targeted region.

In the northern savanna zone, undertakings in social forestry should be encouraged to help secure supplies of firewood, the chief source of energy for rural communities. Further, it would be advantageous to dispatch Japan

Overseas Cooperation Volunteers in programmes for that purpose. In particular, though, the northern sector of the country deserves programmes to foster tree nurseries fed by renovated or newly constructed irrigation ponds.

Ghana also needs help with work to replant logged areas in the southern forest belt, its chief source of timber for export. Already, it has sought masterplan surveys that will be of use in fashioning reforestation programmes aimed at planting protective forest tracts in the transitional ecological zone stretching from the southern forest belt to the northern savanna. Such surveys, though, should be based on sufficient coordination with the country's forest resource management projects.

B. Public Health Infrastructure Development in Urban Districts

Ghana's urban districts have witnessed explosive population growth for some years now. In view of that trend, waste disposal appears destined to become a serious urban issue in the years ahead. Japan could conceivably assist in the formulation of short- and medium-term waste-disposal programmes for Ghana's major cities. That, however, would demand adequate attention to the functional capabilities of the local municipalities that become project counterparts.

Waterworks development has been given priority over sewage treatment. Most wastewater effluent is either untreated or passes through small-scale treatment plants. However, the volume of wastewater effluent can be expected to increase in tandem with coming enhancements in the water supply. In view of that prospect, drawing up suitable wastewater treatment programmes would appear to be another potential target for Japanese aid.

(2) Short- and Medium-Term Aid Priorities

A. Strengthened Inspection and Monitoring Frameworks

In 1994, the Environmental Protection Council (EPC) and the CSIR were consolidated into the Ministry of Environment, Science and Technology. Under Ghanaian environmental resources management projects, the EPC has put together a national programme for environmental monitoring and is working to devise new water-quality standards. However, identifying actual levels of urban air pollution has become yet another pressing challenge. To develop an accurate grasp of current conditions and translate that into future industrial antipollution measures, Japan should first provide technical cooperation for the monitoring of air and water quality.

B. Treatment of Mining Wastewater Runoff

Mining is one of Ghana's core export industries, and a field that has drawn in climbing levels of foreign investment. As a consequence, efforts to establish

relevant legal code and reinforce monitoring frameworks for this industry have grown urgent. Japan could help by dispatching experts in pollution control administration; leading surveys that would be used to establish master plans for the fight against pollution from gold mines; and extending technical cooperation to the Institute of Mining and Mineral Engineering at the Kumasi University of Science and Technology.

2-6. Social Development

Given current conditions in Ghana, development aimed at improving the quality of life and productive potential of the poor is a challenge that will demand a long-term response. Japanese aid priorities in this field should be focused on (i) multifaceted infrastructure development and the supply of materials and equipment for that, and (ii) training personnel to utilize such infrastructural enhancements more effectively. It is preferable that aid strategies synchronize efforts toward these dual goals in every way possible. Though undertakings comprising (i) can be implemented broadly over several regions, those comprising (ii) should be limited to selected regions or contexts. Aid would conceivably be focused in the following priority areas.

A. Support for Food Crop Research and the Dissemination of Improved Methods

As noted earlier in the section on agriculture, research on food crops will be of paramount importance. To support women and small-scale farmers engaged in raising food crops, Japan could furnish aid not only for research on enhancements in crop storage methods and crop yield, but also for strengthened activities aimed at fostering their adoption. To that end, though, aid priorities should be focused on the study and dissemination of low-cost, realistic enhancement strategies that small farmers can readily adopt.

Specific actions might comprise detailed surveys of the Ghanaian agencies engaged in researching or promoting enhancements in yields or storage methods for such food crops as cassava, yam, and maize and other cereal grains. Experts and essential equipment would be supplied to those pursuing programmes deemed worthy.

B. Improved Living Standards for the Urban Poor

Japan could help to improve social services in areas inhabited by Ghana's urban poor through action on both a large and a small scale. With a comprehensive view point, it could assist in the formulation of urban programmes for the development of water-supply and sewage treatment facilities and wastedisposal structures for each city, and provide aid for their implementation in priority areas. Further, over the longer term, it could bundle technical co-

operation with grants of essential materials and equipment to the Ghanaian institutions responsible for planning and providing social services in urban areas.

