



Feasibility Study of Integrating Human Dimension and Human Security in a Disaster Management System: Integrating eBayanihan and SHEREPO

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Disaster Risk \doteq Hazard \times Vulnerability Capacity

#0-1

ICTs for DISASTER focus on Hazards

(By Computer Science, Social Computing and Technology)



eBAYANIHAN

Nationwide participatory web-mobile disaster management system (e-Bayanihan)

UN Response Clusters

CAMP/
SHELTER/
PROTECTION

EDUCATION

FOOD / NON FOOD

EMERGENCY /
TELECOMMUNICATION
S

HEALTH, MEDICAL,
MENTAL HEALTH AND
PSYCHOSOCIAL
SUPPORT

WATER /
SANITATION /

HYGIENE

LOGISTICS

MANAGEMENT OF THE
DEAD AND MISSING

SEARCH, RESCUE AND
RETRIEVAL

ROLE OF INFORMATION COMMUNICATION TECHNOLOGIES (ICT) in DISASTER RESPONSE



I
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N

From RESPONSE to PREPAREDNESS



BAYANIHAN

Bayan = country
Community
Togetherness
Helping one another
Community based
volunteerism

Online Community
Based volunteerism

Crowdsourcing of
Disaster information

M
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L

HUMAN DIMENSION

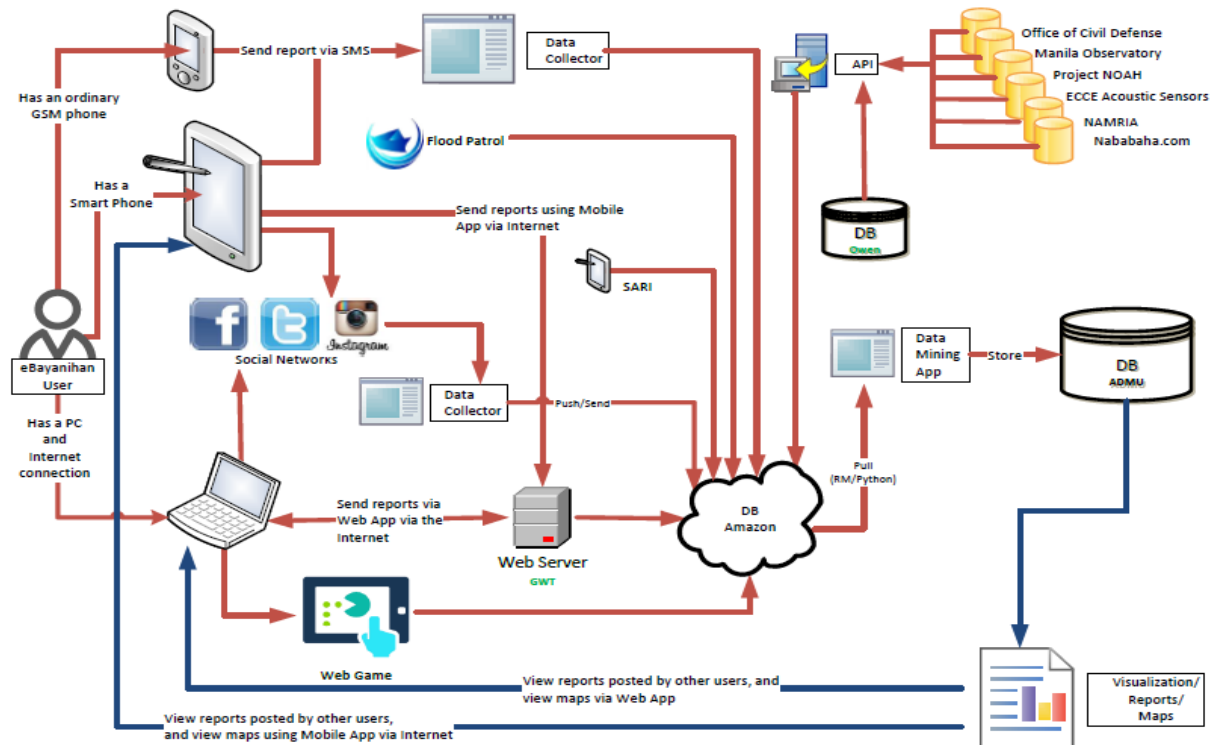
BEHAVIOR / EXPERIENCE
COGNITION / THOUGHTS
AFFECT / FEELINGS

RESILIENCY

RISK
EXPOSURE
PREPAREDNESS{

HAZARD

MULTIPLATFORM



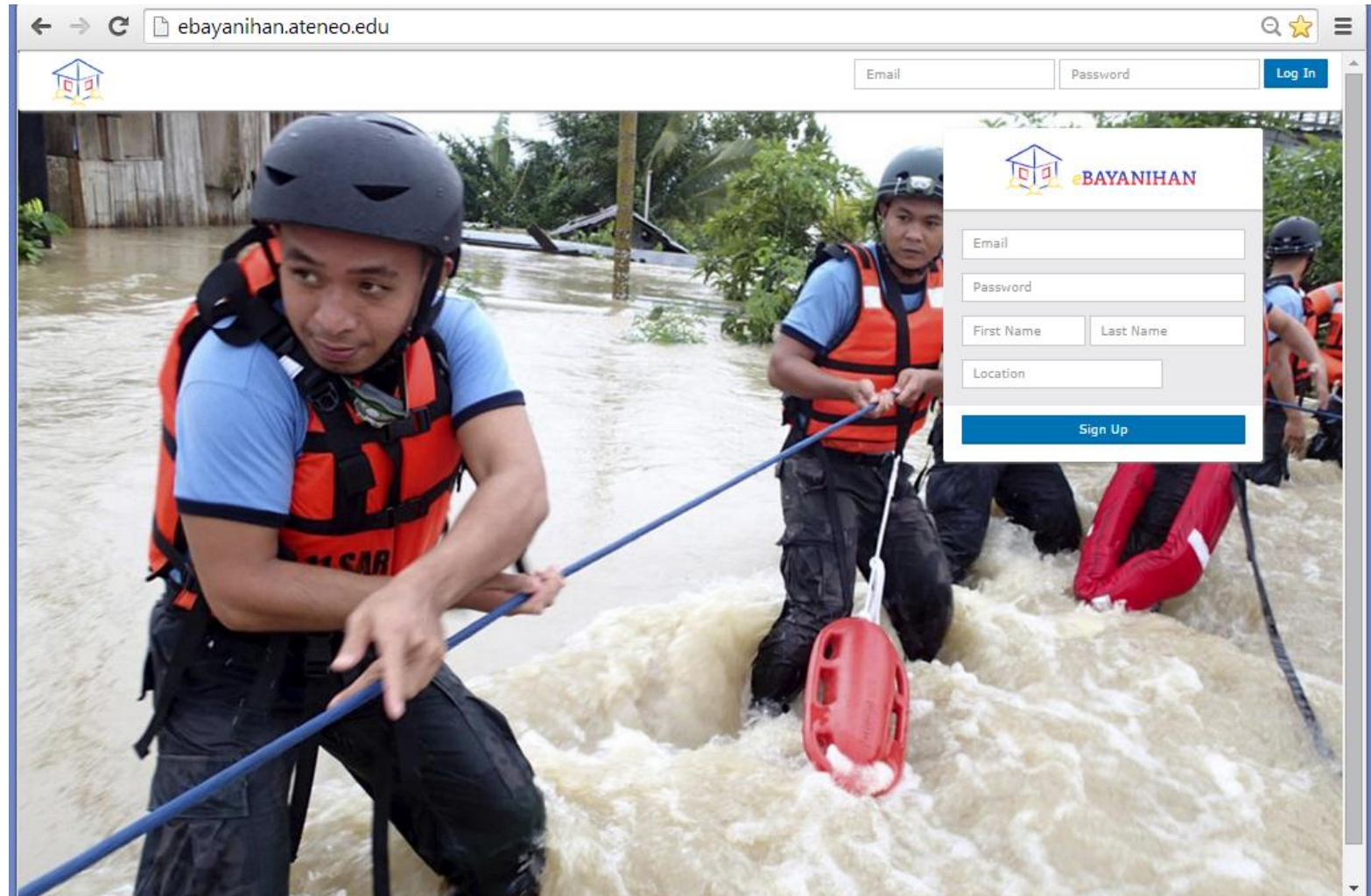
WEB

MOBILE
SMS &
SMARTPHONES

MOBILE
SMS &
SMARTPHONES



LANDING PAGE



OBJ#1: Reporting Tool

HOME SCREEN

The screenshot displays the eBAYANIHAN web application interface. The top navigation bar is blue with the eBAYANIHAN logo and a user profile for Regina Estuar. The left sidebar contains links to Home, Socials, Maps, eHanda, and eUlat. The main content area is titled 'Home' and features two primary sections: 'CitReports' and 'Timeline'.

CitReports Section:

- A text input field for 'Post your incident report.'
- A dropdown menu for 'Post your incident category' and a button labeled 'Urgent? Click me.'
- A text input field for 'Exact incident location'.
- A Google Map showing the area around Mandaluyong, Pasig, and Makati.
- A 'Report' button at the bottom of the map.

Timeline Section:

- Abbe Mat** (Jan 21, 2015 02:11 PM): 'Testing!'. Status: Approved (2), Disapproved (1).
