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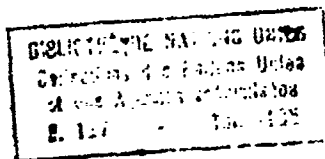
LETTER DATED 24 DECEMBER 1991 FROM THE SECRETARY-GENERAL
ADDRESSED TO THE PRESIDENT OF THE SECURITY COUNCIL

In my letter of 31 July 1991 (S/22863), I informed you that the team of experts which I had appointed under the terms of paragraph 7 of Security Council resolution 598 (1987) would return to the Islamic Republic of Iran to complete its study of that country's reconstruction efforts in the wake of the conflict between the Islamic Republic of Iran and Iraq.

The team, which was led by Mr. Abdulrahim A. Farah, former Under-Secretary-General, visited the Islamic Republic of Iran from 7 November to 1 December 1991 and has prepared a second and final report containing its findings.

A copy of the report is submitted for the information of members of the Security Council.

(Signed) Javier PEREZ de CUELLAR



Annex

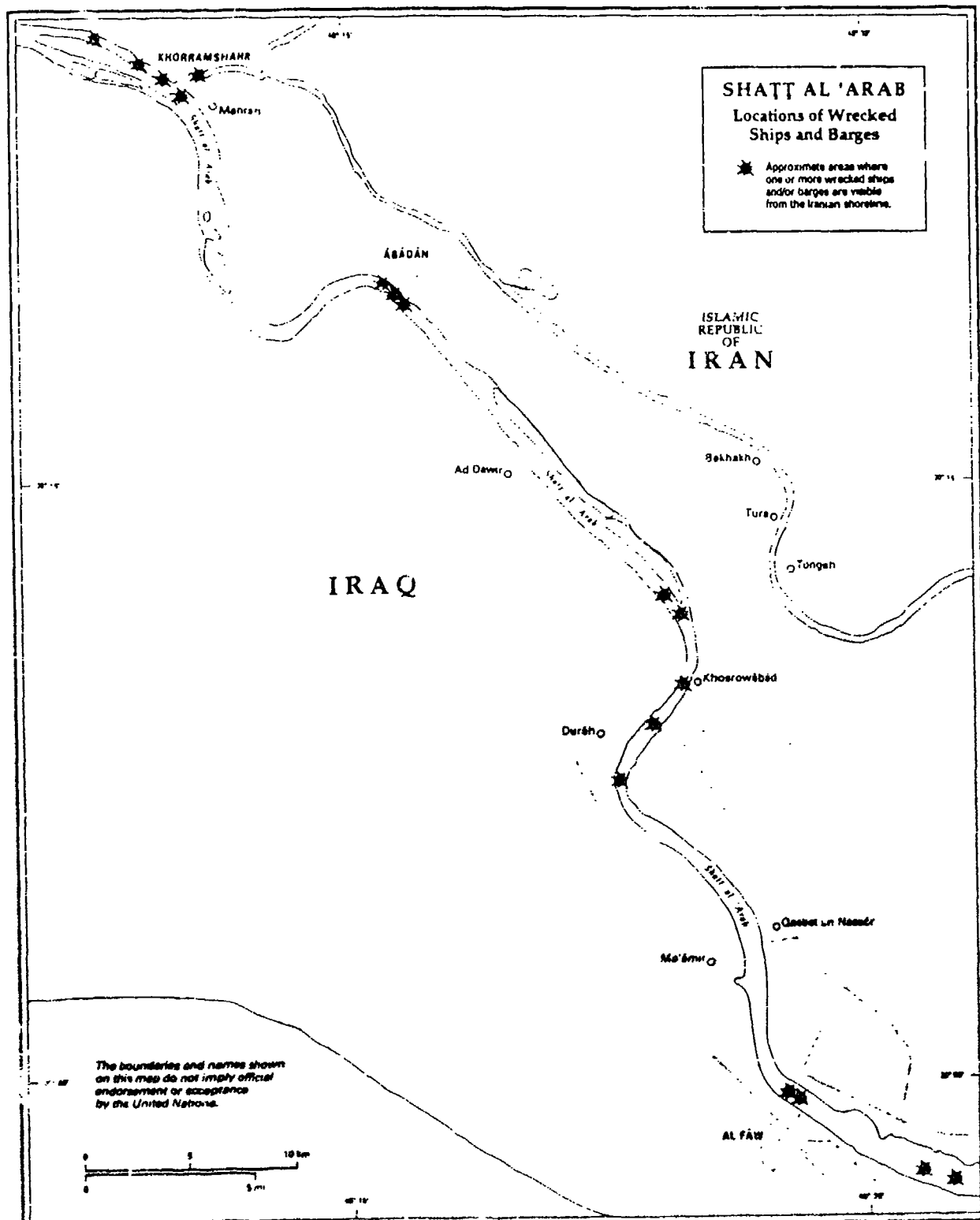
SECOND AND FINAL REPORT OF THE UNITED NATIONS TEAM OF EXPERTS
APPOINTED BY THE SECRETARY-GENERAL PURSUANT TO SECURITY
COUNCIL RESOLUTION 598 (1987), PARAGRAPH 7, PREPARED FOLLOWING
A FURTHER VISIT BY THE TEAM TO THE ISLAMIC REPUBLIC OF IRAN TO
COMPLETE ITS STUDY OF THE COUNTRY'S RECONSTRUCTION EFFORTS AND
NEEDS IN THE WAKE OF THE CONFLICT BETWEEN THE ISLAMIC REPUBLIC
OF IRAN AND IRAQ

7 NOVEMBER-1 DECEMBER 1991

The boundaries and names shown on this map do not imply official endorsement or acceptance by the United Nations.



Map 2



EXECUTIVE SUMMARY

The Security Council in paragraph 7 of resolution 598 (1987) recognized the magnitude of the damage inflicted during the conflict between the Islamic Republic of Iran and Iraq and the need for reconstruction efforts, with appropriate international assistance, and requested the Secretary-General to assign a team of experts to study the question of reconstruction and report to the Security Council.

Accordingly, a team of experts was sent to the Islamic Republic of Iran in May/June 1991 on an exploratory mission to obtain initial information on the nature and extent of war damage suffered by the country's infrastructure. The team's first report was issued under cover of Security Council document S/22863. A second and final visit was made by the team of experts in November 1991. Its findings are the subject of the present report.

Government assessment of direct and indirect damage

In order to permit the international community to understand more fully the magnitudes involved, the costs and expenditures which had been expressed in Iranian rials have been converted into United States dollars, using the United Nations assessment rate. On this basis the Government's assessment of non-military war damage, computed at 1988 replacement costs, would be equivalent to \$97,200 million.

The report does not discuss the question of indirect losses, which the Government had assessed at RIs 34,535,360 million, because of the difficulty of defining their nature and extent.

Other immeasurable social consequences

In addition to the physical damage to infrastructure and the productive apparatus, the country suffered immeasurable systemic damage to the environment and to social institutions and conditions. Significant human casualties in both dead and permanently disabled were recorded, a large number of the population was displaced and normal education and health delivery services were disrupted with adverse long-term implications.

The macroeconomic environment

During the period of conflict, the focus of the Government was on policies and measures to meet its war mobilization needs. This was achieved to a great extent by diverting resources from otherwise productive uses. Since the cease-fire, the Government has shifted to restoring a peacetime economy. This has involved phasing out the broad system of controls on most economic activities necessitated by the war effort; the privatization of state-owned companies and the contracting-out of certain services hitherto provided from within government; and the establishment of a market-oriented

economy. The Government expects that the new economic policy framework will provide incentives for private sector development and for private investment in efficient productive activities, thereby ensuring an increasingly important role for that sector in reconstruction.

Reconstruction of the oil industry

The economy of the Islamic Republic of Iran is very heavily dependent upon the production and export of oil for the generation both of domestic employment and income, as well as government revenue, and of the foreign exchange needed to pay for imported goods. The oil industry was severely damaged during the conflict but because of its vital role, immediate (if temporary) repairs were made to keep the oil flowing. Such repairs were often undertaken several times because of repeated attacks. The authorities estimate that 90 per cent of the war-related repair work, owing to its makeshift nature, will have to be redone. In order to restore the industry to world competitive standards, large-scale future reconstruction investment will be necessary.

Sectoral analysis

Throughout the conflict, the industrial sector suffered heavily from attack and from the shortage of critical spare parts. The sector is now operating at close to pre-war capacity through mainly makeshift repairs despite technological obsolescence. Agriculture in the five war-affected provinces experienced considerable soil degradation in areas where ground fighting had been intense and prolonged. The situation has been compounded by widespread salination caused by the destruction of soil embankments, and irrigation and drainage systems. Investment in land-levelling and replacement equipment are needed. The transport sector requires a substantial investment to replace destroyed equipment such as rolling stock and land vehicles, the reconstruction of roads which were temporarily resurfaced and the strengthening of bridges where repair work had been improvised. The ports of Abadan and Khorramshahr were virtually destroyed. Full restoration of these two ports depends essentially on the reopening of the Shatt al-Arab (see below). Damaged or destroyed installations in the telecommunications sector, particularly in the border areas, have now been rehabilitated. Similarly, the energy and electric power sector whose installations experienced considerable damage in the border area, is now operating close to normal levels. However, the system is somewhat outdated and needs extensive technological upgrading.

The housing and human settlements sector, which suffered far-reaching direct and collateral damage, requires considerable investment to meet the needs of the displaced and homeless population (see also below under resettlement). The education sector was subject to prolonged severe disruption and its schools and other buildings sustained severe damage, especially in the war-affected provinces. This situation has slowed considerably the flow of trained and professional personnel, and has contributed to the present acute shortage of skilled labor. In the health sector basic facilities and services in the war zone were heavily damaged. At

the national level, many important urban and rural centres are facing an acute shortage of health facilities caused by the influx of displaced families and by a marked increase in population growth. The disruption in the flow of medical technicians has led to a curtailment in the delivery of normal health services. The cultural heritage sector did not escape damage to many of its world-renowned sites, monuments and museums. A substantial number received severe and, in some cases, irreparable damage. To date only a small fraction of the needed reconstruction work has been accomplished.

Principal characteristics of reconstruction efforts

The report notes that total reconstruction expenditure, from the beginning of hostilities through 1991, is estimated by the Iranian authorities at about \$13,000 million. This does not take into account the extensive running-down of stocks and the "cannibalization" of equipment to keep other installations functioning. Moreover, reconstruction costs do not cover losses incurred by the private sector, which has yet to receive some form of compensation. The mission observed that preliminary government forecasts of future expenditure in the achievement of reconstruction targets contain differences among the sectors as to the definition of reconstruction, the time periods covered, and variations in the demand for sectoral services. Owing to the mission's time constraint, the report has not attempted to analyse these data. They will need to be further refined by the Iranian authorities in the future.

Resettlement efforts

The Government has assigned the highest priority to the reconstruction of damaged or destroyed rural and urban settlements in the war-affected provinces, and the return and resettlement of the displaced population. Large numbers of housing units need to be constructed, basic infrastructural facilities established, and employment opportunities created. About 250,000 of the 1.2 million displaced population have returned to their places of origin, and some 2 million square metres of residential, commercial and administrative housing have been rebuilt.

Clearance of Shatt al-Arab

The clearance of the Shatt al-Arab is of utmost importance to permit the reconstruction and functioning of the cities and ports of Abadan and Khorramshahr. Once the political agreement of all parties has been secured, immediate attention should be given to the clearance of this important waterway. On the basis of its discussions, the mission believes that marine clearance operations will require international assistance since the Islamic Republic of Iran possesses neither the resources nor the technical expertise to undertake the work on its own. It is the mission's view that the magnitude and complexity of the task will first require a series of surveys to locate the wrecks, identify the nature of the cargo and determine the best means of clearance. The fact that many of the wrecks are heavily silted and may contain cargo of a hazardous nature increases the need for the utmost care in their removal.

Present economic performance

The recent performance of the Iranian economy has been highly satisfactory. However, the ability of the economy to sustain its current high rate of expansion is still doubtful in many sectors, owing to the damage sustained in the conflict and the inability during the war to channel resources to reinvestment. Output growth has depended upon short term measures, including the "cannibalization" of idled facilities and the drawing down of stocks of spare parts. Unless more permanent improvements to productive capability are quickly undertaken, the mission fears that not only will output fall, but serious damage could be done to the basic core of equipment.

Possible future action

The report notes that the quantity and technical quality of the reconstruction effort is impressive, particularly since it has been almost completely undertaken through the domestic mobilization of resources. The amount of reconstruction so far completed is a relatively small fraction of what needs to be done. The country's capital stock is depleted in many sectors, and it is technologically outdated following years of stagnation caused by the conflict. Since the war ended, the Government has had time to take stock of the damage inflicted on its economic and social sectors. Although it has undertaken an impressive programme of reconstruction, it finds that the losses suffered had reduced its capacity to mobilize domestic resources in sufficient quantity and within a reasonable time-frame to meet the remaining costs of reconstruction.

In these circumstances, the Government has expressed its interest in international assistance in the form of access to external sources for the renewal and replenishment of capital stock; to export markets; to international capital markets and investment, and to access to recent technological advances (including technical assistance).

