

CHAPTER II.

THE EMERGENCY PHASE: NOTES ON THE RESPONSE TO THE DISASTER AND THE AS- SISTANCE STRATEGY OF THE UNITED NA- TIONS FAMILY.

Introduction

50. This Chapter narrates the response of the various organizations of the United Nations system in the most acute phase of the emergency. It also describes the actions taken by the Resident Representative of the United Nations Development Programme in mobilizing and coordinating the assistance of the United Nations family and coordinating it with international assistance for disaster relief from other sources.

51. The characteristics of the earthquake, on the basis of technical reports, are discussed in detail in Chapter I of this study. The initial earthquake that struck Guatemala at 3:03 in the morning, local time, on 4 February 1976, caused the most destruction in the *altiplano* (highlands) and along a series of communities extending east towards the Caribbean Coast of the Country. The violent tremors that followed the initial shock, caused further destruction and devastation in the area.

52. Most of the affected population rushed out of their houses in the course of the first earthquake. Many did not make it, as collapsing adobe walls and tile roofs killed and seriously injured thousands. In smaller urban centres and rural communities, the

narrow streets prevented hundreds from reaching safe haven from the structures collapsing all around, so many more were killed and injured as they ran out to the streets.

53. In the capital, the people were severely affected psychologically by the phenomenon and abandoned their residences, considering it safer to stay in the open air. At the time of the earthquake most of the population was asleep, and since the electricity and communication facilities were interrupted due to damage from the earthquake, in the early hours of the morning of 4 February it was impossible to establish the real magnitude of the disaster.

54. After sunrise, the population of the capital discovered that large portions of the city had been severely affected by the earthquake and subsequent tremors. It was noted, to widespread dismay, that many public buildings, residences in the low income areas, churches, hospitals and other structures had been severely damaged. There was no way of knowing at the time the extent which the rest of the country had suffered or how much vital infrastructure such as water and communications had been damaged, but first reports were already filtering in that damages in the rest of the country could be substantial.

55. The National Emergency Committee, a Government entity created in 1971 to direct relief operations in cases of emergency on natural disasters, immediately took over the entire relief operation and took action to mitigate the suffering of the affected population. The entire armed forces of the nation was then mobilized to initiate whatever emergency action was required.

56. Initial reports from the National Emergency Committee on the magnitude of the disaster were unclear early on 4 February. For the Capital City 800 were reported dead and 5,000 injured; however, since no communications were available with the interior of the country, the data on damages in those areas was still unavailable. It may be noted that these estimates were higher than others circulating at the time.

57. Early in the same morning, the Minister of Public Health made an appeal for assistance in the form of medicines, serum,

plasma and first aid kits to relief the injured population. At that time, he also requested all the available medical personnel to report to their duties and cooperate in this enormous task imposed by the emergency.

58. After an aerial survey through the affected area, the President of the Republic declared that it was quite clear that a great portion of the national territory had been severely damaged by the earthquake. He then called on the Guatemalans immediately to start working to cope with the emergency, taking into account that his Government was determined to overcome the effects of the disaster with the assistance of the population. He also appealed to the international community to provide the necessary relief assistance.

59. The population responded in a very positive way to the Government's appeal for work during the emergency phase. The task was immense. The dead had to be buried to prevent mass epidemics. Safe haven had to be found for all, specially for the wounded. In February, the Guatemalan highlands can be very cold. The roads within the towns had to be cleared to permit the entry of relief supplies.

60. During the first days following the earthquake, it was confirmed that the damages were substantially higher than those initially estimated and thus the demand for relief assistance increased rapidly. Further surveys disclosed that several municipalities in the Departments (provinces) of the affected area had sustained 100 per cent destruction and heavy casualties and many others were severely damaged. Only few towns escaped the catastrophe. Water systems, hospitals and health centres were seriously affected. Reports on shortages of water, food, medicines and beds for patients were made available by the Government, as well as the concomitant relief requirements.

