

A REPORT ON DISASTER PREPAREDNESS IN BELIZE

INTRODUCTION

1. The Government of Belize (GOB) embarked on a very ambitious disaster preparedness programme over the last three years. This was an immediate reaction to the effects of Hurricane Mitch (1998) on the region in general and Belize in particular. Hurricane Mitch occurred during the first few weeks of the present administration and created enough concerns to commence a chain reaction of activities, which will be completed by September/October 2003. A number of new initiatives were undertaken along with surveys on the institutional strengthening of the National Emergency Management Organization (NEMO). Over three hundred and fifty (350) hurricane shelters were inspected countrywide. A loan agreement was signed between the Inter-American Development Bank (IDB), the Caribbean Development Bank (CDB) and GOB for approximately thirty-two million US dollars (US \$32,000,000.00) for retrofitting and construction of hurricane shelters among other things. NEMO has initiated a Training Programme, which runs throughout the year and culminates with a National Exercise to coincide with the beginning of the hurricane season annually. The NEMO Secretariat has renovated and occupied new office complex, recruited additional staff and purchase office equipment. There are a number of future projects on the horizon that will continue to improve NEMO's capability to "...preserve life and property in the event of an emergency, threatened or real, and to mitigate the impact on the country and its people."

THE INITIAL REPORT - MARCH 1999

2. The IDB sponsored an initial study on the institutional strengthening of NEMO during March 1999. Two Regional Consultants conducted this survey and submitted a number of recommendations. Some of the recommendations are listed below:

- a. Establish and staff a full time Secretariat. (completed)
- b. Revise the hurricane preparedness plan for Belize and developing other hazard plans. (completed)
- c. Improve the emergency communication system in Belize. (in progress)
- d. Develop a Disaster and Response Act for Belize. (done)
- e. Formulate Disaster Legislation. (done)

THE SETTING UP OF A PERMANENT SECRETARIAT

3. A full-time Secretariat was established in March 1999 with the appointments of the Rt. Honourable George Price, Senior Minister, as the Minister with responsibility for "Disaster Preparedness" and Mr. Anthony Sylvestre as the National Disaster Coordinator (NDC). Brig. Gen. (ret'd) Earl Arthurs later joined the Secretariat as the Deputy Coordinator and Operations Officer. A number of Belize Defence Force Officers were seconded for short periods throughout the year for training and exercise purposes

until November, 1999 when Major Shelton Defour was seconded from the BDF as the Education and Training Officer. Ms. Greta Mossiah joined the secretariat during March 2000 in the post of Executive Secretary. Recently six new District Coordinators namely Mrs. Eleanor O'Brien for Belize District, Mr. Mario Castellonos for Cayo District, Mr. Joseito Lopez for Corozal District, Mrs. Netty Johnson for Orange Walk District, Mr. Santiago Acosta for Stann Creek District and Miss Timrose Augustine for Toledo District were appointed. Similarly, a Warehouse Manager Mr. Brian Flowers was also appointed. The NEMO Secretariat now has a total of fourteen persons with one post still vacant. The approved posts are as follows:

- a. National Emergency Coordinator
- b. Deputy Coordinator
- c. Training Officer
- d. Administrative Officer
- e. Executive Secretary
- f. District Coordinators (6 districts)
- g. Warehouse Manager
- h. Assistant Training Officer
- i. Accounts Clerk
- j. Office Assistant

4. After two years and six months of exemplary service Major Shelton Defour has now returned to the Belize Defence Force as the Operations and Training Officer. NEMO is pleased to welcome onboard Major Gilbert Swaso as the new Training and Education Officer.

REVISION OF DISASTER MANAGEMENT PLAN FOR BELIZE - VOLUME 1

5. In accordance with the initial recommendations from the IDB Consultants and the shortcomings highlighted during the "Mitch Experience", the NEMO Secretariat revised Volume 1 (Hurricane Preparedness) of the Disaster Management Plan for Belize in April 1999. This booklet is widely distributed and the procedures therein tested thrice during field exercises and thrice during real situations. The booklet is presently going through another revision and will be reprinted in 2003. The main goal is to incorporate the consolidated Belize Disaster Management Plan into special "Cassandra" Software and distribute it by E-Mail to all committee members. Implementation of annual updates will be much easier.

