

DISASTER
RELIEF

CASE REPORT
Gilbert & Ellice Islands-Fiji-Tonga-Hurricanes
Fall/1972-Spring/1973

Agency for International Development
Washington, D.C. 20523

GILBERT & ELLICE ISLAND COLONY/FIJI/TONGA

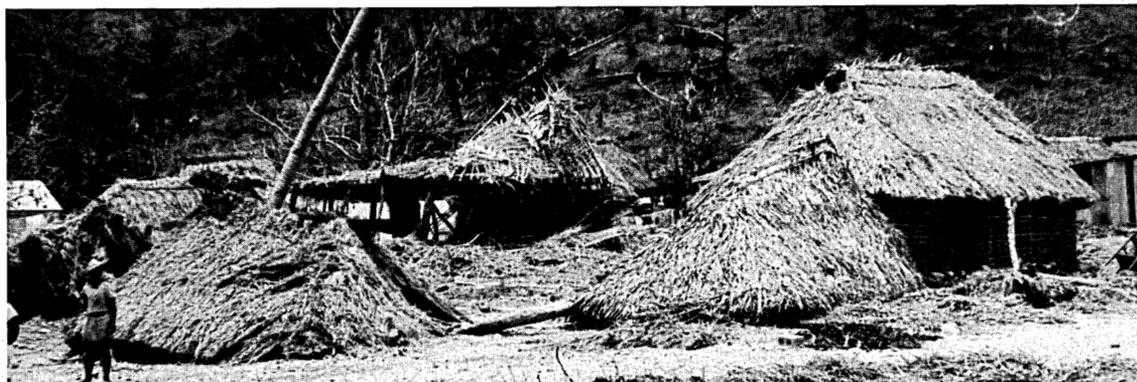
Hurricanes—Fall 1972 and Spring 1973

Hurricanes devastated several islands of the Gilbert and Ellice Island Colony (GEIC), Fiji and Tonga in the fall of 1972 and spring of 1973.

Hurricane "Bebe" struck the GEIC on October 21, 1972 with 170 to 182 mile per hour winds. The hurricane then moved southward, striking Rotuma Island in the Fiji Island chain on October 24, 1972 with winds recorded at 172 miles per hour. "Bebe" also struck islands of the Yasawa group and the islands of Vita Levu and Vanua Levu in the Fiji Islands. Three people were killed, an estimated 8,500 homes were destroyed, and 120,000 people were affected by the hurricane. Losses to fruit and root crops were severe. Damages were estimated in excess of \$22.5 million.

Hurricane "Juliette" and an unnamed sister storm struck the islands of Vanua Levu, Taveuni and the Northern Lau Islands of Fiji and the Ha'apai group in Tonga on April 3-6, 1973. Three people were killed, 1,500 were left homeless, and damage to crops was extensive.

Value Of U. S. Assistance	\$ 852,482
Value Of Assistance By The International Community	\$1,159,256



A coastal village on Rotuma Island destroyed by hurricane winds.

PHOTO BY: New Zealand Red Cross

Foreign Disaster Case Reports are publications of the Office of the Foreign Disaster Relief Coordinator, Agency for International Development. This office has responsibility for coordinating U.S. Government foreign disaster relief responses and for the further coordination of such activities with those of the U.S. private and international disaster relief communities.

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GILBERT & ELLICE ISLAND COLONY— HURRICANE "BEBE":

Hurricane "Bebe" first struck the island of Tarawa, part of the GEIC, on October 21, 1972. Communications were cut off between Tarawa and Funafuti, the principal island of the group. Tarawa did not suffer very extensive damage, but Funafuti was devastated. A Royal New Zealand Air Force Orion surveyed the damage on October 23 and reported that 95 per cent of the homes of a population of 750 people were destroyed, crops and coconut palms were damaged, and three people were dead, two were missing, and 700 were left homeless. The New Zealand Meteorological Station and airfield on Funafuti were also severely damaged.

ACTION TAKEN BY THE GOVERNMENT OF THE GILBERT & ELLICE ISLAND COLONY:

A relief fund was created by the GEIC to provide food and temporary shelter for the victims of the disaster.

ASSISTANCE PROVIDED BY THE U.S. GOVERNMENT:

U. S. Chief of Mission Robert W. Skiff determined that the situation in the Colony warranted U. S. Government (USG) assistance and on November 30, 1972 authorized a cash donation from the A.I.D. Contingency Fund to the GEIC Relief Fund for the purchase and shipment of supplies from Australia and New Zealand in the amount of
\$12,000

ASSISTANCE PROVIDED BY OTHER NATIONS:

The GEIC is administered by the United Kingdom which made a cash donation of £10,000 to the relief effort, equivalent to
\$24,618

FIJI—HURRICANE "BEBE":

Rotuma Island, located south of Funafuti, was next in "Bebe's" destructive path. Wind speeds over 170 miles per hour were re-

corded as the storm passed over Rotuma. The island, part of Fiji, lost most of its crops including its citrus trees which are its major source of income. The islanders were able to salvage two to three weeks' supply of food from their damaged crops, but it was estimated that between 60 to 90 per cent of the island's population would be dependent on relief stocks for a three- to six-month period.

