McNamara Papers

Board actions
Brandt Commission 1980 (Aug.-Oct.)

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International Bank for Reconstruction and Development

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FOR EXECUTIVE DIRECTORS' MEETING

For consideration on August 26, 1980

R80-234

FROM: Vice President and Secretary

August 1, 1980

BRANDT COMMISSION PROPOSALS OF RELEVANCE TO THE WORLD BANK: A PROGRESS REPORT

Attached is a note entitled "Brandt Commission Proposals of Relevance to the World Bank: A Progress Report" for submission to the Development Committee.

Questions on this document should be referred to Mr. Chernick (extension 60123).

Distribution:

Executive Directors and Alternates
President
President's Council
Vice Presidents, IFC
Directors and Department Heads, Bank and IFC

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July 31, 1980

Subject: Brandt Commission Proposals of Relevance to the World Bank: A Progress Report

Introduction and Purpose

1. The Report of the Independent Commission on International Development Issues contains a series of recommendations (Annex II), of which the Bank is studying seventeen which relate to its own activities (Annex I). To date, the Board has discussed papers on two of the Commission's proposals. A fuller report on the Bank's response to the Commission's recommendations will be prepared later, in light of the Board discussions of all the recommendations, and submitted to the April 1981 meeting of the Development Committee.

2. Some of the recommendations of the Commission relate to program lending, cofinancing, energy development, poverty alleviation and food production. In these areas, the Commission's proposals provide support and encouragement to the Bank's initiatives and recent policy changes. The remaining proposals relate to measures that can be taken to expand the Bank Group's borrowing and lending capacities and the institutional changes required to further the Bank's responsiveness to the immediate needs of the developing countries within the context of the rapidly changing international environment.

Structural Adjustment Lending and Cofinancing

3. The Bank's Board of Directors discussed a proposal for Bank structural adjustment lending on March 18, 1980. 1/ The purpose of this type of non-project lending is to support specific and well-defined programs of adjustment designed to increase efficiency of resource use and to improve the economy's responsiveness to changes in economic conditions. The Bank's structural adjustment lending was approved by the Board and also was endorsed by the members of the Development Committee at their meeting in Hamburg in

1/ Paper entitled "Lending for Structural Adjustment" (Board Memo R80-17-IDA/R80-22).

April 1980. 1/ In FY80 three structural adjustment loans were approved by the Bank's Board (Kenya, Turkey I, and Bolivia -- totaling \$320 million). 2/ For FY81 such lending is expected to be about \$600-800 million.

4. In the area of cofinancing, the Bank has been playing an increasingly important role. The quantum of cofinancing (i.e., the amount of funds provided by the Bank's co-lenders) has risen from \$448 million in FY73 to about \$6,500 million in FY80. In FY80 the funds provided by co-lenders were equivalent to 59 percent of total Bank lending. The Board considered a paper on this topic on March 25, 1980, 3/ which was forwarded to the Development Committee for its consideration at the meeting in Hamburg. The paper suggested that despite the Bank's progress in this area, the recent sharp increases in the resource requirements of developing countries necessitate further Bank efforts to expand cofinancing with private sources and export credit institutions. This approach was endorsed by the Board and by the Development Committee, with special emphasis on increasing cofinancing with private sources.

Progress in Other Areas

5. Work on other Brandt Commission recommendations related to the Bank is continuing. Several papers are ready for consideration by the Board including the use of guarantee authority and an expanded program for energy lending.

6. The Bank's paper on the Brandt Commission's recommendation concerning the use of the World Bank's guarantee authority to improve access of developing countries to capital markets shows that, within the framework of the Bank's Articles of Agreement, guarantees affect the Bank's lending authority in the same way as loans disbursed and outstanding. Under present circumstances there appears to be little benefit to the Bank or its borrowers from the Bank fully guaranteeing loans by third parties. The situation is somewhat different, however, concerning the use of partial guarantees, which might sometimes help borrowers to mobilize funds larger than the guarantee extended by the Bank or to introduce them to new lenders or preferred loan instruments. The Bank's willingness to consider requests for guarantees, or partial guarantees, conveyed to the Development Committee in 1976, has thus far had no response. 4/ Use of other techniques, in particular loan sales without guarantee or cofinancing, may achieve the same resource-mobilizing effect of partial Bank guarantees, without the constraints on the Bank's freedom of action. The Bank has made

1/ Paragraph 4, "Press Communique" of the Development Committee, Hamburg, April 24, 1980.

2/ This total includes a \$15 million EEC Special Action Credit for Kenya.

3/ Paper entitled "World Bank Cofinancing" (Board Memo R80-22-IDA/R80-28).

4/ Staff Memorandum dated July 29, 1976 on "Use of the IBRD's Guarantee Authority," (Development Committee DC/WG/CM/76-7, dated August 4, 1976).

limited use of loan sales in the past because the cost of funds obtained through such sales is normally higher than the cost of direct borrowing by the Bank. Loan sales exceeded $100 million in only three fiscal years -- FY70, FY77, and FY78.

7. In the energy field, the two Brandt Commission recommendations relating to the World Bank call for substantially increasing the Bank's lending in this area and for setting up a new facility to finance minerals and energy development.

8. Although the Bank has been lending in the energy field over many years, it began assisting its member countries with petroleum development projects only recently (1977) and it was not until FY79 that it initiated an accelerated program which included financing for exploration as well as production. At present the Bank is by far the largest source of public support for energy development in developing countries -- particularly for energy sources other than electric power. The Bank's expanded lending program for FY81-85 includes a total of $13.2 billion lending in energy (in current prices) -- including oil and gas, electric power, coal and renewables. But the expanded lending program is inadequate in view of the sudden increase in the investment requirements of developing countries in this sector. Over the next five years, investment requirements of LDCs in energy development are estimated to rise from an estimated $34.4 billion in 1980 to an annual average of $54.5 (in 1980 prices) over the 1981-85 period. Based on an analysis of project availability and investment opportunities by country, Bank Group lending of $25 billion, in current prices, for FY81-85 would be justified. The paper 1/ therefore suggests that the Bank explore the establishment of a new energy affiliate, with a capacity to lend about $25 billion for energy development in FY81-85.

1/ Report entitled "Energy in the Developing Countries" (Report No. 3076, July 1980).

STATUS OF THE FOLLOW-UP WORK ON THE BRANDT COMMISSION PROPOSALS OF RELEVANCE TO THE WORLD BANK

Brandt Commission Proposal	Status
1. Expand program lending by the Bank.	Discussed by the Board (3/18/80).
2. Provide for greater cofinancing by the Bank.	Discussed by the Board (3/25/80).
3. Abstain from imposition of political conditions on the operations of multilateral financial institutions.	Submitted to the Board (5/30/80).
4. Plan to effectively utilize the increased borrowing capacity of the Bank resulting from the doubling of its capital.	Draft being prepared.
5. Change the Bank's present "gearing ratio" so as to raise its lending capacity.	Draft being prepared.
6. Develop an action program to reduce absolute poverty in the poverty belts of Africa and Asia during the 1980s.	Draft being prepared.
7. Analyze the likely debt and debt servicing problems in various categories of LDCs and the capacity of existing private and public institutions to meet these needs.	Draft being prepared.
8. Define the role of the surplus countries in financing the adjustment problem of the developing countries.	Draft being prepared.
9. Substantially increase Bank financing for exploration and development of energy resources.	Submitted to the Board (7/11/80).
10. Use the Bank's guarantee to improve access of developing countries to capital markets.	Submitted to the Board (7/18/80).

Brandt Commission Proposal	Status
11. Develop an action program to increase food output in low-income, food-importing developing countries during the 1980s.	Draft being prepared.
12. Provide greater participation of LDC staff in Bank management.	Draft being prepared.
13. Set up a new facility for financing the development of minerals and energy.	Draft being prepared.
14. Provide greater decentralization of the management ofthe Bank's operations.	Draft being prepared.
15. Provide borrowing countries a greater role in the decision-making process in the Bank.	Draft being prepared.
16. Examine the possibility of the Bank's refinancing export credits for capital goods.	Draft being prepared.
17. Consider the creation of a new international financial institution -- a World Development Fund -- to supplement existing institutions and to diversify lending policies and practices.	Work to commence after all other papers have been considered.

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LIST OF THE BRANDT COMMISSION PROPOSALS RELATING TO ECONOMIC DEVELOPMENT

I. The Poorest Countries

*1. Action program to assist poverty belts of Africa and Asia.

II. Hunger and Food

*2. Program to increase food production in food-importing, low-income developing countries.

3. Establishment of an international Grains Arrangement, larger international emergency reserves, and a food financing facility.

4. Increase in food aid and link to employment promotion and agricultural programs and projects.

5. Liberalization of trade in food and other agricultural products within and between North and South.

6. Greater support for international agricultural research with emphasis on regional cooperation.

III. Population - Growth, Movement and the Environment

7. Increased international support and assistance for national population programs.

8. Bilateral and multilateral cooperation to harmonize government policies of emigration and immigration, fair treatment of migrant workers and the protection of their rights.

9. International cooperation in the management of the atmosphere and other global commons and prevention of ecological damage.

10. Development of ocean resources outside the "exclusive economic zones" of 200 miles under international rules.

*Items with an asterisk are included in Annex I, for review by the Bank.

IV. Disarmament and Development

11. International tax on arms trade for development purposes.

12. More research on the means of converting arms production to civilian production.

V. The Task of the South

13. Increased emphasis on the informal sector, through easier access to credit, and expanded training and extension services.

14. Indigenous technological capacity should be strengthened.

15. Support should be provided to relevant voluntary organizations to participate in development process.

16. Regional and sub-regional integration or other forms of close cooperation (e.g., preferential trade arrangements, payments and credit arrangements) should be promoted.

17. Establishment of projects on the basis of tripartite arrangements involving developing countries in partnership with industrialized countries and/or capital surplus OPEC countries.

VI. Commodity Trade and Development

18. Greater participation of developing countries in the processing, marketing and distribution of their commodities.

19. Commodity arrangements should be rapidly concluded .

*20. Estabishment of a new financing facility which will provide concessional finance, as well as explore new financing arrangements between producing and consuming countries, for mineral exploration and development.

VII. Energy

21. Urgent need for an international strategy on energy.

22. Orderly and predictable price changes of scarce non-renewable energy.

23. Special arrangements including financing assistance to the poorer LDCs to ensure adequate energy supplies.

*24. Substantial increase in aid from international as well as regional financial agencies for the exploration and development of energy sources.

25. Creation of a global energy research center, under UN auspices.

VIII. Industrialization and World Trade

26. Rolling back of protectionism by developed countries against the exports of developing countries.

27. Industrialized countries should vigorously pursue positive and time-bound adjustment assistance programs developed through international consultation and subject to international surveillance.

28. The Generalized System of Preferences should be eased in respect of its rules of origin, exceptions and limits and should be extended beyond its present expiration.

29. Extension of financial support and technical assistance to the poorer countries for the establishment of improved commercial infrastructure.

30. International agreements on fair labor standards.

31. Establishment of an international trade organization incorporating both GATT and UNCTAD.

32. Improvement in existing arrangements for cooperation in the establishment and administration of rules, principles and codes covering restrictive business practices and technology transfer.

IX. Transnational Corporations, Investment and Technology

33. Reciprocal obligations on the part of host and home countries covering foreign investment, transfer of technology, and repatriation of profits, royalties and dividends.

34. Legislation to regulate transnational corporations' activities.

35. Intergovernmental cooperation in regard to tax policies and the monitoring of transfer pricing.

36. Harmonization of fiscal and other incentives among host developing countries.

37. Strengthening the bargaining capacity of developing countries, especially the smaller and least-developed countries, against TNCs with the technical assistance from UN and other agencies.

38. Appropriate and effective compensation in cases of nationalization of natural resources and use of international mechanisms for settling disputes on nationalization.

39. Increased efforts in the development of appropriate technology in both rich and poor countries as well as the improvement in the dissemination of information about such technology.

40. Elimination of practices by international aid agencies with regards to restrictions on recipients' freedom of choice in technology.

41. More use of local capacities by international aid agencies in preparing projects.

X. The World Monetary Order

42. Creation and distribution of an international currency (e.g., SDR) to be used for clearing and settling outstanding balances between central banks.

43. Allocation of new SDRs should favor developing countries so as to facilitate their adjustment process.

44. Improvement of the scope of IMF's compensatory financing facility.

*45. Greater responsibility of surplus countries in financing the adjustment problem of LDCs.

*46. Support for providing export credits.

47. Increased stability of international exchange rates, particularly among key currencies, should be sought through domestic discipline and coordination of appropriate national policies.

*48. Greater participation of LDCs in the staffing, management and decision-making of the IMF and the World Bank.

*49. Provide greater decentralization of the management of the Bank's operations.

50. Use of the bulk of IMF gold stock as collateral against which the IMF can borrow from the market for on-lending purposes.

51. Use of profits from staggered gold stock sales as interest subsidy on loans to low-income LDCs.

XI. Development Finance

52. Substantial increase in aid for projects and programs to alleviate poverty and expanded food production, particularly in the LLDCs.

53. Stabilization of the prices and earnings of commodity exports and domestic processing of commodities.

54. International system of universal revenue mobilization.

55. Adoption of timetables to increase ODA from industrialized countries to 0.7 percent of GNP by 1985 and to 1 percent before 1990.

56. Introduction of automatic revenue transfers through international levies.

*57. Effective utilization of the increased borrowing capacity of the World Bank resulting from the recent doubling of capital.

*58. Increase the lending to capital ratio of the World Bank and similar action by regional development banks.

*59. Abstaining from the imposition of political conditions on the operations of multilateral financial institutions.

60. Channelling an increasing share of development finance through regional institutions.

*61. Substantial increase in program lending.

*62. Greater role of borrowing countries in decision-making and management of international monetary and financial institutions.

63. Resource transfers should be made more predictable by long-term commitments to provide ODA, increasing use of automatically mobilized revenues and lengthening the IDA replenishment period.

*64. Creation of a World Development Fund to supplement existing institutions and diversify lending policies and practices.

*65. Greater use of cofinancing by the World Bank and other international financial institutions.

*66. Provision of guarantees by the World Bank and other international financial institutions.

*67. A study of likely debts and debt servicing problems in various categories of LDCs and capacity of existing private and public institutions to meet them.

XII. International Organizations and Negotiations

68. Principle of universality to guide policies, agreements and institutions in the field of international economic, financial and monetary cooperation.

69. Improving and strengthening the UN system.

70. High-level advisory body to monitor the performance of multilateral organizations in the field of international development.

71. Review of the present system of negotiations to determine whether more flexible, expeditious and result-oriented procedures can be introduced.

72. Emphasis on educating the public about the importance of international cooperation.

73. Use of limited summit meetings to advance the cause of consensus and change.

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International Bank for Reconstruction and Development
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R80-249

FROM: Vice President and Secretary August 14, 1980

BRANDT COMMISSION RECOMMENDATION NO. 13 CONCERNING THE NEED FOR A NEW INSTITUTION FOR EXPLORATION AND DEVELOPMENT FINANCING FOR NON-FUEL MINERALS

As referred to in the President's memorandum of February 22, 1980 (SecM80-128), attached hereto is a memorandum dealing with the Brandt Commission Recommendation No. 13 concerning the need for a new institution for exploration and development financing for non-fuel minerals.

Questions on this document may be referred to Ms. Haug (X75759).

Distribution:

Executive Directors and Alternates
President
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THE WORLD BANK
Washington, D.C. 20433
U.S.A.

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Office of the President

August 4, 1980

MEMORANDUM TO THE EXECUTIVE DIRECTORS

Subject: Brandt Commission's Recommendation Concerning the Need for a New Institution for Exploration and Development Financing for Non-Fuel Minerals

Recommendation: "There is need for major additional multilateral finance to support mineral exploration and development in developing countries. Some of this will come from existing institutions, but we believe there is a case for a new facility for this purpose." 1/

A. INTRODUCTION

1. The recommendation summarizes a series of proposals by the Brandt Commission calling for a special effort to increase the flow of resources for mineral exploration and production in the developing countries (LDCs). The text of the Brandt Report specifically refers to non-fuel minerals and the present paper uses the term "minerals" for "non-fuel minerals". Although the recommendation encompasses both exploration and development 2/, the main emphasis in the Report is on increased exploration in LDCs in general, and the poorest countries in particular, which is considered essential to provide a sound basis for their mineral resources development.

2. The recommendation is addressed to governments of both developing and developed countries which are called upon to establish and fund a new financing facility to provide "concessional finance" for minerals exploration and development. The International Financial Institutions (IFIs), including the Bank, are also asked to intensify their funding for exploration, as some of them had done already. Specifically, the need for an increased World Bank role in the mineral sector was addressed in the 1977 report entitled, "Minerals and Energy in the Developing Countries" (R77-121). As a result, the Executive Directors adopted an expanded program for financing of mineral projects, together with selective assistance for mineral exploration. A subsequent progress report, "World Bank Role in Non-Fuel Mineral Development in Developing

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1/ Willy Brandt and Others, North-South: A Program for Survival, London: Pan Books, 1980, p. 292. The full recommendation extends to mineral "and energy" exploration and development. The present paper addresses non-fuel minerals exclusively. Energy, including coal, etc., is covered in a separate paper entitled: Energy in the Developing Countries, R 80-206.

2/ Financing of production facilities (i.e., mines and processing plants, etc.) as distinguished from exploration financing.

Countries - 1978 Progress Report" (SecM79-11) reaffirmed the role envisaged for the Bank in exploration, but indicated that only limited exploration was needed because knowledge of mineral reserves sufficed to ensure medium-term supplies of most important minerals and a substantial number of projects were already prepared up to the feasibility stage. This remains the case. However, the Brandt Commission's conclusions require that a further examination be made of the adequacy of available financing, especially for exploration in the poorest countries, to ensure adequate availability of minerals to meet anticipated demand in the longer term.

3. While proposing new financing initiatives, the Brandt Commission recognizes that a significant scarcity in minerals supply is not expected in this century, although some scarcity of lead, zinc, nickel and copper could arise by the end of the century. Any possible shortages of these and some other minerals, such as mercury, phosphorus, tin or tungsten, are likely to be overcome by improvement of extraction technology, new discoveries and recycling. But the Report further states that, given the long lead time for mineral production, the world will have to become much more concerned with locating "the most economic sources of raw materials" and hence with the allocation of the exploration effort. The Commission is disturbed that 80-90% of exploration expenditures for minerals during recent years has been concentrated in a few developed or newly industrialized countries. This is attributed largely to the decline of private foreign investment for exploration in LDCs, due to the perceived instability of concession agreements and the widespread assertion of sovereignty by developing countries over their mineral resources. The Commission concludes, therefore, that exploration funds have been misallocated, with potentially harmful consequences in the long term for worldwide mineral supply and prices and delayed development opportunities for many developing countries and especially the poorest countries. Therefore, it proposes increased financing for mineral exploration through a new multilateral facility with global responsibility for investment in mineral development.

4. This paper examines briefly whether the premises and conclusions of the Brandt Commission are valid regarding insufficient financing of mineral exploration and development in the LDC's, especially for the poorest countries. More specifically, it briefly addresses the following basic questions:

(i) Are additional exploration funds needed, and if so, in what order of magnitude, to survey the mineral prospects of LDCs, especially those of the poorest countries, with a view to locating economic deposits?

(ii) Are available development funds sufficient for the construction of mining and mineral processing projects in LDCs to ensure the implementation of viable projects and an adequate supply of minerals on an economic basis?

(iii) Is a new institution required to meet the additional need of financing, if any? If not, what more can the existing institutions do?

B. THE NEED FOR ADDITIONAL EXPLORATION FINANCING IN DEVELOPING COUNTRIES

5. The Brandt Commission Report uses the term "exploration" in the widest sense, including all activities necessary prior to a decision to implement a proposed mining project. These activities encompass three main stages as follows: Stage I exploration involves geological surveying and mapping to obtain basic data regarding the mineral potential of a country. Stage II involves prospecting and preliminary investigation of specific mineral occurrences, and Stage III involves detailed feasibility and engineering studies of promising deposits.

6. The Brandt Report correctly points up a lack of geological information in LDCs, especially for the poorest developing countries. A survey of 37 Low Income Countries (LICs) 1/, based on internal documents and two special studies of the mineral potential of LICs undertaken by Bundesanstalt fuer Geowissenschaften und Rohstoffe (BGR), FR Germany and Bureau de Recherches Geologiques et Minieres (BRGM), France, indicates that very little geological surveying and mapping has been undertaken in 22 of these countries (See Annex I). For the remaining 15 countries, a better geological data base exists, but further work is required to guide future exploration for deeper and more remote mineral deposits.