IDB CONSULTANTS SURVEY HURRICANE SHELTERS COUNTRYWIDE

6. The IDB financed a major project to conduct a countrywide survey of all the hurricane shelters in Belize. This survey was executed through the Ministry of Economic Development (MED) and undertaken by local consultants. The final reports were submitted in June 1999. A total of over three hundred and fifty hurricane shelters were inspected. It was recommended that over two hundred and fifty hurricane shelters be identified for retrofitting. The retrofitting of these shelters was programmed in three phases; with the minor repairs being completed in the first package and the medium and major repairs done in packages two and three respectively. A number of "setbacks" were encountered with the implementation of this project such as:

- a. Inaccurate estimates, which were later, increased (in some cases, doubled).
- b. Further deterioration of shelters prior to retrofitting project (2-3 years)

7. An updated survey was conducted in 2001, which resulted in a reduction of the shelters due to the increase in retrofitting costs. The shelters that were repaired in 1999 were also re-inspected and designated for retrofitting this year. A priority list has been approved which was developed in 2001 to utilize the finance available. The GOB also accepted a recommendation to construct "Regional Shelters" in the district towns and Belmopan. A total of eight shelters and a NEMO Headquarters Building has been approved and in various stages of construction (four of these shelters are in Belmopan). This will accommodate approximately 50% of the estimated displaced people in a "worse case scenario". The remainder will shelter in private homes and buildings with friends and families.

INSTITUTIONAL STRENGTHENING OF NEMO - IDB CONSULTANTS

8. Four IDB Consultants arrived in Belize between July and December 1999 and conducted studies and surveys for the institutional strengthening of NEMO (Phase 1) in the following areas:

- a. Hazard and Disaster Management Plans and Programmes.
- b. Hazard and Risk Assessment.
- c. Emergency Communications and Warning.
- d. Legal Framework for NEMO.

9. The consultants completed their assignment by January 2000 and submitted their terminal reports. The reports have been analyzed by NEMO and there are certain areas of acceptance and implementation. This includes:

- a. The draft legislation, "The Disaster Preparedness and Response Act", was previously approved by Cabinet and was passed by the House of Representative on Friday 19 May 2000. This will give NEMO the legal authority as a government agency under the Office of the Prime Minister.
- b. Staff has been recruited and office equipment/furniture and offices have been acquired for the NEMO Secretariat. The NEMO Headquarters building will be completed by February 2003.
- c. The first phase of the Communication Plan has been accepted. This will consist of purchasing additional communications equipment for the BDF Police and other government agencies.

BELIZE, CDB, & IDB SIGN LOAN AGREEMENT FOR HURRICANE PREPAREDNESS

10. On October 20, 1999 the IDB announced the approval of US \$21.3 million loan to Belize to improve the country's capacity to respond to hurricanes and other natural disasters, as well as to reduce

vulnerabilities. The CDB is also providing US \$8.3 million in parallel financing for the operation. The GOB will provide US \$2.6 million in counter part funds. The resources will be used for the following:

- a. Build new regional hurricane shelters.
- b. Improve existing hurricane Shelters countrywide.
- c. Upgrade the drainage infrastructure of Belize City.
- d. Expand the water and sewage capacity in Belmopan.
- e. The institutional strengthening of NEMO.

TRAINING PROGRAMME

11. NEMO has embarked on an all encompassing education and training programme. This involves conducting training at the National, District and Village levels. NEMO also organizes "Training the Trainers" workshops in Emergency Management Skills such as Shelter Management, Damage Assessment, Emergency Operations Centre, and Supplies Management etc. Community Disaster Training Workshops are conducted, with the support of the United Nations Development Fund (UNDP), and facilitated by the Belize Red Cross, in the Northern and Southern Districts. A number of individuals attended Regional and International Training Courses/Workshops/Seminars etc. overseas during the period in review. Leaflets with Hurricane Tracking Charts and Tips on "When Disaster Strikes" were distributed widely to all villages/communities and families. It is estimated that the Belize Red Cross/NEMO trained over three thousand District/Community/Village emergency operators on Community Disaster Preparation and other related disaster management subjects. The NEMO Training team trained over one thousand persons in Shelter Management, Damage Assessment, Emergency Operations Centre, Communications and Warehouse Management. An additional seventeen Emergency Operators attended Allied Forces Humanitarian Exercise (FAHUM 2000) in the Dominican Republic between 13 and 24 February 2000. Fifteen (15) attended FAHUM 2002 in Honduras between February 25 to March 8, 2002. FAHUM is again on the horizon and six persons will be selected to attend in February 2003. Noteworthy is that all District Coordinators and the Warehouse Manager completed a Train - The - Trainer workshop. This workshop paved the route for a better informed population which is in stride with the countries mitigation policy.

NATIONAL TRAINING EXERCISES

12. NEMO conducted three major National Disaster Training Exercises over the period in review. The main aim of these Exercises is to test the Hurricane Plans at the National, District and Village levels. On 15-17 May 1999 Exercise Millennium Breeze was held over a three-day period. This was a simulation of a Category 5 Hurricane striking the coast of Belize. This Exercise was a huge success as it highlighted weaknesses, which were rectified prior to the start of the hurricane season last year. The main weakness was with Emergency Communications. Exercise "Big Blow 2000", a pre-preparedness exercise, was held on 27/28 April 2000. The main objective of this exercise was to "Test the District and Village Plans to determine the level of parity with the National (Hurricane) Plan, in order to

improve the National, District and Village Plans in time for the first Hurricane Season of the New Millennium." Ex Caribbean Breeze was held on April 26/27 2001. All three of these exercises consisted of "notional" and "live" events. During one of the live events, two hundred people were evacuated from an Island/Caye to an inland district town. This consisted of transportation by boat for about twenty-five miles and by road for seventy-five miles. They were then placed in a number of shelters for two days, fed, accommodated, and returned to their homes as part of the evacuation exercise. This exercised a number of committees/agencies in the District Emergency Committee. During Ex Caribbean Breeze, 60% of Hurricane Shelters were opened countrywide.