61. Major roads, specially the interoceanic highway connecting the Pacific Ocean with the Caribbean, were very severely damaged and various important bridges were totally destroyed. Landslides provoked by the earthquake cut roads and blocked the access to several communities in the stricken zone hampering the relief effort.

62. The response to these problems was remarkable. Army planes and helicopters operated jointly from sunrise to sunset with a contingent of private planes of the Guatemala Aero-Club to fly relief supplies to cut-off areas. The small planes landed on improvised strips along segments of the highways. There was something in the nature of the heroic in this effort, as some planes crashed due to the difficult conditions. The air relief network was subsequently reinforced by a strong complement of US Army helicopters and the Civil Defence of Venezuela.

63. The National Emergency Committee was fully engaged in the coordination and distribution of external aid arriving in the country. The Air Force terminal building housed all the services of the Committee and several hangars served as provisional warehouses of goods received from abroad for further distribution to the earthquake victims. Several voluntary agencies received goods from their organizations and initiated distribution operations through their own infrastructure.

64. The international community responded immediately on the President's appeal for assistance. In effect, within hours after the earthquake, aircrafts loaded with medicines, shelter, clothing and food began to arrive at the International Airport.

65. The National Emergency Committee provided information on current developments and specific needs in the rural areas. These data were obtained from military sources stationed in the various departments, municipal authorities, priests, school teachers and local leaders.

66. The «Dirección General de Servicios de Salud», of the Ministry of Public Health, took over the relief operations within the health sector and was also engaged in the distribution of goods and medicines at the hospitals and health centres.

A. *The United Nations Disaster Team in Guatemala*
General Remarks

67. During the first hours following the earthquake, the Resident Representative of the United Nations Development Program-

me established the initial contacts with the representatives of the various organizations of the United Nations system and project managers stationed in the country in order to initiate the Organization's action during the emergency. The entire staff was immediately mobilized and instructed to report to their respective counterpart agencies to cooperate in whatever tasks they would be asked for beyond their terms of reference.

68. At about 8:00 hours local time of the same day of earthquake, the Resident Representative made the first official contact with the Government. The Minister of Defence and President of the National Emergency Committee, advised him that from initial reports a great part of the country had been severely affected by the earthquake; however, since the communications services had been totally interrupted with the interior of the country, the final data on damages and casualties would be much greater. The President of the National Emergency Committee in his first meeting with the Resident Representative indicated that the Government had taken full command of the relief operations and the entire responsibility for the establishment of priority requirements on external assistance. Later in the day, the President of the Republic announced that in view of the magnitude of the catastrophe he had declared the state of national calamity.

69. Immediately after this meeting, the Resident Representative, accompanied by the Chief of the Latin America Branch of the World Food Programme and the WFP Advisor for Central America, discussed with top officials from the Ministry of Public Health the way to coordinate the Organization's relief activities during the initial phase of the emergency. During the discussions, it was proposed that the aid emanating from the UN system be channeled mainly through the «Dirección General de Servicios de Salud» of the Ministry of Public Health as it had a well-developed infrastructure for emergency relief assistance. This proposal was then approved by the President of the National Emergency Committee.

70. The UNDP Offices were temporarily closed and the headquarters for UN emergency operations were established at the Resident Representative's residence, when it was learned that the UNDP premises had been affected by the earthquake.

71. During the initial hours following the earthquake, communication facilities were totally interrupted, thus making difficult our contacts with the outside world. At the request of the Resident Representative, the Senior Agricultural Adviser made contacts through his own amateur radio and later in the morning the first phone-patch conversation with UNDP Headquarters in New York took place and the initial reports were transmitted to the senior officials.

72. At about 10:30 local time, the telephone services were partially restored and contact was made with the UNDP Office in San Salvador, but unfortunately telecommunications were again interrupted. By noon, the first situation report was transmitted to UNDRO Geneva through the UNDP Office in San Salvador. From this time, a close collaboration was established with UNDP El Salvador day and night, which proved to be of great value for the orderly accomplishment of the entire relief operations during the first few days.

