

BEFORE THE STORM: A GAME OF FORECASTS AND ACTION

RULES:

Before the Storm is a decision-making game designed to introduce the weather forecasts and possible actions to take against natural disasters through different roles.

MATERIALS:

Game cards. Materials can be printed from the templates provided. It is preferable to print on heavy card stock. Cut each card out with a paper cutter or scissors.

NOTE: There should be some blank cards. This is part of the game!

TIME:

The entire experience takes about 45 to 90 minutes, depending on how much time is dedicated to discussion.

Players: This game can be played in a group of 4-7. It is possible to run multiple tables of the game (up to 60 or more players) in “tournament style” as described at the end of this document.

GAMEPLAY:

1. Place the time cards (12h, 48h, 10 days) in chronological order on the table from left to right. These represent the lead-time of a forecast: how much time is expected to elapse between the issue of the forecast and the actual occurrence of the forecasted event.
2. Shuffle the forecast cards and place one in front of each time card.
3. Shuffle the action cards and distribute four cards to each player. Some cards might be blank, this is ok!
4. Select one of the players as the Decider for the first round.

Decider - Each person in the group takes turns acting as the Decider. The eldest person acts as the Decider first. Each round the Decider chooses which action card (pre-written or player-generated) they think is most appropriate in each time slot. This role rotates clockwise at the end of each turn.

Advisor - The players not acting as the Decider. Each round the advisors must select which action cards are most appropriate for each time slot from their hand, or use blank cards to write their own actions.

5. Advisors must recommend a plan for disaster preparedness in response to the forecasts. For each of the time cards, advisors select a pre-written action card from their hand or write their own action card (if they have a blank card) to respond to the forecast in each time slot, and place them in front of the respective time cards, face down.

IMPORTANT: when a player writes their own card, they must only write down one action (not multiple actions).

6. Each round, the Decider looks at all the recommended action cards, and chooses one (pre-written or player-generated) s/he thinks is most appropriate in each time slot, given the probability and severity of the forecast. The Actors whose cards are chosen receive 1 point for each pre-written action card and 2 points for each player-generated action card.

7. Challenge! Actors may challenge the Decider's choice. The challenging Actor then advocates for his/her action, and the Decider defends his/her decision. All other players except for the player with the winning card may vote to either uphold the Decider's decision, or overturn the decider's decision and award 1 point to the challenger. If the challenger loses the vote, they lose 1 point.

NOTE: there can only be one challenge per round (due to time constraints inherent in planning disaster preparedness measures.)

8. At the end of each round, shift the forecast cards to the left, drawing a new forecast card for the 10-day time slot. Deal out one more card to each player. The role of the Decider passes clockwise.

SCORING

The game is over once each player has played the role of the Decider once (or, you may choose twice for a longer game). The player with the most points wins!

VARIANTS

TOURNAMENT OPTION (for large group/workshop setting)

For the first round, play proceeds as normal. Once all teams have finished the first round of play, each team will select a person to represent them in the second round. The cards that were chosen by the teams in the first round will serve as their draw pile for the second round of play.

It is a nice day, and it will most likely remain a nice day.

FORECAST!

Heavy rains expected for three consecutive day.

Severity: Class 01

Magnitude: 4.4

Affected Region:
8510 km²
Northern Senegal

FORECAST!

Strong winds. There is a 70% probability that winds will blow in excess of 120 km per hour over the eastern shore of Saint Louis.

FORECAST!

Vast regions west of here are experiencing unprecedented rains.

This will most likely result in floods never experienced in the history of villages along the Senegal river.

FORECAST!

Light showers very likely in the area of Saint Louis

FORECAST!

Up to 35mm of rain likely to occur in this region, with 90% probability for a duration of 24 hours.

FORECAST!

Accumulated rainfall expected to reach 40% above normal. The likelihood of severe flooding is 30%.

FORECAST!

