**HAZARDS & DISASTERS – RISK ASSESSMENT AND RESPONSES**



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| **1. CHARACTERISTICS OF HAZARDS** | **B** | **A** | **R** |
| **I CAN EXPLAIN THE CHARACTERISTICS AND SPATIAL DISTRIBUTION OF:** | | | |
| EARTHQUAKES |  |  |  |
| HURRICANES |  |  |  |
| DROUGHTS |  |  |  |
| GULF OF MEXICO OIL SPILL/CHERNOBYLL |  |  |  |
| I CAN DISTINGUISH BETWEEN THE CHOSEN HAZARDS IN TERMS OF THEIR SPATIAL EXTENT, PREDICTABILITY, FREQUENCY, MAGNITUDE, DURATION, And SPEED OF ONSET & EFFECTS. |  |  |  |
| **2. VULNERABILITY** | | | |
| **VULNERABLE POPULATIONS** | | | |
| EXPLAIN THE REASONS WHY PEOPLE LIVE IN HAZARDOUS AREAS |  |  |  |
| **VULNERABILITY** | | | |
| DISCUSS VULNERABILITY AS A FUNCTION OF DEMOGRAPHIC & SOCIO-ECONOMIC FACTORS, COMMUNITY’S PREPAREDNESS & ABILITY TO DEAL WITH A HAZARD EVENT WHEN IT OCCURS. |  |  |  |
| EXPLAIN THE REASONS FOR SOME SECTORS OF A POPULATION BEING MORE VULNERABLE THAN OTHERS |  |  |  |
| **3. RISK AND RISK ASSESSMENT** | | | |
| **RISK RELATIONSHIPS** | | | |
| EXAMINE THE RELATIONSHIP BETWEEN THE DEGREE OF RISK POSED BY A HAZARD AND THE PROBABILITY OF A HAZARD EVENT OCCURRING, THE PREDICGTED LOSSES & A COMMUNITY’S PREPAREDNESS FOR IT. |  |  |  |
| EXPLAIN THE REASONS WHY INDIVIDUALS AND COMMUNITIES OFTEN UNDERESTIMATE THE PROBABILITY OF HAZARD EVENTS OCCURING. |  |  |  |
| DISCUSS THE FACTORS THAT DETERMINE AN INDIVIDUALS PERCEPTION OF THE RISK POSED BY HAZARDS. |  |  |  |
| **HAZARD EVENT PREDICTION** | | | |
| EXAMINE THE METHODS USED TO MAKE ESTIMATES (PREDICTIONS) OF PROBABILITY (IN TIME & SPACE) OF HAZARD EVENTS OCCURING, & OF THEIR POTENTIAL IMPACT ON LIVES AND PROPERTY. |  |  |  |
| DISCUSS THESE METHODS BY EXAMINING CASE STUDIES RELATING TO TWO DIFFERENT HAZARD TYPES |  |  |  |
| **4. DISASTERS** | | | |
| DISTINGUISH BETWEEN A HAZARD EVENT AND A DISASTER. |  |  |  |
| EXPLAIN WHY THIS DISTINCTION IS NOT ALWAYS COMPLETELY OBJECTIVE. |  |  |  |
| **MEASURING A DISASTER** |  |  |  |
| DESCRIBE THE METHODS USED TO QUANTIFY THE SPATIAL EXTENT AND INTENSITY OF DISASTERS |  |  |  |
| EXPLAIN THE CAUSES & IMPACTS OF ANY ONE DISASTER RESULTING FROM AN ENVIRONMENTAL HAZARD |  |  |  |
| EXPLAIN THE CAUSES & IMPACTS OF ANY ONE RECENT HUMAN INDUCED HAZARD EVENT OR DISASTER |  |  |  |
| EXAMINE THE WAYS IN WHICH THE INTENSITY AND IMPACTS OF DISASTERS VARY IN SPACE & HAVE CHANGED OVER TIME |  |  |  |
| **5. ADJUSTMENTS AND RESPONSES TO HAZARDS AND DISASTERS** |  |  |  |
| **RESPONSES TO THE RISK OF HAZARD EVENTS** |  |  |  |
| DISCUSS THE USEFULNESS OF ASSESSING RISK BEFORE DECIDING THE STRATEGIES OF ADJUSTMENT & RESPONSE TO A HAZARD |  |  |  |
| DESCRIBE ATTEMPTS THAT HAVE BEEN MADE TO REDUCE VULNERABILITY BY SPREADING THE RISK (AID, INSURANCE) & BY LAND USE PLANNING (ZONING). |  |  |  |
| **BEFORE THE EVENT** |  |  |  |
| DESCRIBE STRATEGIES DESIGNED TO LIMIT THE DAMAGE FROM POTENTIAL HAZARD EVENTS AND DISASTERS |  |  |  |
| **SHORT – TERM, MID-TERM & LONG TERM RESPONSES AFTER THE EVENT.** |  |  |  |
| DESCRIBE THE RANGE OF RESPONSES, AT THE COMMUNITY, NATIONAL AND INTERNATIONAL LEVELS, DURING & AFTER A HAZARD EVENT OR DISASTER. |  |  |  |
| DISTINGUISH BETWEEN RESCUE, REHABILITATION & RECONSTRUCTION RESPONSES. |  |  |  |
| EXPLAIN HOW THESE RESPONSES ARE AFFECTED BY INDIVIDUAL & COMMUNITY PERCEPTIONS. |  |  |  |
| EXAMINE THE FACTORS THAT AFFECTED THE CHOICE OF ADJUSTMENTS BEFORE, & RESPONSES TO, ACTUAL HAZARD EVENTS OR DISASTERS. |  |  |  |
| DISCUSS THE IMPORTANCE OF RE-ASSESSING RISK, & RE-EXAMINING VULNERABILITY, FOLLOWING ANY MAJOR HAZARD EVENT OR DISASTER. |  |  |  |