#### •WHAT IS DISASTER?

Disaster is a sudden, calamitous event bringing great damage, loss, and destruction and devastation to life and property. The damage caused by disasters is immeasurable and varies with the geographical location, climate and the type of the earth surface/degree of vulnerability. This influences the mental, socio-economic, political and cultural state of the affected area. Generally, disaster has the following effects in the concerned areas,

- 1. It completely disrupts the normal day to day life
- 2. It negatively influences the emergency systems
- Normal needs and processes like food, shelter, health, etc. are affected and deteriorate depending on the intensity

and severity of the disaster.

It may also be termed as "a serious disruption of the functioning of society, causing widespread human, material or environmental losses which exceed the ability of the affected society to cope using its own resources."

Thus, a disaster may have the following main features:-

- Unpredictability
- Unfamiliarity
- Speed
- Urgency
- Uncertainty
- o Threat

Thus, in simple terms we can define disaster as a hazard causing heavy loss to life, property and livelihood.

e.g. a cyclone killing 10,000 lives and a crop loss of one crore can be termed as disaster.

#### •TYPES OF DISASTER

Generally, disasters are of two types – **Natural** and **Manmade**. Based on the devastation, these are further classified into major/minor natural disaster and major/minor manmade disasters. Some of the disasters are listed below,

Major natural disasters:	Minor natural disasters:
<ul> <li>Major manmade disaster:</li> <li>Setting of fires</li> <li>Epidemic</li> <li>Deforestation</li> <li>Pollution due to productivation</li> <li>Chemical pollution.</li> <li>Wars</li> </ul>	Minor manmade disaster:      Road / train accidents, riots     Food poisoning     Industrial disaster/ crisis     Environmental pollution

#### •Risk:

Risk is a measure of the expected losses due to a hazardous event of a particular magnitude occurring in a given area over a specific time period. Risk is a function of the probability of particular occurrences and the losses each would cause. The level of risk depends on:

- Nature of the Hazard
- Vulnerability of the elements which are affected
- Economic value of those elements

#### **Vulnerability:**

It is defined as "the extent to which a community, structure, service, and/or geographic area is likely to be damaged or disrupted by the impact of particular hazard, on account of their nature, construction and proximity to hazardous terrain or a disaster prone area"

#### **Hazards:**

Hazards are defined as "Phenomena that pose a threat to people, structures, or economic assets and which may cause a disaster. They could be either manmade or naturally occurring in our environment."

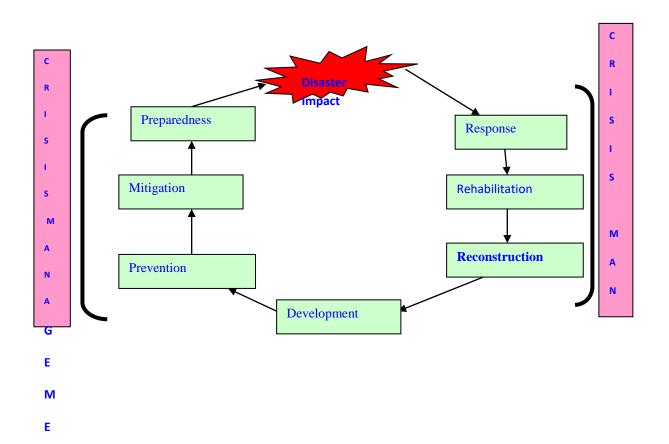
The extent of damage in a disaster depends on:

- The impact, intensity and characteristics of the phenomenon and
- 2) How people, environment and infrastructures are affected by that phenomenon

This relationship can be written as an equation:

Disaster Risk = Hazard +Vulnerability	

#### DISASTER MANAGEMENT CYCLE



#### ÖVERVIEW OF THE DISASTER RISK MANAGEMENT PROGRAMME [2002-2007]

Government of India [Gol], Ministry of Home Affairs [MHA] and United Nations Development Programme [UNDP] have signed an agreement on August 2002 for implementation of "Disaster Risk Management" Programme to reduce the vulnerability of the communities to natural disasters, in identified multihazard disaster prone areas.

# Goal: "Sustainable Reduction in Natural Disaster Risk" in some of the most hazard prone districts in selected states of India".