The Security Council, in its resolution 598 (1987), recognized the scope of the reconstruction process and the possibility of participation by the international community. Having made a survey of war damage in the Islamic Republic of Iran, the Government's reconstruction efforts and its priorities, as well as the considerable amount of reconstruction work that still needs to be undertaken, the mission believes that an appropriate mechanism will need to be devised to provide international participation in the reconstruction programme. To this end, the mission recommends the convening of a round table, at which representatives of the Islamic Republic of Iran and States Members of the United Nations and its relevant agencies and organizations could meet to discuss ways and means of entering into effective cooperation in support of the reconstruction efforts of the Islamic Republic of Iran.

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INTRODUCTION

A. Terms of reference

1. A team of experts was sent to the Islamic Republic of Iran in May/June 1991 on an exploratory mission to obtain initial information on the nature and extent of war damage suffered by the country's infrastructure. The team's first report was issued as Security Council document S/22863, annex.

2. The second visit of the team of experts to the Islamic Republic of Iran (in pursuance of para. 7 of Security Council resolution 598 (1987)) took place from 7 November to 1 December 1991. The team's work was guided by the terms of reference established for the first visit and, in addition, focused on the following tasks:

(a) To complete, where possible, the verification of damage to the country's infrastructure, including the social sectors;

(b) To review economic, social and environmental issues relating to reconstruction and which cannot be dissociated from physical development;

(c) To ascertain reconstruction needs and priorities, and identify sectors covered and type of international assistance required;

(d) To obtain, where possible, a breakdown within each sector of the amount spent so far by the Iranian authorities on reconstruction activities, and on the remaining construction work that needs to be undertaken on restoring damaged sites and installations;

(e) To present a macroeconomic view of the economy to enable an objective assessment of the impact of the reconstruction programme on the national budget; to facilitate the identification of areas where the cooperation of the international community could be effective.

B. Official meetings

3. The mission arrived in Tehran on 7 November and began its work the same day. On the following day the team held meetings with the Vice-President for Reconstruction and Head of the Plan and Budget Organization to discuss its programme of work and to receive additional information on the Government's reconstruction efforts.

4. During the mission's stay in Tehran, a series of meetings was held at key implementing Ministries to ascertain the priorities of their reconstruction efforts. These included meetings with Ministers or Deputy Ministers of the following Ministries: Economic Affairs and Finance; Industries (Light); Foreign Affairs; Agriculture; Telecommunications; Transport; Oil and Petroleum; Heavy Industries; Power and Energy; Education; Health; and the Interior. In addition, meetings were also held with the Governor of the

Central Bank and senior officials at the Iranian Chamber of Commerce, Industries and Mines, the Environmental Protection Organization, National Iranian Oil Company (NIOC), Ports and Shipping Organization, the Foundation for Displaced People, the Foundation for the Disabled, the Housing Foundation and the Institute for Research in Planning and Development.

5. The mission has made a record of all documentation received from Iranian authorities containing background information pertaining to damages and losses sustained as a direct result of the war, as well as data relating to national reconstruction. A detailed list of the documentation submitted to the mission is contained in appendix C.

6. As a means of supplementing the information obtained during the official meetings, arrangements were made for team members to visit sites in the war-affected provinces to obtain additional data on sustained damage and reconstruction efforts.

7. The team held official meetings with government representatives at the national, provincial and local levels. A list of officials met by the team leader and the experts is contained in appendix B.

C. Procedural matters

8. In carrying out its task, the team was provided by the Government with information on its assessment of direct and indirect losses caused by the conflict.

9. The mission obtained all its data and background information on damage and reconstruction from government sources, in the form of documentation handed over by government officials, and information provided verbally either at official meetings or by technical staff who accompanied mission members during on-site visits. The Iranian authorities had, on their part, conducted a thorough accounting of war losses and reconstruction costs, and supplied supporting detail to the mission for all statements made with regard to actual financial expenditure. The Government responded fully to requests made by the mission for additional information and clarification.

10. Because of existing differences between official and non-official exchange rates, the first report of the mission (S/22863, annex) expressed all damage and reconstruction costs in Iranian rials. Since the absence of a comparable international exchange rate made it difficult for the reader to assess the magnitude of losses of reconstruction cost involved, consultations were held with Iranian authorities and the team to identify an appropriate rate. In the present report, costs are expressed in both rials and United

States dollars. The exchange rate used, in agreement with the Central Bank, is that accepted by the United Nations for purposes of calculating the Islamic Republic of Iran's membership payments to United Nations bodies. This rate is based on an average of a number of exchange rates calculated by the Central Bank under different statistical concepts. For 1988 the rate would be Rls 237 per United States dollar, while the rate for 1990 would be Rls 300.

11. To achieve a uniform approach in all sectors with regard to the question of reconstruction, the mission endeavoured:

(a) To collect, on a sectoral basis, all information and data pertaining to major war-related damage and to the reconstruction programme;

(b) To carry out on-site inspections of damaged and reconstructed sites and installations;

(c) To describe all visible damage in qualitative rather than quantitative terms, for example, light, moderate, severe and heavy;

(d) To compare the reconstruction work of a particular site with photographs taken at the time the damage occurred or before the work began.

I. GOVERNMENT ASSESSMENT OF WAR-RELATED DAMAGE

A. Overview

12. As stated in the first report, almost 20,000 square kilometres of Iranian territory came under occupation soon after the outbreak of war in 1980. Out of a total of 24 provinces, 5 became active theatres of war (Khuzestan, Ilam, Bakhtaran, Kordistan and West Azarbayjan) while 11 others were repeated targets of attack by aircraft and missiles. (See map 1 above.)

13. In evaluating the economic damage, the Government considered two main categories:

(a) Direct damage consisting of damage to physical infrastructure and to capital stock as the result of direct attack. Such damage was estimated by the Government to amount approximately to Rls 30,811,424 million.

(b) Indirect damage estimated by the Government at Rls 34,535,360 million. This includes facilities and capacities that could have been utilized had there been no war. It also includes resources allocated for defence purposes that would otherwise have been utilized by the economic sectors.

14. A sectoral breakdown with regard to direct and indirect damages is contained in tables 2 a. 3 of the first report.

B. Assessment of direct damages

15. Following up on the first preliminary estimate of the war-related damages which was presented to the first mission, the Government submitted to the present mission the document entitled Final Report on the Assessment of the Economic Damages of the War Imposed by Iraq on The Islamic Republic of Iran (1980-1988). This document provided details additional to the information previously submitted.

16. The mission believes that, in order to better understand the needs for reconstruction, attention should be focused on the estimates of direct damage in the non-military sectors. For this purpose, therefore, in analysing the total value of the damages, it has excluded armed forces machinery and equipment and materials and goods.

17. The additional information contained in the Government's report provides a breakdown of the value of the damages into two components. The first is the value in rials of domestically supplied materials or equipment while the second is the cost in dollars of imported items. The authorities informed the mission that all such values have been estimated at replacement costs in 1988 prices.

18. In order to present a measure of the damages in internationally comparable terms, the mission has converted to dollars that part of the estimate originally denominated in rials, adding that figure to the part originally estimated in dollars. As explained in the introduction the appropriate rate for 1988 would be Rls 237 per dollar.*

19. The estimate of the value of the non-military damages which are of domestic origin amounts to Rls 12,994,040 million. Converted at Rls 237 to the dollar, the equivalent value is \$54,827 million. The estimate of the value of war-damaged items which have been imported, provided in the above-cited report, is \$42,421 million. The total of the non-military damages is therefore valued at the equivalent of \$97,248 million.

20. Conversely, if the data for war damages of imported items is converted to rials at the same rate of Rls 237 to the dollar, the rial value of this component is equivalent to 10,053,777 million. The total of non-military damages is therefore estimated at Rls 23,047,817 million. For comparative purposes, this total is virtually equivalent to the estimate of gross domestic product (GDP) for 1988, Rls 23,048,200 million.

* It should be noted that a trade-weighted conversion rate estimated by the World Bank for 1988 is 178 rials per dollar. The Central Bank rate, calculated in consultation with the United Nations Statistical Office, is an average of a number of rates estimated under different statistical concepts.

21. As indicated in the report of the first mission, these data do not include any estimate for the value of housing or commercial buildings either completely destroyed or partially damaged, given the large number of individual units involved and the disparate conditions under which they were originally built. In the summary of the sectoral reports presented later in this document, estimates are provided of the costs of the replacement houses and buildings which are being constructed under the Government's resettlement programme.

22. The detailed data provided in the tables of the Government's report indicate that no estimates have been made of port damage nor of the losses in shipping and in civilian aircraft which were suffered during the conflict. The Government also informed the mission that additional data on losses sustained by municipal authorities and by private sector manufacturing establishments had been received after the report had been issued.

C. Indirect damages

23. The Government has also provided data on indirect damages, defined as service and productive capacities that would have been exploited if the war had not taken place. This type of damage also includes resources diverted for national defence during the conflict period which otherwise would have been utilized to create extra capacities within the economic sectors (see S/22863, para. 51 (b)).

24. It is apparent that the war as well as the war effort has seriously distorted the pattern of economic activity. It adversely affected the allocation and generation of resources which did not permit even normal capital stock replacement. That distortion in resource use continues to act as a constraint on achieving growth necessitated by the need to overcome the years of neglect. It was also evident that, given the intersectoral and inter-industrial relationship, physical damage suffered by certain key sectors had a wide-ranging negative impact on others.

25. The mission recognized that a large number of possible interpretations could be put on the extent of the indirect damage and that it would be very difficult to reconcile these interpretations during the brief time available to the mission. It was therefore decided to limit the discussion in the report to direct damage and to associated costs of reconstruction and to take note only of the assessment of indirect damage as reported by the Government. These have been given as Rls 34,542,326 million.

II. MACROECONOMIC BACKGROUND

A. Period of the conflict

26. The outbreak of the conflict in September 1980 occurred as the new Government was taking initial steps to assume control of governmental functions and to restore normal economic activities in the wake of the revolution.

27. Oil production and exports play a fundamental role in the performance of the economy of the Islamic Republic of Iran. Not only does the oil sector generate both directly and indirectly substantial employment opportunities but it is virtually the only source of foreign exchange and for many years provided as much as two thirds of government revenue.

28. In international markets, after the second round of oil price increases in 1979, both the decline in world oil consumption and the coming on stream of non-OPEC oil sources led to pressure on prices which began to decline in the course of 1981, from some \$36 per barrel in early 1981 to an average of \$31 in 1982 and \$28 in both 1983 and 1984, but still well above the relatively favourable early 1979 levels. In an effort to stabilize the markets, OPEC member States during the latter period were asked to curtail output and exports.

29. The Islamic Republic of Iran's exports of crude oil in 1980 were below the level of 1 million barrels per day, the lowest since the early 1960s and were well below its OPEC share. This was in part due to the Government's policy of limiting oil exports to the amounts needed to satisfy the country's basic foreign exchange requirements and in part due to the changes in the Islamic Republic of Iran's oil marketing arrangements after the revolution as OECD countries and Japan shifted to alternative sources of supplies. Export levels were seriously affected in late 1980, and especially through 1981, by severe damage to pumping stations and the Kharg Island facilities which were bombed early in the war. This resulted in a level of exports in the latter year which also fell below 1 million barrels per day. But, in 1982 and 1983, exports exceeded 2 million barrels per day as NIOC repaired war damages to its facilities and new markets were developed. War damage constraints, however, once again became more serious in subsequent years, reducing export levels.

30. The low levels of exports in 1980 and 1981 were therefore reflected in the declines in GDP in those years but the recovery of exports and continued relatively favourable oil prices through 1984 led to strong overall economic growth during the period. By 1984, GDP was some 40 per cent above the 1980 level.

31. The substantial expansion in government revenues after 1980, largely from the oil sector, permitted growth of public expenditures, although only a moderate rise was recorded for real capital formation. The sectoral data available to the mission indicate that the relatively small amount of expenditure on reconstruction which was necessary through 1984 was met from

budget allocations for capital expenditure, from the drawing down of stocks of spare parts (particularly, for example, in the oil sector which at the time had suffered the severest damage) and from internal resources available to the enterprises concerned, particularly those which generate revenues.

32. During the course of 1984, heavy damage was sustained by Iran's oil port facilities and tankers throughout the Persian Gulf. Shipping was thereby discouraged from entering the area, resulting in a substantial fall in the volume of exports in subsequent years. At the same time, oil prices sharply declined, from the \$28 barrel levels of 1983 and 1984 to \$10 in 1986. The combination of the two events had disastrous effects on the Iranian economy. Foreign exchange earnings from oil and gas exports, which had exceeded \$21,000 million in 1983, dropped to \$17,000 million in 1984, to \$14,000 million in 1985 and to \$6,000 million in 1986.

33. Although GDP rose slightly in 1985, it declined in each of the subsequent years and by 1988 was 10 per cent below the 1984 level. The impact on government revenues was more severe, a reduction in income from oil and gas in 1986 to less than 25 per cent of the 1982 and 1983 levels. To prevent any further growth in the public sector deficit (and to attempt to limit inflationary pressures), non-oil taxes were increased. But the deteriorating budgetary situation did not permit increases in allocation for capital formation, one of the principal sources of finance for repairing war damaged facilities. In order to free resources for the latter purpose, expenditures on several new projects were, in fact, suspended.