Your cousin from Dakar calls and said that they just watched the meteo bulletin on TV and found out that your area is going to experience heavy rain in a few hours.

FORECAST!

12 hours

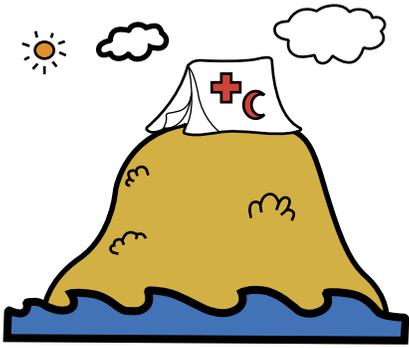
48 hours

12 hours

48 hours

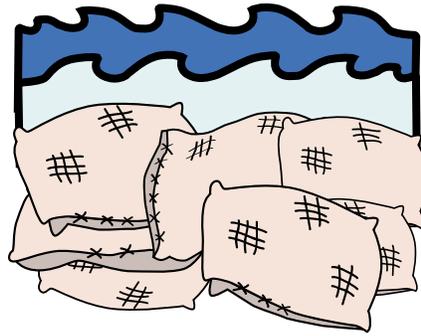
10 days

10 days



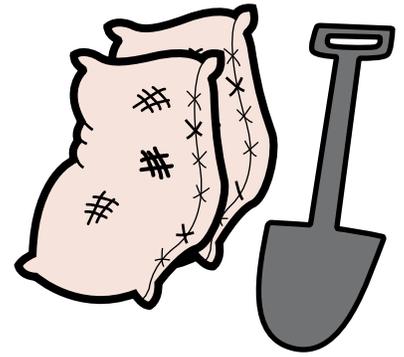
BUILD SHELTER!

Build temporary shelters on highground



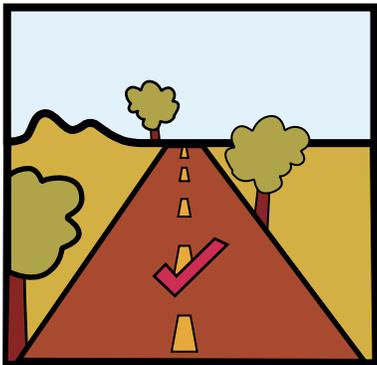
SANDBAGS!

Sandbag the riverbanks



SANDBAGS!

Ensure region center has enough sandbags & shovels



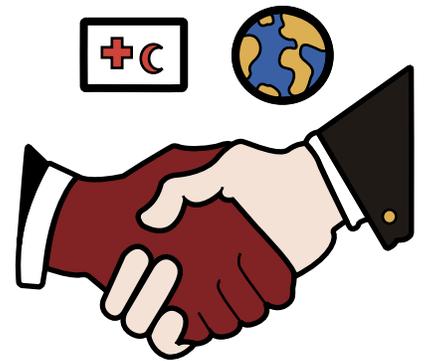
REPAIR ROADS!

Repair / check exit flood structures (roads, routes, etc)



POTS & PANS!

This is a good opportunity to start collecting fresh water!



NEGOTIATE!

Seek funding from international sources.



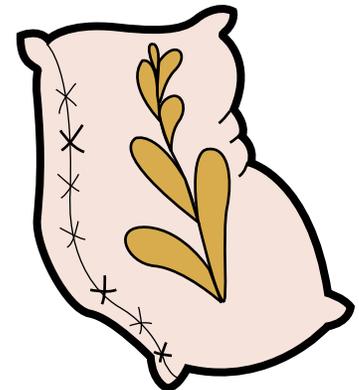
MONITOR!

Assess what was done in last storm and adjust accordingly



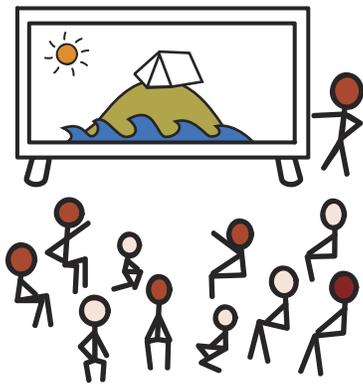
PLAY FUTBOL!