The four main *objectives* of this programme are:

- National capacity building support to the Ministry of Home Affairs
- Environment building, education, awareness programme and strengthening the capacity at all levels in natural disaster risk management and sustainable recovery
- Multi-hazard preparedness, response and mitigation plans for the programme at state, district, block and village/ward levels in select programme states and districts
- Networking knowledge on effective approaches, methods and tools for natural disaster risk management, developing and promoting policy frameworks

#### • Programme Phases:

The programme has been divided into two phases over a period of six years. Phase I [2002-2004] would provide support to carry out the activities in 28 select districts in the states of Bihar, Gujarat and Orissa. In phase II [2003-2007], the Programme would cover 141 districts in the states of Assam, Meghalaya, Sikkim, West Bengal, Uttaranchal, Uttar Pradesh, Delhi, Maharashtra, Tamilnadu, Manipur, Mizoram, Tripura, Arunachal Pradesh and Nagaland.

**Special Focus:** 38 Earthquake prone cities having more than half a million population

#### • EARTHQUAKES SAFETY TIPS:

Earthquakes usually give no warning at all.

#### **Prepare your family**

#### Before the earthquake

Now is the time to formulate a safety plan for you and your family. If you wait until the earth starts to shake, it may be too late. Consider the following safety measures:

- Always keep the following in a designated place: bottled drinking water, non-perishable food (chura, gur, etc), first-aid kit, torchlight and battery-operated radio with extra batteries.
- Teach family members how to turn off electricity, gas, etc.
- Identify places in the house that can provide cover during an earthquake.
- It may be easier to make long distance calls during an earthquake. Identify an out-of-town relative or friend as your family's emergency contact. If the family members get separated after the earthquake and are not able to contact each other, they should contact the designated relative/friend. The address and phone number of the contact person/relative should be with all the family members.

#### Safeguard your house

- Consider retrofitting your house with earthquakesafety measures. Reinforcing the foundation and frame could make your house quake resistant. You may consult a reputable contractor and follow building codes.
- Kutchha buildings can also be retrofitted and strengthened.

#### **During quake**

Earthquakes give no warning at all. Sometimes, a loud rumbling sound might signal its arrival a few seconds ahead of time. Those few seconds could give you a chance to move to a safer location. Here are some tips for keeping safe during a quake.

- Take cover. Go under a table or other sturdy furniture; kneel, sit, or stay close to the floor. Hold on to furniture legs for balance. Be prepared to move if your cover moves.
- If no sturdy cover is nearby, kneel or sit close to the floor next to a structurally sound interior wall. Place your hands on the floor for balance.
- Do not stand in doorways. Violent motion could cause doors to slam and cause serious injuries. You may also be hit be flying objects.
- Move away from windows, mirrors, bookcases and other unsecured heavy objects.
- If you are in bed, stay there and cover yourself with pillows and blankets

- Do not run outside if you are inside. Never use the lift.
- If you are living in a kutcha house, the best thing to do is to move to an open area where there are no trees, electric or telephone wires.

#### If outdoors:

- Move into the open, away from buildings, streetlights, and utility wires. Once in the open, stay there until the shaking stops.
- If your home is badly damaged, you will have to leave. Collect water, food, medicine, other essential items and important documents before leaving.
- Avoid places where there are loose electrical wires and do not touch metal objects that are in touch with the loose wires.
- Do not re-enter damaged buildings and stay away from badly damaged structures.

#### If in a moving vehicle:

Move to a clear area away from buildings, trees, overpasses, or utility wires, stop, and stay in the vehicle. Once the shaking has stopped, proceed with caution. Avoid bridges or ramps that might have been damaged by the quake.

#### After the quake

Here are a few things to keep in mind after an earthquake. The caution you display in the aftermath can be essential for your personal safety.

- Wear shoes/chappals to protect your feet from debris
- After the first tremor, be prepared for aftershocks.
   Though less intense, aftershocks cause additional damages and may bring down weakened structures.
   Aftershocks can occur in the first hours, days, weeks, or even months after the quake.
  - Check for fire hazards and use torchlights instead of candles or lanterns.
  - If the building you live in is in a good shape after the earthquake, stay inside and listen for radio advises.
     If you are not certain about the damage to your building, evacuate carefully. Do not touch downed power line.
  - Help injured or trapped persons. Give first aid where appropriate. Do not move seriously injured persons unless they are in immediate danger of further injury. In such cases, call for help.
  - Remember to help your neighbours who may require special assistance-infants, the elderly, and people with disabilities.
  - Listen to a battery-operated radio for the latest emergency information.
  - Stay out of damaged buildings.
  - Return home only when authorities say it is safe.
     Clean up spilled medicines, bleaches or gasoline or other flammable liquids immediately. Leave the