7. Despite the lack of systematic geological surveying and mapping in many LICs, localized prospecting for specific minerals has taken place in all these countries. The results of this prospecting work are shown in Annex II which indicates that a number of LICs have medium to good potential for the existence of various mineral deposits. However, these findings are tentative since the data base is very small for many of the countries concerned. It is expected that further work will provide more definite information.

8. The information in Annex II relates only to geological conditions in each country and does not reflect the impact of various economic and locational factors on the mineral development prospects of individual countries. These factors include the availability of human and physical infrastructure (comprising as much as 60-80% of the total cost of LDC mining projects), transportation linkages to major minerals markets and the presence of existing mining activities. An indicative ranking of the prospects for mineral development in Low Income Countries is provided in the following table, taking into account both geological and economic factors. Based on present knowledge, it is estimated that about one quarter of the Low Income Countries have good or very good prospects for future mineral development. However, as more exploration takes place and better information is obtained, it is possible that the ranking of some countries may change.

1/ Countries with a per capita income in 1977 of US$300 or less (in 1977 prices) according to Table 1, World Development Report, 1979, World Bank, Washington, D. C. 1979.

PROSPECTS FOR MINERAL DEVELOPMENT IN LOW INCOME COUNTRIES

	Very Good	Good	Average	Poor	
	India	Angola	Benin	Afghanistan	
	Guinea	Indonesia	Burma	Bangladesh	
	Zaire	Madagascar	Burundi	Bhutan	
		Mozambique	Central African Rep.	Cambodia	
		Sierra Leone	Haiti	Chad	
		Uganda	Kenya	Ethiopia	
			Malawi	Laos	
			Mali	Lesotho	
			Niger	Mauritania	
			Pakistan	Nepal	
			Rwanda	Somalia	
			Sri Lanka	Sudan	
			Tanzania		
			Togo		
			Upper Volta		
			Viet Nam		
Total	3	6	16	12	37
%	8	16	43	33	100

Source: IBRD staff estimates, BGR, BRGM.

9. The finding of the surveys by BGR and BRGM, that there has been a lack of systematic basic exploration in the low income countries, is considered to be broadly representative of most developing countries, although the situation is probably not so severe in middle income LDCs. Thus, if the chances for mineral development of the LDCs in general and LICs in particular are to be more fully assessed, further work must be undertaken with regard to developing basic geological data through surveying and mapping. This stage of exploration costs from US$1-2 million per year in small countries to US$10-20 million per year in larger LDCs for a varying number of years. It establishes the geological infrastructure for a specific country and provides the basis for country-wide exploration strategies and investment decisions, including those of foreign parties, which otherwise would be limited to individual regions within a country. This work has no direct financial payoff and is usually undertaken only by national geological services, or with UNDP or bilateral assistance. In order to accelerate this work, especially in the poorest countries, additional financing is required for geological mapping and surveying, concentrating first on the areas with the greatest likelihood of mineral occurrences. In particular, IFIs need to make the same types of exploration financing available for minerals, on both commercial and concessionary terms, that is presently available for coal, oil and gas exploration.

10. Assistance is also required for prospecting and preliminary exploratory drilling. These are high risk activities costing from US$1-10 million per project or more, for which capital is available primarily from transnational companies or bilateral sources of funds. Financing for such prefeasibility work has generally not been available from IFIs except the UNDP and the UN Revolving Fund. For countries which want to undertake this work themselves without the ties resulting from the use of private capital or bilateral financing, increased access to public funds should be made available by IFIs, including the UN Revolving Fund. The latter is discussed in more detail in paras 17 and 18 below.

11. In addition, there is likely to be a growing need for financing of feasibility/engineering work to enable LDC governments and LDC mining companies to assess the feasibility and optimal scope of mining ventures prior to negotiating a concession agreement with transnational companies. This final exploration stage requires the largest amount of funds (US$5-30 million per project) and traditionally has been financed only by prospective private or Government sponsors. IFIs and bilateral financing institutions should be prepared to increase their assistance to LDCs wishing to undertake feasibility studies for promising projects.

12. Data on past and present exploration for minerals, worldwide and in developing countries, are difficult to obtain and have not been compiled systematically. Recent UN studies 1/ indicate that worldwide exploration expenditures for minerals in the late seventies had reached about US$950-1,250 2/ million annually in 1980 terms, of which about US$250-300 million per year were spent in developing countries. Based on an assessment of the growth in demand for minerals during the eighties and nineties and the market share achievable by LDCs, these studies suggest that future exploration requirements for minerals in developing countries are expected to be in the range of US$350-450 million per year in (1980 terms). While these estimates of exploration financing needs in LDCs are necessarily rough, this order of magnitude appears correct. They indicate that total LDC investment in exploration will have to increase significantly, and that the additional funds required from private and public sources are likely to be in the range of US$100-150 million per year (in 1980 terms). Although no firm breakdown is available, it is expected that most of these additional funds will be needed by the poorest countries. Subsequent paragraphs examine the prospects for these funds becoming available.

1/ UN/ESA/NRET/AC12/1/March 1978, Exploration for Natural Resources in Developing Countries: Financial Requirements and Institutional Mechanisms.

UN-A/33/August 1978, Multilateral Development Assistance for the Exploration of Natural Resources -- Report of the Intergovernmental Group of Experts on Mineral and Energy Exploration in Developing Countries.

UN-E/C.7196/March 1979, Mineral Resources: Trends and Salient Issues.

2/ Consistent with the text, all exploration expenditure estimates exclude fuel minerals such as coal, etc.

13. The Brandt Report points out the declining investments in mineral exploration -- in relative and absolute terms -- by transnationals in LDCs 1/ during the seventies. However, a review of exploration budgets of major transnationals during this period also shows that:

(a) exploration budgets were cut back in general, not only for expenditures in developing countries, in response to low metal prices, declining profits and -- for many mining companies -- ample proven reserves sufficient to meet requirements for foreseeable expansions during the next 5-10 years.

(b) LDC exploration expenditures by transnationals were increasingly being allocated to the exploration of uranium and coal rather than non-fuel resources as a result of the increased attractiveness of fuel minerals following the oil price increases of the early 1970s.

14. As noted earlier, the Brandt Commission stresses that the perceived political risks and the instability of concession agreements have contributed to the declining trend of mineral exploration in LDCs in the past two decades. However, other equally or more important factors associated with the depressed minerals markets in the mid-late 1970s -- such as decreased cash generation available for exploration, expected lower growth rates for many non-fuel minerals, and the relatively higher profitability of mineral development in the developed countries -- have also reduced the flow of exploration expenditures to LDCs.

15. The Brandt Commission's conclusion that the present decline in exploration investments in LDCs will necessarily lead to a misallocation of resources and sub-optimal mining projects in the developed countries is difficult to sustain. First, mine production forecasts for nine major minerals 2/ (comprising over 80% of LDC mineral export value) indicate that the LDC share of world output which averages nearly 50% for these commodities is not expected to decline during the next decade. On the contrary, the LDCs are likely to increase their share by 5-10 percentage points from 1978-1990 for at least four of the minerals, including iron ore - from 43% to 52%, bauxite - from 60% to 68%, copper - from 51% to 61% and nickel - from 44% to 55%. 3/ Second, sound opportunities for mineral exploration and production

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1/ A recent survey indicated that exploration expenditure by European mining companies in the Third World had fallen from 57% of worldwide expenditures in 1961 to only 13.5% in 1973-75.

Commission of the European Communities, "Need for Community Action to Encourage European Investment in Developing Countries", January 1978.

2/ Iron ore, bauxite, copper, nickel, tin, gold, diamonds, lead and zinc.

3/ Price Prospects for Major Primary Commodities, Report 814/80, World Bank, 1980.

based on promising geological conditions do exist in developed countries. Because of infrastructure, skilled manpower and good knowledge of mineralization, mineral development in the developed countries is often more attractive in financial and economic terms than many new mining investments in the LDCs, especially during the present period of stagnating worldwide demand and poor metal market prospects. In the long run, however, many mineral deposits in developing countries which are not presently viable will become economic and will then be developed. When the market for minerals again supports greater exploration activity in the LDCs, the flow of funds from the transnationals and other sources may be expected to increase accordingly.

16. The transnationals are not the only, or even the major, source of financing for mineral exploration in LDCs today. As an order of magnitude, slightly less than half of the recent US$250-300 million (in 1980 terms) annual exploration expenditures in developing countries, or US$115-135 million, were provided by national mining companies and geological surveys in LDCs. Transnationals contributed less than one quarter (US$55-70 million) and IFIs, UN and bilateral assistance about one-third (US$80-95 million). 1/ The latter amount represented a relatively small share of total grant and concessionary loans available to LDCs for all purposes, reflecting their assessment of the more pressing needs, faster payback and higher economic returns of other sectors which are eligible for the same development funds as the mineral sector.

17. Many of the issues dealt with by the Brandt Commission had been examined in 1978 in a report prepared by an expert commission called by the United Nations. 2/ It reviewed the adequacy of mineral and energy exploration worldwide and in the LDCs and the need for new financing mechanisms. The report concluded that no new exploration financing mechanisms are required for LDCs, but that existing mechanisms may need some expansion or modifications. Directly concerning LDC mineral exploration, the UN Commission recommended: (i) to expand the use of soft credits from existing institutions for basic geological and geoscientific data collection, and (ii) to modify the operational procedures and consider increasing the capital base of the UN Revolving Fund to increase exploration activity.

18. The Brandt Commission argues, specifically, that the payments required by the UN Revolving Fund from a successful project are too high, discouraging the use of the Fund by the poorest countries. Nevertheless, a review of projects presented to the Fund and of countries that have accepted or rejected the operating principles of the Fund indicates that the repayment requirement is only one of a number of problems which include, *inter alia*, an

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1/ Annex III reviews the size and nature of exploration assistance from major existing financing mechanisms.

2/ Multilateral Development Assistance for the Exploration of Natural Resources, UN Report A/33/256, October 16, 1978.

overly narrow scope of operations, cumbersome administrative and operating procedures, and, recently, inadequate funding relative to its needs. The Fund should develop into a more widely used alternate source of financing for LDC mineral exploration especially for those LDCs which do not wish the involvement of transnationals in the development of their mineral resources or wish to enter into negotiations only after a deposit has been delineated and its economic value estimated by an independent party. As called for at the time the Fund was established, the UN Secretariat has set up a Group of Experts to meet in October 1980 to review the first five years of the Revolving Fund's operations, its modus operandi, and also the future financing requirements for consideration by the UN General Assembly in 1981. It is most likely that the present operating capital of the UN Revolving Fund of about US$32 million will have to be increased in order for the Fund to play a more important role in LDC mineral exploration.

19. In summary, there is a need, in LDCs in general and the poorest countries in particular, for increased financing for geological surveying and mapping, prospecting and prefeasibility studies, and detailed drilling and feasibility/ engineering work for promising mineral ventures. These areas require additional funding of US$100-150 million (in 1980 terms) annually, which is relatively modest in relation to annual LDC mineral investments and annual aid flows to developing countries. It is expected that these funds can be made available by the expanded activities of existing financial sources. This will include expanding the operations of the UN Revolving Fund and the adoption by IFIs, commercial and other lenders of more flexible lending practices for minerals in much the same manner as they have already done for oil, gas and coal exploration.

C. THE ADEQUACY OF FINANCING FOR MINERALS PRODUCTION FACILITIES 1/

20. While the Brandt Commission gives primary importance to exploration and recognizes the constraints of existing mineral market conditions, it notes a decrease in investment in mineral production in the LDCs during the past decade and recommends additional finance to support mineral development.

21. The Commission Report specifically mentions the lack of financing for equity contributions by host country governments towards joint ventures and implies that viable projects in the LDCs are not being developed for lack of financing. However, in recent years the international financial community has reaffirmed its policies to expand programs of financing for mineral mining ventures, including processing plants. 2/ Furthermore, the

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1/ Referred to as mineral development financing by the Brandt Commission.

2/ ADB, the Role of Promoting Mineral Development in Developing Member Countries, February 1980.

IDB, Proposed Operational Policy for the Mining Sector, Report GP-69-2, 1978.

Commission of the European Communities, Need for Community Action to Encourage European Investment in Developing Countries and Guidelines for such Action. Report COM (78) 23, 1978.

IBRD, Minerals and Energy in the Developing Countries (Report No. R77-12/1977).

experience of the past three to four years indicates that the major constraint in developing such projects is not a lack of financing, either on commercial or concessionary terms, but rather the lack of viable projects with adequate financial and economic rates of return, in turn a reflection primarily of the slow growth of worldwide mineral demand and stagnating prices, in real terms, for all but a few important minerals. As a result, the international institutions, including the Bank, have implemented only a small part of their programs for financing minerals projects for the 1977-81 period. 1/ When the mineral market revives, as is expected during the eighties, there is no reason to believe that additional financing will not be forthcoming.

22. The Brandt Report implies that mineral development is one of the important growth stimuli for the LDCs. However, mineral projects seldom provide more than a 12-15% rate of return and often less, which is lower than many projects in other sectors competing for scarce developmental financing resources. Most mineral projects, which are primarily export oriented, require large amounts of financing (between US$50-2,500 million), are capital intensive, and are demanding in terms of infrastructure and skilled and semi-skilled human resources. They are also risky, whether as straight mining projects, integrated mining and processing projects, or as self-contained processing plants. A recent UNIDO study 2/ underlines the potential risks associated with heavy investments in processing facilities and points out that such projects often tie up scarce capital resources while providing marginal increases of value added and economic returns to a developing country. In spite of these factors and the overall decline in investment in mineral production in recent years, the share of mineral processing in LDCs as a percentage share of world mineral processing is expected to increase significantly between 1977 and 1983. For example, in aluminum smelting - from 13.1% to 21.0%; in copper smelting - from 39.1% to 43.8%; in nickel smelting/refining - from 27.3% to 40.6%; and in tin smelting - from 72.2% to 76.0%. 3/

23. Equity funds for host governments wishing to take up a substantial equity participation in a mining company--either because of a lack of foreign investment or a policy decision for direct participation--are available only on a limited basis. In some cases, it may be possible to design concession agreements so as to enable the government to obtain greater control of the mining venture without committing its own scarce funds to a high risk equity investment. Where this is not possible, funds may be obtained from the country budget or commercial or other borrowing. However, on an exceptional basis and as a catalyst to foreign private investment, IFIs should review the

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1/ In 1977 the Board approved a non-fuel minerals program of about US$700-800 million for FY77-81. By the time of the first progress report in early 1979, it had become clear that at best six loans totalling US$300 million will be submitted to the Executive Directors during this period.

2/ UNIDO - Industry 2000 New Perspectives, September 1979.

3/ UN-EC, 7/96, Mineral Resources: Trends and Salient Issues, March 1979.

possibility of financing a portion of the LDC equity participation required to implement high priority mineral projects for countries which have little or no access to commercial borrowing, generally the poorest countries.

24. Although there have been difficulties with concession agreements negotiated 10-20 years ago, more recent experience indicates that by recognizing the needs of both the host country and the foreign partner, agreements can be drawn up which are stable and mutually satisfactory. The participation of third parties, such as the Bank and other multilateral financing institutions, in concession agreements can also help to ensure that agreements are stable and fair and thus increase the capital flow to the LDCs. Any equity financing by IFIs should not merely be an alternate to financing by international mining companies but should normally also serve as a catalyst for additional private venture capital.

D. CONCLUSIONS

25. This paper supports the Brandt Commission conclusion that mineral exploration funding at present does not fully meet all needs. But the shortfall is relatively modest and consists of a requirement for additional exploration financing from private and public sources amounting to only US$100-150 million per year (in 1980 terms). This is needed for:

(a) additional financing of US$20-50 million on concessionary and commercial terms from IFIs and bilateral sources for geological surveying and mapping of the mineral potential of LDCs, in general, and the poorest developing countries, in particular;

(b) additional funding of US$40-60 million from IFIs and bilateral sources for prefeasibility studies and feasibility/engineering work for promising mineral ventures. As in the case of oil, gas and coal, such work should be financed on concessionary or commercial loan terms with the guarantee of only the host government, if no private sponsors can be attracted or if such participation is not desired by the host government. Further, the UN Revolving Fund should be restructured to finance a broader range of activities from an increased capital base; and

(c) in addition, exploration financing of some US$40 million per year would be required by LDCs from other sources.

26. The IFIs, including the Bank, can play a useful catalytic role by their "presence" in the negotiation of concession arrangements and participation in exploration finance, with or without the guarantee of the private sponsor. Such involvement by IFIs should stimulate foreign investors to undertake promising exploration ventures in the LDCs considered as politically risky; however, a significant upturn of exploration investments by transnationals in the LDCs can be expected only after the longer-term demand and price outlook for minerals has improved substantially, profits from mining ventures increase, and the implementation of identified projects at present

ready for execution has made significant progress. The catalytic role which IFIs can play cannot alone reverse the present trend.

27. The development of mineral production projects in developing countries has been held back in recent years not by shortage of financing but rather by a lack of viable projects due to depressed minerals prices, low demand and existing surplus production capacity. There is little evidence to suggest that existing bilateral and multilateral financing mechanisms, together with available private capital, are not sufficient to meet the demand for financing of mineral production during the present decade. However, for countries which have difficulty in obtaining equity funds--generally the poorest countries--IFIs, including the Bank, should be prepared to consider, on a case-by-case basis, the financing of a country's equity participation in a mineral venture. The need for additional financing for LDC mineral production should be reviewed in about five years time.

28. In summary, adequate financing is available for mineral production projects that are economically justified in LDCs. Some additional IFI and bilateral aid funds are likely to be needed to stimulate mineral exploration in LDCs, but these are relatively small, i.e., in the order of US$60-110 million per year out of a total increase of US$100-150 million per year (in 1980 terms), and are primarily required for a large number of relatively small exploration activities. Under these circumstances, a new facility for financing exploration and/or production of minerals is not considered necessary, now or in the foreseeable future. The limited requirements for locating and developing the most economic mineral deposits in the LDCs, can be met more effectively by the existing financing institutions.

