Second Country Study for Japan's Official Development Assistance to the Islamic Republic of Pakistan

March 1996

The Committee on the Second Country Study
for Japan's Development Assistance
to the Islamic Republic of Pakistan

Organised by
Japan International Cooperation Agency

This report is based on the discussions and findings of the Committee on the Country Study for Japan's Official Development Assistance to the Islamic Republic of Pakistan organised by the Japan International Cooperation Agency (JICA). Opinions expressed in the report are those of the members of the Committee and do not necessarily reflect those of JICA and of its affiliated organisations.

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Foreword

With extensive change—such as the opening up of China's economy and economic liberalisation in India—sweeping Asia, Pakistan too has recently engaged in a process of fundamental policy change built on structural adjustment policies, and has sought to foster a democratic state through strengthening of civilian rule. Since gaining independence in 1947, Pakistan has endured frequent political turmoils, as typified by the breakaway of its eastern wing and emergence as a separate state of Bangladesh. The country is now on the way to re-establishing the preconditions needed for national development.

Japan is the largest donor of bilateral ODA to Pakistan, and Pakistan is the seventh largest recipient of Japanese ODA. Given these facts, the country therefore has a substantial need for Japanese assistance, and the standpoint from which Japan provides assistance to Pakistan in the future will be of great interest to the nation.

In this, the second Pakistan Country Study Report, we did not simply confine ourselves to a review of the first Report which was prepared five years ago, but took a fresh look at the historical process of development in the country and its present status, from the following four perspectives: the initial conditions at independence, the socio-economic structure of Pakistan's power elite, government succession and shifts in economic policy, and impacts of so-called "structural adjustment policies." We have also placed future development in the following context:

> "Aiming to guarantee equality of opportunity and build a democratic state with ample choice, and effectively mobilising and employing the resources possessed by the country, to upgrade industrial structure, and to redress growing personal and regional disparities."

We have also described the role to be played in various areas by Japanese ODA as ongoing long-term support to achieve that end, and compare examples of Japanese assistance that have been implemented and the changes in economic and political conditions in Pakistan since the preparation of the previous Country Study Report.

In the accompanying research, deliberations and preparation of this report, I would like to pay special tribute to the members of the Committee for their

valuable contributions, to the responsible agencies in the Ministry of Foreign Affairs for their support, and the Task Force members for their devoted assistance, for without them, this project would not have been possible. I would also like to express my deep appreciation to the Embassy of Japan in Pakistan and the JICA Pakistan Office for their support of our in-country survey activities.

In closing, I would like to express my hope that this report can play a role in the formulation of policy relating to Japan's assistance to Pakistan, and contribute substantially to the development of friendly relations between our two countries.

March 1996

Dr. Shigemochi Hirashima

Chairman, Second Pakistan Country Study Committee

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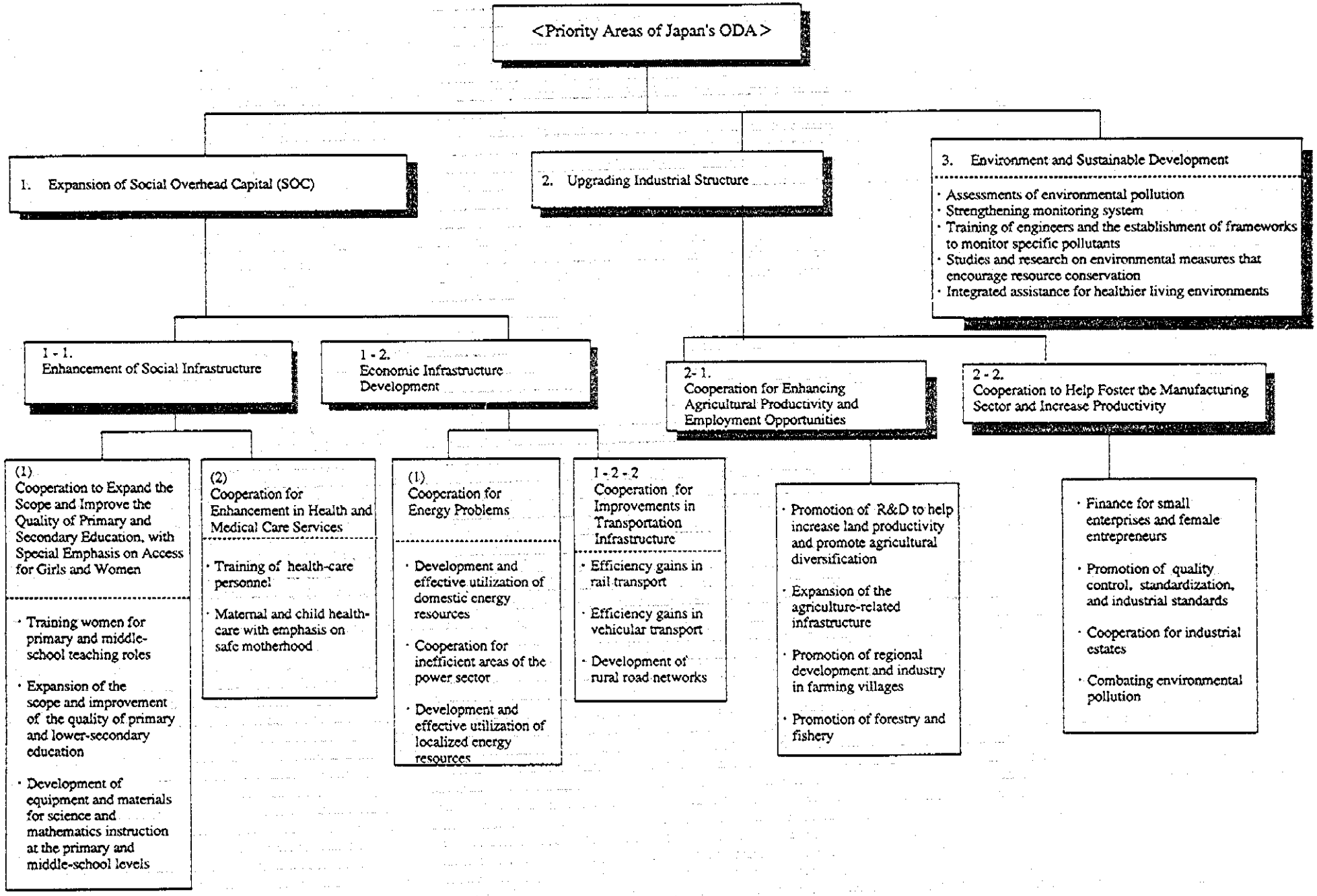
<Priority Areas of Japan's ODA>
1. Expansion of Social Overhead Capital (SOC)
2. Upgrading Industrial Structure
3. Environment and Sustainable Development
· Assessments of environmental pollution
· Strengthening monitoring system
· Training of engineers and the establishment of frameworks to monitor specific pollutants
· Studies and research on environmental measures that encourage resource conservation
· Integrated assistance for healthier living environments
1 - 1. Enhancement of Social Infrastructure
1 - 2. Economic Infrastructure Development
2- 1. Cooperation for Enhancing Agricultural Productivity and Employment Opportunities
2 - 2. Cooperation to Help Foster the Manufacturing Sector and Increase Productivity
(1) Cooperation to Expand the Scope and Improve the Quality of Primary and Secondary Education, with Special Emphasis on Access for Girls and Women
· Training women for primary and middle-school teaching roles
· Expansion of the scope and improvement of the quality of primary and lower-secondary education
· Development of equipment and materials for science and mathematics instruction at the primary and middle-school levels
(2) Cooperation for Enhancement in Health and Medical Care Services
· Training of health-care personnel
· Maternal and child health-care with emphasis on safe motherhood
(1) Cooperation for Energy Problems
· Development and effective utilization of domestic energy resources
· Cooperation for inefficient areas of the power sector
· Development and effective utilization of localized energy resources
1 - 2 - 2 Cooperation for Improvements in Transportation Infrastructure
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· Efficiency gains in vehicular transport
· Development of rural road networks
· Promotion of R&D to help increase land productivity and promote agricultural diversification
· Expansion of the agriculture-related infrastructure
· Promotion of regional development and industry in farming villages
· Promotion of forestry and fishery
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I. Perspectives on ODA to Pakistan

1. Introduction

Five years have elapsed since the release (in 1991) of the report of the first country study on ODA to Pakistan. During that interval, neighbouring India initiated full-scale efforts towards economic liberalisation and opened its doors to an intensifying stream of foreign investment and technology transfers. Reacting to these developments, some segments of the Japanese business community have at last begun to demonstrate heightened interest in South Asia. However, most of that interest to date has been aimed mainly at India, not Pakistan.

Pakistan has witnessed a dizzying succession of government administrations in the meantime: three times in 1993 alone. The atmosphere of political unrest has been accompanied by an increase in social unease; in fact, it is such that essential preconditions for long-term investment have yet to appear.

Pakistan is positioned as a vital gateway to Central and West Asia, and has a largely untapped wealth of skilled human resources. One question, therefore, is why, since achieving independence, it has been so slow in boosting its status from that of a low-income country? In our view, it is essential that future Japanese ODA strategies for Pakistan be explored in terms of the answer to that question.

In light of that understanding, the first sections of this paper focus on problems Pakistan has encountered during the course of its development to date. From that foundation, we then present our views on strategies we believe essential to the task of addressing and surmounting those problems, and on the role ODA can play in that context. In the process, we strive to maintain a comparative perspective on recommendations that emerged from the first country study.

2. A Review of Pakistan's Development Experience

Over the close to half a century that has transpired since its independence (in 1947), Pakistan's economic development has fallen behind expectations in principally two areas: first, in the effective utilisation of resources, human resources in particular; and second, in upgrading industrial structure.

The following four points should suffice here to underscore Pakistan's shortcomings in the first area.

First is the exceptionally slow pace of development in its social sector, a condition that is highlighted by an average literacy rate of 37 percent. In 1992, Pakistan registered 0.483 on the UNDP's Human Development Index, a level ranking it 128th out of the 174 countries comprising the scale.[1]

Second is the low utilisation of women in the labour force. In 1992/93, the country had a total labour participation rate of 27.9 percent; only 8.6 percent of working-age women were part of the labour force, in contrast to 45.9 percent of all working-age men. (By comparison, in 1991 the total labour participation rate measured 52.2 percent for Japan, where 42.2 percent of all women were employed, and 63.6 percent of all men.)[2]

Third are the low levels of resource mobilisation and upkeep of accumulated capital-stock in the agricultural sector of a country actually renowned for having one of the most elaborate irrigation systems in the world. These shortcomings are highlighted by poor land productivity (of only around one-fourth its rated potential), a chronic dependence on imports of raw foodstuffs (foreign exchange earned on exports of rice, cotton, and fish products amounts to only half that spent on imports of wheat, tea, and edible oil), and poor maintenance of irrigation facilities (as evidenced by the poor collection of water fees to meet operation and maintenance expenses and widened damage from salinity and waterlogging), the country's single largest infrastructural asset.[3]

The fourth point deserving emphasis is that Pakistan has not fully mobilised the wisdom, financial resources, nor exploited the leadership abilities of its elite social classes to the task of nation-building. Its inadequate utilisation of quality managerial resources stands out as an example of this, and is in itself attributable largely to inconsistent economic policies.

As to Pakistan's shortcomings in developing a modern industrial base, two points warrant attention.

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1 UNDP, Human Development Report 1995.

2 Government of Pakistan ("GOP" hereafter), Economic Survey 1994-95, p. 100.

3 See the section of this paper devoted to Pakistan's agricultural sector.

First, the direction of structural change itself. As data for the 25-year span from 1969/70 to 1994/95 help to show, the agricultural sector's share of GDP shrank from 38.9 percent to 24.0 percent. Conversely, though, the share attributable to the manufacturing sector—particularly the large, core industries—rose from 12.5 percent to 12.7 percent, which amounts to virtually no change at all. The implication is that the service sector has taken over practically all the share lost by the agricultural sector.[4]

Second, the change in the structure of the labour force. Though the agricultural sector employed 57.0 percent of the labour force in 1969/70, 25 years later it accounted for a smaller 47.5 percent of the total. Clearly, that margin of decline has been much less precipitous than the drop in the sector's share of total GDP. In the meantime, the fraction of the labour force engaged in the manufacturing sector slipped over four points, from 15.6 percent to 10.9 percent. It is believed that these figures effectively illustrate the severity of the challenge Pakistan has faced in striving to create jobs for a fast-expanding labour force fed by steep population growth and a parallel surge in the supply of labour from the younger age groups. Given the pronounced disparity in employment elasticity between its agricultural and industrial sectors (0.57 and 0.33, respectively), Pakistan probably has little choice but to continue striving on the basis of productivity gains and diversification to engage more of its labour force in the agricultural sector, at least until it has laid the foundations for job growth through advances in its industrial sector.[5]

What is to be said of a development course that to date has failed to effectively harness the resources at the country's disposal, and that has left unresolved various problems with the evolution of industrial structure? Our Study Group felt it worthwhile to address this question from three angles: namely, in terms of initial conditions for development; unstable economic policies reflective of the structure of the country's landed power elite; and external factors, including relations with neighbouring India .

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4 During the same period, the GDP contribution by small-scale manufacturing enterprises moved from 3.5 percent to 5.8 percent. For the manufacturing sector as a whole, it climbed 2.5 points, from 16.0 percent to 18.5 percent. GOP, Economic Survey 1994-95, p. 3.

5 GOP, Report at the National Commission on Agriculture, 1988; Economic Survey 1994-95, Statistical Appendix, p. 21.

2-1 Initial Conditions

Initial conditions for growth seem highly relevant to a full understanding of Pakistan's development experience. Six factors for consideration here are outlined below.

First, Pakistan's relative inexperience in the political arena. As is widely known, one of the consequences of British colonial rule is that Muslims in India were treated poorly compared with Hindus in practically every respect. Though the Indian National Congress Party that was set up in 1885 actually had a role in supporting Britain's dominance over its colonial empire, it gradually became a central exponent of the opposition to British rule. Responding to that development, in 1906 Britain supported the establishment of the Muslim League as a political counter-force. Under the leadership of Muhammad Ali Jinnah, however, the Muslim League primarily embraced the idea of partitioning British India into separate Muslim and Hindu areas, and as such, its policies vis-à-vis Britain and the National Congress Party were not always consistent. Jinnah died in 1948, the year after Pakistan gained independence as a separate state. After the 1951 assassination of its first prime minister, Liaquat Ali Khan, Pakistan's political arena was transformed into a battleground of contention by various parties representing the landed power elite. Eventually, the situation deteriorated to the extent that the politicised military was allowed to step in and take control.