- area if you smell gas or fumes from other chemicals. Open closet and cupboard doors cautiously.
- If you smell gas or hear hissing noise, open windows and quickly leave the building. Turn off the switch on the top of the gas cylinder.
- Look for electrical system damages if you see sparks, broken wires, or if you smell burning of amber, turn off electricity at the main fuse box. If you have to step in water to get to the fuse box, call an electrician first for advice.
- Check for sewage and water lines damage. If you suspect sewage lines are damaged, avoid using the toilets. If water pipes are damaged, avoid using water from the tap.
- Use the telephone only for emergency calls.
- In case family members are separated from one another during an earthquake (a real possibility during the day when adults are at work and children are at school), develop a plan for reuniting after the disaster. Ask an out of state / district relative or friend to serve as the "family contact". Make sure everyone in the family knows the name, address, and phone number(s) of the contact person (s).

#### • CYCLONE SAFETY TIPS:

#### **Before the Cyclone Season**

- Keep watch on weather and listen to radio or TV. Keep alert about the community warning systems – loudspeakers, bells, conches, drums or any traditional warning system.
- Get to know the nearest cyclone shelter / safe houses and the safest route to reach these shelters.
- Do not listen to rumours.
- Prepare an emergency kit containing:
  - A portable radio, torch and spare batteries;
  - Stocks dry food Chura, Chhatua, Mudhi, gur, etc.
  - Matches, fuel lamp, portable stove, cooking utensils, waterproof bags
  - A first aid kit, manual, etc.
  - Katuri, pliers, small saw, axe and plastic rope
- Check the roof and cover it with net or bamboo. Check the walls, pillars, doors and windows to see if they are secure. If not, repair those at the earliest. In case of tin roofs, check the condition of the tin and repair the loose points. Cover the mud walls with polythene or coconut leaves mats or straw mats on a bamboo frame. Bind each corner of the roof with a plastic rope in case of thatched roof.
- Trim dry tree branches, cut off the dead trees and clear the place/courtyard of all debris, including coconuts and tree branches.
- Clear your property of loose materials that could blow about and cause injury or damage during extreme winds.

- If your area is prone to storm surge, locate safe high ground or shelter.
- Keep important documents, passbook, etc. in a tight plastic bag and take it along with your emergency kits if you are evacuating.
- Identify the spot where you can dig holes to store food grains, seeds, etc. in polythene bags.
- Keep a list of emergency addresses and phone numbers on display. Know the contact telephone number of the government offices /agencies, which are responsible for search, rescue and relief operations in your area.

## If you are living in an area where CBDP exercises have taken place, ensure:

- Vulnerability list and maps have been updated
- Cyclone drill including search & rescue, first aid training have taken place
- Stock of dry food, essential medicines and proper shelter materials maintained

#### **Upon a cyclone warning**

- Store loose items inside. Put extra agricultural products/ stock like paddy in plastic bags and store it by digging up a hole in the ground, preferably at a higher elevation and then cover it properly. Fill bins and plastic jars with drinking water.
- Keep clothing for protection, handy
- Prepare a list of assets and belongings of your house and give information to volunteers and other authorities about your near and dear ones.
- Fill fuel in your car/motorcycle and park it under a solid cover. Tie bullock carts, boats securely to strong posts in

- an area, which has a strong cover and away from trees. Fallen trees can smash boats and other assets.
- Close shutters or nail all windows. Secure doors. Stay indoors, with pets.
- Pack warm clothing, essential medications, valuables, papers, water, dry food and other valuables in waterproof bags, to be taken along with your emergency kit.
- Listen to your local radio / TV, local community warning system for further information.
- In case of warning of serious storm, move with your family to a strong pucca building. In case of warning of cyclones of severe intensity, evacuate the area with your family, precious items and documents and emergency kit. Take special care for children, elders, sick, pregnant women and lactating mothers in your family. Do not forget your emergency food stock, water and other emergency items. GO TO THE NEAREST CYCLONE SHELTER.

### Do not venture into the sea for fishing.

### On warning of local evacuation

Based on predicted wind speeds and storm surge heights, evacuation may be necessary. Official advice may be given on local radio / TV or other means of communication regarding safe routes and when to move.

- Wear strong shoes or chappals and clothing for protection.
- Lock your home, switch off power, gas, water, and take your emergency kit.
- If evacuating to a distant place take valuable belonging, domestic animals, and leave early to avoid heavy traffic, flooding and wind hazards.

• If evacuating to a local shelter or higher grounds carry the emergency kit and minimum essential materials.

