ASIAN DEVELOPMENT BANK **IES: REG 97025**

IMPACT EVALUATION STUDY

OF BANK ASSISTANCE

IN THE HEALTH AND POPULATION SECTOR

IN

BANGLADESH, PAKISTAN,

PAPUA NEW GUINEA, AND SRI LANKA

November 1997

CURRENCY EQUIVALENTS

Bangladesh	Pakistan	Papua New Guinea	Sri Lanka
(December 1995)	(May 1996)	(October 1996)	(October 1995)
Taka (Tk)	Pakistan Rupee (PRs)	Kina (K)	Sri Lankan Rupee (SLRs)
Tk1.00 = $0.0245	PRs1.00 = $0.029	K1.00 = $0.76	SLRs1.00 = $0.0195
$1.00 = Tk40.75	$1.00 = PRs34.74	$1.00 = K1.31	$1.00 = SLRs51.25

ABBREVIATIONS

BME - Benefit Monitoring and Evaluation
CBR - Crude Birth Rate
CDR - Crude Death Rate
DHC - Divisional Health Center
DMC - Developing Member Country
FP - Family Planning
GDP - Gross Domestic Product
GHC - Gramodaya Health Center
HFA 2000 - Health for All by the Year 2000
H&P - Health and Population
IMR - Infant Mortality Rate
MCH - Maternal and Child Health
O&M - Operation and Maintenance
PHC - Primary Health Care
PHM - Public Health Midwife
PNG - Papua New Guinea
RHS1 - Rural Health Services Project 1
RHS2 - Rural Health Services Project 2
SDHC - Subdivisional Health Center
TA - Technical Assistance

NOTES

(i) The fiscal year (FY) of the Bangladesh and Pakistan governments ends on 30 June. FY before a calendar year denotes the year in which the fiscal year ends, e.g., FY1997 ends on 30 June 1997. The fiscal year of the Papua New Guinea and Sri Lankan governments is the same as the calendar year.
(ii) In this Report, "$" refers to US dollars.

EXECUTIVE SUMMARY

The main objective of the Study was to assess the impact of the Bank's assistance in the health and population (H&P) sector. The Study covered completed projects, for which postevaluation has been done, in four developing member countries (DMCs); namely, Bangladesh, Pakistan, Papua New Guinea (PNG), and Sri Lanka.

Macroeconomic conditions common to the four DMCs at the time of project design and implementation include chronic budget and current account deficits as well as political instability and threats to national security. Such conditions led to inadequate financing of social expenditures. Although social conditions in the DMCs varied, poverty incidence remained high. Based on such indicators as incidence of poverty, literacy rate, and life expectancy, Sri Lanka was the most socially developed of the four DMCs. Pakistan (3 percent) and PNG (2 percent) had the highest population growth rates. As for morbidity rate, only Sri Lanka's was similar to that of more advanced DMCs. The four DMCs adapted the Health for All by Year 2000 campaign of the World Health Organization to their policies for providing primary health care.

By September 1996, the Bank had approved 31 H&P loans and 70 technical assistance projects in 14 DMCs totaling about $956 million. Although all Bank projects aimed at improving health in the DMCs, approaches differed in the four countries during the early years of project implementation. The Bank's experience was characterized by implementation delays with a few cases of partial loan cancellation.

The Bank's assistance in the H&P sector was assessed in terms of its impact on the health status of the beneficiaries, policy adjustment, government budget, institutional development, social dimensions, and environment of the DMCs.

The impact of Bank's assistance on the health status, as reflected by demographic and health indicators, morbidity indicators, beneficiary perceptions of the facilities provided under the projects, and service provision indicators, varied in intensity among the DMCs. On the whole, however, the impact was positive. Demographic and health indicators showing the positive impact of the Bank's assistance were most pronounced in Sri Lanka and least in PNG. Morbidity indicators were unclear in a number of project areas. In Pakistan and PNG, for instance, some data showed increasing morbidity rates. Nevertheless, perceptions of beneficiaries confirmed the general downtrend of disease patterns and improvement in health. Beneficiaries were generally satisfied with the services provided by projects under the Bank's assistance.

Service provision indicators comprised the ease of access to health facilities and the extent of home visits by midwives, the degree of prenatal care and immunization coverage, the frequency of attendance at childbirth by health workers, and the pervasiveness of family planning services. Access to health care improved with the availability and proximity of health centers. Home visits were facilitated with the provision of residential quarters at health centers, although these were constrained by deteriorating law and order situations in some DMCs. The health centers also improved the availability of family planning services, prenatal care, and immunization services.

Except for Sri Lanka, where the success of the village health centers led the Government to focus more attention on providing health care at the most peripheral level, the Bank's assistance did not appear to have any significant or long-lasting impact on policy adjustment. Cost recovery, a policy encouraged under the projects, had limited success and was confined to relatively minor expenses incurred by the beneficiaries. The projects affected government expenditure not only in regard to the provision of counterpart funding during project construction, but also of subsequent operation and maintenance (O&M) requirements, thus aggravating the tight fiscal positions prevailing in DMCs.

The provision of health infrastructural facilities and training improved the capacity of health providers. Such improvement was not evenly spread, however, and in some cases, was nullified by the lack of maintenance in health facilities, inadequate supply of drugs, lack of staff for training fellowships, and other factors.

The social impact of the projects was positive, with women as the major beneficiaries of the health and training facilities under the projects. Impact on poverty reduction was indirect as general improvement in health status led to better employment opportunities and lower work absenteeism from sicknesses. Impact on the environment was positive, particularly when projects provided for water sanitation and services by health inspectors. The possible exception was the case of the dichlorodiphenyltrichloroethane (DDT) factory upgrade in Bangladesh under another Bank project, though the factory subsequently closed down.

Sustainability of the positive impact of the Bank's assistance remained a key issue, especially in the face of inadequate funds for O&M. A related issue was cost recovery. Attempts by the governments to collect user fees ran counter to the perception of many people that health care should be provided gratis. Although the privatization of health services was fully supported by the DMCs, the fact that government doctors were allowed to have private practices led to instances of abuse and conflict of interest. An important lesson arising from the study was that to sustain and reinforce the positive impact of past projects, new projects, rather than focusing on new areas, should be designed to build on the successes of the old projects. A

last issue was that benefit monitoring and evaluation systems, though deemed beneficial, were not vigorously pursued by the DMCs, especially when initial difficulties were encountered.

In conclusion, while health improvement in the DMCs might not be fully attributed to Bank projects, its assistance in the H&P sector has positively contributed to health, lower population growth, and capacity building in the DMCs. Impact on government expenditure, policy adjustments, and the environment was less positive.

Recommendations for the Bank include providing adequate project preparation with in-depth sector analysis and, in order to facilitate future impact evaluation, preparing logical frameworks; follow-on assistance to reinforce positive impacts; and the assurance of full commitment by the executing agencies. Recommendations for the DMC governments include the provision of specific budgetary allocations for O&M and qualified staff for training. Recommendations for both the Bank and the DMCs are to obtain the full participation of staff at all levels, as well as that of the community, in the design and implementation of projects, and ensuring adequate monitoring of project implementation based on appropriate performance indicators.

