EARLY WARNING SYSTEM SURVEY

COUNTRY: DOMINICA

Please complete one form for each Hazard

I INFORMATION ON THE HAZARD

1. The Hazard VOLCANO

2. Summary of events triggered by the hazard

PYROCLASTIC FLOW, ASH FALL, SULPHUR RAIN, MUD FLOW, FIRES

3. Historical events of significance.

4. Description of the region and the population under hazard and of the existing vulnerabilities

b. Degree of exposure of population to hazards **(High/Medium/Low)** MEDIUM

a. Number of communities affected by the hazards **(Approximate #)** 20

c. Number of persons exposed **(#)** 35,000

c. Percentage of people exposed to hazard, etc).**(%)** 50%

5. Is there adequate public awareness about the hazard? (Y/N) NO

6. Attitude towards freedom of hazard information: (Very good/Good/Poor/None) POOR

II TECHNICAL ASPECTS OF THE EARLY WARNING SYSTEM

1. Type of system employed to monitor the hazard:

SEISMIC SENSORS, GEOLOGICAL ANALYSIS

2. Year in which system became operational. 1998 - 2003 (GRADUAL DEVELOPMENT)

3. Time employed for the design and implementation of the system. 5 YRS

4. Geographic coverage of EWS. ACTIVE VOLCANOS AND HIGH RISK VENTS ON THE ISLAND

5. Arrangements made for remote areas? (Y/N) YES

6. Routine operation of the EWS:

a. Members of the community; **(Position)**

b. Personnel from:

1) National; **(Position)** DPO, MEDIA

2) Regional; **(Position)** UWI

3) Local government agency; **(Position)** CENTRALIZED AT NATIONAL LEVEL

4) Research center; **(Name)** UWI

5) Consulting firm; **(Y/N)** NO

6) NGO; **(Name)**

7) Other **(Name)**

8) Mixed; **(Y/N)** YES

7. Type of instrumentation used

a. to monitor the hazard; SEISMIC SENSORS, GEOLOGICAL ANALYSERS, COMPUTERS-INTERNET, RADIO / SATELLITE TRANSCEIVERS,

b. to process information gathered; COMPUTERS

c. to transfer it. BROADCAST RADIO AND TV, SIRENS, BULL HORNS, HF/VHF/UHF RADIO, TELEPHONES, CELL PHONES, CABLE TV

8. Mechanisms used to forecast the events:

a. Procedures? **(Y/N)** YES

b. Are procedures documented in a national plan? **(Y/N)** YES

c. Are procedures backed by legal authority? **(Y/N)** YES

d. Who carries out this task?

1) Members of the community? **(Y/N)** **NO**

2) Personnel from technical institutions? **(Y/N)** **YES - UWI**

3) Other **(Name)**

4) Automatic? **(Y/N)** **YES**

5) Mixed? **(Y/N)** **YES**

6) Other **(Name)**

9. Is warning adequately published in public broadcast media? (Y/N) **NO**

10. Are forecast and media agencies fully integrated? (Y/N) **YES**

11. Is there redundancy and backup for the EW system? (Y/N) **YES**

12. Is lifeline equipment (eg standby power) adequate? (Y/N) **YES**

13. Is there adequate provision for maintenance of the EWS? (Y/N) **YES**

14. Technical support used for the Design, Implementation, Development of the EWS:

a. International **(Name)** **UWI**

b. National **(Name)** **DPO, UWI**

c. Technical **(Name)** **UWI**

d. Scientific **(Name)** **UWI**

e. Academic **(Name)** **UWI**

f. Consulting firm **(Name)**

g. Civil defense agency **(Name)** **NONE**

h. NGO **(Name)** **RED CROSS**

i. Other **(Name)** **NEWS MEDIA (CABLE OPERATORS, TV, RADIO)**

III INSTITUTIONAL AND FINANCIAL ASPECTS OF THE EWS.

