DEVELOPING AN EVALUATION FRAMEWORK FOR SERIOUS GAMES

PARTICIPATORY GAMES & RISK MANAGEMENT & COMMUNITY-BASED ADAPTATION
DECISION-MAKING IN AN UNCERTAIN CLIMATE

- Climate Centre
- Future Climate for Africa (FCFA)
- Zambezi River Basin Initiative
- Zambia Red Cross Society
- Climate Games
- Evaluation Framework
THE ISSUES
DECISION-MAKING IN AN UNCERTAIN CLIMATE
MAKING DECISIONS NOW FOR THE FUTURE

• What are likely impacts of climate change in the medium to long-term?

• How might vulnerability patterns shift?

• What climate information is available? Needed?

• How can climate information be better integrated into development planning?

• How can decision-making processes be enhanced now to better prepare for a changing climate?
THE GAMES
DECISION-MAKING IN AN UNCERTAIN CLIMATE
CLIMATE GAMES

- + 40 Games
- + 4000 Players
- + 50 Countries
Development Card

Title of development plan or development intervention:

Energy for all

Short description:

Home lighting (solar) provide power to small scale enterprises

Climate Information used

* Solar radiation
* Seasonal rainfall
* Wind
* Temperature
WHY EVALUATE GAMES?

• **Systematize** development, testing and evaluation of quantitative and qualitative methods

• *Innovate* new game-based tools to improve decision-making

• **Generate** feedback that informs game design and use

• *Build capacity* among facilitators, players, researchers, designers, INGOs
THE EVALUATION FRAMEWORK
DECISION-MAKING IN AN UNCERTAIN CLIMATE
HOW? WHY? WHEN?

- How do games improve risk management?
- How do games help us learn to make good decisions?
- How can we assess games and evaluate their effectiveness?
# Evaluating Game Design

## Elements of Game Design
- Narrative
- Aesthetics
- Challenge
- Mechanics
- Costs

## Climate Risk Content
- Purpose
- Objectives
- Appropriateness
- Content
- Framing
EVALUATING GAME DYNAMICS

GAMEPLAY EXPERIENCE

User Experience (UX)
Holistic Game System
Enjoyment

COMPREHENSIVE CRITERIA

Outputs
Outcomes
Impact and Attribution
COMMON CRITERIA

STAKEHOLDER CONTEXT

Relevance
Perspectives
Coverage
## RESEARCH DESIGNS

<table>
<thead>
<tr>
<th>Evaluation Design</th>
<th>Pre-Test Baseline Estimations prior to gameplay</th>
<th>Treatment (Gameplay)</th>
<th>Post-gameplay assessment</th>
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</thead>
<tbody>
<tr>
<td>Pre-Test/Post-Test No Control Group</td>
<td>Player Group</td>
<td>Yes</td>
<td>Player Group</td>
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<tr>
<td>Pre-Test/Post-Test with Post Comparison</td>
<td>Player Group</td>
<td>Yes</td>
<td>Player Group Control Group</td>
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<tr>
<td>Pre-Test/Post-Test</td>
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<td>Yes No</td>
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</tbody>
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CONTRIBUTIONS

• Reliable, accurate assessments improve game design & dynamics
• Evaluation lends credibility to games
• Participatory evaluations build capacity
• Evaluations can help games scale
THANK YOU

CENTER FOR SCIENCE & TECHNOLOGY POLICY RESEARCH

RED CROSS/RED CRESCENT CLIMATE CENTRE

ZAMBIA RED CROSS SOCIETY