Second, Pakistan suffered from administrative weaknesses as well. Just prior to independence, only 101 out of 1,157 officials in the Indian Civil Service (ICS) were Muslims.[6] In itself, that figure reflected a lack of secondary schooling among Muslims in general. Although a university for Muslim students was founded in Aligarh in the late nineteen century, Muslim society's poor participation in administrative affairs remained pronounced. That reality, moreover, contributed to administrative weaknesses following the country's independence.

Third, Pakistan has suffered from a scarcity of commercial and industrial entrepreneurship. It is known that it developed as a producer of wheat, cotton and jute, and that much of that produce went to industrial centres such as

6 I. Yamanaka (eds), Pakistan ni Okeru Seiji to Kenryoku, (Power structure in Pakistan: A Study on Political Elites), Tokyo, Institute of Developing Economies, 1992, p55 (Data Sourced from Ralph Braibanti Paper.)

Bombay, Gujarat, and Calcutta. Most of the commercial entrepreneurs active in the country had been Hindus.[7]

Fourth, the existence of the landed power elite and the legacy of the customary economy. Though the former will be discussed later, it should be pointed out that the latter is a manifestation of Pakistan's underdeveloped market economy.

Fifth, Pakistan has inherited a well-developed, irrigation-based agricultural system. While under British rule, India concentrated investments in irrigation infrastructure in the highly productive Punjab region, which ended up accounting for half of all Indian farmland in irrigation. Pakistan inherited as much as 80 percent of that farmland when it was separated from India.[8]

Sixth, during British rule, the Pakistan region comprising Pakistan was renowned as a repository of personnel for military service, particularly from the Rajput and Pathan groups. The setting of borders with Afghanistan, Iran, and India effectively partitioned various ethnic minorities, including the Pathan, Balochi, and Kashmiri, and left numerous areas in the North under tribal control. Accordingly, an atmosphere of continuous territorial tension persisted. That factor has consistently been used to strengthen the military's influence, and it helped to set the stage for the military's eventual politicisation and control of Pakistani government affairs.

2-2 The Socio-economic Background of Pakistan's Power Elite

Rural inhabitants make up almost 70 percent of Pakistan's total population. Therefore, it would not be far off the mark to assume that the country's landed power elite are essentially absentee-landlord classes who live mostly in the cities. Rural Pakistani society is status-based. Villages are divided into farming and non-farming families, and both groups are socially segregated. Farming families, moreover, are further broken into several groupings based on the scale of their land holdings. The agricultural census for 1990 shows that only two percent of farm households own land of 20 hectares or more. That two percent, however, owns 24 percent of all farmland nationwide. Addi-

7 Yamanaka, op.cit. Chapter 6 discusses Pakistan's industrial entrepreneurial elite in detail.

8 For a discussion of the historical development of irrigation-based agriculture, see S. Hirashima, The Structure of Disparity in Developing Agriculture, Tokyo, Institute of Developing Economics, 1978.

tionally, 81 percent of all farm households belong to the category with less than five hectares; this group accounts for 38 percent of all farmland. What is more, these farming classes have been distinguished by their own jati or endogamy. Nonfarm households are another important underpinning of the rural economy. Most do not own any land and tend to be engaged in traditional crafts. Occupation is therefore the chief determinant of social ranking or prestige among the nonfarm classes. One important fact to bear in mind is that nonfarm households account for 53 percent of Pakistan's total rural population. At the top of this social hierarchy are the handful of landed power elite, who dominate political affairs at the federal and provincial levels as members of the national and provincial assemblies.[9]

2-3 Government Succession and Shifts in Economic Policy

In the half-century of economic development it has pursued since achieving independence, Pakistan has had to cope with many difficulties caused by a string of government turnovers and various external pressures. Three periods in particular warrant attention for the decisive impact they have had on the development process. The first was the period of military rule initiated by a coup d'etat that put Muhammad Ayub Khan at the helm of power. The second was the period of civilian rule under the leadership of Zulfiqar Ali Bhutto, following the creation of independent Bangladesh. The third was the period of martial law under the regime of Gen. Zia ul-Haq. The distinguishing policies and external factors of importance during each of these periods are discussed below.

(1) The Ayub Khan Regime (1958-1969)

Efforts in agrarian reform amounted to the primary policy highlight of this period. Though the reforms were not that radical, they nonetheless re-appro-

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9 Data on land ownership from GOP, Economic Survey 1994-95, p. 53. For a discussion of the nonfarm segment of the rural population, see Hirashima, "Pakisutan-Panjahbu Nouson ni Okeru Hi-nouka-zou no Keizai Bunseki (literal translation: An Economic Analysis of the Nonfarm Households in Rural Punjab, Pakistan) Ajia Keizai, 1977. For a discussion of the socioeconomic base for the landed power elite, see Hirashima, Nishi Pakisutan no Tochi Kaikaku (literal translation: Agrarian Reform in West Pakistan) Institute of Developing Economies, 1964. The overwhelming majority of the members of the National and Provincial Assemblies who have held successive terms in office were apparently elected not on the basis of their current occupations, but on their rural land base. From that perspective, the approaches of Mushtaq Ahmad and Norman Omar (quoted in I. Yamanaka, op. cit.), who base their classifications on incumbents alone, seem to underestimate the real influence of the landed power elite.

strated adequate effectiveness in curbing the powers of the landed elite.[10] Second were policies aimed at encouraging the growth of the private sector in line with import substitution. That undertaking was essentially consigned to a business group that had relocated to Karachi from India after Pakistan's separation. As it happens, the administration pursued active policies of liberalisation against a backdrop of domestic law and order, and for that reason the Ayub Khan years became known as something of a Golden Age in the development of the Pakistani economy.

However, this period had two significant by-products, one of which was the formation of 22 new family-led industrial magnates. These business groupings put their support behind the Ayub Khan regime and had so much political clout that even the established power elites could not afford to ignore them. The point that should be noted here is that the country's political stage now had a group of powerful new actors from the business community. The second important development was the aggravation of serious regional disparities, which set the stage for the eventual creation of Bangladesh. Though East Pakistan had contributed substantially to the country's economic development with the foreign exchange it earned on exports of jute, a heavily lopsided share of capital formation and industrial investment went into West Pakistan, thus fomenting major discontent. Opposition from the landed elite, growing differences between the eastern and western wings of the country, and disillusionment about the performance in the 1965 India-Pakistan war all contributed to the Ayub Khan regime's eventual fall from power.

(2) The Civilian Government of Zulfiqar Ali Bhutto (1971-1977)

Having paid a heavy price with its loss of East Pakistan, which became the independent state of Bangladesh (1971), Pakistan moved from a military to a civilian-led period of government under the administration of Zulfiqar Ali Bhutto, himself a leading member of the landed elite in Sind Province. In its policies, though, the Ali Bhutto administration distanced itself from those of the traditional, landed power elite. The first distinction was that it sought to improve relations with China, the underlying objective being to drive a wedge into Indo-Soviet ties. Second, it also utilised this policy in an effort to justify its nationalisation of the country's leading industries, banks, insurance compa-

10 S. Hirashima, op. cit., p. 64.

nies, and education. As a result, education and practically all industrial sectors other than agriculture and textiles ended up under the control of the landed power elite and the bureaucracy. This policy shift was itself pursued in the name of "Islamic socialism," and as such, it proved highly effective in stemming the accumulation of power by the new business groupings discussed earlier. It is noteworthy, however, that in the process of improving labour conditions so it could gain the support of the working classes and small farmers, the Z.A. Bhutto administration also introduced new measures in agrarian reform and redistributed to small farmers and peasants a total of some 200,000 acres in farmland that had been appropriated from 178 big landowners.[11] In other words, it sought to maintain a proper balance of popular support for its socialist policies by holding the landed power elite in check.

Two major developments that essentially reshaped the international economy were the first oil crisis and the end of the international monetary system under the Bretton Woods Treaty. These events, however, proved unfortunate for the Z.A. Bhutto administration. More importantly, Z.A. Bhutto's political ideals proved inconsistent with his administration's economic policies, and ultimately that became a pivotal factor behind the country's slowing economic growth, the increasingly bloated and inefficient nature of the public monopolies, the debut of the privileged working class, and a loss of investment incentive among industrial entrepreneurs. All told, this state of affairs eventually set the stage for a resumption of military rule.

(3) The Zia ul-Haq Regime (1978-1988)

Two factors proved decisive in winning support for the Zia regime. First was the turn away from policies for nationalisation. In effect, Zia announced an end to the nationalisation drive, something that had confronted the business community with an atmosphere of uncertainty, and additionally sought to revive the economy by harnessing the vitality of the private sector. Zia's policies of Islamization were the second decisive factor. The introduction of a non-interest banking system in 1977, and the zakat and ushr systems in 1980, were emblematic steps in that direction. By fostering a return to fundamental Islamic practices, Zia's Islamization policies essentially sought to offset the disarray considered to have resulted from Z.A. Bhutto's experiment in "Islamic

11 S. Hirashima, op. cit., p. 66.

socialisation."

However, two noteworthy external factors eventually also began to have an influence. One was the second oil crisis, which took shape in 1979, and the other was the Soviet invasion of Afghanistan. The Zia regime's Islamization policies had won favour among many oil-producing countries. As a result, Pakistan enjoyed an influx of petrodollars. In addition, heightened demand for Pakistani labour in those countries effectively expanded the flow of worker remittances back into Pakistan. Not least significantly, the oil shock also had the effect of priming an expansion in domestic oil output. The Soviet invasion of Afghanistan transformed Pakistan into a haven for millions of Afghan refugees affected by the war. That in turn brought in heavier infusions of foreign aid and enabled the country to acquire an arsenal of modern weaponry. In the meantime, though, black-market trafficking in illicit drugs and older weapons eventually contributed to a deterioration of law and order situation. In the end, the delayed settlement of the Afghanistan problem imposed social costs far outweighing any of the presumed economic benefits.

Though the Zia regime did put a halt to the Z.A. Bhutto administration's policies of "Islamic socialism," it did not deal a decisive blow to the general policy drift in that direction. That failure is evidenced by the slow progress that has been seen in the privatisation process and the fact that fundamentalist Islamic economic views have been imposed in unmodified form on a secular economic system.

President Zia's death (in 1988) opened a power vacuum that led Pakistan back into an era of civilian rule. Nonetheless, up until the current administration took power in Oct. 1993, the Pakistani politic scene was typified by power struggles between the landed power elite and the country's rising industrial magnates. In fact, an atmosphere of confrontation—between the Prime Minister, the President, and the military—persisted even after the current administration assumed power.

The economy has been languishing for some time now due to a combination of aggravating factors: externally, the recent war in the Persian Gulf, and domestically, the end of the cotton boom together with massive flooding and deteriorating conditions of lawlessness in Sind Province, particularly Karachi. One outcome of that development is that structural adjustment policies engineered by the IMF and World Bank were more fully implemented during the

Moeen Qureshi caretaker government (July-Oct. 1993) and have received continuing support from the current administration (the second Benazir Bhutto administration).[12]

2-4 Liberalisation Policies and Current Economic Conditions

Pakistan's economy is still essentially representative of a food-and-fibre system (FFS). In other words, value-added, exports, employment, and capital formation are all still heavily influenced by the agricultural sector and by the food and textile industries, which utilise agricultural products. The agricultural sector alone accounts for 24 percent of all value-added and 48 percent of all employment. In an economy of this kind, it therefore needs to be kept in mind that smooth growth in the agricultural sector will be key to the perpetuation of economic liberalisation programmes currently in force. In 1991/92, when cotton output was booming, the agricultural and manufacturing sectors and the total economy registered growth rates of +9.50 percent, +8.05 percent, and +7.71 percent, respectively. Due to flooding and heavy damage from disease and insect pests, though, cotton output later dropped sharply. As a result, the following year saw the above three growth rates fall back and measure a respective -5.29 percent, +5.35 percent, and +2.27 percent. In the absence of any substantive recovery in cotton output, economic growth in 1994/95 came to +4.70 percent, a figure that is below the annual average for the 1970s, (4.84 percent, the lowest average on record), not to mention the pace for 1991/92.[13]

However, this development points to three other related points. One is that despite formidable initial conditions, external factors, and the divergent economic policies of successive civilian and military administrations (as discussed earlier in this review), Pakistan registered a pace of economic growth that deserves high marks. The second is that growth in its agricultural sector has the potential to drive industrialisation and economic liberalisation at a faster pace than has been witnessed to date. Third, if it is to achieve stable economic growth, Pakistan must overcome economic drawbacks that have made industrialisation heavily dependent on the agricultural sector.

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12 Pakistan received its first structural adjustment-related loan from the IMF in 1980, and from the World Bank in 1982. In reality, though, its government started seriously striving to meet certain conditionalities after 1993.

13 GOP, Economic Survey 1994-95, Statistical Appendix, p. 30.

Owing largely to natural calamities in 1992/93 and a sharp falloff in cotton output, Pakistan so far during the 1990s has posted sluggish economic growth. Moreover, it has yet to show any sign that it is moving back onto a firm recovery track. The country this fiscal year began pursuing full-fledged efforts in structural adjustment under IMF and World Bank supervision in a bid to counter parallel growth trends in its investment-to-savings gap, fiscal deficit, and current account deficit. As is commonly known, the IMF's policy priorities have been focused on short-term macroeconomic stabilisation, particularly measures to curb overall growth in demand; by contrast, the World Bank has placed priority on bolstering total supply through deregulation, privatisation, and other measures in economic liberalisation. In reality, of course, it is difficult to draw clear distinctions between the two, for certain IMF policies have been integrated into and thus effectively coordinated with policies of the World Bank.

Economic development and the eradication of poverty count as the chief goals behind the World Bank's efforts in policy intervention. It essentially utilises three strategies to achieve those goals. The first is macroeconomic stabilisation, which chiefly consists of efforts to improve Pakistan's fiscal, monetary, and trade policies. The second strategy is aimed at downsizing the public sector while stimulating the private sector, and to that end it is based primarily on the privatisation of state-run enterprises and the deregulation measures that impede market functions or the efficient allocation of resources. The third involves removing infrastructural bottlenecks and reordering priorities for public-sector investment; as such, it relies heavily on the expansion of economic infrastructure in areas supportive of the privatisation process, and ODA for social infrastructure as provided through the Social Action Programme (SAP).

Pakistan's policies for structural adjustment deserve praise on three counts. First, they have provided a clear-cut direction despite fluctuations in economic policy: that is, toward the restoration of a market economy primarily on the basis of privatisation. Second, they have given attention to social infrastructure development, including the development of human resources. And third, they have provided an opportunity for a full review of the country's existing economic frameworks.

However, Pakistan is certainly no exception when it comes to the problems that have been cited by numerous critics. Those problems include efficiency-

oriented policies with set time limits, distortions in the allocation of the resulting burden of responsibility for those policies, and the assorted problems stemming from blanket (i.e., inflexible) policy enforcement across-the-board.[14] Other problems worth citing include the following four.