Things seem relatively calm so have fun!



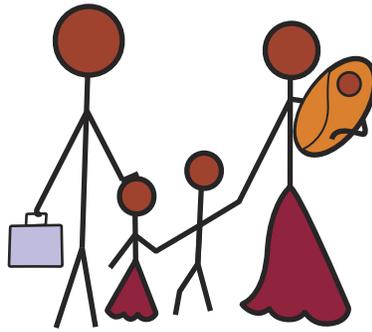
STORE FOOD!

Begin removing food from the granary and store in sacks to be put on high ground



MAKE A PLAN!

Call a village meeting to discuss how to move dwellings and food stores to higher ground



FAMILY!

Stay with relatives for 3 days until storm passes. Pack only essentials.



EVACUATE!

Make sure to evacuate areas that have flooded in the past



COMMUNICATE!

Get cellphones for village elders



PREPARE!

Practice the evacuation route to ensure you know where to meet



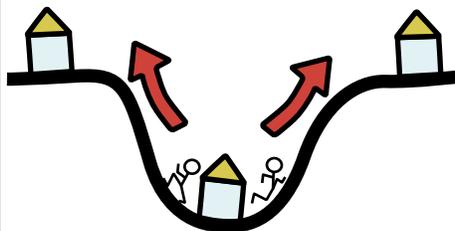
COMMUNICATE!

Interrupt television broadcasts to warn people of storms



PREPARE!

Get advance information on increased river flows to downstream communities



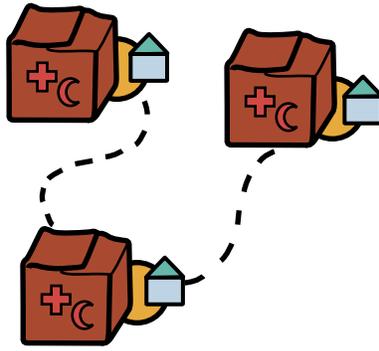
EVACUATE!

Evacuate low-lying areas in the vicinity of rivers and streams



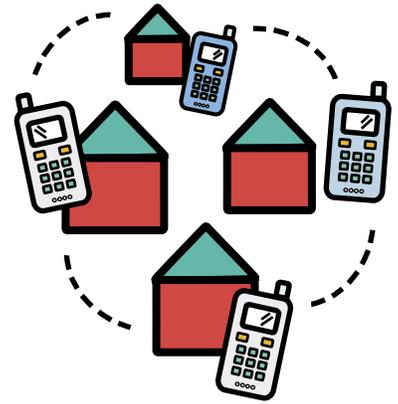
COMMUNICATE!

Talk to Red Cross people to see if the rain is coming



PREPOSITION!

Preposition relief supplies in three strategic locations around the village



COMMUNICATE!

Check that communications are in good working order



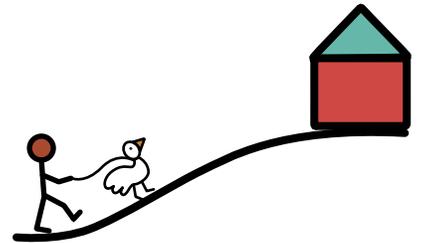
TRANSPORT!

Buy an airplane with an oil tank that can support flying for 24 hours in a row



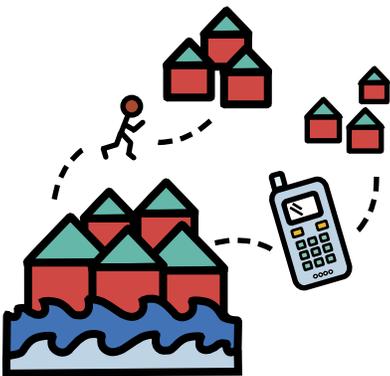
COMMUNICATE!