On a small scale, Japan could conceivably assist in the provision of improved social services in a limited number of impoverished urban districts by dispatching teams of Japan Overseas Cooperation Volunteers and combining that move with small-scale grant assistance and aid to NGOs. Specific undertakings would include the construction of public toilet facilities and the initiation of vocational training programmes on a small scale in selected areas. In addition, work to foster educational programmes in hygiene and cultivate the organizations and personnel responsible for local activities would also be worthwhile.

C. Construction and Maintenance of Feeder Roads and Bridges in Farm Districts and Remote Areas

Wide-area development of branch roads and bridges would be expected to facilitate access to schools, hospitals, and other social service providers, as well as revitalize the economies of farm districts. Priority in such projects would be given to the following: farm districts with a number of widely scattered, quality medical and educational institutions; major producing districts for yam and other domestically consumed foodstuffs, and the trucking routes that serve them; districts noted by the presence of, or potential for supporting, small farming communities; and remote regions that remain seriously underdeveloped.

Selecting priority districts and roadways would demand good preliminary studies attentive to such factors as food crop production and distribution, the existence of indigenous industries (e.g., the production of smoked fish, garri, or palm oil), and the accumulation in hospitals, schools, and other elements of social service infrastructure.

D. Enhancements in Essential Social Services for Rural Areas

Aid is needed for the construction of more safe-water wells and improvements in basic medical care and public health. Priority in the siting of new wells would be given to Ghana's northern reaches, where they are still relatively rare, and to areas in the central and southern regions where the incidence of parasitic guinea-worm infection is high. Ease-of-repair and the domestic availability of replacement parts would be the chief criteria guiding the selection of well types and water-pump models. Also, attention would be given to village well locations that minimize the toil associated with drawing and carrying water, and that forestall water-related disputes with other villages.

The task of improving basic medical care and public health in farm zones would call for projects that target selected areas and bundle the dispatch of personnel with supplies of essential equipment. Basically, aid would be used

to pick out specific villages or areas and, depending on their needs, set up small clinics, simple toilet facilities, public health centres, and other essential structures. In conjunction with that, activities would also be initiated to train personnel who would be employed at such facilities, and to foster programmes in public health education.

E. Improved Living Standards for Women in Farm Communities

Women in farm communities are typically responsible for such duties as hauling water, gathering firewood, cooking, and child-care. Alleviating their burden of toil will demand multifaceted aid. Japan would do the following in selected target zones.

- Build water wells in locations close to villages.
- Plant trees varieties that can be harvested for firewood.
- Set up milling facilities (in areas where maize and other cereal grains are the key food staples).
- Establish local centres for the provision of maternal and child health-care services.
- Support traditional activities of women as producers: for instance, by providing essential equipment and establishing day-care centres for local women's organizations engaged in small-scale, income-generating ventures (e.g., for the production of soap, palm oil, smoked fish, or garri).

In addition, Japan would support projects that bundle the dispatch of personnel with the provision of essential equipment to help improve the quality of life for women who live in selected farm communities. Such projects would have two priorities: (i) alleviating women's workloads (e.g., by building water wells, planting trees as sources of firewood, and setting up milling facilities), and (ii) supporting the participation of women in the economy.

2-7. Human Resources Development

Medium- and long-term aid priorities will be focused in the following areas.

2-7-1. Basic Education

Refining basic education in Ghana will demand steps to uplift the quality of school teachers and address shortages in school facilities, personnel, and instructional materials. Efforts must also be made in parallel to improve the educational environment in the average home. Specific strategies are outlined below. It should be borne in mind, however, that striving primarily to improve and enlarge systems, structures, and other, existing elements of education infrastructure in Ghana will pave the way for a more efficient, effective, and sustained course of development.

(1) Facility Enhancements

A. Instruction at the Village Level

Building, running, and maintaining school structures will demand heavy funding. One approach would be to set up small-scale facilities in each village that are suitably adapted to conditions at the rural community level. Small classes would be conducted by citizens from the local community who possess skills in reading, writing, and arithmetic, or by teachers sent in by the central government. Though classes of this kind are held in churches and mosques on a regular basis already, they are not considered schools in the formal sense, and hence, cannot seriously look forward to financial support from the state or local government. For that reason, it is essential to support educational formats that incur little cost. Such support could be provided by bundling small-scale grant assistance with work led by Japan Overseas Cooperation Volunteers and NGOs. However, given the dual currency of local dialects and official English in most districts, languages for classroom instruction will also demand consideration.

