Distribution plan for phase XIII submitted by the Government of Iraq to the Secretary-General in accordance with the memorandum of understanding of 20 May 1996 and Security Council resolution 1447 (2002)

EXECUTIVE SUMMARY

1. The present Distribution Plan has been prepared in accordance with Section 2 of the memorandum of understanding between the Government of Iraq and the United Nations Secretariat, (referred to herein after as the "MOU"), signed on 20 May 1996, for the purchase and distribution of food, medicine, medical supplies and equipment and other supplies necessary for the essential civilian needs to help alleviate the hardships suffered by the people of Iraq. The plan constitutes an important element in the implementation of Security Council resolution 1447 of 4 December 2002.

2. In the three northern Iraqi governorates, namely Dahuk, Erbil and Sulaymaniyah, the United Nations Inter-Agency Humanitarian Programme (hereinafter "the Programme") will be responsible for the procurement and distribution of essential civilian humanitarian supplies as well as for rehabilitation activities. The Programme will function according to paragraph 20 of the MOU and with paragraphs 3 and 6 of its Annex I. Based on paragraph 2 of Annex I of the MOU, the Programme has identified the humanitarian requirements of the three northern governorates as reflected in the Distribution Plan, (hereinafter "the Plan"). For this purpose, it has considered all relevant circumstances in the three northern governorates and in the rest of the country, in order to ensure equitable distribution. These requirements were also discussed with the Government of Iraq.

3. A total amount of US \$ 4,926.89 million shall be available to meet the humanitarian needs of the people of Iraq, including spare parts and equipment for the Iraqi oil industry. The Plan allocates US \$ 1,275 million to the food sector. The general food basket provides 2472 kilo-calories and protein, especially animal protein (as dried whole milk and/or cheese) which will contribute to 8.5 per cent of total protein, as reflected in the table below. The inclusion of weaning cereal for infants fills an important nutritional need. An amount of approximately US \$ 40 million from the allocation to the food sector will be used to import raw materials for processing of vegetable oil, soap, and detergent, implementation of which would be under the food handling sector.

General rations	Plan XIII		
Calories (Kcal)	2472		
Protein-non-animal	51.70		
Protein-animal	8.50		
Total protein	60.20		
Infants	Plan XIII		
Calories (Kcal)	696		

Protein	19.7
<u></u>	

4. Fortification of vegetable oil with Vitamin A will help reduce the proven public health problem of this deficiency. Fortification of salt with iodine will continue as before, to reduce the problem of Iodine deficiency disorders, known to be prevalent throughout Iraq. The distribution of food will be carried out within the existing framework according to the ration system currently applied, which is described in the previous distribution plans.

5. The Plan allocates US \$ 282 million for the food-handling sector for spare parts and equipment, pursuant to the activities of storage and transportation of foodstuffs and grain milling as well as delivering them to consumers in conformity with the quantities of goods imported, in accordance with the MOU.

6. The Plan allocates US \$ 143 million to the Medical Services sector, 50 per cent of which is for the import of equipment and required items for the rehabilitation of hospitals and health centres, while the other 50 per cent is for the import of medicine and medical supplies. It should be noted that all Iraqi citizens, Arab and foreign residents have access to public health services. Medicine for chronic diseases will be a priority. Spare parts will be purchased to repair service equipment, such as air-conditioning equipment and hospital elevators throughout the country. Subject to the provisions of the MOU relating to the three northern governorates, health commodities will reach the beneficiaries through hospitals and primary health care centres using the existing distribution system. The Plan allocates US \$ 20 million for the three northern governorates, for medicines and medical supplies (Bulk Purchase). In addition, US \$ 55.63 million is allocated for the rehabilitation of hospitals and health infrastructure in the three northern governorates.

7. US \$ 10 million is allocated for supplemental nutrition support for pregnant and lactating mothers, by providing high protein biscuits and Therapeutic Milk. These will be distributed on a monthly basis to pregnant mothers in their last trimester, to lactating mothers for three months after birth, and to malnourished children through Community Child Care Units/MOH in Iraq. Micro-nutrients. Pregnant and lactating mothers will also receive Iron and multi-vitamins through MCH centres. With roughly 50,000 births per month, the funds allocated for the Plan are sufficient to provide the additional caloric requirements for pregnant and lactating mothers.

8. The conditions of potable water and sanitation systems remain critical throughout Iraq. Rehabilitation requirements are estimated over US \$ 700 million, in addition US \$ 150 million to complete the unfinished project to serve 1.8 million inhabitants residing in Baghdad and other governorates. The garbage collection had been neglected due to the shortage of funds and the sector needs US \$ 30 million to purchase spare parts and new equipment. However, due to limited funds, the Plan allocates US 359.54 million, of which US \$ 150 million for Baghdad serving about 6 million people in the city and its surrounding districts. US \$ 94.25 million to be provided for the rehabilitation of water and sanitation facilities in the remaining governorates, including US \$ 115.29 million for the rehabilitation of water and sanitation facilities in the three northern governorates. The UN Secretary-General's report of 19 November 2001 (S/2001/1089) stressed that the programme has focused

on sustaining the existing urban coverage, and pointed out that the inequity of water availability in semi-urban and rural areas needs to be addressed urgently. Equipment will be imported to rehabilitate potable water and sanitation facilities in Baghdad and other governorates.

9. As a result of the destruction inflicted on the electricity sector and the lack of spare parts and equipment for maintenance, the condition of the network has severely deteriorated resulting in frequent and prolonged power cuts to the consumers, including essential services such as hospitals, water treatment and sewage plants, wheat mills, irrigation and drainage pump stations, schools, universities and fuel stations. Although, the total allocation under previous phases increased substantially, the network continues to deteriorate for two main reasons: the scale of inputs received is significantly low in comparison with actual needs, and the large number of contracts on hold. The report of the UN Secretary-General in March 2000 (S/2000/208) refers to this situation. This was compounded by a severe regional drought in the last three consecutive years, which has reduced the power generation from hydro units by more than 350 MW. The deficit in power was 1600 MW, 1700 MW and 1800 MW in the years 1997, 1998 and 1999 respectively, and the corresponding load demand was 5300 MW, 5500 MW and 5700 MW respectively. During a country wide load survey in Aug'1999, the load demand was 6200MW and the deficit in power based on the load demand was 2300 MW. In year 2000, During August the load demand recorded was 6120 MW, the deficit in power was 2402 MW . From the figures it is evident that the power generation deficit has been steadily increasing, as the power generation is not commensurate with the load demand. The details of installed capacity, available capacity, load demand and deficit in power are shown Annex-I/ Electricity. One measure that would remedy the present situation is the immediate approval of the large number of contracts presently on hold. However, the impact of current measures can be realized only after not less than two years owing to long lead-times required for manufacturing the electrical system equipment, spare parts, and time required for installation.

10. The investment required to rehabilitate the electricity sector is beyond the allocation indicated in the Plan; however, to address minimum requirements, the Plan allocates US \$ 272.5 million for this sector.

11. Within this allocation, the Plan has earmarked US \$ 71 million for the three northern governorates. The allocation for the northern governorates is essential to continue the rehabilitation of the distribution network; to ensure supply of fuel for the 29 MW plants providing electricity to essential services; to allow for interim generation until the reconnection to the national grid is established; to ensure the operation and maintenance of installed small diesel generators; and to address power system control and communication facilities. The allocation will also support the establishment of a metering system and tariff structure to monitor and manage energy consumption and supply.

12. The vital role of the Agricultural sector is to enhance the availability of locally produced food items, mainly animal protein, vegetables, fruits and other oil seed crops. The Plan intends to address the basic needs for veterinary infrastructure rehabilitation, and upgrading of the veterinary service capacity to respond to epidemic diseases. The Plan also considered the resources needed to sustain the GOI

poultry programme. Expansion in fish production as well as the enhancement of dairy production have been addressed within the available meagre resources.

13. The sector will receive US \$ 444.33 million to respond to urgent needs. Of that amount, US \$ 228.5 million is allocated to the irrigation sector (centre and south) to address part of the water resources rehabilitation and project construction needs, and to partially secure needed equipment and spare parts.

14. Of the balance, US \$ 179.5 million is designated to agricultural production, including poultry production, in the centre and south and US \$ 36.33 million has been allocated to the agricultural and irrigation sub sectors in the three northern governorates of Iraq. The Plan has focused on the enhancement of domestic food production in order to contribute towards improving the diet of the population as this concerns both quantity and quality, in particular micro-nutrients, vitamins and animal protein. The proposed activities cover the provision, of the basic inputs for vegetable, fruit and animal production. These include inputs needed for soil preparation, irrigation, fertilizer, plant protection chemicals, and drugs for the control of animal diseases.

15. Primary, Secondary and Higher Education sectors are in need of major rehabilitation work. The effects are clear on schools and other educational facilities; there are 4,000 damaged school buildings. There is also severe shortage of books, whereby there is an actual need for preparing more than 50 million books annually. Due to a lack of, printing materials, spare parts and paper, the printing facilities of the Ministry of Education have stopped. All schools suffer from severe shortages of laboratories, aid and training materials. Besides of all the above-mentioned difficulties, the sector is suffering severely from shortage of transportation. This undermines teachers and student rehabilitation and training. Higher education and public education have been also affected by the shortage of books and materials required by scientific departments of Iraqi universities. The needs of higher education for laboratory equipment required for students in medicine, pharmacy, and agriculture will be provided. Other general needs, such as reference books, spare parts for laboratory equipment, photocopiers and educational supplies will be made available. In addition as stressed by the UN Secretary-General's report of 19 November 2001 (S/2001/1089) items such as school rehabilitation materials warrant more attention. This sector will receive US 191.85 million, out of this amount US \$ 123.53 million will be provided for primary and secondary education of which US \$ 63.53 million is allocated for the three northern governorates. For Higher Education the Plan allocates US \$ 68.32 million of which US \$ 17.57 million for Higher Education in the three northern governorates.

16. The Housing Sector addresses people in urgent need of housing, supports permanent settlements in appropriate places and at assists population in cities and towns to secure better housing conditions. Funding of US \$ 80 million is allocated to this sector. For the three northern governorates the Programme aims at providing adequate permanent living conditions in rural as well as in urban areas to large groups of the population who live in unacceptable conditions. To achieve this goal, it will provide integrated housing and related basic service packages, and it will rehabilitate the general infrastructure. Eligible persons who are waiting for a permanent solution to their housing problems will be provided with emergency shelter, relief items, water

and sanitation to ensure the availability of minimum accommodation conditions. Newly established communities will receive social support. A total funding of US \$ 103.70 million is allocated to the Settlement Rehabilitation Sector in the three northern governorates.

17. Landmines in the three northern Governorates continue to claim the lives of many people. An estimated 20 per cent of the arable land of the region cannot be cultivated because of land mines. The implementation of the Programme, including resettlement, is also severely hampered by lack of access to significant areas. The Programme aims at clearing mines in areas close to rural communities, economic activities, electricity transmission and distribution lines and resettlement towns. Training, mine awareness and establishment and expansion of prosthesis centres are some of the priority activities. The current Plan allocates US \$ 25 million for the required activities in this sector.

18. The present condition of telecommunications and transportation throughout Iraq, including the three northern governorates, is extremely poor and requires immediate attention. A viable system of communications is important to the life of the community and to the successful implementation of the Programme pursuant to Security Council resolution 986 (1995), including distribution of food and medicines, information flow among service providers, health education, and for the co-ordination of various social and economic sectors. Because of the limited amount of funds, US \$ 243.11 million only has been allocated, of which US \$ 36.11 million is allocated to cater for the basic telecommunication and transport needs in the three northern governorates.

19. The increasing need for humanitarian assistance in the central and southern governorates, particularly to the neediest social groups and the lack of sufficient resources to support essential activities such as repair of basic infrastructures, amelioration of public health services, improvement of water and sanitation programmes requires a special allocation.

20. The Plan makes available US \$ 343.72 million to cover some essential needs including improvement of dwellings, access to potable water, access of water in remote areas, provision of sanitation facilities and amelioration of the sewerage systems. The required activities in those areas are elaborated in Part Eleven of this Plan.