Check with Red Cross & meteorologists about any potential bad weather



PREPARE!

Move animals to a safe place



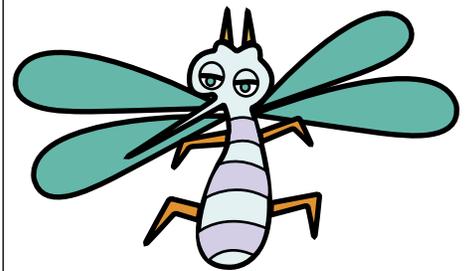
COMMUNICATE!

Spread the news of coming storm to other villages



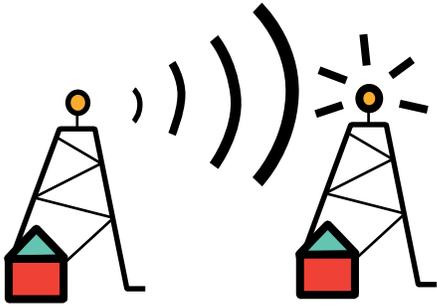
COMMUNICATE!

Distribute hand-cranked radios to people in areas with poor access to electricity



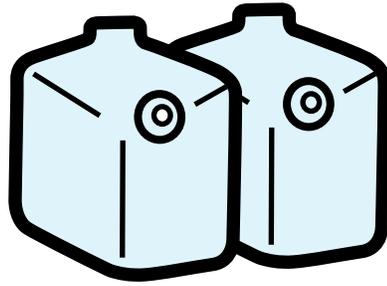
DISTRIBUTE!

Heightened incidences of mosquito-borne diseases
Distribute bed nets & medicine



COMMUNICATE!

Contact local authorities to help with communication about evacuation.



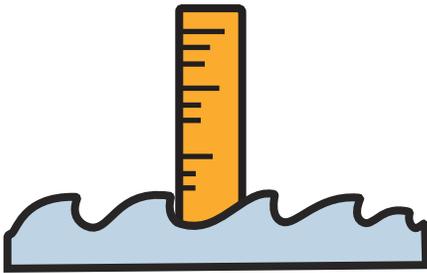
PREPARE!

Store potable water



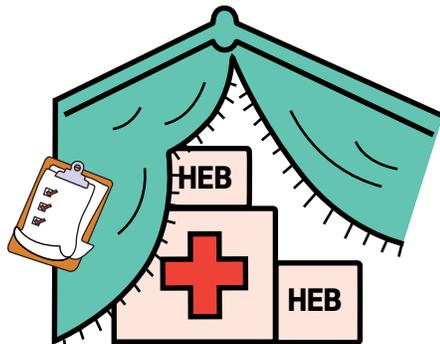
CLEAN UP!

Make sure that all gutters are cleared of refuse.



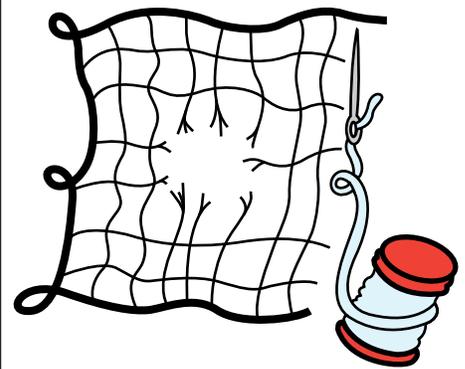
MONITOR!

Monitor the river for any change



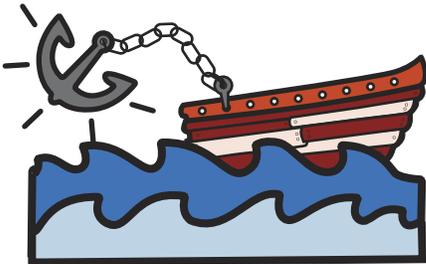
CHECK SUPPLIES!

