

of total disaster relief to Guatemala (see table 7 below) the CIDA expenditures have been assumed to be equally distributed over the years.

5.3 The Assistance of UNICEF

The 1976 earthquake led UNICEF to implement a cooperation-rehabilitation program to assist the people afflicted. To finance this program UNICEF received US \$ 3.8 million from various governments, organizations, institutions, etc. around the world. Unfortunately, no specification of the expenditures made has been accessible to us. Therefore, it has been impossible to arrive at an estimate of the composition of these expenditures corresponding to those in the preceding sections. Instead, we shall present a brief description of the type of assistance provided.*) In spite of the lack of quantification, this presentation will give us an idea of the role played by the UNICEF disaster relief.

Concerning activities of the "purely compensatory" type up to 1977, UNICEF has participated in the reconstruction of schools, child-care units, health and community centers. In addition, equipment to replace damage units has been provided to these schools, etc.

Concerning "complementary to compensation" activities, UNICEF was involved in the training of health promoters, auxiliary nurses, midwives, child-care and social workers and groups of supervisors for different relief activities. Similarly, as expenditures "unrelated to compensation" one may identify the provision of equipment for youth centers, water supply and other infrastructural units and various forms of vocational training. Further-

*) This description has been reproduced from the "Programme Cooperation 1975-80" report of UNICEF, Guatemala City. The assistance connected with the activities of other voluntary agencies through the CRN (already considered above in the analysis of the NGOs) is not included in this description.

more, within the disaster relief program up to the end of 1978, UNICEF provided textbooks for the bilingual education of Maya-speaking children as well as training of bilingual promoters, nutritional planning activities, courses in agriculture, horticulture, small-husbandry, sewing, knitting, weaving, etc.

5.4 The Assistance of the UNDP

To complete this presentation of the assistance provided by the FGOs we now turn to the disaster relief activities of the United Nations Development Program (UNDP). Our information is also very limited here and estimates of interest to us can only be obtained on a very weak basis. In June 1976, the UNDP's Administration Council approved an appropriation of US \$ 3 million to be used for technical cooperation in connection with the rehabilitation and the reconstruction of Guatemala.*) US \$ 1.7 million of this appropriation were expended on activities "complementary to compensation" and the rest on activities "unrelated to compensation".**) The annual distribution of these amounts is presented in table 6 below.

*) Source: UNDP, 1977, Informe de los Actividades del UNDP en el Campo de la Reconstrucción y Desarrollo de Guatemala 31, May; and Cooperación Técnica Internacional Concertada por El Gobierno de Guatemala al 31 de Febrero de 1978 y 1979 Relacionada con el Programa de Reconstrucción Nacional. Consejo Nacional de Planificación Económica. Secretaría General. Sección de Asistencia Técnica.

**)"Complementary to Compensation" activities here include technical cooperation in connection with house reconstruction, training of human resources for different activities and the reestablishment of small business enterprises.

Table 6

Activity \ Year	Annual Distribution of the UNDP's Disaster Relief Appropriation. In Thousands of Current US \$				
	1976	1977	1978	1979	Total
a) Complementary to Compensation	907	-	627	184	1 718
b) Unrelated to Compensation	296	40	726	221	1 283
Development Inducing = a + b	1 203	40	1 353	405	3 001

In table 6 the annual distributions for 1976 and 1977 are based on UNDP information and has been obtained by assuming that the year of approval of a given program coincides with the year of realization of the program. On the other hand, the distributions for 1978 and 1979 are based directly on the information by the "Consejo Nacional de Planificación Económica" (ibid.). The relatively low value of technical assistance for 1977 may therefore only be a consequence of this procedure.