B. School Construction

Projects to build new elementary schools have been pursued for some time. It would appear important, however, to aim for facilities that draw as much as possible on local sources for building materials, that are easy and inexpensive to maintain, and that actively involve local residents in their design and construction stages. It is vital that such approaches be adopted so that school construction projects remain consistent with the goals of public expenditure cutbacks called for under the government's structural adjustment programme. Further, support for such approaches could be furnished through grant aid.

(2) Teacher Training

A. Enhancements to Teacher Training Facilities

Well-trained, quality teachers are indispensable to the task of improving the quality and substance of elementary education. Securing such quality personnel, however, will demand efforts to enrich and refine Ghanaian institutions for teacher training. To that end, it will be crucial to staff university education departments and colleges with adequate numbers of qualified instructors, expand facilities and equipment, and award degrees to highly qualified teacher candidates. Technical cooperation including the dispatch of experts, would likely be of value in striving for these goals.

B. Teacher Placement in Rural Districts

Teachers typically shun rural jobs due to the inconveniences they expect to face there in daily life. That attitude has effectively aggravated the rural

shortage of teachers in turn. Given this state of affairs, Ghana needs to put together teacher placement programmes that lay stress on mandatory positions in rural communities where the need for elementary education is most pronounced. Though such programmes will demand improvements in residential infrastructure, work to build teacher housing could conceivably be supported with grant aid.

C. Training of Full-Time Teachers

Ghana has a system of national service that obligates high-school and university graduates to engage in teaching-related work for a certain amount of time. In fact, that system accounts for practically half of all teachers working in elementary schools now. Considering that the period of mandatory service is less than one year, and that classes are generally led by young student-teacher replacements and substitutes, the quality of instruction is usually not that high.1 What is more, many of those student-teachers will ultimately seek jobs in other professions once their period of national service has ended. Another problem, though one not quite so serious, is the outflow of elementary school teachers in search of a better life abroad. As the foregoing illustrates, cultivating an adequate supply of full-time teachers has become another challenge for Ghana. Groups of Ghanaian teachers should be invited to Japan for educational programmes similar to the African Youth Invitation Programme, which are designed to boost their motivation toward pursuing the teaching profession for the long term.

D. Teacher Retraining

Teaching is a profession that demands research into teaching materials, the drafting of teaching plans, and continued self-study and improvement. However, Ghana has few training facilities for people presently employed as teachers, and the existing facilities are not well equipped. Further, it is not easy to raise funds needed to cover the cost of training. Teacher quality in Ghana would clearly deteriorate if this situation were allowed to continue. Effective counteraction may include grant aid and the dispatch of experts to restore and improve existing training centres, supply needed materials, and help Ghanaian teachers brush up on their professional skills.

(3) Improved Instructional Materials

Next to teachers, instructional materials will also be essential to the provision of a good education. Ghana, however, currently faces deficiencies both in quantity and quality. One effective action would be to donate large quantities of essential instructional materials and distribute them to all Ghanaian children. In the process, though, it will be vital to create conditions for the local procurement of textbooks. To that end, the provision of equipment for

book printing and binding, along with the techniques essential to the design of appealing textbooks, would count as effective forms of assistance. Basic printing facilities could conceivably be financed with small-scale grant assistance.

2-7-2. Higher Education

As to higher education, Ghana currently runs five universities nationwide. Nonetheless, deficient research facilities and other factors have contributed to a weak environment for study and research, and instructor quality is yet another question. This state of affairs has prevented the country from cultivating ample numbers of skilled human resources. University graduates have few employment opportunities, and on top of that, jobs that would effectively harness their skills and expertise remain limited. Consequently, the national investment in education has not adequately translated into development gains for the country, for many qualified individuals who should be tangibly contributing to the development process instead end up leaving in search of better employment opportunities abroad.

Accordingly, to promote needed gains in the arena of higher education, it would seem wise not to pursue multifaceted assistance, but rather, to focus assistance on agriculture, manufacturing and other sectors in which goods are directly produced, as well as professional service fields such as medical care.