21. In the oil sector, the needs and requirements should cover the implementation of projects related to the development of existing and new oil fields in order to compensate for the depletion in oil available for export and prevent further deterioration in oil production in addition to achieving possible increase of production and increased reliability of production and export systems and equipment as well as the requirements of maintenance, rehabilitation and upgrading of equipment and systems used in all sector of the oil industry. In addition to that, it is essential to increase refining capacity by building new refineries to meet rising demands for oil products and to sustain the safe operations of the existing refineries with acceptable standards of efficiency, safety and environmental protection, to provide various oil products for local consumption and distribution including the transport of the fuel needed to operate the electricity generating plants in the country. 22. Hence, US \$ 250 million has been allocated for upstream sector, US \$ 350 million for the downstream sector. This makes the total requirements of the oil sector US \$ 600 million, as stipulated in resolution Security Council resolution 1447 (2002).

23. The enormous humanitarian needs of the population of Iraq are a consequence of the cumulative deterioration of living and environmental conditions during the years of embargo. The humanitarian situation and the goods to be imported for all sectors have been reviewed in accordance with paragraphs 4 and 11 of Security Council resolution 986 (1995) and by the successive reports of the UN Secretary-General. The report clearly pointed out that the various sectors mentioned in the above paragraphs still suffer from shortage of basic needs despite the implementation of the Plan.

24. The Government of Iraq confirms its willingness to cooperate fully with the Programme and to allow it to observe throughout the country the equitable distribution of humanitarian supplies imported under this Plan. To this end the UN personnel working in the Programme will enjoy unrestricted movement in connection with the performance of their functions and the possibility of receiving what facilitates their functions in accordance with paragraph 44 of the MOU. The locations of the independent inspectors will continue according to the current procedure stated under paragraph 25 of the distribution plan of phase VIII.

	Allocations in US \$ Millions (Countrywide*)	Allocations for Dahuk, Erbil and Sulaymaniyah in US \$ Millions		
Food	1,275.00	184.00		
Food handling	282.00	2.00		
Construction Materials	100.00	0.00		
Housing	80.00	30.00		
Health	143.00	20.00		
Electricity	272.50	71.00		
Agriculture				
Agriculture	215.83	36.33		
Irrigation	228.50			
Education				
Education *	123.53	63.53		
Higher Education	68.32	17.57		
Tpt and Tele	243.11	36.11		
WATSAN	115.29	115.29		
GEWS**	94.25			
BWSA	150.00			
Labour and Social Affairs	3.00			
Youth and Sport	29.98	4.98		
Industry	210.00			
Information	50.00			
Culture	20.00			
Religious affairs	25.00			
Justice	4.00			
Finance	20.00			
Central Bank	25.00			
Housing and Settlement Rehabilitation	103.70	103.70		
Mine Related Activities	25.00	25.00		
Nutrition	20.52	20.52		
Health Rehabilitation	55.63	55.63		
Special Allocation	343.72			
Sub total	4,326.89	785.67		
Oil	600.00			
GRAND TOTAL	4,926.89	· 		

Table 1.Allocations for sectoral activities covered by the
Distribution Plan XIII (US \$ Millions)

The estimated allocations by sector constitute indicative figures to give an order of magnitude of intended use of resources. The actual amounts will depend on market prices at the time of procurement.

** The daily food ration will provide 2472 kcal, 60.20 g of protein, 64.90 g of fat, 439.40 mg of calcium, and 9.80 g of iron.

Milk and weaning food for infants include 2 boxes of baby milk and 2 boxes of baby food and 1 kilo of milk for adult per capita.

Includes an allocation of US \$ 40 million for importing raw materials for processing into edible oils, soap, and detergent.

*** The special allocation in accordance with Security Council resolution 1330 paragraph 12 will be allotted to Housing, US \$ 98.71 million; Construction of health facilities, hospitals, specialized centres, and other health facilities, US \$ 126.9 million; Water and Sanitation, US \$ 113.11 million; and Board of Youth and Sports, US \$ 5 million.

**** The total allocation for the humanitarian component, including oil spare parts, (Country wide), has been calculated as 72.034 per cent of oil sales, after deducting the pipeline fees, less US \$ 25 million.

PART ONE

FOOD SECTOR

Introduction

25. The Government of Iraq has established a special rationing system to ensure the distribution of foodstuffs to all Iraqi citizens, Arabs and foreigners residing in Iraq. The system was launched on 1 September 1990 after the imposition of the embargo on Iraq. The Government distributes foodstuffs imported under the MOU throughout the country, with the exception of the three northern governorates, where the United Nations Inter-Agency Programme distributes the food ration to the population on behalf of the Government of Iraq.

The main features of the system.

26. The main partners of the system are:

- Ministry of Trade / Government of Iraq;
- The consumers (citizens of Iraq, Arabs and foreign residents);
- Retail ration agents (private sector).

27. The Ministry of Trade undertakes, on a monthly basis, the distribution of foodstuffs to the retail ration agents in their designated areas. There are more than 45,864 ration agents in the 15 governorates and over 10,000 ration agents in the three northern governorates. Each ration card has a number of coupons that corresponds to the basic food items. Every month the retail ration agents collect the coupons from the households. The ration card covers one calendar year.

28. Every Iraqi citizen, Arab and foreign residing in Iraq is entitled by law to a "Ration card " from the Registration Centres. These centres establish lists of families by name, age and number of consumers in each household and send the list to the computer centre. The computer centre sends one copy of each list to the retail ration agent and another copy of the list to the food distribution centres.

29. Under the current system, the monthly individual ration is the same for each individual with regard to commodities, quantity and the related nominal fees. Every month public and private mass media convey information on household's entitlements and on the time of distribution at the distribution centres.

30. The follow-up mechanism to ensure effective and proper implementation of the Rationing System is done through:

- The concerned monitoring offices of the Ministry of Trade;
- Elected People's Councils;
- Citizens.

31. The beneficiaries have the right to complain to the Ministry of Trade if the agent in their area is violating the relevant regulations. Following this, the Ministry circulates a questionnaire among all households registered with the said agent. If 51

per cent of the participating households condemn the agent, the Ministry cancels his license and appoints a new retail agent.

Monitoring of Distribution

32. Paragraphs 37-38 of the MOU rule the observation of the distribution of goods, as well as the way of determining their adequacy.

Plan for Food Distribution

33. This Plan follows the same mechanism of food distribution stipulated in paragraph 22 of the distribution plan of phase VIII.

Arrangements for procurement and Storage

34. Arrangements for procurement, storage and transport of food supplies under this Plan shall remain as stated in paragraph 24 of the distribution plan of phase VIII.

Warehouses

35. Specific warehouses shall be designated to store the foodstuffs imported by the Government of Iraq under the plan. These shall be located within the main storage complexes of the Ministry of Trade throughout the governorates of Iraq.

36. In the three northern governorates, the Programme shall deliver the humanitarian supplies to warehouses located in the area, as stipulated by paragraph 5 of Annex I of the MOU. Food supplies shall be delivered to the three governorates through transit warehouses in Kirkuk and Mosul. The Programme will manage the transit warehouses along with the onward dispatch of food.

Maintenance, repairs, rehabilitation and replacement of equipment required on the basis of priorities for the handling, storage, supply and distribution of food.

37. The Plan is based on the actual need of the food sector with regard to storage and transportation of foodstuffs, grain milling and delivery to the consumers. It takes into account the ration system and the volume of the imported foodstuffs. The following has been taken into consideration in preparing this requirement:

38. To repair and rehabilitate the apparatuses and equipment of grain silos to ensure the speedy transportation and receipt of the imported grains as well as their supply to mills.

39. To secure the minimum operational needs of the mills as well as the best production, packing and delivery of flour.

40. To ensure the means of enhancing the transportation and timely delivery of grains, flour and foodstuffs. Examples are the provision of trucks and the repair of railways.

41. To guarantee the minimum needs for cold and other type of storage for the foodstuffs.

42. The Plan allocates US \$ 1,275 million, including US \$ 184 million for the three northern governorates, to ensure the adequate procurement for this sector.

43. Under this Plan, the Programme will continue to be in charge of the transport, handling and distribution of food commodities to the end users in the three northern governorates. In this respect, the World Food Programme (WFP) transports the food items from the transit warehouses in Mosul and Kirkuk to the WFP managed warehouses in Erbil, Sulaymaniyah and Dahuk. The distribution of food will be carried out within the existing framework according to the ration system currently applied, which is described in the previous distribution plans.

Governorate	Population	Adults*	Children under one	
Ninewa	2,521,260	2,455,412	65,848	
Tameem	881,494	859,791	21,703	
Baghdad	6,499,975	6,329,742	170,233	
Salah al-Din	976,128	949,461	26,667	
Diyala	1,271,310	1,239,573	31,737	
Anbar	1,270,952	1,234,299	36,653	
Babylon	1,408,730	1,374,081	34,649	
Kerbala	741,744	722,646	19,098	
Najaf	950,222	923,087	27,135	
Qadissiya	915,564	891,438	24,126	
Muthanna	569,933	553,852	16,081	
Basrah	1,981,901	1,922,659	59,242	
Missan	848,322	817,591	30,731	
Thi-Qar	1,538,871	1,492,764	46,107	
Wassit	938,734	915,174	23,560	
Dahuk	817,376	799,130	18,246	
Erbil	1,334,176	1,310,784	23,392	
Sulaymaniyah	1,605,506	1,582,435	23,071	
Total	27,072,198	26,373,919	698,279	

Table 2Iraqi population by governorate covered by the Plan.

* the estimated population number calculated on the basis of the actual distribution figures of DP VII taking into consideration the natural monthly growth of 0.23 per cent.

Table 3
Consolidated Plan and Categorized List of Foodstuffs, Soaps and Detergents
(Phase XIII).

Items	Monthly ration per capita (kg) (2)	Total monthly requirements (ton)	Total needs for six months (ton) (4)	Required value for six months (US\$)	
(1)		(3)		(5)	
1. Food, wheat flour*	9.000	289,000	1,734,000	370,000,000	
Rice	3.000	84,500	507,000	135,000,000	
Sugar	2.000	53,800	322,800	124,000,000	
Tea	0.200	5,600	33,600	70,000,000	
Cooking oil	1.500	40,750	244,500	160,000,000	
Milk powder	3.600	2,520	15,120	66,000,000	
Dried whole milk and / or Cheese	1.000	26,400	158,400	225,000,000	
Fortified weaning cereal	0.800	560	3,360	7,000,000	
Pulses	1.500	41,500	249,000	30,000,000	
Iodized Salt	0.150	4,150	24,900	3,000,000	
Subtotal				1,190,000,000	
2. Soaps and detergents soap	0.250	6,850	41,100	37,500,000	
Detergents	0.500	14,250	85,500	47,500,000	
Total				85,000,000	
Grand total				1,275,000,000	

Note :these figures represent indicative quantities and values subject to actual distribution and market conditions .

- Wheat is to be processed and distributed to beneficiaries as wheat flour. The conversion rate used is 10 kg of wheat to 8.4 kg of wheat flour.
- Quantities are calculated on the basis of population figures listed in Table 2. For accuracy purposes, distribution losses are covered by adding a percentage to the quantity of food/non-food items distributed on a monthly basis: 4 per cent for pulses, 2 per cent for wheat flour, rice, sugar, cooking oil, salt and detergent and 0.5 per cent for tea.
- No additional quantities are given to the agents for milk powder, soap, weaning cereal and infant formulae as these items are distributed by tins or pieces.
- Children under one year of age receive infant formula, fortified weaning cereal, soap and detergent only.
- The amount allocated for food is sufficient to cover the RFB due to expected lower food prices.
- An amount of approximately US \$ 40 million from the food sector allocation will be used to import raw materials for vegetable oil, soap, and detergent.

PART TWO

PLAN FOR PURCHASE AND DISTRIBUTION OF MEDICINE AND MEDICAL EQUIPMENT AND SUPPLIES

44. In drafting its health policy, the Government of Iraq has followed the guidelines published by the WHO Programme on Essential Drugs:

• To provide essential and cost-effective medicines to meet the needs of the whole population of Iraq.

- To ensure equitable distribution.
- To ensure the high quality and proper use of medicine.

45. Before August 1990, the Ministry of Health was spending more than US \$ 500 million for the purchase of medicine and medical supplies. There were also recycled stocks that covered more than one year in addition to the known annual funds of investment for infrastructure. Therefore, the amount allocated by the previous distribution plans never really met the health service needs. The shortage of the medical supplies makes health services inadequate.

46. The provision of medicine in the absence of necessary medical equipment and diagnostic facilities hampers the appropriate delivery of essential health services. As a consequence, most of the patients receive partial treatment only. An aggravating factor is the low local production of drugs.