5.5 The Aggregated Assistance of the FGOs

Table 7 contains an aggregation of the amounts invested by all the FGOs in current prices. In table 8 the same information is presented in constant 1970 prices. There we can see that the "development inducing" component stands for about US \$ 3 million or 13 per cent of the US \$ 21 million of total FGO expenditures. The amount invested in "complementary to compensation" activities alone amounts to approximately US \$ 2 million or 10 per cent of the total expenditures. It is worthwhile pointing out that the value of the "complementary to compensation" component obtained in this case depends to a large extent on the assistance of the UNDP. This assis-

Table 7

ACTIVITY	YEAR	ANNUAL DISTRIBUTION OF THE DISASTER RELIEF PROVIDED BY THE FGOs*) CURRENT PRICES (In Thousands of US \$)				TOTALS BY ACTIVITY
		1976	1977	1978	1979	
1) Purely Compensatory		12 691	8 866	3 370	1 211	26 138
2) Development Inducing	2a) Complementary to Compensation	1 246	251	858	397	2 752
	2b) Unrelated to Compensation	330	74	780	221	1 405
2a) + 2b) = 2)						
Total Development Inducing		1 576	325	1 638	618	4 157
Annual Totals						
1) + 2)		14 267	9 191	5 008	1 829	Grand total 30 295

*) In this table, the UNICEF assistance of US \$ 3.8 million is not included (see section 7.4.3). The assistance of CIDA is assumed to be equally distributed over the four years. In order to convert Canadian to US dollars, in which the rest of the information is expressed, we have used period averages of exchange rates as follows (Source: International Financial Statistics, 1980. International Monetary Fund, December, p. 102):

Year	1976	1977	1978	1979
Conversion factors Can./US \$	0.9860	1.0635	1.1407	1.1714

Table 8

ACTIVITY	YEAR	ANNUAL DISTRIBUTION OF THE DISASTER RELIEF PROVIDED BY* THE FGOs. IN THOUSANDS OF 1970 US DOLLARS				TOTALS BY ACTIVITY
		1976	1977	1978	1979	
1) Purely Compensatory		9 271	6 478	2 193	702	18 644
2) Development Inducing	2a) Complementarity to Compensation	910	183	558	230	1 881
	2b) Unrelated to Compensation	241	54	508	129	932
2a) + 2b) = 2) Total Development Inducing		1 151	237	1 066	359	2 813
Annual Totals 1) + 2)		10 422	6 715	3 259	1 061	Grand Total 21 457

*) For conversion to constant prices we have used the same procedure as in table 3.

tance was entirely aimed at financing research and other information gathering activities in connection with the relief efforts as a whole. We can see here that the share of development inducing expenditures has also been considerable for disaster relief channelled through the FGOs, even though some of the major organizations such as the AID spent very little on such activities.

6. The Assistance Through the Guatemalan Government

In the reviewing of disaster relief channelled through the Guatemalan Government (GnG) we shall also include the reconstruction loans. A considerable part of the reconstruction activities in Guatemala has been financed by such loans. In the macroeconomic analysis presented in chapter 5, the portions of these loans that have been used were added to the disaster relief grants to get the total disaster-related inflow of investment resources to Guatemala. This does not mean that the total volume of loans for reconstruction can be regarded as disaster relief. But part of the loans, and at least the present value of the subsidized part of the credit costs, can be regarded as identical to relief grants and they should be included in the total value of the disaster relief received. However, as we shall see in section 7.5.3, such computations are difficult and therefore, we shall report reconstruction loans completely separately from the grants.

In the case of grants channelled via Guatemala's government we shall distinguish between those provided during the emergency phase and those provided during the reconstruction phase.*) The reason for this differentiation

*) For the quantifications of grants during the emergency phase we have used the information presented by UNDR0 (UNDR0, 1976 a, Case Report, pp. 22-51, June). In Guatemala, grants given with reconstruction purposes during later periods have been reported separately from those given during the emergency.

is that how the grants were used during the emergency phase, as opposed to later periods, was determined cooperatively by all parties concerned, including representatives of the afflicted people.