The hurricane then proceeded to the Yasawa group of islands where it struck with wind speeds up to 182 miles per hour generating waves over 50 feet high. The population of these islands is between 6-7,000 people. An estimated two-thirds of all houses and other buildings were destroyed by the hurricane. The coconut crop, which is the islands' chief source of income, was 80 to 90 per cent destroyed due to early nut fall and loss of trees. Such losses would take from two to five years to be recovered. A one- to two-week immediate supply of root crops and tapioca was salvaged, but it was estimated that a new crop could not be counted on for four to five months. The Yasawa islanders reportedly began the rebuilding effort with great enthusiasm and were fortunate to be able to exploit the unusually good fishing following the hurricane as a source of smoked, dried fish. The island of Viwa was the most severely devastated in this group.

The larger islands of Vanua Levu and Viti Levu were struck on the same day. Viti Levu received the most extensive damage. Nandi Airport was closed and the township was under eight feet of water. Mba and Lautoka, towns on the eastern side of the island, also suffered extensive damage, with as many as 5,900 homes and buildings destroyed in the Mba-Lautoka area alone. The wharf of the South Pacific Sugar Mill in Lautoka was damaged beyond repair and other sugar mills were forced to close. Fortunately, about 80 per cent of the sugar crop in this area had already been harvested before the storm struck and most of the remaining 20 per cent of the crop was salvable. The loss to the next



Emergency relief supplies gathered at Christchurch, New Zealand to be flown to Fiji on a U.S. Air Force C-130 cargo plane.

PHOTO BY: New Zealand Red Cross

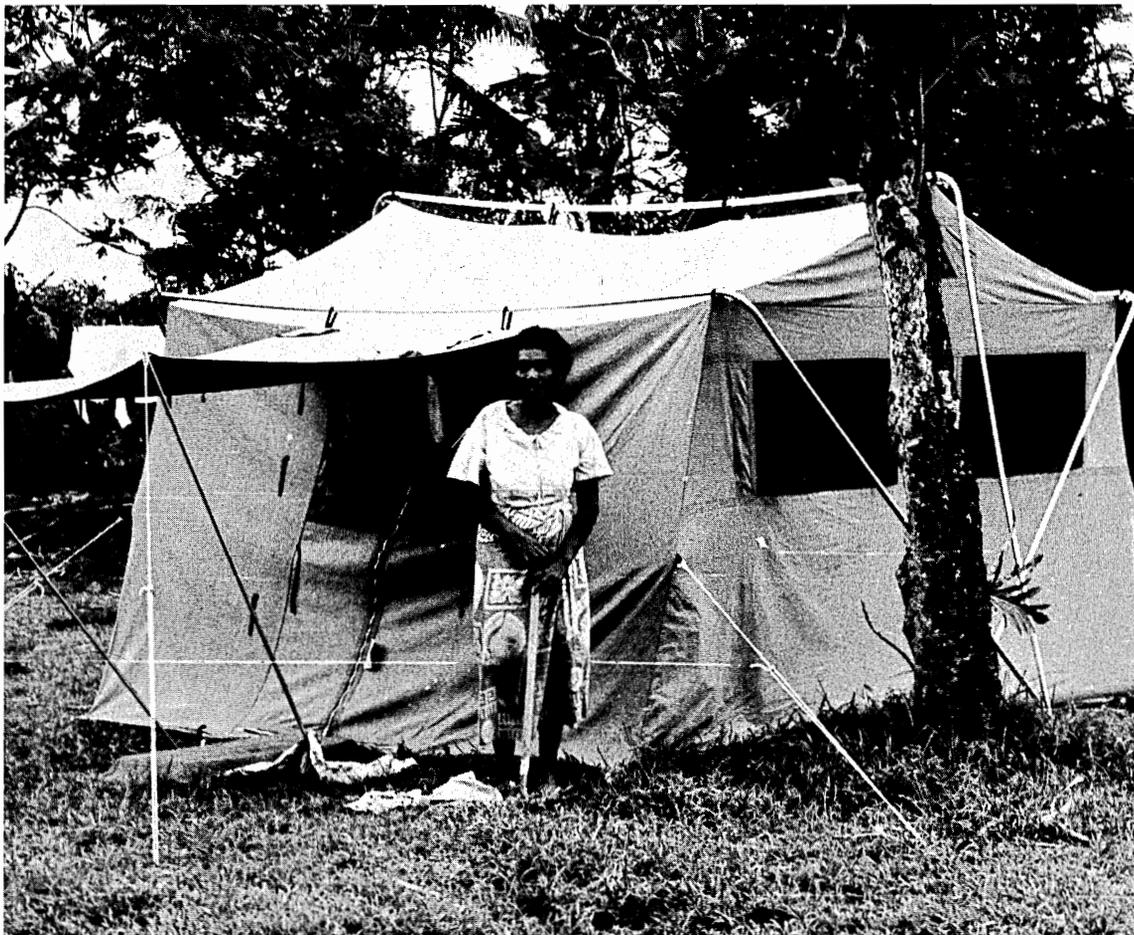
year's crop, however, is expected to be serious, with a resulting loss of personal income. A newly-planted pine forest which covered about 1,000 acres was 75 per cent destroyed. The agricultural areas of Singatoka in the southern part of the island, Navua and the Rewa Delta in the western part of the island, and some interior river valleys suffered severe damage from flooding. In Navua, the banana crop was a total loss with no new crop expected for at least nine months. Banana crop losses were also severe in Singatoka and the Rewa Delta region. Copra production also suffered in these areas, with coconut palms also experiencing serious damage. The Rewa River valley had already sustained severe flooding before "Bebe" struck, with great damage occurring to root crops. Consequently, materials were in short supply for replanting following the hurricane. At least one-third of the rice crop of the Rewa Delta and all the rice seedlings were destroyed. In Singatoka a tidal wave caused further destruction following the hurricane. Suva, Fiji's seat of