Robert S. McNamara

BRANDT COMMISSION NON-FUEL MINERALS RECOMMENDATION

AVAILABILITY OF GEOLOGICAL INFORMATION IN LICs

	Basic Geological Data	Base Metals (Cu, Pb, Zn)	Ferrous Metals (Fe, Co, Cr, Mn, Ni, V, W)	Precious Metals and Stones (Au, Ag, Pt, Rubies, Diamonds, Sapphires)	Other Metals and Minerals (Sn, Phosphate, Industrial Minerals)	Bauxite
GOOD 1		Zaire	Guinea Togo	Zaire	Madagascar Togo	Guinea Sierra Leone
MEDIUM 2 — Upper Range	Lesotho Madagascar	Niger Uganda	Angola Benin India Madagascar Mauritania Niger Sierra Leone Uganda Upper Volta	Central African Republic Lesotho Niger Sierra Leone Tanzania	Mali Mozambique Rwanda Upper Volta	Madagascar Malawi Mali
MEDIUM 2 — Medium Range	Kenya Malawi Mozambique Niger Rwanda Sri Lanka Upper Volta	Haiti Madagascar Togo Upper Volta	Burundi Indonesia Somalia Zaire	Benin Guinea Madagascar Mali Rwanda Sri Lanka Upper Volta	Afghanistan Angola Benin India Kenya Sierra Leone Somalia Sri Lanka Uganda	Haiti India Indonesia Mozambique Pakistan Uganda
MEDIUM 2 — Lower Range	Cambodia Haiti India Mauritania Togo Uganda	Afghanistan Burma India Laos Mauritania Mozambique Somalia	Mali Mozambique Pakistan Sudan	Haiti Somalia Togo Uganda	Afghanistan Burma Burundi Laos Malawi Mauritania Niger Pakistan Tanzania Zaire	Angola
POOR 3 — Upper Range	Afghanistan Benin Bhutan Burma Burundi Chad Guinea Indonesia Laos Mali Nepal Pakistan Sierra Leone Somalia Tanzania Viet Nam Zaire	Cambodia Indonesia Kenya Mali Nepal Pakistan Sierra Leone Sri Lanka Sudan Tanzania Viet Nam	Afghanistan Burma Cambodia Central African Republic Chad Haiti Laos Nepal Rwanda Sri Lanka Tanzania Viet Nam	Afghanistan Angola Burma Cambodia India Indonesia Kenya Laos Mozambique Pakistan Sudan	Cambodia Central African Republic Chad Haiti Sudan Viet Nam	Cambodia Tanzania Togo Upper Volta Viet Nam Zaire
POOR 3 — Medium/Lower Range	Angola Bangladesh Central African Republic Ethiopia Sudan	Angola Benin Bhutan Burundi Central African Republic Chad Ethiopia Guinea Lesotho Malawi Rwanda	Bhutan Ethiopia Kenya Lesotho Malawi	Bhutan Burundi Chad Ethiopia Malawi Mauritania Nepal Viet Nam	Bangladesh Bhutan Ethiopia Guinea Lesotho Nepal	Afghanistan Benin Bhutan Burma Burundi Central African Republic Kenya Laos Nepal Rwanda Sri Lanka
LACK OF APPROPRIATE GEOLOGICAL FOUNDATIONS		Bangladesh	Bangladesh	Bangladesh		Bangladesh Chad Ethiopia Lesotho Mauritania Niger Somalia Sudan

Industrial Projects Department
August 1980

Source: Bank staff, BGR, BRGM

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ANNEX II

BRANDT COMMISSION NON-FUEL MINERALS RECOMMENDATION

MINERAL POTENTIAL IN LICs

	Base Metals (Cu, Pb, Zn)	Ferrous Metals (Fe, Co, Cr, Mn, Ni, V, W)	Precious Metals and Stones (Au, Ag, Pt, Rubies, Diamonds, Sapphires)	Other Metals and Minerals (Sn, Phosphate, Industrial Minerals)	Bauxite
GOOD 1	Zaire	Guinea India Mauritania	Angola Mali Zaire	Sierra Leone Togo Zaire	Guinea
MEDIUM 2 Upper Range	India	Indonesia		India Uganda	
MEDIUM 2 Medium Range	Angola Indonesia Uganda	Angola Sierra Leone Upper Volta	Central African Republic Guinea India Lesotho Rwanda Sierra Leone Uganda Upper Volta	Burundi Central African Republic Indonesia Mozambique Rwanda Sri Lanka	India Mali Sierra Leone
MEDIUM 2 Lower Range	Burma Haiti	Afghanistan Benin Burundi Madagascar Mali Niger		Angola Burma Kenya Laos Pakistan Viet Nam	Indonesia
POOR 3 Upper Range	Ethiopia Kenya Mauritania Pakistan Somalia Sudan Tanzania Viet Nam	Ethiopia Laos Haiti Mozambique Pakistan Somalia Sudan Tanzania Togo	Burundi Haiti Kenya Madagascar Mozambique Sudan Tanzania	Afghanistan Bangladesh Madagascar Malawi Mauritania Niger Sudan Tanzania	Cambodia Haiti Madagascar Malawi Mozambique Viet Nam
POOR 3 Medium/Lower Range	Afghanistan Bangladesh Benin Bhutan Burundi Cambodia Central African Republic Chad Guinea Laos Lesotho Madagascar Malawi Mali Mozambique Nepal Niger Rwanda Sierra Leone Sri Lanka Togo Upper Volta	Bangladesh Bhutan Burma Cambodia Central African Republic Chad Kenya Lesotho Malawi Nepal Rwanda Sri Lanka Uganda Viet Nam Zaire	Afghanistan Bangladesh Benin Bhutan Burma Cambodia Chad Ethiopia Indonesia Laos Malawi Mauritania Nepal Niger Pakistan Somalia Sri Lanka Togo Viet Nam	Benin Bhutan Cambodia Chad Ethiopia Guinea Haiti Lesotho Mali Nepal Somalia Upper Volta	Afghanistan Angola Bangladesh Benin Bhutan Burma Burundi Central African Republic Chad Ethiopia Kenya Laos Lesotho Mauritania Nepal Niger Pakistan Rwanda Somalia Sri Lanka Sudan Tanzania Togo Uganda Upper Volta Zaire

Industrial Projects Department
August 1980

Source: Bank staff, BGR, BRGM

BRANDT COMMISSION NON-FUEL MINERALS RECOMMENDATION

MAJOR EXISTING FINANCING MECHANISMS FOR NON-FUEL MINERALS EXPLORATION

Following is a short description of the scope and characteristics of the major mechanisms for financing non-fuel mineral exploration.

A. Mining Companies

Transnational Companies

During the past five years, exploration investment by multinational companies in non-fuel minerals has been concentrated in a few developing countries, i.e., primarily Brazil, Chile, Indonesia, Philippines and Papua New Guinea. Foreign exploration investment in these countries since 1975 has been estimated at close to US$200 million. These countries have certain common characteristics which are considered attractive to transnational companies. These are, in particular, a Government policy welcoming and supporting foreign investment, relative availability of infrastructure for exploration and project development and an established mining industry with large proven reserves, thus implying widespread mineralization.

National Mining Companies

In a number of developing countries, existing private and state mining enterprises have continuously undertaken exploration investments. However, with a few exceptions, such as CVRD in Brazil, the cash flow available in these firms for exploration has been rather limited either because no systematic exploration programs were designed and no reserve funds for exploration were constituted during times of high metal prices or because any surplus is being claimed by the shareholders for other priority uses. A comparison of the average annual exploration expenditures of 10 large North American base metal companies with 10 LDC mining companies of similar composition, size and product range indicates that the North American mining firms tended to spend during the seventies between US$5-30 million per year in 1976 terms on exploration, with average expenditures of US$17 million per year, compared to exploration budgets averaging only about US$6 million per year by the LDC mining companies.

B. National Geological Survey and Mining Departments

The majority of LDCs have established geological surveys financed by budget allocations and bilateral assistance. The annual budgets of such institutions financed from internal resources vary widely from an average of US$15-30 million in Brazil to US$100,000-200,000 in smaller African and Asian countries.

C. International Financial Institutions (IFIs)

World Bank Group

The Report, Minerals and Energy in the Developing Countries, (R 77-121), considered by the Executive Directors in July 1977, reviewed, *inter alia*, the Bank's involvement in the financing of non-fuel mineral exploration, considering the risk associated with exploration, in particular the early stages. It was decided at that time that the Bank should be prepared to provide assistance during the exploration stage of mineral resource development by: (i) participating in the negotiations of concession agreements where appropriate; and (ii) making a loan for exploration against the guarantee of the foreign sponsors to repay the loan should exploration not lead to a commercial venture. Loans with such guarantees have been made in 1971 for the infrastructure engineering of the Shashe copper/nickel project in Botswana (Loan No. 776-BT), but no additional financing requests have been received since 1977. Further, the Bank has supported exploration in non-fuel minerals in selected cases for: (i) the feasibility/engineering studies prior to the final investment decision through engineering loans such as the Jordan Potash Engineering Credit (No. S-19) of US$1.0 million in 1975; and (ii) the provision of financing totalling US$4.5 million for the Bolivian National Exploration Fund (Loan No. 940-BO) in 1979, or for a small component of the Mexican Small and Medium-Scale Mining Development project (Loan No. 1820-ME) in 1980.

IFC, in their 1978 Five-Year Program, adopted an expanded strategy for non-fuel mineral investment, but does not finance exploration. Since then, seven projects have been approved for an IFC investment of US$83.6 million, including US$6.4 million equity, plus an additional US$90.0 million in loans sold to other participants.

Inter-American Development Bank

The IDB provides exploration financing from the general survey or identification stage to the final evaluation of mineral resources or investment decision. Since 1974, however, only three loans were made totalling US$7.5 million and ranging from general mapping and survey of the central-west region of Brazil; prospecting, metallurgical testing and feasibility studies of an iron ore project in Argentina; to prospecting and feasibility work for a phosphate rock project in Colombia.

Asian Development Bank

The ADB, following the adoption of a new strategy for promoting potential mineral development in developing countries in 1978, will provide financing for Stage I exploration (surveying and mapping), and Stage III work (feasibility/engineering studies). However, exploratory and development prospecting for non-fuel minerals is specifically excluded according to the latest ADB policy paper. 1/ *Inter alia*, a Minerals Resources Survey was

1/ Role of the Bank in Promoting Mineral Development in Developing Member Countries, Asian Development Bank, February 1978.

financed by the ADB in Korea in 1977 (US$0.2 million), an aeromagnetic survey in Thailand with a loan of US$10 million in 1979, and a US$6.2 million loan to Bangladesh for the accelerated exploration for mineral resources and modernization of the Geological Survey.

D. Bilateral Funds

Bilateral assistance for exploration is an important component of the total funds available to developing countries. It has been available from many countries, including Canada, Japan, France, the Federal Republic of Germany, Sweden, the US, the USSR, Romania, Poland and the People's Republic of China. Such assistance (available in grant or highly subsidized loans) has been primarily concentrated on geological surveys, mapping, prospecting up to the pre-feasibility stage and institution building assistance to the Geological Survey and Mining Departments of LDCs. The assistance these countries provided is substantial. For example, the Federal Republic of Germany and France are presently providing about US$10-15 million per year in various types of exploration-related technical assistance. In addition to this general exploration assistance, bilateral development financing institutions such as CIDA, the Overseas Mineral Resources Development Corporation of Japan, KfW, etc., are generally prepared to finance feasibility studies and engineering work on concessionary or commercial loan terms for specific, well-defined projects.

E. Multilateral Organizations

United Nations Development Program

Since its establishment in 1958, the UNDP and other UN agencies have maintained a continuous program of technical assistance and aid for mineral exploration. In total, by the end of 1979, the UNDP and related agencies had expended about US$170 million on close to 200 mineral projects in more than 75 countries with governments' contributions amounting to an additional US$130 million. Out of a total of about US$3 billion envisaged for the UNDP 1977-81 program, on the average 6% of available funds or about US$15 million per year has been allocated by the developing countries to the mineral sector. As these monies are grant funds, use of funds for the mineral sector competes with other sectorial demands, i.e., only few governments (such as Turkey) give top priority to using UNDP funds for mineral exploration. UNDP funds are not available for all phases of exploration investments. Their use has been concentrated on financing of general mineral surveys and mapping, technical assistance to strengthen the institutional aspects of a country's mineral sector and a few specific exploration/prospecting projects up to the pre-feasibility stage. The UNDP specifically does not get involved in the costly third stage of exploration, the feasibility/engineering studies phase.

UN Revolving Fund for Natural Resources Exploration

The UN Revolving Fund was created in 1973 and has operated since 1975. The Fund is based on the principle of replenishment by those projects which result in commercial production. Initially, its operation has been limited to solid minerals. Of the operating capital of the Fund totalling about US$32.0 million, only two projects have been completed, and thirteen projects are approved and/or operational, representing a commitment of funds totalling US$27.5 million as of July 1980. In addition, other projects for which firm requests have recently been received by the Fund represent a potential commitment in the order of US$30.0 million, for which funding is not presently available. It must be noted that the Fund's operations are limited. The Fund restricts its operation to the prospecting of viable targets or areas of favorable geology, providing services, not funds, up to the prefeasibility stage, undertaking the type of work mining companies might be likely to consider. Two of the objectives of the exploration undertaken by the UN Revolving Fund are: (i) placing the host countries in a stronger position to negotiate favorable concession agreements for further preinvestment work and the exploitation of the deposits; and (ii) creating new investment opportunities for national or private mining companies in developing countries. However, the response to the UN Revolving Fund has fallen behind expectations and administrative delays have occurred in the ratification of the individual exploration agreements between the UN Revolving Fund and developing countries' governments.

Lome II

The Lome II convention between the EEC and the African, Caribbean and Pacific (ACP) countries includes special provisions for financing of all stages of mineral exploration. The European Investment Bank, which for several years has made loans for feasibility and engineering studies, has obtained additional funds, including subsidized loans, totalling units of account (UA) 685 million and risk capital totalling UA 280 million which are available, inter alia, for prospecting and feasibility studies of mineral resources. In addition, UA 2,928 million in grants and UA 504 million in subsidized loans for regional projects are being administered by the Fonds Europeen de Developpement during the 1980-85 period and can be used by ACP countries for development projects, including investments in all stages of exploration. As in the case of UNDP funds, the first programming attempts by EEC missions have, however, shown that the ACP countries tend to use only a very small portion - if any - for non-fuel mineral exploration.

Industrial Projects Department
August 1980

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R80-285

FROM: Vice President and Secretary

September 18, 1980

BRANDT COMMISSION RECOMMENDATION NO. 7 RELATED TO THE DEBT AND DEBT SERVICING PROBLEMS OF DEVELOPING COUNTRIES

As referred to in the President's memorandum of February 22, 1980 (SecM80-128), attached hereto is a memorandum dealing with the Brandt Commission Recommendation No. 7 related to the debt and debt servicing problems of developing countries.

Questions on this document may be referred to Mr. Hicks (X60138).

Distribution:

Executive Directors and Alternates
President
Senior Vice Presidents
President's Council
Vice Presidents, IFC
Directors and Department Heads, Bank and IFC

THE WORLD BANK
Washington, D.C. 20433
U.S.A.

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September 18, 1980

Office of the President

MEMORANDUM TO THE EXECUTIVE DIRECTORS

Subject: Brandt Commission Recommendation No.7 Related to the Debt and Debt Servicing Problems of Developing Countries 1/

Recommendation: "...the various international institutions begin immediately to study and articulate the range of likely debts and debt servicing problems as they are emerging, and the likelihood of existing private and public institutions being able to meet these needs." 2/

I. Introduction

Debt problems are often the result of a combination of circumstances in which poor debt management policies interact with both inadequate financial and economic policies, and adverse external conditions. In practice, it is almost impossible to identify a debt service problem as distinct from general problems of balance of payments management.

External capital flows offer the opportunity for countries to acquire the use of real resources for investment and other purposes, but these benefits must be judged against the risks associated with rising debt service burdens in the balance of payments. Capital inflows can be used to create productive capacity which in turn might generate a repayment capacity in terms of export earnings and import savings, or they might be used to offset temporary reductions in export earnings, or to allow time for structural adjustments to higher import costs. In all of these cases, there are risks that the conceived strategy may not work; export markets may be limited, commodity prices may not recover, or policy steps may not be taken to restrict imports. Countries more dependent on primary commodities with highly variable prices, with limited export potentials and with limited capacities to adjust to external shocks, are less well placed to acquire large external debt burdens, and do so with greater risk of eventually encountering difficulties.

This note explains the evolution of existing debt and debt service situation for the developing countries, both in the aggregate and at the country level. Recent changes in the terms, conditions and types of capital flows are also briefly reviewed, as well as debt service prospects for the future. A final section considers a possible international response to the emerging debt servicing problems of the developing world, including the role of the Bank.

1/ The reference is to the order of recommendations listed in SecM80-128, dated February 22, 1980.

2/ Willy Brandt, North-South: A Program for Survival, p. 239.

II. Current Situation and Prospects

Since 1973, oil importing developing countries have been faced with the prospect of larger current account deficits because of rising import costs and a more unstable external environment. Commodity prices have tended to exhibit wide fluctuations and, while manufactured exports have accelerated in volume terms, their growth has often been affected by the imposition of quantitative import restrictions in the developed countries.

Thus, in an era of increased uncertainty, most countries have been increasing the level of their external borrowings as a means of stabilizing their balance of payments situation without reducing the level of investment and growth. As a result, the debt outstanding of the developing countries grew at an annual rate of about 20% per year during the period 1973-1980, and reached an estimated level of $410 billion by the end of the period. While this appears to be large in comparison to the level of only $114 billion in 1973, much of the increase is due to inflation. In real terms, total debt grew during the period at about 6.8% per annum, compared to a growth rate of 5.3% for the GDP of the developing world, and 5.1% growth in the volume of exports. Thus, debt outstanding at the end of the decade was both absolutely and relatively higher than at the beginning of the decade. Total debt outstanding and disbursed for the oil importing countries will amount to 22% of their GNPs at the end of 1978, compared to 17% in 1973. For the capital deficit oil exporters, this ratio exceeds 29% (see Table 1).

Table 1: DEBT OUTSTANDING AS A PERCENT OF GNP

	1973	1974	1975	1976	1977	1978
Oil Exporters	19.8	17.0	19.6	23.9	26.8	29.4
Oil Importers	17.3	17.0	18.6	19.1	20.1	22.0
Low Income	17.6	17.0	18.2	20.1	19.9	19.4
Middle Income	17.3	16.9	18.8	18.9	20.2	22.8

Source: EPD (36 country sample).

Another indicator of debt service situation is the debt service ratio, or the ratio of debt service to total export earnings. 1/ Debt

1/ There is considerable question over the utility of this ratio, particularly in an era of rapid price inflation and greater access to private capital markets. It is used here largely to give an indication of the relative size of debt service in the balance of payments of the developing world.

service ratios for the low income oil importing income countries, which rely primarily on concessionary aid, have remained stable at about 10-13%. In recent years, debt service ratios for these countries have actually fallen, largely as a result of inflation reducing the real burden of nominal debt repayments. For the capital-deficit oil exporters, on the other hand, the debt service ratio has increased from about 9% in 1974 to an estimated 21% in 1978, and those for the middle income oil importers from 18% to 25%. Large increases for these countries reflects their greater access to private capital markets in recent years (see Table 2).

Table 2: DEBT SERVICE RATIOS
(percent)

	1974	1975	1976	1977	1978
Oil Exporters	9.3	11.4	12.9	16.0	21.4
Oil Importers	19.6	22.5	20.8	21.2	22.3
Low Income	13.5	13.1	11.6	10.1	10.3
Middle Income	18.4	22.1	20.2	20.3	24.8

Source: EPD (36 country sample). The debt service ratio includes both private and public debt.

It is impossible to say, however, whether debt service is more of a "problem" now then it was in 1974. These aggregate numbers indicate a growth in the relative size of debt service when compared to GNP and exports. Whether the present or future debt and debt service will become in some sense "unmanageable" will depend on a host of other factors affecting the balance of payments, and needs to be considered on a country-by-country basis. The debt service ratios in Table 2 are somewhat misleading, moreover, since they combine countries with large exports and little or no debt with major debtor countries. In addition, the debt service ratios exclude short-term debt which in many countries has risen sharply in recent years and has become a major cause of balance of payments problems.

As mentioned above, changes in these aggregate ratios have arisen not only because developing countries are borrowing larger amounts of capital but also because of an expanded use of private capital borrowings by the oil-exporting and middle income oil-importing countries. This has taken the form of borrowings from banks and bank syndicates, as well as greater use of the international bond market. For the developing countries, the advantage of such borrowings lies in the fact that they are not tied to the purchase of specific goods as supplier's credits are, and thus can be used for refinancing of debt payments. Furthermore, they are quick disbursing loans that are not encumbered by the conditions usually associated with bilateral or multilateral official lending.

Unlike the fixed interest official or private export credits, however, these international bank loans generally have interest rates which are pegged to the LIBOR (London Interbank Offered Rate), by the use of a spread of .75 - 2.5 percentage points above the LIBOR. Hence, the interest cost of these obligations varies with market conditions, and future debt service obligations are more difficult to anticipate.

As a result of the increased reliance on private sources of credit, the average terms of new loans to LDCs have considerably hardened. This is attributable to two effects: a combination of the composition of borrowings and changes in average terms within each category. As shown in Appendix Table A-4, the average interest rate on borrowings by oil importing developing countries rose from 5.1% to 7.8% between 1970 and 1978, and average length of maturities fell from 21 to 16 years. As a result, while the external debt generally has not grown out of proportion to GNP, the shortening of maturities and higher interest rates have increased the debt service burden. Thus, the debt service ratios have risen faster than the ratio of debt outstanding to GNP. However, when looking at debt service obligations, it is necessary to consider the erosion of the real value of past debt because of inflation.

Country Situations

Dealing with highly aggregative numbers is somewhat misleading since debt service problems are essentially country problems. Trends in debt service ratios for selected oil importing countries (Table A-3) indicate that over 75% have had rising debt service ratios over the 1974-79 period. In some cases, the increase is quite sharp. For instance, Turkey's debt service ratio rose from 6.7 to 29.9, Ivory Coast from 14.3 to 23.3, Morocco from 5.9 to 24.8, and Brazil from 34.5 to 61.7. In some cases, the debt service ratios have not risen because the countries have benefitted from debt reschedulings.

The debt service ratio is admittedly a very rough indicator of debt service problems, since creditworthiness depends on repayment prospects rather than on the size of existing debt service or the debt service ratio. Some countries with high debt service ratios, such as Brazil, have managed to avoid a debt service "problem." On the other hand, countries with relatively low debt service ratios had to seek debt relief.

A review of recent case studies of countries having debt problems illustrates both the similarities and differences between various countries, and the interrelationships between debt and other problems. After 1973, many countries faced larger balance of payments deficits because of higher cost of oil and other imports. Because of favorable trends in export earnings, some countries were able to finance this deficit with private capital borrowings. Creditworthiness was imperiled in some cases by a sudden downturn in primary commodity prices (Philippines, Zaire) or a decline in export volumes (Peru, Sudan). In the case of Turkey, the crisis was accelerated by a decline in worker's remittances and little growth in manufactured exports, while in Sudan the problem was exacerbated by a decline in official aid.