- John Sixto Santos** (Jan 22, 2015 01:27 AM): 'Jigglypuff.' Status: Approved (0), Disapproved (0).
- Jhoanna Isla** (Jan 21, 2015 10:37 PM): 'Me, too!'. Status: Approved (0), Disapproved (0).
- Regina Estuar** (Jan 22, 2015 07:06 AM): '[TEST] Side road along Osmena closed'. Status: Approved (0), Disapproved (0).
- Regina Estuar** (Jan 22, 2015 07:06 AM): 'Temporary closure to manage traffic'. Status: Approved (0), Disapproved (0).
- John Sixto Santos** (Jan 22, 2015 12:39 AM): (Partial entry visible).

The bottom of the image shows a Windows taskbar with various application icons and a system clock indicating 7:06 AM on 1/22/2015.

OBJ#1: Reporting Tool

SOCIALS

The screenshot displays a web browser window with multiple tabs. The active tab is 'staging.ebayanihan.ateneo.edu/socials'. The browser's address bar shows the URL. The page header is a blue bar with the 'eBAYANIHAN' logo and a user profile 'Regina Estuar'. The main content area is titled 'Socials' and features a sidebar on the left with navigation links: Home, Socials, Maps, eHanda, and eUlat. The central area is divided into two columns. The left column, under the heading 'Tweets', shows a list of tweets from '@dost_pagasa' and '@DepEd_PH'. The first tweet is from 'PAGASA-DOST' (@dost_pagasa) with a timestamp of '1h', containing a '24-HOUR MINDANAO LOCAL WEATHER FORECAST' issued at 5:00 AM on January 22, 2015. The second tweet is also from 'PAGASA-DOST' (@dost_pagasa) with a timestamp of '1h', containing a '24-HOUR PUBLIC WEATHER FORECAST' issued at 5:00 AM on January 22, 2015. The third tweet is from 'PAGASA-DOST' (@dost_pagasa) with a timestamp of '2h', containing a 'RAINFALL UPDATE #VIS_PRSD'. The right column shows a list of tweets under the heading '#RubyPH'. The first tweet is from 'Islam' (@Islam_love_him) with a timestamp of '9m', containing the text 'Ang Talakayan ng Kristiyano at #Muslim' and a link to 'IslamHouse.com/2605'. The second tweet is also from 'Islam' (@Islam_love_him) with a timestamp of '1h', containing the text 'Ang Simula at Ang Katapusan' and a link to 'IslamHouse.com/259913'. The bottom of the image shows a Windows taskbar with various application icons and a system clock showing 7:07 AM on 1/22/2015.