47. The Plan targets top priority needs for medicine, especially for chronic diseases, medical supplies and equipment, the local production of drugs, syringes and spare parts. In addition, it aims at rehabilitating services and equipment in hospitals and health centres such as air conditioning, elevators etc. US \$ 143 million is the total allocation to the health sector.

48. The reports of the Secretary-General reiterate the need for the rehabilitation of equipment in hospitals and health centres. However, these large investments are not possible under the Humanitarian Programme.

49. The Plan aims at the provision of high quality and low-cost medicine to meet the needs of the whole population of Iraq. Up to date medical equipment, such as Computerized Tomography (CT) Scans and Magnetic Resonance Imaging (MRI), medical and surgical appliances, diagnostic equipment and vaccines are required. Among other priorities that require an urgent attention within the framework of the Plan, are the provision of pesticides, insecticides, for domestic use the provision of field vehicles to ensure communication within the health network and vehicles to transport medicine and medical equipment. It should be stressed that the public health sector cannot be improved by the provision of medicine and medical appliances only. The infrastructure of hospitals, medical centres and warehouses is in need of rehabilitation through the provision of spare parts and replacement equipment in addition to physical repairs. Furthermore, the provisions of 400 ambulances for the health services are basic and urgently needed to improve public health services. 50. The deterioration of the economic and social situation led to high levels of malnutrition. US \$ 10 million is allocated for supplemental nutrition support for pregnant and lactating mothers.

51. In the three northern governorates of Iraq, while the health infrastructure has been largely rehabilitated or newly built since the beginning of the Programme, there are still problems related to access to health care services and medicine. In addition, child morbidity remains a serious problem and malnutrition, wasting, diarrhoea, acute respiratory infections and other infectious diseases as well as some micronutrient deficiencies are further challenges to address.

52. The Plan allocates US \$ 20 million to the health sector in the three northern governorates for the procurement of medicines and medical supplies. Most of funds will be used for bulk procurement and rehabilitation of equipment in hospitals and health centres. This includes the purchase of spare parts for air conditioning and hospital elevators. The remaining funds will be used to import medicine and medical supplies. Medicine for chronic diseases will be a priority. People in the three northern governorates will benefit of health commodities through hospitals and primary health centres.

53. The Plan allocates US \$ 20.52 million to supplemental nutrition support for pregnant and lactating mothers. The monthly distribution of high protein biscuits and therapeutic milk will target pregnant women in their last trimester of pregnancy, as well as lactating mothers for three months after birth. In addition, Mother and Child Centers will distribute micronutrients (iron and multivitamins) to this population. Malnourished children will be attended through the Community Child Care Units of the Ministry of Health.

54. For phase XIII, US \$ 20 million has been allocated for the provision of medicines and medical supplies and US \$ 55.63 million for projects under the component of "health rehabilitation".

55. The health care infrastructure of the three Governorates has been largely rehabilitated or newly constructed since the beginning of the humanitarian programme started. However, there are still problems with the access to health care services and particularly medicine. Child morbidity remains a serious issue in some communities. Malnutrition, wasting, diarrhoea, acute respiratory infection, infectious diseases and some micronutrient deficiencies are other negative outcomes of this situation.

56. The Plan allocates US \$ 20 million to the Health (Medical Services) sector including medicine and medical supplies. Most of the funds will be used to import bulk equipment and for equipment rehabilitation in Hospitals and Health Centres. Funds will also serve to purchase spare parts for service equipment, such as air-conditioning and hospital elevators. Medicine for chronic diseases will be the first priority. Health commodities in the three Governorates will reach the beneficiaries through the existing hospitals and primary health care centres using the existing distribution system.

Sub-Sectors

57. Purchase orders for essential drugs, medical supplies, equipment and support items follow the general priorities in the health sector and take into account the projected stock shortages. The Permanent Representative of Iraq to the United Nations in New York will communicate to the Office of Iraq Programme any change in priority or need for further allocation of funds.

- **Medicine and Medical supplies.** The Plan aims at providing adequate medicine and medical supplies to health care providers throughout Iraq. The Ministry of Health will focus on ensuring a continuous flow of essential items to health facilities.

- **Rehabilitation of Health Facilities.** It is estimated that approximately 50 per cent of the medical equipment is obsolete and/or un-repairable. The limitation of funds, makes possible only the provision of critical equipment for medical care and diagnostic purposes, as well as of spare parts to repair equipment that can still be used. Hospital air-conditioning, heating and elevators as well as fork lifts, trucks and spare parts to facilitate distribution of supplies will be a priority. Additional items for logistical, information processing and communications support are critical for an efficient distribution and for the inventory management system. The overall objective of these measures is to improve the quality of care, the general working conditions for the health staff and the hospital conditions for patients.

- **Quality Control Laboratories.** The Plan provides for medical equipment to facilitate quality control testing and other tests required by the Iraqi regulation.

Plan Components for the Health Sector

58. The components of the Plan, i.e., the estimation of needs, the distribution procedures and the criteria for importation and storage will remain like in the first distribution plan.

59. The Government of Iraq shall provide the Programme with detailed information about the delivery of appliances and equipment to facilitate the monitoring of their use.

60. In accordance with the MOU and the Plan, in the three northern governorates, the Programme will be responsible for the distribution of medical supplies and medical equipment as well as for infrastructure rehabilitation.

Serial no.	Governorates	Number of ambulances
1.	Ninewa	28
2.	Tameem	12
3.	Baghdad	120
4.	Salah al-Din	16
5.	Diyala	16
6.	Anbar	20
7.	Babylon	16
8.	Kerbala	12
9.	Najaf	12
10.	Qadissiya	12
11.	Muthanna	12
12.	Basrah	32
13.	Missan	16
14.	Thi-Qar	16
15.	Wassit	12
16.	Dahuk	12
17.	Erbil	16
18.	Sulaymaniyah	20
Total		400

Table 4Criteria for distribution of Ambulances *

Distribution: two ambulance / 100.000 population.

PART THREE

PLAN OF EQUIPMENT PURCHASE FOR WATER AND SANITATION SECTOR

61. The deterioration of this sector is reflected in the decrease of potable water and in the inadequate sanitation system, both of which have contributed to the incidence of water-borne diseases throughout the country. This is due to the highly deficient functioning of most of the water treatment plants, to the lack of spare parts and equipment, to the poor status of the water distribution network. The results of water quality tests reported by MOH and WHO have shown a high contamination. According to Iraqi standards the turbidity of water reaching the population should not exceed 1 Nephelometric Turbidity Unit (NTU).

62. Despite the identification of these problems, the deterioration continues. The causes are the limited funds allocated to this sector by the previous distribution plans, as well as because these supplies require no less than six months for their manufacture and shipment.

63. Sector Objective and Strategies. The overall objectives of the Water and Sanitation Sector in Iraq are:

- To provide sufficient potable water to the population.
- To dispose, hygienically, of all kinds of waste (solid and liquid).

64. To meet the above objectives three subsequent planning stages are to be followed:

• **Stage I.** Rehabilitate the existing system to enhance efficiency and improved performance as well as quality. The estimated cost of this stage is US \$ 700 million.

- **Stage II.** Fill in the gap to reach universal accessibility of services.
- **Stage III.** Increase the level of services to cope with the demographic growth.
- 65. The purchase strategy will follow the three subsequent distribution plans.

66. The water system in the centre / south of Iraq is composed of many water treatment plant and compact water units and thousands of kilometres of water supply pipes. Because of the requirements set by the previous distribution plans, have not been met, the current estimated capacity of these facilities is 30 per cent less than their design capacity.

67. The situation is even worse in the sanitation area, as raw sewage is disposed directly into rivers, causing contamination. The sewage and rainfall collection systems, composed of many vertical sewage pumping stations, are in bad shape. The use of septic tanks and cesspools for sewage disposal is also facing problems because of the high water table and the breakdown of the fleet of cesspool emptiers. Flooded septic tanks inundate residential areas, causing contamination. To address these problems the Plan allocates US \$ 359.54 million out of which US \$ 150 million to Baghdad to improve the delivery of drinking water to the beneficiaries of Rosafa water treatment plant. The funds would provide items such as water pumps, tanks,

ductile pipes, pressure filters, electrical generators and other materials. The Plan further allocates US \$ 94.25 million to the districts surrounding Baghdad and to other 14 governorates. The three northern governorates will receive US \$ 115.29 million.

68. The US \$ 94.25 million allocated to the Ministry of Interior under which the General Establishment of Water and Sanitation (GEWS) functions will be used for:

a. The needs for operation and maintenance of the water and sewerage projects, mainly for the purchase of Alum, Chlorine, horizontal pumps, Chlorine equipment, alum injection pumps, Chlorine injection pumps, wells pumps, horizontal pumps for compact units, submersible pumps, electrical cables, chlorine gas cylinder locks and safety valve, air compressors, electrical and mechanical equipment and tools, welding machines, generators, Diesel pumps, complete system of communications and control of water projects, overload, sewerage cleaning equipment, linen reinforced hoses, engine wires, engines, leakage inspection equipment, sub-base digging equipment, vertical pumps, electrical circuit breakers, ball bearings, spiral pumps, laboratory equipment, contactors;

b. Water and Sewerage Networks by purchasing plastic pipes, ductile pipes and GRP pipes;

c. Municipality Services such as garbage collection vehicles, garbage container lifts, garbage containers, asphalt spreader, rubber roller, steal roller, steal roller-tier, asphalt peeler, streets weeper vehicles, tractor with wagon, tar transporting vehicles, tar spreading vehicles, streets lining equipment, stone breaker, spare parts for street lining equipment, asphalt factories, grader, mobile workshops, small rollers, bulldozers, traffic control equipment, traffic safety materials, spare parts for stone breaker, shuffles, bulldozers, tractors and spreaders;

d. Civil defense requirements expressed in mine detection vehicles, mine detection equipment, light rescue vehicles, heavy rescue vehicles, multi-purpose fire fighting, supporting fire fighting, river fire fighting boat, fire fighting suit, fire fighting hard hat, torch light, fire fighting foam, chemical dry powder, fire fighting communication station, breathing equipment, lighting vehicles, fire fighting vehicles, spare parts for shelters;

e. Other requirements such as wireless control system, vehicles wireless sets, hand sets, office wireless set, electronic switchboard, rechargeable torch, driving cabinet, GIS geographical system, archiving systems, laser printers, photography equipment, photocopy equipment, concrete factory, cement silo vehicles mobile site laboratory, communications system, elevators, air conditioning equipment, computers;

f. Service vehicles and production equipment such as saloon cars, Land cruisers, double cabinet pick-ups, cars for the transportation of employees, rescue cars, motorcycles, tankers, sewerage emptying cars, 2 ton pick ups, 5 ton pick ups 10 ton pick ups, 15 ton pick ups, low loader, reversible lorry, diggers, fuel transporting cars, rotary shuffle, dumper, concrete mixer vehicle, concrete pumping pump, specialized vehicles for blockage opening, fork lifts, cranes, batteries, tiers, spare parts for different cars, laboratory vehicles sewerage suckers, 35 ton trailer, mobile workshop,

steam launches, cars for the transportation of employees, sidewalk casting equipment, balance and weighing equipment, lifts with four electrical supporters, manual car jack.

69. With regard to spare parts and equipment required for this sector, priority continues to be given to the purchase of water purification chemicals and some of the specific urgent required supplies in specific water treatment plants not only for Baghdad Municipality but also to the General Establishment for Water and Sewerage. In order to address the rehabilitation needs of large water and sewerage treatment plants in a comprehensive manner, turnkey projects of the type presently implemented in the electricity sector will be introduced.

70. There will be a focus on improving water services to under-served or unserved rural population. The sanitation system requires the purchase of sewage pumps, cesspool emptiers, sewer jetting units, sewers cleaning equipment and garbage collectors. A second priority will be the purchase of supplies for water treatment plants and focus will be given to the purchase of some ductile and UPVC pipes for the water supply network. There will also be focus on water quality control through the purchase of required supplies. On a third priority basis, water tankers to provide services to unserved areas and some support vehicles (trailers and loaders) will be purchased.

71. In urban areas the apparent access to water and sanitation is by no means guaranteed even where systems are nominally in place. The quality of potable water is highly variable and dependent on a reliable and continuous electricity supply. The latter ensures that pressures remain sufficient to avoid drawing polluted water back into the main supply pipes. In addition many of the pumps are well beyond their useful working life. For rural areas, recent surveys indicate that less than 50 per cent of the population has access to water supply and 15 per cent only to latrines.