I. INTRODUCTION

1. Despite its status as the world's most economically dynamic region, Asia is home to a disproportionately large percentage of people living under poor health conditions. In particular, the low-income developing member countries (DMCs) of the Bank have a high prevalence of contagious, parasitic, and immuno-preventable diseases, as well as high rates of population growth. Although attempts by DMC governments to address these issues have varied from country to country, the need to devote more public resources to basic health and population (H&P) services is generally recognized as a prerequisite to economic development.

2. Since 1978, the Bank has provided $932.55 million for 31 projects in the H&P sector. In addition, grants worth $24.02 million were provided for 70 technical assistance (TA) projects. Bank assistance in the early years was focused primarily on improving health conditions in DMCs, but increasingly the Bank has recognized the need to become involved in population activities and to integrate these with its health activities.[1]

3. No comprehensive assessment has been made to determine the impact of Bank operations in health and family planning. The importance of an impact evaluation of Bank health projects is underscored by the Medium Term Strategic Framework (1995-1998), which identified the social sector as a priority area for Bank assistance. Accordingly, the Post-Evaluation Office

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1 *Population Policy–Framework for Assistance in the Population Sector*, Asian Development Bank, 1994.

initiated a Study of the Impact of Bank Assistance in the Health and Population Sector (the Study) under a regional technical assistance.2 The impact evaluation represented an important step in the project cycle and was needed to improve future development policies, strategies, and implementation arrangements in the Bank and the DMCs.

II. BACKGROUND

A. Study Objectives, Approach, and Methodology

4. The main purpose of the Study is to assess the impact of Bank's assistance in the H&P sector and derive lessons concerning the improvement of the quality of its H&P projects. The Study would (i) provide an overview of the Bank's experience in the sector and highlight key issues requiring attention; (ii) identify strengths and weaknesses in project design and implementation arrangements; (iii) extrapolate lessons from completed projects; and (iv) recommend measures for attaining project objectives and improving Bank operations.

5. The Study was based on seven completed health projects, six of which have been postevaluated.3 There are two projects each from Bangladesh, Pakistan, and Papua New Guinea (PNG); and one from Sri Lanka. All seven projects were approved during the first half of the 1980s, prior to the preparation of a regional study4 which has since guided subsequent Bank assistance in the H&P sector. Details of the selected projects are given in Appendix 1. These four DMCs were chosen because of the Bank's significant involvement in these countries' H&P sectors.

6. Beneficiary surveys were conducted by locally recruited consultants in each of the four DMCs. International consultants, who supervised the local consultants, were responsible for the preparation of the country impact studies and consolidated impact report, except for PNG. Due to initial difficulties and delay in recruiting suitable local consultants, the beneficiary survey in PNG did not have the benefit of supervision by international consultants. Instead, the survey in that country was undertaken by a highly qualified locally recruited expatriate consultant with assistance from Health Department staff. More details on the survey methodology and its constraints are given in Appendix 2. The surveys were complemented by a desk study and an in-depth review of all project documents (including those of H&P projects in

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2 TA No. 5629:*Regional Study of the Impact of Bank Assistance in the Health and Population Sector,* for $300,000, approved on 27 April 1995.

3 The remaining project (Loan No. 710-PAK:*Second Health and Population Project*), for which a project completion report has just been completed, was added to provide a more complete picture, even though a project performance audit report was not prepared. Pakistan had five Bank-assisted projects of which only one has been postevaluated.

4 TA No. 5294:*Regional Study of the Health and Population Sector*, for $198,000, approved in June 1988.

other countries), field visits, and discussions with Bank staff and executing agencies. The usefulness of secondary data from the DMCs is limited by the quality of data in these countries.

7. A caveat must be applied to the approach adopted in undertaking these surveys. The macroeconomic environment and overall economic management in these four countries differed substantially from DMCs in East and Southeast Asia when these projects were implemented. Besides their greater capacity to provide the necessary resources because of a higher developmental stage, the DMCs in East and Southeast Asia were able to release more resources for the H&P sector by spending less on income transfers and by leaving the most productive investments to the private sector. Such releases of resources created a more favorable environment for positive impact than any other kind of intervention in the sector. It would therefore be more accurate to view this Study of the four selected countries which had a less favorable environment as a subset of the Bank's overall assistance in the H&P sector.

B. Initial Conditions against Which Impact was Appraised

1. Macroeconomic Background

8. The economic performance of the four countries covered in the Study was generally characterized by chronic budget deficits and negative current account balances. Bangladesh was one of the poorest countries in the world with a per capita income of around $250 in 1995. Economic growth had remained low and poverty was prevalent among both rural and urban households. In Pakistan, fiscal and external macroeconomic imbalances and structural problems persisted, even if the gross domestic product (GDP) exhibited sustained growth rates averaging 6 percent over the past decade and a half. For Sri Lanka, economic performance had been sluggish, but this improved substantially in the 1990s following the revitalization of an economic liberalization program in 1989. The economy of PNG during the same period, on the other hand, was unsteady, characterized by sluggishness during the first part of the 1980s, followed by a burst of economic activity during the 1985-1988 period, then a general decline from 1989 after the closure of two of its most important mines, except for 1991-1993 when the economy picked up.

9. Political instability and threats to national security were a common experience in all four countries. This resulted in fiscal management problems that involved not only budget deficits, but the inability of governments to finance other social costs. As a large portion of the expenditures was devoted to national defense, such social concerns as health and education were inevitably affected. In Bangladesh, this was further aggravated by the periodic occurrence of such natural calamities as floods and typhoons, further impinging on whatever resources remained for addressing these social problems.

2. Social Development

10. While the four countries covered under the TA operated within diverse socioeconomic and cultural environments, they had some similarities. Significant proportions of the population in each country fell below the poverty line. The highest incidence of poverty for the period 1980-1991 was recorded for Bangladesh, with 78 percent below the poverty line, followed by PNG with 73 percent. In contrast, Pakistan's poverty incidence rate was 28 percent and Sri Lanka's was 39 percent. Varying rates of progress had been made in the reduction of poverty among the countries under study. In Sri Lanka, the poverty levels declined by about 18 percent between 1985 and 1990.

11. Among the four countries, Sri Lanka was the most socially developed. Its literacy rate was about 90 percent, compared with PNG's 72 percent, Bangladesh's 38 percent, and Pakistan's 37 percent. The average life expectancy was also longer in Sri Lanka at 72 years against 62 years in Pakistan, 56 years in Bangladesh, and 55 years in PNG. Women enjoyed better status in Sri Lanka as indicated by the much higher female literacy rate of 87 percent compared with 63 percent in PNG, 26 percent in Bangladesh, and 24 percent in Pakistan (Table 1, Appendix 3).

3. Overview of the Health and Population Sector

12. Two of the countries were characterized by high population growth rates. Pakistan's rate of 3.0 percent was the highest for the period 1990-1995, while PNG's was 2.0 percent over the same period. In contrast, Sri Lanka had the lowest rate (1.2 percent) followed by Bangladesh (1.8 percent).