OBJ#1: Reporting Tool

MAPS

staging.ebayanihan.ateneo.edu/map?mode=recent&source[]=CitReports

Person 1

Apps Jobs List | Syner... Ebayanihan eBayanihan eHealth Tablet ... Etableuniversal Etableuniversal... http://balut.ad... MyCIC Personal ... Smart LTE CRAN: Contribu... Medicine 2.0: S... KDNuggets™ N... Create Applicat...

eBAYANIHAN

Regina Estuar

Last 24 hours All

Manila Bay

Google

Filter Options

☒ CitReports ☐ NOAH Flood Reports ☐ Tweets

Start Date End Date

Urgency ☒ All ☐ Urgent ☐ Not Urgent

Keywords

| | | | |
|------------------------------------|-------------------------------------|-----------------------------------|-----------------------------------|
| <input type="checkbox"/> Flood | <input type="checkbox"/> Rain | <input type="checkbox"/> Wind | <input type="checkbox"/> Fire |
| <input type="checkbox"/> Landslide | <input type="checkbox"/> Earthquake | <input type="checkbox"/> Brownout | <input type="checkbox"/> Accident |
| <input type="checkbox"/> Road | <input type="checkbox"/> Bridge | <input type="checkbox"/> Brgy | <input type="checkbox"/> Rescue |
| <input type="checkbox"/> Evacuate | <input type="checkbox"/> Relief | <input type="checkbox"/> Health | |

Update Reset

Windows Taskbar: 7:08 AM 1/22/2015

OBJ#1: Reporting Tool

LAYER & FILTER NOAH

staging.ebayanihan.ateneo.edu/map?mode=all&source%5B%5D=CitReports&source%5B%5D=NOAH+Flood+Reports&start_date=10%2F26%2F2014+7%3A12+AM&end_date=01%2F16%2F2015+7%3A12+AM&urgency=&keyword%5B%5D=

eBAYANIHAN

Last 24 hours All

Filter

Filter Options

☒ CitReports ☒ NOAH Flood Reports ☐ Tweets

Start Date: 10/26/2014 7:12 AM End Date: 01/16/2015 7:12 AM

Urgency: ☒ All ☐ Urgent ☐ Not Urgent

Keywords:

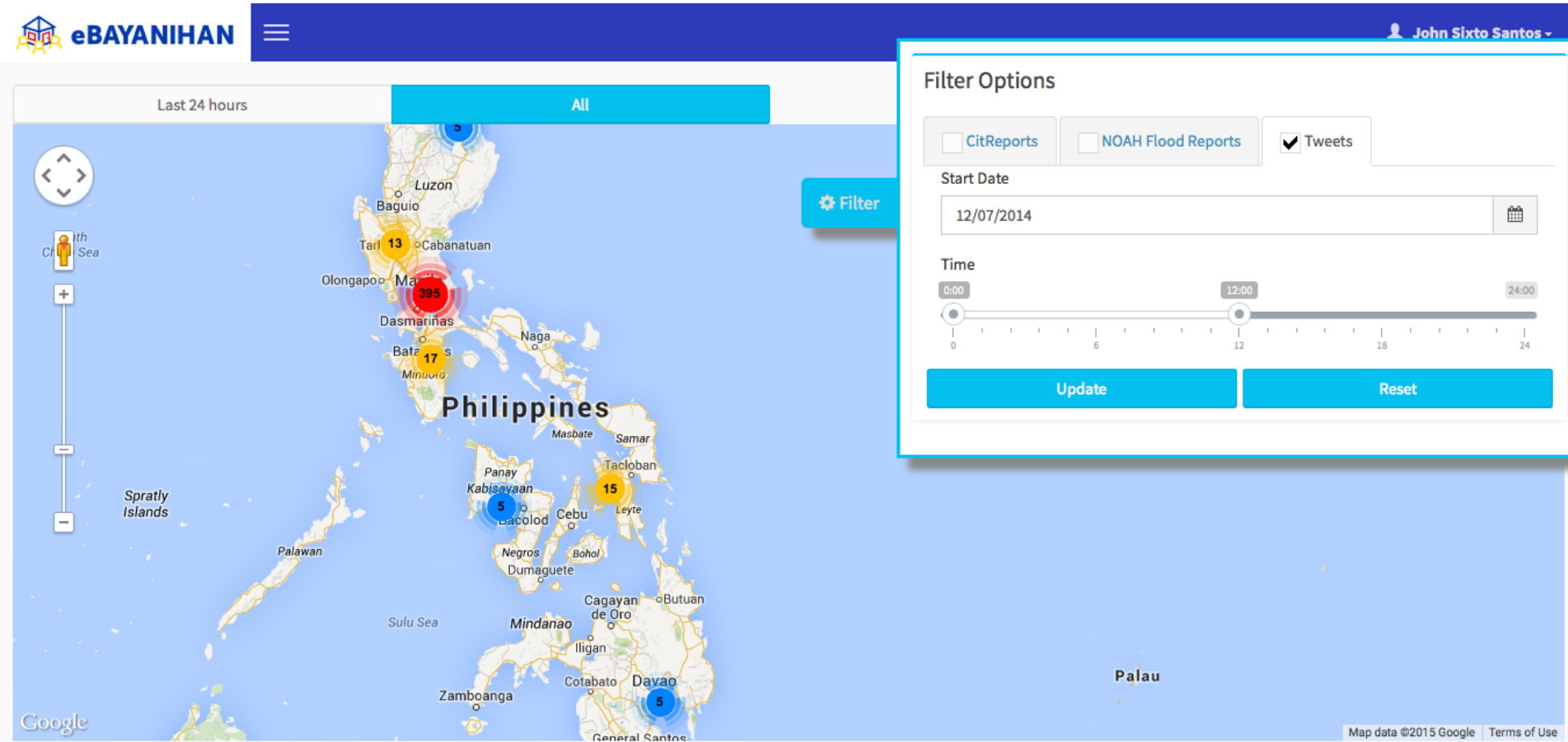
| | | | |
|---|-------------------------------------|-----------------------------------|-----------------------------------|
| <input checked="" type="checkbox"/> Flood | <input type="checkbox"/> Rain | <input type="checkbox"/> Wind | <input type="checkbox"/> Fire |
| <input type="checkbox"/> Landslide | <input type="checkbox"/> Earthquake | <input type="checkbox"/> Brownout | <input type="checkbox"/> Accident |
| <input type="checkbox"/> Road | <input type="checkbox"/> Bridge | <input type="checkbox"/> Brgy | <input type="checkbox"/> Rescue |
| <input type="checkbox"/> Evacuate | <input type="checkbox"/> Relief | <input type="checkbox"/> Health | |