Check & re-stock medical supplies



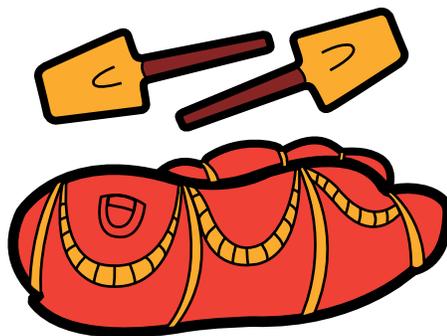
REPAIR!

Mend fishing nets



PLAN!

Inform fishermen & make plan to move fishing vessels to a safe place



SEARCH & RESCUE!

Acquire materials for a search and rescue



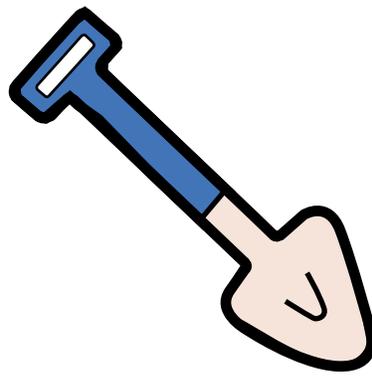
PREPARE!

Prepare food, water, and any essentials for two days in case of flooding



COLLECT WATER!

Put containers on the roof to collect rain water.



DIG DITCHES!

Dig drainage ditches to reroute water



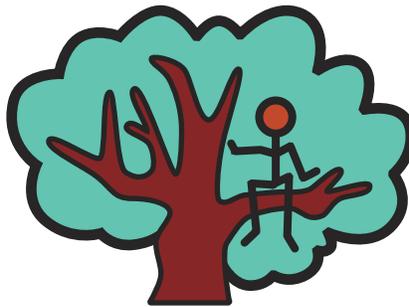
TEND TO FIELDS!

Help your neighbor tend to his fields



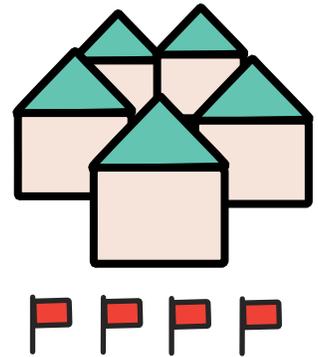
STAY HOME!

Stay at home with my family. I'm confused!



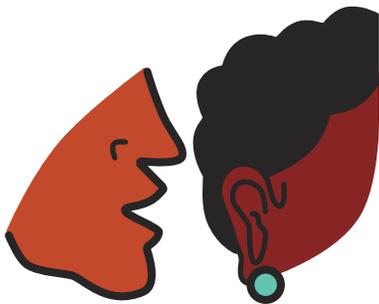
SEEK SHELTER!

Seek shelter in a tree and wait for the flood to end



PREPARE!

Establish evacuation routes to safe shelters



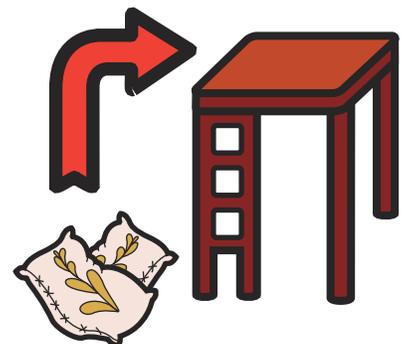
RELAX!

And gossip about the neighbors!



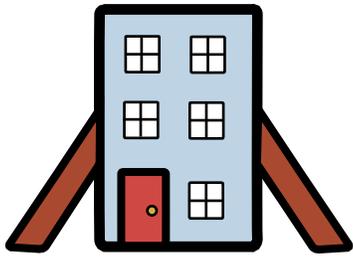
RECOVER!