34. However, a number of ongoing projects considered vital to the war effort continued to be implemented. Examples include the ports at Bandar Khomeyni and Bandar Abbas, cited above, which underwent substantial expansion. Given the complete destruction of Khorramshahr, previously the most important port facility, it was essential to proceed with those projects to ensure the functioning of the Iranian economy. (See the discussions in section II.)

35. Other sector reports indicate that strenuous efforts were made to maintain the operational levels of key infrastructural facilities throughout the conflict period. Given budgetary limitations and the difficulties in getting components, some damaged installations were "cannibalized" to keep other units functioning (e.g., power, refinery operations, roads), the financial flows of revenue-producing installations were used to finance some of the ongoing work, and spare parts inventories continued to be drawn down.

36. The loss of foreign exchange earnings also had a significant impact on productive activities as steps were taken to control imports and various measures were taken to control domestic demand and activities. Imports of raw materials and intermediate goods for industry and mining were sharply reduced and priority was given to the production of goods, particularly spare parts and components, needed for the war. Manufacturing activity, which had experienced moderate growth in the 1981-1984 period, declined sharply and by 1988 was some 20 per cent below the 1984 level.

B. Period from the cease-fire to the present

37. With the cessation of hostilities in 1988, the Government rapidly moved to shift from a wartime economy to reconstruction. The task was monumental, given the enormity of the damages which had been sustained. Foremost among the problems were the immeasurable burden arising from the displacement of 2 million people, the casualties from the war, and the urgent need to make up for some eight years of domestic resource allocation essentially oriented towards the war effort and which had entailed the suspension or reduction of many normal economic activities.

38. Immediately after the cease-fire, the Government elaborated its first five-year development plan (1989-1993). The plan was presented to the Majlis (parliament) in early 1989 and adopted on 31 January 1990.

39. The principal concern of the plan is the reconstruction of an economy and, as such, it does not specifically deal with reconstruction of damaged facilities except in so far as those are needed to meet overall objectives. The emphasis in the short run is to take those immediate steps required to restore productive activities in the quickest possible time, so as to establish a flow of goods and services which would permit the generation of resources necessary to lay the basis for sustained economic growth. Moreover, it addresses many of the key socio-economic concerns not directly resulting from the war but rather the consequences of an eight-year time lapse when the principal priority was the conduct of the war. These are spelled out below in section V of the present report.

40. To implement its development plan, the Government announced a series of major macroeconomic policy reforms, the details of which continue to be elaborated. The essential aim is to restore the balance of the economy, moving away from the high degree of state intervention which characterized the war period towards the establishment of an economy relying mainly on market mechanisms.

41. Greater reliance would be put on the private sector and private entrepreneurship. This would include the privatization of many economic activities now undertaken by the Government. Moreover, the authorities indicated that they would be guided once more by the principles established in the Law for the Attraction and Protection of Foreign Investment enacted in 1955 which provides for non-discriminatory treatment of foreign investment.

42. Measures have already been taken to liberalize the financial system, to improve and reform the tax revenue system, to reduce gradually price and distribution controls, to lower the level of protection from tariff and non-tariff barriers, and to move gradually to a unified exchange rate.

43. The Government has assigned highest priority to the voluntary resettlement of the mass of population which has been displaced from the war-devastated areas. This will involve providing adequate housing, basic infrastructural services, employment and income-generating opportunities. The

details of these programmes are contained in the sectoral chapters issued as an addendum to the present report and are summarized in section VI.

44. Economic performance since the end of the hostilities has been highly encouraging. In 1989 GDP grew by some 3 per cent, but rose rapidly by more than 10 per cent in 1990, in spite of a severe earthquake in two northwestern provinces in June 1990 which caused heavy loss of life and considerable damage. The preliminary estimates for 1991 are for continued high growth rates. A major factor has been the strong recovery in the value of oil exports which recovered to \$12,000 million in 1989 and rose to more than \$17,000 million in 1990. Further improvement in these exports has occurred in 1991 with the current volume exceeding 2 million barrels per day. At the present time, it appears that oil production has reached over 3 million barrels per day, the highest output since 1979. Although there has been some recent instability in oil prices, current levels are 30-40 per cent above the lows recorded in 1985-1986.

45. In other sectors of the economy, the recent changes in the government policy facilitated rapid adjustments towards a peacetime economy. Manufacturing activity increased by 17 per cent in 1990 and the Government reports that the level of capacity utilization in the sector in 1991 reached 80 per cent. The lifting of import controls has improved access to raw materials and intermediate products while the removal of price and distribution controls has encouraged producers to raise output. In general the policy reforms and the improved earnings from oil exports resulted in a substantial increase in imports in 1990 which appears to be continuing in 1991. Recovery of the agricultural sector from war damage has been impeded by the 1990 earthquake and a long period of drought.

46. A significant feature of the economic performance of the Islamic Republic of Iran through this period has been its policy to reduce sharply the level of its foreign debt through timely repayment. The Government has indicated that it has virtually no medium- or long-term foreign debt at the present time. This situation should substantially enhance its creditworthiness in international capital markets.

47. Higher revenue for the Government from oil exports, as well as from tax reform measures adopted earlier, has permitted an expansion in development expenditures and a reduction in the overall budgetary deficit. An additional consequence of these developments has been the decrease in inflationary pressures.

48. Nevertheless, the difficulties in sustaining this productive performance is recognized at many levels since it has depended in many instances on short-term measures to raise output which need to be followed very quickly by more permanent improvements in productive capability. For example, the National Iranian Oil Company (NIOC) reports that 90 per cent of the repairs that it has made to war-damaged facilities will have to be redone in order to avoid serious losses in the future. In addition, the high level of oil extraction at the present time is being achieved by operating wells where war

damage has affected the ability to re-inject associated gases into the oil reservoirs, thus requiring considerable flaring of those gases. It will be necessary to invest in compressing and associated equipment to correct this situation.

49. Similarly, repairs to many of the major roads need to be redone, including a number of war-damaged bridges which require more permanent reconstruction to withstand the loads they are now carrying. Moreover, the entire rail system needs overhaul, in particular, upgrading of rolling stock which had been damaged during the war and which had been repaired using locally produced components.

50. In the case of electric power generation, officials estimate that about one fourth of the repair to damaged facilities will have to be redone in order to ensure safe and proper functioning. In this sector and a number of others, the drawing down of stocks of spare parts at plant sites in order to effect repairs has made the system vulnerable to breakdowns.

III. THE RECONSTRUCTION EFFORT

A. Reconstruction during the conflict

51. The main focus of the domestic mobilization efforts during the period of the hostilities was to provide for strategic and policy requirements of the war. Following the recapture of Khorramshahr in June 1982, the Government authorized the commencement of reconstruction activities in the war-damaged areas in furtherance of that objective.

52. At the national level, reconstruction plans and programmes were limited to short scopes and periods, to enable the damaged facilities to resume their services or production as quickly as possible. Resources available for reconstruction were allocated for projects with immediate feedback, for militarily strategic projects, and for the implementation of urgently needed projects responding to the social and political pressures resulting from the war. In some sectors (e.g. roads and bridges), it was not possible to undertake normal maintenance and repair activities, nor to embark on normal replacement programmes, owing to the limited resources.

B. Post-war reconstruction objectives and organization

53. The Iranian Government elaborated its first five-year development plan in 1989, to provide appropriate orientation for the shift from a war economy to a peacetime economy (see section II). The basic objectives include reconstructing and renovating productive and infrastructural capacities, as well as population centres damaged during the war, achieving economic growth with the aim of increasing per capita production and productive employment, and providing minimum basic needs of the population. In this context, the reconstruction of war-damaged areas was stated to be an integral part of the plan and the specific activities devoted to the various elements making up

reconstruction are defined within the framework of the priorities envisaged in the plan.

54. Within the above-stated objectives the Government has set out the following priorities for action:

(a) Reconstruction of residential, educational, health and commercial units in cities, towns and villages located in the war-damaged areas;

(b) Provision of infrastructure, such as water, electricity and sanitation in war-damaged residential areas, with a view to accelerating the resettlement process and in preparation for the future development of the areas;

(c) Revitalization of the economy through the regeneration of productive employment, particularly through the rehabilitation of agricultural land, and the reconstruction and rehabilitation of industries within war-damaged areas;

(d) Repair and reconstruction of existing communication networks, including roads, bridges and telecommunications;

(e) Repair of damaged historical and cultural sites and monuments.

55. In order to provide top-level supervision over the reconstruction and renovation processes and the return of the displaced, the Supreme Council for the Reconstruction and Renovation of the War-Damaged Areas was created, under the direction of a Vice-President of the Republic. A detailed description of the organization and operation of the Council, its relationships with provincial and local governments and with government ministries, is contained in the first report (S/22863, paras. 64-68). A review of the progress achieved in the resettlement programmes is provided in the summary of the sectoral report on housing and human settlements contained in section VI of the present report; the full sectoral report is contained in the addendum.

C. Role of the private sector

56. The exigencies of the war led to governmental intervention in all sectors of the economy and in the social sectors. Following the cease-fire, the authorities began to seek a more balanced structure by reducing most controls over the economy in order to improve the allocation of resources, reducing public sector involvement and, in general, providing more scope for private sector activity. A major element in this shift has been the privatization of a large number of government enterprises. The macroeconomic policy framework, first outlined in the plan, is designed to provide an appropriate incentive structure for the private sector to establish efficient import-substituting industries and profitable export activities, thereby ensuring an increasing role for that sector in the process of reconstruction.

57. The Government is actively promoting the re-emergence and functioning of private sector organizations, such as the Chambers of Commerce and Industry. These groups can play an important role in dissemination of information on a broad range of topics of interest to the private sector, including technology, government assistance to the private sector and investment promotion. At the same time, the chambers, which are organized on the national, provincial and municipal levels, can serve as channels for private sector views on key elements of government policies. As noted earlier, the authorities have reaffirmed their intention to implement the law on foreign investment originally enacted in 1955, which provides non-discriminatory treatment for such investment.

58. The Government's holding company for small- and medium-sized industries (the National Iranian Industries Organization (NIIO)) has begun the process of privatization by selling shares in some 300 of the enterprises it controls. This is being done through the rejuvenated Tehran Stock Exchange. Trading in these shares accounts for about half of the current level of transactions in that market, which has grown from about Rls 2,000 million in the year immediately following the cease-fire to over Rls 160,000 million in the first six months of 1991.

59. In the areas where hostilities took place, assistance is being provided to small- and medium-sized industries damaged during the war to assist in their reconstruction. Funds have been allocated to the Ministry of Industries to permit it to make grants for rebuilding. These enterprises are also being assisted in arranging financing plans with local financial institutions.

60. The Government is also playing an important role in the development of private construction companies in the war-damaged areas. Grants are being given directly to the owners of damaged houses, who are then responsible for rebuilding. This has led to the creation of many small construction firms in the region which are being contracted for the actual work.

D. Other developments relating to the conflict

61. The reconstruction programme has had to deal with several major socio-economic factors arising from the eight-year duration of hostilities. One of the most striking is the substantial growth in population which exceeded 3 per cent per annum during that period, resulting in a total population size some 50 per cent higher in 1988 than in 1980. The high birth rate has resulted in a demographic profile in which some 45 per cent of the present population is under the age of 14. The provision of social services and educational opportunities for this age group clearly presents major challenges to the authorities in their allocation of resources as they simultaneously cope with the problems of overcoming the damages inflicted in those sectors.

62. The priorities of the war effort made it extremely difficult for the productive sectors to incorporate technological change. This was compounded

by the international political developments associated with the war which limited the country's access to those changes. As a consequence, the Islamic Republic of Iran's basic productive structure and infrastructural framework are by and large technologically obsolete, with a capital stock that is now at least 12 years old, much in fact being considerably older. In these circumstances, the objective of reactivating production or restoring services as quickly as possible may conflict with the need to initiate technological upgrading.

63. Careful assessments will have to be made of proposed repairs or replacements of damaged equipment or system components to ensure that such expenditures do not lock in the existing obsolescence. One example which the mission encountered is the case of telecommunications, where it has been necessary to rebuild completely the network in the war-damaged areas. Some of the replacement has been undertaken with outdated equipment produced by local suppliers, thus saving on foreign exchange. However, the balance of the equipment needed has been imported and this represents more up-to-date technology.

E. Summary of actual reconstruction expenditure

64. Because of the imperative need to keep oil flowing, both for hard-currency exports and to serve the needs of the domestic economy during the conflict, the Government attached the highest priority to repair and reconstruction work in this sector. Maintaining the output of industry - particularly heavy industry to support the war effort - was also a high priority for the Government. The task of rebuilding the fabric of human settlements and of transport were further priority matters for the Government. These priorities are reflected in the actual expenditures made by government ministries for reconstruction over the period from the outset of the conflict to the present. As shown in the summary table below (the data for which were provided to the mission by the Government) these expenditures have to date totalled the equivalent of \$17,343 million; all these costs have been met by the Government from domestic resources. Assuming that private sector reconstruction expenditure has been equal to at least one tenth of expenditure incurred by the public sector, an estimate of the total reconstruction expenditure covering both public and private sectors would be about \$19,000 million.