Update Reset

Windows Taskbar: 7:12 AM 1/22/2015




OBJ#1: Reporting Tool

LAYER & FILTER TWEETS

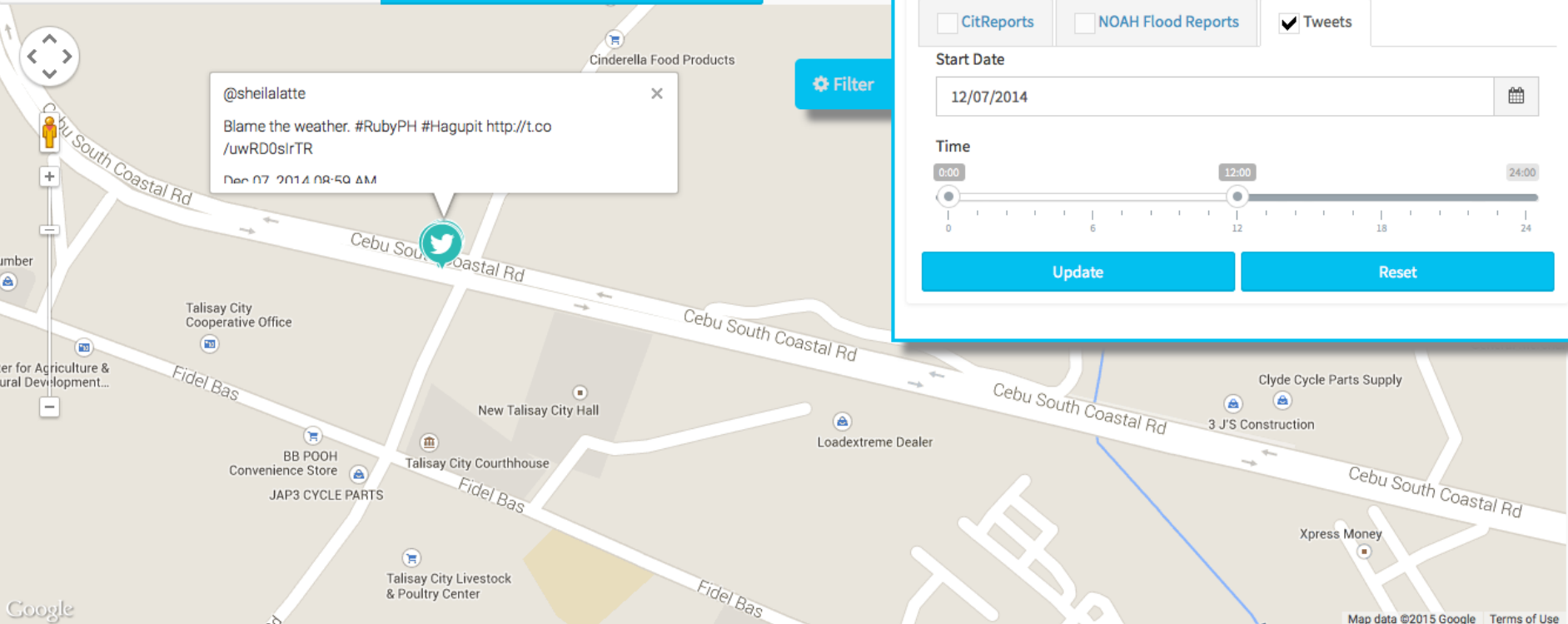



OBJ#1: Reporting Tool

LAYER & FILTER TWEETS


 eBAYANIHAN   John Sixto Santos


Last 24 hours **All**

Filter Options

☐ CitReports ☐ NOAH Flood Reports ☒ Tweets

Start Date
12/07/2014 

Time
0:00 12:00 24:00


Update **Reset**

Tweet:
@sheilalatte
Blame the weather. #RubyPH #Hagupit <http://t.co/uwRD0sirTR>
Dec 07 2014 08:50 AM

Map data ©2015 Google [Terms of Use](#)

OBJ#1: Reporting Tool

LAYER & FILTER TWEETS

Chrome File Edit View History Bookmarks Window People Help

Frontend Web D Great News! Am DOST aims to b Facebook Bug #472: Time Inbox (3) - johnn Ebayanihan phpPgAdmin Noel

staging.ebayanihan.ateneo.edu/map?mode=all&source%5B%5D=Tweets&start_date=01%2F01%2F2014+8%3A13+AM&end_date=01%2F01...

Apps CodeIgniter Information Hubs Acads Tools Food Places Sony Tipu tweaks Graph API Explorer ABS-CBN Live Stream Other Bookmarks

eBAYANIHAN Noel Victorino

Last 24 hours All

Map Satellite Filter

@faujibrat

Thank god Hagupit is not touching India. Otherwise we'd be in some deep shit.

Dec 07 2014 09:00 AM

Google

3 characters selected 140 size: 4 plain text

OBJ#1: Reporting Tool

eHANDA DEMOGRAPHICS

Browser tabs: M Inbox (6,243) - restu... x Ebayanihan x staging.ebayanihan.ateneo.edu/ehanda/new

Browser address bar: staging.ebayanihan.ateneo.edu/ehanda/new

Browser extensions: Apps, Jobs List | Syner..., Ebayanihan, eBayanihan, eHealth Tablet ..., Etableuniversal, Etableuniversal..., http://balut.ad..., MyCIC Personal ..., Smart LTE, CRAN: Contribu..., Medicine 2.0: S..., KDnuggets™ N..., Create Applicat...