One is the tradeoff between policies designed to control aggregate demand on the one hand, and those designed to bolster aggregate supply on the other. Recent trends in cotton output suggest that Pakistan's economy suffers more-serious bottlenecks on the supply side. A second problem is that not enough has been done to identify the actual structural bottlenecks—both social and economic—that effectively work against the implementation of the policies. The third problem has to do with private-sector involvement in efforts to enlarge and improve social overhead capital. It is strongly likely that private-sector participation aimed at offsetting funding shortfalls in the public sector will cause fluctuations in the price of supplying various services. Finally, as yet a fourth problem, social, economic, and political repercussions stemming from existing regional disparities have largely gone understated.

3. Priority Areas of Japan's ODA

The foregoing review allows us to conclude that Pakistan overcame numerous difficulties and obstacles to eventually begin making serious headway toward establishing fundamental conditions for its economic and social development. To build a more-affluent and democratic nation, its civilian government now faces the task of coming up with a long-term strategy that will help to restore lasting order, effectively mobilise and allocate the country's resources, foster the modernisation of industrial structure, and narrow the gaps between different regions and individuals. The recommendations we make in this paper are based on these perspectives.

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14 A. Nishigaki and Y. Shimomura, Kaihatsu Enjo no Keizaigaku (literal translation: Economics of Development Assistance), Yuhikaku, 1993. Also, see the following for documentation on problems in structural adjustment: S. Ishikawa, Kaihatsu Keizaigaku no Kihon Mondai (literal translation: Fundamental Problems in Development Economics) Iwanami Shoten, 1990; T. Yanagihara, "Kouzou Chousei Seisaku no Hatashita Yakuwari to Kongo no Tenbou" (literal translation: Structural Adjustment Policies: Their Past Role and Future Prospects), Economic Planning Agency Symposium Keynote Report, 1995; Overseas Economic Cooperation Fund, "Sekai Ginkou no Kouzou Chousei Apuroochi no Mondaiten ni Tsuite" (literal translation: On Problems with the World Bank Approach to Structural Adjustment), Kikin Chousa Kihou, No. 73, 1991; and Y. Hayami, "Keizai Kaihatsu ni Okeru Shijou to Kokka" (literal translation: The Role of the Market and the State in Economic Development), Kokusai Kyouryoku Kenkyuu, Oct. 1995.

In keeping with the above-noted conclusions, we have decided to arrange our recommendations in the following order.

(i) ODA for the expansion of social overhead capital (SOC) [15]

- Social infrastructure development
- Economic infrastructure development

(ii) ODA for the modernisation of industrial structure

- Improved agricultural productivity and expanded employment
- Strengthening of manufacturing industries and improvements in productive efficiency

(iii) ODA for environmental conservation

Detailed discussions concerning our recommendations are taken up in the following sections of this paper. Here, our intention has been to provide simply a rough sketch. Expanding SOC in the form of public goods and services that offer external economies will be a fundamental step toward the establishment of conditions for effective development. The indications are that the development of quality human resources, and improving educational services for women in particular, will be a key to Pakistan's long-range economic advance. Pakistan's people have excellent hidden potential. However, unless the vast majority are provided improved access to education and health-care, the country will find it difficult to surmount the structural bottlenecks it already faces.

However, while social infrastructure development will certainly be an essential condition for long-term economic growth, by no means will it be sufficient. Growth of the productive sectors of the economy will help to bring about changes in industrial structure. Pakistan needs that growth, as well as the service-sector gains that can be expected to accrue from it. One point deserving attention in this regard, though, is that the country should avoid a recurrence of one development witnessed during the 1960s: namely, the aggravation of social and regional disparities by the concentration of wealth. Given that the public sector bears responsibility for the development of economic infra-

15 According to A.O. Hirschman, social overhead capital (SOC) in the strict sense usually refers only to economic infrastructure. However, in its broad sense, it is considered to refer to social infrastructure as well. In general, the term signifies those elements of the economy that have been put in place by the public sector, that engender external economies, and that cannot be imported.

structure, it seems reasonable to assume that the scale and orientation of government investment in infrastructure will be major determinants of Pakistan's success in this regard. We have decided to place high priority on our ODA for the development of energy resources, roads, and railways, because we have reservations about the premature participation in these fields by private sector.

The private sector will play an instrumental role in efforts to modernise the country's industrial structure. Public-sector work to maximise external economies can be expected to enable companies in the private sector to trim costs and expand their business activities on a geographic scale. However, as noted earlier, Pakistan's productive sectors have been performing far below their actual potential. The problem is that to sustain its current drive in economic liberalisation, Pakistan should first recognise the importance of the role its agricultural sector plays, be it in terms of generating surplus output or absorbing surplus labour. In view of past experiences from the cotton boom, ODA for this sector will probably be concentrated in research, development and extension activities, and in curbing the deterioration of cultivable farmland.

Restoring essential conditions of law and order, managing cross-border trade and commerce, establishing a long-range outlook for industrial growth, and cultivating internationally competitive export industries all count among the most critical challenges now facing the industrial sector. Attention primarily to small enterprises helped to shape the recommendations made in this paper, i.e., for financing and quality control, support for standardisation and the establishment of industrial standards, and regional development-oriented ODA to industrial estates. While it is true that small enterprises are more in need of public assistance than their larger counterparts, the above position derived from a more fundamental factor: namely, recognition of the vital importance of strengthening the economy's ability to harness labour from the low-income classes of society.

The recommendations herein are concerned primarily with steps to increase social overhead capital (SOC) in its broadly defined sense, followed by ODA for industrial modernisation and finally, cooperation to conserve the environment. We emphasise, though, that environmental and antipollution measures bear features demanding that they be applied on a comprehensive scale spanning all areas of priority, not just as the third.

The following sections present detailed recommendations for each area of priority as well as an analysis of background factors while maintaining a comparative perspective on recommendations that grew out of the previous country study (in 1990-1991).

II. ODA Priorities

1. The Expansion of Social Overhead Capital

1-1 The Enhancement of Social Infrastructure

(1) Cooperation to Expand the Scope and Improve the Quality of Primary and Secondary Education, with Emphasis on Access for Girls and Women

- Training Women for Primary and Middle School Teaching Roles
- Cooperation to Expand the Scope and Improve the Quality of Primary and Secondary Education
- Cooperation with the Development of Equipment and Materials for Science and Mathematics Instruction in Primary and Secondary Education

1) Recommendations Made in the Previous Country Study

As our ODA priority aimed at fostering improvements in social infrastructure, the previous report recommended that action be taken to expand primary and secondary education and promote science education. It also mentioned several priority measures for the educational field, as listed below, and with special emphasis on the provision of relevant educational equipment for improvements in the quality of education itself, as well as exchange of personnel primarily through training programmes.

- Fostering of Female Teachers for Primary, Middle and Secondary Schools
- Promotion of Science Education in Middle and Secondary School
- Improvement of Technological Education in Universities and Colleges
- Exchange of Teachers and Regional Education Administrators

2) Japanese Assistance Since the Previous Country Study

Japan has pursued a number of assistance programmes since the previous report came out (Feb. 1991), including the following.

- Project for Upgrading Teaching Facilities at the National College of Textile Engineering, Faisalabad (1991, grant assistance, ¥650 million)
- Project for the Improvement of Educational Equipment at the Univer-

sity of Engineering and Technology, Peshawar (1992, grant assistance, ¥519 million)

- Educational TV Programmes to the Pakistan Television Corporation Ltd. (1993, grant assistance, ¥50 million)
- Project to Develop Educational Facilities and Establish a Teachers' College for Women in North West Frontier Province (1994, grant assistance, ¥857 million)
- Project for Improvement in Primary Education for North West Frontier Province (1994-1996, ¥1.416 billion; involves construction of 30 primary schools)
- Project to Expand the Number of Educational TV Channels (1994, grant assistance, ¥333 million)
- Project to Develop Educational Facilities for Allama Iqbal Open University (1994, grant assistance, ¥974 million)
- Dispatch of Project Formulation Specialist (1994, one specialist, primary-education field)
- Project for Participatory Development-Led School Construction (1994, small-scale grant assistance)
- Project for Participatory Development-Led Construction of Women's Community Education Centre (1994, small-scale grant assistance)

3) Position of the Second Country Study Group on Priority Areas

① Education: Current Conditions and Challenges

Problems in the education field must be addressed from a long-range perspective. Major improvements cannot be expected within a time frame as limited as five years. Many of the same problems cited in the first country study (1991) are still evident.

Below is a listing of the principal problems now characterising the education sector at large.[16]

- Low enrolment rates at every educational level: 71 percent in primary

16 Numerical data excerpted from UN Inter-Agency Mission on Basic Education, Challenges and Opportunities: Basic Education for All in Pakistan, 1995. GOP, Ministry of Education, Social Action Programme Seminar on Basic Education in Pakistan, 1995

school (male 87 percent, female 55 percent); 45 percent in middle school (male 58 percent, female 31 percent); and 30 percent in secondary school[17]

- Primary education still not widespread; enrolment rate low and dropout rate, high (45 percent)
- Low literacy rate (total 37 percent; male 49 percent, female 24 percent; urban 58 percent, rural 28 percent)
- Poor enrolment and literacy rates for girls
- Inadequate teaching materials and facilities
- A shortage of technical and vocational schools
- Unemployment among citizens who have received a formal education

In effect, Pakistan faces a host of education-related troubles. If anything, though, special attention should be given to the educational needs of women if it is to post sweeping improvements in the education field. In fact, the country will find it extremely difficult to lift enrolment and literacy rates without first striving to erase the gender gaps distinguishing access to education in general. It is widely recognised that the educational level of their mothers is a decisive factor influencing the school enrolment of young women. No one should overlook the fact, therefore, that encouraging women to pursue their education now will also effectively serve as an investment in the education of future generations. What is more, improving basic education for women will be key to the success of family-planning programmes and promoting child health. Given these perspectives, it seems strongly necessary that steps be taken to improve primary and secondary education in Pakistan, with special emphasis on the needs of women.

Primary education is one of the areas given priority under the Social Action Programme (SAP) now in effect. Particular emphasis has been placed on female education, with the goals of closing the gap in enrolment rates for boys and girls and lifting enrolment rates overall. To that end, efforts are being made to build new school structures, improve existing structures, develop instructional equipment and materials, and boost the quality of teacher training programmes. Budgeting has been secured for these undertakings; in addition,

17 The education system is divided into the following levels: Primary school (Classes I-V), Middle school (Classes VI-VIII), Secondary school (Classes IX-X) and Higher secondary school (Classes XI-XII).

education-sector budgets have been reallocated, and appropriations accordingly increased for primary education.[18] New education policies formulated in 1992 give overt attention to the issue of improving the efficiency of frameworks for implementation and cite a need for strengthened provincial government roles as well as improved capabilities in the arenas of education-programme assessment and monitoring.

The foregoing portrayal depicts problems for the education field in general. In re-examining education-oriented ODA for Pakistan, however, our attention focused on several issues of particularly noteworthy importance. These issues are taken up below.

a. Fostering the Spread and Quality of Primary Education

Following are some of the problems with primary education.[19]

- Low enrolment rates (in terms of gross totals, 71 percent overall and 55 percent for girls. On a net basis, the overall enrolment rate is believed to be around 50 percent, with about half of all students remaining enrolled to their final school year.)
- High retention and dropout rates (the dropout rate is at 45 percent. Many students drop out during the first two years of school.)
- Low levels of student achievement in school[20]

Several factors can be cited for these problems. Educational facilities and educational opportunities remain inadequate and unbalanced (with gaps evident between urban and rural areas and between boys and girls). School curricula tend to be overloaded and does not meet practical needs, and the available instructional materials are insufficient. Furthermore, many school teachers are reported as being untrained and teacher absenteeism is common. Certain background circumstances, however, cannot be ignored. Education budget shortfalls are one, weak school administration (from the provincial down to the *teshil* level) are another, and the lack of community participation in

18 GOP, Planning Commission, Social Action Programme 1992-1995.

19 Numerical data from same source listed in footnote 16.

20 According to a recent study conducted with a nationwide sample of 11-12 year-old children, only 33.5 percent could read with comprehension and only 17.4 percent could write a letter. (Data source same as above.) Original source is M. Perez, Basic Competencies of Children in Pakistan, Pakistan Psychological Foundation, 1995.

educational affairs, yet a third. To be sure, the challenges facing primary education in Pakistan abound and are tightly interrelated, thus demanding comprehensive approaches to their solution.

b. Expanding Educational Opportunities for Girls and Women

Steps to improve primary education will also demand that special attention be given to educational opportunities for girls and women in rural districts. The backward state of education for women, particularly in rural areas, is one of the key reasons for low enrolment and literacy rates. There is strong resistance in Pakistan to the idea of having girls in upper primary and higher grades receive their education together with boys, or allowing them to be taught by male teachers. Another factor that should be kept in mind is the scarcity of female teachers at the rural level, a situation stemming from the fact that few women commute over long distances or live alone. (Female teachers can, however, teach classes of boys or girls.) Accordingly, to improve educational opportunities for girls and women in general, it is essential that the rural shortages of girls' schools and of female teachers be redressed, and that steps also be taken to bolster the qualifications of female teachers.

Training for women teachers and access to educational services together stand as key issues confronting work to improve the scale and quality of secondary education for women. Particularly in the rural areas of Pakistan, the shortage of girls' middle schools is even more serious than the shortage of girls' primary schools. In addition, society generally frowns on the idea of female students commuting very far. For such reasons, many girls do not advance to middle school even though they have completed primary school and are adequately prepared for continued study. In societies such as Pakistan's, social restrictions limit contact between men and women. That is one reason there is a serious need for programmes to train women who will serve as providers of social services to women. In addition, from the standpoint of training women to serve as teachers and in other professional roles, secondary education for women has also become vital.

c. Teacher Training

Low enrolment rates, high dropout rates, and poor levels of student achievement indicate that students and parents alike are not particularly enamoured of schools or schooling. That is an attitude that has been strongly influenced

by teacher absenteeism and the shortage of qualified, knowledgeable teachers. Indeed, Pakistan apparently needs to move away from its conventional theoretical focus and conduct training programmes that place more emphasis on pedagogy. In addition, the government would be advised to take steps to bolster the relatively low social prestige of school administrators.

d. Expanding Science and Mathematics Instruction in Primary and Secondary Education

When it comes to providing useful instruction in mathematics and science subjects, primary, middle and secondary school curricula in Pakistan seem to face a number of problems. In particular, textbooks tend to be inadequate in their content, both in sheer volume and usefulness. Largely for such reasons, students generally demonstrate poor scholastic achievement in these areas. Instilling students with a functional understanding of science and mathematics demands suitable facilities and materials for laboratory experimentation and applied study. Few schools in Pakistan are currently so equipped.