OCCUPATION OF NEW OFFICE COMPLEX

13. The NEMO Secretariat initially occupied a single room office for nearly one year; however, on April 3rd 2000 it moved into a newly renovated, air-conditioned and spacious office complex. This allows the six staff officers to work in a more comfortable environment. This is only a prelude to the final move in February 2003 when the NEMO Headquarters will be completed. Construction of this facility commenced in November 2001.

PURCHASE OF OFFICE EQUIPMENT

14. The GOB recently purchased "The Cassandra Software" for developing Disaster Plans. 3 Pentium III Computers, 2 Laser Printers, Scanner, 1 Photocopier, 3 Desktop Computers & Bubble jet Printers, 4 X Computer Desks, 1 X LCD Projector, 2 X 4 Drawers Cabinet, 1 X Lap Top Computer, 1 Binder, 1 X Digital Camera and 1 Heavy duty Stapler were procured over the period in review. A number of other office supplies were acquired in order to support the training and administrative programmes. A list of office equipment is presently on order and will arrive within the next three weeks. This includes: 1 X Combination TV VCR, 1 X Heavy Duty Punch, and 1 X Radio/Tape, etc.

FUTURE PLANS

15. The NEMO Secretariat is eagerly awaiting the construction of its new Headquarters Complex. However, there are several other key objectives that have been identified by the National Emergency Coordinator and the staff. These are as follows:

- a. Development of five hazards plans. These must be done at three levels (National, District and Village), with copies held at the NEMO Secretariat on the new Cassandra software. A Consultant is presently in country and will complete this project by July/August 2003.
- b. Training of all Village Emergency Committee countrywide and assisting Village Council Chairpersons in developing Village Emergency Management Plans to work in conjunction with the District Plans.
- c. Improve the Emergency Communication Network by acquiring new communication systems for the BDF, Police and other agencies. Also, the setting up of VHF (Hand Held) radios in all villages countrywide. This will assist in communication between Districts and Villages during periods when

the national telephone system is unworkable. A "Consultancy" is presently being advertised for the development of an Emergency Communications Plan for Belize. This is to be completed over a thirteen (13) weeks period.

d. Continuous training of Emergency Operators in all aspects of Emergency Training including Emergency Operations Centre, Damage Assessment, Supplies Management, Shelter Management and Radio Communications (all at National, District and Village levels).

e. Completion of the retrofitting project countrywide.

f. Construction of regional shelters in the districts in accordance with the IDB Loan Agreement.

g. The improvement of the drainage system in Belize City in accordance with the IDB Loan Agreement.

h. The expansion of the water and sewage system in Belmopan in accordance with the CDB Loan Agreement.

i. Annual Pre-Preparedness Exercises to test the Disaster Management Plan for Belize.

j. Conduct of Shelter Inspections on a continuous basis to ensure that the retrofitting project is done as recommended by the consultants.

k. Development of a Mitigation Policy. A "Consultancy" is presently being advertised for a Mitigation Advisor to conduct a Vulnerability Assessment and develop Mitigation Plans over a seven (7) months period.

CONCLUSIONS

16. The Government of Belize has displayed its commitment to the institutional strengthening of NEMO and the improvement of the National Emergency Management Plan for Belize. The retrofitting of existing hurricane shelters and the construction of regional shelters are a major undertaking, which will be completed in the next eighteen months. The NEMO Secretariat has been staffed adequately and moved into newly renovated office complex (as an interim measure while the NEMO Headquarters is being constructed), and office equipment has either been purchased or currently on order. There is a comprehensive Training Programme that is all encompassing and utilizing international, regional and local expertise. Training is initially geared at "Training the Trainer", but with the objective of training and developing plans from the National, District and down to the Village levels. The numerous studies done by the consultants over the last three years have been very helpful in establishing the needs and possible solutions.

17. Belize has come a long way since Hurricane Mitch walked around our country in October 1998. Hurricane Keith in 2000, Tropical Storm Chantal and Hurricane Iris in 2001 are testament to this. The NEMO Secretariat is committed to the preservation of life and property in the event of an emergency and will continue to endeavour to achieve this mission. As the Senior Minister once stated, "Much has been done, but much more is yet to be done".

NEMO Secretariat
East Block
Belmopan
Belize, C. A.

Copyright © 2001 National Emergency Management Organization (NEMO). All Rights Reserved.