Page Header: eBAYANIHAN Regina Estuar

Left Sidebar: Home, Socials, Maps, eHanda, eUlat

New Barangay Profile

Demographics & Information | Service Institutions & Infrastructure | Disaster Risk Reduction & Preparedness

Demographics & Information

Physical and Demographic Characteristics

Region: -- Select a Region --

Province:

City/Municipality:

Barangay:

Classification:

Number of Puroks/Sitios: 0

Population

Adult Males: 0

Adult Females: 0

Children: 0

Households

Number of Households: 0

Number of Families: 0

Number of Barangay Personnel

| Female | Male |
|--------|------|
| | |

Reference Period:

Source of Data:

Reference Period:

Source of Data:

Female:

Male:

Taskbar: Windows, Edge, File Explorer, Task Manager, Chrome, R, R, Home, 7xC, Camera, Cloud, Soccer, VS Code, PowerPoint

System Tray: 7:16 AM 1/22/2015

OBJ#1: Reporting Tool

eHANDA DRR&P

Inbox (6,243) - restu... Ebayanihan x staging.ebayanihan.ateneo.edu/ehanda/new Person 1

Apps Jobs List | Syner... Ebayanihan eBAYANIHAN eHealth Tablet ... Etableuniversal Etableuniversal... http://balut.ad... MyCIC Personal ... Smart LTE CRAN: Contribu... Medicine 2.0: S... KDnuggets™ N... Create Applicat...

eBAYANIHAN Regina Estuar

New Barangay Profile

Home Socials Maps eHanda eUlat

Demographics & Information Service Institutions & Infrastructure Disaster Risk Reduction & Preparedness Back to List

Disaster Risk Reduction & Preparedness

Does the barangay have a written disaster risk reduction plan? ☐ Yes

Does the barangay have a disaster/emergency response team? ☐ Yes

Does the barangay have any of the following disaster/emergency response equipment? (check means Yes)

☐ Rubber Boats ☐ Flashlights ☐ Handheld Radios ☐ Others (specify)

☐ Medicines/First Aid Supplies ☐ Rain Gear (coats,boots) ☐ Life Vests ☐ Emergency/Service Vehicle

☐ Megaphone

During the past 3 years, how many times have these events occurred?

| | | | | | |
|-------------------|----------------------|----------------------------|----------------------|-----------------------------|----------------------|
| Typhoon | <input type="text"/> | Tsunami | <input type="text"/> | Armed Conflict | <input type="text"/> |
| Flooding | <input type="text"/> | Fire in Houses/Properties | <input type="text"/> | Closure of Large Firm | <input type="text"/> |
| Drought | <input type="text"/> | Forest Fire | <input type="text"/> | Closure of Many Small Firms | <input type="text"/> |
| Earthquake | <input type="text"/> | Epidemic | <input type="text"/> | Mass Layoff | <input type="text"/> |
| Volcanic Eruption | <input type="text"/> | Pest Infestation | <input type="text"/> | Opening of Large Firm | <input type="text"/> |
| Landslide | <input type="text"/> | Livestock/Poultry Diseases | <input type="text"/> | Opening of Many Small Firms | <input type="text"/> |

Evacuation Centers

Does the barangay have designated evacuation centers? ☐ Yes

Add Evacuation Center

| Name | Location |
|------|----------|
|------|----------|

Submit

Windows Taskbar: 7:17 AM 1/22/2015

OBJ#1: Reporting Tool

eULAT REPORT

Sign in - Google Acc x Ebayanihan x

staging.ebayanihan.ateneo.edu/eulat/new

Apps Jobs List | Syner... Ebayanihan Ebayanihan eHealth Tablet ... Etableuniversal Etableuniversal... http://balut.ad... MyCIC Personal ... Smart LTE CRAN: Contribu... Medicine 2.0: S... KDnuggets™ N... Create Applicat...

eBAYANIHAN Regina Estuar

Home Socials Maps eHanda eUlat

New eUlat Report

New eUlat Report

Situation

Post your incident category ▾

Exact incident location

Initial Estimate of Damage

| | Very Approximate Numbers | Comments |
|------------------------------|--------------------------|----------|
| Dead | | |
| Injured | | |
| Missing | | |
| In Need of Shelter | | |
| In Need of Clothing | | |
| In Need of Food | | |
| In Need of Water | | |
| In Need of Sanitation | | |
| Damage to Lifeline Systems ⓘ | % | |