Practical instruction in science and mathematics subjects is essential (especially at the middle and secondary levels). It therefore seems imperative that steps be taken to improve the existing curricula, provide teachers adequate training in basic science, and equip more schools with essential equipment and materials for instruction in these fields.

Further, introducing and strengthening vocational or home-science course programmes would be one conceivably effective way of improving the practical value of education to daily life, thereby buoying the appeal of primary and secondary education itself.

e. Strengthening the Programme-Implementation Abilities of Education Administration

Education counts as a field in which both the federal and provincial governments have jurisdiction. District-level government agencies, moreover, fulfil an instrumental role in managing and monitoring the country's public schools. Strengthening the implementation and monitoring abilities of the local administrative apparatus would go a long way toward improving the overall quality of education. It thus seems essential that steps to that end be pursued. Another noted problem is that many schools are not very well-rooted in the local communities they serve, a factor that effectively undermines the interest of

children and parents in schooling, per se, and that also accounts for deficiencies in community-led monitoring abilities. Remedying these drawbacks will call for actions aimed at bolstering the implementation powers of local administrative units and encouraging communities to become more actively involved in running their school facilities.

② Priorities

In view of the current situation and problems cited above, the priorities stressed by the previous country study basically still seem valid to us. However, given the sheer immensity of the task of pursuing real improvements in the education field and the effectiveness of ODA that Japan can extend to that end, we would prefer to adopt a slightly different stance on the priorities and actual methods of implementing ODA.

Primary and secondary education, and especially for women, is one of the priority fields of Japanese ODA. Within that context, teacher training for women will receive special priority. Additionally, we recommend that the North West Frontier Province be treated as a priority region for the time being, given the fact that Japan's assistance programmes for the training of women teachers and for primary education are already under way there. Our rationale for that recommendation stems from the point of view that it would be an effective strategy to augment the projects already in progress in that province with support in the areas of curriculum, teaching aid preparation, personnel and training, and utilise them as models for the future pursuit of comparable ODA projects in other regions of the country where education services are still relatively backward. From the standpoint of offsetting regional disparities, we also feel it would be wise to include educationally backward Balochistan Province among the target regions for our ODA (i.e., together with North West Frontier Province).

Lifting the quality of educational services and pursuing the development of education infrastructure at the regional level together will hold the key to the advancement of education in Pakistan. Accordingly, Japan should explore what it can do within the limits of its own existing ODA frameworks and maintain a flexible posture of accommodation.

Though efforts to enhance the quality of education pose extremely important challenges to Pakistan's social and economic development, due to the presence of an underlying maze of social and administrative restraints, this is

one field where improvements will be difficult to achieve. Partly for that reason, ODA should be extended on a sustained, long-range basis.

a. Training Women for Primary and Middle School Teaching Roles

Currently, a teachers college for women is being built with Japan's grant-based assistance in Abbotabad in North West Frontier Province. Future progress, however, will hinge largely on the approaches pursued in the soft or intangible areas of assistance. Accordingly, for now we would prefer to lay emphasis on teacher training programmes for women in North West Frontier Province and Balochistan while providing support for efforts aimed at enhancing the soft features of the above-cited college facility.

Specifically, we feel assistance of the following kinds would be beneficial:

- training programmes for women teachers, in Japan or third countries (e.g., Indonesia, Malaysia, or other Islamic countries in Asia)
- deployment of experts in teachers colleges and provincial education bureaus
- deployment of Japan Overseas Cooperation Volunteers (JOCVs)

Providing opportunities for change in the actual workplace will be essential to the task of lifting the qualifications of teaching personnel in Pakistan. Utilising youth-exchange programmes to invite women teachers and allow them to experience the Japanese educational system in practice would likely have a significant ripple effect. It would probably prove equally effective to have experts versed in matters ranging from school management to pedagogic techniques deployed in teacher colleges while placing experts in education administration in the offices of provincial education bureaus. There would also conceivably be value in having JOCVs work as instructors chiefly in the subjects of science and mathematics, two areas that, as has been pointed out, will be major challenges for primary and secondary education in the years ahead. And, as a necessary step to ensure that teachers colleges for women live up to their essential objective, consideration should probably be given to establishing student scholarships, with preferential eligibility assigned to women brought up in rural areas who are prepared to return to rural districts and serve as teachers once they have completed their courses of study.

Another potentially useful measure would be to utilise the teachers college facilities as education centres in the community. In other words, they could be

used as training centres during the summer vacation period, offering in-service training courses for local teachers, or programmes aimed at encouraging formally educated women in the community to take an active interest in pursuing teaching careers.

b. Cooperation to Expand the Scope and Improve the Quality of Primary and Secondary Education

Serious inequalities distinguish rural and urban education infrastructure and opportunities in Pakistan. That state of affairs demands that action be taken to build more schools, especially in rural communities. Consequently, Japan should actively consider extending ODA for projects to build small schools or renovate and expand existing school structures. Training and preparing rural women who have some formal education to serve as teachers may be one effective way of overcoming the general shortage of women teachers in rural districts. Given that such forms of assistance, however, would be difficult for Japan to undertake on its own, coordinating projects with international organisations or NGOs may be a better approach. Similarly, coordination with other aid organisations would conceivably be one expedient means of furnishing assistance in the form of incentives for students (e.g., scholarships, meals, school uniforms, etc.).

Japan is currently engaged in a grant-funded project for the construction of 30 primary schools in North West Frontier Province. As with the teachers-college project mentioned above, it will be essential to expand on that assistance in the future. Specific actions to that end will possibly include

- placing teachers or JOCVs versed in science and mathematics subjects on assignment in Pakistan, and
- assisting in the development of instructional materials for those subjects.

Additionally, as one strategy aimed at advancing these efforts, the facilities now under construction could be utilised as support centres for other schools in surrounding communities. In particular, Japanese experts and volunteers involved in the above undertakings could play an active role in building new, small-scale schools, renovating existing facilities, and running teacher-training programmes.

c. Cooperation with the Development of Equipment and Materials for Science and Mathematics Instruction in Primary and Secondary Education

Assistance in this area would likely be focused in the development and production of equipment and materials for practical experimentation and study in the science and mathematics fields.

The National Educational Equipment Centre (NEEC) in Lahore is one facility already engaged in developing instructional materials (flasks, magnifying glasses, etc.) for primary school teachers. Though it is not as yet a very large-scale operation, it has drawn attention to the potentially instrumental influence it could have toward improving academic curricula.

Helping Pakistan expand its capabilities in terms of supplying instructional materials in general can be expected in turn to foster the spread of science and mathematics-related instructional materials into primary school classrooms nationwide. Such assistance will effectively heighten the practical value of primary school curricula and indirectly contribute to better student familiarity with scientific subject matter at the middle school level. Forms of assistance to the National Educational Equipment Centre would conceivably include the deployment of Japanese experts and JOCVs with education or engineering backgrounds.

Finally, the overall effectiveness of efforts toward the three priority objectives discussed above would likely be enhanced if actual ODA projects were implemented on an integrated basis.

③ Other Issues Deserving Attention

In exploring forms of assistance aimed at building schools that will serve as regional models, two issues must be borne in mind: namely, (i) whether such schools will be suited to local conditions, and (ii) whether they will actually serve as effective local models in a realistic sense (i.e., can they be replicated or not?). The poor quality of education services, together with the absolute scarcity of education infrastructure especially in rural areas, together count as the two most fundamental problems confronting the primary and secondary education fields in Pakistan at this time. Viewing local conditions, it seems imperative that schools be built to an appropriate scale and with suitable facilities if we are to maximise the effectiveness of limited ODA resources and develop structures that will serve as serious models for Pakistani education infrastruc-

ture at large. From the perspective of offering better educational opportunities to those groups that have been afforded relatively less access to the benefits of education to date (particular girls and women in rural districts), these considerations will be essential.

We must emphasise, moreover, that transforming schools now under construction with Japanese ODA into effective community models will amount to a task demanding various forms of soft, content-oriented assistance (e.g., developing instructional materials, deploying teachers, and running teacher-training programmes) in addition to the hard, construction-related work.

Improvements to the system of education administration will count as yet another essential for efforts to address the many education-related issues now in view. To that end, studies of education administration at the federal, provincial, and rural levels would likely be worthwhile (i.e., concerning the actual roles of, flow of funding at, and problems associated with each level with respect to education-programme formulation, implementation, and management).

Finally, to expand on Japanese assistance in the education field, it would seem desirable to find organisations and research institutions that are willing to serve as the pivotal elements of support for foreign-trainee programmes in Japan and the deployment of Japanese teaching personnel abroad.

(2) Cooperation for Enhancements in Health and Medical Care Services

- Cooperation for the Training of Health and Medical Care Personnel
- Cooperation for Maternal and Child Health-Care, with Emphasis on Safe Motherhood

1) Recommendations Made in the Previous Country Study

The recommendations of the previous country study emphasise several measures for better primary health care. In particular, they place importance on strengthening and linking facility-led assistance, such as that for the provision of better health-care services at the Islamabad Children's Hospital, with much-needed increases in regionally oriented assistance, such as the provision of equipment and materials to basic health units (BHUs). In addition, they underscore the importance of finding steady supplies of personnel capable of the operation and maintenance of medical equipment.

The previous study also expressed the view that projects in certain areas (e.g., for the construction of paediatric and cardiovascular clinics, the supply of equipment and materials, and the extension of technical assistance) would be viable and effective ways of improving the services of secondary and tertiary health-care institutions. Further, as measures in the fight against infectious disease, it cites technical and logistics-oriented assistance as serviceable approaches to aid, particularly in the production of vaccines, one area where Japan has achieved world-class levels of quality.

2) Japanese Assistance Since the Previous Country Study

Since the paper on the previous country study came out (in Feb. 1991), Japan has initiated, or has put together plans for, several aid undertakings in this field, including the following:

- Project for Improvement of Medical Equipment in NWFP (1994, grant assistance, ¥900 million)
- Study on Implementation of Maternal and Child Health Project (1996)
- Project Formulation Study on Population and AIDS (in priority countries under the Global Issues Initiative (1996).

3) Position of the Second Country Study Group on Priority Areas

① Health Care: Current Conditions and Issues

With few exceptions, health care in Pakistan today shows little change from its state five years back, when the first country study was carried out. If anything, the primary difference is that the country has since formulated (1992) and implemented a Social Action Programme. Secondly, it has launched its National AIDS Prevention & Control Programme to deal with AIDS, a problem that has taken on increasing national significance.

a. Social Action Programme (SAP)

The Pakistani government has made the SAP one of the priority areas of its Eighth Five-Year Plan. Accordingly, budget appropriations for the SAP have been made on a priority basis. The SAP gives preference to a number of objectives in the health-care field, including steps to lower the population growth rate (from 2.9 percent to 2.5 percent by the end of the 1990s); lift the coverage rate for family-planning programmes (from 21 percent to 68 percent); vaccinate

85 percent of all first-year infants against infectious diseases; increase the coverage rate of traditional birth attendants (TBAs); increase the number of community health workers; improve the quality of services provided by rural health centres (RHCs) and BHUs; and establish health centres for the urban poor.[21] Whereas the federal government is responsible for formulating and earmarking budget appropriations for the SAP, the provincial governments are responsible for SAP project implementation.

b. Social Constraints

As is illustrated by tables in the supplementary material at the end of this paper, most indicators on primary health care in Pakistan are not favourable. One prerequisite to improve those indicators is physical infrastructure for health and medical care, such as district health and medical care facilities, and potable water supplies. Aid from the World Bank and the Asian Development Bank, as well as Japan, has fostered significant improvements in primary health-care facilities such as RHCs and BHUs. The major issues at present include improving secondary health and medical care facilities such as district hospitals, and effective utilisation of primary and secondary medical facilities and establishment of efficient referral systems between these facilities. Access to potable water-supply facilities at the regional level is still inadequate; only about 40 percent of the population in rural communities has access to water supplies.

In addition to the physical or infrastructural factors discussed above, several social factors also form a significant prerequisite to improve the indicators. As it happens, social indicators for women are much lower than expected. This is attributable chiefly to various social bottlenecks, including poor literacy rates, the limited penetration of basic education, and insufficient levels of health education. Furthermore, there is still strong resistance to the idea of women undergoing medical treatment by male doctors. That social factor has heightened the need for female doctors, particularly in rural areas. Even so, the absolute number of female physicians in Pakistan remains considerably fewer than that required. Another serious problem is that few female physicians take up assignments in rural areas; several background factors help to explain why. One possible reason is the prevailing system of social values in

21 GOP, Planning Commission, Social Action Programme 1992-95.

Pakistan which inhibits women from working outside their homes or living away from their families. Another possibility is the insufficient remuneration that female physicians assigned to rural areas can receive, compared to the remuneration levels enjoyed by their counterparts in urban areas. Another possibility is the social environment in rural areas which makes a woman living alone away from her family feel vulnerable. Another serious issue is the shortage of qualified nurses, though that situation has been improving. For instance, many women consider nursing jobs to be a good source of income, and thus an increasing number now aspire to enter the profession. One significant change characterising the improvement is the increased number of Muslim nurses, who constitute over 70 percent of the country's nursing population.

Though Pakistan may have enough doctors in terms of pure totals, their numbers in the urban and rural areas remain severely unbalanced. Doctors tend to be concentrated in urban areas and show little interest in moving to the countryside. There seems to be a correlation between their attitude and the backward state that characterises difficult communications as well as the poor quality of and difficult access to education and health-care services in rural areas. Trained professionals who have finished higher education can typically have a broad range of job opportunities to choose from. Accordingly, it could be pointed out that the real problem is that rural districts lack incentives that would effectively encourage doctors to pursue their professions there.

The problems hampering the advance of health care in Pakistan are tightly interwoven with other problems having to do with socially imposed constraints and underdeveloped conditions in rural areas. Assistance shaped by considerations for these factors will be a precondition for serious improvements in Pakistan's health and medical care sector. In addition, it will be essential to pursue assistance projects from a medium and long-range perspective.

c. Institutional Constraints

In addition to social factors, various institutional constraints are also considered a deep-rooted source of many of the problems with health and medical care in Pakistan, as has been illustrated by serious organisational inefficiencies and inadequate training programmes for medical professionals.

It has been reported that the structures in place for the provision of primary health service tend to be inefficient and overly concentrated in the hands of the federal government. In addition, many cases of overlapping services and

functions are reported, and the system itself has been described as having become too complex in organisational and institutional terms, making management an extremely difficult task. For such reasons, inadequacies sometimes characterise programme budgeting, personnel policies, and the supply of necessary equipment and drugs. On top of that, the situation is such that delays in budget appropriations seem frequent.[22]

Health-care services have become fairly widespread in recent years. Over 90 percent of all union councils are now equipped with BHUs or alternative facilities. However, at the rural level, many of these facilities sometimes lack supplies of basic drugs, contraceptives, and vaccines, face shortages of adequately trained female workers, and offer health-care services that are generally poor in quality. For that reason, many have fallen into disuse or have been abandoned outright.[23] As one of the problems stemming from this situation, patients have frequently bypassed the lower levels of the health-care system altogether and crowded into central hospitals, essentially undermining the efficiency of the referral system itself.