At the same time, many governments used external borrowings to avoid a reduction in either their planned investment programs or in private or public consumption levels. In certain cases, foreign borrowings were not devoted to the kinds of activities that would create an eventual repayment capacity or reduce dependence on imports. Funds were used for investments with marginal returns lower than the cost of capital, or to finance military expenditures, or to finance projects with long gestation periods. In some cases, creditors have made loans without regard to appropriateness of the terms for the particular borrower and with insufficient concern about the manner in which the resources were used.

For many countries, the combination of weak domestic investment and expenditure policies, plus adverse external events, resulted in a balance of payments situation so severe as to necessitate a debt rescheduling (Sudan, Turkey, Zaire, Sierra Leone, Peru). Some countries which borrowed heavily in private markets, at the same time managed to undertake programs of structural reforms which helped reduce their balance of payments problems (Korea, Philippines). Those countries which have borrowed heavily but have not made adequate adjustments to higher energy prices face a difficult situation: they carry a relatively high debt service burden (Jamaica, Turkey).

Debt Service Prospects

Projections undertaken for the World Development Report indicate that the overall debt service ratios are likely to rise through 1985, and then decline. For the oil importing countries shown in Table 3, the overall debt service ratio is projected to rise from an average of about 21% in 1977 to an estimated 23% in 1980, and to 26% by 1985, largely as a result of increased borrowings from private capital markets. While the ratios for the low income countries are estimated to remain in the 10-12% range, those for the middle income countries are expected to rise to an average of 29% by 1985 (compared to about 20% in 1977).

Table 3: DEBT SERVICE RATIOS
(percent)

	1977	1980	1985	1990
Oil Importers	21.2	22.9	26.0	20.7
Low Income	10.1	9.1	11.3	11.5
Middle Income	20.3	25.7	28.6	22.1
Oil Exporters	16.0	15.4	13.5	12.9

Source: EPD (36 country sample).

It should be noted that these projections of debt service ratios are highly dependent on assumptions about trade prospects, import requirements and capital flows. For instance, the LDCs are assumed to grow at an average overall rate of 5.3% during the decade, while exports grow at 5.9%. The current account deficit is projected to decline from 3.9% of GNP (1980) to 2.1% in 1990 (high case). Export growth of the projected magnitude depends on an acceleration of growth rates in the industrialized countries, with declining or stable levels of tariff and nontarriff protective barriers, which may prove to be an optimistic expectation. For instance, if the export growth rate were to be one percentage point less than projected, the overall debt service ratio for the oil importers would increase from an expected 20.7% in 1990, to 27.9%. 1/ This in turn depends on developing countries having access to private capital to finance the larger deficit caused by the shortfall in export earnings.

The middle income countries, which have enjoyed reasonably good access to private capital markets in the recent past, may be faced with more limited possibilities in the future. There is growing concern among banks and bank regulators over the exposure of commercial banks in developing countries, dwindling capital/asset ratios, and the need for greater control and regulation. It is not clear, however, to what extent recent declines in bank lending to developing countries arise from higher interest rates and lower spreads, versus a reluctance by banks to extend their exposure. For these countries, the issue may not be one of debt service, but rather one of the inadequacy of future capital flows. Debt service problems in individual countries may arise if private creditors misjudge prospects and economic management capabilities, and thus become over-extended. These issues are explored in greater depth in the paper "Prospects for Capital Flows to Developing Countries" (R80-211), which was discussed by the Board on August 5, 1980.

The low income countries generally lack access to private capital markets. This prevents them from accumulating large amounts of debt on terms which could create difficulties. They are likely to be faced, however, with major adjustment problems caused by higher oil prices, slower OECD growth and inadequate levels of concessionary assistance. While debt service obligations are likely to remain an important element in the balance of payments, and although repayments are not likely to be the main cause of their foreign exchange constraint, further progress in rescheduling official debt or in retroactively adjusting terms would make an important contribution to increasing aid flows in the next few years when many countries will face exceptionally difficult balance of payments situations.

IV. The International Response to Debt Problems

Debt problems in developing countries have generated two broad types of responses by the international community; first, for the low income countries there has been a limited agreement on generalized debt relief on past ODA credits. Secondly, for countries with serious debt problems, there has been continued use of the Paris Club and other arrangements for debt relief. Because of the importance of these two responses, their characteristics are analyzed below.

1/ This assumes that the total debt service on new capital inflows equals 15% of the debt outstanding; and refers to the sample of 25 oil importing countries only (see Table 3).

Generalized Debt Relief

For a considerable period, developing countries have requested generalized debt relief as a means of effecting a rapid transfer of resources for their development. The developed countries, on the other hand, have argued that debt relief should be based on a "case-by-case" approach considering each country's needs. Some of the more advanced developing countries also opposed generalized relief because they feared that it would reduce access of the affected countries to private capital markets. After a considerable period of negotiations, agreement was reached at the UNCTAD Trade and Development Board in 1978 on a compromise whereby the members of DAC would grant to the least developed countries "retro-active terms adjustment" or equivalent measures (new aid), in order to ease the debt service burden of past ODA loans. Within this general framework, donors agreed to conclude bilateral agreements with recipient developing countries. This agreement recognized that the terms of present ODA loans were often more concessional than past loans, and some action was warranted to harmonize present practices with the terms of past debt. Indeed, many donor countries have recently moved from ODA loans to grants, particularly for the least developed countries.

The total amount of debt relief announced so far by ten DAC countries indicates the cancellation of about \$4.87 billion of outstanding ODA credits and the elimination of about \$.84 billion in future interest. The actual amount of debt relief must be negotiated between the countries involved, so that these figures are approximate. Donor participation in the UNCTAD program has varied, with substantial relief coming primarily from the United Kingdom and West Germany.

The beneficiary countries also vary widely. Since retroactive debt relief of this type was extended largely to the least developed countries (with some exceptions, see Table A-8), many low income countries received little, if any, benefit. The excluded countries tended to be those holding the bulk of the debt of the low income countries (e.g., India, Pakistan). For instance, the amount of total debt relief given so far -- less than \$5 billion dollars -- amounts to about 11% of the total external debt of the low income countries of approximately \$43 billion, of which \$29 billion is from concessionary bilateral sources. Some creditor countries, including some who endorsed the 1978 agreement, object to this kind of "back door" financing of developing assistance, and further debt relief authorizations may be no easier to obtain than appropriations for new concessional loans. Several countries have indicated, furthermore, that their generalized debt relief operations will not be additional to their total development assistance effort. On the other hand, this exercise has probably been successful in increasing the proportion of DAC assistance which is transferred in a quick disbursing form. Thus, in the next several years as the developing countries face increasingly acute balance of payments problems, debt relief can be a useful device for augmenting the rapidly disbursing portion of their capital recipts.

There is no doubt that the burden of debt is and will be a serious problem for all the low income countries. They must deal with this issue in addition to the major structural changes which they now face as a result of high energy prices, prevasive inflation and the slowdown of international trade. The international community should therefore seriously consider:

- a more complete and rapid implementation of the existing UNCTAD agreement;
- assuring that debt relief is additional to current aid levels; and
- extending this agreement to include all oil importing low income developing countries.

Multilateral Debt Renegotiations

The majority of debt relief operations in the recent past have been handled through informal creditor club arrangements, or, in a small number of cases, through the use of aid consortia/consultative groups. The creditor club arrangement began in 1956 when a group of creditor countries met in Paris under French chairmanship to consider the renegotiation of supplier credits extended to Argentina, and insured by the creditor governments. The Paris Club 1/ was, and remains, an informal organization with no legal structure or secretariat, organized principally to handle the rescheduling of insured supplier credits, but gradually extended to cover official loans and credits. The informality of the organization is viewed by its members as an advantage, since it permits *ad hoc* arrangements to be made in each case, and does not establish institutional recognition of a permanent need for debt relief. However, certain general principles have been developed for dealing with debt reschedulings within the group. These include:

- the country seeking debt relief must be in a situation where default is an imminent prospect in the absence of relief;
- all participating creditor countries agree to negotiate bilaterally the same or similar terms of repayment;
- the terms of debt relief are to be non-concessional, and the amounts rescheduled are to consolidate debt over a relatively short period (one to two years);
- debt relief is not normally to be extended for short-term trade credit;

1/ The term Paris Club is used here also to include creditor club arrangements which sometimes meet in other European capitals under non-French chairmanship.

- debtors agree to seek comparable or better concessions from non-participating governments and private creditors as a condition of official relief;

- debt relief is not directly associated with development assistance or longer-term development needs;

- debts once rescheduled are not to be rescheduled again.

The aim of these general principles is to insure equal treatment of all creditors, and to provide for an orderly repayment of debts on commercial terms while attempting to preserve the creditworthiness of the debtor. There have been, however, important exceptions to these guidelines. For Indonesia (1970) and Ghana (1974), debt relief was granted on concessionary terms, while reschedulings for Zaire (1979) included short-term trade credits. Paris Club agreements for Ghana (1970) and Zaire (1979) also included the rescheduling of debts already previously rescheduled. Thus, the rules are not fixed and each country is treated on a case-by-case basis. Much less stringent rules apply to those countries seeking debt relief through the aid consortia/consultative group mechanism (India, Pakistan, Turkey). Consolidation and repayment periods are often longer, and interest rates are often more concessionary.

In recent debt renegotiations the Paris Club creditors have required the debtor country to adopt a stabilization program supported by the IMF through an IMF standby agreement or extended agreements. Thus creditor countries have been able to benefit from the corrective policies associated with standby arrangements. Since 1961, both the staffs of the IMF and the Bank have been invited to attend the meetings as observers, and are increasingly asked to supply technical information and advice on the debt situation.

The developing countries have often complained about the ad hoc nature of the Paris Club arrangements, which they feel results in unequal treatment between different countries, ignores the long-term development needs of the debtor countries, and places the developing country at a disadvantage since the arrangements are dominated by the creditor countries. The developed countries have resisted more formal arrangements because they do not want debt relief to be considered a form of aid, nor do they want it to become a standard or usual practice. At the same time, the hard terms of relief granted, and its short consolidation and repayment period, often necessitate further reschedulings. A review of the history of multilateral debt renegotiations indicates that since 1956 there have been 44 reschedulings, involving 14 countries (see Table 4). The Paris Club has handled 29 reschedulings for 11 countries, excluding three countries where reschedulings have been handled in consortia/consultative groups.

the Paris Club arrangements are designed to resolve debt crises, their relatively short-term focus sometimes creates the basis for a repetition of the debt rescheduling exercise. This is often true when rescheduled interest and repayments are added to already severe future debt payments on non-rescheduled debts.

Table 4: MULTILATERAL DEBT RENEGOTIATIONS

Period	Number of Renegotiations	Number of Debtor Countries Involved
1956-1960	2	2
1961-1965	6	4
1966-1970	10	4
1971-1975	13	5
1976-1980 /a	13	6
Total	44	14 /b

/a Through July 1980.
/b Argentina, Brazil, Cambodia, Chile, Ghana, Indonesia, India, Pakistan, Peru, Sierra Leone, Sudan, Togo, Turkey, Zaire.
Note: See Table A-7 for details.

In many cases, provision is made for only short-term debt relief in order to give an incentive to the country to comply with the agreed program. These agreements often contain a "goodwill clause," which indicates the willingness of the Club to consider further reschedulings if the country adheres to the present agreement. It is not clear, however, how successful this "carrot and stick" approach has been in practice. Countries on the verge of an actual debt default have often been able to obtain a rearrangement of their debt from the Club members regardless of performance in previous debt renegotiations.

The previous discussion of country experience with Paris Club negotiations, and the discussion of the structure of the Club arrangements in general, suggest that some improvements in the existing situation would be desirable. Some possibilities, most of which have been discussed before, 1/ include:

1/ Similar measures have been recommended in the Bank's World Development Report 1979.

- consideration of debt problems in the broader framework of the more general problem of development, including the long-term balance of payments situation and the likely impact of debt reschedulings on it;

- search for longer-term and more permanent solutions for debt crises, as compared to the present series of "short-leash" operations which necessitate repeated reschedulings;

- use of concessionary terms for debt reschedulings where this would improve the prospects for an orderly and more permanent solution for the problem;

- greater use of more imaginative and more flexible arrangements that permit automatic adjustments to the rescheduling terms as economic conditions change (such as the use of "bisque clauses"). 1/

It is doubtful, however, whether the creditor countries will be willing to agree to a change in the present procedures and focus of the Paris Club. Proposals along the above lines have often been made previously but have not found any positive response.

The role of the Paris Club may change in the future, as the focus of debt problems shifts toward unguaranteed debt owed to private creditors. Recent Paris Club agreements have often been paralleled by similar agreements with commercial bank lenders. In these cases, the debtor country will often ask the largest creditor bank to chair a meeting at which the major banks agree to common terms for a lengthening of debt maturities, with these terms then being applied to all banks equally. Greater cooperation between the Paris Club and private lenders may prove useful in order to insure a consistent treatment of private and official debt, and the maintenance of access to private capital markets.

V. The Role of the Bank

Since the early 1960s the Bank has participated as an observer in debt renegotiations sponsored by the Paris Club. The Bank's role in these meetings has largely been to provide technical information on

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1/ A "bisque clause" written into the Agreed Minutes of the debt renegotiations permits the debtor, under certain circumstances, some agreed amount of further debt relief without cumbersome renegotiations.

the debt situation of the debtor country concerned. However, in debt renegotiations conducted under Bank-chaired consortia, the Bank has taken a leading role in arranging meetings, analyzing the debtor country's development strategy, estimating its external capital requirements over the medium-term, and assessing the impact of alternative debt relief solutions on its development prospects.

The Bank should be able to play a leadership role in more cases. It is unlikely that other creditors would object to such a role by the Bank, provided they continue to be convinced that the Bank's involvement would help remove procedural obstacles, expedite negotiations, and facilitate a solution to the debt problem.

Preventive actions which keep debt problems from arising are to be preferred to curative actions that must be taken once the debt and balance of payments situation becomes unmanageable. Actions of this nature, some of which the Bank has undertaken in the past and where more can be done in the future, include:

- giving more assistance to countries in the fields of debt reporting and debt management, including identification of timely corrective measures to head off the emergence of debt problems;

- discussing more actively the debt servicing implications of the financing plan for their medium-term development programs.

Policy advice on external debt management is, of course, a difficult area which must consider country development priorities and political and social sensitivities, and where policy advice should be coordinated with the Fund.

On the curative side, there are also a number of steps the Bank can take to increase its involvement in the resolution of debt difficulties of its member countries. For instance, it could:

- take a more active role in offering technical advice in debt renegotiations to developing countries in the preparation of their negotiating positions;

- take actions, in its role as chairman of various aid counsultative groups, to have debt problems discussed in these groups in the context of overall development prospects, particularly when Paris Club debt relief seems likely;

- help strengthen the balance of payments by assisting in restructuring the underlying foreign trade and productive sectors through the program of structural adjustment lending.

Robert S. McNamara

List of Appendix Tables

Table A-1: DEBT OUTSTANDING AND DEBT SERVICE
($ millions)

	1973	1975	1977	1978	1980 (est.)	Growth Rate (%) 1973-80
Debt Outstanding & Disbursed						
Oil Exporters /a	27,056	44,032	73,891	94,051	124,972	24.4
Oil Importers	86.097	127,400	183,561	224,140	285,000	18.6
Low Income	20,112	25,722	32,576	36,353	43,023	11.5
Middle Income	65,985	101,678	150,985	187,787	241,977	20.4
TOTAL	113,153	171,432	257,452	318,191	409,972	20.2
Deflator (IPI)	63.4	91.1	100.0	115.9	144.9	12.5
Total in 1977 Dollars	178,475	188,180	257,452	274,539	282,934	6.8
Debt Service						
Oil Exporters /a	3,136	5,936	11,154	15,825	18,744	29.1
Oil Importers	8,038	19,203	26,691	36,409	49,711	29.7
Low Income	1,189	1,641	1,852	2,183	3,305	15.7
Middle Income	6,849	17,562	24,839	34,226	46,406	31.4
TOTAL	11,174	25,139	37,845	52,234	68,455	29.6
Deflator (IPI)	63.4	91.1	100.0	115.9	144.9	12.5
Total in 1977 Dollars	17,625	27,595	37,845	45,068	47,243	15.1

/a Excludes capital surplus oil exporters.

Source: External Debt Division, EPD, and WDR projections.

APPENDIX
Table A-2

Table A-2: DEBT OUTSTANDING BY TYPE OF DEBT

($ million)

	1973	1975	1977	1978
Oil Exporters				
Bilateral	8,918	13,456	18,890	22,473
Multilateral	2,599	3,801	7,169	8,937
Private	15,539	26,774	47,832	62,641
Total	27,056	44,032	73,891	94,051
of which Concessional:	8,206	11,524	17,022	20,317
Oil Importers				
Bilateral	32,109	41,262	53,847	62,232
Multilateral	10,335	15,508	22,344	27,386
Private	43,653	70,630	107,370	134,522
Total	86,097	127,399	183,561	224,140
of which Concessional:	30,915	39,656	52,676	60,635
Total				
Bilateral	41,027	54,718	72,737	84,705
Multilateral	12,934	19,309	29,513	36,323
Private	59,191	97,404	155,202	197,162
Total	113,152	171,431	257,452	318,190
of which Concessional:	39,121	51,180	69,697	80,952

Source: EPD, Debtor Reporting System.

Table A-3: DEBT SERVICE RATIOS FOR SELECTED COUNTRIES, 1974-79
(Percent)

	1974	1975	1976	1977	1978	1979
I. Oil Importers						
Low Income						
Bangladesh	5.5	16.3	12.7	10.2	11.7	12.0 e
Ethiopia	5.4	7.4	6.7	6.4	7.5	6.6 e
India	17.4	13.0	10.8	9.6	9.8 e	8.7 e
Kenya	8.0	11.5	12.0	8.6	14.7	11.6
Madagascar	3.6	3.3	3.9	3.4	3.2	6.6 e
Pakistan	14.5	15.4	15.4	13.7	12.3	12.9
Sri Lanka	12.0	21.8	20.0	14.5	9.2	6.9
Tanzania	6.6	7.7	5.8	6.4	7.1	7.2 e
Middle Income						
Argentina	25.4	38.4	30.7	25.2	37.5	27.0
Brazil	34.5	40.8	36.7	40.4	51.9	61.7
Chile	18.2	39.6	39.1	43.6	46.3	36.3
Colombia	21.3	14.4	12.6	11.2	11.9	12.3
Ghana	4.4	6.2	6.4	4.1	5.2	3.6 e
Guatemala	4.7	2.7	5.9	4.0	6.5	7.8
Ivory Coast	14.3	15.4	14.4	14.2	18.4	23.3 e
Korea	11.0	12.4	10.4	9.9	11.3	12.1
Morocco	5.9	6.1	7.9	11.7	20.0	24.8 e
Peru	35.5	41.2	44.9	46.8	45.5	40.8
Philippines	12.0	12.8	14.6	14.2	26.6	15.2
Senegal	6.3	5.9	6.0	6.6	15.7	15.4 e
Sudan	14.2	21.7	14.1	7.5	9.4	32.6
Thailand	9.1	12.6	10.9	10.5	15.6	9.3
Turkey	6.7	8.0	10.9	22.1	27.1	29.9
Yugoslavia	17.2	18.6	17.1	13.5	12.3 e	16.6 e
Zambia	8.4	13.3	13.6	22.2	34.9 e	28.4 e
II. Oil Exporters						
Algeria	14.5	9.5	14.1	16.4	22.1	25.7 e
Bolivia	18.5	24.2	24.4	30.3	60.3	40.6
Ecuador	8.4	5.4	8.4	8.7	13.2	30.9
Egypt	21.7	22.5	18.5	24.1	22.2	18.3
Indonesia	5.7	9.5	11.9	15.5	17.4	24.0
Malaysia	3.7	4.7	5.8	7.7	9.5	4.8
Mexico	29.1	37.1	43.2	55.6	60.7	71.2
Nigeria	1.9	3.0	3.6	1.2	1.9	1.8 e
Syria	6.4	7.9	7.7	7.2	16.0	13.6 e
Tunisia	6.7	6.9	7.1	12.3	13.5	17.9 e
Venezuela	5.4	6.9	6.0	10.2	9.6	11.3

Notes: Debt service ratio = total debt service, divided by exports of total goods and services. e = staff estimates.

Source: Economic Analysis and Projections Department.