#### When the cyclone strikes

- Disconnect all electrical appliances and turn off gas.
- If the building starts crumbling, protect yourself with mattresses, rugs or blankets under a strong table or bench or hold on to a solid fixture (e.g. a water pipe)
- Listen to your transistor radio for updates and advice.
- Beware of the calm 'eye'. If the wind suddenly drops, don't assume the cyclone is over; violent winds will soon resume from the opposite direction. Wait for the official "all clear".
- If driving, stop but well away from the sea and clear of trees, power lines and watercourses. Stay in the vehicle.

#### After the cyclone

- Do not go outside until officially advised it is safe.
- Check for gas leaks. Do not use electric appliances, if wet.
- Listen to local radio for official warnings and advice.
- If you have to evacuate, or did so earlier, do not return until advised. Use a recommended route for returning and do not rush.
- Be careful of snake bites and carry a stick or bamboo
- Beware of fallen power lines, damaged bridges, buildings and trees, and do not enter the floodwaters.
- Heed all warnings and do not go sightseeing.

#### •FLOODS SAFETY TIPS:

This guide lists simple things you and your family can do to stay safe and protect your property from floods.

#### Before flooding occurs.

- All your family members should know the safe route to nearest shelter/ raised pucca house.
- If your area is flood-prone, consider alternative building materials. Mud walls are more likely to be damaged during floods. You may consider making houses where the walls are made of local bricks up to the highest known flood level with cement pointing.
- Have an emergency kit on hand which includes a:
  - A portable radio, torch and spare batteries;
  - Stocks of fresh water, dry food (chura, mudi, gur, biscuits), kerosene, candle and matchboxes;
  - Waterproof or polythene bags for clothing and valuables, an umbrella and bamboo stick (to protect from snake), salt and sugar.
  - A first aid kit, manual and strong ropes for tying things

### When you hear a flood warning or if flooding appears likely

- Tune to your local radio/TV for warnings and advice.
  - Keep vigil on flood warning given by local authorities
  - Don't give any importance to rumours and don't panic

- Keep dry food, drinking water and clothes ready
- Prepare to take bullock carts, other agricultural equipments, and domestic animals to safer places or to higher locations.
- Plan which indoor items you will raise or empty if water threatens to enter your house
- Check your emergency kit

#### **During floods**

- Drink boiled water.
- Keep your food covered, don't take heavy meals.
- Use raw tea, rice-water, tender coconut-water, etc. during diarrhoea; contact your ANM/AWW for ORS and treatment.
- Do not let children remain on empty stomach.
- Use bleaching powder and lime to disinfect the surrounding.
- Help the officials/volunteers distributing relief materials.

#### If you need to evacuate

- Firstly pack warm clothing, essential medication, valuables, personal papers, etc. in waterproof bags, to be taken with your emergency kit.
- Take the emergency kit
- Inform the local volunteers (if available), the address of the place you are evacuating to.
- Raise furniture, clothing and valuables onto beds, tables and to the top of the roof (electrical items highest).
- Turn off power.

- Whether you leave or stay, put sandbags in the toilet bowl and over all laundry / bathroom drain-holes to prevent sewage back-flow.
- Lock your home and take recommended/known evacuation routes for your area.
- Do not get into water of unknown depth and current.

#### If you stay or on your return

- Stay tuned to local radio for updated advice.
- Do not allow children to play in, or near, flood waters.
- Avoid entering floodwaters. If you must, wear proper protection for your feet and check depth and current with a stick. Stay away from drains, culverts and water over knee-deep.
- Do not use electrical appliances, which have been in floodwater until checked for safety.
- Do not eat food, which has been in floodwaters.
- Boil tap water (in cities) until supplies have been declared safe. In case of rural areas, store tube well water in plastic jars or use halogen tablets before drinking.
- Be careful of snakes, snakebites are common during floods.

#### TIPS ON FIRE ACCIDENTS

#### a) High-Rise Fires:

- Calmly leave the apartment, closing the door behind you. Remember the keys!
- Pull the fire alarm near the closest exit, if available, or raise an alarm by warning others.
- Leave the building by the stairs.
- Never take the elevator during fire!

#### If the exit is blocked by smoke or fire:

- Leave the door closed but do not lock it.
- To keep the smoke out, put a wet towel in the space at the bottom of the door.
- Call the emergency fire service number and tell them your apartment number and let them know you are trapped by smoke and fire. It is important that you listen and do what they tell you.
- Stay calm and wait for someone to rescue you.