1. Is there a legal framework for the EWS? (Y/N) **YES**

2. Institution(s) in charge of design and implementation (Name) **DPO**

3. Institution (s) which participate routinely in monitoring the hazard (Name) **DPO, UWI**

4. Is there adequate public awareness of the EWS? (Y/N) **NO**

5. Is there parity between forecasting and warning? (Y/N) **NO**

6. Is there provision for nightime warning and response? (Y/N) **YES**

7. Type of resources required for the implementation, routine operation, and maintenance of the EWS:

a. Technical personnel **VOLCANOLOGISTS, GEOLOGISTS, COMPUTER OPERATORS AND TECHNICIANS, RADIO ENGINEERS AND OPERATORS, MEDIA PERSONNEL**

b. Equipment: **COMPUTERS, RADIOS, CELL PHONES, SATELLITE PHONES, SIRENS, BULL HORNS, FIXED FREQUENCY RECEIVERS, MONITORING EQUIPMENT, GIS SYSTEMS, SMS READY CELL SYSTEMS, INTERNET ACCESS, TOTAL MEDIA (RADIO & TV) COVERAGE,**

c. Logistical support (transportation for example)

d. Monetary resources **ADEQUATE GOVERNMENT REVENUES,**

e. Other **(Name)**

8. Origin of resources required to implement, operate, and provide maintenance to the EWS:

a. Community **(Y/N)** **NO**

b. National **(Name)** **GOVERNMENT MINISTRY**

c. Regional **(Name)** **CDERA, CDB**

d. Local institutions **(Name)** **GOVERNMENT MINISTRY**

e. International agencies **(Name)** **UNDP, WORLD BANK, OCHA, ECHO, DFID, USAID, CIDA**

f. Donors **(Name)**

g. NGOs **(Name)** **RED CROSS**

h. Mixed **(Y/N)** **YES**

9. Inter agency and Inter personal relations between emergency agencies and personnel: **(Very good/Good/Poor/None)** **POOR**

IV MECHANISMS TO ISSUE A WARNING AND AN ALERT

1. Who is warned or alerted by those who monitor the hazard?

a. Community **(Y/N)** YES

b. Local **(Name)** FIRST RESPONDERS AND THREATENED COMMUNITIES

c. Regional **(Name)** CDERA

d. National Government **(Name)** PRIME MINISTER, MINISTRIES, RESPONSE AGENCIES

2. Which means are employed to warn the people and the various agencies or institutions?

TELEPHONE, CELL PHONE FAX, EMAIL, PUBLIC MEDIA, CABLE TV, BULL HORNS ETC

3. Who is in charge of declaring the state of alert:

a. The Community **(Y/N)** NO

b. Technical personnel who monitor the hazard **(Y/N)** NO

c. Local **(Name)**

d. Regional **(Name)**

e. National level government **(Name)** PRIME MINISTER

f. National civil protection agency **(Y/N)** NO

4. Type of public alert employed:

Bells / Public Radio / TV / Flags / Whistles / Megaphones / Email /

Fax / Cell Phone / Community Members Cascade / Multiple options

5. Who is in charge of operating the alert mechanisms/equipment and orders the activation of alerts?

NATIONAL DISASTER COORDINATOR

6. Official policies, norms, and procedures in place to issue warnings and alerts (if any)

YES - NATIONAL DISASTER PLAN

7. Local government participation: CENTRALIZED AT NATIONAL LEVEL

8. Is the content of the alert message adequate? (Y/N) YES

9. Is there verification that the information is correct and acted on? (Y/N) AS FAR AS POSSIBLE

a. Type of municipal organization **(Name Type)**

b. Resources provided. AS SPECIFIED ABOVE

10. Community participation:

a. Type of organization **(Name Type)** COMMUNITY ASSOCIATIONS, NGO'S, CHURCHES, ETC

b. Participants **(Name Organizations)** RED CROSS, ETC

c. Relation with the local government. **(Very good/Good/Poor/None)** GOOD

11. Special arrangements for social groups with limited resources and special needs? (Y/N) YES

V ANALYSIS OF EWS

1. Comments regarding successful and unsuccessful results during the operation of the EWS.

POPULATION NOT AT ALL INTEGRATED WITH EWS.....INFORMATION IS TIGHTLY HELD BY GOVERNMENT AND MOST OF POPULATION IS NOT AWARE OF EXACT STATUS OF VOLCANIC THREAT

2. Strengths and weaknesses of the EWS.

STRENGTHS: GOOD SCIENTIFIC MONITORING BY UWI SEISMIC DEPARTMENT

WEAKNESSES: IS UNLIKELY TO PRODUCE BEST RESULTS AS POPULATION IS EXCLUDED

3. Lessons learned, benefits of the EWS.

NONE AS YET AS NO CATASTROPHIC ERUPTION FOR MORE THAN 100 YEARS

4. Added value gathered from the EWS (benefits not initially conceived during the planning stages, which emerged during standard operation of the system).

ANNEX: MAP OF THE REGION WHERE EWS IS OPERATED.