2-7-3. Occupational and Technical Training

Some imbalance is being observed between employment and school enrollment in Ghana. Consequently, the country has an excess of elementary- and middle-school trained workers competing for formal salaried positions in the job market. One reason for the persistent lack of balance between school enrollment and employment is that curricular content at middle-school and higher educational levels does not reflect the needs of industry. It is recommended that financial and technical cooperation be bundled together for stronger vocational training programmes aimed at cultivating the human resources essential to Ghana's further economic independence and development.

2-7-4. Adult Education

Parents and siblings alike play a vital role in home study. Unfortunately, some adults are illiterate because they had no access to schooling when they were young. Establishing schools for adults and having parents pursue educational activities in tandem with their children will be essential to improving the effectiveness of home study in general. Small classes (as outlined in 2-7-1. (1) A.) backed by grant aid and the dispatch of Japan Overseas Cooperation Volunteers would count as yet another effective approach.

2-7-5. Education Administration

Under the system of direct administration run by the central government's Ministry of Education, official educational policy and programmes carry little weight at the rural level. That spells a need for the decentralization of education administration. Japan could conceivably explore the possibility of dispatching advisers to the Ministry of Education who would assist in the formulation of a national education development programme. That programme would include measures aimed at enhancing administration at the local level, strengthening the National Functional Literacy Programme for adults, establishing suitable teacher-placement programmes, and stemming the brain drain of highly qualified personnel.

2-8. Public Health and Medical Care

In selecting areas of Ghanaian public health and medical care that deserve aid priority, Japan should first pay attention to problems likely to become the most serious in the future, as well as the problems faced by the poor and by people with poor access to public health and medical services. Further, in fashioning measures to deal with those problems, Japan should focus its sights on areas where it already has ample experience. On this understanding, the four development challenges outlined in I, 3-8. of this paper deserve closer attention. That is to say, improved maternal and child health care and family planning aimed at resolving population issues, measures to fight the AIDS epidemic, which is spreading rapidly, and improved nutrition for women and children in poverty-stricken groups should all be treated as priorities of mediumand long-term aid. Assistance in related research led by the Noguchi Memorial Institute for Medical Research, University of Ghana would also seem to deserve priority.

2-8-1. Aid Priorities

(1) Primary Health Care Focusing on Maternal and Child Health Care and Family Planning

Ideally, aid aimed at dealing with population issues should go beyond mere family planning. In particular, it should also encompass assistance for broadranging improvements in the health of mothers and children, coupled with support for higher living standards overall through programmes for the promotion of educational and regional economic development. In the field of public health and medical care alone, reinforced health services aimed at guaranteeing healthier lives for mothers and children would be the most appropriate approach toward resolving population issues. This view is based on the belief that improved reproductive health and reproductive rights would be a driving force behind efforts to lower the death rate for infants, pregnant women, and nursing

mothers, and ultimately fuel a decline in the birth rate.

Aid that gives priority to contraception or to population policies that overtly recommend cuts in the birth rate is at odds with the guiding principles behind Japanese aid aimed at addressing population issues. For that reason, the best form of assistance for Japan likely would be to focus aid in maternal and child health care and family planning that emphasizes improvements in the health of mothers and children, given that such improvements are considered to be indirectly effective in curbing fertility rates.

(2) Basic AIDS Surveys and Frameworks for Medical Examination

It goes without saying that preventive measures against infectious diseases such as malaria, diarrhoea, and parasitosis count as pressing challenges. However, the incidence of AIDS has risen sharply in recent years, and if that were allowed to continue, Ghana could be hit especially hard in human resources and social productivity, and experience loss on a national scale. Urgent measures against AIDS are therefore vital.

Activities aimed at preventing infection count as the most important and urgent step in the fight against AIDS. However, precisely identifying the extent of AIDS infection in the population is another major challenge that will serve as the basis for preventive measures. Accordingly, aid priority should be placed on developing and reinforcing frameworks for medical examinations and epidemiological surveys into the incidence of AIDS.

(3) Programmes for Improved Nutrition in Northern Zones

Inhabitants of northern Ghana face a plethora of nutrition-related problems. Symptoms of deficiency in protein and carbohydrate intake, and in micronutrients are high in women and children, and deserve an immediate response. Various social ills are believe to factor behind this high incidence of nutritional deficiency. One obvious reason, though, is the inadequacy of efforts to improve nutrition in the first place. Anemia and iodine deficiency can be prevented through improvement of diet, and the development and consumption of iron- and iodine-enriched food products. Also, the development and promotion of baby foods would be expected to remedy child malnutrition. Accordingly, Japan could contribute to improved nutrition in northern Ghana by cooperating in the formulation of nutritional enhancement programmes and assisting in activities aimed at encouraging consumption of enriched foods and developing nutritional baby foods.