# If there is a fire alarm in your building which goes off:

- Before you open the door, feel the door by using the back of our hand. If the door is hot or warm, do not open the door.
- If the door is cool, open it just a little to check the hallway. If you see smoke in the hallway, do not leave.
- If there is no smoke in the hallway, leave and close the door. Go directly to the stairs to leave. Never use the elevator.

#### If smoke is in your apartment:

- Stay low to the floor under the smoke.
- Call the Fire Emergency Number which should be pasted near your telephone along with police and other emergency services and let them know that you are trapped by smoke.
- If you have a balcony and there is no fire below it, go out.
- If there is fire below, go out to the window. **DO NOT OPEN THE WINDOW** but stay near the window.
- If there is no fire below, go to the window and open it. Stay near the open window.
- Hang a bed sheet, towel or blanket out of the window to let people know that you are there and need help.
- Be calm and wait for someone to rescue you.

#### A) A) Kitchen Fires:

It is important to know what kind of stove or cooking oven you have in your home — gas, electric, kerosene or where firewood is used. The stove is the No. 1 cause of fire hazards in your kitchen and can cause fires, which may destroy the entire house, especially in rural areas where there are thatched roof or other inflammable materials like straw kept near the kitchen. For electric and gas stoves **ensure that the switch or the gas valve is switched off/turned off immediately after the cooking is over.** An electric burner remains hot and **until it cools off, it can be very dangerous**. The oven using wood can be dangerous because burning embers remain. When lighting the fire on a wooden fuel oven, **keep a cover on the top** while lighting the oven so that sparks do not fly to the thatched roof. After the cooking is over, ensure that the

remaining fire is extinguished off by sprinkling water if no adult remains in the kitchen after the cooking. Do not keep any inflammable article like kerosene near the kitchen fire.

#### Important Do's in the Kitchen:

- **Do** have an adult always present when cooking is going on the kitchen. Children should not be allowed alone.
- **Do** keep hair tied back and do not wear synthetic clothes when you are cooking.
- **Do** make sure that the curtains on the window near the stove are tied back and will not blow on to the flame or burner.
- **Do** check to make sure that the gas burner is turned off immediately if the fire is not ignited and also switched off immediately after cooking.
- **Do** turn panhandles to the centre of the stove and put them out of touch of the children in the house.
- **Do** ensure that the floor is always dry so that you do not slip and fall on the fire.
- **Do** keep matches out of the reach of children.

#### **Important Don'ts**

- **Don't** put towels, or dishrags near a stove burner.
- Don't wear loose fitting clothes when you cook, and don't reach across the top of the stove when you are cooking.
- **Don't** put things in the cabinets or shelves above the stove. Young children may try to reach them and accidentally start the burners, start a fire, catch on fire.

- **Don't** store spray cans or cans carrying inflammable items near the stove.
- **Don't** let small children near an open oven door. They can be burnt by the heat or by falling onto the door or into the oven.
- **Don't** lean against the stove to keep warm.
- **Don't** use towels as potholders. They may catch on fire.
- **Don't** overload an electrical outlet with several appliances or extension cords. The cords or plugs may overheat and cause a fire.
- **Don't** use water to put out a grease fire. ONLY use baking soda, salt, or a tight lid. Always keep a box of baking soda near the stove.
- **Don't** use radios or other small appliances (mixers, blenders) near the sink.

#### • **COMMON TIPS**:

- **Do** keep the phone number of the Fire Service near the telephone and ensure that everyone in the family knows the number.
- **Do** keep matches and lighters away from children.
- **Do** sleep with your bedroom closed to prevent the spread of fire.

**Do** you know that you should **never run** if your **clothes are on fire** and that you **should - "STOP – DROP-ROLL."** 

#### LANDSLIDE

#### **During a Landslide:**

- Stay alert and awake. Many debris-flow fatalities occur
  when people are sleeping. Listen to a Weather Radio or
  portable, battery-powered radio or television for
  warnings of intense rainfall. Be aware that intense, short
  bursts of rain may be particularly dangerous, especially
  after longer periods of heavy rainfall and damp weather.
- If you are in areas susceptible to landslides and debris flows, consider leaving if it is safe to do so. Remember that driving during an intense storm can be hazardous. If you remain at home, move to a second story if possible. Staying out of the path of a landslide or debris flow saves lives.
- Listen for any unusual sounds that might indicate moving debris, such as trees cracking or boulders knocking together. A trickle of flowing or falling mud or debris may precede larger landslides. Moving debris can flow quickly and sometimes without warning.
- If you are near a stream or channel, be alert for any sudden increase or decrease in water flow and for a change from clear to muddy water. Such changes may indicate landslide activity upstream, so be prepared to move quickly. Don't delay! Save yourself, not your belongings.
- Be especially alert when driving. Embankments along roadsides are particularly susceptible to landslides.