13. Pakistan's population grew from 82.6 million in 1980 to 129.8 million in 1995. Over the same period, PNG's population grew from 3.0 million to 4.1 million; Bangladesh, from 88.5 million to 116.9 million; and Sri Lanka from 14.8 million to 18.0 million. While the decline in the population growth rate generally reflected the declining crude birth rate (CBR), the outmigration of workers since 1981 also played a key role.

14. Mortality measured in terms of crude death rate (CDR) remained at around 11 per thousand population in 1993 for Bangladesh and PNG, with Pakistan slightly better off at 9 per thousand population. But Sri Lanka's CDR at around 6 per thousand population was comparable to the more advanced DMCs. Infant mortality rate (IMR) was highest in Bangladesh at 106 per thousand live births, followed closely by Pakistan with 88 per thousand. Predictably, Sri Lanka's IMR was the lowest at 17 per thousand live births. PNG's IMR of 67 per thousand, although it was lower than Bangladesh or Pakistan, was still considered serious. In general,

health conditions in Sri Lanka were the most improved while those in Bangladesh and Pakistan were the least favorable (Table 2, Appendix 3).

15. Differences in the health and family status among the countries were partly attributed to the degree of effectiveness achieved by the government's health and family planning (FP) programs. In Bangladesh and Pakistan, health conditions and family planning activities did not improve significantly over the Study years. In addition to social and religious factors, low literacy rates made the implementation of health and family planning programs difficult, particularly in the rural areas. On the other hand, Sri Lanka's family planning programs were very successful in reducing the country's population growth rate. This was attributed to socioeconomic and cultural conditions, and high literacy rates, which made the people more responsive to modern health and family planning strategies.

4. Policy Environment

16. Because of the budgetary problems discussed earlier, public expenditures on health in the four DMCs had lagged over the years. Health expenditures had remained below 2 percent of GDP, which partly accounts for the poor local health conditions in these countries. In recent years, however, the governments of these countries had become more cognizant of the need to improve the overall health status.

17. The Health for All by the Year 2000 (HFA 2000) campaign5 was endorsed by the DMCs under study and provided the impetus for reviewing policies in the sector. In Bangladesh, the campaign was launched by shifting the public health system's emphasis from curative to preventive care. Health policies have since focused on strengthening health management and paramedics, local production and supply of essential drugs, and integrating health services with the national family planning and nutrition program.

18. In Pakistan, the Government launched its Social Action Program in 1992. This program aimed at improving the provision of basic social services in four key subsectors, one of which was primary health. Under the Social Action Program, the main priorities for the health sector were (i) to improve the quality of care by strengthening managerial effectiveness and the delivery of health care services; and (ii) to increase accessibility, particularly by women, through improving the vertical health programs, provision of drug supply, and mobilization of resources. The main priority of health subsectors was the expansion of health facilities. Additionally, the Government encouraged greater participation of the private sector in the provision of health care.

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5 The goal of this World Health Organization campaign is to assure that all member countries achieve a state of health enabling all citizens to lead socially and economically productive lives by the year 2000.

19. In PNG, much of the health infrastructure was already in place at the time of the country's independence. Since then, public health administrators have concentrated mostly on upgrading existing facilities. There have been four Five-Year National Health Plans since independence. The main health priorities identified under the current Plan are to (i) increase health services to the rural majority; (ii) expand health promotion and preventive services; (iii) reorganize and restructure the national health system; (iv) develop skills of health workers; and (v) upgrade and maintain the health infrastructure.

20. Sri Lanka's health services were primarily provided by the public sector and medical treatment was generally provided free in all hospitals, clinics, and dispensaries. In 1992, the National Health Policy was formulated, emphasizing health promotion and disease prevention, improvement in the quality and range of existing services, and decentralization of health administration. A Presidential Policy Statement in 1995 reiterated the Government's commitment to achieving higher health status for the people and identified such additional thrusts in health services as preventive disease control and availability of primary-level facilities, targeting of poor income groups and rural regions, and eradication of child malnutrition.

C. Bank Operations in the Health and Population Sector

21. Bank assistance to the H&P sector was based on the premise that improvement in the health status and moderate growth of populations had a beneficial influence on the socioeconomic development of DMCs. The Bank's first assistance to the sector was extended to the Sha Tin Hospital-Polyclinic Project in Hong Kong, amounting to $19.5 million, approved on 14 September 1978.

22. By September 1996, the Bank had approved 31 H&P projects dispersed in 14 DMCs and totaling $932.55 million (about 1.6 percent of total lending). Of this amount, 43.25 percent (11 projects totaling $403.33 million) were funded from ordinary capital resources, and 56.75 percent (21 projects totaling $529.22 million) from the Asian Development Fund. Additionally, 70 TA projects have been approved amounting to $24.03 million, representing 2.34 percent of the Bank's total TAs.

23. Bank-financed H&P sector projects in the past concentrated mainly on the improvement of service delivery through the upgrading/construction of middle-level referral hospitals, large urban-based hospitals, and primary health care (PHC) facilities. The Regional Study on the Health and Population Sector conducted in 1989 identified priority areas for future assistance. These areas were sector planning and policy development, health administration and management, PHC services and targeting of benefits to high-risk populations, family

planning services, cooperation with nongovernment organizations, human resource development, essential support services, and sector financing.

24. Long-term considerations for future H&P projects were also identified under the Regional Study. These included (i) increasing the geographical coverage of Bank assistance, (ii) providing a more balanced hardware-software financing mix, (iii) improving project supervision and implementation monitoring, (iv) enhancing institutional support though regional TAs and advisory TAs, (v) financing recurrent costs, (vi) using the sector and program lending approach whenever appropriate, (vii) improving project justification techniques, and (viii) enhancing intersectoral coordination within the Bank.

25. As a result, the Bank's involvement in the H&P sector over the last two decades has successively moved from (i) supporting middle-sized hospitals to rural health infrastructure, to development of health personnel (including equipment and other softer aspects), and to sectorwide policy reforms; (ii) purely Ministry/Department of Health prescribed programs and activities to nongovernment organizations and beneficiary defined programs; and (iii) purely state-owned, funded, and delivered services to a mix comprising private sector, insurance market, and contracted services. Such trends would not have been fully captured by the projects under study.

III. OBJECTIVES, SCOPE, AND IMPLEMENTATIONAL EXPERIENCE OF THE PROJECTS

26. While all of the projects in the Study were aimed at improving the health status of the beneficiaries, the approaches for achieving this goal varied for each country. In Bangladesh, the initial focus of health projects was on the provision of essential drugs and the improvement of quality of health services. To ensure the adequate supply of drugs intended for PHC, a pharmaceutical company was established from an existing publicly owned pharmaceutical production unit. Additionally, a DDT (dichlorodiphenyltrichloroethane) factory was refurbished to boost the national campaign against malaria. Health services would be enhanced both through improved hospitals and better auxiliary services. These services included warehousing and repair and maintenance of medical facilities and equipment. The subsequent projects included the establishment of health centers.

27. In Pakistan, on the other hand, health projects initially concentrated on providing training to medical staff and supplying medical equipment. Nurses and paramedical staff were major beneficiaries of the training components. Family planning activities also assumed importance in the projects as training for field staff were conducted and family planning services in health outlets were provided. Attention to the provision of basic health centers was given in later projects.