6.1 Grants During the Emergency Phase

Grants channelled via the Guatemalan government for the period up to 31 May 1976 amount to US \$ 125 million (see UNDRO, 1976, *ibid.*). These figures include grants in the amount of US \$ 72 million which were expended through NGOs and FGOs (the Red Cross, CARITAS, OXFAM, AID and the UNICEF) and which have already been analyzed in the preceding sections. Therefore, here we shall discuss only the remainder, US \$ 52.6 million

A review of the list of grants shows that only US \$ 10,000 can be classified as activities "complementary to compensation". This amount concerns technical assistance aimed at improving the efficiency of emergency activities. However, we should point out that the costs for most of the technical assistance that we know has been provided during this phase have not been reported in the statistics.

No activities "unrelated to compensation" can be reported here. Although such operations are likely to be very limited during the emergency phase, there have probably been some activities of this kind. Thus, on this point as well, we can expect the information to be downward-biased, contributing to a probable underreporting of the component of "development inducing" activities.

6.2 Reconstruction Grants

Examining the grants provided during the reconstruction period, we find that US \$ 14 million were channelled through the Government of Guatemala. Of this amount, US \$ 5.5 million were given in cash directly to the government ("Tesorería Nacional"), US \$ 6 million were received by FONDEM (Fondo Interamericano para Situaciones de Emergencia)*) and US \$ 2.31 million were technical assistance negotiated by the Government of Guatemala (CRN, 1978, Informe al Honorable Congreso de la Republica, August, pp. 16, 74, 75, and Annex C, F, G). Also in these cases corrections to avoid double counting are necessary. The US \$ 5.5 million indicated above includes the US \$ 170,000 provided by AID for construction of "Butler" buildings. In the same way, an amount of US \$ 25,440 provided by local donors is included and has to be deducted. Moreover, the US \$ 1.76 million of the assistance from the UNDP are included in the US \$ 2.31 million of technical assistance (compare the UNDP's contributions and Annex E in CRN, op.cit.). Deducting all these amounts we find that US \$ 11.8 million have to be considered as grants channelled via governmental institutions in Guatemala.

A review of these US \$ 11.8 million shows that US \$ 1 million or 8 per cent of the total were invested in activities "complementary to compensation" (CRN, 1978, op. cit. Annex E, F1 and G). But the amounts invested in such activities vary to a large extent with the implementing agency or ministry involved. None of the expenditures made by the Guatemalan government alone (without the participation of FONDEM, UNDP, AID or CIDA) are reported to have been invested in "development inducing" activities. US \$ 0.35 million or 6 per cent

*) FONDEM distributes grants to the different agencies of the Guatemalan Government with which reconstruction contracts have been established.

of the grants channelled through FONDEM were for activities "complementary to compensation". Finally, we may note in passing that US \$ 1.3 million or nearly 24 per cent of the US \$ 5.5 million expended directly by the Government are reported as having been paid out to the Ministry of Defense.

As we did in connection with the other channels of assistance, we shall present the aggregate amount of expenditures in current dollars by activity and year of implementation, see table 9. In table 10 we present the same information in 1970 prices. There we can see that from this channel US \$ 0.6 million or 1.5 per cent were expenditures of the "complementary to compensation" type. We can also see that it has not been possible to report any expenditures on activities "unrelated to compensation" in this case.

6.3 Loans for Reconstruction

An important source for financing reconstruction has been loans from foreign international banks and governmental agencies. These new loans which were given solely as a form of disaster relief differ from ordinary long-term development loans in that the terms are much easier than for loans in the usual financial markets: interest rates are 0 to 2 per cent with grace periods of up to 15 years and amortization periods of 40 years or more.

As already pointed out, only the subsidies resulting from the easier terms of these loans should be considered as disaster relief. It may well be, however, that some of these loans could not have been obtained at all on any regular credit market for the reconstruction purposes for which they were to be used. Thus, the problem of estimating the equivalent volume of grants is even more complicated than at first glance. For this reason we have chosen

Table 9

ACTIVITY	YEAR	ANNUAL DISTRIBUTION OF THE DISASTER RELIEF THROUGH THE GUATEMALAN GOVERNMENT. IN THOUSANDS OF CURRENT US DOLLARS					Totals by Activity
		1976	1977	1978	1979		
Purely Compensatory		60 613	1 451	1 451	-	63 515	
Development Inducing	Complementary to Compensation	366	-	398	160	924	
	Unrelated to Compensation	-	-	-	-	-	
Total Development Inducing		366	-	398	160	924	
Annual Totals		60 979	1 451	1 849	160	Grand Total 64 439	

*) Includes grants for emergency activities as well as for reconstruction.