73. The ITU Coordinator for Central America stationed in Guatemala was likewise requested to re-establish the communication facilities for the Office. A telex machine of the national telecommunications company (GUATEL), was put at the disposal of our Office from 4 through 6 February until all the technical work was completed to install our equipment at the Tivoli Sub-Station of GUATEL. The installation was accomplished on schedule, however, a secondary quake of intensity 5.6 on the Mercalli scale damaged the communications centre forcing UNDP to reinstall the equipment at two tents set up next to the Tivoli Sub-Station.

74. The first meeting with the representatives of the organizations of the UN Family took place on 4 February at about 10:30 hours local time at the residence of the Resident Representative. The objectives of this meeting were:

- a) To establish the personal situation of the United Nations personnel and their families;
- b) To establish the availability of human resources to be put at the disposal of the Government; and,

- c) To begin the task of coordination of emergency operations and subsequent assistance within the UN family and with multilateral, bilateral and private assistance groups.

75. As a complement to the coordination activities referred to above, the Resident Representative contacted later in the day (4 February) some of the major voluntary agencies, including CARE, OXFAM, Save the Children Fund, CARITAS, and the Red Cross. These contacts were maintained continuously thus assuring an efficient coordination of our activities with those of the volunteer agencies. Telex facilities were made available during the emergency to OXFAM and Save the Children Fund.

76. The Resident Representative established permanent contact with the National Emergency Committee during the entire emergency relief operation, reporting regularly to the United Nations Disaster Relief Office on current developments.

Evaluation and advisory activities of the UN Disaster Team in the context of the emergency

77. The United Nations Advisory Team permitted the Resident Representative to do two things: (a) evaluate the circumstances and conditions which prompted specific types of requests from the Government; (b) advise the Government on priority immediate needs and the possibility of requesting these.

78. To start with, the UN had experts in key government agencies or ministries engaged in disaster relief (see discussion next section), and workers in the field or close contact with field operators. This permitted a technical evaluation on the basis of known conditions on Government requests for assistance of any form.

79. With the assistance of the Aero Club de Guatemala it was also possible for the UNDP Resident Representative and his disaster relief team to undertake aerial surveys of the devastated area. The information collected was usefully utilized for relief operations, and also for photographing the affected areas. These

photographs were used by UNDRO to give donors an idea of the situation.

80. This same technical capability permitted the UN family to request clarification on a sound basis in case of doubts on certain request. It permitted us to advise the Government on reconsideration of certain requests, or consideration of new ones.

81. For example, UN technical advice on the weather situation permitted the Resident Representative to advise the Emergency Committee on the need for blankets before any widespread consciousness had been generated in this sense.

82. The meteorologist from WMO assigned to the National Observatory of Guatemala—which at the time was also responsible for recording seismic activity (it had a 3 component Wieckert seismograph)—collaborated with the Government within the scope of his terms of reference. He served as liaison between the Observatory and the UNDP Office and reported on a daily basis seismological and meteorological data which was then communicated to the various agencies involved in the emergency operations thus ensuring the coordination of relief activities.

83. The meteorological reports prepared by the National Observatory with the assistance of our WMO Expert, were of great value for the establishment of priority needs on relief operations. In effect, the predictions of cold waves, which eventually hit the highlands, warned everybody involved in the emergency to take immediate action and urgently implement relief programmes aimed at the provision of shelter to homeless and the protection of the victims from exposure.

Direct technical assistance of the United Nations family to the Government in the emergency phase

84. The health situation throughout the country was seriously affected by the earthquake due to the high number of deaths and of injured persons—specially due to polytraumatic causes—and the psychological shock of the community. The lack of shelter, food and clothing severely aggravated the prevailing conditions.

Furthermore, 317 water supply systems were damaged, 58 urban sewage networks were destroyed and 64,000 latrines were required for the rural areas. The available Government resources to cope with the demand for medical attention were insufficient for the emergency, as six hospitals were totally destroyed —two important ones in the capital city— and 57 health posts were severely affected by the catastrophe with an estimated loss of 50 per cent of the installed capacity in the city.