government on the eastern side of the island, also suffered extensive damage. It was reported that ships were sunk, vehicles were swept away, water supplies were fouled or cut, communications and all services were disrupted including complete power failure in some parts.

Altogether an estimated 1,697 homes were completely destroyed, with an additional 5,000 suffering extensive damage. Non-agricultural damages were estimated in excess of \$20 million, with agricultural losses estimated at \$2.5 million. Approximately 85,000 people were in need of relief assistance for a three-month period. The most immediate needs were for food, temporary shelter and uncontaminated drinking water.

ACTION TAKEN BY THE GOVERNMENT OF FIJI AND LOCAL ORGANIZATIONS:

A Hurricane Aid Committee was established by the Government of Fiji (GOF). The Committee was chaired by the Prime Minister, with the Director of Public Supplies, the



Eighteen hundred tents were airlifted from the U.S. to Fiji to provide temporary housing until houses could be rebuilt.

Permanent Secretary of the Ministry of Fijian Affairs, and local government authorities coordinating the day-to-day operations of the relief effort. The Committee worked through four divisional commissioners who in turn were responsible for four to five districts, each with their own administrative staffs. The GOF relief effort was well organized and the distribution of supplies proceeded efficiently and effectively despite poor communication and inadequate transportation. The homeless were temporarily housed in tents and food assistance was provided to those in need. The number of persons requiring rations was reduced each month between October and the following March until feeding assistance was no longer necessary. Crops were replanted and, as production re-

turned to normal, needs were reduced. The rebuilding and reconstruction of schools was given first priority after emergency aid. With the assistance of the Government of New Zealand (GONZ), all of the 58 schools that had been destroyed by the hurricane were rebuilt by mid-February. Private dwelling replacement was then begun. The reconstruction progressed quickly through the combined efforts of village self-help and Fiji Government and overseas assistance. The GOF offered five-year, interest-free housing reconstruction loans to eligible families. Houses built under this program were constructed with GOF-approved designs that would withstand future hurricanes. The Fiji Red Cross was also active in the distribution of relief supplies.

ASSISTANCE PROVIDED BY THE U. S. GOVERNMENT:

On November 1, 1972 the Chief of the U.S. Mission in Fiji, Robert W. Skiff, exercised his disaster relief authority and made a cash donation of \$25,000 to the GOF. The extent of the damage in the Fiji Islands and the needs of the hurricane victims resulted in several requests to AID/W for additional expenditures from the Contingency Fund. Throughout the emergency period, the USG provided the following:

Cash	\$25,000
Airlift (transport of private donations of clothing and other relief supplies collected through the New Zealand Red Cross)	3,000
Fish (canned mackerel purchased in New Zealand by the U. S. Embassy) ..	3,700
Flour (non-PL-480), 300 tons, including transportation costs	73,171
Trucks 2 M-139 (5 ton) and 19 M-35 (2-1/2 ton), including transportation costs	150,104
Tents, 1,800	285,260
Tanks, 70 3,000-gal. rubber water storage, including transportation costs	118,180
Salt, 63.2 tons, including transportation costs	6,256
Airlift (shipment of donated food and telecommunications equipment from New Zealand)	11,511
PL-480 Title II commodities, 26 tons vegetable oil and 10,010 tons flour, including transportation costs	161,300
Total Value of USG Assistance ..	\$837,482