65. The expenditures shown in this table are almost certainly a significant understatement of the actual cost of reconstruction carried out to date, because they exclude - inter alia - the extensive "cannibalization" of existing plants and equipment and the running down of stocks of spares, which helped in large measure to keep the wheels of industry turning throughout the conflict, despite the damage from attacks, and the difficulty of obtaining replacement parts through the usual trade channels on account of embargoes.

Table 1. Summary of reconstruction expenditures by government ministries

(In millions of United States dollars)

SECTOR	Cost to 1991 inclusive		
	Foreign Exchange	Domestic Currency	TOTAL in \$
Oil and petrochemicals	2 898	214	3 112
Agriculture	520	154	674
Energy	990	310	1 300
Ports	373	110	483
Human settlements	1 143	506	1 649
Heavy industry	1 598	354	1 952
Light industry	3 669	1 084	4 753
Transport	886	262	1 148
Environment	0	0	0
Health	359	159	518
Telecommunications and post	696	84	780
Education	662	293	955
Cultural heritage	13	6	19
TOTAL	13 807	3 536	17 343

Source: Mission estimates based on data provided by the Office of the Vice-President for Reconstruction.

Note: (1) This table is calculated using a rate of Rls 70/\$ to convert foreign exchange expenditures.

(2) Domestic currency expenditures are expressed in 1988 prices at Rls 237 to the dollar.

66. The Government has also provided the mission with its preliminary forecasts of spending required in the future to complete its reconstruction efforts in the sectors listed in table 1. As this information was made available to the mission only very late in its second visit to the Islamic Republic of Iran, and after the sectoral experts had completed their reports and left the country, it has not been possible for the mission to examine these forecasts in detail. It can, however, be noted that they involve sums in foreign exchange which are very large, both in absolute terms, relative to the sums forecast to be expended in domestic currency, and by comparison with the expenditures (covering the development of the entire economy) set forth in the current five-year plan. In the mission's view, this could be attributable to the extreme difficulty to be encountered of attempting to separate purely reconstruction costs from development expenditures. Iran's economy is undergoing a major overhaul - particularly with regard to the updating of technology - in the wake of a population explosion and a decade-long absence from international business intercourse.

67. These qualifications having been made, table 2 below is presented for the sake of completeness. It will be noted that the lion's share (56.5 per cent) of the total relates to the oil and petrochemical industry, where the forecast foreign exchange requirements are especially large, given the need to acquire modern plant and equipment from abroad.

Table 2. Forecast of reconstruction expenditures by government ministries

(In millions of United States dollars)

SECTOR	Expected Cost from 1991 on		
	Foreign Exchange	Domestic Currency	TOTAL in \$
Oil and petrochemicals	122 389	1 197	123 587
Agriculture	24 518	2 105	26 623
Energy	15 763	1 513	17 276
Ports	16 733	554	17 287
Human settlements	8 983	3 144	12 127
Heavy industry	3 347	222	3 569
Light industry	8 928	724	9 670
Transport	2 526	376	2 902
Environment	3 403	270	3 673
Health	2 788	336	3 124
Telecommunications and post	2 063	33	2 096
Education	147	145	292
Cultural heritage	211	74	285
TOTAL	211 799	10 711	222 510

Source: Mission estimates based on data provided by the Office of the Vice-President for Reconstruction.

Note: (1) A rate of Rls 70/\$ is used to convert foreign exchange expenditures.

(2) Domestic currency expenditures in the period from 1991 onwards are expressed in 1991 prices, and therefore a conversion rate of Rls 300/\$ has been used.

IV. THE ENVIRONMENTAL CONSEQUENCES OF THE CONFLICT

68. In the first report reference was made to the environmental consequences of the conflict in the sections on human settlements and agriculture. In the course of its second visit to the Islamic Republic of Iran, the team was provided with more detailed information on the nature of the damage to the environment and the measures that need to be taken to deal with the problem in its various forms.

69. In the case of human settlements the vast destruction of basic infrastructure in many cities and towns that were attacked or occupied during the conflict has created immense problems for the authorities, principally because the displaced population will not be able to return until the sites have been rebuilt. The costs are almost prohibitive, but essential. More details are provided in section V.A of the present report and section A of the addendum.

70. In the south-west provinces, particularly in the coastal region and along the main inland waterways, the scale of environmental destruction is extensive. For example it was stated that along the Karun River, which prior to the conflict was the pulse of the region's economic life, overall economic activities have been severely constrained owing to pollution and contamination. Farmlands were reported to contain dangerous substances resulting from many years of war activities, and these substances are said to have adversely affected the quality of crops. The rural population is reported to have suffered from an unusually high incidence of diseases, especially eye infections, stomach illnesses and skin ailments. These diseases do not occur at comparable levels outside the war-affected provinces. Health authorities are currently unable to offer any explanation as to the exact cause.

71. Along the coast, in particular between Abadan and the Strait of Hormuz, there are more than 250 kilometres of beaches covered with tar or asphalt, threatening the survival of already endangered species and protective vegetation. Leaking oil tankers attacked during the conflict are believed to be the cause of this situation. Oil pollution and oil spills were said to have negatively affected the economic life of more than 20 islands in the Persian Gulf. Mangroves and seagrass cultures have been destroyed, and there is a severe threat to the prawn fishing industry.

72. The section of the present report on agriculture and irrigation provides additional information on the type and extent of damage suffered, together with estimates of related reconstruction costs.

73. The sunken ships and wrecks in and along the river banks of the Shatt al-Arab pose another serious environmental hazard. Naturally, the magnitude of the problem increases commensurate with the time the sunken ships remain in their present position. In the process, the livelihood of fishermen is menaced and a serious danger exists to the ecology of the surrounding environment. No records are available on the nature of cargo carried by the ships at the time they were sunk. Any cleaning-up activity of the Shatt

al-Arab waterway will have to be undertaken with the assistance of the international community and the full participation of the two riparian States.

74. Another type of environmental hazard created by the conflict is the presence of extensive minefields and unexploded ordnance in border areas. The Ministry of Health claims that at least 10 persons are either killed, maimed or wounded daily by these lethal devices.

75. It is the Government's position that the major environmental problems arising from the conflict need to be studied in detail before preparing a plan to resolve them. Considering the dimension of the environmental degradation and its consequential overall impact, there appears to be a definite role for cooperation at the regional and international levels to address these issues. The Environmental Protection Organization informed the mission that it had so far been unable to carry out any conclusive surveys or studies because of the high cost involved and the level of specialization required. However, the authorities stated that international assistance is required to enable a number of studies highly prioritized by the Government to be undertaken. These include the following: clearance of debris in devastated cities; clearance of tar-polluted beaches; monitoring of Karun River pollution; effects of pollution on Persian Gulf islands; conservation of seagrass and mangrove forests; water quality studies in the war-affected provinces.

V. SECTORAL PRESENTATION (SUMMARIES)

(This section contains summaries of sectoral presentations.
A detailed account of each presentation can be found in the
addendum to the present report.)

A. Housing and human settlements

76. At the peak of hostilities, over 2 million persons were displaced by the conflict. The influx of large numbers of people over a short period of time placed a very heavy burden on the social and physical infrastructure of the receiving cities. In the process infrastructure, buildings and other facilities of the abandoned areas quickly deteriorated because they were not regularly maintained. Although the Government has placed the highest priority on creating the conditions appropriate for the return of the displaced, the mission was told that economic uncertainties and fear of renewed hostilities keep many of the displaced from returning to their homes in border areas. Thus far, about 250,000 displaced people have left camps to return to their former homes.

77. The loss of shelter for the displaced is the most widespread physical consequence of the conflict. In its field survey of damage, the mission ascertained that few residential or commercial structures in settlements within the areas occupied by enemy troops remained unharmed. The entire housing stock was destroyed in many villages and towns. Cities beyond the immediate area of ground hostilities also suffered varying degrees of damage to their housing stock as a result of missile attacks and aerial bombardment. A revised government estimate indicates that 117,035 housing units were lost;

there was a corresponding loss of commercial buildings in areas where ground action was fought, estimated by the Government to amount to 13,140 commercial units.

78. Water and sewerage systems in urban areas within the theatre of ground combat suffered not only from direct military action but also from collateral damage caused by destruction of buildings as well as by neglect. Networks have become silted and clogged and pumping stations have fallen into disrepair.

79. In areas under reconstruction, owners are responsible for the reconstruction of their own units. However, the Government provides partial compensation for losses and damage sustained by private individuals in the form of grants. In regard to the construction and repair of commercial and residential units, low-cost bank loans have also been made available to owners to cover expenses above the limit of compensation grants. The Government prepares physical development plans and provides technical support and supervision of construction efforts. Other support services include the free transport of building materials to construction sites.

80. The re-establishment of electric power is a prerequisite for the return of displaced populations to the reconstructed cities and towns. With power stations coming back on line and the transmission lines mostly in place, the only remaining element is the reconstruction of distribution networks within the towns and cities. According to the Government, this is being done as part of the overall reconstruction of settlements. Another major requirement for resettlement is the collection, removal and final disposal of waste, scrap and debris. In urban areas the clearing of the debris from damaged and destroyed buildings is well under way, but considerable work still remains to be done. Further, postal services - vital for communications - were greatly affected by the conflict. Some 64 post office buildings were either destroyed or damaged; the total area to be rebuilt is 17,378 m², of which 8,807 m² have already been rebuilt or rehabilitated.

81. The mission was informed that, for the reconstruction of human settlements, the Islamic Republic of Iran's primary need is for construction equipment. In addition, there are shortages of building materials. Iran possesses a well-qualified body of professionals in the fields related to the physical reconstruction and rehabilitation of war-devastated areas, such as engineering, architecture and urban and rural planning. The existing national capacity provides a good base for the utilization of specialized expertise to augment know-how already available within the country.

B. Petroleum industry

82. The economy of the Islamic Republic of Iran is heavily dependent on the production and export of oil for the generation both of domestic employment and income and of the foreign exchange needed to buy imported goods. The industry was devastated during the conflict.

83. In the "upstream" (oil production) part of the industry, the damage and destruction inflicted covered every aspect of permanent oil/gas high-volume and high-pressure production operations in each of the three operating damaged sectors (south fields, north fields and offshore operations). Kharg Island (part of the south fields operation) warrants special mention because of its unique role in the exporting of Iranian crude oil and the devastation it incurred throughout most of the war by almost daily attacks. Before the war, Kharg was capable of off-loading 14 million barrels per day (b.p.d.), at its 14 berthing facilities, consisting of 10 berths at its T-jetty and four at Sea Island; its off-loading capability is now about 2 million b.p.d. The island had a pre-war crude oil storage capacity of 22 million barrels in 39 tanks; its storage capacity is currently 10 million barrels because 21 tanks were completely destroyed by fires occasioned by the attacks.

84. Table 3 below summarizes the information provided by the authorities on reconstruction costs for the three production areas in the country. It is based on expenditure incurred during the war plus those incurred since the cease-fire, and those expected to be incurred in the future. The authorities estimate that the total cost of "upstream" reconstruction, both past and for the future, amounts to Rls 795,500 million and \$18,999 million.

Table 3. Reconstruction costs by production area

(In millions)

Area	TO DATE		IN FUTURE		T O T A L	
	Rls	US \$	Rls	US \$	Rls	US \$
South	30 000	500	640 000	12 000	670 000	12 500
North	20 000	9	18 500	140	38 500	149
Off-shore	17 000	350	70 000	6 000	87 000	6 350
TOTAL	67 000	859	728 500	18 140	795 500	18 999

85. The "downstream" (refining and petrochemicals) operations were also severely affected by the conflict. The outbreak of war in 1980 witnessed attacks on all seven refineries with heavy damage and the widespread disruption of petroleum product supply, particularly at the Abadan refinery. Reconstruction and repairs, together with debottlenecking projects at the Tehran and Esfahan refineries, have brought most refineries back to or above pre-war production levels. However, Abadan is still operating at a little over one third of its original capacity owing to the shortage of crude, although it is capable of operating at one half of its original capacity.

86. The location of the petrochemical industry, along the northern shore of the Persian Gulf meant that the facilities came within easy range of aerial attack during the war. The huge joint venture plant at Bandar Khomeyni was more than 60 per cent completed when the war began. Its products were for the most part to be exported and were expected to provide major revenue for the country. However, as a consequence of the war, the entire project has had to be suspended on account of the damage sustained, and the high cost of reconstruction and risk involved during the war. The damage to the entire sector was such that, for several years during the middle part of the war, production in all chemical plants was virtually halted. This led to a production loss of the order of 30 million metric tons of total petrochemical products over the eight-year period. All the plants, with the exception of the joint venture facility, are once again operating near their pre-war capacity levels. However, much of the reconstruction is of a temporary nature and no major funding has as yet been earmarked for permanent repair of the extensive patchwork.

87. The table below summarizes the information provided by the authorities on reconstruction costs for the seven refineries and seven petrochemical plants in the country, based on expenses incurred during the war plus those incurred since the cease-fire, and those expected to be incurred in the future. The total cost of "downstream" reconstruction, both past and in the future, by the Government's estimate, is thus Rls 218,723 million and \$4,098 million.