Table A-4: TERMS OF LOANS TO DEVELOPING COUNTRIES, 1970-78

	Oil Exporters			Oil Importers		
	1970	1975	1978	1970	1975	1978
Interest Rate (%)						
Concessionary Bilateral	2.9	3.1	2.8	1.9	2.8	3.0
Official Export Credits	6.2	7.2	7.6	6.2	7.8	8.1
Multilateral Loans	4.8	7.6	6.1	5.5	5.6	5.0
Private Source Loans	7.8	8.6	8.7	7.3	8.9	9.9
TOTAL /a	6.0	7.2	7.8	5.1	6.7	7.8
Maturity (years)						
Concessionary Bilateral	28.6	21.8	30.0	32.7	28.7	30.8
Official Export Credits	9.1	9.9	11.0	10.0	11.2	11.7
Multilateral Loans	29.3	22.7	22.5	26.6	29.2	26.5
Private Source Loans	8.4	7.8	7.8	9.9	7.8	9.8
TOTAL /a	17.0	12.3	11.6	20.9	17.7	16.2
Grace Period (years)						
Concessionary Bilateral	8.1	6.9	7.2	10.1	8.7	9.4
Official Export Credits	2.1	4.1	3.5	3.1	4.2	3.6
Multilateral Loans	6.4	5.2	5.8	5.7	6.7	6.2
Private Source Loans	2.2	2.6	3.1	2.6	2.9	2.8
TOTAL /a	4.3	3.9	3.8	5.8	5.1	4.4

/a Includes only public debt.

Source: DRS data.

Table A-5: COMMERCIAL BANK CLAIMS ON DEVELOPING COUNTRIES, /a 1976-79
(US$ millions)

	1976		1977		1978		June 1979	
	$	%	$	%	$	%	$	%
Brazil	18,461	16.71	25,048	16.57	32,941	16.16	35,738	16.13
Mexico	17,885	16.19	20,280	13.42	23,271	11.41	25,807	11.65
Venezuela	6,853	6.20	9,097	6.02	14,048	6.89	16,645	7.51
Spain	7,323	6.63	11,485	7.6	13,195	6.47	14,504	6.55
Argentina	3,260	2.95	4,863	3.22	7,015	3.44	10,550	4.76
Korea	3,701	3.35	5,247	3.47	7,543	3.70	9,392	4.24
Algeria	2,513	2.28	4,415	2.92	7,641	3.75	8,273	3.73
South Africa	7,624	6.90	8,577	5.68	8,099	3.97	7,688	3.47
Iran	3,124	2.83	6,406	4.24	8,887	4.36	7,651	3.45
Yugoslavia	2,227	2.02	3,679	2.43	6,148	3.02	6,972	3.15
Indonesia	4,010	3.63	4,973	3.29	5,819	2.85	5,801	2.62
Philippines	2,953	2.67	3,396	2.25	5,016	2.46	5,666	2.56
Greece	2,855	2.58	4,117	2.72	5,481	2.69	5,503	2.48
Israel	2,033	1.84	2,549	1.69	3,925	1.93	3,890	1.76
Thailand	1,077	0.98	1,831	1.21	2,817	1.38	3,874	1.75
Turkey	2,340	2.12	3,173	2.10	3,777	1.85	3,660	1.65
Chile	985	0.89	1,581	1.05	2,920	1.43	3,644	1.64
Taiwan	2,277	2.05	2,806	1.86	4,175	2.05	3,642	1.64
Peru	2,996	2.71	3,417	2.26	3,575	1.75	3,425	1.55
Portugal	1,012	0.92	1,705	1.13	3,162	1.55	3,332	1.50
Ecuador	779	0.71	1,639	1.08	2,613	1.28	2,821	1.27
Nigeria	284	0.26	810	0.54	2,281	1.12	2,806	1.27
Morocco	534	0.48	1,193	0.79	2,604	1.28	2,794	1.26
Colombia	1,851	1.68	1,763	1.17	2,200	1.08	2,744	1.24
Egypt	1,264	1.14	1,361	0.90	1,811	0.89	2,012	0.91
All Others	10,232	9.26	15,712	10.40	22,901	11.23	22,709	10.25
Total: All Developing Countries	110,453	100.00	151,123	100.00	203,865	100.00	221,543	100.00

/a Excluding off-shore banking centers -- Bahamas, Barbados, Bahrain, Bermuda, Cayman Islands, Hong Kong, Lebanon, Liberia, Netherland Overseas Territories, New Hebrides, Panama, Singapore, and West Indies.

Source: BIS and Federal Reserve.

Table A-6: TERMS OF EUROCURRENCY BORROWING
1972-1979,
DEVELOPING COUNTRIES

	Average Maturity (years)	Average Spread Over LIBOR (%)	6 Month Deposit Rates 1/ (%)	Approx. Interest Cost (%)
1972	7.3	1.26	6.19	7.62
1973	10.3	0.98	10.13	11.24
1974	8.6	1.13	10.19	11.44
1975	5.4	1.68	6.63	8.44
1976	5.6	1.72	5.38	7.22
1977	6.5	1.55	7.50	9.18
1978	8.7	1.20	12.31	13.64
1979	9.2	0.87	14.44	15.44
1st Quarter	9.1	0.99	10.56	11.68
2nd Quarter	9.2	0.86	10.50	11.48
3rd Quarter	9.0	0.86	12.75	13.74
4th Quarter	9.6	0.80	14.44	15.37

1/ Prime banks' bid rate in London, at or near end of month. LIBOR is generally higher than the bid rate by 0.125.

Source: Based on BIS data.

Table A-7: MULTILATERAL DEBT RENEGOTIATIONS

Year	Number of Renegotiations	Name of Countries
Before 1961	2	Turkey (1959), Argentina (1956)
1961	1	Brazil
1962	1	Argentina
1963	None	---
1964	1	Brazil
1965	3	Turkey, Chile, Argentina
1966	2	Ghana, Indonesia
1967	1	Indonesia
1968	4	Ghana, Indonesia, India, Peru
1969	1	Peru
1970	2	Indonesia, Ghana
1971	1	India
1972	4	Chile, India, Pakistan, Cambodia
1973	2	Pakistan, India
1974	4	Chile, Ghana, India, Pakistan
1975	2	India, Chile
1976	2	India, Zaire
1977	3	Zaire*, Sierra Leone, India
1978	2	Turkey, Peru*
1979	4	Zaire*, Togo, Turkey*, Sudan*
1980 (As of July 1980)	2	Sierra Leone, Turkey
Total	44	

* Also concluded agreements with private banks to cover unguaranteed debts.

Source: Compiled from World Bank and U.S. Department of State data.

Table A-8: DEBT RELIEF ON ODA CREDITS BY DAC DONORS, 1978-79
(US$ Millions)

Donors	LLDCs	MSAs	TOTAL
Belgium	2.02	.14	2.16
Canada	292.36	-	292.36
Denmark	91.76	-	91.76
Finland	23.39	4.13	27.52
France	146.15	-	146.15
West Germany	1,805.10	-	1,805.10
Japan	683.00	-	683.00
Netherlands	133.00	-	133.00
New Zealand	1.04	-	1.04
Sweden	87.84	153.89	241.73
Switzerland	13.46	44.54	58.00
United Kingdom	178.66	1,454.14	1,632.80
TOTAL	3,457.78	1,656.84	5,114.62

Source: UNCTAD (August 1980). Includes only those DAC countries that have made specific commitments for debt relief in response to CIEC and UNCTAD understandings, and covers only the nominal value of the principal outstanding.

Definition of Groups:

LLDCs: Afghanistan, Bangladesh, Benin, Botswana, Burundi, Cape Verde, C.A.R., Chad, Ethiopia, Gambia, Guinea, Haiti, Laos, Lesotho, Malawi, Mali, Nepal, Niger, Rwanda, Somalia, Sudan, Tanzania, Uganda, Upper Volta, Western Samoa, Yemen, Yemen Arab Republic.

MSAs: 1/ Burma, Cameroon, Egypt, India, Kenya, Madagascar, Pakistan, Sierra Leone, Sri Lanka.

1/ Includes only those MSA countries receiving debt relief and which are not on the LLDC list.

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International Bank for Reconstruction and Development

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 R80-294

FROM: Vice President and Secretary September 26, 1980

BRANDT COMMISSION RECOMMENDATION NO. 11 RELATED TO DEVELOP AN ACTION PROGRAM TO INCREASE FOOD OUTPUT IN LOW-INCOME, FOOD-IMPORTING DEVELOPING COUNTRIES DURING THE 1980s

As referred to in the President's memorandum of February 22, 1980 (SecM80-128), attached hereto is a memorandum dealing with the Brandt Commission Recommendation No. 11 related to develop an action program to increase food output in low-income, food-importing developing countries during the 1980s.

Questions on this document may be referred to Mr. Donaldson(X75108).

Distribution:

Executive Directors and Alternates
President
Senior Vice Presidents
President's Council
Vice Presidents, IFC
Directors and Department Heads, Bank and IFC

THE WORLD BANK
Washington, D.C. 20433
U.S.A.

Office of the President

September 26. 1980

MEMORANDUM TO THE EXECUTIVE DIRECTORS

Subject: Brandt Commission Recommendation No. 11 related to Develop an action program to increase food output in low-income, food-importing developing countries during the 1980s 1/

Recommendation: "A broad programme of increased food production and agricultural development must be launched with intensified efforts in the South and increased aid of some $8 billion annually. These efforts are essential to overcome food deficits in poor countries and to ease inflationary pressures in the world food market. As a start to the programme of international food security, we call for an early conclusion of the International Grains Arrangement, and increases in emergency food supplies." 2/

I. INTRODUCTION

The Brandt Commission Report calls for a concerted action program to put an end to mass hunger through a series of measures to assist "low-income food-deficit" countries. It recommends the large-scale transfer of financial and technical resources as an essential part of an effort to abolish hunger from the world. It proposes that such a program should focus particularly on the low income countries of the "poverty belts" whose population numbers around 1.4 billion. The intermediate goals suggested are increased self-sufficiency in food production, removal of onerous food import burdens and provision of reliable supplies through freer trade and the creation of buffer stocks.

The program proposed by the Commission comprises short-run measures to meet the immediate food needs of the "low-income food-deficit" countries, as well as longer-term measures in resource development, support services for agriculture and rural structural change. The primary thrust is seen as the abolition of hunger through:

1/ The reference is to the order of recommendations listed in SecM80-128, dated February 22, 1980.

2/ Willy Brandt, North-South: A Program for Survival, p. 239.

(i) major improvements and expansion in soil and water management, particularly irrigation;

(ii) increases in the flow and quality of inputs to agriculture;

(iii) additional infrastructure and more efficient institutional arrangements to facilitate storage and distribution of food;

(iv) freer international trade in food together with the creation of buffer stocks; and

(v) better income distribution to increase purchasing power of the nutritionally vulnerable groups in each country.

In response to these proposals this paper: (i) examines the current outlook for world food supplies and reassesses priorities in this context; (ii) reviews the measures proposed by the Commission for this sector and outlines what is being and can be done in response to them; and (iii) on the basis of the foregoing, proposes a major Bank initiative in the area of water resource development.

II. OUTLOOK FOR WORLD FOOD SUPPLY

Consumption and Trade

There have been significant recent developments in the world food situation which, when viewed collectively, somewhat modify the scenario presented in the Brandt Commission Report. In the early 1960s many analysts suggested that population growth would be the critical determinant of increased demand for food exports. In fact, rising incomes in the more affluent countries of Europe, East Asia and Latin America, not population growth, proved most important. As incomes rose so did consumption of higher value foods including tropical products, vegetables and, most important of all, livestock products from grain fed animals. The resulting increase in livestock production had a profound effect on international trade. In the early 1950s only about 5% of total grain production entered world trade and very little of this was used for feed. Since then international trade in grain has grown by about 6% a year, twice the rate of increase in global output. The proportion of total grain consumption going to livestock has grown from less than 20% in the 1950s to more than 40%. Today more grain is fed to animals than is consumed by the 1.4 billion people living in low income countries (Annex Table 1).

Concurrently, international grain prices have shown increased instability in recent years. This is caused in part by the agricultural support policies in various OECD countries and the Soviet Union. The EEC and Japan have kept their farm sectors isolated from world price variations through the use of import quotas and substantial subsidies, exporting surplus production (with export subsidies) or relaxing quotas to ensure supplies. Similarly, the USSR has used imports on a large scale in recent years as its source of residual supply. Both sets of policies have tended to transmit internal production instabilities to the world market (Annex Table 3).

Middle income countries. The major expansion of grain imports has come from middle income developing countries. Growth in demand has been steady, reflecting in large part the increase in consumption of livestock products and the growth of urban populations. In particular, oil countries have achieved a dominant position taking approximately 60% of total incremental wheat imports in 1976-79. For the middle income countries as a whole, approximately 250 million more people are living in cities today than in 1960. About half of total cereal consumption in these cities is now imported. Given the likely continued shift of diets to wheat and animal products, and because current Soviet imports may be approaching the maximum possible with present port capacity, middle income importers should account for half to three-quarters of total incremental food imports through 1985.

Middle income countries have shifted away from concessional imports and are now buying on commercial terms. As Table 4 shows, most grain exports to developing countries in the early 1960s were on concessional terms; today the middle income countries buy more than 95% of their grain at full commercial rates. At the same time, total export earnings of these countries have risen faster than the cost of food imports. The proportion of total foreign exchange earnings devoted to cereal imports by the middle income countries has, despite the shift to commercial purchasers, dropped by about one-fifth since the early 1960s.

The low income countries.[1/] The food situation in the low income countries is a striking contrast to the trend in middle income countries toward greater dependence on trade and increased feed grain consumption. Usually less than half of total food produced in these countries enters commercial market channels and over a billion individuals depend largely on the output of their own small farms for their food supply. Production statistics for such countries are frequently questionable and it is difficult to judge progress since the 1960s. Perhaps 500 million people living in these areas depend on non-cereal, traditional crops for a significant proportion of their consumption in normal years. When cereal harvests fail, an even larger proportion of the diet comes from these crops for which there are few reliable production statistics. It is in these relatively autarkic food systems that the great bulk of the absolute poor live and where the Commission wants additional aid efforts to be focused.

Some studies tend to over-emphasize the financing problems associated with low income country imports of food. Self-sufficiency levels of the low income countries as a whole have not declined, although the position of particular

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1/ Defined as those with average GDP per capita at no more than $360 (1978), as in WDR III.

regions has worsened in terms of the net cereal trade balance (Annex Tables 5 and 6). The perception is widespread that the low income countries are becoming seriously burdened by foodgrain imports. In fact, these countries are not only marginal actors in the international grain economy but foodgrain import bills have remained a modest burden in foreign exchange terms. Most of their foodgrain imports are obtained on concessional terms so that the proportion of total export earnings devoted to purchases of commercial cereal imports has remained constant or declined over the last twenty years. Taken together, foodgrain import costs for these countries are less than 20% of their export earnings from agriculture and about 5% of total foreign exchange earnings.1/ More important are the specific situations at a country or sub-regional level.

- India. Per capita food production has improved significantly as has the stability of production. The determinants of this change are numerous and complex, but the expanded use of irrigation and fertilizers has played a major role. On the other hand, the pattern of growth within India has been extremely uneven with per capita production remaining stagnant in many of the poorer subsistence farming states. Grain surpluses, generated in the northwestern states in particular, have replaced imports, placing considerable strains on internal distribution systems.

- Other South Asia. The foodgrain situation in Bangladesh has not improved significantly since the early 1970s and average per capita production remains below levels achieved prior to Independence. However the natural resource base is adequate to provide the potential for self-sufficiency in foodgrains. Elsewhere in South Asia per capita production has remained relatively stable in recent years. Pakistan continues to earn more from its rice exports than it pays for wheat imports.

- Indonesia. Food production per capita has shown little increase in recent years, although it is up slightly from the early 1960s. Steadily increasing imports reflect income growth, particularly in urban areas. Indonesia has become the world's largest importer of high quality rice and has used its market strength to obtain favorable prices.

- Other Southeast Asia. Several other countries of Southeast Asia have shifted from being important rice exporters to large importers. The performance of their food sectors has been highly unsatisfactory. Serious food shortages and deprivation are widespread. Political disturbances have prevented effective utilization of a generally favorable natural resource base. Kampuchea's per capita output appears to be roughly one-tenth that of 15 years ago.

1/ The food import bill contrasts with the real burden imposed by petroleum imports. In 1960 the cost of energy and food imports were roughly equal. Today petroleum imports of these countries cost five times commercial foodgrain imports.

- Sahelian Zone, Ethiopia and Somalia. These countries have suffered a serious decline in food grain self-sufficiency and an equally disastrous fall in output of livestock products from pasture lands. Some studies suggest that the problem relates to long-term climatic shifts. Others suggest more mutable causes. Average import levels equal urban consumption with little external food reaching the countryside.

- High Growth Subsaharan Africa. These countries, comprising Burundi, Kenya, Madagascar, Rwanda, Sudan and Tanzania, have, at least until recently, increased per capita food production at rates above those in India. The most productive subregions of these countries can be compared favorably to the surplus states of India and Pakistan.

- Low Growth Subsaharan Africa. While possessing comparable resource endowments to countries with more satisfactory rates of growth, these countries, including Angola, Benin, Mozambique, Togo, Uganda and Zaire, have not been able to increase per capita food or agricultural production. Roughly three quarters of all urban food consumption is imported as compared to almost complete self-sufficiency 20 years ago. Agriculture's unsatisfactory performance, in large part, must be attributed to political instabilities.

Food Distribution and Nutrition

Increased food supplies are a necessary, but not always sufficient, condition to ensure adequate nutrition. Experience with low income countries suggests that even if per capita food supplies are increased the incidence of malnutrition can rise in the short run. The major problem is limited access to food, frequently reflecting inadequate purchasing power. Education and social factors also play a role. Recent surveys indicate that the majority of those malnourished are children. Evidence suggests that: (i) the absolute number of those seriously malnourished at some time during the year has increased over the last twenty years; (ii) given prevailing social structures, likely patterns of asset or income distribution, and realistic growth scenarios for low income countries, the absolute number of malnourished cannot be expected to decrease significantly through the current process of economic development; and (iii) it is extremely difficult to ensure adequate nutrition in isolation from effective action on the general problem of poverty.

Governments of most low income countries have attempted to increase the food security [1/] of vulnerable groups through extra market interventions in pricing and distribution. The most common instrument is subsidized retail

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1/ The assured provision of minimum nutrition throughout the year at acceptable prices.

prices to benefit urban consumers. Studies of such programs indicate that operating costs are relatively high (in the order of $ 70-100 per ton distributed) but that it is possible to benefit the poor. However, such programs usually benefit only urban consumers and are often financed by implicit taxes on rural areas and farmers. Evidence about targeted feeding schemes is less encouraging. It appears that intra-household leakages are frequently sufficiently large to make such programs uneconomical.

In many areas of Asia and Africa malnutrition is largely a rural phenomenon. The effect of the Green Revolution technologies on income distribution in rural areas is controversial, although there is no doubt that they have significantly increased the overall volume of food production. Ex-post analysis of irrigation projects in South and East Asia has documented the substantial indirect employment benefits from intensifying output. Recent studies by the International Rice Research Institute (IRRI), the Center for Research in Maize and Wheat (CIMMYT) and the International Food Policy Research Institute (IFPRI) show that the principal beneficiaries from increased farm productivity generated through the adoption of new technologies are low income consumers who typically spend a disproportionate amount of total income on staple foodstuffs and thereby gain from lower prices. In many instances small farmers have been able to increase their own output and real incomes. But for producers in areas not well adapted to high yielding varieties of cereals, the Green Revolution has produced few benefits.

Existing efforts to reduce poverty by raising rural productivity have generally focused on helping those who have access to land. There are millions of people in the rural areas who either do not have access to land or whose holdings are too small to sustain themselves and their families. Today perhaps a third of all rural inhabitants are primarily engaged in non-farm activities. The plight of the landless has proved most difficult to alleviate directly. Without improved access to land or other assets, the prospects for many of the landless remain bleak. Moreover, employment and poverty problems in the rural sector cannot be resolved on their land alone. Productive opportunities to absorb migrants arriving in central and regional urban areas as well as off-farm rural employment are also essential.

Rural malnutrition is inexorably linked to more general problems of poverty and agricultural development. No simple methods exist to eliminate inequitable patterns of asset ownership, changing adverse ecological circumstances or inadequate marketing infrastructure necessary to move food into deficit areas. The scope for direct action programs to effectively address consumption problems in <u>rural</u> areas is limited. Experience indicates that increased food production and greatly enhanced food distribution infrastructure are prerequisites to reducing malnutrition in these areas. Effective measures to reduce rural malnutrition require consideration of:

- Seasonal malnutrition. Intra-seasonal variation in nutritional well being is a central problem in rainfed farming systems in many areas. The "hungry season" phenomenon has been correlated with higher child mortality and other indirect measures of malnutrition. Intra-seasonal price variations often exceed the real costs of storage and can result in pricing low income consumers out of the market during certain times of the year.