Table 10

ACTIVITY	YEAR	ANNUAL DISTRIBUTION OF THE DISASTER RELIEF (GRANTS) THROUGH THE GUATEMALAN GOVERNMENT. IN THOU- SANDS OF 1970 US DOLLARS					Totals by Activity
		1976	1977	1978	1979	1979	
Purely Compensatory		44 277	1 060	944	-	-	46 281
Development Inducing	Complementary to Compensation	267	-	259	92	92	619
	Unrelated to Compensation	-	-	-	-	-	-
Total Development Inducing		267	-	259	92	92	619
Annual Totals		44 544	1 060	1 203	92	92	Grand Total 46 900

to include the loans connected with the reconstruction after the earthquake in their full amounts. They are, however, presented separately as it would be misleading to add them to the amount of grants received.

The loans for reconstruction were negotiated by the Guatemalan Ministry of Finance in coordination with the "Banco de Guatemala", the "Secretaría General del Consejo Nacional de Planificación Económica" and the Congress of the Republic of Guatemala. During the emergency phase the Guatemalans renegotiated 11 existing loans for an amount of US \$ 40 million. Later on, new loans for reconstruction amounting to US \$ 141 million were obtained. However, as we shall see in table 11 below, only a minor share of the new loans had been utilized prior to 1980.

In 1976 some of the US \$ 76 million in loans for reconstruction had been obtained. But, during that year, the loans were not used at all. In 1977, the accumulated amount of loans obtained increased to US \$ 115 million, but the amount utilized during the year was only around US \$ 6 million. Thus, in 1977, only 5 per cent of the approved loans for reconstruction had been utilized by the government. Although a 100 per cent utilization of loans would have been virtually impossible, or at least incompatible with an efficient use of the available loan volume as we shall discuss below, it seems obvious that this represents an underutilization of the resources available to Guatemala. As is indicated in table 11, this tendency of underutilization of loans persisted even after 1977. Up to 1980, only 30 per cent of an amount of accumulated loans of US \$ 142 million, or US\$ 43 million had been utilized.*)

*) This expenditure was mainly for the reconstruction of infrastructure such as roads, seaports, water resource systems, administration buildings etc, and to the restoration of national monuments, churches, museums, etc.

Table 11

APPROVED LOANS AND AMOUNT UTILIZED 1976-80. IN CURRENT US DOLLARS. *)			
BUDGET OF REFERENCE (Fiscal Year)	APPROVED AMOUNT (ACCUMULATED)	AMOUNT UTILIZED (ACCUMULATED)	ACCUMULATED UTILIZATION (In percent of the approved amount)
1976	75 720,000	-	-
1977	115 220,000	6 222,800	5.4
1978	120 620,000	16 405,100	13.6
1979	141 920,000	28 213,200	19.9
1980	141 920,000	42 935,600	30.2

*) The information in this table is based on information available from the presentation of the annual budget (under the leading "foreign assistance received for reconstruction") -June of each year- to the Guatemalan Congress. The original data are to be found in the Consejo Nacional de Planificación Económica; Secretaría General, Sección de Asistencia Técnica.

There may be several reasons for this underutilization of loans. One has to do with cyclical fluctuations of the economy and the need for a countercyclical management of public expenditures. For instance, even reconstruction programs may have to be postponed to avoid inflationary pressures or balance-of-payments problems. Other reasons may reflect precautionary measures taken in order to avoid misspending of loans. For instance, if unexpected grants tied to the type of expenditure a particular loan has been planned to be used for are received, a change and hence, a delay in the use of this loan is called for. In cases such as these, the underutilization of loans indicated by the data on table 11 reflects efficiency. There are however, reasons which are

incompatible with efficiency, such as slow administrative processes and difficulties for the Guatemalan Government in fulfilling conditions for loan disbursement. For instance, a review of the loans approved by the USA (through AID) indicates long delays before the loans were used.