Some important problems are also observed in the system of training for medical professionals, as well. People who pursue medical careers in Pakistan tend to be motivated largely by the goal of setting up their own personal practice as medical specialists; for that reason, the medical education system does not prepare students for primary health services at the rural level. Such tendencies notwithstanding, recent developments suggest Pakistan has started working to better integrate the health-care needs of rural society into its medical training programmes; for instance, in Dec. 1995 Bakkai University, a private institution, held a conference on rural health care with backing from the World Health Organization. In addition, the Health Service Academy, which receives assistance from GTZ, is planning to introduce a Master of Public Health programme next year.

② Priorities

Development needs in the health and medical care field of Pakistan are diverse. Japanese ODA in particular, though, should be focused in efforts to

22 World Bank documents (1994).

23 World Bank documents (1994).

bring down the high mortality rate for women (a statistic attributable in large part to deaths during pregnancy and childbirth), reduce morbidity, and foster improvements in district health-care systems, including the provision of better primary health-care services.

Pakistan also has broad-ranging needs for assistance in the arena of primary health care, a field that has been beset by various problems extending from those of national proportions on down to the community level. This situation demands a comprehensive approach to strategic planning within the context of fostering improvements in the country's district health-care system at large. That approach would conceivably involve working in coordination with other aid institutions to furnish assistance that is mutually complementary, that can be initiated and enlarged in phases, or that gives consideration to the effective utilisation of local human resources. However, Pakistan will also require assistance that looks beyond BHUs, RHCs, and other primary-care facilities and strives for improvements at district headquarter hospitals and other secondary health and medical care facilities, i.e., those facilities to which patients receiving primary care are often referred.

a. Cooperation for the Training of Health-Care Personnel

Improving the knowledge, health and medical care expertise, and management skills of the personnel employed at health and medical care facilities will be essential if Pakistan is to effectively strengthen its district health and medical care systems. Indeed, in view of the social constraints discussed earlier, heightening the access of women in rural areas to health and medical care services will be preconditioned on effectively training and positioning female doctors (WMOs), nurses, lady health visitors (LHVs), midwives, and other female health and medical care personnel in health-care facilities nationwide.

However, Pakistan still suffers from a chronic shortage of nurses. In fact, there are currently three doctors to every nurse, on average (three doctors to every two if LHVs and midwives are included). That situation prevents patients from receiving the quality care usually extended by nurses, and has contributed to a general deterioration in the quality of medical treatment. New schools for nurses and LHVs have been built with donor-provided assistance in most provinces, effectively alleviating most of the difficulties once attributable to a shortage of such schools. However, the facilities, quantity and quality of instructors, and training curricula of the respective schools have

not yet attained satisfactory levels. To be sure, striking gaps in these areas are evident at the provincial level and between schools themselves. Hopefully, steps will be taken to bolster the qualifications of Pakistan's health-care personnel by identifying, and extending assistance to deal with those areas in need of improvement.

In order to ensure a viable referral system between primary and secondary medical facilities, training programmes or refresher courses in medical techniques and management skills to provide medical services tailored to the health care needs in rural communities have to be organised for doctors and LHVs working in rural areas. In addition, such programmes will have to be monitored to gauge whether they are effective in bringing about substantial improvements. Assistance aimed at strengthening the administrative and educational structures and refining the skills of the personnel who are involved in the actual formulation and implementation of medical care programmes and the follow-up assessments of such training programmes will also conceivably be an important and effective means of lifting the quality of health-care services at the community level, even if such assistance is indirect.

Support for undertakings in South-South cooperation would also be a potentially effective means of cultivating needed human resources. To that end, Japan could provide assistance aimed at encouraging personnel exchanges at various levels between Pakistan and other developing countries in Asia (Islamic countries in particular) that have already demonstrated a measure of success with programmes of their own for the provision of rural health care. This approach would allow Pakistan to draw on the experiences of such countries, for instance, in the arenas of programme development and the training of health-care personnel.

b. Cooperation for Maternal and Child Health-Care, with Emphasis on Safe Motherhood

One of the most conspicuous features distinguishing patterns of death and disease in Pakistan is that the incidence among women is relatively high compared to other countries at the same level of economic development. In particular, maternal mortality due to complications during pregnancy and childbirth is exceptionally high (around 500 per 100,000 live births); though it would appear the country has substantial room for improvement in this area, little or no sign of progress has been observed to date. Another problem worth

noting is that, compared to neighbouring countries such as India or Bangladesh, Pakistan has shown relatively little progress since the early 1980s toward improving mortality among children under age five.

Figures on maternal mortality are indicative of poor levels of health and welfare among Pakistani women. Those deficiencies are thought to be a manifestation of several influences, including malnutrition, frequent pregnancies, and a low incidence of reliance on available health-care services—a factor in itself attributable to social restraints and poor education. Accordingly, it would appear the country is in need of sweeping measures, including actions in the areas of education and nutrition.

Primary health-care coverage has improved significantly at the rural level due to efforts since the 1980s to build and run more facilities. Nonetheless, 85 percent of all childbirths still take place at home; further about 80 percent of pregnant women in rural communities and 40 percent in urban districts still receive no prenatal care. Clearly, Pakistan faces a pressing need to improve the reach and quality of maternal and infant health-care, with emphasis on safe motherhood. Japanese ODA should therefore place priority on measures in these areas.

Maternal health in Pakistan has been neglected practically as a fringe concern of the health and population welfare sectors. Largely for that reason, efforts to improve indicators on maternal health in the country have not achieved concrete results. Accordingly, it is desirable that Japan consider furnishing assistance for more substantive maternal health-care services at primary health-care facilities, as well as for enhancing emergency medical care in the obstetrics field at secondary-referral hospitals.

Around half of the cases of infant mortality up to five years of age in Pakistan are neonatal deaths occurring up to four weeks after birth.[24] Neonatal mortality is known to be more strongly influenced by the mother's health and nutritional status during pregnancy and at birth, rather than post-natal nutrition and hygiene. It can therefore be anticipated that improving maternal health will lower both maternal, and indirectly, infant mortality rates.

As it happens, Japan is currently in the process of initiating a new project

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24 Demographic and Health Surveys, Pakistan Demographic and Health Survey 1990/91, p.114

for improved maternal health in Pakistan. The preliminary field study and negotiations have started. The philosophy underlining the project is the protection of motherhood. The project is expected to offer refresher training for female doctors, nurses, and midwives throughout Pakistan, and to establish pilot referral systems in selected districts in the capital district of Islamabad, Punjab Province, and North West Frontier Province.

③ Other Issues Deserving Attention

The implementation of a Social Action Programme in the health and medical care field represents an unprecedented development. However, ensuring that the SAP actually results in improved health-care quality and access at the community level demands better administrative capabilities at the district level, and technical assistance to the districts by federal and provincial governments as well as the decentralisation of authority. These are important issues that should be kept in mind as Japan moves forward with assistance programmes in this field.

Maternal health and primary health care are issues that have to be addressed on a long-range and nationwide basis. In furnishing assistance in these areas, Japan should formulate projects that give adequate attention to the technical, organisational, institutional, and budgetary aspects which influence the sustainability of a project, so that project models can be applied in other regions of the country. In addition, monitoring organisational and institutional aspects of a project should be incorporated into the project components. As one of the underpinnings of work to develop Pakistan's health-care sector at large, steps to develop new assistance models will require that reforms or progress in other less-apparent facets of the health-care system (those having to do with advances in the private sector or government-NGO cooperation) also be identified and better coordinated with each other.

Most of the beneficiaries of primary health care and maternal health care are women. In view of that reality, it seems absolutely essential that any project formulation be led by an awareness of the cultural and social position of women in Pakistan. That awareness could be achieved by having survey teams and deployed specialists conduct social analyses, and by having gender specialists (preferably women) participate in the project-formulation process.

With the introduction of its national AIDS Prevention & Control Programme, Pakistan's federal government has launched a national-scale response to the

AIDS problem. Though there have been few reported cases of HIV infection in Pakistan to date, in view of the epidemiological data for neighbouring countries, it seems advisable that early steps be taken to prevent the spread of HIV infection and thereby minimise the impact of AIDS. Japan, for its part, should maintain an ongoing dialogue with the Pakistani government regarding assistance to this end.

Not enough is known about the state of school-based health programmes in Pakistan at this time. Nonetheless, given the insufficiency in health-related education and the low level of Pakistani indicators on primary health in general, measures to foster a wider awareness of health-related practices and topics at the elementary and lower-secondary educational levels would likely be effective.

1-2 Economic Infrastructure Development

(1) Cooperation for Energy Problems

- Cooperation for the Development and Efficient Utilisation of Domestic Energy Resources
- Cooperation in Efforts to Address Inefficient Areas of the Power Sector
- Cooperation for the Development and Effective Utilisation of Localised Energy Resources

1) Recommendations Made in the Previous Country Study

As a measure to deal with a projected increase in energy imports, the first country study urged that Pakistan reduce its dependence on such imports by harnessing more of its own domestic hydropower and coal reserves. That action, it noted, would help the country improve its current account balance while at the same time diversifying its sources of energy.

To this end, the first study listed several priorities for ODA:

- Support for research studies on coal
- Studies and research on the construction of coal-fired thermal power stations

- Improvements in the overall efficiency of electric power transmission
- The manufacture of briquettes for household fuel, and
- Measures to protect the environment.

2) Japanese Assistance Since the Previous Country Study

Japan has pursued two aid projects in this field since Feb. 1991.

- Bin Qasim Thermal Power Station Unit 6 Extension Project (II) (1994, loan assistance, ¥14.0 billion)
- The Secondary Transmission Line Network Expansion Project (1995, loan assistance, ¥12.0 billion)

3) Position of the Second Country Study Group on Priority Areas

① The Energy and Power Sectors: Current Conditions and Issues

Pakistan's Eighth Five-Year Plan incorporates several policy objectives for the country's energy sector, including (i) the promotion of energy conservation; (ii) improved energy self-sufficiency through the development of domestic energy resources; (iii) sectoral steps in deregulation and privatisation; and (iv) rationalisation of energy prices.[25] However, it neither specifies the priorities to develop primary energy sources, such as coal, oil or hydropower, nor the priorities to develop alternative energy sources of electric power. Responsibility for the development of coal and water resources in Pakistan is in the hands of the provincial governments. For that reason, it is considered that the administrative structure might provide some impediments to formulating the policies that would set priorities for energy-resource development from a national perspective.

Privatisation is the biggest change taking place in Pakistan's energy and power fields. Otherwise, little if any change has been observed in demand, supply, and other fundamental conditions since the last country study was performed five years back. Inefficient and unsustainable forms of energy use in urban and rural areas count as one of the most noteworthy problems at present.

25 GOP, Planning Commission, Eighth Five-Year Plan 1993-98, 1994.

a. Absolute Power Shortages and Promotion of Privatisation

Peak demand for electricity currently runs around 11,000 MW, which is significantly more than the installed capacity of 8,500 MW. To be sure, Pakistan's power shortage has been chronic for many years; now, the government is striving to harness private-sector capital in order to alleviate it. It has already received bids from private-sector contractors for a project to build a new thermal power station, and has since reached tentative agreements with two companies. The government has expressed its expectation to reach tentative agreements by March 1996 on projects to construct a total of 2,400 to 3,620 MW of new thermal power stations.

Regarding hydropower development, it has decided to invite private-sector bidding on projects for the construction of regulate-pondage and run-off-river hydropower plants with generating scales of under 300 MW.[26] In addition, as a step to restructure the Water and Power Development Authority (WAPDA) and transform it into an independent corporation, the government is now exploring the idea of selling off some of its existing power plants to the private sector. In particular, it has plans to divide certain geographic sections of its existing power distribution networks into smaller zones and sell them off to private interests,[27] and has unveiled bold privatisation policies that aim to construct new transmission lines with private sector investment.[28] However, because the private sector construction of hydropower plants and transmission lines has just started, it is premature to predict how well the private sector will evaluate the privatisation programme and how much private investment such programmes would be able to attract.

In Sept. 1994, the government set up its Private Power and Infrastructure Board (PPIB) to handle the procedural affairs of privatisation. In addition, it recently authorised the establishment of the National Electricity Power Regulatory Authority (NEPRA), thus completing the institutional framework for the privatisation process. In other words, it appears NEPRA will be the institution with regulatory jurisdiction over the power sector, with WAPDA and the private firms in the business of thermal and hydropower generation and distribu-

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26 GOP, Policy Framework and Package of Incentives for Private Sector Hydro Power Generation Projects in Pakistan, 1995.

27 According to interviews with officials in the Ministry of Power and Water Management (Sep. 1995).

28 GOP, Policy Framework and Package of Incentives for Private Sector Hydro Power Generation Projects in Pakistan, 1995.

tion which are under NEPRA. It is also anticipated that WAPDA, which is to become a state-owned corporation, will retain its traditional responsibility over large hydropower development projects, the distribution networks with less demand density, some old power stations with lower thermal efficiency, and undertakings in rural electrification.

It is expected that most of the new thermal power stations to be built by the private sector will be powered with imported fuels, which would eventually result in an increased proportion of primary energy imports out of the total primary energy demand. In order to reduce transportation costs for imported fuel, it is anticipated that most of the new thermal stations will be sited near Karachi, which would increase transmission line losses caused by unbalanced distribution of generating facilities in the national grid.

b. Slow Progress in the Exploitation of Domestic Energy Resources

Pakistan has an estimated hydropower potential of 27,000 MW; of that total, however, only 4,825 MW (18 percent) had been harnessed as of Dec. 1993.[29] Also, due to problems associated with the relocation of local inhabitants, the country has not made any serious progress in developing new, large-scale hydropower facilities for some 20 years. However, construction work is about to begin on the Ghazi Brotha Hydro Station (a run-off-river type with capacity of 1,450 MW), which is scheduled to enter operation in 2001. Hydropower is a renewable energy resource. Accordingly, further developing and harnessing Pakistan's hydroelectric potential will be an increasingly vital challenge, given that it can help the country effectively alleviate its dependence on imported energy supplies and improve its balance-of-payments position over the medium and longer term.

Though coal counts as yet another important domestic energy resource, questions persist about its quality as well as whether the country is actually utilising it effectively. Because the utilisation of coal depends largely on its quality, it seems essential that further research be pursued on utilisation methods that are well-suited to the physical qualities of the types of coal extractable in Pakistan.