85. The Chief of Zone III of PAHO/WHO made available to the Government, immediately following the earthquake, the services of 37 experts assigned to the country as well as the staff and facilities of the Institute of Nutrition for Central America and Panama (INCAP) administered by PAHO/WHO. The team of experts advised the Government in re-organizing the health sector and the institutional coordination as well as on the evaluation of the situation. They also advised in the development of a nutrition plan implemented within the food-for-work project of the WFP.

86. Apart from the advisory services, PAHO/WHO also provided the Government medical supplies for emergency relief operations. The nature of this assistance is discussed later in this chapter.

87. On the request of the Government, the UNICEF Area Officer based in Guatemala agreed to supervise the field operations undertaken by the Scouts Association of Guatemala. A staff member from the Mexico Area Office was detailed to the country to assist in the emergency relief operations. A Programme Officer collaborated with the Human Resources Unit of the National Planning Council in the preparation of situation reports of the social sectors. The emergency relief actions of UNICEF are discussed later in this Chapter.

88. The team of experts assigned to the UNDP/UN Groundwater Survey Project, actively collaborated with the Government by providing advice regarding water supply in the capital city. The complete inventory of water wells maintained by the project was positively used for the establishment of a list of stand-by emergency wells which were reported to EMPAGUA

—the city water works authority— and the San Carlos University, which were organizing a water distribution programme to the affected areas. The counterpart personnel assigned to the project in cooperation with San Carlos University prepared, during the initial days of the emergency, a location map and a complete list of stand-by wells, water tanks, emergency settlements and septic pits.

89. The project's drilling group immediately initiated the training of the national personnel and from 5 February was deployed to the field where they operated permanently.

90. As mentioned before, telecommunications were badly disrupted as a consequence of the earthquake, thus making difficult an assessment on damages in the interior. The situation was even most serious since the rather obsolete and scarce telecommunications facilities available in the stricken area were totally destroyed or seriously damaged.

91. Immediately following the earthquake, five ITU experts were assigned to the National Telecommunications Company (GUATEL) to assist the Government in their rehabilitation efforts. The team of experts collaborated in the assessment of damages in the disaster area and in the preparation of a restoration plan of communication facilities both in the capital city and the interior of the country.

Other Evaluations

92. After the earthquake, several scientific teams visited Guatemala to evaluate the causes of the natural phenomenon, and its characteristics.

93. UNESCO and the Regional Center of Seismology in South America (CERESIS), fielded a seismological reconnaissance mission that arrived on 11 February. The mission members were a seismologist from the Seismological Institute of Caracas and a structural engineer from the «Instituto de Materiales y Modelos Estructurales» (IMME), of Caracas. Both experts worked in their respective fields of specialization and a report on the technical features of the Motagua fault earthquake was produced.

94. A second UNESCO/CERESIS mission was also sent to Guatemala on 22 February. The team was also composed of a seismologist and a structural engineer from the «Instituto Nacional de Prevención Sísmica» of San Juan, Argentina. These data should be useful in regional planning for reconstruction.

95. The UN experts assigned to the Groundwater Survey project contributed to the technical evaluation of the phenomenon by a detailed survey of the water level observation wells systems and the hydrological control stations to assess the damages sustained by these water bodies. Such tasks included temperature measurements of water and evaluation of bulk chemical quality. The geologist attached to the project actively participated with the Geological Association of Guatemala and the Geological Division of the National Geographic Institute in a complete and detailed plotting and evaluation of the geological phenomena.

96. The advanced hydrological and hydrogeological knowledge of the project, proved to be a very valuable and useful source of information for the National Emergency Committee, the United States Geological Survey Mission and the US water team experts. Copies of the most important internal technical reports were reproduced for scientific and technical organizations engaged in water programmes during the emergency.

97. On the request of several national agencies, the project also undertook the evaluation of geological conditions which affected several Government buildings and plants. As a result of these services, short technical papers were submitted to GUATEL, EMPAGUA and INTECAP.