In table 12, below, an extreme case of this kind is found in connection with a loan for primary school reconstruction (V-029). There we can see that a loan agreement was signed on September 14, 1977, but not considered by the Guatemalan Government and approved by the Congress for execution until October 6, 1978. Furthermore, by the end of September, 1980 (3 years later) no funds from the loans had been disbursed at all.

The following reasons are pointed out in the reports to the "Presidencia de la República" to explain the difficulties of fulfilling disbursement conditions (CRN's archives):

- i) coordination problems among administrative institutions and/or executive agents and limited administrative capacity of the governmental agencies
- ii) time needed for offers for a given project to be requested, considered and approved, since foreign or local entrepreneurs participate in the implementation of most of these projects
- iii) changes of executive persons or officials in the administration involved in the execution of projects and
- iv) political "pressures", either internal in the locality or, sometimes, external from the lender country.

Table 12

Loans Approved by the U.S. Government (through AID) to the Guatemalan Government *

LOANS	AMOUNT AUTHORIZED	DATE AUTHORIZED	AGREEMENT SIGNED	TERMS			INITIAL CP'S MET	TERMINAL COMMITMENT DATE	TERMINAL DISBURSEMENT DATE ORIGINAL	TERMINAL DISBURSEMENT DATE REVISED	DISBURSEMENTS				TOTAL DVCU 9/30/80	PERCENT DISBURSED
				YRS	INT	GR					FT 79	OCT/JULY	AUGUST	SEPTEMBER		
GUATEMALA - 520																
L-007	700	6-08-63	11-27-63	30	2	-				6-30-66					700	100
L-008	2,000	4-27-64	9-01-65	40	2	10	3/4			2-28-73					1,947	97
L-009	700	6-30-64	8-17-65	40	2	10	3/4			2-28-73					700	100
L-011	1,550	12-03-65	8-17-66	40	2	1/2				12-31-69					1,550	100
L-011A	630	5-03-69	7-30-69	40	3	10	2			3-31-71					630	100
L-012	758	9-30-66	10-14-66	40	2	1/2				6-30-74					4,965	100
L-013	5,000	6-23-67	9-26-67	20	2	1/2	5	1/2		9-30-73					2,199	44
L-014	2,200	6-09-67	7-10-67	40	2	1/2				12-31-76					8,365	100
L-015	8,600	6-28-68	11-14-68	40	2	1/2				12-31-75					1,237	14
L-016	2,000	6-30-69	2-05-71	40	3	10	2			12-31-75					2,100	100
L-017	21,000	7-03-69	12-03-70	40	3	10	2								22,846	100
L-018	23,000	2-23-70	7-17-70	40	3	10	2			9-30-76					6,991	30
L-019	7,000	6-21-71	8-20-71	40	3	10	2			7-31-76					2,339	33
L-020	2,500	6-24-71	11-19-71	40	3	10	2			3-31-80	320				3,679	147
L-021	3,400	6-29-72	2-14-73	40	3	10	2								4,463	131
L-022	5,000	6-29-72	11-29-72	20	4	5	4								1,233	25
L-023	1,250	2-16-73	2-28-73	40	3	10	2			6-30-77					1,233	100
L-024	4,500	2-27-73	4-30-74	40	3	10	2								4,500	100
	<u>72,888</u>										320				<u>70,622</u>	100
V-025	7,000	6-04-75	11-03-75	40	3	10	2		1-14-77	12-31-79		286	230		658	12
V-026	13,000	12-31-75	4-08-76	40	3	10	2		12-29-76	10-08-80		621	620		2,821	21
M-027	8,000	6-30-76	9-20-76	40	3	10	2		4-19-77	9-20-80		1,304	-		2,207	27
V-029	5,200	3-29-77	9-14-77	40	3	10	2		10-06-78	6-30-81		-	-		-	-
V-030	3,400	8-30-77	5-18-78	30	3	10	2		9-06-79	2-18-85		-	-		-	-
V-031	8,600	5-17-79	9-22-79	25	3	10	2		7-16-80	5-21-84		-	-		-	-
V-032	7,000	11-17-78	7-13-79	25	3	10	2		-	4-13-85		-	-		-	-
D-033	5,000	6-26-80	-	25	3	10	2		-	6-19-86		-	-		-	-
	<u>57,200</u>										216		850		<u>5,896</u>	10
Country Total	130,088										536		850		76,518	60