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29 World Bank documentation (1994).

c. Poor Efficiency of Energy Use and Deteriorating Air Quality

Transportation currently accounts for the largest share of energy consumed in Pakistan. However, transportation-related energy use is still extremely inefficient. The biggest reason is that more efficient forms of rail transport to carry unit loads account for only a small 14 percent share of the total load carried, whereas less efficient forms of vehicular transport account for 86 percent. As it happens, the share attributable to rail-based transport (14 percent) has been shrinking steadily from the 75 percent it measured [30] years ago. However, the Eighth Five-Year Plan incorporates government provisions to push the share back up to 20 percent.30

Trucks account for most vehicular cargo transport. However, many trucks are typically overloaded. The resulting heavy loads on truck diesel engines degrades their fuel efficiency, while the exposure of roads to loads exceeding their designed capacity contributes to their general deterioration. Inefficient energy use[31] in the transportation sector is also considered to be a major cause of air pollution.

d. Rural Energy Consumption and the Depletion of Forest Resources

Achieving improvements in the consumption and supply of energy will be a major challenge in urban and rural districts alike. According to a survey of household energy use conducted in 1991, only 53 percent of all households in Pakistan were electrified, a finding that suggests close to half the country's population still does not benefit directly from the supply of electricity. It was also discovered that firewood accounts for 54 percent of final energy consumption, followed by cow dung at 18 percent.[32] These findings point to yet another fact; namely, that the continued consumption of forest resources in the absence of reforestation programmes has rapidly depleted the country's forests, which were originally a scarce resource.[33] As this illustrates, supplying energy to rural districts has become a critical issue that goes hand-in-hand with the problem of deforestation.

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30 GOP, Planning Commission, Eighth Five-Year Plan 1993-98, 1994.

31 See 3-1 in the next section (I-2-2), on "Aid for Improvements in Transportation Infrastructure."

32 GOP, The Energy Wing, Pakistan Household Energy Strategy Study, 1991.

33 Given these circumstances, the federal government has begun implementing plans for a tree-planting campaign.

② Priorities

a. Cooperation for the Development and Effective Utilisation of Domestic Energy Resources

Pakistan has many promising yet undeveloped sites for the generation of hydropower on a scale comparable with the facilities at Kalabagh (3,600 MW) and Basha (3,300 MW). Judging from its long-range energy needs, it seems imperative that the country effectively harness these hydropower resources, albeit with due attention to the surrounding environment and local inhabitants. Furthermore, potential small-scale sources of hydropower abound in the mountainous belt to the north. Such resources, if harnessed, would be a highly effective means of electrifying the rural communities in those mountainous districts.

Pakistan also possesses sizeable confirmed reserves of coal. Though questions about the quality of the coal itself seem to rule out much hope of utilising the coal deposits as a source of export income, such reserves could conceivably help the country satisfy domestic energy demand. It is hoped, therefore, that their effective utilisation can be encouraged through the provision of assistance for studies and research on utilisation methods suited to coal quality. It is somewhat unclear what role the Pakistani government has assigned to coal in its energy policies. Japan should bear that factor in mind as it strives to formulate ODA projects in this area.

b. Cooperation in Efforts to Address Inefficient Areas of the Power Sector

Even after becoming a state-owned corporation, it is anticipated that WAPDA will still be responsible for a number of inefficient generation plants and be faced with the necessity of pursuing various unprofitable ventures in rural electrification. Under these circumstances, it could be presumed that it would be very difficult for WAPDA to attain financial self-reliance. From a purely economic perspective, then, it seems vital that WAPDA be assisted in formulating programmes for the renovation and modernisation of existing elements of its power-generation and distribution-network infrastructure, and that it have financial assistance for programme implementation. Rural electrification is yet another issue, and one of substantial geographic scale. It therefore seems imperative that WAPDA have help in formulating projects that give attention to such factors as demand density and local geographic features, and

that it also have financial support at the implementation stage.

c. Cooperation for the Development and Effective Utilisation of Localised Energy Resources

Hopes have focused on the potential in solar power, small-scale hydropower, biomass-based fuels, and other forms of renewable energy that can be utilised as community-based, localised energy resources. At present, little effort has been made in Pakistan to effectively harness these localised energy resources in remote communities. One problem is that due to their small size, such generating plants cannot enjoy economies of scale. Nonetheless, if adequate attention is given to this drawback, assistance for the exploitation and effective use of such localised energy resources could conceivably play an instrumental role, both in boosting the quality of life in remote communities and conserving scarce forest resources.

③ Other Issues Deserving Attention

Pakistan has demonstrated impressive strides in implementing policies for the privatisation of its power sector. Nonetheless, questions remain as to whether it will be able to suitably balance the bold goals of its privatisation programme with the need to maintain stable supplies in a field that is fundamentally in the public interest. Electricity rates in Pakistan have been largely subsidised up to now. As to be expected, the rates private-sector power suppliers charge will no doubt seem higher by comparison, given that they must be preconditioned on the concept of cost recovery. Therefore, unless government regulations and monitoring in this sector are appropriate, expensive electricity rates could exclude low-income households from benefiting from electricity, and may impede economic development itself.

Privatisation is a relatively new trend in Asia and for that reason, various uncertainties still cloud its eventual outcome. In some ways, the privatisation of Pakistan's power sector could be considered as an ambitious experiment. In formulating and approving future aid projects for Pakistan, Japan will find it essential to give attention to the degree of success of privatisation process.

(2) Cooperation for Improvements in Transportation Infrastructure

- Cooperation for Rationalisation in Rail Transport
- Cooperation for Rationalisation in Road Transport
- Cooperation for the Development of Rural Road Networks

1) Recommendations Made in the Previous Country Study

Railways, roads, ports, and telecommunications were the infrastructural areas given priority by the previous study. In particular, it was noted that it would be necessary to repair aging railroads and locomotives, modernise workshops, and extend technical assistance for improving the quality of services by introducing on-line ticketing systems. In connection with the issue of energy resource development, the study also cited a need for a fundamental restructuring of management and operating systems and the introduction of public-private approaches to the transportation of coal, and discussed possible cooperation for structural reforms and operational changes. Regarding roads, the study considered it of pressing importance to establish a system for the repair and regular maintenance of arterial highways, and to develop rural road infrastructure. Further, in view of the fact that the Indus Highway project had been initiated with Japanese ODA, the study called for a forward-looking policy on additional assistance for that undertaking. Port and harbour facilities were described as belonging to a field in which profitable operations would be difficult to be achieved. Accordingly, it was urged that ODA for that field be focused primarily in technical assistance. Finally, with respect to telecommunications, the study stressed that importance be given to the provision of services tailored to the needs of consumers namely through technical transfers for maintenance and grant assistance to develop and improve central research facilities in the telecommunications field.

2) Japanese Assistance Since the Previous Country Study

Japan has pursued a number of aid projects in this field since Feb. 1991.

- Greater Lahore Mass-Transit System Development Plan (3-year study initiated in 1989)
- Project to Upgrade Trunk-Line 94 Station Signal Equipment (1991, loan assistance, ¥3.2 billion)

- NWFP Bridge Construction Project (grant assistance over three years beginning 1992, ¥2.6 billion in total)
- Engine Rehabilitation Project (1993, loan assistance, ¥6.0 billion)
- Engine Assembly Project (1993, loan assistance, ¥6.1 billion)
- Indus Highway Construction Project (1993, loan assistance, ¥18.2 billion)
- Road Construction Project for Rural Development (1993, loan assistance, ¥11.5 billion)
- The Study on National Transport Plan (1994, development study)
- Kohat Tunnel Construction Project (1994, loan assistance, ¥5.4 billion)

3) Position of the Second Country Study Group on Priority Areas

New developments in the drive to privatise the infrastructure sector are considered the most significant changes that have taken place in the arena of economic infrastructure since the first country study was performed. The federal government has already decided to privatise its biggest state-run company, Pakistan Telecommunication Corporation (PTC), and is now moving ahead with preparations to sell off its PTC stake. Apparently, the government prefers to privatise its holdings in this potentially lucrative field and shift the priorities of soft loans and other forms of ODA to other fields. However, the phone penetration rate is still extremely low in Pakistan, at 20.6 phones per 1000 population.[34] In addition, questions linger over the development of telecommunications in rural areas where privatised companies would hardly find it profitable. It is therefore necessary to retain some areas of telecommunications for Japanese and other donor's assistance.

For port and harbour development, Pakistan is already receiving assistance from the Asian Development Bank (ADB) and other aid organisations. Also, mirroring an approach adopted for the telecommunications field, it has recently announced several private-capital-led projects for port development in major port cities.[35] Considering the change discussed above, and the wide range of economic infrastructure development needs in Pakistan, it is necessary for a donor to concentrate on selected development needs for assistance. In view of that necessity, the Second Country Study Group has decided to place

34 GOP, Planning Commission, Eighth Five-Year Plan 1993-98,1994.

35 According to interviews with officials on the Board of Investment (Sep. 1995)

immediate priority on the development of transportation infrastructure, especially roads and railways, which represent major elements of the infrastructure. Accordingly, we discuss current conditions and issues as well as priorities in the sections following.

① Transportation Infrastructure: Current Conditions and Issues

Geographically, Pakistan spans a substantial distance from north to south. That feature makes rail one of the more-efficient modes of surface transport. What is more, rail also surpasses vehicular transport in terms of energy efficiency per unit of cargo. Nonetheless, in 1991 around 86 percent of all passengers and cargo carried by surface transport nationwide was over roadways, whereas railroads accounted for only the remaining 14 percent.[36] That figure of 14 percent represents a sharp decline on the 75 percent share attributable to railroads some 30 years earlier. What is more, as a result of that decline, the energy efficiency of surface transport has dropped by a comparable margin on a national scale. This state of affairs, moreover, has at the same time become a key factor behind the increase in air pollution due to exhaust-gas emissions from buses and trucks. As stipulated in the government's Eighth Five-Year Plan, shifting from road transport to rail transport will be one of the critical challenges Pakistan is facing in the years ahead. Improvements in the efficiency of rail transport are considered to be an essential precondition for that shift.

In Pakistan fiscal resources and adequate implementation systems for effective road and rail maintenance are considerably undermined. As one consequence, deteriorating road and rail conditions are becoming more evident. At the same time, transport under these conditions has created a vicious cycle that is characterised by further declines in energy efficiency.

a. Road Network Development and Regional Disparities

Pakistan's road network consists primarily of national highways (6,600 km) managed by the National Highway Authority, provincial highways (44,000 km) under the control of provincial public-works departments, and rural roadways (65,000 km) supervised by local municipalities.[37] Due to the growing volume of traffic in recent years, large cities such as Karachi, Islamabad, and

36 GOP, Planning Commission, Eighth Five-Year Plan 1993-98, 1994.

37 GOP, ES 94-95.

Lahore have witnessed an increase in traffic accidents. Budget shortfalls, however, have prevented authorities from maintaining and expanding road facilities necessary to accommodate the growth in traffic volume.

Much of the country's road infrastructure is concentrated in the provinces of Punjab and Sind. By contrast, North West Frontier and Balochistan Provinces do not have enough roads. In terms of width, number of lanes, paving, and other factors, many existing roads are not in good condition.

b. Structural Problems in the Railway Sub-sector

Most of the railway networks were constructed by Britain during the colonial era preceding Pakistan's independence in 1947. Following independence, rail services were operated by a public monopoly, the National Pakistan Railway, and placed under the jurisdiction of the Ministry of Railways. The rail monopoly has continued to run its largely unprofitable services at an operating deficit. That financial predicament, coupled with the inefficiencies stemming from inadequate capital investments and poor maintenance, has given shape to a vicious cycle of increasing severity. The resulting deterioration in passenger- and cargo-transport efficiency, moreover, has been one of the factors behind the shift to vehicular modes of land transport. Thirty years ago, the rail system commanded a 75 percent share of all surface transport in the country. Since then, however, it has achieved no growth in transport volume, which is to say that road transport have accounted for practically all the volume growth in surface transport to date. In effect, structural problems are the root cause of the inefficiencies characterising Pakistan's railway system today.

c. Private Participation in the Rail Transport Sub-sector

Attempts by the private sector to participate in rail transport are emerging as a manifestation of recent privatisation efforts in the infrastructure sector. According to the Private Power and Infrastructure Board established in September 1994, the construction and operation of thermal power plants by private sector will become a reality. In addition to construction and operation by the private sector, there is a plan in place under which fuel transport to thermal power stations will be subcontracted to private companies. According to this plan, the private subcontractor is to procure its own locomotive and tanker cars and to transport fuel from the port to thermal power stations using the railway owned by the National Pakistan Railway, paying a usage charge to the

NPR. The PPIB has expressed intentions to expand this formula and let private-sector firms transport other types of cargo as well.

② Priorities

Improving poor energy efficiencies and organisational systems for management and operation represent the principal challenges Pakistan is facing in the arena of transportation infrastructure. Japanese ODA should place priority on efforts to deal with those challenges. Additionally, the necessity of securing means of transport in rural districts is taken up in (3) below. It is considered that underdevelopment in Pakistan is attributable largely to the traditional power structures in local areas.[38] Accordingly, from a long-range perspective, securing the means of transport in rural areas will help establish the fundamental conditions for eliminating such barriers to further development.

a. Cooperation for Rationalisation in Rail Transport

Since the first country study, a sense of urgency has compelled Japan to supply Pakistan with assistance for projects aimed at improving rail transport. However, structural problems built into the rail system itself are the important source of the inefficiencies witnessed in this sector. For that reason, logistically oriented ODA alone will not be enough to get at the root of the problem. Assistance to streamline, revitalise and modernise the National Pakistan Railway will thus be essential.

To that end, it appears Japan should first proceed chiefly with technical assistance which prepares a comprehensive plan to lift the overall efficiency of National Pakistan Railway operations, and then the financial assistance should be provided so that the plan can be implemented gradually. More specifically, the technical assistance should consist of capital components, including the renovation of existing facilities and equipment and installation of more signals, and informational components, which streamline and modernise the management systems and organisational structure of the rail system. The technical assistance should culminate in a rationalisation plan for the rail system to allow the plan to be implemented by such financial assistance.

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38 See sections I of this paper (Perspectives on Aid to Pakistan).

b. Cooperation for Rationalisation in Road Transport

Pakistan's road sector has been a target of substantial assistance since the first country study was performed. All projects currently in progress are aimed at establishing core elements of the country's surface transportation infrastructure, and as such, they should be continued. New undertakings in this area, though, should be limited primarily to projects that can be expected to offer strong social and economic benefits. Deficiencies currently characterise the country's budgeting and systems for road maintenance. Consequently, if projects for the construction of new roadways were pursued under these conditions, they would further aggravate the country's road-maintenance expenses and contribute to greater deterioration in the maintenance of existing and new roads combined. Ultimately, the efficiency of road transport would be adversely impacted in turn.