Watch the road for collapsed pavement, mud, fallen rocks, and other indications of possible debris flows.

#### What to Do if You Suspect Imminent Landslide Danger:

- Contact your local fire, police, or public works department. Local officials are the best persons able to assess potential danger.
- Inform affected neighbors. Your neighbors may not be aware of potential hazards. Advising them of a potential threat may help save lives. Help neighbors who may need assistance to evacuate.
- Evacuate. Getting out of the path of a landslide or debris flow is your best protection.

#### **Media and Community Education Ideas:**

- In an area prone to landslides, publish a special newspaper section with emergency information on landslides and debris flows. Localize the information by including the phone numbers of local emergency services offices, the Red Cross, and hospitals.
- Report on what city and county governments are doing to reduce the possibility of landslides. Interview local officials about local land- use zoning regulations.
- Interview local officials and major insurers. Find out if debris flow is covered by flood insurance policies and contact your local emergency management office to learn more about the program.

- Work with local emergency services to prepare special reports for people with mobility impairments on what to do if evacuation is ordered.
- Support your local government in efforts to develop and enforce land-use and building ordinances that regulate construction in areas susceptible to landslides and debris flows. Buildings should be located away from steep slopes, streams and rivers, intermittent-stream channels, and the mouths of mountain channels.

#### **After the Landslide:**

- Stay away from the slide area. There may be danger of additional slides.
- Check for injured and trapped persons near the slide, without entering the direct slide area. Direct rescuers to their locations.
- Help a neighbor who may require special assistance infants, elderly people, and people with disabilities.
  Elderly people and people with disabilities may require
  additional assistance. People who care for them or who
  have large families may need additional assistance in
  emergency situations.
- Listen to local radio or television stations for the latest emergency information.
- Watch for flooding, which may occur after a landslide or debris flow. Floods sometimes follow landslides and debris flows because they may both be started by the same event.
- Look for and report broken utility lines to appropriate authorities. Reporting potential hazards will get the

utilities turned off as quickly as possible, preventing further hazard and injury.

- Check the building foundation, chimney, and surrounding land for damage. Damage to foundations, chimneys, or surrounding land may help you assess the safety of the area.
- Replant damaged ground as soon as possible since erosion caused by loss of ground cover can lead to flash flooding.
- Seek the advice of a geotechnical expert for evaluating landslide hazards or designing corrective techniques to reduce landslide risk. A professional will be able to advise you of the best ways to prevent or reduce landslide risk, without creating further hazard.

#### **Media and Community Education Ideas:**

- In an area prone to landslides, publish a special newspaper section with emergency information on landslides and debris flows. Localize the information by including the phone numbers of local emergency services offices, the American Red Cross chapter, and hospitals.
- Report on what city and county governments are doing to reduce the possibility of landslides. Interview local officials about local land- use zoning regulations.

- Interview local officials and major insurers regarding the National Flood Insurance Program. Find out if debris flow is covered by flood insurance policies from the National Flood Insurance Program and contact your local emergency management office to learn more about the program.
- Work with local emergency to prepare special reports for people with mobility impairments on what to do if evacuation is ordered.
- Support your local government in efforts to develop and enforce land-use and building ordinances that regulate construction in areas susceptible to landslides and debris flows. Buildings should be located away from steep slopes, streams and rivers, intermittent-stream channels, and the mouths of mountain channels.

#### **Before a Landslide: How to Plan:**

Develop a Family Disaster Plan. Please see the "<u>Family Disaster Plan</u>" section for general family planning information. Develop landslide-specific planning.

Learn about landslide risk in your area. Contact local officials, state geological surveys or departments of natural resources, and university departments of geology. Landslides occur where they have before, and in identifiable hazard locations. Ask for information on landslides in your area, specific information on areas vulnerable to landslides, and request a professional referral for a very detailed site analysis of your property, and corrective measures you can take, if necessary.

#### If you are at risk from landslides:

- Talk to your insurance agent.
- Develop an evacuation plan.
- Discuss landslides and debris flow with your family. Everyone should know what to do in case all family members are not together. Discussing disaster ahead of time helps reduce fear and lets everyone know how to respond during a landslide or debris flow.