For recovery, acquire tools and seeds for replanting damaged crops



PREPARE!

Move supplies to higher ground



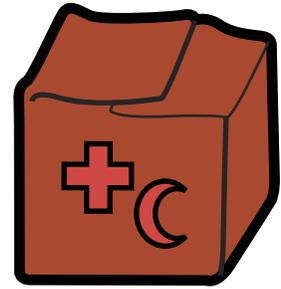
BUILD!

Fortify building structures



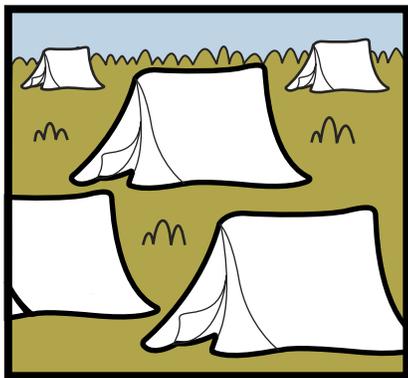
MONITOR!

Check that communications are in good working order



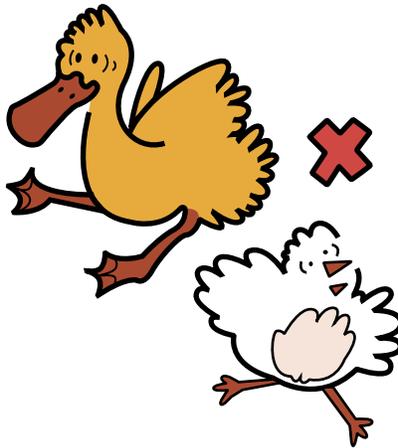
STOCK!

Arrange for adequate stocks of antibiotics for cholera and diphtheria



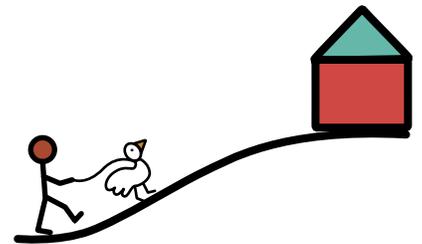
SHELTER!

Set up substantial amount of shelters



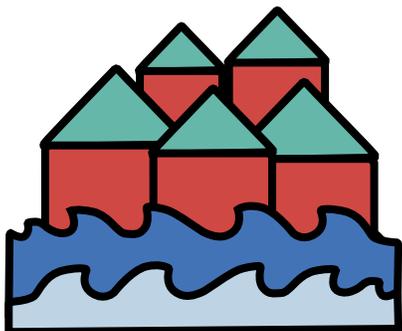
PREPARE!

Swap your chickens for some ducks, as ducks will swim in a flood.



PREPARE!

Move livestock to higher ground



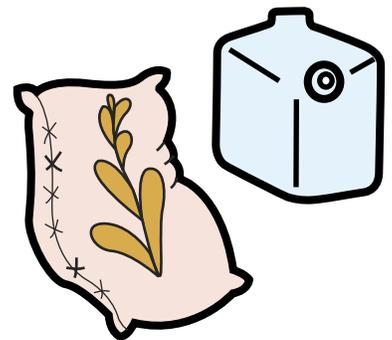
MONITOR!

Identify households at risk.



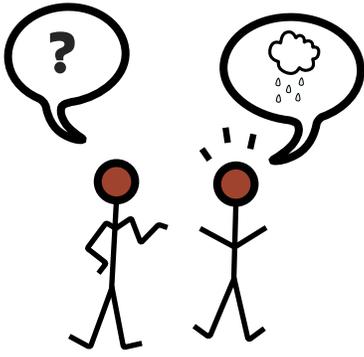
DIVERSIFY!

Diversify crops.