98. Evaluations of use over the medium-term prepared by the UN family are cited in Chapter III.

Emergency Relief Operations and their Coordination

99. This section will identify the action of the UN family in terms of coordination. After communications were established with UNDRO Geneva late on 4 February, the Resident Representative was requested to re-employ a former Consultant with

previous disaster experience—who happened to be in the country during the earthquake—to assist the office in the emergency relief operations. A second officer from the Relief Coordination Division arrived on 6 February to establish liaison with the National Emergency Committee and with relief agencies involved in the emergency.

100. During the early days of the emergency, the UN disaster team was fully engaged in the collection of data on the situation throughout the affected area and on requirements for the relief of the population.

101. Daily telephone and telex contacts were established with the UNDRO office in Geneva to transmit the necessary information on current developments. The information received was then analysed with information from other sources and a situation report was prepared by UNDRO for distribution to potential donors, voluntary agencies and the organizations of the UN system.

102. We have described how permanent contact was established with the Government through the National Emergency Committee, and with voluntary and bilateral agencies.

103. The National Emergency Committee and the Ministry of Public Health, Government Institutions which maintained daily contacts with the various Organizations of the UN family, had an important role in the coordination and distribution of relief assistance provided by these Organizations. The information on priority requirements was transmitted to UNDRO who then appealed to potential donors to make contributions to the relief operations carried out in Guatemala.

104. To avoid possible duplication of efforts in the assistance operation, the UN Disaster Team provided to UNDRO Headquarters data on emergency assistance received. Such information was also available at the National Emergency Committee to voluntary and bilateral agencies and Government authorities. UNDRO for its part also sent data on projected arrivals of emergency supplies or donations.

105. We have also explained that the UNDP Resident Representative convened daily meetings at his residence with the heads of the organizations of the UN system to ensure the efficient coordination of relief operations undertaken by these organizations. The meetings proved to be of great value to the entire operation since important information was exchanged on current developments related to specific areas, such as climate reports, health and water situation, distribution of relief assistance, etc.

106. As a further coordination activity, the United Nations sponsored regular meetings attended by representatives from the voluntary and bilateral agencies as well as Government officials. The first of such meetings was convened on 25 February. At that meeting it was agreed that every agency should provide relevant data concerning their activities, namely projects under execution or being planned; inputs; availability of resources; etc. These meetings proved to be very useful in bringing to the attention of the members of the Reconstruction Committee of Guatemala some bottlenecks that were immediately corrected particularly in the handling of materials.

107. The coordinating meetings referred to above were very useful during the first three weeks following the initial gathering; however, as the acute emergency period passed the meetings lost tempo and several representatives from major donors failed to attend.

108. When the Government decreed that the emergency was over and established the National Reconstruction Committee on 18 March, the President of this newly created body requested the Resident Representative to stop the coordination meetings as they were going to establish a special unit to deal with coordination. To discharge these responsibilities, the National Reconstruction Committee established on 8 April, the International Cooperation Unit responsible for the coordination and orientation of any external assistance at the stage of national reconstruction. The last coordination meeting with the voluntary, bilateral and multilateral agencies held together with the Emergency Committee and the National Reconstruction Committee, was held on 29 March at the National Palace. At that time, representatives of the

various agencies gave account of their activities and disclosed areas where further assistance was required.

B. The strategy of the emergency relief assistance

109. The Organizations of the United Nations system channeled the emergency relief assistance on the basis of continuous reports provided by the National Emergency Committee on current developments and specific needs in the disaster area. In addition, information was also exchanged among the various voluntary agencies and bilateral donors regarding priority requirements.

110. The relief assistance provided by the organizations, was also adjusted in terms of location of the stricken zones, climatic conditions, type of damages, geographical distribution of casualties, and risks to the health or safety of the population (epidemics and exposure).