- Micro famines and shortages. Understanding is limited of price formation in small-scale, modernizing farming systems. Field work in various countries supports the view that interseasonal variations in the output of a particular production/ marketing unit (generally an isolated village) can cause serious hardship to small producers and increase malnutrition. ICRISAT has documented the disincentive effect of variable weather

- National security reserves. Emergency stockpiles have had important benefits in times of tight supply. India's recent experience confirms this. However the relatively high cost of maintaining such reserves ($45-80 per ton per year) has prompted a serious re-examination of their economic efficiency. Even more important, low income countries have found that inadequate internal distribution systems frequently prevented the timely use of existing stockpiles outside of urban centers. Increasing imports has proven equally effective and far less costly a mechanism for maintaining per capita food consumption than using emergency stockpiles. A poor crop will provide adequate food for rural population for some months immediately after the harvest, and most importing countries have adequate stocks to cover urban demand for the two months it takes to arrange imports. With certain exceptions, present buffer capacity in developing countries is adequate. Incremental managerial and financial resources could better be used to improve the efficiency of the food distribution pipeline.

- Global food security and market stabilization reserves. In assessing the level of total global interseasonal stocks needed to guard against production shortfalls or price swings, a number of critical conditions must be considered: (i) overall production remains relatively stable in the developing countries as a whole; (ii) substantial global production variations and associated export price fluctuations primarily result from exceptional variations in yields in the USSR or North America; (iii) support policies in the USSR, EEC and Japan which keep domestic feedgrain consumption steady have the effect of transferring domestic production instabilities into the world market; and (iv) a cataclysmic fall in world output that could only result from an unprecedented level of uniformly poor weather could be compensated for by diverting part of the 500 million tons of grain used to feed livestock. The indications are that buffers for stabilizing commercial export prices or mitigating the effects of world production shortfalls will have only a marginal impact on food security in individual developing countries, particularly where those most prejudiced by shortage are found largely in rural areas.

Agricultural Production

Sources of growth. In the middle 1960s the advent of the Green Revolution technologies, and the synergism between water and fertilizer, fundamentally altered the structure of agricultural production in developing countries (Annex Table 9). Area expansion became relatively less important as a source of growth. In South Asia about 75% of total incremental output was the result of higher yields or double cropping. In the high growth regions of Subsaharan Africa more than half of incremental production was the result of higher yields; elsewhere (including the Sahel) the figure was about a third. The rate of area expansion continued to slow in the 1960s and the 1970s. Most of the expansion of cultivated area occurred in Subsaharan Africa.

FAO has estimated that almost 80% of total cereal yield increase since the middle 1960s in developing areas is due to incremental fertilizer use and better water management. Nutrient consumption of chemical fertilizers has increased by about 15% each year. High growth developing countries use twice as much fertilizer per hectare as lower growth countries and use water more effectively at the farm level. India today uses seven times as much fertilizer per hectare of farmland as it did 15 years ago and the area irrigated has increased by over a third. The low income developing countries as a group consume three times as much fertilizer as they did in the mid-1960s and probably twice as much water from irrigation systems. Depite these growth rates, fertilizer application and water usage remains much below optimum levels.

Constraints to growth. It is difficult to generalize about the constraints to increasing production by large numbers of small producers in ecologically different circumstances. However, several general points have emerged from Bank experience:

... There is no substitute for suitable price policies. Farmers require a credible assurance of adequate returns before undertaking the effort required to increase productivity.

... Domestic resource mobilization is important. In most countries the scale of public investment in agriculture has not kept pace with requirements and in some areas has not even matched physical depreciation rates. Typically, the investment rate in agriculture, in proportion to GDP, is about half that for the economy as a whole despite evidence that the returns to agricultural investments are no less, and frequently higher, than those in other sectors.

... The weak administrative capacity of authorities in implementing agriculture projects has proven to be a critical bottleneck. Government priorities in the allocation of scarce managerial resources are frequently as important to project success as the availability of financial resources.

... Low cost investments can have a large impact on agricultural productivity. The two most important examples are extension and research. Well-designed, low-cost extension programs can raise small farmer yields by a third. Returns to adaptive agricultural research are similarly large.

... Private sector investments in agriculture are important and depend critically on a favorable economic environment in the sector. Experience with irrigation projects has shown that on-farm private investments which account for a small proportion of total expenditure, are crucial. Private investments in marketing and distribution systems for production inputs have proven equally important.

... All high growth regions within the low income countries have had the advantage of better developed distribution infrastructure and markets. Experience has shown that these are prerequisites for subsistence farmers to begin producing and selling surpluses.

III. COMMISSION RECOMMENDATIONS ON FOOD AND AGRICULTURE

In contrast with the foregoing, the Commission sees little progress in improving the world food situation in either consumption or production terms. The "low-income food-deficit" countries are seen to be characterized by chronic, and frequently acute, malnourishment, and to be heavily burdened by the necessity for food imports. Food is regarded as the first priority, with the ultimate goal as self-sufficiency in food for all regions, with commensurate action to ensure food security for all country and population groups. To this end they propose a substantial investment program of $7 billion per year between 1980 and 2000.

More specifically, on the consumption side the Commission recommends:

(i) programs at the national level to improve food storage and distribution and support agrarian reform to increase incomes and food consumption by the rural poor;

(ii) efforts at the international level relating to grain agreements, increased food aid, buffer stocks, and more flexible arrangements for financing reserves and trade in food. It is considered that international food security can be best improved by establishing buffer stocks in low income countries as part of a new international agreement to stabilize world grain markets.

On the supply side, the recommendations include:

(i) programs at the national level to enhance domestic production and move toward the goal of self-sufficiency, including technical assistance to increase absorptive capacity, institutional reform, increased attention to farming systems, improved input supplies, expansion of forestry and fisheries and measures to expand and increase the efficiency of irrigation;

(ii) programs at the international level to mobilize massive capital assistance from the North for development of food production. Within the context of international assistance for water resource development, attention is to be directed to the institutional, technical and financial measures needed for "large regional projects of water and soil management" and in particular, the integrated development of those large international river basins which support the majority of the world's poor - Mekong, Bramaputra, Ganges, Indus, Nile, Zambesi, Congo, Senegal, Niger and Volta.

Notwithstanding the different intrepretation of recent experience, as noted above, the Bank is in general agreement with the perceptions of the Commission regarding agriculture and food problems. The Bank shares their view on the important role of agriculture in development - both as a source of food and as a generator of employment and incomes. We also agree that "agriculture is frequently neglected" (p. 92) by governments, often in those countries where it may be the most important sector in terms of short-run development. Similarly, it is accepted that agriculture cannot do it all in terms of generating employment, and that industry - with potential growth rates of 10-15%, compared with 3-5% for agriculture - has a vital long-run role to play in this regard.

The Bank also strongly supports the strategy of building up institutions and of institutional reforms (p. 82), including agrarian reform, with a view to "helping people to help themselves" (p. 88), this being a basic premise of the

Bank's rural development approach. In this respect, again, the joint role of agriculture in relation to "hunger and incomes" (pp. 97-98) - as a source of food supply and of the wherewithal to purchase food - is of fundamental importance. However, we would have some reservations regarding the Commission's emphasis on self-sufficiency, although this is expressed somewhat ambivalently (see p. 91 last para. and p. 93 first para.). While there is a need to ensure that the development of commercial agriculture does not adversely affect the nutrition of people in any sub-region, substantial economic benefits may be derived from exploiting the comparative advantage associated with different resource endowments in particular countries or sub-regions and relying on trade to obtain food.

The Bank also shares the concerns, expressed strongly in the Commission Report, regarding the consumption side of the food problem. In particular, we welcome the attention to problems of food distribution (pp. 96, 97) and the need for investment in physical infrastructure for the collection, transportation, processing and storage of food, especially foodgrains. With regard to ensuring food security, however, the Bank would advise countries to rely less on expensive national reserve stocks and more on effective infrastructure and logistical arrangements to facilitate timely movement of stocks combined with standing import arrangements. Improvements in national distribution systems are considered by the Bank to be an essential element in efforts to increase food security, without which national and international emergency stocks may be of little use and with which they may be unnecessary.

The potential role of food subsidy and intervention programs in ensuring access to food in rural and urban areas is recognized, but we would emphasize more strongly the interim role of subsidized food intervention programs, given the costly nature of such programs and their budgetary implications. In the long-run food production programs and steps to increase incomes of the poor are the essential requirements to meet nutritional needs. Generally investment in well conceived projects will yield a higher return than expenditure on food subsidy programs. In addition much of the money spent in development projects may itself lead to a substantial direct increase in food consumption.

The role of food aid in ensuring supplies and logistical support, while minimizing the need to expand scarce foreign exchange, is also recognized. However, while acknowledging that additional consideration should be given to ensuring that the low-income importing countries have adequate supplies at all times, and especially in times of global scarcity, the Bank is not convinced that an international buffer stock would be an adequate or cost-effective mechanism to achieve this. Rather the Bank favors an efficient system of international trading and food aid as the best means of ensuring adequate supplies of food at minimum cost.

In respect of investment, the Bank supports the need for more international and domestic resources for agriculture and food production. However, we would stress more than the Commission Report, the importance of greater efficiency in using existing as well as additional resources. In the Bank's view, there is considerable scope for more effective policies and better management in the agricultural sector of many developing countries. We note also, however, that since FY74 external resource transfers for agriculture have increased more rapidly than internal allocations (see Annex Table 7). The proportion of total public investment for agriculture disbursed from external sources has doubled in this period. The Bank would also urge caution in estimating the flows of external financial resources required to achieve particular development objectives pertaining to agriculture and food. There are great difficulties involved in defining and estimating such requirements in widely diverse situations, with different resource endowments, both physical and human, variable seasons, differing degrees of government commitment and often uncertain technology. Apart from this, it is becoming increasingly clear that the efficiency with which available financial measures are used is no less important to the total development effort than the quantity of resources available. Major improvements in this area are considered essential.

Specific Proposals for Action

Within its recommendations the Commission Report specifies eight areas for particular attention and support by international transfers of resources. These are measures to improve absorptive capacity, agarian reform, farming systems and agricultural research, supplies of agricultural inputs, fisheries development, forestry and rural energy, storage and marketing infrastructure, and water resource development. The Bank agrees that these are areas of major concern and has already initiated programs that address them. It is accepted that more could be done in all of these areas providing additional resources were available. It is also recognized that more could be done within existing programs to meet the special needs of the "low-income food-deficit" countries and, where opportunities permit, this possibility will be pursued in the context of Bank lending.

Institution Building. The Commission Report emphasizes the need to create local institutional arrangements for planning and financing agricultural and food programs. It proposes this as the best means of encouraging aid flows and of enabling countries to use available funds more effectively (p. 87). It also draws attention to the need for greater technical assistance (especially if it is planned jointly with recipients) to support the identification, preparation and implementation of projects, in order to improve the absorptive capacity of the poorest countries.

The Bank stands ready to further its efforts in helping countries increase their indigenous capacity to plan agricultural development and manage projects. Through its project lending, the Bank encourages and finances the creation and expansion of local institutions including ministries, parastatal bodies, and private sector firms. This includes the development and staffing of management units, monitoring and evaluation programs, national statistical systems, regulatory bodies, research institutions and the institutional arrangements for the support of an increasingly commercialized, science-based agriculture. Many projects make provision for management training. Through "sector lending" the Bank endeavors to utilize and further strengthen the capacity of local institutions responsible for identifying, preparing and implementing projects. These and related activities are also supported by direct technical assistance through the Bank's country economic and sector work in agriculture. In addition, the courses of the Bank's Economic Development Institute provide training in agricultural sector management and the preparation and implementation of projects. Nevertheless, it is recognized that much remains to be done in this area, especially in respect of resource management.

Agrarian reform. The Commission Report notes that an end to hunger among many countries requires efforts to improve income distribution and thereby provide the means to purchase additional food. Agrarian reform, including improved security of tenure, land consolidation in areas of fragmented holdings, or redistribution to encourage more intensive use, is identified as an urgent need in many countries (p. 96).

The Bank fully supports this view. The importance of appropriate tenurial arrangements has been stressed in dialogues with member countries. Bank studies have confirmed that small farmers frequently use their lands more efficiently than do large farmers. For reasons of both equity and efficiency, the relations which govern land use are important. These matters have been addressed in the Land Reform Sector Policy Paper (1975). While the Bank cannot force social change, it can and does support appropriate adjustments in rural tenurial arrangements. It stands ready to finance activities that support tenurial reform aimed at the betterment of the poorest groups. These activities could include credit, technical services and infrastructure projects for land reform beneficiaries. Where land is held in some form of tenancy, the Bank's projects are designed to encourage tenancy conditions which are equitable and conducive to efficient resource use. More broadly, the Bank will not support projects where existing land rights result in major benefits accruing solely to high-income groups, unless increases in food outputs or balance of payments considerations are overriding factors.

Farming systems and agricultural research. The Commission Report notes some evidence of declining international support for agricultural research and states that a much greater research effort is warranted at national, regional and international centers (p. 94). The report points out the difficulties and possible dangers of transferring the "western agricultural model" to developing countries and advocates the development of farming systems appropriate to local circumstances.

Bank support for agricultural research at the national level has increased steadily in recent years and is today among the fastest growing components in agricultural and rural development lending. Increasingly, this has been linked to efforts to strengthen national extension services. At present, about half of all Bank-supported projects in agriculture and rural development include research components. In FY77-79, lending for agricultural research and extension constituted about 9% of total Bank lending for this sector and averaged more than $250 million per year. About one-third of this has been for research alone. Looking forward, it is proposed in the

Agricultural Research Systems - Sector Policy Paper (1980) that Bank lending for research and extension should increase from more than US$330 million in FY79 to at least US$550 million in FY84 (1979 dollars), or, on present projections of lending for the sector, to about 12% of total Bank lending for agriculture and rural development.

The Bank has been a strong supporter of the international research system as well. It serves as cosponsor of the CGIAR and provides a Secretariat and Chairman for this Group. In FY72-79 the Bank, as the residual donor to the CGIAR, provided $42.9 million from profits, making it the second largest contributor to the Group. It is expected that the Bank will continue to expand its contribution in order to meet residual needs of the international system as it expands, up to a maximum of 10% of total requirements.

Supplies of agricultural inputs. The Commission Report points out that the expansion of HYV agriculture increases the demand for fertilizer, particularly nitrogenous materials, and other agricultural support services. The Report notes that, while fertilizer supplies are likely to be adequate in the near future, their price link to steadily increasing petroleum costs may cause difficulties for some developing countries. Because the marginal yield response to increased fertilizer use tends to be greater in the South than the North, efficient global use of this input would imply larger applications in the developing countries. The Report stresses the importance of providing the farmers of these countries with fertilizers at reasonable prices (pp. 100-101).

The Bank clearly recognizes the importance of providing adequate supplies of production inputs, particularly fertilizer, to permit optimum returns from high-yielding crop varieties. No less important are effective programs to provide production credit to farmers to facilitate purchase of these inputs. It is estimated that perhaps 40% of recent increases in cereal yields in developing countries derives from increased fertilizer use. The World Bank group has been the most important single source of technical and financial support for fertilizer manufacturing in the developing world. It has loaned over $1 billion in FY74-77 for this purpose and expects that Bank-financed plants will provide almost a third of all incremental fertilizer production in developing countries in 1978-85. More recently, it has begun to finance fertilizer imports in situations where local supply shortages or balance of payments considerations made these operations necessary (e.g., a $25 million credit to Bangladesh in FY80). In addition the Bank provides agricultural credit, particularly short- and medium-term funds, which is frequently used to finance the distribution and purchase of fertilizer.

Fisheries development. The Commission Report stresses the important role that increased fish consumption could have in reducing hunger and malnutrition as well as increasing employment (p. 96). The Report notes that most developing countries consume relatively little fish despite a favorable resource base. It identifies technical and managerial difficulties, particularly for smaller countries and requests international support for finance of training and technical assistance to organize cooperative fishing efforts among these countries (p. 97).

The Bank supports these objectives and is currently reviewing its approach to fisheries development. Lending for this activity has been small, accounting for only about 1% of the Bank's total agricultural and rural development lending in FY74-79, but is expanding rapidly. During FY78 and FY79, lending for fisheries, either in fisheries projects or for fisheries components in other projects, totaled nearly $200 million (to be contrasted with total fisheries lending of about $360 million over the FY64-79 period). No less important is the sharp change in Bank strategy and emphasis: the early Bank-supported projects were largely oriented toward commercial fisheries development, frequently based on capital-intensive marine fisheries technology. Today most Bank-supported projects focus on lower-income groups whose livelihood depends on capture fisheries and aquaculture. Looking forward, the Bank might lend some $200 M annually over the next 5 years for fisheries development. Projects already under preparation account for approximately one-third of that amount. Most of it is expected to be channeled into rural areas in support of small-scale fisheries while the balance would support large-scale industrial fisheries projects.

Forestry and rural energy. Considerable attention is given in the Commission Report to the role of forestry development in meeting key energy needs of low-income groups (p.83), and to the ecological dimensions of rapid deforestation (p. 114). The Bank views the emerging fuelwood shortage as second only to food and nutrition problems, in terms of potential adverse impact on the welfare of low-income rural people. A major expansion and reorientation of Bank support of forestry development is underway in recognition of the human welfare and ecological consequences of this depletion. The Bank's Forestry Sector Policy Paper (1978) proposed to lend a total of about $100 million per year in FY79-83 for forestry development, of which about 60% was to be channeled into rural development-oriented forestry (particularly for fuelwood production), while 40% would go to help finance larger industrial forestry projects. Actual lending has substantially exceeded these targets. In FY80, total forestry lending (excluding that for pulp and paper) amounted to $218 million. This represents a tenfold increase over average annual forestry lending achieved in FY73-77. Bank lending for fuelwood increased from about $12 million in FY78 to over $100 million in FY80 and now includes operation in some 25 countries. The Bank Policy Paper on Energy (1980) proposes that the Bank lend about $1 billion for wood-based energy projects over the next 5 years, but no special provisions are made for the low-income countries.

Storage and marketing infrastructure. The need for secure supplies of food staples is stressed by the Report which notes that expanded grain storage, improved transport and communication are essential to distribute food supplies efficiently (p. 96). As part of efforts to enhance "international food security", the Report suggests that developing countries need to hold 5-7 million tons of a 20-30 million tons international reserve. Acquisition and storage construction costs are put at about $1.75 billion (p. 99).

The Bank believes that the problem of international food security is best addressed through a combination of measures: some increase in grain storage capacity (but with recognition of the high opportunity costs for the resources involved) and much greater emphasis than in the Report on measures to facilitate smooth and efficient working of international and national grain marketing and handling systems. The availability of adequate supplies of foodgrains is of little use unless it can be moved in response to information on changing requirements in various locations. Further, the growing commercialization of food production and urbanization in developing countries will anyway require much larger capacity for these marketing systems. By 1985 another 100 million tons of domestically grown grain may be traded in commercial markets of developing countries while total grain distribution in these countries may rise from about 250 million tons in 1978 to 400 million tons by 1990. These volumes suggest that capacity of grain marketing systems, including transportation, storage and processing will have to nearly double in the next 10-15 years.

The Bank recognizes the need for additional investment in several components of these systems: on-farm and commercial storage, trading stocks, processing infrastructure (including drying and milling) and grain handling infrastructure (including road, rail and port facilities and equipment). Effective information systems to link production zones and consumers are also of great importance in the efficient functioning of grain markets. It is expected that the Bank will expand substantially its operations in this area during the next five years, depending on the availability of resources. But since total investment requirements to strengthen food distribution and marketing systems are large, this will require increased efforts by other multilateral and bilateral donors as well; the Bank intends to work closely with other donors in this general area.

Rainfed agriculture. Surprisingly little is said in the Commission Report about rainfed agricultural production, despite the fact that 60% of developing country food output in the period 1970-75 came from this source. Over the last decade about 40% of all increases in agricultural production in developing countries came from rainfed lands. Almost half of the rural people in those regions identified by the Commission as "poverty belts" are dependent for a livelihood on dryland farming and livestock production.

Expansion of rainfed agriculture is feasible only in the humid and semi-humid tropics, and Bank experience shows this to be a slow process. However, there is evidence that relatively low incremental capital-output ratios (ICORs) are encountered in intensification of production on already settled rainfed lands. The principal constraint is the lack of new technology suited to prevailing ecological and institutional conditions. Nevertheless, the possibility of reaching some of the lowest income rural groups and of improving their food security at relatively low cost, makes this an important area for further Bank efforts. Both in its own projects and in its relationships with other institutions the Bank will continue to explore all avenues for increasing rainfed agriculture and livestock production.