Restrictions on truck load capacities and improvements in public transport together represent the challenges that must be addressed if the efficiency of road transport is to be lifted. Many trucks tend to be loaded beyond their capacity. That practice exposes roadways to loads beyond their designed limit, and thus contributes to their physical deterioration. In addition, the extra loads on truck diesel engines not only hurts their fuel efficiency, but also results in heavier gas emissions resulting from incomplete combustion that are a cause of air pollution. Enforcing appropriate regulations on truck-load capacities will be essential if this situation is to be remedied.

Due largely to the factors cited above, existing roads in Pakistan have reached a fairly serious state of disrepair. In addition, many roads are too narrow or still unpaved. Repairs and renovations aimed at alleviating these conditions will be vital to the goal of heightening the overall efficiency of road transport.

Public transportation tends to be rather meagre in developing countries in general, and Pakistan is basically no exception. Steps to develop public transportation systems will be vital, for they can help to alleviate road congestion and air pollution in urban areas while at the same time providing opportunities for more women to enter the national work force. In order to solve public transport problems in Karachi, Lahore, and other urban centres, Pakistan now is preparing a plan to introduce light-railway transit systems (LRTs). Though questions about implementation frameworks and economic viability remain, it

is expected that the plan will be of significant benefit in alleviating urban congestion and boosting the overall efficiency of road transport, provided it could be actually implemented.

c. Cooperation for the Development of Rural Road Networks

Traditional power structures entrenched at the rural level appear to be one of the core factors behind Pakistan's lagging development. From a long-term perspective, though, fostering the range of job choices for lower-income rural inhabitants and increasing the opportunities for women to participate in productive economic activities will together be vital to the country's economic and social development. Developing Pakistan's rural road networks can be considered to be one of the several effective steps toward transforming the traditional social structure in rural areas.

However, unlike the arterial highways connecting its major urban centres, Pakistan's rural road networks cover huge areas of national territory. For that reason, it will be essential to pursue development work by placing priority on selected districts. In particular, it will be necessary to evaluate the conditions of existing roads at the provincial and district levels, prioritise respective candidate regions, and implement projects on a long-range basis. Local governments typically may not have enough funding for the construction and maintenance of branch roads that would be under their jurisdiction. Therefore, in formulating assistance projects, Japan should also give attention to budgeting contingencies at the local level.

Rural road infrastructure will be essential to the promotion of rural development and industrialisation. Accordingly, projects to develop and improve rural road networks will be more effective if they are pursued in tandem with programmes for rural development and industrialisation.

③Other Issues Deserving Attention

Because economic infrastructure development needs in Pakistan vary considerably, it is necessary for Japan to concentrate on the selected needs in order to extend effective assistance. In particular, given the close connection between the improvement of energy use and the alleviation of air pollution, attention should be focused on the importance of boosting the efficiency of rail and road transport. Furthermore, in preparing aid packages for the development of rural road networks, existing regional disparities will deserve atten-

tion.

The Pakistani government is now striving to invite foreign investment as a means of privatising not only its power sector but also some components of its road, rail, and port infrastructure. However, several questions about economic viability still characterise the privatisation projects themselves. On top of that, it is difficult to deny the impression that the privatisation scheme seems under-developed to fulfil the intended objectives which include the reduction of government fiscal burden. Unless Pakistan moves to address certain organisational and structural constraints, it would be difficult to expect substantial progress in remedying inefficiencies and lagging development in operational systems of economic infrastructure.

2. Upgrading Industrial Structure

2-1 Cooperation for Enhancing Agricultural Productivity and Employment Opportunities

- Cooperation for Promoting Research and Development (R&D) to Help Boost Land Productivity and Promote Agricultural Diversification
- Expansion of Agriculture-Related Infrastructure
- Promoting Regional Development and Industry in Rural Areas
- Cooperation for Promoting Forestry and Fishery

1) Recommendations Made in the Previous Country Study

The previous country study report contained the following recommendations for two priority areas, boosting agricultural productivity and diversifying the range of agricultural products.

Agricultural productivity enhancement involves the following:

- Sustaining and increasing the land productivity
- Effective use and management of irrigation water
- Measures to combat salinity and waterlogging
- R&D into crop varieties, cultural husbandry, planting configuration, prevention of blight and insect damage, etc.

- Introduction of improved inputs and equipment (this includes the effective use of chemical fertilisers)
- Two-step loans for small- and medium-scale farmers
- Fortifying the spread of agriculture and expanding agricultural education and training

Diversifying the range of agricultural products involves the following:

- Cultivation of vegetables and fruit
- Improvement of the overall distribution system, including storage and transport
- Promotion of stock breeding, fishery, and forestry

2) Japanese Assistance Since the Previous Country Study

Japan has advanced a large number of cooperation projects, primarily irrigation-related, to help boost agricultural productivity:

- On Farm Water Management Project (1991, loan assistance, ¥8.23 billion)
- Agricultural Credit Project (1991, loan assistance, ¥10 billion)
- Malir River Basin Agricultural Development Project (Engineering Service) (1993, loan assistance, ¥206 million)
- Land Resource Development Project for the Uplift of Farming Community in the Province of the Punjab (1992, grant assistance, ¥1.809 billion)
- Grant Aid for Increased Food Production (2KR) (grant assistance, ¥5.3 billion cumulative total for 1991-1994)
- Project for Land Resources Development in Balochistan (1993, grant assistance, ¥1.964 billion)
- Project for Watershed Management and Irrigation Development in Mithawan (1994, grant assistance, ¥460 million)
- Feasibility Study on the Development of Irrigation Based upon Flood Flows of D. G. Khan Hill Torrents (1992, development study)
- Feasibility Study on Chashma Right Bank First Lift Irrigation Project (1994, development study)

- Feasibility Study on Lining Distributaries and Minors in Punjab (1994, development study)

Japan has promoted the following agricultural diversification projects:

- Coastal Fisheries Development Project in the Province of Balochistan (1993, grant assistance, ¥414 million)
- Genetic Resources Preservation and Research Laboratory Establishment Project (1991, grant assistance, ¥1.567 billion; 1993, technical assistance)

In addition, several experts in the fishery and stock breeding fields have been dispatched to Pakistan.

3) Position of the Second Country Study Group on Priority Areas

① Current Conditions and Issues in the Agricultural Sector

Agriculture is an important key to the success of the ongoing economic liberalisation effort in Pakistan. Agriculture plays many different roles in the process of economic development, including the inexpensive and stable supply of wage goods and raw materials for industry, the creation of jobs, the acquisition of foreign capital, the mobilisation of savings, and the enhancement of purchasing power. To fulfil these diverse roles, the agricultural sector must achieve growth of at least 5 percent.

The agricultural growth rate in Pakistan has not been low, even compared to rates in industrialised countries.[39] Remarkable increases in productivity were achieved through the "green revolution," initiated in the mid 1960s.[40] In the mid-1980s, production of new varieties of cotton was begun, leading to a significant leap in production by 1991-92. This was a tremendous success and it raised the country's hopes with regard to the potential of primary products

39 Growth in the agricultural sector in the 1960s (1960-61 to 1969-70) was 3.7 percent, up from 1.2 percent in the 1950s (1949-50 to 1959-60). Over the past ten years (1983-84 to 1993-94), the growth rate has been 4.4 percent. During the first part of the "green revolution" (1960-61 to 1964-65), the average growth rate was 2.9 percent, but as the revolution gained momentum in the latter half of the 1960s (1965-66 to 1969-70), the growth rate reached 5.5 percent. By way of comparison, the Japanese agricultural growth rate before the war (1889 to 1940) was 1.34 percent. S. Hirashima, op. cit., p. 70; World Bank data (1995), World Bank Annual Economic Review; Minami, Nihon no Keizai Hatten (Literal translation: Japanese Economic Development), Toyo Keizai Shinpousha, 1992.

40 In 1959-60, prior to the Green Revolution, Pakistan produced 6.1 million tons of food grains (3.91 tons of wheat, 1 million tons of rice), but it has boosted that figure 3.6 times to 22 million tons as of 1994-95 (16.7 million tons of wheat, 3.36 million tons of rice). During that time, the area under cultivation has increased by 53 percent. ES 94-95, computed from the Statistical Appendix.

for boosting economic development.[41] These achievements, however, are still not satisfactory when viewed in light of Pakistan's potential. The agricultural sector in Pakistan faces the following problems.

- Low land productivity
- The depletion of arable land due to salinity and waterlogging
- Regional disparities in public investment
- The decline of combined agriculture and stock breeding
- Insufficient mobilisation, maintenance, and management of resources
- Dualistic structure of technology at work
- Insufficient employment opportunities in rural areas
- Biases in pricing policies
- Inefficiency in R&D and dissemination systems
- Insufficient credit for small farmers and non-farmers
- Slow progress in modernising agricultural infrastructure, including the building of agricultural roads and electrification of farming villages

These various problems can be best clarified by dividing them into three main categories.

a. Technical Aspects of Boosting Productivity

Even after undergoing a green revolution, Pakistan's average land productivity was at a level comparable to that in Japan in the early Meiji Period (1868-1912). Average productivity was a mere one-fourth of that achieved at an agriculture experiment station in Pakistan. This is attributable first to limited investment of modern agricultural inputs, as well as to a lack of expertise in agricultural technology among farmers, a dualistic structure of technology (capital-intensive technology and labour-intensive technology), a failure to establish appropriate location specific technology, and a lack of efficiency in capital stock. Over the long term, farmers' technological expertise must be raised, and to achieve this, improvements must be made in basic technical education and in the systems for disseminating technology. In addition, urgent

41 Pakistan produced 500,000 tons of cotton in 1983-84, and doubled production to 1 million tons the following year. Production reached a peak in 1991-92 of 2.18 million tons, before declining the following year to 1.54 million tons. ES94-95, p.47.

measures must be taken to counter production declines in cotton due to blight and insect damage and the depletion of arable land due to salinity and water-logging.

b. Institutional Aspects of Agricultural Production

Pakistan's present land system undoubtedly has a considerable impact on growth and equity in the agricultural sector. With respect to the impact on growth, an inverse correlation between scale and productivity has not been fully demonstrated. That is primarily because there are many examples of positive correlation between scale and technology level. Therefore, the appropriateness of land-system reform has not yet been established from the vantage point of boosting productivity. However, the necessity of reform is manifest from the perspective of achieving equity. Attention must be paid to the extremely political nature of land-system reform, inasmuch as it is not a free-market measure.

Urgent measures are needed to address three aspects of Pakistan's agricultural system. The first is the modernisation of systems for the development and dissemination of technology. A matter of particular importance in this regard is that organic links have not been established between central R&D systems and dissemination of technology. The second is bias regarding agricultural credit, purchasing, and marketing of agricultural produce. The third is the lack of production organisation in rural villages. Given the complex socio-economic structure of Pakistani villages, it is understandable that organisation at the lowest level would be fraught with difficulties. Nevertheless, organisation at the village level and the strengthening of production capacity are going to be necessary in the future in order to promote the mobilisation and effective use of local resources and improve the maintenance and management of the existing capital stock.

c. The Dilemma of Agricultural Policy

We would like to take up three policies here. The first is pricing policy. It is premature to make a definitive assertion, but changes in relative pricing produced by structural adjustments[42] appear to be working to the advantage of

42 Changes in trade terms between agriculture and industry; more specifically, changes in agricultural product prices and the prices of inputs for agriculture supplied from sources outside of the agricultural sector.

farmers who have excess marketable surpluses, as indicated earlier. The second is the policy concerning the choice of technology. The current structure which is seen to exist among farmers has given rise to a duality in technology selection. [43] The Pakistani economy has not yet passed through a so-called "turning point," but technological selection is clearly moving from an orientation toward land productivity increase to one of increasing labour productivity. The third is the absence of a policy towards non-farm households in villages. Non-farm households, who account for 53 percent of village residents, are seeking new employment opportunities in and outside of farming, but no clear policy orientation has been devised so far with respect to these persons.[44]

Careful consideration must be given to these three policy areas when deliberating the roles that Pakistan's agricultural sector should fulfil in the future.

② Priorities

a. Cooperation for Promoting Research and Development (R&D) to Help Increase Land Productivity and Promote Agricultural Diversification

In order to fully exploit Pakistan's latent agricultural capacity, the supply system of modern agricultural inputs must be fortified, but what is still more important is enhancing farmers' technical and managerial skills. In terms of assistance for addressing this problem, over the long term, it will be essential to extend assistance for R&D that is acceptable for small farmers, the improvement of technology dissemination systems with their focus on small farmers, and the expansion of agricultural education. Over the near and medium terms, meanwhile, what is effective is cooperation aimed at the development and dissemination of water management and land conservation technology; cultivation technology in breeding, fertilised growth management, and comprehensive blight and insect damage control; and post-harvest processing technology. It is also necessary to emphasise the importance of technical cooperation in the fields of fruit cultivation, stock breeding, and sericulture, which fulfil important roles in stabilising farm income and are fields in which female participa-

43 See Perspectives on Aid to Pakistan, section 2-2 (P.5). The Socio-economic Background of Pakistan's Power Elite.

44 Non-farmers in villages comprise a diverse group, ranging from traditional craftsmen, such as barbers, blacksmiths, carpenters, and cobblers, to mere labourers. With regard to family labour capacity, an effort is made to supplement the income from traditional crafts and reduce the extent of annual labour fluctuations by working part-time in farming during the harvest season and working in other non-farming jobs as they arise. S. Hirashima, op. cit., p.102-120.

tion rates are high.

b. Expansion of Agriculture-Related Infrastructure

The top assistance priority in this field is the modernisation of agriculture-related infrastructure, specifically the building of agricultural roads and the electrification of villages. It must be emphasised that the objective of this is not only to facilitate access to farm products and investment capital markets. It also has the objectives of facilitating access to information, education, and health/medical facilities, expanding the range of employment choices for low-income persons in farming villages, and promoting village women's greater participation in society. One other important area is assistance to help upgrade the production base, primarily through the rehabilitation of the existing capital stock and measures to counter salinity and waterlogging.