72. A particular problem in this sector is the widespread deterioration of the vehicle sanitation fleet, which is used for regular removal of both liquid and solid wastes. The reduced capacity of this fleet compromises both health and environment.

73. The availability of potable water in the three northern governorates is less than satisfactory. A 2002 United Nations Children's Fund (UNICEF) household survey points out wide disparities in the access to water in the rural area, that vary from 41 to 70 percent. Water supply is less than 100 litres per day per person and qualitatively is under the Iraqi minimum standards. However, as stated in the Secretary-General's report of 12 November 2002 (S/2002/1239) the deterioration of water facilities has been halted. The construction of pump and chlorinator houses and the installation of chlorinators benefited 91,000 and 229,300 people respectively.

74. Hygiene education projects aim at educating the population in the proper use of water and sanitation facilities with the ultimate goal of bringing down water and sanitation related diseases. Under phase XII, training as well as the development of IEC materials suited to the local socio-cultural context continued. For phase XIII the total budget allocation for water and environmental sanitation is US \$ 115.29 million.

75. In accordance with paragraph 40 of the MOU, the Government of Iraq shall provide the Programme with detailed information about the delivery of supplies and

equipment to their locations in order to facilitate the monitoring of their use. For this purpose, the Programme will conduct the tasks provided for in paragraph 8 of annex-1 of the MOU.

PART FOUR

PLAN OF SUPPLIES AND EQUIPMENT FOR ELECTRICITY SECTOR

The deficit in electric power as result of damage inflicted upon this vital 76. sector and non-availability of spare parts and equipment for maintenance, is a serious problem throughout the country. Although, the total allocation under previous phases increased substantially, the network continues to deteriorate for two main reasons: the scale of inputs received is significantly low in comparison with actual needs, and the large number of contracts on hold. This fact has been confirmed by various UN reports and in particular, the latest report of the UN Secretary-General of March 2000. The situation was compounded by a severe regional drought in the last two consecutive years which has reduced the power generation from hydro units by more than 300 MW. The deficit in power was 1600 MW, 1700 MW and 1800 MW in the years 1997, 1998 and 1999 respectively, and the corresponding load demand was 5300 MW, 5500 MW and 5700 MW respectively. During a country wide load survey in Aug'1999, the load demand was 6200 MW and the deficit in power based on the load demand was 2300 MW. In year 2000, During Auguset the load demand recorded was 6120 MW, the deficit in power was 2402 MW. From the figures it is evident that the power generation deficit has been steadily increasing, as the power generation is not commensurate with the load demand. The details of installed capacity, available capacity, load demand and deficit in power are shown Annex-I/ Electricity. Further, forced outages of large generating units in the network result either in cascade tripping or isolation of units from the network to prevent black outs. This causes unscheduled and prolonged power cuts to the consumers, including essential services such as hospitals, water plants, sewage plants, wheat milling plants, irrigation and drainage pumping stations, schools and universities and other social services facilities. As also mentioned in the report of the UN Secretary-General of 10 March 2000 (S/2000/208), reliable power generation underpins health-and nutritionrelated initiatives in all sectors.

77. To address urgent needs, a sum of US\$ 201.5 million is allocated in this plan. As there is a severe shortage of power, the Plan concentrates on increasing generation by installing new gas turbine generation units and carrying out rehabilitation and repairs to some of the larger thermal, gas turbine and hydro-electric power generation stations throughout country , also starting with installation of new thermal power stations in some locations . The Plan also emphasizes the need to rehabilitate on transmission and distribution networks in different parts of the country and reconnection of the northern governorates with the National grid.

78. The installation of new gas turbine units alongside the existing, Baiji, Shamal, Mussayeb, Nassiriya, Najaf, and new places in . New Rumaila, Baghdad East and other gas turbine power stations is under construction in some of them . It is decided to get advantage of utilizing the gas turbine generating units as combined cycle units. The estimated cost of new gas turbine units is US\$ 200 million and these units are expected to add around 250 MW. A sum of US\$ 50 million has been allocated for additional rehabilitation of the gas turbine generating units at Khor Al-Zubair, Najef, and maintenance of other gas turbine power stations. These gas turbine units after rehabilitation are expected to add about 50 MW. The thermal generating units in Baiji, Mussaib, Daura, Baghdad south and other power stations are planned for

rehabilitation the estimated cost is around US\$ 100 million. After completion of rehabilitation, the units are expected to add 160 MW. An amount of US\$ 35 million is allocated for maintenance and repair of hydro- generation units in Qadissia and Saddam power plants and the new hydro power plants in Makhool and Sinhareeb. This amount is meant for emergency repairs to ensure that the system remains operational and sustains the present level of generation, but no increase in generation is anticipated in the plan. Although the transmission and distribution networks are in urgent need of rehabilitation . Installation of new substations, new transmission lines , extension of existing substation for curing bottleneck in the existing network and consumers is needed . A sum of U\$ 150 million is allocated. Within the limited available fund , a sum of US\$ 50 million is allocated for the distribution network and US\$ 30 million for the transmission network. To start the construction of power plants in Yousifiya, Al-Shemal , Salah El-Deen , Al-Anbar , and a new power station in Wasit, a sum of US\$ 300 million is allocated.

79. The above mentioned figures could vary according to the urgency of the system requirements prevailing at the time of ordering. The Commission of Electricity is fully aware that the total sum of these priority projects exceeds the allocation expected for this sector. However, it should be stressed that the above figures are indicative for planning purposes and are a reflection of the scale of resources required to implement the above mentioned projects.

80. The Plan also emphasizes the need to rehabilitate transmission and distribution networks in various parts of the country and reconnection of the northern governorates with the national grid.

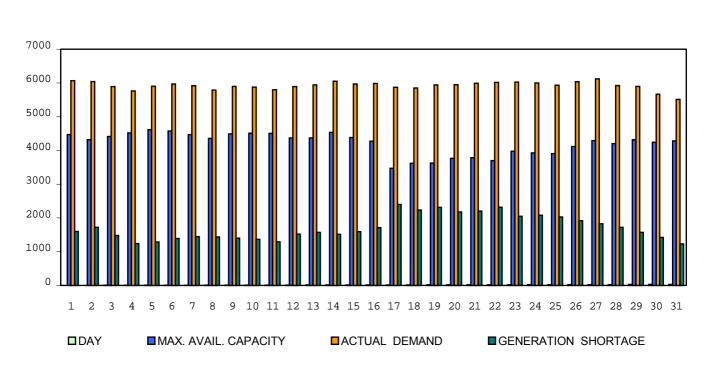
81. The total phase XIII allocation to the electricity sector in the three northern governorates is US \$ 71 million.

82. The electricity supply system in the Northern Iraq remains largely in a dilapidated condition. The network still suffers from vandalism of essential materials and the non-availability of equipment and spare parts. Furthermore maintenance is not yet adequate. Consumers still suffer of power cuts and essential services such as hospitals, water treatment and sewage plants, wheat mills, irrigation and drainage pumps stations, schools, universities and fuel stations lack adequate supply of power. Although the total allocation under previous phases has been substantial, the network continues to deteriorate for two main reasons. The first is that the volume of inputs received is significantly lower than the actual needs and the second is the large number of service contracts still on hold.

83. The investment required to rehabilitate the electricity sector is still substantial in terms of time and funds. To address humanitarian requirements this Plan allocates US \$ 71 million for electricity rehabilitation in the three northern governorates in phase XIII. This allocation will serve to continue the rehabilitation of the regional distribution network, and reconnection of Erbil and Sulaymaniah governorates to the national grid. It will also help implement projects for enhancing energy conservation, providing emergency electricity needs and establishing power system control and communication facilities.

84. The United Nations Development Programme / Electricity Network Reconnection Project (UNDP/ENRP) will continue its efforts to provide for the full emergency electricity needs of the three northern governorates.

ANNEX 1 Phase XIII (Electricity Sector)



AVAILABLE CAPACITY , DEMAND , GENERATION SHORTAGE AND TOTAL INSTALLED CAPACITY OF THE SYSTEM DURING AUGUST 2000

INSTALLED CAPACITY = 8090 MW

ANNEX 2

AVAILABLE CAPACITY, DEMAND, GENERATION SHORTAGE AND TOTAL INSTALLED CAPACITY OF THE SYSTEM DURING AUGUST 2000

DAY	MAX. AVAIL. CAPACITY	ACTUAL DEMAND	GENERATION SHORTAGE		
1	4470	6067	1597		
2	4319	6044	1725		
3	4412	5893	1481		
4	4523	5765	1244		
5	4616	5903	1287		
6	4580	5973	1393		
7	4470	5917	1447		
8	4355	5791	1436		
9	4493	5897	1404		
10	4513	5879	1366		
11	4504	5799	1295		
12	4372	5894	1522		
13	4371	5943	1572		
14	4539	6053	1514		
15	4381	5973	1592		
16	4275	5986	1711		
17	3470	5872	2402		
18	3619	5853	2234		
19	3628	5942	2314		
20	3769	5948	2179		
21	3785	5991	2206		
22	3700	6017	2317		
23	3981	6029	2048		
24	3925	6003	2078		
25	3904	5933	2029		
26	4120	6037	1917		
27	4293	6120	1827		
28	4202	5924	1722		
29	4321	5896	1575		
30	4240	5664	1424		
31	4285	5514	1229		

PART FIVE

PLAN OF PROCUREMENT AND DISTRIBUTION FOR THE AGRICULTURAL SECTOR

Introduction

85. The agricultural sector plays a leading role in providing a substantial portion of the population's nutrition needs, in spite of the various constraints resulting from the sanctions, which in turn brought a halt to the development of the sector.

86. The sector's growing requirements are beyond the meagre resources available through the Humanitarian Programme. Consequently, the Plan's strategies are still oriented towards halting, as much as possible, the sector's deterioration and towards increasing the sector's contribution to food availability.

87. Agricultural production involves many complex and interrelated biological processes. This requires that all interventions have to be addressed in a well-integrated manner and approved as a package in order to achieve the targeted goals. Provision of basic inputs will strengthen the sector, improve the availability of agricultural products at current or even lower prices, and make available a supplement for the food basket.

Activities Envisaged By Sub-sector

Enhanced Domestic Food Production.

Production of field crops, vegetables and fruits

88. Agricultural production in Iraq is highly mechanized even at the small farmer level and almost one half of the area under crop production lies within the irrigated sector. The overall crop production requirements include proper soil preparation, good quality seeds, and harvesting with minimum losses. Any attempt aiming at maintaining or increasing the level of the crop productivity, therefore should address all those factors.

89. Failure to adequately respond to each of these inter-related activities will seriously affect the achievement of the eventual crop production level. It is therefore essential, that appropriate inputs should be available for each activity in a timely manner.

90. Prior to the imposition of sanctions, the number of agricultural tractors was more than 40,000, working on the 4 million ha of arable land. This represents approximately one tractor for 100 ha under cultivation. Presently, however, a large number of agricultural machinery has surpassed its useful life expectancy of 15 years. Agricultural production is therefore seriously affected by this situation. It is of paramount importance to continue addressing the gradual replacement of the entire stock of tractors, combine harvesters, and other agricultural equipment and implements.

91. The Plan includes the acquisition of 3,000 tractors of different types which will partially address the urgent need for remedial measures in this area. It is estimated that this quantity will enable adequate and timely soil preparation, seeding, weed control and fertilizer application for an area of approximately 450,000 ha which represents 11 per cent of the total arable area. In order to overhaul some of the tractors already available in the country, the Plan also includes the provision of spare parts. The particular problem of soil preparation will be addressed through the importation of 1,000 mounted moldboard ploughs together with spare parts amounting to 5 per cent of the ploughs' value, as well as of 1000 rotary tillers.

92. Timely weed and pest control measures could only be undertaken if adequate agricultural sprayers are available. The Plan therefore intends to provide 6,000 mounted and wheelbarrow sprayers together with 5,000 knapsack sprayers.

93. Due to the acute shortage of operational harvesting equipment, post-harvest losses are continually increasing. In many cases, the farmer has been forced to revert to manual harvesting methods that end in high losses. Losses are also aggravated by the poor conditions of the mechanical harvesters. It has been estimated that overall post harvest losses may have risen to 20 or 25 per cent of the potential crop yield since the imposition of the sanctions. The Plan proposes to import 400 combine harvesters together with 250 pieces, of walking reapers, 100 corn huskers and 250 threshing machines, plus assorted spare parts, in attempt to improve mechanical harvesting.