Table 4. Reconstruction costs incurred on refineries and petrochemical plants

(In millions)

Type	TO DATE		IN FUTURE		T O T A L	
	Rls	US \$	Rls	US \$	Rls	US \$
Refinery	19 034	357	42 298	793	61 332	1 150
Petro-chemical	48 850	915	108 556	2 033	157 406	2 948
TOTAL	67 884	1 272	150 854	2 826	218 738	4 098

Source: Based on documentation obtained at NIOC.

88. In brief, the Government estimates that it has already expended the equivalent of \$2,700 million on reconstruction of the oil industry, and expects to spend a further sum equivalent to \$24,000 million to complete the task.

Table 5. Reconstruction costs to oil industry
(In millions)

Type	TO DATE		IN FUTURE		T O T A L	
	Rls	US \$	Rls	US \$	Rls	US \$
Upstream	67 000	859	728 500	18 140	795 500	18 999
Down-Stream	67 884	1 272	150 854	2 826	218 738	4 098
TOTAL	134 884	2 131	879 354	20 966	1014 238	23 097

Note: Rls 134,884 million @ Rls 237/\$ = \$ 569 million;
Rls 879,354 million @ Rls 300/\$ = \$ 2,931 million.

Source: Based on documentation obtained at NIOC.

89. The estimate for the oil sector presented to the mission by the Vice-President for Reconstruction is as presented in the table below. As can be seen, they are different from those presented to the mission by NIOC.

Table 6. Estimate of reconstruction costs in the oil sector
(In millions of rials)

Name of unit affected	From start of war until approval of resolution	From approval of resolution until first year of plan	Allocation from first year of plan until 1991	Reed. before end of 1992	Required before completion: foreign currency (\$m)	Required before completion: local currency (millions of rials)	Total (\$m)	Total (Rm)
NIOC	59 081	25 617	53 613	126 860	99 097	1 618 104	101 085	1 724 262
National Gas Company	2 642	1 763	208	410	125	7 000	100	9,255
National Petrochem. Company	27 394	16 266	69 022	514	2 642	43 000	3 472	759
Ministry of Petroleum (total)	89 117	43 646	122 843	127 784	101 864	1 668 104	104 717	1 734 276

(\$1 = 60 rials)

Source: Vice-President for Reconstruction, November 1991.

Note: The data on reconstruction obtained from NIOC covers only part of the reconstruction programme for the industry. The information provided in the above table is in respect of the industry as a whole.

C. Transport

1. Roads, rail and air transport

90. An impressive amount of reconstruction was carried out in the land and air transportation sub-sector, both during and after the war. It was essential for the war effort to keep transport corridors open in the border provinces; therefore reconstruction of airports, roads and railways was carried out during the war and, where subsequent damage occurred, repeated several times. These multiple repairs are not visible now, but they are reflected in the estimate of the direct loss. The team's inspection confirmed that in most cases the ruins of buildings and pattern of reconstruction, as well as debris and destroyed equipment, were consistent with the damage reports and photographs.

91. The total direct loss in the transportation sub-sector was estimated by the Government at Rls 1,085,600 million. The loss sustained by this sub-sector, compared with other sectors, does not appear to be high, but this is only the quantifiable part of the loss. The war caused a considerable delay in the development of the road and railway network, as well as of port capacities, and this in turn caused serious bottlenecks in the development of other sectors. This part of the loss is not visible in the transportation sub-sector itself. The Government has estimated the costs of reconstruction to date in the transport sector at the equivalent of \$1,148 million, and expects the completion of reconstruction already planned to cost the equivalent of a further \$2,902 million.

92. The mission has made attempts to verify all severe damage and to assess the extent of the losses suffered by both land and air transportation, as reported by the Iranian authorities. The monetary value of damage caused to buildings and installations in the land and air transportation sub-sector appears to be appropriate except for roads where, in the mission's view, damage to the road network was underestimated. However, the mission was not able to verify the extent of damage caused to railway rolling stock, aircraft, road vehicles and equipment for railway and road construction and maintenance, as these had already been cleared from road sites and depots.

93. Most damage to roads was not caused by direct bombardment, but by overloaded vehicles and/or because of lack of appropriate maintenance during or immediately after the war. Because of the priorities given to the border areas, only relatively small repairs and improvements to the country's road network could be undertaken during the war period, with the result that the overall quality of the road system deteriorated.

94. The reconstruction of land and air transport physical infrastructure was planned and designed by Iranian engineers and executed by Iranian skilled manpower through (mostly privately owned) Iranian companies. The mission observed that the reconstruction work performed meets standard quality requirements even in complicated undertakings, such as bridge construction, or in work with high quality requirements, such as runway construction. Based on

the quality of work observed, the team felt that the Islamic Republic of Iran has adequate and appropriate expertise and manpower for reconstruction work in this sector. However, a considerable amount of foreign currency is needed for the import of equipment and spare parts not manufactured in the country. Reconstruction of railway installations also requires a foreign currency component for materials and parts not locally manufactured.

95. The damage to machinery and equipment in the land and air transport sub-sector (aircraft, railway rolling stock, road vehicles, equipment for railway and road maintenance, as well as other land and air transportation machinery and equipment) was considerably higher than the reported damage to structures and installations. However, because of the restrictions imposed on the country during the war, replacement or repair was, in most cases, of lower quality and considerably more expensive than it normally should have been. Moreover, with few exceptions (railway freight wagons and passenger coaches), these items will need to be imported, thereby causing a heavy foreign currency drain on the economy.

96. A high priority in reconstruction has been given to the rebuilding of the Khorramshahr-Ahwaz railway line, the Abadan and Ahwaz airports, and major bridges in the border provinces. The construction of additional railway capacity to the port of Bandar Khomeyni and new railway capacity to the port of Bandar Abbas, as a consequence of the shifting of port capacities from Khorramshahr, will alleviate the land transportation problems and eliminate some of the bottlenecks. The railway network also needs upgrading and modernization as well as renovation and additions to the rolling stock. The team observed that railways are not carrying a sufficient share of freight although they do have the capacity to do so.

97. All modes of land transport suffered from lack of maintenance and renewal investments during the war and it is critical that such deficiencies be corrected through modernization. In order to upgrade the land transportation infrastructure and to apply a higher level of technology, foreign inputs, mainly foreign exchange, would be needed.

98. The Iranian authorities recognize that it is important to reconstruct and develop the air transportation sub-sector, because there are no viable alternatives to air travel over long distances. However, air transportation facilities have not so far been reconstructed, modernized or developed to an appropriate level. To facilitate this modernization, substantial foreign inputs will be needed.

2. Ports and marine salvage

99. Ports and shipping were major targets during the war years; they are now key factors for the country's recovery and expansion. The Iranian authorities have devoted much effort and expense to emergency repairs, which frequently had to be repeated, followed by restoration and by replacement construction or acquisitions. The work which is still to be carried out will take a considerable period of time to complete.

100. According to information presented to the mission, the repairs to or replacement of shipping tonnage is well under way. The losses of dry cargo tonnage (17 total losses and 18 vessels damaged) amounted to \$201 million. The reconstitution of oil cargo tonnage has been completed, at a cost of \$498 million.

101. The reconstruction of oil ports has involved substantial repair expenses. Major restoration work under way includes a \$225 million project for Kharg Island. Reconstruction of commercial ports during the post-cease-fire years has focused on the reconstruction of Khorramshahr and repairs at Bandar Khomeyni, as well as on landside debris clearance at Abadan and Khorramshahr. A further \$57 million has been expended on the dredging of the Bahmanshir.

102. Construction at the major port of Bandar Abbas was continued during the war years, with the result that the overall capacity of Iranian ports is almost at a level with the needs of the present-day economy. However, reconstruction of the ports of Abadan and Khorramshahr, which is planned in the immediate phase to cost the equivalent of \$2,468 million, is urgently needed in order to promote a good geographical balance in port location; to ensure a smooth flow of traffic during peak periods; and to meet the needs of future economic expansion, especially in Khuzestan. In addition, the Government estimates that a further \$300 million will be required to complete the dredging of the Bahmanshir.

103. The reopening of the Shatt al-Arab is an imperative priority for any undertaking to reconstruct the ports of Abadan and Khorramshahr. The river serves the Iranian ports of Abadan and Khorramshahr, as well as the Iraqi port of Basra. It was reported that during the war, innumerable unexploded shells and bombs landed on the river bed; many vessels were hit and sunk; and a huge amount of silt has accumulated in a channel which used to be dredged regularly. Map 2 indicates approximate areas where wrecked ships and barges are visible from the Iranian shoreline. According to the Government's preliminary estimate, dredging of the waterway would cost \$1,800 million.

104. In the course of its discussions, the team understood that once political agreement was reached for the reopening of the waterway international help would be necessary in order:

- (a) To alleviate the very heavy financial burden of reconstruction;
- (b) To provide, from foreign sources, much-needed specialized machinery, equipment and personnel, hitherto inaccessible to the Islamic Republic of Iran because of export restrictions;
- (c) To provide for the clearance of wrecks and unexploded ordnance from the waterway, requiring the latest technology;
- (d) To provide the clearance of a number of dangerous wrecks in the Persian Gulf, which require special heavy equipment.

105. Such assistance from the international community would be necessary, despite the proven competence and expertise of the Iranian authorities and personnel, if all the required reconstruction work is to be accomplished within a reasonable period of time.

D. Industry

1. Heavy industry

106. This economic sector comprises the iron, steel and aluminium industries, including their downstream facilities for metal transformation, and the Islamic Republic of Iran's heavy manufacturing industry. A great number of these industrial plants are located in the south of the country relatively close to major Persian Gulf ports and important raw material sources. During the conflict many factories were destroyed either through enemy occupation or by frequent air raids and artillery attacks.

107. According to government estimates, direct damage sustained by the heavy industry sector amounts to approximately Rls 1,102,029 million. Although the mission was not in a position to verify this overall figure, it carried out on-site inspections to 12 major industrial plants which indicated that the damage estimate in the case of the plants visited appeared to be reasonably accurate.

108. Reconstruction expenditure incurred by the Ministry of Heavy Industry has amounted to approximately \$1,952 million since the outbreak of the hostilities. In certain instances, some plants were destroyed several times over during the conflict. After each attack, repairs were carried out immediately so that the plants became operational again in the short term.

109. Based on inspection visits to a representative sample of plants in the heavy industry sector, it is the mission's impression that major sectoral constraints include, inter alia, lack of finance for investment, technological gaps, shortage of adequate high-level manpower, and, in certain cases, a lack of sufficiently inexpensive domestic raw materials. Although investment prospects have improved following a decision by Government to encourage foreign participation in joint ventures, matters such as obsolete technology and manpower shortages will need to be addressed in a more comprehensive manner in the long term.

110. Technical staff will need to be exposed to new technologies in other countries by means of study tours and short-term assignments abroad. Moreover, priority will continue to be assigned to the strengthening of national technical institutions and establishment of additional vocational and management institutions.

111. The team believes that for the better and more efficient use of domestic raw materials, the Government - together with the private sector - might wish to revive the important bauxite, alunite and nepheline mines with necessary investments, in order to be able to cut back on expensive imports.

112. Since the end of the conflict, the metal-producing industry has been undergoing a significant transformation which includes a shift away from government ownership. Government is encouraging full private-sector participation both domestically and from abroad. One of the largest privatization efforts being undertaken at present concerns the Arak aluminium plant, where two thirds of the needed investment is expected to be made available by foreign companies.

113. The rehabilitation of heavy industry in the narrowest sense of its meaning can be considered to be complete. Almost all steel and aluminium plants damaged during the conflict are now producing more than in 1980. In certain instances, as for example in the case of the Arak aluminum production plant, the pre-war capacity, which amounted to 45,000 tons per year, was surpassed in 1988 as annual production reached more than 75,000 tons. The future reconstruction programme foresees a further increase in output levels to 120,000 tons per year to satisfy domestic demand in keeping with the overall economic expansion.

114. For the future, the Government has prepared an ambitious programme to modernize its metallurgical industry. This will demand a new generation of engineers, highly skilled specialists, managers and administrators. It is important that the international community be prepared to cooperate in providing technical assistance in the form of highly specialized, short-term advisory services and assist Iranian authorities in advising on research and development programmes, as well as in the identification of equipment and technology.

2. Light industry

115. The light industry sector which comes under the responsibility of the Ministry of Industry covers a wide variety of industrial sub-sectors and includes, inter alia, food, leather, textile, paper, chemical, electronics, printing and service industries. Together, these small-, medium- and large-scale industries account for almost 80 per cent of Iranian industry.

116. The mission observed through selected on-site visits that the industrial sector had sustained considerable damage. Damage was severest in the five western provinces where extensive ground fighting took place. The majority of industries destroyed are at present little more than piles of debris and corroded steel. Outside the immediate battle zone, destruction to industrial units was in general less severe, although some installations sustained heavy losses owing to aerial bombardment.

117. The mission also observed that most of the plants are back to what at least superficially resembles normal operation. Physical traces of damage are visible everywhere, many factories continue to suffer from a lack of spare parts, and maintenance facilities and back-up services are limited as a result of the makeshift reconstruction and repair work.