111. On 5 February, UNDRO authorized the Resident Representative to incur expenditures up to \$20,000 on any priority items of emergency assistance to be procured locally. At the same time, UNDP Headquarters authorized an emergency assistance project, financed from the Programme Reserve, in the amount of \$20,000. The UNDRO and UNDP funds were utilized for the purchase of corrugated roofing panels.

112. Local procurement for the shelter material was impossible since the production in the factories in Guatemala was initially paralyzed by the disaster. The Resident Representative took the initiative of searching for procurement possibilities in the neighboring countries and established close contacts with a producer located in El Salvador. The transaction was coordinated with the UNDP Office in San Salvador, which took care of all the administrative details including the shipment of the material. The relationship with the Salvadorean factory proved to be of great value since, through our negotiations, a voluntary agency (OXFAM), contracted, late in February, the procurement of 157,000 corrugated iron roof panels, costing approximately \$850,000 for their emergency relief assistance programme. The

UNDP Offices in San Salvador and Guatemala provided the necessary administrative support and communications facilities to OXFAM to implement their shelter programme. Through this deal the manufacturer consigned 5,000 pieces a day.

113. From the National Emergency Committee reports it was established that immediate action was required to provide shelter for the protection of victims from exposure.. In the light of this, UNDRO and UNICEF agreed to purchase jointly tents and blankets in San Salvador. UNDRO allotted \$74,000 and UNICEF contributed with the amount of \$100,000, which was made available by that Organization for immediate relief supplies to be purchased locally. As in the case of the iron roofing, both the tents and the blankets were purchased in San Salvador. It is to be noted that the Resident Representative of Guatemala was able, in the following days after the earthquake, to contract the entire production of blankets from San Salvador at very competitive prices. The goods donated by UNICEF, were given to the «Dirección General de Servicios de Salud», of the Ministry of Public Health, which was responsible for the distribution. Starting 4 March, the Friends World College was engaged in the distribution of blankets purchased with UNDRO's contributions.

114. The Ministry of Agriculture of El Salvador, provided at no cost, trucks and drivers for the transportation of blankets purchased in that country. The first consignments of iron roofing and blankets arrived in Guatemala on 10 February and the tents were received on 11 February.

115. PAHO/WHO allocated \$150,000 for emergency medical equipment and supplies including first aid medicines, to be procured locally.

116. As a consequence of the second quake that struck the country (5.6 Mercalli Scale), the General Hospital of Guatemala City was heavily damaged and patients and equipment were transferred to the exhibition halls of the Industrial Parks. WHO experts assisted the Government in the entire operation which was accomplished within 72 hours.

117. On the same day of the earthquake and after discussions among the Resident Representative, the Chief of the Latin Ame-

ican Branch of the World Food Programme, the WFP Adviser for Central America and top officials from the Ministry of Public Health, it was agreed that a WFP emergency project was urgently required to provide food assistance badly needed to feed in-hospital patients and wounded population.

118. On 4 February, the Government of Guatemala officially requested assistance from the WFP to provide supplementary food rations to the wounded population and in-hospital patients. This request was approved on 6 February. The project was oriented to provide daily rations for 10,000 persons during a 30-day period, and eventually food rations were distributed to some 15,000 beneficiaries receiving medical care. The commodities provided in this assistance between February 14 and 24 April were 15 metric tons of canned fish and 90 metric tons of wheat flour, valued at around \$50,000. The national counterpart agency was the Ministry of Public Health which provided the required infrastructure for the implementation of the project. To accelerate the procurement, it was decided, after negotiations were concluded with the Governments of Guatemala and El Salvador, that the goods be lent from the available resources of a WFP project under execution in El Salvador.

119. Within days after the emergency, three tons of special children's medication, collapsible tents, tarpaulins and water supplies equipment were flown in from the UNICEF's emergency stockpile in Copenhagen. This assistance was distributed to the affected population through the Guatemala Scouts Association, under the supervision of UNICEF.