* Source: AID's archives Guatemala City.

On the other hand, lenders such as AID, CIDA, Inter-american Development Bank, and the World Bank have all put the blame for the failure of project fulfillment on the administrative inefficiency of the borrowers.*) According to AID (ibid.), this problem exists in other Latin-American countries as well.

Returning to the questions of concern to us in this chapter, it should be pointed out that it has not been possible to identify expenditures on activities "complementary to compensation" resulting from the loans referred to here. However, this does not necessarily mean that such activities have not been implemented in connection with the GnG loan programs. In fact, loans to LDCs made by, e.g., IDB, are required to include a "grant" aimed at improving the technological level or level of know-how of the borrowing nation. According to the nature of the project and the level of the economic development of the borrowing country this grant may vary between 25 to 75 per cent of the amount of the loan (for a general description of the IDB's loan conditions and concessions see, e.g., Karlsson, W., 1981, pp. 15-20). It has not been possible to ascertain the extent to which such provisions were made for loans to Guatemala during this period.

7. Aggregating the Results

In order to obtain a picture of the distribution of the total volume of disaster relief and loans related to disaster relief provided to Guatemala since the 1976 earthquake we shall now aggregate the estimates from all the cases examined above. In a first stage we aggregate only the amounts expended by foreign organizations, i.e., NGOs and FGOs. This aggregation is presented in table 13 below and covers the data in tables 3 and 8.

*) Personal interviews. In Guatemala City with Stukel, T. (AID) and Cohen, S. (CIDA) and with Schemberg, H. (IBRD) in Washington.

Table 13

ACTIVITY	YEAR	ANNUAL DISTRIBUTION OF THE DISASTER RELIEF PROVIDED BY NGOS AND FGOs.*) IN THOUSANDS OF 1970 US DOLLARS				TOTALS BY ACTIVITY
		1976	1977	1978	1979	
1) Purely Compensatory		11 630	14 154	8 276	6 779	40 839
2) Development Inducing	2a) Complementary to Compensation	1 324	564	876	527	3 291
	2b) Unrelated to Compensation	1 248	583	902	348	3 081
2a) + 2b) = 2) Total Development Inducing		2 572	1 147	1 778	875	6 372
Annual Totals 1) + 2)		14 202	15 301	10 054	7 654	Grand Total 47 211

*) Aggregation of values in tables 3 and 8.

Table 14

ACTIVITY	YEAR	ANNUAL DISTRIBUTION OF THE TOTAL GRANTS PROVIDED TO GUATEMALA SINCE THE 1976 EARTHQUAKE. IN THOUSANDS OF 1970 US DOLLARS*)					Totals by Activity
		1976	1977	1978	1979	1979	
Purely Compensatory		55 907	15 214	9 220	6 779	87 120	
Development Inducing	Complementary to Compensation	1 591	564	1 135	620	3 910	
	Unrelated to Compensation	1 298	583	902	348	3 081	
Total Development Inducing		2 839	1 147	2 037	968	6 991	
Annual Totals		58 746	16 361	11 257	7 747	Grand Total 94 111	

* Aggregation of values in tables 10 and 13.