(4) Cooperative Research Tied to Public Health Administration

Japan has contributed significantly to medical research in Ghana over the years by providing assistance to the Noguchi Memorial Institute for Medical

Research. Though the institute's activities have increased, government financial strains have not enabled it to operate on its own momentum. In view of the strong acclaim it has earned both abroad and at home, the Noguchi Memorial Institute for Medical Research will deserve continued assistance for years to come.

Having that facility's research findings better reflected in public health policy will demand that projects be put together and managed in close coordination with Ghana's Ministry of Health. Though the Noguchi Memorial Institute for Medical Research is affiliated with the University of Ghana and has no direct ties to the Ministry of Health, per se, to ensure its own future survival, it must engage in research that contributes significantly to improvements in Ghanaian health care. For that reason, it is imperative that it pursue joint research and closer ties of communication with the Ministry of Health. Further, the institute also needs to maintain close ties with public health administrators if it is to increase its chances of receiving research assistance from other aid organizations.

2-8-2. Specific Aid Programmes and Methods of Implementation

(1) Assistance in Programmes for Maternal and Child Health Care and Improved Nutrition in Northern Ghana

Undertakings in maternal and child health care, family planning, and improved nutrition share many of the same objectives and target groups. Accordingly, it would seem advisable that they be combined and managed within the context of a single, comprehensive programme. One potential approach would be to place emphasis on northern Ghana, where access to health services is low, and the incidence of malnutrition, high. Aid would then be provided for efforts to promote better nutrition and beef up maternal and child health care and family-planning services aimed at maintaining and improving the health of women (pregnant women and mothers in particular) and children. Technical cooperation projects would be the basic form of cooperation, but grant aid or small-scale grants could also be weighed as means of furnishing structures, health-care vehicles, and some essential equipment. To that end, though, it would also be necessary to dispatch Japanese experts in maternal and child health care, family planning, and nutrition for long- and short-term assignments in Ghana, and pursue broadly defined technology transfers and technical cooperation in line with the above-cited objectives. Though the Ghanaian Ministry of Health would lead programme implementation, the managers of regional medical offices would probably serve as actual counterparts.

Specific measures would conceivably include the following: support for functional improvements at health centres; heightened inoculation rates; training for health-service personnel; assistance in retraining programmes; expanded health and family-planning services for rural inhabitants; cooperation in the

formulation of programmes for improved nutrition and in organizing their activities; efforts to widen familiarity with nutritional concepts and practices; the joint establishment of investigative councils with farm leaders; and the promotion of baby-food development and the wider consumption of enriched foods.

(2) Cooperation with AIDS-Related Research Led by the Noguchi Memorial Institute for Medical Research

Aid in this area would have two key goals, in addition to supporting the research efforts of the Noguchi Memorial Institute for Medical Research. One would be to slow the pace of the AIDS epidemic by gathering basic data on AIDS and using that to produce effective programmes of prevention. The other goal would be to quickly identify AIDS carriers and people infected with the AIDS virus and retard secondary infections by developing and strengthening frameworks for medical examinations.

Project-type medical technical cooperation in conjunction with the Noguchi Memorial Institute for Medical Reserch, would be the principal form of aid. However, it would also seem appropriate to fund the installation of advanced diagnostic equipment on institute premises with grant aid. Also, Japan would probably find it necessary to dispatch epidemiologists for basic surveys into AIDS infection, public hygienists, immunologists, or virologists who would furnish technical guidance in diagnosing AIDS. In fact, pursuing AIDS-related basic research would probably demand that Japan consider sending experts in other, peripheral fields to Ghana on long- and short-term assignments. Counterparts would come from both the Ministry of Health and Noguchi Memorial Institute for Medical Research, and solid communication between the three parties would be required.

In brief, cooperation would assume the following forms: epidemiological studies into AIDS infection; efforts to establish frameworks for medical examinations at Noguchi Memorial Institute for Medical Research (improved reference labs) and reinforce such frameworks at regional hospitals; training for examination personnel; and cooperation in AIDS-related basic research.

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