28. Improvement in the rural health status was the main objective of the two projects in PNG. Existing health facilities were provided with medical equipment and medical staff. The specific focuses of both projects centered on health infrastructure, water supply and sanitation, communications and transport for health service delivery, and health education.

29. The first Health and Population Project in Sri Lanka was intended to improve the delivery of integrated PHC by providing both preventive and curative services to the community, and concentrated on strengthening the health infrastructure by establishing health centers at various administrative levels, concomitantly providing them with medical equipment, furniture, and transport services. Additionally, in-service training on public health and family planning was provided (Appendix 4).

30. All seven projects incurred implementation delays ranging from one to four years (20-124 percent time overrun). Projects in Bangladesh had the longest delays, averaging about four years. Projects in PNG had the lowest time overrun, averaging about one year delay. Common factors cited for the delays were institutional inefficiencies of the governments and executing agencies such as poor intra-agency and interagency coordination and red tape, and lack of familiarity with the Bank's implementation procedures. Other causes for the time overrun included (i) lack of counterpart funds; (ii) problems with procurement; (iii) difficulties with land acquisition, siting, and technical problems; and (iv) civil unrest and weather disturbances (Table 1, Appendix 5).

31. Except for the Second Rural Health Services Project (RHS2) in PNG, the rest of the projects, despite substantial delays, were completed at lower costs than the appraisal estimates. Cost underrun ranged from 3.4 percent in the Health and Family Planning Services Project in Bangladesh to 39.6 percent in the Health and Population Project in Pakistan. In the case of PNG's Second Rural Health Services Project, with an overrun of 4.7 percent, additional costs were incurred for the pharmaceutical component that was added during implementation, to which initial loan savings had been reallocated. Overall, the average cost underrun for the seven projects was about 24 percent. The main reasons cited for the cost underrun were the reduction or cancellation of some project components, and savings arising from the devaluation of the local currencies. Another factor that contributed to lower actual project costs was the high provision for contingencies set during appraisal (Table 2, Appendix 5).

32. The implication of cancellation of project components during implementation is noteworthy in terms of assessing the impact of Bank's assistance. Impact on capacity building could be lessened with the cancellation of the component on training and related consulting services, as in the case of the Second Health and Population Project in Pakistan. Similarly, cancellation of the financing of part of the DDT supplies in the Public Health Program in Bangladesh reduced the effectiveness of the malaria campaign (incidences of malaria

subsequently increased), though it could be argued that longer-term adverse impact on the environment and health of those exposed to DDT would have been lessened.

IV. IMPACT OF BANK OPERATIONS

33. In assessing the impact of the Bank's assistance in the H&P sector, one has to bear in mind the change in the Bank's orientation as regards project appraisal. Concerns over sector linkages, social dimensions, project quality, issues of ownership, and beneficiary participation, for instance, were only emphasized in recent years. Extracting lessons learned in the context of these present concerns, however, may be difficult because they were not applicable in the past. Attempts to assess the impact of the Bank's assistance is further constrained by the failure in most loan documents to indicate the criteria by which impact is measured. Nevertheless, an attempt is made here.

34. Because of the nature of the Bank's assistance in the H&P sector, the discussion focuses on the impact of the seven completed projects across the four different countries. The Study assesses impact in the following six categories: health status, policy adjustment, government budget, institutional development, social dimensions, and environment. The geographical impact under each of these categories, however, differed by country because of the scope of the projects and the nature of the components. Some covered the whole country (e.g., PNG) while others were confined to administrative units (e.g., specific provinces in Pakistan and districts in Sri Lanka).

A. Impact on Health Status

35. The impact of the Bank's assistance on the health status of the DMCs was reflected by demographic and health indicators, morbidity indicators, service provision indicators, and beneficiary perceptions of the facilities provided. Importantly, however, these indicators often reflected health improvement efforts as a whole rather than just the Bank's contribution. While the indicators may have their limitations, they do represent general measurements of impact on H&P as put forward by experts engaged under the Study.

1. Demographic and Health Indicators

36. Achievements presented by demographic and health indicators varied by country. The most significant achievements were in Sri Lanka. Vital H&P indicators such as CBR, CDR, IMR, and maternal mortality rate in project districts between 1988 and 1994 showed a gradual improvement in line with national trends. The average percentage reduction in CBR from 1989 to 1992, for instance, was 13.7, whereas the figure for Sri Lanka over the same

period was 7.8 (Table 1, Appendix 6). In Bangladesh, these vital health indicators also showed a declining trend in some of the project districts. In Chandpur, the CBR dropped by 6.1 percent between 1990 and 1992, while the IMR dropped by 6.4 percent in line with national trends (Table 2, Appendix 6). The picture was less clear in Pakistan given the paucity of time series data for comparison in the project areas before and after project implementation. In PNG, on the other hand, many indicators showed an increasing trend. National IMR, for instance, increased from 65 per thousand births in 1985 (during implementation of the first and second Rural Health Services Projects [RHS1 and RHS2]) to 67 per thousand in 1993 (after implementation). While improvements in health status could not be specifically attributed to the Bank's projects, these figures generally did indicate a positive contribution of the project interventions in varying degrees toward the improvement of the health status of the people in the project districts. Even in the case of PNG, health officials indicated that the projects helped to arrest the rapid deterioration of the health environment brought about by the worsening social conditions.

37. The projects also appear to contribute to the reduction in population growth. The lowest percentage population growth was recorded for Sri Lanka, though the migration of workers, especially to the Middle East, was a very significant factor. While the population growth rates in the project districts show a slightly declining trend in Bangladesh and Sri Lanka, a more direct indicator of impact is CBR which showed a steadily declining trend, except for Ratnapura district in Sri Lanka (Tables 1 and 2, Appendix 6).

2. Morbidity Indicators

38. The pattern of major diseases varied from country to country. In Sri Lanka, upper respiratory tract infections, infectious and parasitic diseases, and complications associated with pregnancy, childbirth, and puerperium, were the most common ailments. Elsewhere in Bangladesh, infectious and parasitic diseases (particularly tuberculosis), and diarrhea were common. Pneumonia, malaria, and perinatal conditions (neonatal sepsis) were killer diseases for all ages in PNG, with typhoid and AIDS (acquired immunodeficiency syndrome) the main new and significant health problems. In Pakistan, the most common diseases were acute respiratory infections, gastrointestinal disorders, and malaria in the project districts. The impact of Bank projects in reducing the incidence of these diseases depended to a great extent on the nature of the projects. Where projects had important components in providing basic health units at the most peripheral levels (for example, Gramodaya Health Centers [GHCs] in Sri Lanka or Basic Health Units in Pakistan), the positive impact of the projects was more discernible, even though some results were mixed.

39. Although morbidity data based on government hospital records do not give a complete picture of the extent of morbidity in the community (because patients also sought treatment from facilities other than government hospitals), these data do indicate the morbidity trend in the country. In a number of instances, the morbidity rates increased. In Pakistan, the rate in the tehsil headquarters hospitals increased from 1.3 percent in 1981 to 2.5 percent in 1990. But in project District Headquarter hospitals the morbidity rates came down slightly from

2.8 percent in 1981 to 2.3 percent in 1990. In the case of Sri Lanka, morbidity trends by districts were mixed, but for the country as a whole, the decreasing trend was evident during the period 1988-1994. Specifically, the incidence of the three most prevalent immunizable diseases decreased in most districts as well as in the nation as a whole, due to the very successful Expanded Program of Immunization implemented through project facilities. Certainly in Sri Lanka at least, the Bank's assistance had positive impacts in reducing morbidity in the project districts, especially because of the extensive immunization activities carried out at GHCs established by the projects.