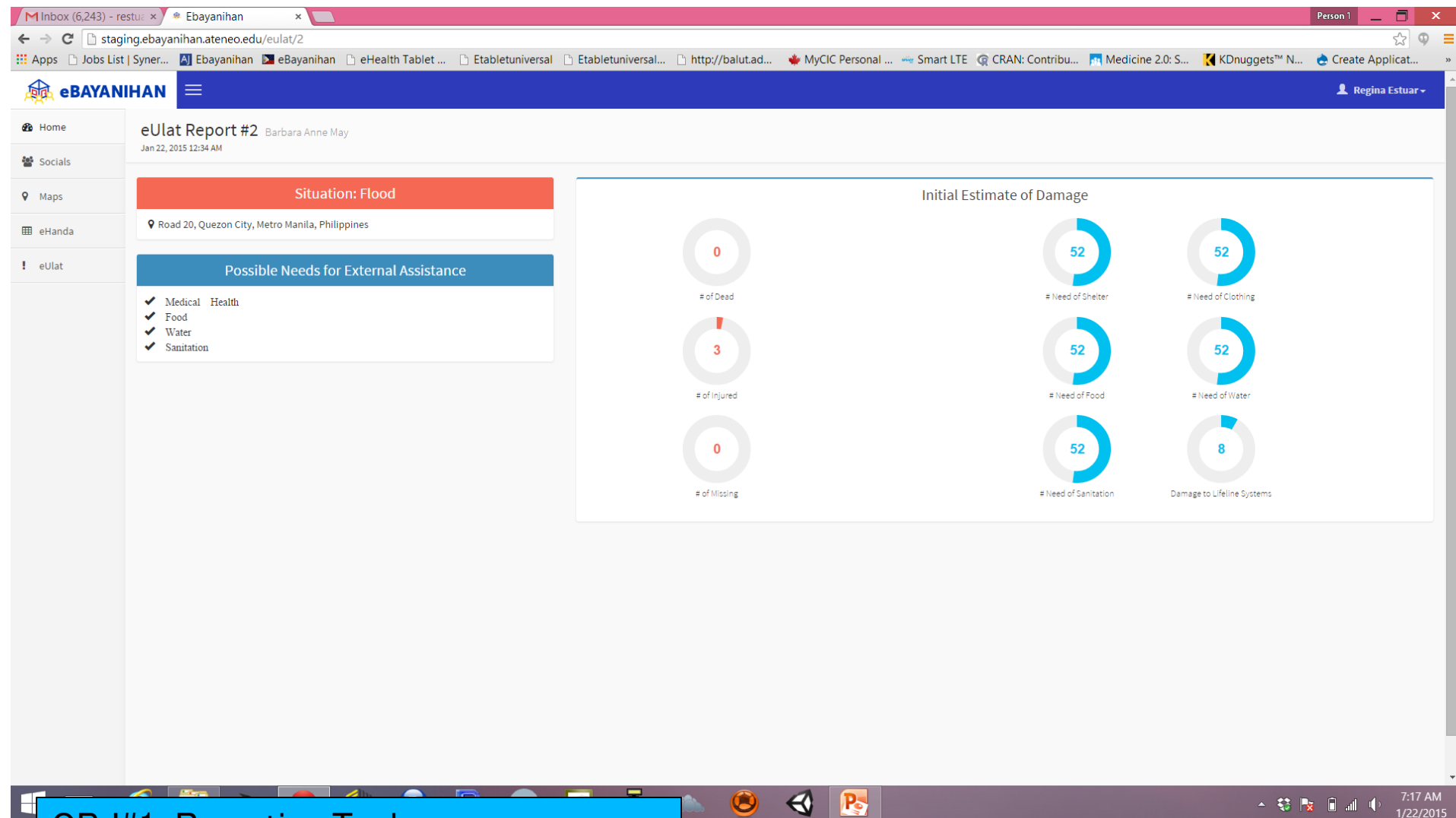
Possible Needs for External Assistance

| | | | |
|--|---|---|-------------------------------------|
| <input type="checkbox"/> Search and Rescue | <input type="checkbox"/> Clothing | <input type="checkbox"/> Evacuation | <input type="checkbox"/> Food |
| <input type="checkbox"/> Protection | <input type="checkbox"/> Water | <input type="checkbox"/> Medical and Health | <input type="checkbox"/> Sanitation |
| <input type="checkbox"/> Shelter | <input type="checkbox"/> Repair of Lifeline Systems | | |

Submit

OBJ#1: Reporting Tool

eULAT FULL REPORT VIEW



OBJ#1: Reporting Tool

SMS based application

HOW DOES eBAYANIHAN WORK?

OBSERVE



REPORT



VISUALIZE



MANUAL

HOW TO SUBSCRIBE

To subscribe to the eBayanihan Service:



- 1 Text **INFO**
- 2 Send to 215 84716
- 3 After receiving the message from eBayanihan, reply "YES" to be able to subscribe.

HOW TO REGISTER

To complete registration to eBayanihan:



- 1 After receiving the welcome message, send <YOUR NAME> <COMMA> <LOCATION> to complete your registration.
- 2 A message confirming registration will be sent.

HOW TO GET DETAILS

To find out more details on how to report a disaster:



- 1 Text **HELP ME** to get details on reporting and searching for disaster information.

HOW TO REPORT A DISASTER

To find out more details on how to report a disaster:



- 1 To report a disaster event text
POST <SPACE> <KEYWORD>
<COMMA> <BARANGAY>
<SPACE> <CITY/MUNICIPALITY>
<COMMA> <DETAILS>.

LIST OF KEYWORDS

- | | | |
|------------|-----------|--------|
| ACCIDENT | EVACUATE | RELIEF |
| BQY | FIRE | RESCUE |
| BRIDGE | FLOOD | ROAD |
| BROWNOUT | LANDSLIDE | WIND |
| EARTHQUAKE | RAIN | |

SMS Service for Feature Phones

HOW TO REPORT A DISASTER

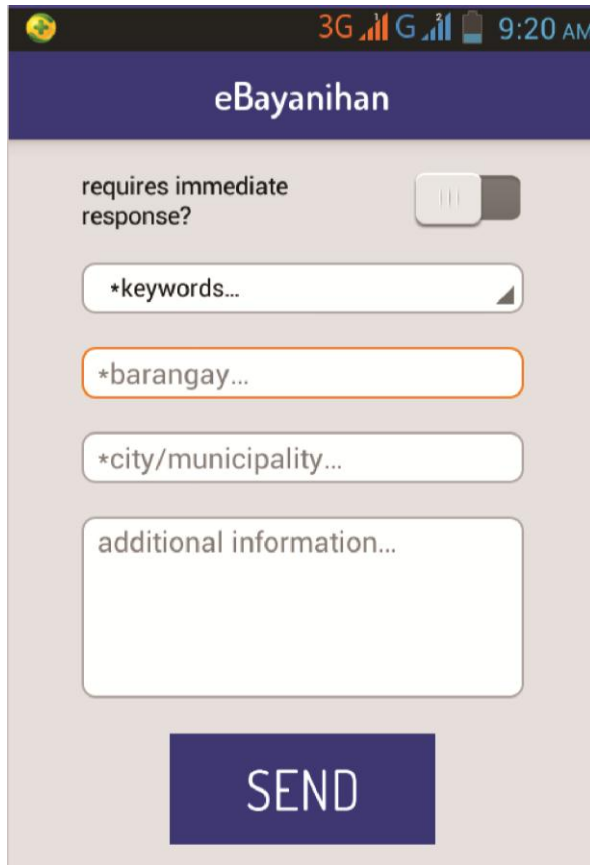


- 1 To report a disaster event text **POST** [SPACE] <Keyword> [COMMA] <Urgency> [COMMA] <Barangay> [SPACE] <City/Municipality> [COMMA] <Details>