In table 13 we see that during the 1976-79 period the "development inducing" component in the disaster relief through foreign organizations amounted to some US \$ 6 million in constant 1970 US dollars, or 14 per cent of the total assistance of US \$ 47 million. Expenditures on activities "complementary to compensation" alone amounted to US \$ 3 million or 7 per cent of the total amount expended. Furthermore, if we look at the year-to-year composition of activities we find that in 1976 the "complementary to compensation" component amounted to more than 9 per cent of the total assistance provided that year. During the years following 1976 the share of "complementary to compensation" assistance diminishes. In spite of a minor increase in 1978 the level of this component remains low for the rest of the period. As we have already pointed out, this may have to do with the reduced need for labor training once the initial catastrophic conditions had been overcome. The minor increase in 1978, on the other hand, may be due only to lack of statistics concerning the annual assistance of the UNDP (see section 5.4).

Table 14 contains the sum of the data in tables 10 and 13 above. It presents total grants channelled through foreign organizations and the Guatemalan Government. There we may see that disaster relief in the form of grants to Guatemala amounted to some US \$ 94 million. Of this amount, US \$ 7 million or 8 per cent were invested in activities that we have considered likely to have influenced development conditions of the nation. If only the activities "complementary to compensation" are considered, the estimate falls to about 5 per cent.

If we observe, in addition, the utilized volume of loans for reconstruction (from table 11) the "complementary to

compensation" component would appear to play an even smaller role. This is because, as described on page 200 the amounts of loans utilized reflect only expenditures on physical reconstruction without taking into consideration the technical assistance that may have been provided as grants in connection with the loans.

If we add grants and reconstruction loans we get, as we have already mentioned, an exaggerated picture of the volume of the disaster relief but, in principle, a correct estimate of the total inflow of investment resources to the Guatemalan economy. As shown in table 15, below, this inflow amounts to 112 million in constant 1970 US dollar. This corresponds to about 18 per cent of the estimated value of the damage caused by the earthquake and to 4 per cent of the 1976 Guatemalan GDP (in 1970 prices, see chapter 5, tables 1 and 7). If no loans are included the shares drop to 15 and 3.5 per cent respectively. If all loans offered also had been utilized the percentage would have risen to 37 and 9, respectively.

Table 15 : Annual Inflow of Resources from Disaster-Related Grants and Loans (Utilized) to the Guatemalan Economy Since the 1976 Earthquake. In Thousands 1970 US Dollars

Source	Year				Total per source
	1976	1977	1978	1979	
Grants	58 746	16 361	11 257	7 747	94 111
Utilized Share of Approved Loans	-	4 547	6 626	6 850	18 023
Annual Totals					Grand Total
Totals	58 746	20 908	17 883	14 597	112 134

8. Concluding Remarks

As table 16 indicates, the grants used for relief activities of the "development inducing" type do not seem to have been insignificant in the Guatemalan case. Expenditures on such activities 1976-79 have amounted to some US \$ 7 million or to more than 7 per cent of US \$ 94 million of the total volume of disaster relief grants. This percentage, however, varies somewhat with the type of organization considered. It is 14 per cent for the NGOs, 13 per cent for the FGOs and only 1 per cent for the GnG.

In the preceding sections, we have seen that the percentage of relief activities of the development inducing type varied also from year to year. It reached its highest level in 1976: 38 per cent of the relief of the NGOs (see Table 5), 11 per cent of the relief of the FGOs (see Table 8) and only 1 per cent of the relief channelled through the GnG (see Table 10).

The estimates presented here may, however, fail to reflect the extent to which relief activities have improved the development preconditions of the areas assisted. Individual items of what we have called "development inducing" activities may not have led to actual improvements of the preconditions of economic development. Some examples of how this could be explained were given in section 2. Thus, the figures reported here may overestimate the actual development effects of the disaster relief.