Water resource development. The development of irrigation is singled out by the Commission as the principal source of increased food output in the "poverty belt" countries of Africa and Asia over the next two decades. This accords with FAO estimates that as much as 70% of increased food output between 1980-2000 may be obtained from irrigated lands. Greater control of water removes much of the random effects of weather from the farmer's calculus and paves the way for synergistic production effects between water and other inputs such as HYVs and fertilizer. By intensifying production activities it also has important employment effects. Recognizing this, the Commission suggests that "the largest single amount of investment required is for irrigation and water management". It goes on to stress the need for a relevant framework within which international resource transfers for this purpose can be made, especially to the "poverty belts" of Africa and Asia.

The Bank strongly shares these concerns. Since food security requires reliable supplies of food, irrigation is the preferred source of increased domestic output. Since the new land brought into production in the "low-income food-deficit" countries is largely marginal land, in the sense that soils are less fertile and seasons less reliable, irrigation has a special role to play in reducing an otherwise growing uncertainty in production. However, to provide reliable supplies of food, irrigation systems themselves have to be reliable and the use of water efficient. Although Bank lending for irrigation represents roughly one-third of its commitments in the rural sector, there seems scope for substantial further investment in this area. In this the Bank seems well qualified to take a positive new initiative.

An appropriate response to the Commission's concerns on water development would require formulation of an approach toward investment and technical assistance for irrigation development, built up from a typology of countries with respect to the natural resource base, institutional capabilities, investment possibilities and management issues. What can or should be done in this field depends on the state of existing systems and command areas and on the potential for additional irrigation development, on a region by region basis.

In assessing this potential it is necessary to distinguish between three broad climatic regions: (i) the humid tropics and sub-tropics, exemplified by much of South and SouthEast Asia and Western Africa south of the Sahel; (ii) the semi-arid and sub-humid sub-tropics of which the Sahel, southern India and eastern Africa are typical; and (iii) the arid tropics and sub-tropics which include much of the Middle East, North-East Africa and southern Pakistan. Each of these requires a separate water use technology and involves different physical and ecological problems in water storage and distribution.

Within each country different types of investment may be desirable in the short, medium- and long-term. In the short-run (1-3 years), and where some irrigation is already practised, there is likely to be scope for three kinds of intervention: (i) measures to improve the on-farm use of water, including new technology and volumetric water pricing where feasible; (ii) modifications to upgrade the management of delivery systems, including changes in institutions and activation of user associations; and (iii) investments to increase the use of groundwater to supplement canal water and ensure supplies. In the medium-run (4-10 years) a further three kinds of activities are feasible: (i) projects to rehabilitate existing infrastructure, including minor reconstruction and canal lining; (ii) measures to expand the command area so that available water is fully utilized, including the construction of additional tertiary and quaternary canals to carry water to farmers' fields; and (iii) the development of services, including research and extension, credit, storage and transport, to support a science-based irrigated agriculture. Finally, in the long-run (10-25 years) there is a need for: (i) major rehabilitation schemes, including the replacement of head-works, especially where dams have silted up or become unsound; and (ii) new river basin development programs, to exploit in an integrated way the resources of underdeveloped river valleys.

As the largest lender in the irrigation field, the Bank is in a position to provide a focal point for a major effort to develop water resources over the next two decades. In line with the Commission's expressed concern with water resources and irrigated agriculture, the Bank could move on two fronts: first, to increase lending for expansion, rehabilitation, and on-farm intensification of irrigation systems; and second, to give greater attention to the institutional and human resource aspects in the planning and management of water resource systems. A paper outlining the scope and nature of an action program to address these twin goals will be prepared in the coming year.

Robert S. McNamara

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ANNEX
Table 1

GRAIN CONSUMPTION AND TRADE, 1960-1979 /1
(millions of metric tons)

	Average 1960-63			Average 1977-79		
	Net Trade	Total Consumption	Self Efficiency	Net Trade	Total Consumption	Self Efficiency
Developed Exporters						
USA	+32.7	139.8		+94.9	173.5	
Canada	+10.2	15.1		+17.7	22.5	
Oceania	+ 6.6	4.4		+14.3	6.0	
Developed Importers						
EEC-9	-21.5	92.0	(78%)	- 8.0	118.3	(79%)
Other Western European	- 4.3	24.9		- 9.8	43.6	
Japan	- 5.3	21.0		-23.0	34.0	
Centrally Planned						
USSR	+ 7.3	119.0	99%	-17.9	217.6	(93%)
Eastern Europe	- 6.4	64.3		-12.4	106.5	
China	- 4.0	112.3		- 8.7	225.2	
Developing Countries /2						
Total Low Income	- 5.6	139.3	(96%)	- 8.7	214.0	(95%)
India	- 4.1	73.1	(95%)	- 1.3	109.4	(99%)
Middle Income	-12.7	101.3	(88%)	-44.7	191.8	(77%)
Major Exporters /3	+ 7.2	13.5		+17.4	21.5	

/1 Excluding Albania, Cuba, Mongolia and Southern Africa (South Africa, Lesotho and Zimbabwe).

/2 Low-income countries are defined as those countries having per capita income below US$250. Their population is approximately 1,325 million. Middle-income countries are defined as all other developing countries including the capital surplus oil exporters (Saudi Arabia, Kuwait and Libya) except the main grain exporters (Thailand and Argentina) and the semi-industrialized countries (Portugal, Greece, Yugoslavia, Rumania and Israel). Their population is approximately 840 million. Population of the grain exporting developing countries is approximately 75 million.

/3 Thailand and Argentina.

Source: USDA

ANNEX
Table 2

FEEDGRAIN USAGE
(million metric tons)

	1960/65 Average	1970	1978/79	1979/80
Developed Exporters				
USA	108.8	132.1	138.2	139.2
Canada	11.4	17.0	17.6	18.0
Oceania	2.0	2.7	3.1	3.2
Developed Importers				
EEC. 9	53.4	67.3	69.8	70.5
Other W. Europe	13.1	20.4	29.7	31.0
Japan	4.1	7.4	15.8	16.7
Centrally Planned				
E. Europe	33.1	46.9	71.3	72.2
USSR	38.0	87.0	122.0	123.0
Developing Countries				
Latin America	11.7	18.9	31.6	32.5
Other Middle Income	6.8	10.3	16.6	27.4
Low Income	.5	1.0	2.5	2.4

Source: USDA

ANNEX
Table 3

SOURCES OF INSTABILITY, 1960-1979
(Average Variation from Trend)

	1960-69			1970-79			1960-1979		
	Yield	Production	Consumption	Yield	Production	Consumption	Yield	Production	Consumption
World	2.26	2.57	1.17	3.36	3.32	2.16	3.04	2.93	2.10
... US	3.19	6.49	3.85	10.38	7.79	9.21	7.78	7.12	7.34
... USSR	13.96	13.26	7.95	15.89	16.07	6.33	15.21	14.38	7.36
World Less US and USSR	1.78	2.08	1.18	1.49	1.85	1.05	1.84	2.30	1.30
Developed Countries	2.43	4.28	1.60	5.65	5.24	4.66	4.44	4.64	4.24
... EEC	3.90	4.20	1.24	7.00	7.75	2.16	5.76	6.51	3.03
... Japan	5.66	5.87	1.69	4.63	5.08	1.82	4.95	7.61	1.98

Source: USDA

ANNEX
Table 4

DEVELOPING COUNTRY GRAIN IMPORTS:
SHIFT IN US FROM AID TO COMMERCIAL EXPORTS
(million tons)

	Net Balance/a	US Exports		
		Total	Concessional/b	Commercial
1960-63	-12.2	14.5	13.5	1.0 (7%)
1976-79	-40.1	31.5	5.1	26.4 (84%)

/a Includes exports by both net importers and exporters (net balance equals gross exports less total imports).

/b Includes both grants and sales on highly concessional terms whose major cost for importers was shipping.

Source: USDA

ANNEX
Table 5

NET GRAIN IMPORTS & CEREAL SELF SUFFICIENCY OF SELECTED LOW INCOME COUNTRIES
(Million tons and % Self Sufficiency)

	1960/63 Average	1977	1978	1979
South Asia				
India	-4.2 (94%)	0.0 (100%)	+1.0 (100%)	+1.1 (101%)
Other /1	-2.3 (91%)	-3.2 (92%)	-3.3 (91%)	-3.4 (91%)
East & SE Asia				
Indonesia	-1.1 (92%)	-3.0 (86%)	-3.3 (86%)	-3.7 (84%)
Other E & SE Asia /2	+2.2 (120%)	-1.1 (94%)	-2.0 (89%)	-2.1 (89%)
Subsaharan Africa				
Sahel & Ethiopia /3	-0.2 (99%)	-1.0 (89%)	-0.9 (92%)	-1.2 (89%)
Other		-1.6 (91%)	-2.3 (86%)	-3.2 (82%)

/1 Afghanistan, Bangladesh, Nepal, Pakistan and Sri Lanka.
/2 Kampuchea, Laos and Vietnam.
/3 Chad, Ethiopia, Mali, Mauritania, Niger, Senegal, Somalia and Upper Volta
Source: USDA and FAO.

Table 6

PER CAPITA FOOD PRODUCTION: SELECTED INDICES
1961/65 = 100

	1976	1977	1978	1979
South Asia				
India	103	111	115	103
Bangladesh	85	91	86	85
Pakistan	121	128	123	127
Total	103	110	112	103
East & SE Asia				
Indonesia	107	107	114	106
Vietnam	48	49	42	45
Subsaharan Africa				
Sahelian Zone	87	69	88	68
Ethiopia	63	58	52	54
Other:				
High Growth (average)/1	113	117	111	110
Low Growth (average)/2	74	67	69	67

/1 Including Burundi, Kenya, Madagascar, Rwanda, Sudan and Tanzania.
/2 Including Angola, Benin, Guinea, Mozambique, Togo, Uganda and Zaire
Source: USDA and FAO.

OFFICIAL COMMITMENTS TO AGRICULTURE IN DEVELOPING COUNTRIES
EXCLUDING FOOD AID

(current US$: millions)

	1973	1978
ODA (largely concessional)		
DAC	910	3,263
Multilateral	725	2,297
OPEC	34	276
TOTAL	1,669	5,836
Other Official Flows		
DAC	72	341
Multilateral	442	2,816
OPEC	31	42
TOTAL	545	3,199
GRAND TOTAL /a	2,214	9,035

/a In constant 1978 prices, the total increased from $3.9 billion in 1973 to just over $9.0 billion in 1978.

Source: OECD

ANNEX
Table 8A

AGRICULTURAL INPUTS AND OUTPUTS IN LOW INCOME COUNTRIES
1960/65 vs 1977

	INPUTS								OUTPUTS			
	Rural Population (millions)		Arable & Perm. Cropped Land (million ha)		Irrigated Land (million ha)		NPK per HA (10Kg)		Agric. Prod. per Rural Population ($US 1977 prices)		Agric. Prod. per Land ($US 1977 prices per HA)	
	1960	1978	1961/65	1977	1961/65	1977	1961/65	1977	1960/65	1978	1960/65	1978
South Asia												
India	352	524	162	169	25.5	35.2	37	253	$79	$83	$170	$270
Other	127	197	38	42	14.3	18.3	46	294	$49	$65	$160	$290
East Asia												
Indonesia	81	114	14	17	4.1	4.9	84	350	$115	$132	$640	$880
Other	32	45	19	19	1.8	2.1	70	225	NA	NA	NA	NA
SubSaharan Africa												
Sahel & Ethiopia	35	54	49	59	0.2	0.3	2	20	$77	$66	$55	$ 65
Other	81	118	54	61	1.5	2.4	2	36	$135	$144	$180	$230

Source: USDA

ANNEX
Table 8B

AGRICULTURAL PRODUCTION IN LOW INCOME COUNTRIES 1960 vs 1978

	1960 Million US$ (1977 Prices)	% of Total	1978 Million US$ (1977 Prices)	% of Total	Av.Annual Growth Rate % 1960-70	1970-78
South Asia						
India	27,669.7	50	43,675.9	40	1.9	2.6
Other South Asia	6,199.5*	46.9*	12,800.6**	40.9**	3.8*	2.1*
Total South Asia	33,869.2	49.4	56,476.5	40.2	2.2	2.5
East Asia						
Indonesia	9,344.7	54	15,013.1	31	2.5	4.0
Other East Asia	-	-	-	-	-	-
Total East Asia	9,344.7	54	15,013.1	31	2.5	4.0
SubSaharan Africa						
Sahel - Ethiopia	2,685.7	53.3	3,569.6	42.6	2.5 2/	0.4
Other SubSaharan Africa	10,968.7 1/	49.0 1/	17,034.3	43.3	2.3 3/	0.9 4/
Total Africa	13,654.4	49.8	20,603.9	43.2	2.4	0.8
Other (Haiti)	-	-	-	-	0.6	2.6
Total, Low Income	56,868.3	50.3	92,093.5	39.4	2.3	2.1

* Bangladesh, Burma, Sri Lanka and Pakistan Only
** Bangladesh, Burma, Sri Lanka, Nepal and Pakistan
1/ excludes Sierra Leone, Burundi, and Lesotho
2/ for Ethiopia, Niger, Mauritania and Senegal only
3/ for Somalia, Mozambique, Guinea, Central Africa, Nepal and Angola only
4/ excludes Rwanda, Benin and Sudan

Source: World Bank, UN and FAO

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ANNEX
Table 9A

FOODGRAIN IMPORTS VS. AGRICULTURAL EXPORTS - 1977

	Commercial Foodgrain Imports (million US$)	(million tons)	Food as % of Agricultural Exports
South Asia			
India	0	0.0	
Other	$230	1.5	15%
East and Southeast Asia			
Indonesia	$500	2.2	17%
Other	$100	0.6	NA
SubSaharan Africa			
Sahel & Ethiopia	$ 80	0.6	8%
Other	$320	2.4	9%

Source: IMF, World Bank & UN

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ANNEX
Table 9B

AGRICULTURAL EXPORT EARNINGS
US$M (1977 Prices)

	Agric. Exports 1960	1977	Av.Annual Growth Rate '60-'77 %
South Asia			
India	1,376.1	2,177.7	2.74
Other S. Asia	2,203.6	1,464.4	2.38
Total	3,579.7	3,642.1	0.10
East & South East Asia			
Indonesia	3,170.8	2,930.3	0.46
Other E. Asia	NA	NA	NA
Total	3,170.8	2,930.3	0.46
SubSaharan Africa			
Sahel Ethiopia	673.8	1,003.7	2.37
Other	3,376.8	3,677.2	0.50
Total	4,050.6	4,680.9	0.85

Source: IMF, World Bank and UN

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R80-298

FROM: The Deputy Secretary

October 10, 1980

BRANDT COMMISSION'S RECOMMENDATION NO. 6 CONCERNING AN ACTION PROGRAM TO ASSIST THE POOREST COUNTRIES

As referred to in the President's memorandum of February 22, 1980 (SecM80-128), attached hereto is a memorandum dealing with the Brandt Commission's Recommendation No. 6 concerning an action program to assist the poorest countries.

Questions on this document may be referred to Mr. Burki (X60133).

Distribution:

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THE WORLD BANK
Washington, D.C. 20433
U.S.A.

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Office of the President

October 10, 1980

MEMORANDUM TO THE EXECUTIVE DIRECTORS

Subject: Brandt Commission's Recommendation No. 6 Concerning an Action Program to Assist the Poorest Countries 1/

Recommendation: "An Action Program must be launched comprising emergency and long term measures, to assist the poverty belts of Africa and Asia and particularly the least developed countries." 2/

I. INTRODUCTION

The Brandt Commission has called for a major initiative in favor of the poorest countries and regions. Recognizing that "the removal of poverty requires both substantial resource transfers from the developed countries and an increased determination of the developing countries to improve economic management", the Commission has proposed a collective international response. The Proposed Action program has a number of elements. It includes large regional projects of water and soil management; the provision of health care and eradication of such diseases as riverblindness, malaria, sleeping sickness and bilharzia; afforestation projects; solar energy development; mineral and petroleum exploration; and support for industrialization, transport and other infrastructural investment. The Commission estimates that its program would require additional foreign assistance of at least $4 billion per year for the next two decades, "at grant or special concessional terms, assured over long periods and available in flexibly usable forms". New institutional arrangements are proposed "on a regional basis to coordinate funding and to prepare plans in cooperation with lending and borrowing countries." Finally, the Commission emphasizes the need of the poorest countries for greater technical assistance to help them with the preparation of programs and projects.

The Commission notes that the 'least developed countries' (as defined by the UN) are mostly located contiguously in two areas--the so-called 'poverty belts'--one extending across the middle of Africa and the other from the Yemens, through Afghanistan, across South Asia and into East Asia.

1/ The reference is to the order of recommendations listed in SecM80-128, dated February 22, 1980.

2/ Willy Brandt, North-South: A Program for Survival, p. 282.

Clearly the Commission's main intention is not to redefine the group of poorest countries, but rather to call for significant additional concessional aid and technical assistance to be mobilized to assist the absolute poor living in countries lacking domestic resources to support poverty alleviation programs.

An initiative is already being taken in this direction by UNCTAD in organizing the forthcoming UN Conference on the Least Developed Countries, scheduled to be held in 1981. The objective of this conference is to review the development plans of the Least Developed Countries and their related financing and technical assistance needs with a view to mobilizing increased official development assistance.

A limitation of the proposed conference is that it will not address the needs of all 37 countries in the poverty belts since the LLDCs cover 20 countries in Asia and Africa and account for only 24 percent of the 680 million absolute poor in the poverty belts. Thus the special effort being mounted to address the pressing needs of the LLDCs should be supplemented by parallel initiatives for the other poorest countries. For a number of the larger countries, where World Bank Consultative Groups and Consortia are functioning, the issues raised by the Brandt Commission can be addressed in the context of external assistance programs.

For the purpose of this response to the Brandt Commission proposals it is assumed that the poverty belts comprise all those African and Asian countries defined as 'low income' in The World Development Report, 1980 (see Annex 1). These encompass close to 90 percent of the world's absolute poor which, in the Bank's view, should be the principal focus of attention. This paper summarizes the characteristics and prospects of the countries in the poverty belts, discusses the need for and possible content of an Action Program to assist the poorest countries and, finally, defines the Bank's role in the elaboration and implementation of the proposed Action Program.

II. CHARACTERISTICS AND PROSPECTS OF COUNTRIES IN THE POVERTY BELT

More than half the population of the low income countries of Asia and Africa live in absolute poverty (Table 1 below). Although the porportion of the poor in the total population has declined over the last twenty years, there was an increase of around 80 million in their absolute number.

Table 1: Distribution of Absolute Poverty, 1980
(millions)

Poverty Belts	Total Population	Number of Absolute Poor	% of Population Who Are Poor	Number of Rural Poor	% of Poor in Rural Areas
Africa	175	110	63	100	91
Asia	1,135	570	50	480	84
TOTAL	1,310	680	52	580	85

SOURCE: World Development Report, 1980.

Although the poor in Asia and Africa share a number of common characteristics, the situation in Africa is much more serious. For instance:

- There is generally a high concentration of absolute poverty in the rural areas but Africa has a much larger proportion of poor in the countryside.

- High rates of population growth have contributed significantly to persistence of poverty. But many Asian countries appear to have turned the demographic corner with population growth rate slowing down from 2.4 percent per annum in the 1960s to 2.2 percent in 1970-77. Exceptions to this development are Bangladesh, Nepal and Pakistan, but their prospects for a decline in population growth are good. Fertility rates are still high and possibly on the increase in some countries in Africa. The African rate of population growth has increased from 2.5 percent in the 1960s to 2.7 percent in 1970-77.

- Levels of social development, when compared to the middle-income and developed countries, are extremely low in both Asia and Africa. In terms of several indicators of social development, African levels are considerably lower than those of Asia. (See Table 2 below.)

- The social status of women remains low in both Africa and Asia. Of the 680 million undernourished people in the two belts, over 450 million are females. The rate of female mortality, particularly in the age group 19-39, is some 30-50 percent higher than male death rates. Consequently, life expectancy for females is less than that for males. While nearly 90 percent of the boys now attend primary school in these countries, the proportion for girls is less than 60 percent.

Table 2: Levels of Social Development in the Poverty Belts

	Life Expectancy at Birth	Infant Mortality (per '000 live births)	Child Mortality (per '000 live births)	Adult Literacy (% of Pop.)
Poverty Belts				
Africa	46	160	36	19
Asia	51	120	16	41
Middle-Income Countries	61	40	10	71
Developed Countries	74	13	1	99

SOURCE: World Development Report, 1980.