Of greatest importance in the long term would be technical and financial cooperation for a comprehensive infrastructure modernisation plan aimed at promoting the sustained use of agricultural resources, specifically water and land. Given the scale involved in any comprehensive measures for combating salinity and waterlogging, which could include large-scale drainage plans, it would be effective to think of a scheme involving international collaboration rather than in terms of Japanese assistance alone. Over the near and medium terms, cooperation could be provided to help modernise the agricultural infrastructure, specifically to build agricultural roads and upgrade the water supply in the North West Frontier Province and Balochistan, where modernisation through public investment is lagging behind. In Punjab and Sind, financial cooperation could be provided for the building of agricultural roads, the electrification of farming villages, the repair of existing irrigation facilities, and the improvement of linings and drainage in order to prevent leakage from water conduits to control salinity and waterlogging.

c. Promoting Regional Development and Industry in Rural Areas

The main objective of this component is to create employment opportunities for low-income persons in farming villages. Specifically, this entails modernising the economic and social infrastructures primarily of market towns, and, through this, promoting increases in and diversification of agricultural production and providing assistance for manufacturing industries located in rural areas. What should be kept in mind here is that modernisation of the

social sector was insufficient in prior development of market towns and industrial estates, and because of this adequate results were not achieved. Thus, over the near and medium terms, financial cooperation for Pakistan's financial system must be devised in order to upgrade the economic and social infrastructure and to promote industry in rural areas.

d. Cooperation for Promoting Forestry and Fishery

Forest lands account for a mere 4 percent of Pakistan's total land area. This is something that Japan must be concerned with, both from the perspective of production and from that of environmental conservation. Forest conservation in North West Frontier Province, where the majority of the country's forests are found, plays an important role in flood control of the Indus River basin. Then again, social forestry in Balochistan, aimed at supplying inhabitants with firewood, is thought to be helping in the fight against desertification.

Over the long term, therefore, financial and technical cooperation must be devised to promote forest conservation in North West Frontier Province. And over the near and medium terms, grant assistance and technical cooperation must be devised to promote the spread of social forestry in Balochistan.

In the fishery field, shrimp and other marine products exported to the Middle East are gradually gaining greater and greater importance. Promoting coastal fishery in Sind and Balochistan, and fresh-water fishery in North West Frontier Province and Punjab, will help the people supplement their protein intake and could also help them raise their personal income. Japan should continue providing financial and technical cooperation in this field, as it is one in which Japan possesses technology that makes it fully capable of providing assistance.

③ Other Issues Deserving Attention

Taking into account past assistance experience and field studies, we would like to draw attention to the following three points.

First, assistance in the field of research and development, including the dissemination of the results of this R&D, fulfils a pivotal role in Japanese cooperation in the agricultural sector. However, Pakistan's existing R&D systems are fraught with problems. Foremost among these problems are the division of responsibilities between the Agricultural Research Council (ARC)

and provincial R&D systems, and the division of responsibilities between, and collaboration among, provincial experimental stations and university research institutions. Therefore, in the process of considering new cooperation for ARC, consideration could be given to coordinating cooperation content and upgrading R&D systems by dispatching an expert adviser when necessity demands. Second, attention must be paid to the fact that there is often a tendency for economic rationality to be ignored in fields which possess advantages of scale (fields in which the necessity of international collaboration was referred to earlier). Third, myriad difficulties can be expected to arise in projects that directly affect the socioeconomic structure of rural communities, inasmuch as the key to the success of such projects lies in organisation at the grass-roots levels. We would hope that the formation of grass-roots level organisations, a prerequisite for participatory development, would be furthered by the upgrading of agricultural roads, the electrification of villages, and expansion of social services.

2-2 Cooperation to Help Foster the Manufacturing Sector and Enhance Productivity

- Financing for Small Enterprises and Female Entrepreneurs
- Cooperation for Promoting Quality Control, Standardisation, and Industrial Standards
- Cooperation for Industrial Estates
- Cooperation for Combating Environmental Pollution

1) Recommendations Made in the Previous Country Study

The previous country study report stated that the key to Pakistan's future growth is the revitalisation of industry. Issues of the greatest importance in this respect are strengthening the productive capacity and international competitiveness of intermediate and capital goods, especially machinery and electrical equipment, development of import substitution in machinery production, and fostering export oriented industries through diversification of manufacturing industries. This requires assistance for indirectly supporting the revitalisation of the private sector, and in particular small enterprises.

Specifically, the report identified the following priority areas:

- Financing for the establishment of small enterprises
- Promoting technical cooperation
- Provision of equipment and technical guidance for small-enterprise technical centres
- Anti-pollution measures

2) Japanese Cooperation Since the Last Country Study

The only technical assistance Japan has implemented in this area has been the "Study on Textile Industry Development Program," a development study conducted by JICA in 1991-92. This study recommended important guidelines for the Pakistani government with regard to future policy for promoting the textile industry (as indicated by the fact that it was referred to in Pakistan's eighth five-year plan). In the area of loan assistance, ¥5.1 billion in financing was provided for the Daudkhel Fertiliser Plant Modernisation Project II.

Thus, Japan has provided little assistance to the manufacturing sector, in part because of the inherent limitations on the targets and methods of assistance, and additionally because of the impact of Pakistan's policies of private-sector revitalisation and privatisation which have gained force since 1988.

3) Position of the Second Country Study Group on Priority Areas

① Present Conditions and Challenges in the Manufacturing Sector[45]

The manufacturing sector recorded average growth of 7 percent over the ten-year period from 1984 to 1993, although growth slipped to 6 percent in the latter half of this period. During the same ten-year period, the manufacturing sector accounted for between 16 and 18 percent of Pakistan's GDP, as this sector continued to be stagnant.

To make up for the lag in the process of upgrading the country's industrial structure, attributable to the stagnancy of the manufacturing sector, efforts must be made to formulate long-term manufacturing policy, clearly define the Government's role, and accelerate the development and growth of the manufac-

45 The figures in the first paragraph were computed on the basis of the World Bank's World Tables (1995 version).

turing sector.

a. Privatisation

Pakistan's policies of private-sector revitalisation and privatisation began to gain force in 1988. Privatisation is sweeping through a broad range of state-owned enterprises, including those in the manufacturing sector, and as of the end of March, 1995, over half of the more than 100 state-owned enterprises had already been privatised, or were in the process of privatisation.[46] However, problems have begun to surface, including the question of how to deal with unprofitable factories for which there are no buyers, and the tendency for the enterprises to wind up concentrated in the hands of a limited number of domestic capitalists. Attention will have to be paid for some time to these problem areas in the privatisation of state-owned enterprises, including those in the manufacturing sector.

b. Investment Promotion

A so-called private-sector revitalisation policy, involving deregulation and the introduction of foreign direct investment, is now being promoted in the manufacturing sector, as exemplified by the construction of thermal power plants with domestic capital. Signs have begun to be seen of increasing capital investments from the West and other parts of Asia. Given that in neighbouring India, aggressive system reforms and a relatively well-established basic infrastructure have led to a flush of investment from abroad, there appears to be a lag in the effort to enhance Pakistan's investment environment. The key to future economic growth in Pakistan, as is clear from the example provided by India, is the acceleration of foreign direct investment, primarily in the energy and manufacturing sectors.

A prerequisite for this is the stabilisation of internal affairs, beginning with the maintenance of law and order in Karachi. Also important are upgrading the legal system and the system of law enforcement, and the modernisation of economic and social infrastructures (water for industrial uses, roads, electricity, communications, schools, medical facilities, drinking water, and sewage systems) in and around industrial estates, special industrial zones, and export processing zones. The problem of obtaining water for industrial uses, in par-

46 GOP, ES 94-95.

ticular, is expected to grow increasingly serious due to water resources constraints.

c. Upgrading the Manufacturing Sector

Food and fibre systems continue to account for approximately 40 percent of the total value added in the manufacturing sector.[47] Inasmuch as these fields are related to agricultural production, they readily experience ups and downs due to the effects of weather and other natural conditions. All in all, this industrial structure can be characterised as a fragile one. Pakistan must move away from this agriculture-dependent industrial structure through quality enhancement and upgrading of the manufacturing sector.

d. Export-Oriented Small-scale Enterprises, Local Industry, and Rural Industry

Small enterprises in Pakistan possess vitality and dynamism. The overall growth rate for 1994-95 is expected to be around 4.4 percent in the manufacturing sector. The growth rate for small enterprises, however, is expected to be right around the initial target of 8 percent.[48] There are examples in Pakistan of successful export industries, such as ones producing surgical and sporting equipment in Sialkot, Punjab, that have developed from traditional crafts and are exploiting the merits of integration into small enterprise groups. It is to be hoped that such local industries will develop in other parts of the country and provide income earning opportunities for small farmers and non-farmers in the surrounding villages.

e. The Labour Market and Human Resource Development

Pakistan has a structural imbalance in its supply of skilled workers, as opposed to unskilled workers, due to the ease with which workers can go abroad (primarily to the Middle East) to work, a factor which serves to push up labour costs. This condition in the labour market makes it difficult for foreign businesses coming into Pakistan to find technicians in the supervisor and manager class. Then again, labour costs for unskilled workers cannot be characterised as low either, due to the relatively few number of women, com-

47 GOP, ES 94-95.

48 GOP, ES 94-95.

pared with non-Islamic countries, working as unskilled labourers in labour-intensive industries.

To support future growth in the manufacturing sector, Pakistan must ensure a stable supply of skilled workers and supervisor-class technicians through the training of technicians in comprehensive technical fields, especially machinery and metal working, and of supervisor-class technicians in the electric and electronics fields, where needs are expected to grow from here on. Female workers have gradually begun to enter the textile and electric component assembly fields, but some time will be required before they join the work force in significant numbers.

f. Environmental Pollution

While the environmental pollution problem has been pointed out for years, adequate measures still have not been devised. Among the reasons for this are that the pollution problem has never become comparatively serious due to the fact that the manufacturing sector growth has been centred upon light industries rather than heavy chemical industries, and the difficulty of assessing the discharge from small enterprises, which account for the majority of the country's businesses, and devising measures to deal with this discharge. The administrative organ responsible for pollution control is still in the early stages of establishing organisational and legal systems, and it has not yet reached the point of establishing monitoring systems. Therefore, the bulk of effluent and smoke discharged from existing factories, except for foreign-affiliated and certain other large factories, is discharged without undergoing any processing. In addition, this administrative agency has not made any inspections or exercised any regulatory control.

Nevertheless, these conditions have begun to be seen as a problem over the past few years, as effluent has caused particularly serious river and soil pollution in the Karachi suburb of Korangi (chemical, metal, and leather industries) and Kasur in Punjab (leather). Radical measures are needed, and the establishment of monitoring systems is a matter of great urgency.

② Priorities

a. Financing for Small Enterprises and Female Entrepreneurs

This financing entails the provision of loans for the establishment of small enterprises, purchases of new machinery, and their renovation and expansion of facilities. A public investment system of this sort is exemplified in small-enterprise loans provided by the Industrial Development Bank of Pakistan and low-interest loans from funds set up, with financing provided by provincial governments and donor organisations, in the public corporations for small-enterprise development in each of Pakistan's provinces. The quality and quantity of this financing, however, cannot yet be called adequate.

Public systems of small loans that can be accessed by micro enterprises, which generally lack solvency, need to be expanded through financial cooperation. In addition, cooperation in "soft" components, through the dispatch of experts to Pakistan, is effective in the effort to assist in the creation of credit institutions, such as guarantee associations, which do not presently exist there. In addition, consideration should be given to cooperation designed to promote small-scale financing, through The First Women Bank, aimed at assisting female entrepreneurs. Even though it does not involve large-scale investments, cooperation in this field can be expected to help foster rural industry.

Consideration should be given to cooperation in the form of financing for small enterprises based on extensive studies and thorough analysis of the capacities of the implementing institutions.

b. Cooperation for Promoting Quality Control, Standardisation, and Industrial Standards

The standardisation of, and enhancement of quality control over, industrial products is a chief prerequisite for building up the export competitiveness and boosting the added-value content of such products. The setting and dissemination of standards by a public institution, and the functions of inspection, examination, and consigned testing, are currently shared between two separate bodies overseen by the Ministry of Industry.[49] Opinions have begun to be voiced that these functions should be integrated, but there are many unresolved organisational/systemic problems. Addressing this need could presumably in-

49 The Pakistan Standard Institute and the Central Testing Laboratory.

volve a master plan study on the formulation of industrial standardisation strategies, subsequent advice in the policy realm by foreign experts, and training programmes for technology and management.

In order to effectively improve the country's ultimate quality control capabilities, it is important to pay attention to enhancing private enterprises' inspection capabilities as well as to public-private sector cooperation and division of responsibilities between the two sectors. At the same time, it is important to assist in strengthening public institutions' organisational, personnel, and functional aspects.

c. Cooperation for Industrial Estates

There are nearly 100 industrial estates in Pakistan, ranging from small ones, where a number of small factories are gathered together, to export processing zones designed for large, foreign-affiliated factories. The infrastructure in and around the majority of these industrial estates is inadequate, and development of industrial estates in remote areas, in particular, is not proceeding as hoped. Capitalising on the advantages of aggregation through the development of industrial estates is extremely important for promoting the diversification of income sources for those living in surrounding villages by expanding employment opportunities. It is to be expected that the benefits of assistance for technical centres and for upgrading the surrounding infrastructure in conjunction with the development of industrial estates would contribute to the promotion of local industries, as well as to the development of the region.

Consideration should be given to a vision of regional development projects made possible through industrial-estate assistance that comprehensively incorporates technical assistance not only for economical infrastructure development in the surrounding area but also for the expansion of social infrastructure, including such components as medical care, and water and sewage systems. This should be based on studies of sites that have the potential for becoming future development models, not ones in the environs of large cities, both for existing and new industrial estates.

d. Cooperation for Combating Environmental Pollution

Awareness of pollution as an environmental problem has been mounting in recent years, but river and soil pollution from factory effluent is expected to grow ever more serious from here on. The administrative organ in Pakistan

responsible for monitoring the environment is still in the formative stages in terms of both organisation and function. Therefore, the actions being taken by the World Bank and the UNDP, which have begun providing cooperation to meet this challenge, must be studied, and, based on this, a plan for an effective assistance method must be devised that is linked with, or avoids duplication of, their efforts.

Specifically, studies must be conducted of measures to combat pollution (from factory effluent) aimed at regions where leather, dye, and metal industries are located, and more trainees in the pollution control field must be accepted into programmes in Japan. In addition, over the medium term, consideration must be given to a vision of financial and technical cooperation for comprehensive pollution control assistance that goes beyond the realm of pollution control and encompasses peripheral issues such as saving energy and resources.

e. Other Technical Cooperation

In addition to the above-mentioned areas of industrial standards, quality control, and industrial standardisation, consideration must be given to stepping up training in Japan in such fields as small-enterprise management, trade promotion, and privatisation, and, as circumstance dictate, third-country training programmes in ASEAN Islamic nations, such as Indonesia and Malaysia. Consideration must also be given to implementing master plan studies for individual sub-sectors to formulate policies for appropriate industrial promotion.

Also important is cooperation involving the sending of experts and provision of equipment in order to modernise and strengthen the functions of technical centres oriented toward small enterprises. Linking such cooperation to the World Bank's Micro Enterprise Project and Small-scale Industries Project would make it even more effective.

③ Other Issues Deserving Attention

Remarkable progress has been achieved in attracting foreign capital and in the privatisation of state-owned enterprises through the policies of private-sector revitalisation and privatisation which have gained force since 1988. It is important from here on to plan effective indirect assistance based on close observation of trends in this area. With regard to the fostering and promotion