118. Responsibility for the reconstruction of small production units was generally exercised at the local level, with work on medium- and large-scale units being directed from Tehran. In respect of government fund allocation for reconstruction purposes, priority continues to be given to strategic products such as food and building materials. At the plant level, the highest priority was given to the immediate rehabilitation of the most essential production equipment in order to retain a basic production process. The functioning of auxiliary facilities such as maintenance and repair workshops, stand-by generators, safety equipment and administrative buildings which would secure dependable industrial output has yet to be addressed.

119. About 80 per cent of the light industry sector is at present privately owned and, as a consequence of the Government's post-war privatization policy, the share of the private sector is increasing rapidly. Private sector initiative is also a dominating factor in the reconstruction process. Some larger factories managed to finance their reconstruction programmes from their own resources and without any government assistance. Most of the small- and medium-scale units in the war-affected provinces, however, take advantage of the financial incentives offered by the Government.

120. The mission observed that private entrepreneurs are responding positively to the Government's call for new industrial initiatives in the war-affected provinces, especially in the Abadan-Khorramshahr industrial parks, where pioneering industries such as processed meat, fish powder, plastic tubing and textiles are being successfully established.

121. With the exception of the areas where ground fighting took place, most craftsmen have returned to their workshops and nearly all medium- and large-scale industries have reached pre-war output levels. No significant relocation of any medium- or large-size industry has been reported and the reconstruction and rehabilitation process has not been impeded by any reported manpower shortages. At the management level, the lack of awareness of up-to-date technologies has had some adverse effect, but abilities to improvise and the development of mechanical skills have reached impressive levels.

122. Although rehabilitation and reconstruction have brought outputs to pre-war levels, the overall situation is far from satisfactory. Owing to lack of funds, especially the foreign currency components, reconstruction of production lines has often stopped at the bare minimum. As a result, several major plants are, for example, without stand-by generators, proper maintenance facilities or adequate spare part stores. In order to improve this situation and to ensure that no serious work stoppages occur as a result of these shortfalls, it will be necessary to invest large sums of foreign exchange. According to government estimates nearly \$3,900 million will be needed in foreign exchange for reconstruction expenditure during the current five-year plan.

123. In the view of the mission the international community could play a major role in providing financial and technical assistance in the completion of the

reconstruction and rehabilitation process. For more than 10 years technology transfer was seriously interrupted. In many instances, industries focused on keeping a basic production process going rather than experimenting with technological innovations. United Nations agencies could be called upon to facilitate the contacts between Iranian industry and relevant technology holders abroad.

E. Agriculture and irrigation

124. The institutional framework relating to the agricultural sector comprises: (a) the Ministry of Agriculture, which is responsible for crop production, on-farm irrigation and other agricultural activities; (b) the Ministry of Energy (mobilization and conveyance of irrigation water); and (c) the Ministry of Construction Jihad (forests, pastures and fisheries).

125. The agricultural sector is reported by the Government to have sustained direct losses equivalent to \$7,523 million and to have been the object of reconstruction expenditure to date amounting to \$674 million. The Government estimates the cost in the current phase of the present five-year development plan for agricultural reconstruction to be \$7,800 million. The farming sub-sector accounts for 80 per cent of the estimated direct losses.

126. The rehabilitation of agricultural land destroyed as a result of the war is accorded the highest priority through land levelling, restoration of the irrigation network and the provision of farm machinery and livestock to resettled farmers. Replanting of destroyed date palms and orchards, reconstruction of agro-industries, replanting of forests and rehabilitation of pastures are given the next order of priority.

127. In the three most affected provinces of Khuzestan, Ilam and Bakhtaran, reconstruction of the farming sub-sector involves land levelling and grading of about 251,000 ha of irrigated farmland and rough levelling of 53,700 ha of rain-fed land. The irrigated areas would also require the construction of irrigation networks comprising 8,500 kilometres of distributary canals and 6,000 kilometres of drainage channels. In addition, about 1,300 kilometres of traditional irrigation canals require reconstruction. Using large fleets of heavy earth-moving equipment, about one half of the above tasks have already been completed. Subject to the availability of foreign exchange resources for replacement of much of the outdated equipment and purchase of spare parts, the remaining work is scheduled for completion before the expiry of the second five-year plan period ending in 1999.

128. Areas dependent on lift irrigation would require reconstruction of 47 large and 300 small pumping stations, as well as 256 deep tube wells and about 200 tube wells of moderate depth. Apart from the deep tube wells, of which some 75 per cent have been reconstructed, very little progress has so far been achieved in reconstructing the remaining units owing to resource constraints.

129. Damage to the water resources sub-sector under the Ministry of Energy would require reconstruction of 126 diversion weirs, 242 pump stations and

tube wells for lift irrigation, about 1,700 kilometres of main canals and ancillary works such as access roads, construction camps and hydro-met. stations. Overall progress on reconstruction of the damaged works is estimated at about 20 per cent, with the remaining works scheduled for completion, subject to availability of resources, by the end of the second five-year plan period.

130. About 18 per cent of farm machinery, such as 65 HP tractor units with implements, for resettled farmers, has been supplied so far. Subject to resource availability, the supply of the remaining machinery is scheduled to be completed by the year 1999.

131. More than 3 million date palms and 5,000 ha of orchards were destroyed during the conflict, of which about 15 to 20 per cent have so far been replanted. Reconstruction of damaged farm support buildings, comprising a total area of about 63,000 square metres, has been completed to the extent of about 40 per cent. The remaining work is scheduled for completion by the year 1999.

132. Sugar production at the two major agro-industries in the Ahwaz-Dezful region of Khuzestan is making rapid recovery. In Haft Tappeh it has been restored to about 80 per cent of originally installed capacity of 100,000 tons per year, while in the case of Karun, recovery has reached 20 per cent of its 250,000 ton capacity. Interrupted plans for establishing seven more agro-industrial units in the area have been reactivated.

133. Progress made towards the rehabilitation of some 130,000 ha of natural forests and 753,000 ha of pasture lands in the war zone, together with repair of damage in the fisheries sub-sector, could not be ascertained owing to unavailability of data.

134. The environmental impact of the conflict on the agricultural sector comprises (a) adverse effects on soil fertility due to the removal of topsoil, compaction and flooding of agricultural lands; (b) waterlogging and salinity arising from ingress of saline water into agricultural land, modification in river flow regimes and interruption in the installation of drainage networks; and (c) soil and water contamination, reported by the Government, from the toxic materials emanating from chemical and biological weapons. Comprehensive studies are required to assess the nature and extent of environmental damage caused by the war and to devise remedial measures. The mission noted that the physical constraint imposed by the presence of unidentified mine fields may delay the rehabilitation of some 20 per cent of the affected agricultural land.

135. The principal constraints to completion of the reconstruction programme are (a) the paucity of foreign exchange resources to meet the cost of importing equipment, spare parts and construction materials; and (b) the shortage of skilled manpower and supporting facilities.

136. The expressed needs for external assistance comprise mainly foreign exchange resources for the procurement of (a) heavy earth-moving equipment

such as scrapers, bulldozers, graders, loaders etc. and their spare parts; (b) civil engineering construction equipment and construction materials such as well drilling, canal lining, pumping plant, steel and cement, etc.; and (c) farm machinery and implements with a total capacity of about 250,000 HP.

137. The mission was impressed by progress already achieved in the reconstruction effort and recommends that, in addition to the expressed needs for external assistance, technical assistance be provided to assess the reported environmental damage caused by waterlogging of agricultural lands and the resulting salinization of the soil.

F. Electric power

138. According to the Ministry of Energy, the major areas of loss in the electrical sector were (a) the war-zone border provinces of Khuzestan, Ilam, Bakhtaran and Kordestan, where widespread damage was done to the generation, transmission and distribution systems; and (b) the transmission network and principal generating stations in other parts of the country, which were targeted with a view to disrupting national power supplies.

139. It was evident from the mission's visits to sites in Khuzestan that, although major efforts had been made to maintain power supplies to consumers, aided by the installation of temporary diesel generators, significant reconstruction work remains to be done on the distribution system (70 per cent, according to the local power authority, over a period of two years). A number of substations are operating without proper protection equipment. Two thirds of the reconstruction work has been carried out using materials diverted from development projects in other areas, and some 10 per cent of the system has been reconstructed only in a temporary manner. Materials and spare parts valued at some Rls 12,100 million were also destroyed in the conflict while awaiting distribution from Khorramshahr.

140. In Ilam, Bakhtaran and Kordestan, several small diesel generating units with an overall capacity of 138 MW were destroyed in isolated networks. Rather than replace them, the local power authority installed systems connecting such areas to the major interconnected transmission network. Substantial damage was also done to the distribution system: 70 per cent of the reconstruction work remains to be done, over a period of two years. In the case of West Azerbaijan, which suffered a lesser degree of damage, 80 per cent of reconstruction work has yet to be completed.

141. Most major substations of the transmission system were damaged during the war, causing disruptions of the power supply to major cities: 50 per cent of the damage was repaired during the war, but 90 per cent of the repaired facilities was further damaged in subsequent attacks. Approximately 50 per cent of the physical reconstruction work is now complete: the remaining work should, in principle, take two years to complete but will probably take longer owing to financial constraints.

142. According to the national authorities, six thermal power stations and two hydroelectric stations suffered damage during the war: all were restored to service, but in many cases temporary repairs resulted in unreliable operation. The major interconnected system currently has an installed generating capacity of 11,017 megawatts, having doubled - in response to increased demand - between 1980 and 1988. Whereas in 1980 only 7,800 villages were supplied with electric power, that figure rose to 24,000 by 1990, meaning that over 65 per cent of the rural population received supplies.

143. As for nuclear energy, the mission was informed that two 1,200-megawatt units had been under construction (one 85 per cent complete, the other 60 per cent) at the start of the conflict. Both were severely damaged. Neither the nuclear reactor nor nuclear fuel had been delivered.

144. During the war, the Government's policy was to concentrate on the rapid restoration of damaged facilities, achieved exclusively through the use of locally available materials. With the end of the conflict, it has formulated the following immediate objectives: (a) to restore the production capacity of damaged power stations; (b) to ensure that damaged major transmission systems could meet power requirements throughout the country; and (c) to restore the local supply networks in the war-affected provinces to full capacity. Its long-term objectives are (a) to complete the permanent reconstruction of damaged facilities; (b) to implement pre-war development plans for production, transmission and distribution; and (c) to replenish stocks of materials required to ensure the electrical system is not disrupted. The major constraints encountered in meeting such objectives are the time delays involved in ordering equipment from abroad, together with a shortage of foreign exchange with which to make the purchases.

145. Although the situation has improved greatly since the conclusion of the conflict, there are still frequent interruptions to the power supply. In order to overcome these problems, the Ministry has reportedly awarded contracts to construct a further 9,000 megawatts of generating capacity and to expand the associated transmission facilities. In a further attempt to upgrade services, the Ministry has, in principle, agreed to privatize the operation of both regional electric companies and power-generating plants.

146. The Ministry has indicated that international assistance will be required, particularly with regard to the purchase of up-to-date equipment, in order to upgrade the electrical system to a level comparable with that which would have been achieved if the conflict had not affected normal development. There is also a considerable need for assistance in areas relating to management, planning and power systems design, as well as the updating of technology, including dam construction and modern control systems.

G. Telecommunications and broadcasting

117. Estimates of physical damage to the telecommunications sector sustained during the conflict indicate that 172 buildings, 9,000 kilometres of

underground cable and more than 50,000 telephone lines were at least partially destroyed. The value of the damaged assets has been estimated by the Telecommunications Company of Iran (TCI) at a minimum of Rls 115,000 million.

148. The damage observed can be classified into two main categories: damage was total in areas which were occupied by enemy forces, while somewhat lesser damage occurred in those areas outside the war theatre where air and ground artillery attacks took place sporadically. Telecommunication towers are clearly highly visible targets and the exchange and microwave installations could therefore be easily identified. Targeted installations in the interior of the country, however, did not in general suffer serious damage.

149. As regards reconstruction work, the mission believes that the bulk of the restoration of primary services has been completed. A major installation at Khorramshahr, installations of underground cable networks, provision of additional telephone service in the border provinces and the completion of some microwave works are the main items pending.

150. The mission was also informed that the Ministry is currently implementing a five-year reconstruction-cum-development plan, with a view to expanding and modernizing telecommunications systems, that goes beyond normal reconstruction. The plan, which focuses on the border provinces, incorporates both repair and reconstruction of damaged assets, as well as the normal expansion which would have occurred during the period 1980-1988. A total of Rls 139,000 million has been allocated to complete the plan objectives. The mission plan does not separate reconstruction work from development objectives. The mission could not obtain such data.

151. As for the damage to broadcasting installations, the mission was informed that the war had resulted in the destruction of many high-power medium-wave transmitters, FM radio transmitters, buildings and television studios. Their replacement would cost an estimated Rls 19,000 million.

152. The mission noted that in the reconstruction process the general trend is to replace broadcasting equipment with more powerful and technologically advanced components. Moreover, in order to reduce the risk of future damage, new stations are being housed in thick concrete shelters. This has increased reconstruction costs.

153. The mission is impressed with the quality of the reconstruction work in the telecommunications and broadcasting sector. The technical level of Iranian personnel does not call for any outside assistance, with the exception of work relating to the installation and commissioning of transmitters and antennas. Up to now, the Islamic Republic of Iran Broadcasting Corporation (IRIB) has executed all these tasks with its own personnel. However, owing to the increased number of projects to be implemented and the lack of adequately trained engineers, severe difficulties are now being encountered in commissioning some transmitter stations. IRIB in some cases has to call on the services of the equipment supplier which, in general, increases the costs and causes delays.