One reason for the grave African situation is the much lower level of economic performance there in recent years. In the 1960s, average incomes increased at almost the same rate in the two poverty regions. In the 1970s, however, there was a slight increase in the rate of per capita income growth in Asia, but a sharp deceleration in Africa (see Table 3 below). In Africa, average per capita incomes are estimated to have increased by only four dollars (in 1977 dollars) over the ten-year period 1970-80. It is likely that the incomes of the poorest segments of society actually declined.

Table 3: Output Growth in the Poverty Belts (at constant 1977 US $)

	Per Capita GNP in 1980	GNP		GNP Per Capita	
		1960-70	1970-80	1960-70	1970-80
Poverty Belts					
Africa	186	4.2	3.0	1.7	0.2
Asia	192	4.2	4.2	1.8	2.0
All Developing Countries	615	5.6	5.3	3.1	2.9

SOURCE: World Development Report, 1980.

The World Development Report, 1980 provides two scenarios for the countries of the poverty belts during the 1980s. Given strong economic management, sufficient finance to support higher payments deficits, and continuing agricultural growth, the low-income Asian countries could carry their recent progress into the first half of the 1980s and accelerate it in the second half. But poor countries in Africa face a desperately hard adjustment period - coming on top of economic stagnation in the 1970s. Even under comparatively optimistic assumptions, there will be negligible growth in the 1980s.

If the poverty belt countries are not able to adjust to the difficult economic environment they now face and fail to improve their economic management, they could register a deceleration in the rate of growth in per capita incomes. In fact, low income Africa could witness a decline in real incomes in the first half of the 1980s.

These growth scenarios have very serious implications for poverty. Under the less-hopeful scenario - the low case in World Development Report, 1980 - the number of people living in absolute poverty could actually increase. For the high case, there is an overall decline but, even here, low-income Africa will have more absolute poor in 1990 than it did in 1980.

Table 4: Future Growth Prospects and Impact on Poverty 1980-90

	Number of Absolute Poor 1980	"Low" Case (1990)		"High" Case (1990)	
		Growth Rate GNP Per Capita	Number of Absolute Poor	Growth Rate GNP Per Capita	Number of Absolute Poor
Poverty Belts					
Africa	110	-0.1	150	0.6	120
Asia	570	1.7	550	2.6	520
TOTAL	680	1.5	700	2.3	640

SOURCE: Estimates based on World Development Report, 1980 projections.

III. ACTION PROGRAM TO ASSIST THE POOREST COUNTRIES

As noted above, the Brandt Commission highlighted a number of measures which it considered merited priority inclusion in an Action Program to assist the poorest countries. Agriculture, forestry, minerals, transport, and health were identified as priority sectors for investment. In particular, the Report stresses the need to finance regional river basin schemes as a means of improving the security of food supplies. Although it may be readily agreed that most of the measures referred to in the report in the context of the Action Program are of critical importance in many countries, nonetheless the actual priority that a particular country should attach to any specific measure or investment must be determined by the special needs and circumstances of that country. Thus, the Action Program must be based on and support the individual country development programs.

Over the past two decades, a considerable amount of project experience and analytical studies concerning poverty alleviation has been amassed which it is possible to draw upon in formulating a long-term plan to assist the low-income countries. What needs to be done is to translate this experience into more effective operational programs. To an extent, bilateral donors and multilateral agencies are already assisting countries in improving the formulation of their development strategies and in strengthening project implementation. But, as suggested by the Brandt Commission, there is an urgent need to increase and better coordinate this activity.

The Commission noted the need for both emergency and long-term measures to assist the poorest countries. It identified three problems in particular as deserving emergency action. The most obvious and also the most important of these is the sharp increase in the current account deficits of the poor countries, caused by the increase in the price of oil and a slowdown in OECD growth. It is essential to help these countries to protect their economies from the adverse effect of this sharp change in their external environment.

Two other areas--measures to protect the absolute poor from the disastrous consequences of possible shortfalls in food output and measures to reduce the incidence of diseases--qualify for urgent action even though the problems the poor countries face here are more long-term in nature. A number of other measures, some of which were not specifically referred to in the Commission's report, are also briefly discussed. The Commission's proposals do not include any significant measures for human resource development, other than those related to health. The importance of human resource development was highlighted in the World Development Report, 1980; at the end of this section, therefore, measures related to education and nutrition in an Action Program are discussed.

Because of deep-seated causal factors, the problem of absolute poverty in the low-income countries needs to be tackled through long-term programs. The emergency measures discussed below would serve only to prevent a further worsening. To make significant improvements in the living standards of the mass of the poor will take several decades of concerted action. Moreover, it should be recognized that many of the actions will have to be undertaken by the poor countries themselves. External assistance can be effective only if there is a strong joint commitment to economic and social development, the goal is given high priority and is supported by an appropriate policy framework.

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Current Account Deficits

The increase in the price of oil, which occurred after the work of the Brandt Commission was substantially completed, is a major aggravation of the difficult financial situation now confronting most of the low-income countries. The more optimistic scenario for the 1980-85 period given in World Development Report, 1980 projects a rate of growth of only 1.7 percent per annum in the GDP per capita of the low-income oil importers--a rate nearly one percentage point lower than that in the 1970s. To achieve even this rate of growth, the average 'real' volume of foreign capital inflow into these countries will have to be about $11 billion per year, compared to about $9 billion in 1980, while in current prices the 1985 inflow will have to be more than double the 1980 level. Therefore, without a substantial increase in concessional aid and without structural adjustment in their domestic economies, the poorest countries will be condemned to very low levels of growth rates--rates at which there will be a further increase in the large number of absolute poor.

Despite the evident needs of the poorest countries for external assistance, the proportion of bilateral ODA allocated to the low-income countries fell from 47 percent in 1970 to 38 percent in 1978 (see Table 5). Moreover, recent actions--such as the substantial aid cuts announced by the British Government, the continuing difficulties encountering aid bills in the United States Congress, and the fact that most donors have not committed themselves to increase the share of GNP allocated to aid--are cause for concern.

Table 5. Distribution of DAC's Bilateral ODA
(shares in percent)

	1970	1975	1978
Poverty Belts	47	44	38
Middle-Income Countries	44	46	52
Unallocated	9	10	10
TOTAL	100	100	100

[Note: Similar breakdown of aid flows from OPEC countries are not available.]

SOURCE: World Development Report, 1980.

There is a need, therefore, for new international initiatives to ensure a larger flow of concessional assistance to the poorest countries simply to meet the higher cost of oil and to facilitate adjustment to the changed external economic situation. There are a number of approaches to this issue which merit urgent consideration by the international community:

- a sustained increase in the share of DAC countries' bilateral ODA going to low-income countries in the 1980s;

- an increased share of OPEC aid to finance the external capital needs of the low-income countries;
- an increase in the volume of flexible types of concessional assistance (e.g., program and structural adjustment types of credit); and finally
- an increase in total ODA to provide increased funding for IDA and other international soft loan funds which predominantly finance low-income countries.

Food Strategy

The priority attached by the Brandt Commission to improving food supplies in the poverty belts merits strong endorsement. Although there were only insignificant amounts of commercial food imports into the countries in 1979--the production-consumption gap of some 10 million tons was provided for mostly by food aid--the situation is likely to deteriorate sharply over the decade, unless major new efforts are made to significantly increase domestic foodgrains output.

Many of the poorest countries--in particular those in Africa--are subject to wide fluctuations in the output of food. These fluctuations are the source of much hardship; they also can cause serious ecological damage. The Sahelian drought of 1972-74 is a vivid case in point. Some of the drought-prone areas in South Asia are similarly affected; analysis undertaken by the International Crops Research Institute for the Semi-Arid Tropics (ICRISAT) shows that for the rain-fed agricultural areas in South India, year-to-year yield fluctuations can be of the order of 25 percent. In West Africa, severe droughts have followed cycles of twenty years; with creeping desertification, their overall impact is likely to increase in the future.

The Brandt Commission argues for investment in irrigation systems to alleviate serious food shortages due to recurrent droughts. The human suffering and ecological damage that are caused by drought certainly warrant investment in water control systems, but the Bank's experience suggests that large investments in major water development schemes take a long time to design and implement and are not available for all poor countries. Rather, urgent immediate action should involve: improving the ability of existing smallholders to cope with fluctuations in rainfall; improving storage and distribution facilities; and expanding food aid. 1/

Improving Health

Health is the third area for urgent action in view of the evidence that the countries in the poverty belts of Africa and Asia are not maintaining their earlier efforts in fighting disease. The number of cases of malaria

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1/ Some of these measures are elaborated in a separate Bank paper responding to the Brandt Commission's recommendation No. 11 on agriculture and food. That paper also discusses the possibilities for--and priority to be attached to--the development of the major international river basins referred to in the Commission's Report.

rose very substantially since 1972; the incidence of other major parasitic diseases has also increased. These reversals have happened partly because some countries became overconfident and allowed their control programs to decline and partly because of immunities build-up. In addition, disease control has become relatively more expensive and, consequently, needs greater assistance from the donor community than in the past. The Brandt Commission rightly considers the health sector to be a high priority for international assistance.

Control of certain vectors and their associated diseases requires international programs covering a number of countries. Multinational efforts --in research, training and control--are needed for controlling such tropical diseases as malaria, measles and whooping cough. Specific measures to restore momentum to disease-control efforts in the poorest countries are spelled out in World Development Report, 1980 and in the Health Sector Paper (February 1980). It is estimated that additional external assistance amounting to approximately $2-3 billion over the next five years would be needed to implement these measures. Even more important than finance is technical assistance to strengthen public health institutions, and a political commitment in the developing countries to accord adequate priority to programs to combat disease.

But these major disease control measures, while internationally actionable and possible to organize relatively quickly are by no means the totality of the health problem. Considerable additional effort is needed in the area of preventative health care, particularly in the rural areas, to further reduce the incidence of mortality and morbidity in the poor countries. The life expectancy in these countries is nearly a dozen years less than in the middle-income nations.

Other Priority Measures

The crucial importance of maintaining and expanding the forested areas in the poverty belt countries is correctly highlighted in the Commission's Report. For most poor families firewood is the chief source of energy, but at the same time the forests protect the watersheds and prevent soil erosion. There is general agreement that a greatly increased investment in aforestation must constitute a key element in any Action Program. This need is fully elaborated in the Bank's Forestry Sector Policy Paper (February 1978). The energy aspects are addressed in the Bank's paper Energy for the Developing Countries (July 1980), which in a companion study of Renewable Energy Sources, discusses the potential for solar energy mentioned in the Commission's Report.

It was noted above that the Commission's Report made little mention of the priority to be attached to education. However, there is a compelling body of evidence in support of accelerated investment for human resource development compiled in the Basic Needs Overview Paper 1/ and in The World Development

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1/ This has been published as part of a series of booklets on the subject of basic needs. See, Meeting Basic Needs: An Overview, September 1980, World Bank.

Report, 1980. In most of the poverty belt countries, expansion of basic education remains a high priority. In addition, female education merits greater emphasis because of its impact on family nutrition, health, and birth control.

Nutrition is another aspect of human resource development of particular importance in the poverty belt countries. Like better health, better nutrition can be viewed as an objective of economic growth, but there is also a causal link from better nutrition to increased productivity. Boosting food production (especially of food that poor people consume) and raising the incomes of the poor may be regarded as two complementary requirements, that can be reinforced by other efforts, such as targeted food subsidies, fortification of food, and nutritional education.

IV. THE BANK'S ROLE

In recent years, the Bank has been developing approaches to poverty alleviation, the broad lines of which are similar to those discussed in the report of the Brandt Commision. For the future, mindful of the important role which the Commission suggests for the World Bank and other multinational organizations in the attack on absolute poverty, the Bank will continue working to widen and deepen these activities. Essentially four approaches can be distinguished:

- First, a high proportion of IDA resources has been allocated to the poverty belt countries.
- Second, IDA lending to the poverty belt countries has been reoriented to support the sectors which are critical to poverty alleviation.
- Third, a number of special multinational programs have been developed, notably in the health sector, with the Bank in a leading role.
- Fourth, increased technical assistance has been provided in the poverty belt countries.

Resource Transfers

The broad magnitude of external resources needed for the countries in the poverty belts have been indicated above. The role the Bank Group can play in this respect is constrained by the volume of resources available to IDA. Over the last decade the proportion of IDA resources committed to the low-income countries has steadily increased, and now stands at 86 percent of the total. There is not much room left for a further increase in this proportion. Only by increases in IDA's real resources can the level of overall resource transfers to the poverty belt countries be increased.

Table 6: IDA Lending to the Poverty Belts
(US$ billion p.a.)

	Poverty Belts	Total	Share of the Countries in the Poverty Belt (%)
FY70-74	0.75	0.93	81
FY75-79	1.70	2.00	86
FY80	3.10	3.61	86 1/

1/ Much of the remaining 14 percent of IDA was lent to countries outside the poverty belts, but which nonetheless have major poverty problems for a proportion of their population.

Reorientation in Lending Priorities

In recent years IDA resources have been increasingly allocated to projects aimed at the absolute poor: smallholder agriculture and rural development; meeting basic needs in education, health, water supply, sanitation and shelter. The patterns of IDA lending therefore reflect a growing emphasis on the very priority sectors identified by the Brandt Commission. More can be done in sharpening the poverty focus of IDA lending and this is reflected in the IDA lending program planned for FY80-84.

Table 7: Areas of IDA Lending
(percent)

	FY70-74	FY75-79	FY80-84
Agriculture and Rural Development	21	31	33
Education	5	4	4
Population and Health	1	1	1
Shelter, Water Supply and Sanitation	6	8	10
Other	67	56	52
TOTAL	100	100	100

As a result of this restructuring of IDA lending, much has been achieved. The Bank Group is now by far the largest single source of funding for agriculture in the developng world, over 75 percent of which has been for raising food production. In line with the Commission's emphasis on irrigation, it is expected that the Bank's lending in this area will increase from $1.4 billion per annum in FY77-79 (1980 prices) to possibly $2 billion in FY81-85. Of this, approximately 75% would go to the countries in the poverty belt. In the area of education, lending for primary and non-formal education has increased sharply from 10 percent of total lending for the sector during FY70-74 to 31 percent for FY75-78 and is projected to reach 48 percent during the FY79-83 period. Furthermore, greater emphasis is being placed on institutional development and technical assistance projects. Lending for health began over four years ago with experimental components in projects in other sectors, and it has now been agreed that the Bank Group should begin a full program of operations in the health sector itself. Over half the water supply loans in the past four years now include funds for the water and sanitation requirements of the absolute poor. Population projects have been financed in a number of the poverty belt countries, and operations in this are expected to increase significantly in the next five years.

There have also been qualitative changes in the design of projects and the items financed to strengthen their relevance to poverty alleviation. Financing for operating costs of projects is now more readily available, and this has enabled many poor countries to undertake projects, for example in rural development or education, which previously would have been beyond their reach because of the high operating costs relative to initial investment.

Multinational Initiatives

Control of certain disease vectors requiring international programs for a number of countries has been supported by the Bank in the past, but some slackening in this effort was noted in Section III above. The Bank continues its association as fiscal agent and cosponsor, with the UNDP and WHO, in the Special Program for Research and Training in Tropical Diseases, and also continues to cosponsor with the FAO, WHO, and the UNDP, the Onchocerciasis Control Program to combat riverblindness in Western Africa. A study of design criteria for schistosomiasis control activites is under way.

The Brandt Commission identified the development of several large river basins as critical to the welfare of many of the absolute poor. The 10 major international river systems in Africa and Asia with significant potential for expansion of irrigated agriculture, flow through 38 developing countries of which 28 are in the poverty belt. They account for a quarter of the average discharge from the world's rivers, approximately 70 percent of the current irrigated area in the poverty belts and perhaps as much as 80 percent of the remaining irrigation potential in their countries. The planning and design of these systems do not present major problems. However, the practical difficulties of obtaining the political consensus and institutional capability to implement such programs are profound. But these obstacles should not be allowed to impede progress in this area. The UN Conference on International River Basin Commissions to be held in Dakar in January 1981 should provide an opportunity for a realistic assessment of viable approaches.

Technical Assistance

The Brandt Commission report calls for expanded technical assistance to overcome the absorptive capacity of the least developed countries. It noted the difficulties of making efficient use of foreign technicians in a weak administrative and managerial environment. Furthermore the high cost of technical assistance is a deterrent to its use for the poorest countries where it may be most needed. Greater recognition of these difficulties by international agencies is needed as a first step.

The Bank's technical assistance activities are expanding rapidly.

(i) Technical assistance components included in loans and credits (all sectors, all countries) rose to $534 million for 197 operations in FY80 compared with $359 million for 181 operations the previous year. If supervision, implementation and engineering services were included in the definition of technical assistance component, the total would have been $807 million for FY80.

(ii) Specific technical assistance loans or credits form part of the Bank's lending activities. Nine such loans, totalling about $43 million, were approved in the last two fiscal years. The trend in the number of such loans or credits in recent years has been upwards.

(iii) The Bank's Project Preparation Facility was established in 1975 to assist borrowers with project preparation and support project implementation agencies prior to loan approval. Advances from the PPF amounted to $20.4 million in FY80, compared with $12.6 million in the previous year.

(iv) The Bank frequently acts as Executing Agent for UNDP technical assistance projects. The number of such new UNDP projects in FY80 was 44 involving a commitment of $20 million, compared with 37 projects and $42.9 million the previous year. 1/

(v) The Bank continued to sponsor the Consultative Group on International Agriculture Research jointly with the FAO and the UNDP.

(vi) Less specific than the project-related technical assistance activities, the EDI has made a major contribution to improving the capacity of the developing countries in national economic,

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1/ A typical UNDP project costs about half a million dollars. The much larger amount in 1979 resulted from the inclusion of several very large projects (e.g., $10.9 million Yemen Arab Republic Agricultural Research and Institutional Support, $3.9 million Onchocerciasis Program and $3.1 million credit to Afghanistan Agricultural Development Bank) in the portfolio.

sectoral or project management. In FY80 340 individuals participated in 13 Washington-based courses or seminars, while 39 other courses or seminars, with about 1,000 participants were offered overseas. The general guidelines of EDI also are to offer more support for training institutions overseas, particularly in francophone Africa.

Apart from its own operations, the Bank has also worked towards the elaboration of a more general Action Program. The Bank is assisting in the preparation of the UN Conference on the Least Developed Countries. For other major poor countries outside the group of Least Developed Countries, the World Bank Consultative Groups and Consortia have provided a forum for initiating recommendations along the lines of those of the Brandt Commission. In addition, as far as Africa is concerned, at the request of the African Governors, the Bank has initiated a special study of African problems. A task force which has been appointed will draft an Action Program for Africa; it is hoped the report will be completed in time for presentation to the Development Committee at its meeting scheduled to be held in Gabon in May 1981.

V. CONCLUSION

The main intention of the Brandt Commission Report in highlighting the development problems of the poverty belt countries was to focus the attention of the international community on this issue and to mobilize political support for additional assistance to poor countries. There is a definite danger that, in their immediate preoccupation with adjustment problems, both the developing countries and the donor nations may give lower priority to the persistent problem of absolute poverty. This would be short-sighted. At the same time, it should be recognized that the need for external resources by the poor countries, both to adjust to a more unfavorable international environment and to reduce the extent of absolute poverty in their societies, has increased considerably. Unless substantial additional concessional resources are made available to complement their domestic efforts, the poor countries face extremely difficult choices in the years ahead.

A number of proposals are presently being considered by the international community to increase the flow of resources to the developing countries. Many of the concrete proposals, however, are concerned with mechanisms for recycling non-concessional resources - including intermediation by international financial institutions. So far as concessional resources are concerned, various proposals for improving the volume and distribution of this type of assistance are well documented by now. What is required at this stage is a decisive political commitment for action, rather than additional studies. The major unanswered question is how such a political commitment is to be secured.

Robert S. McNamara

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Annex

POVERTY BELT COUNTRIES

Africa	Africa	Asia
Angola	Mauritania	Afghanistan*
Benin*	Mozambique	Bangladesh*
Burundi*	Niger*	Bhutan*
Central Africa Republic*	Rwanda*	Burma
Chad*	Senegal	Cambodia
Ethiopia*	Sierra Leone	India
Guinea*	Somalia*	Indonesia
Kenya	Sudan*	Lao PDR*
Lesotho*	Tanzania*	Nepal*
Madagascar	Togo	Pakistan
Malawi*	Uganda*	Sri Lanka
Mali*	Upper Volta*	Vietnam
	Zaire	

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* Countries marked with an asterisk are included in the current UN List of the Least Developed Countries.

NOTE: This list comprises the low income countries as defined in the World Development Report, 1980 except for Haiti which is outside the Regions concerned; it also excludes countries with less than one million population.