40. The downward trend of disease patterns was confirmed by beneficiaries surveyed in various field studies—by as much as 84 percent of the beneficiaries in Sri Lanka. Reasons given for the decline were increased coverage of immunization, better health practices, increased awareness of health and diseases, and the seeking of early treatment for illness. These reasons are directly attributable to the services provided by the various health centers, especially those at the most peripheral levels, established through Bank assistance.

3. Service Provision Indicators

41. The nature of services provided by the health centers under Bank projects varied from country to country according to whether the emphasis was on curative or preventive health services. In Sri Lanka, the GHCs were oriented towards preventive and promotive health care, especially in the area of maternal and child health care and family planning. The opposite was true in Bangladesh where curative services were the dominant activities in the village health centers. While there was an increasing emphasis towards preventive and promotive health care, especially in those countries fully subscribing to HFA 2000, curative health services were still much sought after. Access to the health facilities, be they oriented more towards curative or preventive health care, are an important element in the evaluation of the impact of Bank's projects. Other than curative services, the health centers provide prenatal, natal, and postnatal care; family planning; immunization; growth monitoring; nutrition supplementation; and health education.

a. Access to Health Facilities and Home visits

42. Access to health care by the beneficiaries improved with the availability and proximity of the health centers constructed under the Bank's projects. Access to health care can be assessed either in terms of the ease with which beneficiaries visit the health centers, or in terms of the ease and frequency of health workers visiting the beneficiaries in their homes. Generally, where the facilities were provided under the projects, there was a reduced need to travel long distances for health assistance. Between 63 and 72 percent of respondents interviewed in various districts of Bangladesh reported that the need to travel long distances for health care was definitely reduced. However, in many instances, access was marred by the presence of other constraints. In PNG, for example, it was tempered by the lack of medical

supplies at aidposts, irregular patrols by health workers, and poor maintenance of the facilities compounded by the poor security situation in the country.

43. Home visits by health workers formed an important link in the provision of health services. An important function of the public health midwife (PHM) in Sri Lanka, for instance, was to visit homes for the purpose of registering and providing care to children and pregnant women. Though the average number of home visits by a PHM had not changed significantly over the years, the fact that the PHM now resided in her area of work at the GHC should result in more efficient visits and time savings for other activities associated with the GHC, such as immunization. However, in PNG, home visits were made difficult by the breakdown of law and order. Irregular maternal and child health (MCH) patrols had been cited by as large as 47 percent of the beneficiaries interviewed in the project areas of RHS1 as the reason for the lack of health improvement in the project areas.

b. Prenatal Care and Immunization Coverage

44. The Bank's assistance improved the availability of prenatal care and immunization services, particularly in the rural areas. In Sri Lanka, the registration of pregnant women by a PHM before the end of the fourth month of pregnancy and the immunization of pregnant women with tetanus toxoid showed progressive increase in health standards over the years as a result of the existence of GHCs constructed under the first Health and Population Project (Table 1, Appendix 7). In the case of PNG, prenatal care coverage increased from 56 percent of pregnant women receiving care (as against those attending clinics) to 70 percent during the 1987-1991 period. Similarly, prenatal coverage by trained personnel in the project areas in Bangladesh was comparatively higher. Prenatal care in Mymensingh district in 1993 (73.3 percent) and in 1994 (72.2 percent) were comparatively much higher than the corresponding figures for the Rajshashi district, a nonproject district (Table 2, Appendix 7). In the case of another project district, Jessore, which shows a lower figure, the trend is increasing as against the decreasing national trend.

45. Immunization programs were greatly facilitated by the existence of health centers at all levels provided under the Bank's assistance. In Bangladesh, the immunization figures in some project areas were higher compared to the national figures. The Mymensingh district's registered immunization rate against BCG (bacillus Calmette-Guérin, the tuberculosis vaccine) exceeded 100 percent compared to the national figure of 95 percent in 1994 (Table 2, Appendix 7). The picture for PNG was similar. The annual immunization coverage for children under one year for the vaccines of third Triple Antigen, third Polio, measles, and BCG showed very clear improvement in coverage from 1982 to 1990. However, over the same period, infant mortality in PNG rose. As immunization coverage increased for the vaccines mentioned, the children were not immunized against the major killer diseases of infancy and childhood (pneumonia, malaria, and diarrhea).

c. Attendance of Deliveries

46. Attendance at childbirth deliveries by a health worker was facilitated by the presence of peripheral health centers in the rural areas. While over 85 percent of deliveries in Sri Lanka took place in the maternity units of hospitals, PHMs, by virtue of their 24-hour availability as they resided at the GHCs, could be called upon to assist home deliveries in emergencies. In Bangladesh, the percentage of deliveries by trained health personnel in some of the project areas increased. In the district of Jessore, for instance, the percentage increased from 40 percent in 1993 to 52 percent in 1994 (Table 2, Appendix 7).

d. Family Planning

47. FP activities have generally increased in the project areas. In Bangladesh, from 1990 to 1994, they have increased considerably except in the case of sterilization. The contraceptive acceptance rate increased from 58.6 percent in 1993 to 62.0 percent in 1994, while intrauterine device (IUD) insertions increased from 5,529 in 1990 to 14,377 in 1994 in the Kishoregonj district. In Sri Lanka, distribution of oral pills and condoms improved from 1988 to 1994, pills increasing from an average 0.2 to 0.4 packets per eligible couple and condoms moving up from an average of 0.3 to 1.2 per eligible couple. In PNG, FP activities were integrated with the MCH programs. Bank assistance has contributed to ensure widespread prevalence of FP services down to the aidpost level (where condoms, pills, and ovulation methods are predominant), the health center and subcenter levels (where condoms, pills, depo-provera, ovulation methods, and loops are available), and at the hospital levels (all methods plus ligation and vasectomy).

4. Beneficiary Perceptions of Services

48. The types of beneficiaries of the H&P projects differed according to the project components. These varied from those who derived direct benefits, such as women and children attending basic health care units at the village levels, to those who derived indirect benefits, such as hospital patients who benefited from speedier diagnoses of medical equipment workshops funded by the projects. Additionally, health service providers benefited through the upgrading of their expertise through training and the provision of medical equipment. The beneficiary surveys normally covered two groups of beneficiaries: (i) the users or primary beneficiaries of health facilities, consisting mostly of women and children in the case of the most peripheral health units; and (ii) the health care providers, including senior government health officers. Beneficiary perceptions of the impact of the projects have been evaluated in terms of whether health services have improved, whether they were satisfied with the services provided, and whether they perceived that there had been an improvement in health. Beneficiary perceptions of the services provided by the health centers were generally positive. However,

wide variances in the proportion of respondents reporting the positive perceptions occurred not only across countries, but even within the country among the project areas.