POST flood, urgent,
Loyola Heights Quezon City,
hanggang tuhod

SMS Reporting

SMS Service for Smart/Android Phones



The screenshot shows a mobile phone interface for the 'eBayanihan' app. At the top, the status bar displays '3G', signal strength, 'G', and the time '9:20 AM'. The app header is a dark blue bar with the text 'eBayanihan'. Below the header, there is a toggle switch labeled 'requires immediate response?'. The toggle is currently in the 'off' position. Below the toggle are four input fields: a text field labeled '*keywords...', a text field labeled '*barangay...' (which is highlighted with an orange border), a text field labeled '*city/municipality...', and a larger text area labeled 'additional information...'. At the bottom of the form is a large blue button with the text 'SEND' in white capital letters.

1. Turn on or keep off “requires immediate response?” by sliding toggle button
2. Fill-in required details
 - a. Barangay
 - b. City or Municipality
 - c. Additional information
3. Click on the “SEND” button

Smart Phone Application



SMART Phone



REPORT

☒ NOT URGENT

☐ URGENT



keyword...



location...

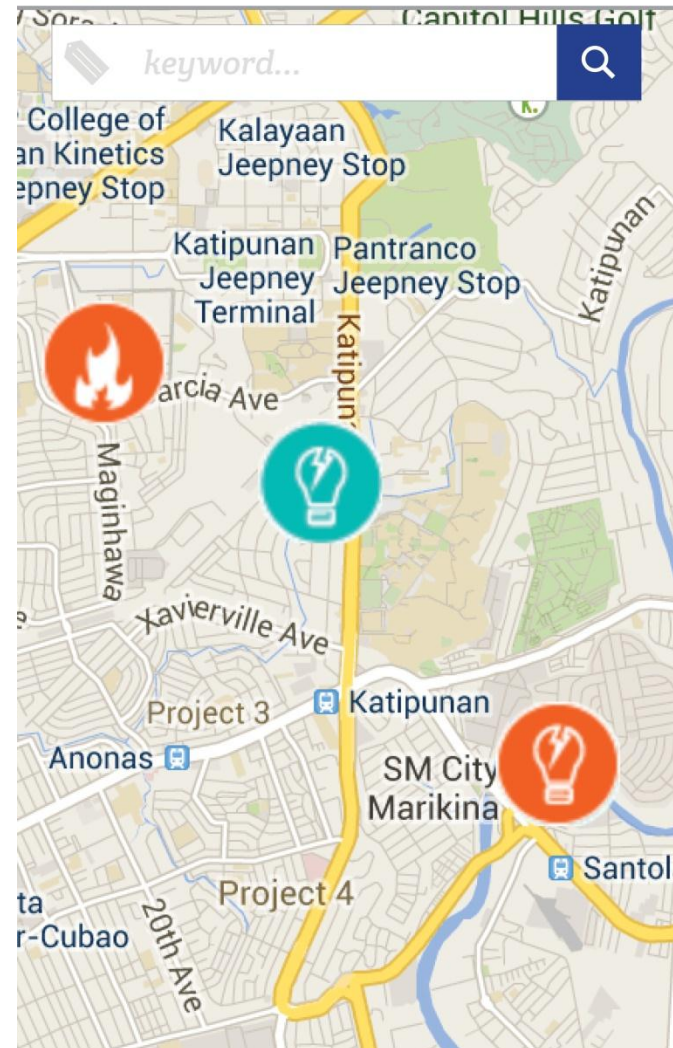


additional information...

SEND



REPORT



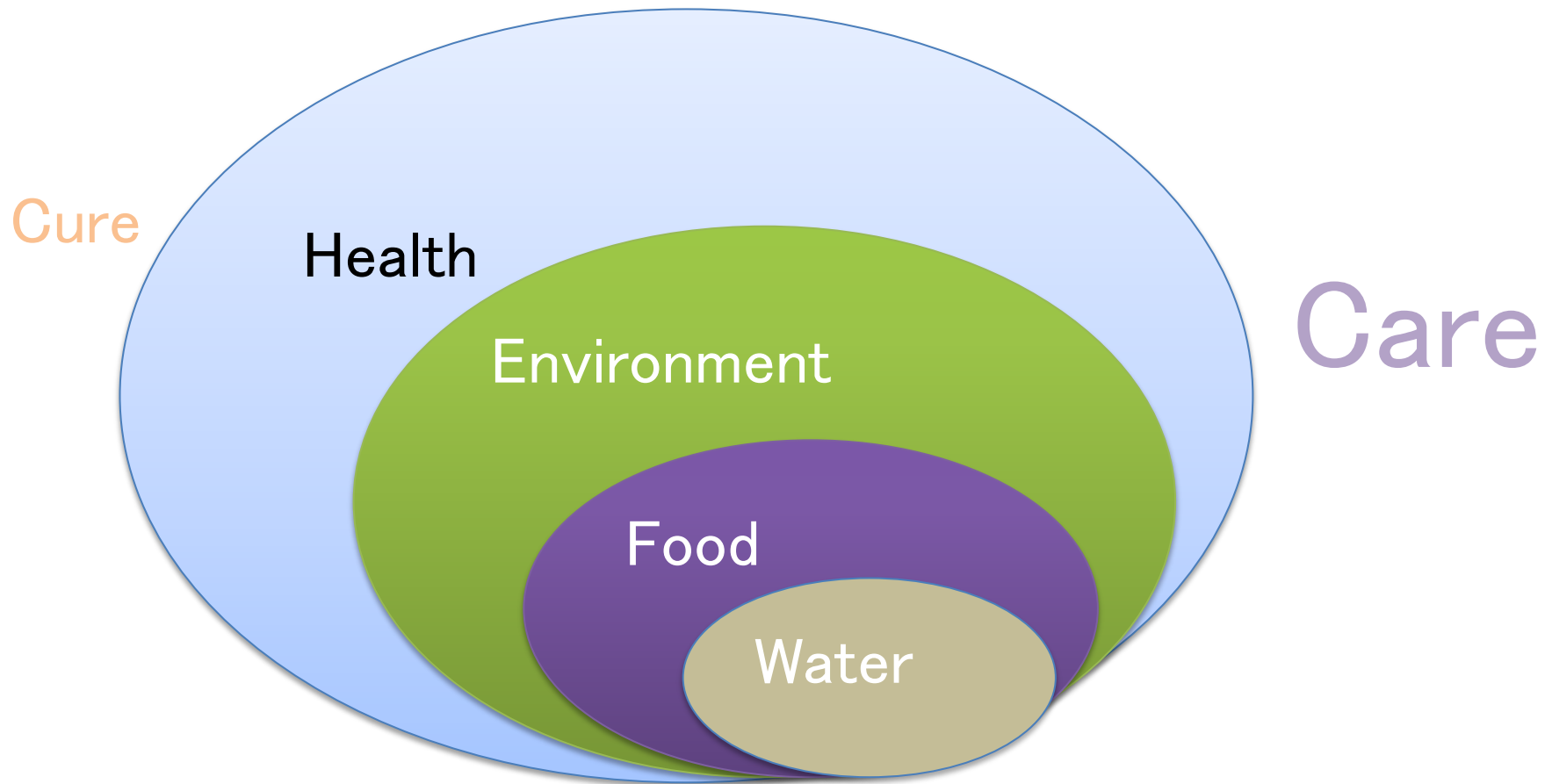
$$\text{Disaster Risk} = \frac{\text{Hazard} \times \text{Vulnerability}}{\text{Capacity}}$$