94. Table 5 shows the allocation of the planned tractors to the 15 Governorates. This allocation is based on the area under cultivation and the number of available and operational tractors in each governorate. A similar procedure will be followed at district level. At farm level, all the farmers are eligible to apply to be an end user of a tractor.

95. Rehabilitation of seed factories by importing spare parts and essential equipment needed for seed processing is also addressed in the Plan.

96. The Plan also considered an expansion in the storage capacity of 11 maize threshing and drying plants in the central and southern parts of the country. In this regard the Plan will import 20 silos for the storage of the maize produced during the rainy seasons, which coincide with the maize harvesting seasons.

97. The Plan included provision of 5 maize processing plants for threshing and drying maize. This is in line with the Government policy towards the encouragement of animal production in the country through supply of required animal feed. The Government took several measures, to help the expansion of maize production. Currently, the cultivated area under maize reached 150,000 ha. The existing maize processing capacity cannot handle the locally produced maize. The requested plants will add more than 1000 metric tons of processing capacity. This will enable the absorption of the local maize products. The plants will be installed in Babylon, Baghdad, Wassit, Tameem and Salah al-Din. The governorates are selected on the basis of size of land under maize production.

Governorate	Tractors	Combine Harveste	Irrigation Pumps	Irrigation Pumps	Irrigation pumps	(100) lt Sprayers	(400- 600) lt	(14-20) lt Knap-
		rs	(with engine)	(without engine)	(for deep well)	- F - Of - F	Sprayers	Sack Sprayers
Ninewa	450	37	1440	400	500	680	34	180
Tameem	362	23	1440	400	500	550	56	280
Salah al-Din	274	16	1800	500	1000	500	118	550
Diyala	240	16	1800	500	300	500	116	550
Baghdad	140	11	990	275	200	500	74	360
Anbar	62	3	720	200	600	150	54	270
Babylon	162	12	900	250	200	250	84	420
Kerbala	26	2	540	150	200	100	40	200
Najaf	218	10	900	250	300	250	74	360
Qadissiya	252	16	1620	450	300	200	68	330
Muthanna	80	3	720	200	200	100	14	100
Thi-Qar	146	10	1080	300	300	120	36	200
Wassit	388	26	1800	500	200	500	136	600
Missan	176	13	1350	375	200	250	24	150
Basrah	24	2	900	250	1000	350	72	450
Total	3000	200	18000	5000	6000	5000	1000	5000

Table 5Distribution Plan For Tractors – Harvesters – Irrigation Pumps – Sprayers *

The distribution allocations are based on cropping pattern and cultivated area. Final distribution will be decided in proportion to the above table but determined by physical arrival of the consignments.

98. Agricultural authorities will select beneficiaries on the basis of the following criteria: the farm size (area), the farmer's production index and the current state of old tractors on the farm. As the amount of mechanization equipment will fall short of present overall needs, priority will be given to the end users that have not benefited from similar distributions, either prior to or after the imposition of sanctions.

99. With regard to the distribution of tractor operated agricultural machinery, all Governorates will be entitled to submit their requirements according to farmer's demand. Any justifiable request will be duly considered within the limitations of total availability.

100. Lack of good quality seed continues to be one of the major constraints to increase crop production. The imposition of the sanctions resulted in reducing the

country's capacity to produce quality-certified seeds as well as the capacity to maintain good quality seed processing activities. The lack of good quality seed remains to be among the serious constraints to crop production. The seed processing capacity in the country is limited. The Plan, therefore, includes five seed production units which will be installed at the state seed production company within the Ministry of Agriculture. The planned seed cleaning and processing is anticipated to provide additional 80,000 metric tons of seed. This will considerably contribute to the availability of good quality seed which will be distributed in the production areas in all the 15 governorates.

101. Iraq faces a serious shortage of hybrid and certified seeds, especially sunflower and vegetable seeds, together with seeds and seedlings needed for the orchards. Prior to the imposition of sanctions, the country regularly imported both seeds and seedlings to satisfy the requirements. The sanctions have interrupted supplies of these essential inputs and seriously lowered production as a consequence. In order to redress the situation and to enhance the domestic production of fruit, vegetables and sunflower (for vegetable oil), the Plan includes the proposed importation of hybrids, certified seeds and seedlings.

102. These inputs will be made available to all the farmers already involved in the production of such crops. The distribution plan to each governorate will be determined on the basis of the total area under each of these crops, with due consideration to both ecological and climatic factors. The proposed quantities represent the following percentages of the annual requirements: 25 per cent of vegetable seeds; 90 per cent of sunflower seeds; 100 per cent of rape seeds; sunflower and soya beans; and 80 per cent of orchard seeds and seedlings.

103. The Government put great emphasis on the vegetable and fruit production in an attempt to ameliorate the nutritional value of the diet of the population. However, the availability of cold storage facilities is limited. This causes in a great loss and damage during the peak of production. In addition to wasting valuable nutrients supplementing the food basket, it also affects the profitability of vegetable production at the level of the farmers. Thus, the Plan considers provision of 300 cold storage units with a capacity from 100 to 1500 metric tons to be distributed to the public and private sectors in the 15 governorates.

104. The Plan is proposing the establishment of a 5 ha nursery for banana production. The nursery beside the production and distribution of the banana seedlings will act as an extension centre to promote the small-scale banana production in the centre and south. For this, needed equipment and necessary input are included.

105. Iraq previously was able to satisfy the greater part of all national fertilizer requirements through national production and manufacture. However, the factories suffered severe damages after 1991 and this has drastically reduced the possibility of self-sufficiency in the production of this input. Shortage of fertilizer has led to large areas of crops being grown without application of any fertilizer. In other cases, application rates have been considerably reduced which significantly lowered the crop yields. The situation has been further aggravated by the practice of monoculture of cereals, as described above. This seriously reduces soil fertilizers. The situation was worsened

by the lack of sufficient locally produced fertilizer and of imported fertilizer which was limited due to financial constraints.

106. The country's total annual fertilizer requirement is 1.5 million metric tons of compound phosphate fertilizer and 1 million metric tons of nitrogenous fertilizer. Prior to the Gulf War, the country's total production capacity was 1.2 million metric tons of phosphate fertilizer and more than 1 million metric tons of urea. The production in relation to limited area under cultivation at that time allowed surplus which was exported. However, during the sanctions the three state fertilizer plants suffered marked deterioration in their productivity and reached a stage of near total collapse. Last year, local production dropped to 130,000 metric tons of phosphate fertilizers, respectively. The Plan aims to address the current production covers only 10 per cent and 40 per cent of the country's need of compound and nitrogenous fertilizers, respectively. The Plan aims to address the current big shortage of fertilizer through provision of needed replacement equipment and spare parts for rehabilitation of the three existing fertilizer plants in the country.

107. The requested input is anticipated to prevent further deterioration of the current capacity as well as to increase the total fertilizer production capacity to 600,000 metric tons of urea and 220,000 metric tons of compound fertilizer. The final products will be distributed to the farming community in the 15 governorates at cost price. To bridge the shortage and in an attempt to maintain the current level of production, it is proposed to import 40,000 metric tons of N.P.K (18.18.0). Such a procedure will reduce transportation costs and also help to overcome some of the logistical constraints, which could be encountered during the distribution process. In addition to the DAP, 5228 metric tons of potassium, magnesium, zinc, ferrous sulfate, and fouler fertilizer are to be imported plus 10,000 metric tons of TSB fertilizer.

108. This total quantity of fertilizer has been proposed on the basis of satisfying the minimum plant nutrient requirements for approximately 320,000 ha under both cereal and vegetable crop production.

109. Allocations to each Governorate will consider the present availability of locally produced fertilizers and the current state of the soil fertility. All farmers will have equal accessibility to the planned inputs. They may submit their requests, which will be evaluated according to the farm holding size, the type of the crop grown and the recommended fertilizer application rates for the particular crop.

110. The Plan also includes the implements required for agricultural industry requirements for plastic covers, sugar industry, phosphate and urea production with patching material in addition to the urgent need for tractors and sprinkler irrigation rehabilitation sector.

111. The Plan also addresses the rehabilitation of the extension sector. The Plan includes the essential equipment needed for the main five centres in the Centre and South and also for field extension.

112. In many parts of the country, agricultural production relies entirely on irrigation, whereas in other areas, supplementary irrigation is used to complement

rainfall supplies. There is an urgent need to repair and replace many of the irrigation pumps. Many of the pump units which have been installed previously are powered by electric motors; the frequent electrical power failures which Iraq is currently facing indicate that even installed and operational units cannot be always used. The Plan proposes to redress this situation by acquiring 18,000 irrigation pumping sets of different capacities, in addition to 5,000 pumps (without engine) with 5,000 suitable generators most of which are to be powered by diesel or electricity, as well as spare parts for irrigation pumps of different types.

113. Plant pests, diseases and weeds impose a serious threat to crop production. The capacity of the plant protection service to efficiently respond to the increasing threat of plant pest and diseases continue to be limited. Currently only 5 aerial spraying helicopters out of the fleet of 27 are operational. However, their total remaining flying hours never exceeded 300. In response to this serious shortage, which is drastically effecting the plant protection operations, the Plan included provision of six fixed wing agricultural spraying air-crafts with necessary spare parts, overhauling of 12 spraying helicopters, fast consuming spare parts for the aircraft, 20 fuel tankers with needed spare parts as well as 100 field vehicles for ground control operations.

114. The Plan includes a series of herbicides, insecticides, fungicides and other pesticides for, at least, maintaining the present levels of production. These will serve for more effectively controlling the most serious and widespread weeds, diseases and pests. These herbicides represent approximately 25 per cent of the total estimated national crop protection requirements. Weed control will be undertaken either through ground or aerial spraying methods. The herbicides will be distributed to farmers according to levels of infestation and the area under crop production.

115. The pesticides will also be allocated to the Governorates according to infestation levels. The ultra-low volume (ULV) pesticides will be applied through either aerial or ground control application procedures that will be undertaken by the State Board of Plant Protection. Specific targets include sun-pest, grasshoppers and date palm diseases. Emulsion concentrate (EC) pesticides will be available to the farmers according to their needs. Upon receipt of specific farmer requests, the plant protection staff will determine the type, quantity and application dose required for each individual case.

116. The bee industry, which is also affected by acute shortages of essential control inputs, requests additional agro-chemicals. Distribution and control procedures will be similar to those indicated above for the pesticides.

117. In order to minimize the cost of some plant protection measures that rely on expensive pesticide and herbicide, the Plan intends to import high concentrates of two insecticides: Sumicidin 92 per cent and Diazinon 95 as well as two herbicides Proponil 96 per cent and Glyphosate for weed control in rice fields and orchards, respectively. The concentrates will be used in formulation of big quantities of insecticide and herbicide to be distributed to the farmers in the 15 governorates.

Animal Production.

118. Live stock raising is practised in most parts of Iraq. Prior to the imposition of the embargo, livestock production contributed between 30 per cent and 40 per cent in value to the total production of the agricultural sector. It also played an important role in providing a significant part of the nutritional requirements at household level. Livestock production continues to constitute a major source of animal protein throughout the country but the sub-sector has suffered greatly because of the sanctions and its contribution to the country's food security has been drastically reduced.

119. Previously, the per capita share of domestically produced animal protein was estimated to be 18 g/day. This may be compared with the minimum per capita requirement recommended by the World Health Organization (WHO) which is 28 g/day and the current domestic production that is estimated to be only 2 g/day. Prior to the imposition of sanctions, the government bridges the gap through regular importation of red meat and poultry products. However, this is now severely restricted. As a consequence, a marked deterioration in the general health status of the population has been noted, particularly in children up to 15 years of age, who currently represent 45 per cent of the total population.

120. Animal production levels depend upon a number of inter-related factors of which some of the important ones are genetic stock, feed characteristics and animal health. Furthermore, even genetically improved livestock when managed through appropriate feed regimes, could still fail to reach optimum production levels, if attention is not paid to maintaining the animal's health.

121. The General Veterinary Directorate within the Ministry of Agriculture is responsible for all aspects of animal health. The total value of annual imports of animal health requirements amounted to some US \$ 75 million. This included acquisition of necessary vaccines, drugs and equipment, as well as necessary field transport means and cold-chain facilities. Previous activities included regular vaccination programme against serious endemic diseases, together with campaigns for drenching, dipping and spraying animals against endo- and ecto-parasites as well as zoonotic diseases.