49. An average of about 65 percent of the primary beneficiaries in Sri Lanka reported marked improvement in the services provided by the Bank-assisted health centers. Regularity of services, improved quality of MCH and FP services, availability of PHMs 24 hours a day, and easy access were given as reasons for the improvements. In PNG, 95 percent of the primary beneficiaries in the project areas of RHS1 but only 55 percent in some of the project areas of RHS2 reported that services of the health centers had improved. The major reason for this perception was the daily availability of the services. In the case of Pakistan, over 70 percent of the primary beneficiaries from project District Headquarter hospitals and about 80 percent from the Tehsil Headquarter hospitals agreed that the services provided by the hospital had improved considerably.

50. Most beneficiaries in Sri Lanka were satisfied with the services provided by the Project health centers, a few being dissatisfied for reasons of lack of expansion of services, ill-maintained buildings, irregularity in the provision of services, and long waiting time. In PNG, there were more satisfied beneficiaries from the first project compared with the second project: over 90 percent of the primary beneficiaries from RHS1 were satisfied while only an average of about 65 percent of the beneficiaries from RHS2 were recorded as being satisfied with the services provided.

51. The perception of primary beneficiaries with respect to improvement in health around them was similar. About 80 percent of those in RHS1 areas indicated that family health had improved. This is in contrast to the RHS2 areas where only about 48 percent of the beneficiaries mentioned that family health had improved.

52. Perceptions of service providers generally supported the view that the projects had contributed to the improvement of health services and health levels of the areas served by the projects. In Pakistan, almost all health care providers interviewed in the Project hospitals agreed that there was considerable improvement in the provision of services as a result of the supply of essential medicinal and surgical equipment provided through the projects. Their diagnostic and treatment capabilities had also improved considerably. Even in PNG, where the overall morbidity indicators were not encouraging, the health care providers were of the opinion that the projects assisted by the Bank helped to arrest the seriously declining trend in health brought about by the deteriorating social conditions of the country. About 55 percent of those interviewed thought that the health of the people had improved on the basis of less sickness episodes and improved nutritional status of the family. Such improvement was believed to have been facilitated by the close proximity of health services in the case of 75 percent of responses and by the provision of MCH patrols in the case of 56 percent. In Bangladesh, response from

the health care providers confirmed the usefulness of the infrastructure, equipment, and drug facilities provided by the projects.

B. Impact on Policy Adjustment

53. Except for perhaps Sri Lanka, it does not appear that the Bank's assistance had any significant or long-lasting impact on policy adjustments in the DMCs concerned. In the case of Sri Lanka, the success of the GHCs led the Ministry of Health to modify the PHC model by focusing more on the provision of preventive health care through GHCs. The change in operational policy led to the construction of more GHCs in other parts of the country from the Government's own funds and external assistance from other funding agencies.

54. Cost recovery as a policy encouraged under various projects did result in some attempts by the governments to impose user charges. But these were limited to payment for relatively minor expenses like payment for contraceptives. While the governments recognize the validity of the policy of cost recovery, they are faced by the perception and expectation of the people that health services should be provided gratis and are therefore disinclined to implement this policy.

55. While governments welcomed private sector participation in the provision of health services, attempts to promote privatization as a matter of policy were limited, except in the case of one of the projects in Bangladesh where a Government pharmaceutical production unit was converted into the private Essential Drug Company Limited. Provision of health services by Government doctors on a private basis was either officially sanctioned as in the case of Sri Lanka, or tolerated as long as the services were provided outside of office hours and premises.

C. Impact on Government Expenditure

56. Expenditure of government counterpart funds during construction of health facilities and electro-medical workshops, the consequent recruitment of health staff, and subsequent operation and maintenance (O&M) requirements, caused increases in the development and recurrent expenditure of the governments. The degree to which the strain was felt by the respective governments depended on the fiscal position of the countries and, in all cases, there were competing demands for resources such as maintenance of security or law and order. Although O&M allocation for health facilities was often inadequate, however, health expenditure in general increased in nominal terms. In Sri Lanka, the provision for maintenance of GHCs in general was generally considered inadequate by the officials interviewed. Isolating the impact of Bank-assisted projects on government expenditure from that produced by other

health projects is difficult. Nevertheless, the Bank's assistance has definitely contributed to the increasing demand for greater budget allocation.

57. Public expenditure on health in Sri Lanka has increased fivefold in nominal terms from SLRs1.34 billion in 1980 to SLRs6.54 billion in 1992. As a proportion of total Government spending, it increased from 4.7 percent in 1980 to nearly 5.5 percent in 1992. Over the same period, public development expenditure in Pakistan on health and nutrition together with population planning increased from PRs813 million to PRs3.1 billion. In PNG, Government expenditure on health increased from K55 million in 1980 to K114 million in 1992, while in Bangladesh it increased from Tk1.34 billion to Tk6.83 billion over the same period.

58. However, the impact is mixed when viewed in the context of the share of the GDP devoted to health expenditure. In Bangladesh, health expenditure as a percentage of the nation's GDP increased, though marginally, from 0.7 percent in 1980 to 0.8 percent in 1992; while in PNG, the share decreased from 3.2 percent to 2.8 percent over the same period. In contrast, public health expenditure in Sri Lanka as a share of the GDP increased from 1.3 percent in 1985 to 1.5 percent in 1992. In Pakistan, the share as a percentage of the gross national product had remained constant at about 0.7 percent over the same period, except for 1988 and 1989 when the share rose to about 1.0 percent.

D. Impact on Institutional Development

b59. Construction of new health facilities, upgrading of existing infrastructure, supply of equipment, and provision of transport and repair facilities to the project centers, coupled with greater supply of pharmaceutical products, has enhanced the capacity of these institutions to better serve the community. In particular, the capacity of the health providers to provide better health care, especially those who served at peripheral levels, has been augmented (e.g., the provision of PHMs with residential facilities at the village level in Sri Lanka). However, the impact on institutional capacity was not evenly spread and, in many cases, nullified by the lack of maintenance in the health centers. An example is the case of Pakistan, specifically Sindh Province, which had a policy of no allocation of maintenance expenditure for new buildings for the first two years. Significant constraints in PNG included the unavailability of drugs in some aidposts, the lack of security for health providers working in the villages, and the reluctance of health providers to stay in the village health centers because of the absence of civil and social amenities. In a few cases, the full impact of the projects in terms of institutional development, and ultimately the efficient provision of health services was impaired by the non-usage or inoperational condition of some of the equipment (e.g., the unpacked X-ray machine in Sindh funded under the Second Health and Population Project[6]) or facilities (e.g., a medical equipment workshop occupied by law and order personnel in Pakistan and wrongly sited village health units in Sri Lanka and Pakistan).

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6 Loan No. 710-PAK(SF): *Second Health and Population*, for $16 million, approved on 29 November 1984.

60. Capacity building components of the projects tended to be generally designed in support of institutional development plans for the projects. Nevertheless, there were cases where the capacity measures were specifically designed to facilitate project implementation such as in the case of the Sri Lankan project which provided for training personnel in supervision of project implementation as well as monitoring and evaluation of project benefits.