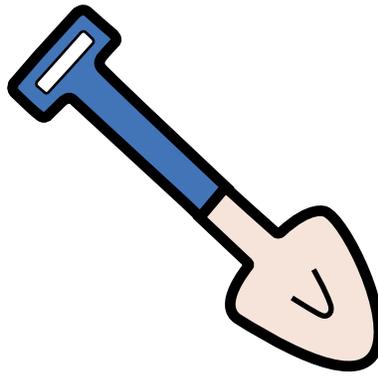
DISTRIBUTE!

Bring food and water to region.



COMMUNICATE!

Talk to other community members to see if they have heard anything



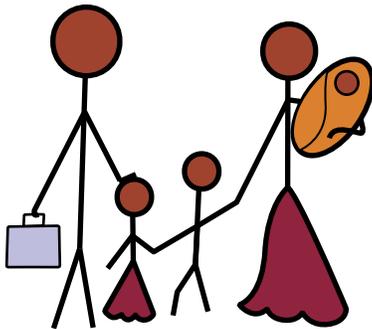
FORTIFY ROADS!

Fortify roads with gravel.



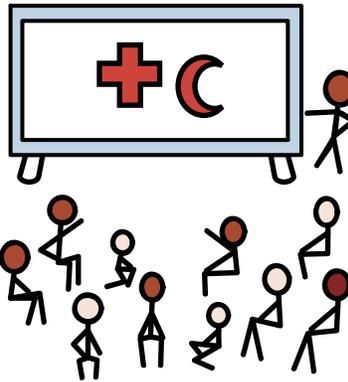
SUPPORT!

Ask local authorities for financial support



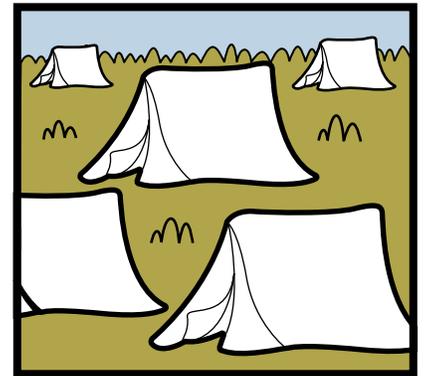
HELP OUT!

Take care of people in the community that may not be able to help themselves



PREPARE!

Train local community in first aid procedures



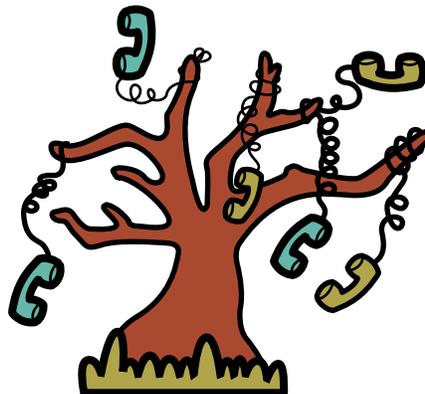
SHELTER!

Build temporary shelter in designated safe location



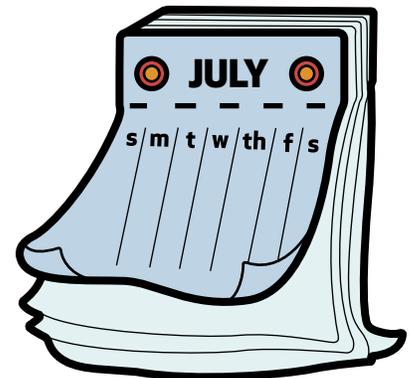
EVACUATE!

Move to emergency residence. Pack essentials.



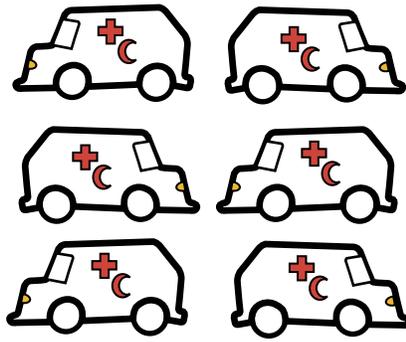
BE ACTIVE!