H. Education

154. In the five war-affected provinces, 9,300 of the pre-war total of 44,300 classrooms in 2,637 schools were reported as having been damaged or destroyed during the conflict. In addition, 362 schools in other provinces were affected by missile attacks. About 450,000 of the five provinces' 1.25 million pupils and students were forced to flee to other regions, necessitating the introduction of a double-shift system at those regions' schools. Migration of teachers away from the war-affected provinces also continues to pose serious problems.

155. The Government accords high priority to the reconstruction of primary schools and to the provision of teachers in the war-affected provinces. The authorities provide incentives to encourage staff to return to hardship areas where amenities are few and locations remote. It was stated that there was a sufficient number of teachers to staff the schools that had been reconstructed.

156. Over the past three years, more than 50 per cent (1,422) of the damaged schools have been brought back into service. Reconstruction work has been completed on 12 technical and vocational training centres, at a cost of Rls 21,000 million. Work on a further 370 schools is due to be completed within the current budget period. Approximately 20 per cent of the total reconstruction effort has been undertaken by various foundations and trusts working in parallel with the Government, while much of the expenditure (Rls 103,553 million to date, with remaining requirements estimated at Rls 146,400 million) has been covered by voluntary assistance.

157. In the devastated rural areas, school reopenings will have to be delayed until a viable community is re-established. For this reason it is unlikely that later phases of the school restoration programme will proceed at the same pace as has been maintained to date. Thus, only 60 to 70 per cent of remaining reconstruction work is likely to be completed by the end of the first five-year plan period.

158. The major constraint affecting restoration of educational services is a shortage of building materials. In devastated areas, this situation is compounded by the need to replace basic services and infrastructure, including adequate housing. According to the authorities, the problem in the devastated areas is not one of an insufficient number of teachers but of the tremendous need for urban and rural reconstruction.

159. At the national level, there is a shortage of teachers; 40,000 new primary school teachers are required each year, while only 25,000 graduate annually from teacher-training centres; the shortage of secondary teachers is put at 116,000. With a view to easing the pressure on the Government's programme, the private sector has been allowed to set up non-profit-making educational establishments at all levels.

160. With regard to international assistance, the Ministry of Education has expressed interest in expert support for "school mapping" activities. The mission also feels, given the Government's stated policy of reviewing and

modifying the education and training system in accordance with the country's needs and development programme, that expertise in the form of comprehensive human resources analysis might be helpful. Furthermore, it envisages problems in the form of teacher shortages, particularly in rural schools as the resettlement programme gets under way.

161. While current standards of school construction are high, there is no doubt that schools which function equally well could be built at lower costs, for example, by simplifying structures and/or reducing or entirely omitting internal circulation spaces. Area unit costs over the entire range of school types are said to be between Rls 200,000 and 300,000 per square metre (at 1990 prices). The current shortfall in teaching space is now of the order of 160,000 classrooms.

162. The mission was unable to obtain details of the situation regarding institutes of higher education.

I. Cultural heritage

163. Listed archaeological sites, monuments and museums of outstanding significance suffered severe and, in some cases, irreparable damage. Field visits, although necessarily subject to time constraints, permitted an inspection of damage to the well-known national museums, to the principal cultural heritage institutions and to the principal historic cities, monuments and sites affected by the war.

164. Significant damage was done to the excavated monuments at Shush, as well as to the archaeological research centre and exhibits stored within it. One wing of the Shrine of Daniel was partially destroyed, while the mirror decoration of the iwān collapsed. At Chaga Zanbil, a section of the outer casing of the first and second stages of the ziggurat collapsed, while the Haft Tappeh site was disturbed by trench-digging and the erection of defensive military obstacles. Indirect damage in the Shush area included the illicit removal of objects from unprotected sites and a failure to maintain conservation programmes.

165. In Esfahan, 10 major mosques, 5 religious schools, 3 main bazaars and more than 40 listed historic houses suffered damage, while over 1,000 old houses were totally destroyed. The south-eastern prayer hall of the 'Atiq Congregational Mosque was hit by rockets in 1984, but restoration is now complete. Various restoration and rebuilding work was carried out on the damaged Agha Nur Mosque and its adjacent bazaar, the Masjid Sayyid and the Hammam-e-Wazir. Although no direct damage was inflicted on monuments around Maidan-e-Imam, shock waves from a missile explosion were thought to be responsible for the lifting of faience tiles around the crown of the Imam Mosque's dome. Ongoing conservation work on other monuments was halted to make way for restoration activities.

166. Approximately 15,000 houses and public buildings are said to have been destroyed in Dezful, involving irreparable damage to the urban fabric of the historic city centre. Many historic houses and public buildings were also destroyed or damaged in the old town of Shushtar.

167. Of Iran's 40 museums, 5 in Tehran, 3 in Khuzestan and 1 in Lorestan were all damaged to varying degrees, that of Abadan being destroyed completely. At museums in Tehran, the National, Golestan Palace, National Arts and Glass and Ceramics, nearby explosions caused damage both to exhibits and to the structure of the buildings. In Khuzestan, repairs to the Shush museum building had been completed, while restoration of damage to the collections was still in progress. Despite some repairs to the Haft Tappeh museum, the damaged ventilation system and some showcases need replacement.

168. The Iranian authorities have declared their priorities for the reconstruction and restoration of war-damaged cultural heritage to be as follows: comprehensive revision of plans and objectives; establishment of an adapted organization; provision of adequate legal and financial means; rehabilitation of manpower; rehabilitation and modernization of facilities and equipment; and the reconstruction, restoration and rehabilitation of damaged monuments, sites, museums and collections. The Cultural Heritage Organization estimates that approximately one tenth of restoration work has so far been completed. In monetary terms, that organization estimates that a total of Rls 37,000 million, will be required for restoration work. To date approximately Rls 23,000 million have been spent. That figure does not include overheads or private sector losses. It also excludes the contribution of voluntary groups said to have been organized throughout the country to ensure the protection of heritage sites.

169. With respect to external assistance, the need was expressed for training - both abroad and on-site - of an entire new generation in the conservation, restoration and documentation of cultural property, as well as in the various branches of museology. New technology is required, including, in particular, photogrammetric plotting equipment. Software is needed for the inventory of historic monuments, as well as cultural and intellectual exchanges with overseas institutions and access to specialist publications and reviews.

170. In terms of technical assistance, international advice is sought on methods for the conservation of stone, baked brick and adobe structures. Assistance is also needed for a study of the ancient water mills and irrigation system at Shushtar. A draft United Nations Development Programme project on "Assistance for Training of Personnel and Restoration of Historic Monuments" should be amended to concentrate on the strengthening of the National Research Laboratory in Tehran. Extrabudgetary funding is required to restore a group of historic houses in Esfahan with a view to expanding the facilities of the existing School of Restoration.

171. Despite the commitment of considerable human resources to restoration efforts, and the zeal and competence of traditional craftsmen working under the supervision of talented experts, it is the mission's view that it will take many years to complete the necessary work.

J. Health

172. During the conflict, a total of 102 "health houses", 84 rural health centres, 80 urban health centres and 12 provincial and/or district health centres were destroyed. In addition, 5 quarantine and tuberculosis control centres and hospitals containing 2,076 beds sustained severe damage which will require complete rebuilding. The destruction included medical equipment, supplies, medicines and vehicles.

173. The total cost of infrastructure reconstruction during the period 1983-1990 amounted to Rls 50,848 million for the Ministry of Health and Rls 12,000 million for other governmental bodies and institutions. Infrastructure reconstruction costs for the health sector 1991-1993 are estimated at Rls 295,454 million. War damage to health facilities in the non-government sector was estimated at some Rls 156,943 million, with reconstruction costs expected to exceed the estimated cost of the damage.

174. Health and medical education facilities, which also fall under the responsibility of the Ministry of Health, were severely damaged. They include 3 medical universities, 37 teaching hospitals and 17 educational/research centres in the 5 war-affected provinces. Reconstruction work on 10 hospitals and 10 training centres was completed by the end of 1990.

175. Given its additional responsibility for water supply and sanitation facilities in all villages housing over 150 families, the Ministry incurred costs of some 5,200 million rials in respect of damage to such facilities. The actual cost of reconstruction work so far completed was stated to be Rls 7,346 million.

176. The mission was informed of a latest survey which showed that 593,000 civilians were physically and/or mentally disabled as a result of the war. This is well over the provisional estimates mentioned in the mission's first report. Despite the Government's efforts to reduce the impact of such disabilities, it will be impossible to cover their needs and to meet established health targets in the war-affected provinces without international assistance to help support the launching of an accelerated reconstruction and rehabilitation programme. The programme will need to take into account environmental problems which have proliferated as a result of the interruption of health services during the conflict: the destruction of water and sanitation systems; chemical contamination of the soil; and the threat posed by an alarming increase in health-threatening pests and insects. The incidence of acute respiratory diseases and diarrhoea has risen sharply, resulting in an increase in morbidity and mortality rates.

177. The Government is determined to ensure the earliest possible rehabilitation of interrupted health services and to encourage the return of physicians and other health workers to the border provinces. As a matter of urgency, it hopes for international assistance in securing the following items: 2,000 field vehicles; 1,000 ambulances; 300 prefabricated health houses; 300 prefabricated health centres; and 5 prefabricated 500-bed public hospitals. The establishment of a local facility to produce prefabricated units would be of immense value. The Government also requires up-to-date materials and technical support for environmental monitoring, as well as support in research concerning the conflict's effects on health and the environment.

178. In the medium term, the Health Ministry wishes to obtain access to modern technology in the form of information, modern teaching equipment and laboratory reagents and equipment, as well as training facilities for the disabled and additional means of transport. The transfer of technology should enable the Ministry to reach its long-term objective of self-sufficiency in the production of equipment, reagents and medicines. Meanwhile, the Iranian authorities need links with international institutions offering expertise in disaster management and subsequent reconstruction.

VI. MAIN FINDINGS AND CONCLUSIONS

179. Reconstruction needs for the Islamic Republic of Iran following an eight-year period of hostilities can only be described as substantial when one takes into account the considerable physical damage experienced by the productive sectors, the displacement of large numbers of people, the significant human losses suffered through death and permanent disability, and the economic and social consequences brought about by the diversion of development to satisfy security and military needs.

180. In the three years that have elapsed since the cease-fire agreement, the Iranian authorities have made important progress in defining reconstruction priorities, in mobilizing consensus and widespread public support as to objectives, and in restoring the flow of productive activities essential to resume an economic growth path. Although much of the physical material damage inflicted by the hostilities on the productive sectors has been repaired, it will require many years to overcome the systemic damage to the environment, to the infrastructure, and to social institutions and services in the affected provinces.

181. A mid-term review of progress under the five-year plan is now being undertaken. Although the full results of that review are not yet available, the authorities have expressed general satisfaction with the pace of implementation, particularly as it relates to the achievement of key targets. The growth which has taken place in recent years has been based primarily on the mobilization of domestic resources. Macroeconomic policy reforms have enabled the financial system to capture domestic savings and have encouraged expansion of productive activities by the private sector. At the same time,

improved fiscal performance by the Government has permitted increased allocation of funds for fixed capital formation while reducing the budget deficit.

182. There is consensus within the Government that, at the present time, there are three main barriers to further successful implementation of the plan and to the achievement of its principal objectives. These are: (a) shortage of foreign exchange; (b) shortage of skilled professional and technical cadres; and (c) transportation bottlenecks. In addition, the sector reviews undertaken by the mission indicate the need for substantial upgrading of existing technology and the transfer of new technology.

183. The five-year plan anticipates the acquisition of about \$27,000 million from foreign sources to implement specific new projects, which would be in addition to the investments currently being undertaken within the framework of the current development plan. It should be noted that the latter represent largely projects which in the 1980s were in various stages of design or implementation but which had to be postponed because of the war. About \$10,000 million of the new funds would be acquired through buy-back arrangements primarily for resource-based activities designed to absorb new technology and to gain access to new export markets. The balance would be for projects in industry, agriculture, oil and petrochemicals. These activities would be import-saving or export-earning to minimize the problems of debt servicing. As noted above, the Government is also actively promoting foreign investment, particularly in the context of joint ventures.

184. Although it was possible to make only a brief survey of the progress in implementing these proposals, the mission was informed that the pace of completion of the necessary arrangements has been slower than anticipated but that this was expected to improve rapidly. A number of important projects are currently being actively negotiated, with prospects for early investments. One example cited was a major aluminium refinery to be financed in great part by European investors which would contain an important export component.

185. An extremely difficult problem to deal with in the short run is the shortage of skills. The Government is making an effort to attract back to the country trained personnel who had emigrated. The new investment projects involving foreign participation which are described in the previous paragraph are expected to involve transfer of skills through on-the-job training of local personnel. Longer-term efforts to fill this gap are in train to re-establish vocational training institutions, expand teacher training and strengthen the university system.