120. On 6 February, at the regular coordinating meeting with the heads of the various organizations of the UN system, the WMO meteorologist announced that a cold wave was approaching the country and was due on 8 February. From this information, immediate action was taken by the Resident Representative to recommend to the Government to request blankets for the earthquake victims to avoid unnecessary hazards and illness through exposure due to the climatological conditions. At the same time, UNDRO, based on the information received, appealed for cash donations for the local procurement of blankets. Approximately

\$80,000 collected by UNDRO were used for the purchase in San Salvador of about 38,000 blankets.

121. The cold wave penetrated the country as predicted. PAHO/WHO representatives received reports from the Government of several deaths from exposure. In the light of the prevailing situation in the *altiplano* (highlands), where the temperature dropped considerably, immediate action was taken to orient the WHO assistance to medicines against respiratory diseases, and direct other appeals towards shelter materials.

122. Upon request from USAID and on advice of the UNDRO consultant, UNDRO approved actions to provide urgently needed relief items procured from cash donations received by UNDRO, directly to volunteer agencies. After this proposal was approved by the National Emergency Committee, UNDRO allocated US\$ 25,000 to World Neighbours for the procurement of emergency shelter material —iron roofing, nails, wood, tools etc.— required by the agency to implement an assistance programme in Tecpán, San Martín Jilotepeque, Santa Apolonia and San José Poaquil. The initial allocation was subsequently increased to \$50,000 to provide additional assistance to the agency for further implementation of this programme.

123. Based on information received from the Ministry of Public Health, through the Chief Zone III of WHO, the Resident Representative was advised that essential first aid kits, medical supplies and food rations for both health brigades and in-hospital patients were badly needed by health authorities. A joint PAHO/WHO/UNICEF/UNDRO programme was immediately approved partially to assist the Government by providing the required items. This assistance was funded with contributions from these organizations.

124. At a regular co-ordinating meeting with the UN representatives of the various agencies and after a careful analysis on the children's situation, it was decided to allocate funds for the purchase from Mexico of a special high protein supplementary food for children (NUTRIMPI) that can be eaten uncooked in a solid form. This decision was taken since the supplementary

food was suitable for the areas where water was unavailable or scarce. A joint purchase shipped at no cost by the Government of Mexico, of one million rations was made by UNDRO and UNICEF. UNDRO allotted for this purpose \$15,600 and UNICEF contributed with an equal amount. The nutrient arrived on 27 February and was immediately delivered to the National Emergency Committee.

125. Under a special agreement with the National Emergency Committee, UNICEF and the Guatemala Scouts Association cooperated closely in the distribution of approximately 15 tons of food for children sent to the national authorities from donor countries. They also cooperated in the distribution of drugs, relief shelter material, drinking water and water supply equipment in the rural and urban areas. To this purpose, UNICEF made available three vehicles and five motorcycles.

126. One of the main concerns during the emergency was the water problem in the capital city and rural areas. To cope with this situation a working group of water experts was established to bring water to the affected population. It was announced that the USA had ordered about 97 collapsible water rubber tanks of 3,000 gallons each for deployment through Guatemala. For the same purpose, UNDRO allotted \$50,000 for additional 37 water tanks and the necessary fittings. The tanks ordered by the Organization through USAID arrived in Guatemala on 25 February and were immediately deployed through the city and positively increased the distribution capacity of water within the marginal areas of the city. The tanks were transported at no cost by a Belgian aircraft put at the disposal of the National Emergency Committee for relief activities.

127. In spite of these actions, the water problem continued to be one of the most serious preoccupations of the authorities. Appeals were made for water-tank trucks to no avail. The Resident Representative then recommended the allocation of \$120,000 for the procurement of nine trucks (bare cab and chassis) and for the local manufacture of 2,500 gallons water tanks to be mounted on the trucks. UNDRO approved this proposal and the trucks were purchased in Mexico and delivered to the National Emergency Committee.