61. The training components of the projects served to expand and upgrade the capacity of the existing health providers (paramedical personnel, medical technologists, laboratory technicians, nurses, and family planning personnel) as well as the capacity of the DMCs to provide health services in both the public and private sector. While it is difficult to quantitatively measure the impact of the training components of the projects due to their long-term and indirect effects, the impact is certainly positive. Training accorded to PHMs and public health inspectors in Sri Lanka, for instance, assisted in improving the technical and managerial skills of both. The in-service training enabled PHMs to improve the quality of their services and, as acknowledged by the beneficiaries, their knowledge of family planning has also increased considerably. In colleges assisted by the Bank, the impact would have been even more extensive if not for the limitations imposed by physical intake capacity. Of about 150 students applying to the College of Technology under the Institute of Health in Pakistan for a medical technologist course, only 20 students could be accepted in 1990. Greater impact of the training components of the projects has been marred by the inability of the DMCs to provide adequate staff to take advantage of the fellowships provided under the projects. Such inability in fact has led to cancellation of some of the components by the Bank as in the case of the first Health and Population Project in Pakistan.7

E. Social Impact

62. The social impact of the projects has been favorable with regard to women and poverty reduction. However, it must be pointed out that at the time of project formulation, social considerations were not given prominence. Performance indicators in poverty reduction, for instance, were not specified, even though health programs have obvious implications for poverty reduction.

1. Impact on Women

63. The major beneficiaries of the Bank's assistance were women and children. Given the role of women in all these DMCs with regard to health matters, this was to be expected. In Sri Lanka, almost all the services provided at GHCs by PHMs and the other health staff were targeted at women and children. Considering that the profiles of beneficiaries in the

7 Loan No. 562-PAK(SF): *Health and Population*, for $15 million, approved on 15 December 1981.

village health facilities in other DMCs were similar, the impact on the improvement of health status of women has been considerable.

64. MCH and FP clinics conducted at the health centers, such as those in Sri Lanka, were also occasions for social gatherings of women. Discussions among women, particularly mothers, commonly centered on health issues. One significant activity at the clinics was the health education talk on current health topics given by PHMs to mothers and children. The result was increased awareness of mothers about health and disease. Improved literacy among females, increased women's employment, and women's general contributions to socioeconomic development are at least partly attributable to the improved health status of women as well as reduction in family size.

65. The impact of the projects on women should also be considered in terms of training. Many trainees were women, notably nurses, PHMs, and FP workers, besides those in categories of health providers as medical technologists. For women already employed, the training served to upgrade their skills. For those not employed at the time of training, the projects afforded them better opportunities for employment with higher qualifications in either the public or private sectors.

2. Impact on Poverty

66. The incidence of poverty in rural areas was higher than that in urban areas. The selection of socioeconomically deprived areas for Bank assistance was appropriate in consideration of the positive impact improved health status made in enhancing the income levels of individuals and families. It is difficult to determine in quantifiable terms the economic benefits to the family brought about by improved health. Easy access and availability of health facilities reduce travel time and cost, reduced family size due to increased family planning acceptance, and overall improvement in health status (thus increasing employment opportunities and reducing work absenteeism) have all had a contributory impact on income generation and poverty reduction in the family.

F. Environmental Impact

67. Except for the possible effect from the DDT factory upgraded under the Public Health Program Project in Bangladesh, no direct adverse impact on the environment was expected given the nature of the Bank's assistance. The possibility of adverse effects from the spraying of DDT to contain the malaria vector was resolved when the factory was closed in 1991. In general, project interventions have had positive impacts, directly or indirectly, on the environment. Examples are the facilitation of available potable water supply in PNG and improved sanitation in all the countries brought about by the increased awareness of people,

especially mothers, of the sources of environmental pollution. Knowledge about proper disposal of household and garden refuse and the need to use sanitary toilets was generally imparted in the health education talks given to mothers at the clinic centers. Further, the adverse effects of excessive population growth on the environment could be reduced by effective FP methods. Environmental sanitation was the primary responsibility of the public health inspectors who were part of the PHC complex. Their knowledge and skills regarding this aspect were improved by the in-service training provided through the projects.

V. KEY ISSUES FOR THE FUTURE

A. Sustainability of Impact of the Bank's Assistance

68. The initial impact generated by the Bank's assistance must be sustained. Sustainability of the benefits of the projects depend on the availability and operational efficiency of the facilities established under the projects. The lack of adequate budget provisions for O&M and related delays in making project facilities operational have significantly reduced the full potential impact of the Bank’s assistance. In all the DMCs under study, the problem of inadequate funding for O&M of the health centers (including hospitals), the training schools and institutes, the electro-medical workshops, and equipment was constant. In most cases, this resulted from competing demands on an already tight budget. In some cases, however, it was the result of the manner in which the allocation for maintenance was made, normally allocated as a one-line vote at the headquarters level of the department or ministry. This situation invariably resulted in health centers distant from the headquarters obtaining much less allocation than requested. Given their low priority in the administrative hierarchy, therefore, the most peripheral health units (the GHCs in Sri Lanka, the Basic Health Units in Pakistan, or the aidposts in PNG) had little or no allocation for maintenance, even though it was recognized that the clientele they served were in greater need of health care. Moreover, in some other cases the lack of maintenance was the result of policy measures. In Sindh Province in Pakistan, for example, possibly in response to budgetary constraints, no allocation for maintenance was normally made for any new buildings for the first two years. The problem in most cases was that more money was required to rehabilitate the health facilities than would have been required had they been maintained regularly.

B. Cost Recovery

69. Related to the above issue is the question of cost recovery. If user charges are imposed, the sums collected could contribute to minor maintenance expenditures. The policies of the governments reflected their reluctance to impose fees on users of public health services, particularly the more vulnerable groups. Some shift in the thinking of these governments was discernible perhaps faced with the strain on the budget. Current attempts at cost recovery included nominal charges collected at GHCs for condoms and contraceptive pills in Sri Lanka, or charges for certain categories of wards in Pakistani hospitals. These attempts remain

inadequate to rationalize the demand for health services or to provide for significant maintenance expenditure. The thinking of some governments appeared to be that, while preventive and promotive health care should continue to be free of charge, there are a number of service areas, particularly in secondary and tertiary curative care, where cost recovery could be made possible without affecting those unable to pay. In the case of Sri Lanka, the Government initiated studies to look into the mechanism for some form of cost recovery measures such as health insurance and prepayment schemes. However, given the welfare orientation of most governments in regard to social services and the traditional political climate on such a sensitive sector as health, any attempts at cost recovery require considerable effort. Yet the DMC governments need to consider alternative financing strategies because the increasing demand for health services are not matched by increasing budget allocations. To improve cost recovery, unit costing of services must be developed. Such information would help the governments to decide on the methods of cost recovery.

C. Privatization of Health Services

70. An important approach for the successful development of the health sector is to involve the private sector. Private sector participation in the provision of health services was encouraged by DMC governments. Although the projects themselves did not actively solicit private sector delivery of health care, some project components contributed indirectly to fuller private sector capability in the delivery of services such as the training of medical technologists or nurses, many of whom will ultimately find employment in the private sector. In practice, Government support for private sector participation took the form, either tacitly or explicitly, of allowing government doctors to engage in private practice outside of office hours and outside the health facilities in which they were working, with the hope that once established they would turn to private practice. The majority of the 3,948 Government doctors in Sri Lanka, for instance, are presently engaged in part-time private practice.