122. This budget has now been drastically reduced and under the Programme pursuant to Security Council resolution 986 (1995), the value of inputs imported for animal health purposes has on no occasion exceeded US \$ 15 million every 6 months. The field programme has also been considerably reduced, which is now resulting in serious and widespread outbreaks of a whole range of viral, bacterial, parasitic and tick borne diseases. Both brucellosis and tuberculosis, which were previously under control, are now spreading widely. Currently, brucellosis is positive in 10 per cent of the sampled sheep. In addition, circumstance of screw-worm out break and the recent of FMD out break, impose further threat to live stock in the country. In addition, cases of endo-parasites, Congo fever and echinococcus, have been registered. To carry out efficient disease control measures during the outbreak, additional financial resources beyond the MOU funds are needed. In the prevailing sanction situation, however, long-term strategies and development activities are not possible.

123. The Plan aims to make maximum use of the limited available resources, supplementing them in key areas selected on a priority basis, with the overall objective of commencing a programme to redress the present serious situation.

124. The proposed rehabilitation of the cold chain facilities comprises provision of spare parts and refrigerators.

125. The Plan also includes the provision of 10 of 15 ton tankers and mobile dip with trailer for increasing the activity of external parasite equipment in the 15 governorates.

126. The Plan also considered the provision of priority supplies for animal health. This includes vaccines, veterinary drugs and supplies, together with application equipment.

127. Particular attention has been focused on the need for surveillance and control of epidemic diseases. Livestock production in Iraq is normally undertaken according to traditional methods carried out by nomadic groups and characterized by considerable trans-human movements. Such practices result in scattering the livestock population throughout the country, which in turn obliged the mobilization of veterinary service teams. It is only through such methodology, any control or eradication can be achieved. The Plan thus includes the acquisition of mobile veterinary, clinical and field vehicles for transport of the teams involved in the control operations as well as needed chemicals. The Plan includes basic equipment needed to improve the diagnostic capabilities at the various veterinary centres.

128. During the 1970s and 1980s, the government focused intense efforts on building up a poultry industry designed to respond to the nutritional needs of the country. This programme included the establishment of a number of different sizes of modern poultry farms for the production of both table eggs and broiler meat. In addition, stock farms, hatcheries and poultry slaughter-houses were established.

129. The programme included economic incentives and fostered the establishment of efficient means for the provision of poultry health services. Regular supplies of the necessary production inputs were organized and by 1989, a total of some 8,000 poultry farms were operational. Production at that time was estimated at 1,700 million table eggs and 250,000 tons of poultry meat.

130. The Government of Iraq is very much concerned of the nutritional status of the Iraqi population, in particular, the lack of animal protein in the SCR 986 food basket. For this reason, it is in favour of a plan that would allow enhancement of domestic production of animal protein, especially the reactivation of the poultry industry. The broiler and table egg reactivation programme under the enhanced phase V is continuing. The initial impact of the project is already visible with a marked reduction of market prices of poultry products in the country and also stabilization of red meat market prices. The MOA poultry revival programme managed to rehabilitate 2300 broiler poultry farms out of the farms identified as suitable for rehabilitation in a short time with reasonable resources. The inputs allocated under this Plan will further sustain the programme achievements and are essential to maintain the planned level of production.

131. This Plan will address the major components of poultry production through two parallel activities. The first of these will focus on addressing the rehabilitation

needs of those farms which most easily and quickly could be brought back into production. The second will provide the basic production inputs for both table egg and broiler production. The overall objectives include a monthly production of 45 million table eggs and 5,000 to 6,000 metric tons of broiler meat.

132. Poultry production requires housing with a controlled environment in order to allow optimum production levels, whilst reducing the risk of high mortality rates due to air borne diseases. The rehabilitation of a further 1,200 farms is envisaged, including the provision of emergency electrical power supplies. Using range of 25-500 KVA generators mounted to 2600 pieces.

133. The broiler production cycle is short and requires the regular supply of day old broiler chicks. In addition to the locally produced one-day-old chicks, importation of 15 million broiler-hatching eggs is needed to meet the programme requirements. The Plan addressed the shortage of layer hatching eggs and proposes to import 25,000 and 140,000 one day old grand parent and parent laying chicks in series of consignments. The intervention is aiming at supplying the poultry parent stock farms with needed one day parent chicks required for production of layer hatching eggs.

134. Poultry production requires a supply of balanced rations containing both high quality proteins and micro-nutrients. The bulk of the energy requirements will be met through the use of domestically produced maize, barley, sorghum and other grains. The protein and micro-nutrient requirements and energy for both layers and broilers will be met through imports of maize and Soya bean-meal and poultry concentrate and pre-mixes. The Plan also indicates the need to import equipment for farm transport and for the packing of final products in addition to the spare parts required for the operating 110 hatcheries and 30 slaughter houses and poultry houses and also the rehabilitation of the main feed analysis laboratory in Baghdad.

135. The MOA poultry programme has proven the efficiency in regard to broiler production. Poultry meat produced by the programme has a positive impact by increasing the availability of meat and raising affordability by a large number of the people.

136. However, egg production is still lagging behind. The main reason is that the risk involved in rearing pullets from one day to 18-22 weeks is high. In order to encourage expansion in egg production, the MOA is planning to establish facilities for producing layers at laying points to be distributed to layer growers. This will be supported by distribution of layer houses to those who are interested in egg production. To achieve this, the Plan includes provision 18 poultry houses to be installed in Baghdad within the premises of the State Company of Animal Resources for the production of one million layers.

137. The Plan also includes the purchase of 54 layer houses to be distributed to table egg producers. The Plan target is production of 250 million table eggs yearly throughout the 15 governorates.

138. The Plan also considers maintaining and whatever possible enhancing livestock productivity and production, approximately 85 per cent of the cattle population within the country are indigenous breeds with milk production levels

ranging from 200 to 1,500 kg per lactation. Since the imposition of sanctions, attempts to improve breeding of the stock through artificial insemination have been virtually paralyzed. There is an urgent need to reactivate the breeding programme, particularly in view of the prevailing economic and food security situation. To these ends, the Plan includes importation of 10,000 pregnant heifer and 20 progeny tested bulls and the acquisition of basic artificial insemination equipment.

139. In an attempt to enhance animal protein availability, revival of fish production is considered in this Plan. The country has great potential for fish production and considerable investment in this sub-sector, had been made for its development. Similar to the situation in other sub-sectors, fishery sub-sector has also suffered immensely, and the full exploitation of the available potential is constrained by the lack of resources.

140. The Plan addressed the fishery sub-sector requirement through the provision of equipment needed for fish finger productivity, parent fish stock, needed spare parts to rehabilitate the existing equipment, rehabilitation requirement of fish hatcheries and needed fishing equipment.

141. In line with the above and in an attempt to maximize milk production, the Plan included the provision of spare parts for milking machine, portable milking units and milk containers to be distributed to dairy stations and to small and medium dairy farms.

142. Agriculture plays a major role as a source of livehood for 45 percent of the population of the three northern goverorates of Dohuk, Erbil and Suleimaniyah in addition local food production filled the nutritional gaps in the programs food basket by boosting production and productivity of animal protein, vegetables and fruits

143. This plan is considered as continuation and consolidation of previous efforts that targeted the improvement of food security at all levels in particular at household level it aims to support sustainable crop and animal production including surface and ground water supply and agricultural machinery and spare parts and other required agricultural input.

144. In the field of animal production the plan include the enhancing of backyard activities to improve household nutrition of vulnerable groups. The plan represent the need for strengthening agricultural extension, research and training required to implement agricultural program successfully. Protection of natural resources is addressed through forest rehabilitation, seed link production and range improvement.

145. US\$ 36.33 million has been allocated to meet planed requirement in an implementation which is hoped to enhance domestic food production.

Irrigation sub-Sector.

146. Iraq had experienced a severe drought for the three agricultural seasons from 1998 to 2001. While during 2002 the amount of precipitations was satisfactory, intervention measures required for the maintenance and rehabilitation of the existing water resources infrastructures, affected by the drought, are still necessary. A speedy approval for the Plan inputs will enable early intervention to overhaul the disastrous consequences left by the drought on human, crop and livestock.

147. **Pumping Stations.** The water pumping stations plays a key role in the irrigation systems which have been established in many parts of Iraq. These not only provide the irrigation water to the fields but also, drain part of it out again. Unfortunately, the vast majority of these stations are suffering from frequent breakdowns as the equipment exceeds the end of its useful life. There is also an acute shortage of necessary spare parts for maintenance and repair. In many of these cases, rehabilitation will prove uneconomic and indeed, will often also not prove to be technically feasible.

148. The Plan therefore proposes that a number of the pumps should be replaced whilst others will be rehabilitated through provision of spare parts. The overall objective of this intervention to provide services for approximately 750,000 ha of land which at present are suffering from a severe lack of pumping capacity and efficiency.

149. **Maintenance of Irrigation Projects.** Whilst the establishment of irrigation projects requires a very high level of investment, it will be a waste if those projects are not adequately maintained. Many of the soils in Iraq are alluvial and are exposed to erosion. This causes high rates of sedimentation in the rivers, which could adversely affect water supply for irrigation purposes. In order to maintain these resources, the rivers and water channels require continuous dredging. Equipment and sprinkler irrigation systems for maintaining the high efficiency of the irrigation projects need either to be replaced or to be repaired, also to execute some projects in order to increase the Irrigated area and to save in water requirements. indicates the immediate requirements, which have been identified for inclusion in the present Plan.

150. Surveys and monitoring of water storage structures. The main infrastructure for water storage and control consists of dams and barrages. These not only store the water prior to its distribution but also constitute a vital component of the flood control measures. As part of the maintenance procedure for such structures, periodic monitoring surveys must be undertaken. In addition, the Saddam Dam on the upper Tigris above Mosul requires grouting for its foundations.

151. In vast areas, ground water resources represent the only source of irrigation and drinking water. Governorates which currently suffer from water shortages include Kerbala, Najaf, Anbar, Tameem, Diyala, Salah al-Din and Basrah.

152. **Water and Soil Analysis.** Deterioration of water quality and agricultural soils throughout the country necessitates continuous monitoring by the Ministry of Irrigation. These activities need well equipped laboratory facilities. To enable the Ministry to carry out these activities, necessary laboratory instruments and supplies have been included in the Plan.

153. The implementation of the proposed Plan allocated US \$ 215.83 million for agriculture of which US \$ 36.33 million is for the three northern governorates, (Dahuk, Erbil and Sulaymaniyah). US \$ 228.5 million is allocated for irrigation for the centre and south.

154. In accordance with paragraph 40 of the MOU, the Government of Iraq shall provide the Programme with detailed information about the delivery of supplies and equipment to their locations. In order to facilitate the observations of their use, the Programme will conduct the tasks provided for in paragraph 8 of annex-1 of the MOU.

PART SIX.

PLAN OF PURCHASE OF MATERIALS AND REQUIREMENTS FOR EDUCATION SECTOR

155. Primary, secondary and higher education in Iraq have been effected by the severe shortage of basic teaching materials, school furniture, books and stationery, printing requirements, training laboratories and other basic requirements. About 4000 damaged schools remained non-repaired. Most of these classrooms are without doors or windows. A large number of schools still lack potable water and sanitation. In some schools, a classroom, which usually holds 30 students, enrols 60 students. The current situation has led to the decrease in school enrolment and to a considerable increase in the rate of school dropouts, particularly in the primary and secondary stages. This sector needs an urgent rehabilitation as indicated by the reports of UN agencies and the reports of the UN Agencies.

156. Thus, the general, basic and urgent requirements of the educational sector throughout Iraq are estimated at large amounts. The Plan allocates US \$ 191.85 million for this sector, out of which US \$ 123.53 million have been allocated for the basic educational requirements up to the secondary stage, and US \$ 68.32 million for the higher education sector. US \$ 81.10 million is allocated for the three northern governorates of which US \$ 63.53 million is earmarked for basic educational requirement up to the secondary stage, US \$ 10.57 million for higher education and US \$ 7 million for medical education.

157. The Ministry of Education established the Educational Centre for the Cancer Research where students can pursue a Medical Diploma in Cancer Sciences.

158. For the three northern governorates, the Plan will continue to focus not only on rehabilitation of facilities but also on the quality of primary, secondary and higher education.

159. For the secondary education, the Programme in the three Northern Governorates will focus on improving the quality of education services, and on providing equipment, tools, and supplies. Newly constructed schools will continue to be provided with all the necessary furniture, textbooks and related materials to students in all the three Governorates.