Create telephone tree to promote communication about climate change



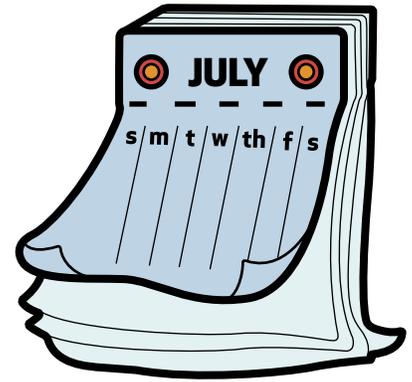
MONITOR!

Check weather again in one week.



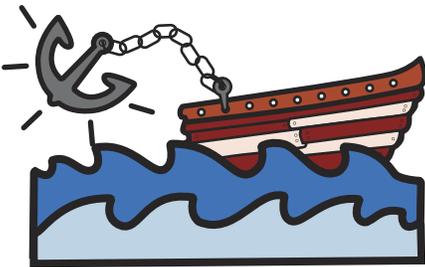
TRANSPORT!

Procure trucks from Red Cross to move supplies.



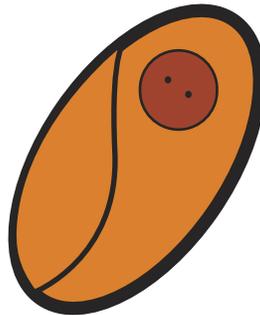
MONITOR!

Check the weather every week to see if there's any change.



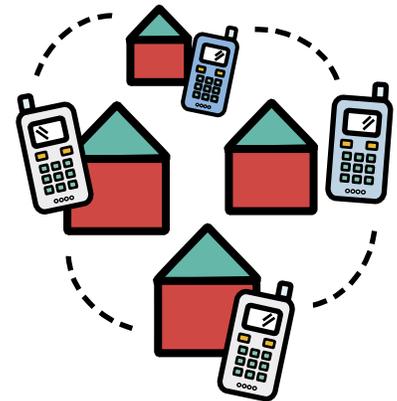
PREPARE!

Anchor your boat and store in a safe location



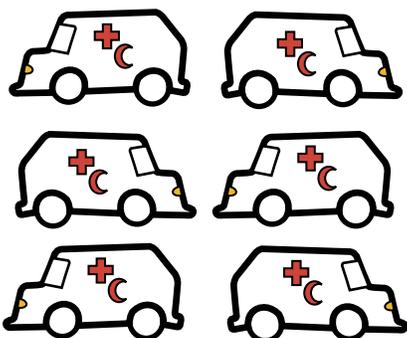
MONITOR!

Assess children at high risk for malnutrition



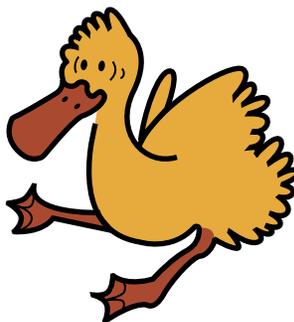
COMMUNICATE!

Disseminate warning messages



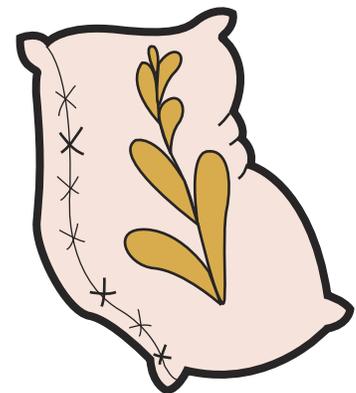
PREPARE!

Fill trucks with gasoline. Fill extra gas cans.



PREPARE!

Lock up all livestock.



BUY FOOD!

Purchase and store grain for future relief supplies