Still, the obvious reason for singling out the activities that are "complementary" or "unrelated to compensation" is that they are more likely to give rise to development effects than the "purely compensatory" activities. In particular, this may be so for the activities we have recorded as "complementary to compensation". We have here,

Table 16

TYPE OF ORGANIZATION		DISTRIBUTION OF THE DISASTER RELIEF GRANTS -BY TYPE OF ORGANIZATION ASSISTING GUATEMALA - SINCE THE 1976 EARTHQUAKE. THOUSANDS OF 1970 US DOLLARS. *)			
ACTIVITY		NGOs	FGOs	GnG	Totals by Activity
Purely Compensatory		22 196	18 644	46 282	87 122
Development	Complementary to Compensation	1 410	1 881	619	3 910
Inducing	Unrelated to Compensation	2 148	932	-	3 080
Total Development Inducing		3 558	2 813	619	6 990
Totals by Organization		25 754	21 457	46 901	94 112

*) Summary of the information on the assistance of the NGOs (table 3), FGOs (table 8) and GnG (table 10; loans for reconstruction not considered). Period 1976-1979.

mainly for statistical reasons, limited this category to the training of labor for reconstruction operations, etc. Such training is particularly likely to have beneficial spillover effects. In contrast, activities "unrelated to compensation" may, for instance, reflect the preference of the donor only and thus be of very little value for Guatemala. Therefore, we have taken the "complementary to compensation" component as a lowest estimate of the "development inducing" expenditures.

In table 16 we find that expenditures on activities complementary to compensation" amounted to approximately US \$ 4 million or 4 per cent of the US \$ 94 million of the relief provided during the whole period. Again, we may note the variations among the different media. For the FGOs the "complementary to compensation" component is 9 per cent while it is 5 per cent for the NGOs and 1 per cent for the GnG.

These are figures that deviate dramatically from the maximum estimates of the development inducing effects presented in chapter 5. However, they clearly deviate in the other direction from the minimum estimate (zero) derived from the aggregate analysis in that chapter. At the same time it must be emphasized that the sum of activities "complementary" and "unrelated to compensation" may give an estimate of the true development inducing effects of the disaster relief received that is too low. The main reasons for this are a) that statistics have not always permitted extracting development inducing activities from the "purely compensatory" activities, and b) that certain "compensatory" activities contain inseparable development inducing effects.

In "Informe Periódico de las Actividades del CRN; Selección de Proyectos" (Martínez, J. August, 1979), no more than 7 programs of the NGOs with expenditures amounting to some US \$ 6 million are indicated as having been implemented in urban areas ("Proyectos en el Area Metropolitana").*) This means that the remainder of the assistance of the NGOs or US \$ 20 million approximately (in 1970 prices) was given to rural areas. In addition, as the CRN and many foreign organizations in Guatemala City**) have pointed out, many of the rural areas assisted have not in recent years been reached by economic assistance of any kind, although they have been extremely poor for a long time. In fact, at least US \$ 32 million including the US \$ 20 million of the NGOs, the US \$ 6.5 million of CIDA and the US \$ 5.4 million of the AID***) were aimed at assisting traditionally poor rural areas. Thus, it is possible that as much as 34 per cent or more of the disaster relief reached segments of the population which traditionally had not received economic assistance of any kind. This redistributive effect of the relief will become more apparent when we look more closely at some individual projects in the next chapter.

To conclude, our way of classifying disaster relief activities, permitting an analysis of the composition of disaster relief expenditures, appears to have supported our tentative inferences of the preceding chapter. It indicates that the foreign disaster relief to Guatemala 1976-79 has had an impact on general conditions that

*) These programs in urban areas were implemented by CEMEC and the Norwegian Church, Servicio Mundial de Iglesias, ESFRA, CESEP, Comité Central Menonita and Iglesia Episcopal.

**) Such as CARITAS Arquidiocesana, Swiss Aid, Norwegian Church, Save the Children Alliance, AMG-International, FUNDACED, INCAP, UNICEF and CIDA (via personal communication).

***) The US \$ 5.4 million indicated here correspond to the CRN- AID program of provision and distribution of construction materials, i.e., the "Alberge Rural y Programas de Trabajo" (see "Informe al Congreso de la República", CRN, Agosto, 1978 Guatemala City).

promotes development in the country as well as real income in certain permanently poor areas not reached by traditional development aid. We have also seen that such an impact varies among different relief media.