160. In order to enhance access to education and improving educational services the provision of transportation facilities to students and teachers will continue. In addition, the programme will continue to diversify educational services through provision of significant resources for didactic equipment, sports, music and art activities as well as for planning, renovation of school facilities and other education support activities.

161. As part of the school rehabilitation, and in order to ensure quality of education programmes, professional development of teachers and administrators in all the three Governorates, which has been carried out under the previous phases, will continue.

162. For higher education the needs for construction and rehabilitation of facilities in the universities and technical institutes as well as the provision of equipment and supplies are still critical. Meeting these requirements is essential to ensure the quality and adequacy of programmes provided by these institutions. Most of the construction and rehabilitation projects and resources planned as well as provision of equipment and supplies under phase XIII will complement similar activities planned under previous distribution plans.

163. In accordance with the priorities agreed with the partners, The Plan provides significant resources for equipment, teaching materials, teacher training and technical assistance, and the provision of books. Construction and rehabilitation of University and Technical Institutes facilities will continue for the three northern Governorates.

PART SEVEN

INFRASTRUCTURE SUPPORT FOR FOOD, NUTRITION, AGRICULTURE AND HEALTH SECTOR TRANSPORT AND TELE-COMMUNICATIONS AND THE PLAN OF PURCHASE OF MATERIALS AND REQUIREMENTS FOR TELECOMMUNICATIONS AND TRANSPORTATION/BANKING REQUIREMENTS

Telecommunications

164. The telecommunication sector is vital to the Iraq's infrastructure. It has a significant role to play in the improvement of food distribution, medicine, water and sanitation, electricity, and the rest of the humanitarian programme sectors. Before 1991 the telephone density in the country was 5.6 telephones per 100 inhabitants. In 1999 this density has decreased to 3.3 due to damaged exchanges, shortage of spares and increase in the population. World telephone density average is 10 per cent.

165. The present state of telecommunication systems throughout Iraq is extremely poor and it has negative consequences on the efficient procurement and distribution of humanitarian supplies. The difficulties experienced by the Ministries involved in implementing the MOU when communicating with their suppliers have contributed to delays in ensuring timely submission of applications and subsequently in the delivery of supplies to Iraq. In the health sector, poor communications between warehouses and hospitals have contributed to delays in the collection of supplies by health facilities. The absence of adequate data links has also hindered the timely passing on of accurate information on requirements. With regard to the electricity sector, this has affected the co-ordination of operation between the source, the transmission stations and substations.

166. A UN mission (August 1998) to Iraq by experts delegated from the International Telecommunication Union (ITU) concluded that the entire telecommunication infrastructure is deteriorating to such an extent that the quality of service is beyond comprehension. The rate of unsuccessful calls has risen dramatically in recent years and the quality of transmission channels is so bad that it constitutes a major problem for even the transmission of faxes. At present, the transfer of computer files, (data transfer), is almost impossible via the public telephone network and this affects directly UN observation activities and reporting. The mission, further, concluded that the rehabilitation and modernization of the telecommunication network is a huge development project. It would require an investment of US \$ 1 billion or more and its implementation could take between 7 and 10 years. This of course falls outside the Programme pursuant to Security Council resolution 986 (1995).

167. In order to ensure a more effective implementation of the Plan and enhanced utilization of commodities imported, communication equipment is required. The requirements presented in the current Plan have the objective of replacing damaged or obsolete equipment and introducing some new equipment that will improve communications in areas of activities of the humanitarian programme in Baghdad and other few selected areas. This will directly have positive impact on the improvement of the procurement and distribution system of humanitarian supplies.

168. The installation of telecommunication projects requires high level of expertise. Before 1991, the staff of ITPC used to carry out all the installation of telecommunication equipment with minor supervision from the suppliers. The same staff was able to put the majority of the remaining systems, immediately after the war, into operation. The Plan envisages the utmost use of local resources for the installation and commissioning of the projects, to minimize expenditures.

169. Whilst the establishment of telecommunication projects requires a very high level of investment, this all risks to be lost unless those projects are adequately maintained. In order to maintain these projects properly, on-job training is required. It goes without saying that the new equipment to be purchased is of the latest technology. This will require training in the manufacturer premises.

The present condition of telecommunications throughout Northern Iraq is 170. precarious and requires immediate attention. In order to more efficiently carry out the humanitarian programme in the northern Governorates, an effective telecommunication service is required, particularly an uninterrupted telephone system. With an objective to raise the telephone density (number of working telephone lines per 100 habitants) to 5.5 per cent, the sector aims at rehabilitating telecommunications infrastructure, introducing a modern system and widening the areas serviced. It also aims at capacity building for local staff to maintain the system. The sector has been allocated US \$ 26.11 million for the three northern governorates.

Railways

The Iraqi Railways plays a great part in the transportation of food and 171. agriculture products, beginning with the first stage of farming by providing fertilizers, seeds, etc. This kind of transportation from most of the cities in Iraq to different parts of the country requires special wagons and rolling stock. Most of the transportation of food which arrived at Umm Qasr port under the MOU, especially grains and rice, are carried by railways to most cities of Iraq. The Iraqi Railways can not fulfil its obligations to distribute the required quantities of food due to the lack of spare parts for locomotives and wagons, which are needed for this huge transportation task. The number of operating locomotives has been reduced to 65, and the operating number of wagons reduced from 11,000 to 1,000, representing different kinds of wagons, because of this shortage of spare parts needed for major maintenance. The Iraqi Railways need 365 locomotives per day to be in a position to assure a minimum standard of transportation service. Moreover, the condition of the present railway track system, totalling about 2,500 kilometres, is not in a state of repair which permits the acceptance of this number of locomotives and wagons, because of the non availability of spare parts and materials for maintenance of the tracks, including spare parts for track maintenance machines. This situation affects the capacity and the safety of the rail transport system, and will only deteriorate further unless urgent measures are taken to halt the decline.

172. In accordance with paragraph 41 of the MOU, the Government of Iraq shall provide the programme with detailed information about the delivery of supplies and equipment to their locations in order to facilitate the monitoring of their use. The

programme will conduct the tasks provided for in paragraph 8 of Annex 1 of the MOU.

Ports

173. The port of Umm Qasr is the only port in Iraq authorized to receive commodities imported to Iraq against the MOU. Since 1991 the port facilities have not been maintained and consequently they have now degraded to an extent that is severely limiting the ability to handle humanitarian supplies. To prevent further degradation in the situation it is necessary to dredge the entry channels and repair the port facilities.

Dredging. Prior to 1991, the channel and wharf could accept vessels with a draught of 10.5 metres. Today that draught has been reduced to 8.5 - 9 metres and as result larger vessels discharge in Jordan, (Aqaba), and goods are transported by road to Iraq a distance of 1350 km. This adds 4 to 5 days to the transit time and increase transport cost by \$38-40 per metric tons. Dredging the channels and port will increase in the capacity of Umm Qasr and result in more vessels using the port. This will increase the rate of delivery of Humanitarian Supplies into Iraq and reduce the landed cost of goods.

Port Facilities. The state of port facilities has similarly degenerated. Mechanical handling equipment is old and inefficient; safety equipment, including fire-fighting equipment, is obsolete and unreliable; auxiliary power, essential to provide 24 hours operations as well as safety and security, is non-existent. The availability of tugs and pilot vessels imposes delays on berthing and accordingly on the speed of discharging humanitarian supplies. The speed of discharging has a direct effect on the receipt and ultimate distribution of humanitarian supplies, as well as the total cost of commodities. Any improvement in this area will have a positive effect on the humanitarian programme.

Land Transport

174. To carry MOU commodities from Umm Qasr and Trebil, different trucks (flat bed, semi trailer, refrigerants, and open trailers lorries of different kinds and capacities are required for this purpose. More than 10,000 (ten thousand) trucks are required per year.

Public Transport

175. Without doubt, the availability of reliable and affordable public transport has an important place in the social structure of a country. In Iraq, this is of particular significance as the population maintains strong ties to their place of origin and as a result they travel frequently to their "home" to mark important events and anniversaries, and on the occasion of holidays. From phase VIII, the Government of Iraq has allocated funds for the purchase of buses to be used in public transportation. Paragraph 75 of the Distribution Plan (S/2002/666) submitted by the Government of Iraq to the Secretary-General in accordance with the MOU) and Security Council resolution 1302 (2000) states that, "to overcome congestion in carrying public throughout the country (towns and rural areas), different kinds of buses are required

(city and inter city mini busses, coasters, etc.). Since, trains could not meet the demand." Buses thus imported are sold at concessionary rates to bus operators in the center/south through the Ministry of Trade.

176. In the three northern governorates of Erbil, Dahuk and Sulaymaniyah where the United Nations Inter-Agency Programme (the Programme) is implementing the humanitarian programme on behalf of the Government of Iraq, public transport is provided solely by the private sector using vehicles ranging from 11 to 50 seat capacity, supplemented by taxis which operate on a "multiple hiring" arrangement. The fleet is aged, generally between 19 and 23 years old, and therefore, unreliable, polluting, in dubious condition regarding safety, and more often than not overcrowded and uncomfortable.

177. In recognition of the continuing need in this sector, the allocations for the three northern governorates includes a further \$10 million for the provision of transportation. In line with the approach adopted by the Government of Iraq the allocation on this occasion has been shown against the Telecommunication and Transport sector.

Other Sub-Sectors

178. Demand for supplying earth-moving equipment (shovels, graders, etc) together with fuel tankers, water tankers, generating sets, etc. are needed to replace old ones. Also needed tyres, spare parts, repair kits and tools for this purpose.

179. In addition, meeting the requirements of the Civil Aviation and Meteorological offices is essential to support the Humanitarian Programme.

• Planes under Iraqi Airways carry sick people & disabled for treatment outside Iraq. That means that relevant facilities such as buses, different vehicles, ambulances, etc need to be in good conditions and in operative manner.

• Meteorological reports and information are needed for farming in all sectors throughout the country.

180. The total allocation for the Telecommunication & Transport sector will amount to US \$ 243.11 million.

181. In accordance with paragraph 41 of the MOU, the Government of Iraq shall provide the programme with detailed information about the delivery of supplies and equipment to their locations in order to facilitate the monitoring of their use and to make sure of this. The programme will conduct the tasks provided for in paragraph 8 of Annex l of the MOU.

PART EIGHT

PLAN FOR THE REQUIREMENTS OF THE OIL SECTOR

182. The implementation of the provisions of Plan necessitates achieving a steady and sustained rate of oil exports. This requires the implementation of projects related to the development of existing and new oil fields in order to compensate for the depletion in oil available for export and to prevent further deterioration in oil production. To increase the volume and reliability of production and export systems and equipment it is necessary to purchase spare parts, materials and equipment needed for maintenance, rehabilitation and upgrading of obsolete or semi-obsolete equipment and systems in the upstream sector and to ensure better reservoir management and improve environmental protections and pollution control, processing, storage and transportation capabilities are also required

183. In regard to downstream requirements, the provision of various oil products for local consumption meets a range of essential humanitarian requirements including heating, cooking, transportation and electricity generation. Hence it is essential to increase refining capacity by building new refineries to meet rising demands for oil products as well as sustain the safe operations of the existing refineries with acceptable standards of efficiency, safety and environmental protection, and to continue the rehabilitation, revamping & upgrading of the oil product production & distribution facilities to achieve these aims. Similarly, fuel stations and other related facilities should be operated within appropriate safety margins. Hence provision has to be made for the continued supply of urgently required equipment to achieve the above aims.

184. In regards to Oil Training Institutes requirements, some basic needs have to be provided for these institutes to enable them to carry out the task of developing middle level technical staff, for the oil industry

185. US \$ 600 million is allocated under Security Council resolution 1447 in phase XIII for the supply of spare parts, materials, equipment and cost of service contracts and other necessary works and projects mentioned above to cover the essential and urgent needs of the Oil Sector. US \$ 250 million will be allocated for the upstream, US \$ 350 million for the downstream requirements .

186. In accordance with paragraph 41 of the MOU, the Government of Iraq shall provide detailed and timely information about the delivery of supplies of equipment to their locations in order to facilitate and ensure observation of their use.

PART NINE

PLAN FOR THE REQUIREMENTS OF CONSTRUCTION MATERIALS

187. The Plan allocates funds to import materials, raw materials, machinery and other related requirements for housing and construction needs in all fifteen central and southern governorates. The funds will target social welfare projects such as schools, hospitals, streets, mosques, churches and water and sewerage projects.