186. Related to the problem of skills is the question of upgrading technology and, in general, raising the technological level of the society. In the past, the Islamic Republic of Iran had demonstrated an excellent capacity to keep abreast of modern technological developments, a capacity which stands it in good stead now as the country seeks to rehabilitate its economy. However, having been cut off for almost a decade from the rapid pace of technological change in a wide variety of fields, special efforts will be required to update

technologies and to incorporate the newly developed technologies to levels prevailing in modern societies if the economy is to achieve the sustainable growth path its resources, both human and natural, can support. A number of activities are now under way or are being planned to deal with the problem. These include (a) intensive educational programmes for government and private sector officials in the management of technological change; and (b) measures to strengthen the university system.

187. Transportation bottlenecks mainly reflect the problems which have arisen, in part due to the shift in the infrastructure pattern following the closing of Khorramshahr and, in part, due to the war period when it was not possible to undertake normal maintenance and repair of the road and railway networks. The Government attaches high priority to the railway link between the port at Bandar Abbas and the principal cities in the hinterland. Negotiations are under way to secure financing for this project from international sources.

188. The number of persons who are still registered with the relevant government agencies as displaced and requiring resettlement is now of the order of 1.2 million. It is understood that about 250,000 others have resettled with government assistance in their places of origin. Of the 14 million square metres of housing construction which the government estimates is required to meet total resettlement needs, approximately 2 million have been completed.

189. Iran's post-war domestic mobilization effort to deal with the consequences of the hostilities and to reconstruct its economy has been substantial and impressive. Considerable progress has been achieved in what has been essentially a "boot-strap" operation, almost completely dependent upon domestic resources. At the macroeconomic level, a growth path has been established essential to resolving the deep-seated social consequences of the war and the attainment of long-term development targets. The policy framework which the Government has elaborated, with its emphasis on an efficiently functioning market system, is fully consistent with the objective of achieving an optimum allocation of resources.

190. At the same time, the results of the sector reviews indicate the urgency of what may be called a deepening of the reconstruction process. The immediate post-war strategy of rapid recovery of output, often through makeshift methods and improvised technology, appears to be nearing its limits. There is the need to adopt a more thorough approach to the improvement of the physical infrastructure and productive apparatus. Crucial to the change in strategy is an increase in foreign exchange resources.

191. There is little doubt that the international community can make important contributions to accelerating progress in reconstruction. The Islamic Republic of Iran's low indebtedness profile makes it particularly creditworthy for the project financing it seeks, focusing mainly on activities which will generate their own debt servicing capacity. There appears to be a wide range of viable projects in the pipeline, both in the public and private sectors.

Moreover, the policy environment is open and welcomes the establishment of close ties with external partners.

192. In addition, financial assistance, under appropriate terms and conditions, might be provided for activities in the social fields, for example education and health care, where the immediate requirements for investment are substantial but which do not directly generate a capacity for servicing the associated debt. Such financing could be carefully designed within the framework of an overall debt strategy to minimize long-term debt servicing concerns. 1/

193. The need for technical assistance, particularly in the social sectors, are especially acute. For example, given the magnitude of the problems, there is great scope for assistance from private organizations with broad experience in dealing with large numbers of people physically disabled by war or traumatized by displacement or by war.

194. In the economic sectors, technical assistance is needed essentially to strengthen and widen the domestic programmes now planned or under way. Such assistance could best concentrate on filling the gaps currently existing, to overcome the shortage of highly skilled personnel. Major external programmes to support technological development also appear fully warranted in the current conditions of the Islamic Republic of Iran and its past performance in this area.

195. During its meetings with Iranian officials, the mission sought to obtain the views of the Government on the precise forms of international cooperation which would most efficiently assist in the country's reconstruction effort. It was agreed that the latter should be defined in the broad sense of the restoration of the economy to a growth path. Formulated in general terms, the responses stressed three factors: (a) access to recent technological developments (including technical assistance) and to sources for renewal and replenishment of capital stock; (b) access to export markets; and (c) access to international capital markets and investment.

196. Paragraph 7 of Security Council resolution 598 (1987) envisaged a role for the international community in the reconstruction of the two parties to the conflict. Having completed its study of the reconstruction efforts of the Islamic Republic of Iran and being aware of the Government's priorities, the mission strongly recommends that consideration be given to the convening of a round-table conference under the auspices of the United Nations or any other appropriate body at which the Islamic Republic of Iran and States Members of the United Nations and its relevant agencies and organizations could meet to discuss specific measures for cooperation. It is anticipated that a minimum of six months would be needed for the preparation of such a conference. The Iranian Government, with the assistance of the United Nations could arrange for the preparation of the necessary documentation and project profiles, taking into account Iran's substantive need and priorities for reconstruction.

197. In the same connection, the mission believes that the role of the international community in clearing the waterway at Shatt al-Arab and the immediately adjacent waters of the Persian Gulf is an economic necessity. It will be necessary to revive the functioning of the Combined Bureau of Coordination (CBC) which, prior to the war, administered and coordinated the operation of the waterway. As detailed in the sectoral report summarized in section V, the particular salvage work which is needed, its magnitude and complexity, will require considerable external technical inputs. It will be necessary to utilize sophisticated and large equipment, not available in Iran, to deal simultaneously with sunken vessels, a wide variety of ordnance lying on the river bed, and the extensive siltation which has accumulated as a result of more than 10 years of neglect. Once the political ground has been cleared, the mission considers it necessary as a first step, for a series of surveys to be carried out, as soon as possible, to locate the wrecks and other obstacles, identify the cargo and to determine the best means of clearance (including the removal of any hazardous materials and unexploded ordnance).

Notes

1/ In February 1991, the World Bank extended a \$250 million loan for an earthquake recovery project to assist the Government's earthquake reconstruction programme.

Appendix AComposition of the team

The team was led by Mr. Abdulrahim Abby Farah, former Under-Secretary-General. Below are the names of the members of the team including their sectoral assignments: Mr. Irwin Baskind (consultant), macroeconomist; Mr. John D. Cuddy (United Nations Conference on Trade and Development), macroeconomist; Mr. Ignacio Armillas (United Nations Centre for Human Settlements), housing and human settlements; Mr. William H. Crowe and Mr. John Thomas (consultants), oil, gas and petrochemical industries; Mr. Vladimir Skendrovic (United Nations Department for Technical Cooperation for Development), rail, roads and air transport; Mr. Andre Pages (consultant), ports and shipping; Mr. Joseph Madeo (consultant), marine salvage; Mr. Christian Beinhoff and Mr. Niels Biering (United Nations Industrial Development Organization), heavy and light industry; Mr. Ali Asghar Abidi (consultant), agriculture and irrigation; Mr. Seamus Kenny (consultant), electrical power; Mr. P. Roychoudhury and Mr. Bernard Humm (International Telecommunication Union), telecommunications and broadcasting; Mr. T. Worku and Mr. J. Sheley (United Nations Educational, Scientific and Cultural Organization), education; Mr. Barry Lane (United Nations Educational, Scientific and Cultural Organization), cultural heritage; Dr. O. Sulieman and Dr. S. Ben Yahmed (World Health Organization), health; Mr. Gerard Fischer (United Nations Conference on Trade and Development) served as Special Assistant and Sectoral Coordinator. Mr. Andrew Brookes (United Nations Secretariat) and Mr. Jafar Javan (United Nations Development Programme) served as translators/interpreters.

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Appendix B

Officials met by the team leader and the experts

Mr. Hamid Mirzadeh	Vice-President and Special Government Representative for Reconstruction
Mr. Issa Kalantari	Minister of Agriculture
Mr. Hossein Kamali	Minister of Social Services and Labour
Mr. Reza Malekzadeh	Ministry of Health
Mr. Mohammad Reza Nematzadeh	Minister of Industry
Mr. Hadi Nezhad-Husseinian	Minister of Heavy Industries
Mr. Mohsen Noorbakhsh	Minister of Economic Affairs and Finance
Mr. Abdullah Nouri	Minister of the Interior
Mr. Mohammad Saeidikia	Minister of Transport
Mr. Bijan Zanganesh	Minister of Energy
Mr. Mohammad Hussein Adeli	Governor of the Central Bank
Mr. Mohsen Yahyavi	Deputy Minister, Director of Corporate Planning and Board Member of National Iranian Oil Company, Ministry of Oil
Mr. Ali Khorram	Adviser to the Foreign Minister and Head, Persian Gulf Headquarters
Mr. Mehdi Tabeshian	Vice President, Islamic Republic of Iran Broadcasting (IRIB)
Mr. Behkish	Chamber of Commerce, Industries and Mines

Appendix C

Documentation submitted by the Iranian authorities

1. Final report on the assessment of the economic damages of the war imposed by Iraq on the Islamic Republic of Iran (1980-1988): Plan and Budget Organization
2. Law and Regulations concerning the Attraction and Protection of Foreign Investments in Iran: Iran Chamber of Commerce, Industries and Mines Centre for Economic Research and Analysis
3. Summarized version of the first five-year economic, social and cultural development plan of the Islamic Republic of Iran (1989-1993): Plan and Budget Organization
4. Policies, priorities, functions and experience of nine years of reconstruction in the Islamic Republic of Iran: His Excellency Mr. Hamid Mirzadah, Vice-President in Administrative Affairs, Special Representative of the Government in Reconstruction and Renovation of War-Damaged Areas
5. Statement by the Hon. Mohsen Noorbakhsh, Governor of the Bank for the Islamic Republic of Iran at 1991 Annual Meeting of the World Bank Group in Bangkok, Thailand
6. Telecommunications - War Damage Report - June 1991, received from Telecommunication Company of Iran (TCI)
7. Document defining the credits needed for the reconstruction in the sectors of housing and infrastructure and employment in war-damaged areas
8. Map of Port of Bandar Abbas) Ports and Shipping
Map of Port of Bandar Khomeyni) Office
9. Reply from Iranian authorities (in Farsi) to request for information of 13 August 1991 - translation attached
10. A general perspective of the destruction of Iranian villages during the imposed Iraqi war upon Iran and the process of reconstruction: The Islamic Republic of Iran Housing Foundation of Islamic Revolution
11. (a) National Petrochemical Company Information
(b) National Petrochemical Company Projects
(c) Answers to Oil and Gas Journal's questionnaire on current status of crude oil refineries in the Islamic Republic of Iran

- (d) NIOC's Petroleum Product Imports (1979-1990)
- (e) NIOC: Specifications for gasoline, kerosene, gas, oil and 1700 sec fuel oil
- (f) NIOC: Details of attacks on refinery
- 12. Central Bank of the Islamic Republic of Iran: Economic Report and Balance Sheet 1363 (as at 20 March 1985)
- 13. Central Bank of the Islamic Republic of Iran: Economic Report and Balance Sheet 1366 (1987-1988) (as at 20 March 1988)
- 14. Implications of the imposed war on the Islamic Republic of Iran Broadcast Services
- 15. Map showing maritime access to Shatt al-Arab ports of Abadan, Khorramshahr to Bandar Khomeyni
- 16. Shipping charts (Ports and Shipping Office)
- 17. Reconstruction Programme and Development: Director Engineering TCI
- 18. Ministry of Energy - 1967-1979 Electric Power Industry in Iran; Electric Power Industry in Iran 1982; 1989 Electric Power in Iran
- 19. Brief report on seven damaged Iranian airports during the imposed war - Abadan, Ahwaz, Bakhtaran, Hamedan, Orumieh, Sanandadje, and Shiraz (Civil Aviation)
- 20. Document describing priority projects in the field of environment seeking assistance from the international communities. Environmental Protection Organization
- 21. Information release - United Nations Environment Programme inter-agency consultation on environmental consequences of the Gulf war - attached is UNEP document UNEP/GC.16/6, Effects of Chemical Weapons on Human Health and the Environment (UNDP)
- 22. One page - Environment - Costs of projects in rials: Environmental Protection Organization
- 23. Data received from Vice-President for Reconstruction - (tables and translations)
- 24. Statement on reconstruction projects (Ministry of Industry Fund Assessment for Reconstruction concerning Ministry of Road and Transportation)
- 25. Data relating to Khorramshahr post office building (Postal Services)

26. Estimation of necessary machinery for reconstruction (Rural Housing Office)
27. Renovation data relating to ports (NIOC)
28. Educational planning - Data in Farsi: Directorate of Educational Planning and Projects, Ministry of Education (together with handwritten translation)
29. Agriculture - Provincial Statement of Damages, "Summary report on War-damaged areas"
30. Reconstruction programme, including cost of works and external assistance: Ministry of Energy Water Resources
31. Blueprint map of Isfahan: Office for Reconstruction, Iranian Cultural Heritage Organization, Isfahan
32. Document issued by the International Monetary Fund - Statement by Mr. Mirakhor on the Islamic Republic of Iran - Executive Board Meeting, 6 September 1991
33. Two documents of the International Monetary Fund: Islamic Republic of Iran - Staff Report for the 1991 Article IV Consultation (SM/91/145); Islamic Republic of Iran - Recent Economic Developments (SM/91/156)
34. Iranian Cultural Heritage - Damages due to the imposed war.. Brief report prepared for Senior Adviser to the United Nations Secretary-General - resolution 598 (1987)
35. The Imposed War - volume 6
36. Agricultural Sector - Khuzistan Province reconstruction programme
37. Miscellaneous documents issued by the Central Bank of Iran
38. Official submission on health sector (Ministry of Health)