ASSISTANCE PROVIDED BY U.S. VOLUNTARY AGENCIES:

Church World Service collected 5,000 pounds of clothing which were airlifted to Fiji as a humanitarian act by Pan American World Airways, Trans World Airlines, and American Airlines from Honolulu, Hawaii, free of charge. Value of this clothing was estimated by FDRC at \$3,000

ASSISTANCE PROVIDED BY PRIVATE GROUPS AND INTERNATIONAL ORGANIZATIONS:

The League of Red Cross Societies (LICROSS) reported receiving contributions from National Red Cross societies as follows:

Country	Cash Gifts	Gifts-in-Kind
Australia	\$ 1,153	\$16,612
Canada	3,722	5,450
China (People's Republic)	43,613	
Denmark	1,417	
Japan		6,043
New Zealand	3,883	60,534
Philippines		258
Singapore	689	
South Africa	250	
Sweden	2,062	7,232
United Kingdom	2,302	1,177
OXFAM and War on Want	1,724	
United States	657	
	<u>\$61,472</u>	<u>\$97,306</u>

Save the Children Fund (United Kingdom) Sent baby foods and milk valued at .. \$3,000 World Food Program Provided 849 metric tons of wheat flour, 7-1/2 tons of tea, 360 tons of rice, 50 tons of milk biscuits, and 65 tons of German dried fish fillets for a total value estimated by FDRC in excess of 200,000 Japanese-owned tuna fishing company in Fiji donated 40,000 pounds of frozen and smoked fillets. Value estimated by FDRC 20,000

TOTAL \$223,000

ASSISTANCE PROVIDED BY FOREIGN GOVERNMENTS:

Australia—10 tons of flour, 8 tons milk biscuits, 10 tons powdered milk, 10 tons rice, and 2,400 pounds canned fish for a total value of \$26,000 India—500 blankets, 1,320 pounds of tea, 5,900 yards of cloth, and 2,500 pounds of crackers for a total estimated value by FDRC to be at least 8,000

New Zealand—Cash donation, building supplies, food, and construction personnel for a total value of 595,000
 Tonga—Cash donation and supplied a small inter-island shipload of vegetables, sleeping mats, and other household equipment *

United Kingdom—Cash donation and airlifted 20 tons of foodstuffs for a total value of 100,000

TOTAL \$729,000

FIJI & TONGA—HURRICANE "JULIETTE"

Hurricane "Juliette" and an unnamed sister storm struck Fiji and Tonga on April 3-6, 1973. The hurricane was accompanied by wind speeds of only 57 to 69 miles per hour. These winds were not strong enough to cause extensive damage but they generated one or more tornadoes near the center of the hurricane which did cause the greatest damage.

There was considerable damage to homes reported in the Savusavu and Bua areas of Vanua Levu in Fiji. An estimated 229 homes and 9 schools were destroyed in these areas and damage to root crops and coconuts, the major cash crops of these areas, was extensive.

The Government of Tonga (GOT) reported on April 12 that three persons were dead as a result of the storm and several hundred were left homeless in the Ha'apai group of islands. The banana crop of these islands was considered a total loss and there was a

* Incomplete or not reported.

33 per cent loss to copra production, Ha'apai's two major cash crops. The major need in Tonga following the disaster was for building materials.

ACTION TAKEN BY THE GOVERNMENT OF FIJI:

Hurricane relief supplies remaining from donations following Hurricane "Bebe" in October, 1972 were distributed to the victims of the disaster.

ACTION TAKEN BY THE GOVERNMENT OF TONGA:

The Government of Tonga requested emergency assistance from the United Nations.

ASSISTANCE PROVIDED BY THE U. S. GOVERNMENT:

No additional expenditures were incurred by the USG as a result of Hurricane "Juliette". The GOF used 212 tents, 7-1/2 tons of flour, and one 2-1/2 ton truck remaining from relief supply stocks donated by the United States following Hurricane "Bebe" to aid the victims of the later hurricane and storm. The value of these supplies is included under the listing of aid provided following Hurricane "Bebe".

ASSISTANCE PROVIDED BY OTHER NATIONS

The Government of Australia made a cash donation to the Tonga Relief effort, equivalent to \$23,860



Villagers salvaging fallen palm trees to be used to rebuild their houses.

New Zealand Red Cross PHOTO

GILBERT ISLANDS

Tarawa

ELLICE ISLANDS

Funafuti

Rotuma Island

FIJI ISLANDS

Vanua Levu

Viti Levu

TONGA ISLANDS

NEW ZEALAND

GILBERT & ELLICE ISLANDS,
FIJI, TONGA