188. The Ministry of Trade will distribute construction items through the State Company for Construction Materials and the State Company of Shopping Centers. The items will be provided directly from the warehouses of these companies, spread over the mentioned governorates. The applicants should present the official building licence together with documents showing that they own the plot on which the housing unit will be constructed. The engineering department in the mentioned companies will specify the quantities required by taking into account the size of dwelling. The prices of materials supplied shall be decided by the Ministry of Trade. The Plan allocates US \$ 50 million for this purpose.

189. In concert with the commendable endeavours in the centre and south governorates of Iraq, an amount of \$ 30 million has been included under the Housing sector to meet needs of similar groups in the three northern governorates. This amount will be utilized to provide materials for 'self construction' of houses by owners.

RESETTLEMENT REHABILITATION

190. The Housing Sector is aimed at those who require immediate new housing to support their permanent settlement in appropriate places, and assisting population in cities and towns to achieve better housing conditions. The first priority for new construction will be to construct housing for Internally Displaced Persons (IDPs) currently living in tents, barracks and public buildings.

191. Within the overall settlement rehabilitation sector, assistance will be provided to eligible individuals to have access to the minimum acceptable living conditions and to assist them in the process of social and economic development of newly established or settled communities, through the promotion of self-help activities and skills training.

192. Project activities will include: the provision of emergency shelter, relief items, water and sanitation to ensure the availability of minimum accommodation conditions. The activity will include maintenance of the level of preparedness with relief stocks for the consolidation of an immediate relief response US \$ 3.2 million is budgeted; for supporting the planning and management capacity of the municipal authorities to incorporate initiatives emanating from the newly settled population and their host communities US \$ 1.15 million is budgeted; for the development of a referral service, to essential resources, for the economically and socially

disadvantaged provision of skills development through vocational training and startup assistance in newly established communities US \$ 9.84 million is budgeted.

193. A total funding of US \$ 103.7 million is allocated to the settlement rehabilitation sector. For the three northern Governorates the programme aims, in addition to the above, to support; a) rural village resettlement; b) rehabilitation of resettled towns and villages; c) construction of infrastructure and services; and d) provision of basic relief items, such as tents and blankets.

MINE-ACTION

194. There are currently more than 3,600 known minefields in the three northern governorates, which continue to plague the lives of the local population. Civilian landmine casualties are estimated at between ten and twenty per month. An estimated twenty per cent of the arable land within the region cannot be cultivated due to landmines. Resettlement activities are furthered hampered by the presence of landmines.

195. The MAP strives to provide a comprehensive approach to resolving minerelated problems and creating an environment in which people can resume normal, productive lives. It includes an integrated approach to:

• Assess the socio-economic impacts of minefields on communities and individuals in order to determine where actions are needed most;

- Map, mark and clear minefields;
- Raise public awareness about mines, and on how to avoid them;
- Provide medical, rehabilitation and vocational services to mine victims;

196. The Mine Clearance Programme in the three northern governorates focuses on the locating and removal of landmines to allow the civilian population to lead unimpeded lives. The emphasis is on communities with the greatest needs for village resettlement, agriculture and other humanitarian assistance and rehabilitation projects supporting community activities. Manual clearance teams, dogs and the continued operation of mechanical clearance devices are utilised to address the mine problem. Continuation of victim/prosthesis centres, and of mine awareness training, are core components to the Mine Action Programme.

197. The current Plan requires US \$ 25 million for the ongoing support of these activities.

PART TEN SPECIAL ALLOCATION REQUIREMENTS

Introduction

198. In addition to the food ration, under the humanitarian programme the population of Iraq also receives basic services such as health care, potable water, sanitation facilities, subsidized power supply and rehabilitated shelters. The Ministry of Labour and Social Affairs is the nodal Ministry tasked with the provision of assistance programmes to the most needy segments of the population outside the Humanitarian Programme A special allocation, envisaged in paragraph 9 of Security Council resolution 1360 (2001), targets this social group.

199. These funds also intend to establish lasting infra-structural assets and service delivery through projects implemented in the health, housing and water and sanitation sectors. In this regard, the government has identified geographic areas in the central and southern governorates.

Water and Sanitation

200. The condition of water and sanitation systems in many parts of the country remains critical. Large sections of suburban and rural areas have either no access to potable water or receive inadequate, poor quality supplies. To ameliorate this situation, US \$ 113.11 million has been made available under the special allocation to the General Establishment for Water and Sewage (GEWS) for the supply of electrical and mechanical equipment for plants in affected areas and the implementation of the following projects:

- 1. Al-Hamdaniya water treatment plant Ninewa Governorate;
- 2. Sinjar water treatment plant Ninewa Governorate;
- 3. Hammam al-Aleal Ninewa Governorate;
- 4. Al-Eshaqy Salah al-Din Governorate;
- 5. Al-Seaniya Salah al-Din Governorate;
- 6. Al-Dhibai Salah al-Din Governorate;
- 7. Dejla al-Semoom Salah al-Din Governorate;
- 8. Al-Sharkitt Salah al-Din Governorate;
- 9. Al-Sharkitt Village Salah al-Din Governorate;
- 10. Al-Selam Missan Governorate;
- 11. Al-Qadisiya Najaf Governorate;
- 12. Al-Diwaniya Al Qadissiya Governorate;
- 13. Al-Wafaa Anbar Governorate;
- 14. Al-Baghdady Anbar Governorate;
- 15. Balad Rooz / Diyala Governorate;
- 16. Al-Basrah Unified water treatment plant -Basrah Governorate;
- 17. Al-Sewarah sewage treatment plant Wassit Governorate;
- 18. Al-Tarmiya sewage treatment plant Baghdad Governorate;
- 19. Al-Romadi sewage treatment plant Anbar Governorate;
- 20. Al-Mosul Right bank sewage treatment plant Ninewa Governorate;
- 21. Al-Faluja sewage treatment plant Anbar Governorate;
- 22. Heat sewage treatment plant Anbar Governorate;

- 23. Al-Amara Sewage treatment plant Missan Governorate;
- 24. Al-Mahmoodiya sewage treatment plant Baghdad Governorate;
- 25. Al-Nasriya sewage treatment plant (2^{nd} stage) Thi-Qar Governorate;
- 26. Reverse Osmosis units.

Board of Youth and Sports

201. The Board of Youth and Sports envisages the procurement and importation of equipment and commodities such as lighting, communication equipment and materials required to construct, equip, and furnish sporting facilities. The Plan allocates an amount of US \$ 5 million for this purpose.

Ministry of Housing and Construction

202. The allocation of US \$ 98.71 million to the Ministry of Housing and Construction will be used for designing and building housing projects in the six governorates of Baghdad, Ninewa (2 sites), Basrah (3 sites), Anbar (Falluja), Najaf and Kerbala. This includes all infrastructural services and social building requirements for such complexes such as schools, shops, clinics, mosques, sewage treatment plants, etc.

Ministry of Health

203. The Ministry of Health has prepared a plan for the utilisation of additional funds for the construction of medical facilities. These facilities, providing services to the disabled and other special cases, in addition to the general population, have deteriorated markedly. The Plan includes the construction of an atomic hospital, diabetes specialised centre, specialised hospitals and centres in the southern and central governorates for a total expenditure of US \$ 126.90 million.

204. The construction of medical facilities will improve the provision of specialized services to a reasonable standard.

PART ELEVEN

OTHER ALLOCATIONS

205. The Plan allocates funds to various ministries acting in economic, social and cultural areas.

Ministry of Industry and Minerals

206. US \$ 210 million will be allocated to the Ministry of Industry and Minerals. The allocation will be used to purchase materials and equipment to rehabilitate plants that produce construction materials, such as cement, bricks, tiles, plastic pipes, steel and electrical facilities as well as the raw materials and production materials needed to produce such construction materials.

207. Drug factories in Samarra, Ninewa and Baghdad need raw materials, packing materials, equipment and spare parts to maintain their production capacities.

208. Schools in Iraq annually require different kinds of writing a laboratory books which are produced locally. To maintain the local production of paper and writing books, raw materials, production materials, spare parts and equipment for the paper plants are needed.

209. The local production of field crops, vegetables and fruits requires huge quantities of fertilizers of different types, plastic covers for greenhouses and updated irrigation facilities. The local production of these goods is facilitated by improving the capacity of fertilizer plants, petrochemical complex and mechanical equipment factories to adequately address local needs.

210. The Ministry of Industry will also use the allocation to develop the sugar industry in Iraq. Depending on local cultivation of beet sugar and sugar cane, the Ministry will need to import raw materials, chemicals, production materials, spare parts and equipment for sugar plants.

211. In addition, the Ministry of Industry will use the allocation to produce aluminium sulphate for water treatment, and to assemble drinking water treatment and reverse osmosis units for local use. It will import raw materials, production materials and equipment with spare parts.

212. Factories and plants producing local consumer goods such as dairy products, vegetable oil, cosmetics, soaps and detergents, clothing and shoes, cigarettes, batteries and tyres also need raw and production materials, equipment and spare parts

213. In order to overcome car congestion, the Ministry of Industry is encouraging bus transportation as an alternative to private cars. It will, therefore, use part of its allocation to assemble CKD and SKD parts of public buses for towns and rural areas.

Ministry of Housing and Construction

214. The building materials imported by the Ministry of Housing and Construction will be used for the construction of housing complexes and other public utilities in all central and southern governorates. An allocation will be made to the Ministry of Housing and Construction under phase XIII to cover the cost of importation of equipment (i.e., bulldozers, cranes, shovels) required by this Ministry to build social housing complexes and other public utilities in all fifteen central and southern governorates. In addition, the imported equipment will be used for the rehabilitation of existing roads and the construction of new roads and bridges. Roads and bridges are part of the countries basic infrastructure and an important factor for the efficient implementation of all humanitarian sectors. Because of limited railways and lack of alternative transport means, the country depends heavily on the road infrastructure for the transport of humanitarian goods as well as for the private sector. The Plan allocates US \$ 178.71 million to this element.

Ministry of Religious Affairs

215. US \$ 25 million will be allocated to the Ministry of Religious Affairs in phase XIII to import elevator machines and construction equipment. As well as Kerbala tile factory circuitbreakers, compressor, tv. Studio air conditioning sets. In addition the ministry will spend the allocation to purchase ride-on sweepers, office equipment, amplifiers, low tension power cables. Furthermore, the Ministry will buy vacuum cleaners, water coolers, stand and ceiling fans, lighting construction, pumps, equipment and manual hardware.

Ministry of Labour and Social Affairs

216. US \$ 3 million will be allocated to the Ministry of Labour and Social Affairs for supplies and requirements related to its activities.

Ministry of Culture

217. US \$ 20 million will be allocated for the importation of supplies related to the Ministry of Culture such as recording studios, audio equipment, lighting, mobile television and cinema vehicles, microphone equipment, computers, video designing systems, press machines, air conditioning sets, elevators, pumps and generators, heritage laboratories, surveying machines, interpretation equipment. In addition, the Ministry also requires vehicles and other related equipment, fire-fighting equipment and alarms, sewing machine units, tourism equipment, musical systems and equipment and studios for motion pictures.

Ministry of Information

218. The Ministry of Information will be allocated US \$ 50 million for its requirements. These include printing presses and accessories, television sets, television and radio studio systems, mobile broadcasting vehicles, television and radio transmission equipment, television and radio receivers, microwave links, towers and cables, photo processing and archiving SRTs and various other office equipment.

Central Bank of Iraq

219. The Plan allocates US \$ 25 million to the Central Bank of Iraq (CBI) for the importation of equipment and spare parts for armored vehicles for safe transportation of currency notes and notes. Furthermore, the CBI requires press equipment and modern offset machines, modern intaglio press machines, modern finalization machines as well as other accessories related to the above. The allocation will also be used to purchase central air conditioning and elevators.

Ministry of Justice

220. US \$ 4 million is allocated for the supply of spare parts for air conditioners (qty 3), 30 telephone exchanges, 15 minbuses (14 passenger capacity), 20 cars (5 passenger capacity) and 15 cars (8 passenger capacity).

Ministry of Finance

221. US \$ 20 million is allocated for required equipment, vehicles and spare parts.

Board of Youth and Sports

222. The Plans earmarks US \$ 20 million for a project of Olympic sport city including: 1. Cycling race track; 2. Sports hall (5000 spectators); 3. Sports hall for shooting; 4. Sports hotel. Sport supplies and materials -US \$ 10 million. This amount includes US \$ 5 million Special Allocation. An amount of US \$ 4.98 is allocated to the three northern governorates.