71. Apart from the possible abuse of the privilege, there was the inherent conflict of interest as the same patients visited the doctors both during and outside office hours. Given that the provision of curative services is more lucrative than the provision of preventive services, doctors invariably focused on the former. This situation is not conducive to the integration of preventive and curative services, as doctors are more inclined to devote attention to hospital work (curative service) at the expense of preventive work, which also involves field visits. Hospital work, after all, serves to keep the doctors in touch with the types of services required in private practice.

D. Project Design and Implementation

72. A frequent observation of health providers in the DMCs is the apparent lack of linkage between the Bank's projects. While the first project in Bangladesh, for example, was

focused on the provision of drugs production, the second was concerned with establishment of health centers. Similarly, in Sri Lanka, the successful component of the first project was not part of the design of the second project. Realizing the importance of sustainability, it has been suggested that in future the Bank should design projects that build on the successful components of earlier ones. In effect this means that projects must be designed and implemented keeping in mind not only lessons learned from earlier interventions, but the need to reinforce the positive impacts of early interventions. While there are constraints in designing such integrative projects, given the manner in which projects are proposed to the Bank for assistance, the resolution of this issue merits consideration if the impact of the Bank's assistance is to be sustained.

73. Lessened impact from cancellation, non-use, and implementation delay of project components could have been minimized with more thorough assessment of the constraints facing the sector. Unopened X-ray equipment provided under the Second Health and Population Project to Pakistan, for instance, resulted from the lack of technical staff to set up and operate the equipment. Only 20 percent of funds for in-service training of public health midwives and inspectors under the first Health and Population Project in Sri Lanka were utilized because similar training was provided by other funding agencies. Other inadequacies include the absence of impact indicators and relevant baseline data at project preparation, poor monitoring at implementation, faulty design due to inadequate preparatory work, and minimal involvement of health care providers and beneficiaries throughout the project cycle— which in the case of Sri Lanka resulted in the non-use of some GHCs because of poor location. These constraints indicate the need for an in-depth analysis of the sectoral and institutional issues prior to project formulation.

E. Benefit Monitoring and Evaluation

74. The importance of setting up benefit monitoring and evaluation (BME) systems was recognized by both the Bank and the DMC governments in all these projects. The issue is whether the setting up of the system was vigorously pursued. BME components were often not implemented for various reasons, such as when difficulties prevented the recruitment of consultants in the Sri Lankan project, or when appropriate counterpart staff were not assigned. Another problem was the lack of performance indicators by which to assess the effectiveness of the design or the impact of the projects.

75. The installation of an appropriate BME system would have improved the efficiency of health care delivery systems. In particular, it would have helped to monitor benefits both during and after project implementation, and also to ensure that relevant benchmark data by which to quantify the impact of project intervention would be compiled. The existence of viable BME systems would certainly have alleviated the data collection problems often encountered in postproject assessments caused by transfers and unavailability of relevant government officers intimately connected with the projects. Also, BME data would have

provided essential data for the proper design and implementation of follow-up interventions by the Bank.

VI. CONCLUSIONS AND RECOMMENDATIONS

76. Although health improvement in the DMCs is fully attributable not only to Bank projects but to factors such as general income growth and improvement in education, it would be incorrect to deny that, overall, the Bank's assistance in the H&P sector has contributed positively to the health of the population in the DMCs. The veracity of this statement is based on the various health indicators as well as the perception of the beneficiaries. Similarly, with regard to the reduction in the population growth rate, Bank assistance has contributed positively to increased family planning acceptance and dissemination of family planning advice and information. Other significant contributions of the projects are the institutional development and capacity-building impact from the establishment of health-related facilities and the implementation of training programs, though instances of poor maintenance and cancellation of fellowships somewhat detracted from potentially greater impact.

77. In terms of the impact of the Bank's assistance on policy adjustment and Government expenditure, the result was somewhat nebulous. Only in Sri Lanka, where the project helped the Government make the necessary policy changes to focus more on the delivery of health services through the most peripheral health centers (GHCs), was the impact of the project on Government policy apparent. In the other three countries, while it was expected that health projects would add to the demand for greater expenditure in absolute terms, relative allocation for health expenditure declined. The social impact of the projects would be significant, except that no performance indicators can be formulated based on the data available to measure the impact in quantitative terms. Environmental impact of the projects was insignificant on the whole, though if viewed on a project basis, as in the case of the PNG projects with water sanitation components, the impact could be viewed as distinctly positive.

78. Based on the findings of the Study, the following recommendations are offered for consideration.

A. Recommendations for the Bank

(i) Especially in a social sector like H&P, in-depth sector, intersectoral, and macroeconomic analysis is crucial when designing and formulating a project for which specific measures including policy changes and institutional improvements would be necessary to ensure the long term sustainability of benefits.

(ii) Appropriate provisions for future impact evaluation, particularly with the formulation of performance indicators in a logical framework, should be considered from the start of project preparation. Clear definitions of anticipated health and related impacts should be formulated, and the relevant impact indicators and benchmark data should be identified for future use.

(iii) The Bank should consider providing follow-up assistance, if needed, to projects with successful components upon which it can build, rather than initiating new projects. It will help to reinforce the positive impact from completed projects, particularly when full benefits are not immediately realizable, because financial and other problems continue to affect project sustainability.

(iv) The Bank should encourage full commitment of the executing agencies in providing the necessary support, such as provision of required human resources, training, and maintenance of facilities, so that project benefits are maximized and sustained over the long term.

B. Recommendations for the DMC Governments

(i) The DMC governments should ensure that adequate specific budgetary allocations are made for the repair and maintenance of buildings, equipment, and vehicles provided by projects so that all potential benefits are enjoyed by the beneficiaries. Regular in-service training of personnel in project health centers should be conducted to develop their technical and managerial skills.

(ii) DMC governments should ensure that appropriately trained and qualified personnel are appointed early to staff the project implementation units. Incentives could be given to the staff to implement projects smoothly and efficiently.

(iii) DMC governments should ensure that appropriately qualified staff are made available for project components such as fellowships and other forms of training; otherwise, they should consider partial loan cancellation rather than incurring further debt.

C. Recommendations for the Bank and the Government

(i) Project formulation and design should always be done with the full participation not only of key government officials at the Central level, but of regional health administrators and care providers. Wherever possible, targeted beneficiaries should also be involved. This would create a sense of ownership among all concerned.

(ii) Project implementation based on monitorable performance indicators at different levels of the project cycle should be conducted more extensively and regularly so that problems can be identified early and corrective measures taken immediately. This monitoring exercise should be done not only in conjunction with the key officials in the ministries but with regional health administrators, health care providers, and, wherever possible, the beneficiaries. Project implementation units composed of health and other officials should be established right at the beginning of project implementation.

(iii) All avenues of community involvement and participation should be explored during project implementation. Construction of buildings at low cost through community organizations, and donation of land and maintenance of facilities by the beneficiaries, are examples of possible community participation. Active beneficiary involvement would give the community a sense of self-reliance and responsibility toward the sustainability of the project.

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