128. On 17 February, the WFP approved a request for assistance submitted by the Government of Guatemala on 6 February, amounting to approximately \$98,000. The Ministry of Health was the counterpart agency responsible for the provision of the necessary infrastructure and for the implementation of the project. The programme was designed to provide daily food rations as compensation for work done by the communities in the removal or rubble and clearing operations. The commodities provided were 1,728 metric tons of rice and 864 metric tons of beans. To provide the necessary professional training demanded for the efficient implementation of the project, two nationals from Guatemala were trained in San Salvador in programming, warehousing, food conservation, food-for-work, mini-projects organization and the like. Simultaneously, two Salvadorean officials attached to a WFP project in El Salvador with a solid background and experience in these operations collaborated during 30 days in the implementation of the project. To facilitate the transportation of food from the central warehouse to the affected areas, UNDR0 made available \$36,770 for the procurement of three 5 MT trucks and two smaller vehicles, delivered to the Ministry of Public Health on 8 April.

129. PAHO/WHO personnel was fully engaged in rehabilitation activities. They cooperated with the national health authorities in specific programmes aimed to the re-establishment of medical care services, epidemiology, including mass vaccination campaigns, and rehabilitation of water supply services and waste disposal in the rural areas. For the later programme, UNDR0 made available to WHO the sum of \$40,000 to complement the total cost of the project.

130. As mentioned elsewhere in this Chapter, the infrastructure of the water systems were heavily affected by the earthquake, specially in the rural areas. UNICEF, with the cooperation of the Guatemala Scouts Association initiated a programme aimed to the repairing and/or replacement of at least 25 water systems in the Chimaltenango area. UNDR0 agreed to contribute with \$90,000 towards this project.

131. To assist in the implementation of a food-for-work project under execution by CARE for an emergency shelter programme,

UNDRO donated \$47,750 for the purchase of five pick-up trucks and one ten-ton truck.

132. The «Secretaría de Asuntos Sociales of the Presidencia de la República», was fully engaged in activities related to the protection of orphans and appeals were made for assistance.

133. It was also disclosed that an Orphanage in the Capital City was seriously damaged forcing to move its installations and the orphans to inadequate accommodation. A great part of the equipment was lost. UNDRO decided to contribute, upon recommendation from the Resident Representative, \$10,200 intended for shelter materials for an orphanage. Additionally, UNDRO made a cash donation of \$30,000, to the «Secretaría de Asuntos Sociales of the Presidencia de la República» —headed by the First Lady— for the procurement of shelter materials and equipment for orphans whose homes were destroyed by the earthquake.

134. The Berhorst Clinic Foundation administered several community health centres in the Chimaltenango and Sacatepequez areas. As a consequence of the earthquake, some of these centres were seriously damaged and part of the medical equipment was lost. UNDRO made a cash donation of \$100,000 for the repair or replacement of these facilities including medical equipment and supplies.

135. The storage facilities for basic grains of a cooperative of about 3,000 members in Tecpan, were severely affected by the catastrophe. OXFAM and the World Neighbours initiated a Programme for the rehabilitation of such facilities and UNDRO shared part of the budget with a contribution of \$40,000.

136. A sizeable donation of iron roofing was obtained from UNICEF, however, financing for the transportation of the material was not obtained until UNDRO allotted \$20,000 for that purpose.

137. To assure the proper distribution of relief assistance as well as to avoid duplication of efforts, it was decided by the par-

ticipants of the coordinating meeting of voluntary agencies, to conduct a survey on unmet relief needs in the affected departments. To this effect, UNDRO financed the study (\$4,800) carried out by the Friends World College. The results of the study did not satisfy the purposes initially projected since the agency did not have the technical capabilities required for this task.

138. During the later part of the emergency phase, UNDRO made available \$24,128 for the purchases of shelter material (iron roofing), \$14,251 for the purchases of vehicles for CARE relief operations, and \$5,826 to the Catholic Relief Services for the procurement of a truck for the transportation of reconstruction materials.

139. Finally, \$5,690 were made available to the World Neighbours for the implementation of a road construction programme in the village Las Lomas, San Martín.

140. As indicated earlier, this summary shows how, following Government clearance, funds provided by bilateral donors through UNDRO were rather heavily channelled through voluntary agencies.