Caribbean Action Alert

December 5, 2013

The Caribbean Institute for Meteorology and Hydrology, The Red Cross / Red Crescent Climate Centre, and The International Research Institute for Climate and Society
Games
Ready for Rain
a game on the use of seasonal forecasts
Ready for Rain

PARTICIPATORY!
(EXPECT CONFUSION)
Ground Rules

1. Game = *simplified* representation of reality
   No questioning of game rules

2. Decisions are individual
   NO consultation with other people

3. You can win a prize
   With most matches (stickers)
Response to Historical Disasters in the Caribbean

- Design health campaign
- House-to-house hygiene promotion
- Disseminate information on shelter locations
- Distribute Non-Food Items (2 weeks post-disaster!)
- Recruitment of volunteers (to distribute food parcels)
Climate Information?

13.9% Chance of Flooding in the next 3 months
Flood?

Observed

Please note: Preliminary results only
Putting it Together

Climatology

33 17.8%
33 10.8%
33 10.5%

Actual flood probability for this forecast: 12.9%

Please note: Preliminary results only
Putting it Together

Forecast

50 35 15

A N B

17.8%
10.8%
10.5%

14.2%

Actual flood probability for this forecast

Please note: Preliminary results only
What’s the difference?

10% increase in probability

12.9% → 14.2%

Climatological probability of flooding in a 3-month period

Forecast-based probability of flooding in a 3-month period

Please note: Preliminary results only
50% chance of above-normal

14.2% Chance of Flooding in the next 3 months

Compared to climatology: 10% increase in probability of flooding

Please note: Preliminary results only
15.3% Chance of Flooding in the next 3 months

65% chance of above-normal

Compared to climatology:
19% increase in probability of flooding

Please note: Preliminary results only
Matches

13.9% Chance of Flooding in the next 3 months

45% chance of above-normal

Compared to climatology: 8% increase in probability of flooding

Please note: Preliminary results only
13.5% Chance of Flooding in the next 3 months

40% chance of above-normal

Compared to climatology: 5% increase in probability of flooding

Please note: Preliminary results only
# Results

<table>
<thead>
<tr>
<th></th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Discussion

1. What patterns did you notice in the pairing of actions in the game?

2. What differences did you notice between suggested actions based on the standard seasonal forecast compared to the actions based on a probability of flooding? (map vs. pie chart)

3. Are the probabilities of flooding (based on different seasonal forecasts) distinct enough to warrant taking new actions for different forecasts?

4. Based on your reflections, how can we tailor seasonal forecasts for use by disaster managers? What about other sectors?
# Action Alert

<table>
<thead>
<tr>
<th>Alert Level</th>
<th>Above Normal Rainfall most likely</th>
<th>Recommended actions (predetermined by IFRC office)</th>
</tr>
</thead>
</table>
|             | Fiji (Central Division)          | - Check that you have sufficient emergency response stocks ie: blankets, sand bags and mosquito nets.  
|             |                                  | - Ensure adequate flood response related items are maintained (ie: water purification kits) |
| Niue        |                                  | Ensure previous stage preparedness activities are done, also:  
| Samoa       |                                  | - Identify the people and areas of the country through risk assessments that are most vulnerable to high rainfall conditions and ensure adequate stock level is maintained and locally available to meet their needs  
| Tonga (Northern Division) |                                  | - Conduct disaster awareness simulation activities |
|             | Solomon Islands                  | Ensure previous stage preparedness activities are done, also:  
|             | Tonga                            | - Get in touch with Meteorological Office and NDMO to discuss preparing for a high rainfall situation without duplication  
|             | Vanuatu                          | - Check availability of your team members, volunteer mobilization capacity, and establish your emergency teams  
|             |                                  | - Pre-determine evacuation centres and evacuation routes |
Your Help?

• Feedback on flood risk thresholds
• Ideas for drought indicators
• Feedback on format and actions in a draft Action Alert
• Use of tool!