#0-2

ICTs for DISASTER focus on
Vulnerability,

(By Human Security and Nursing

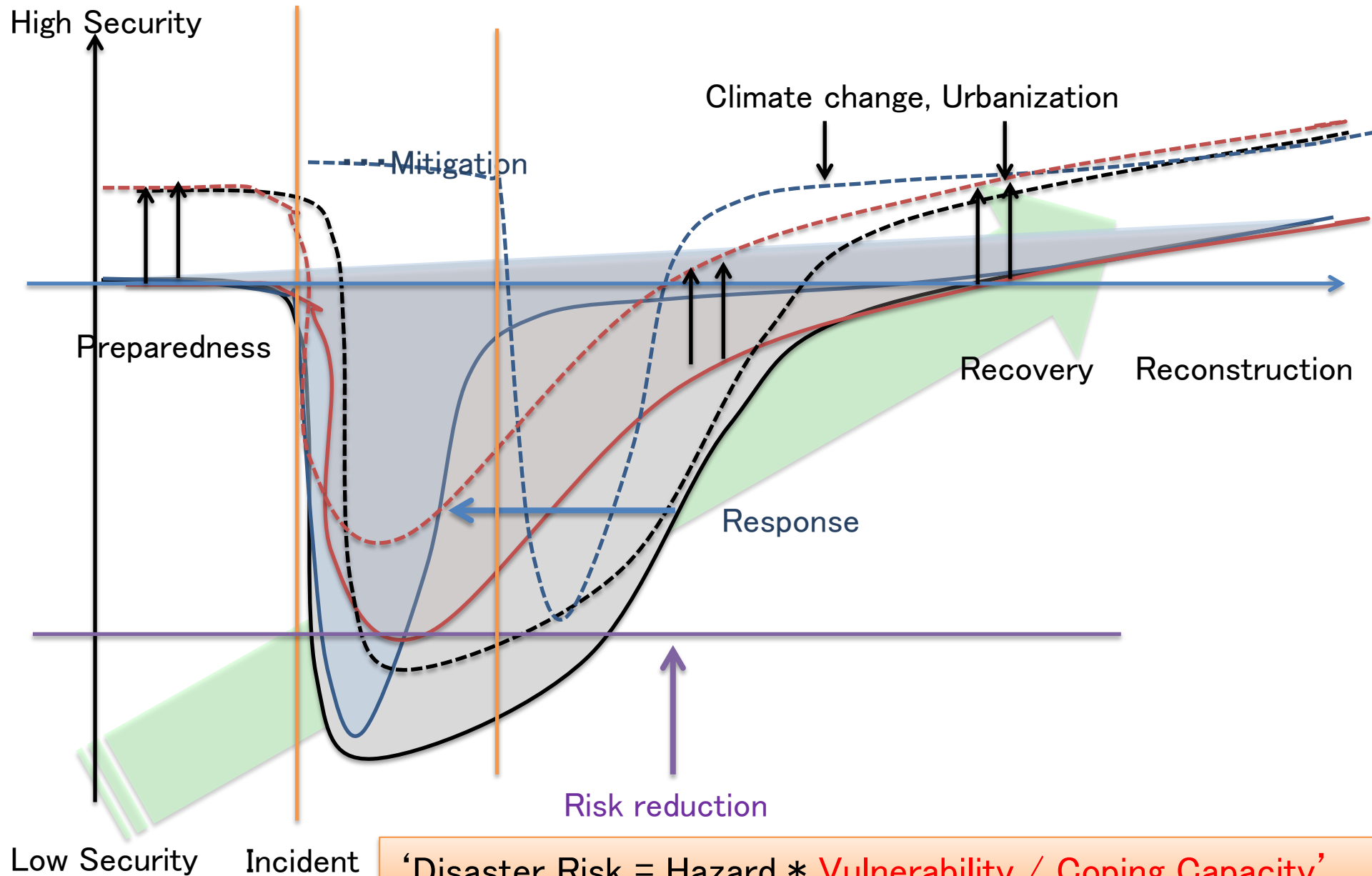
Paradigm of Nursing



HUMAN SECURITY MEASURES

now or never

Human Security and Disaster Nursing

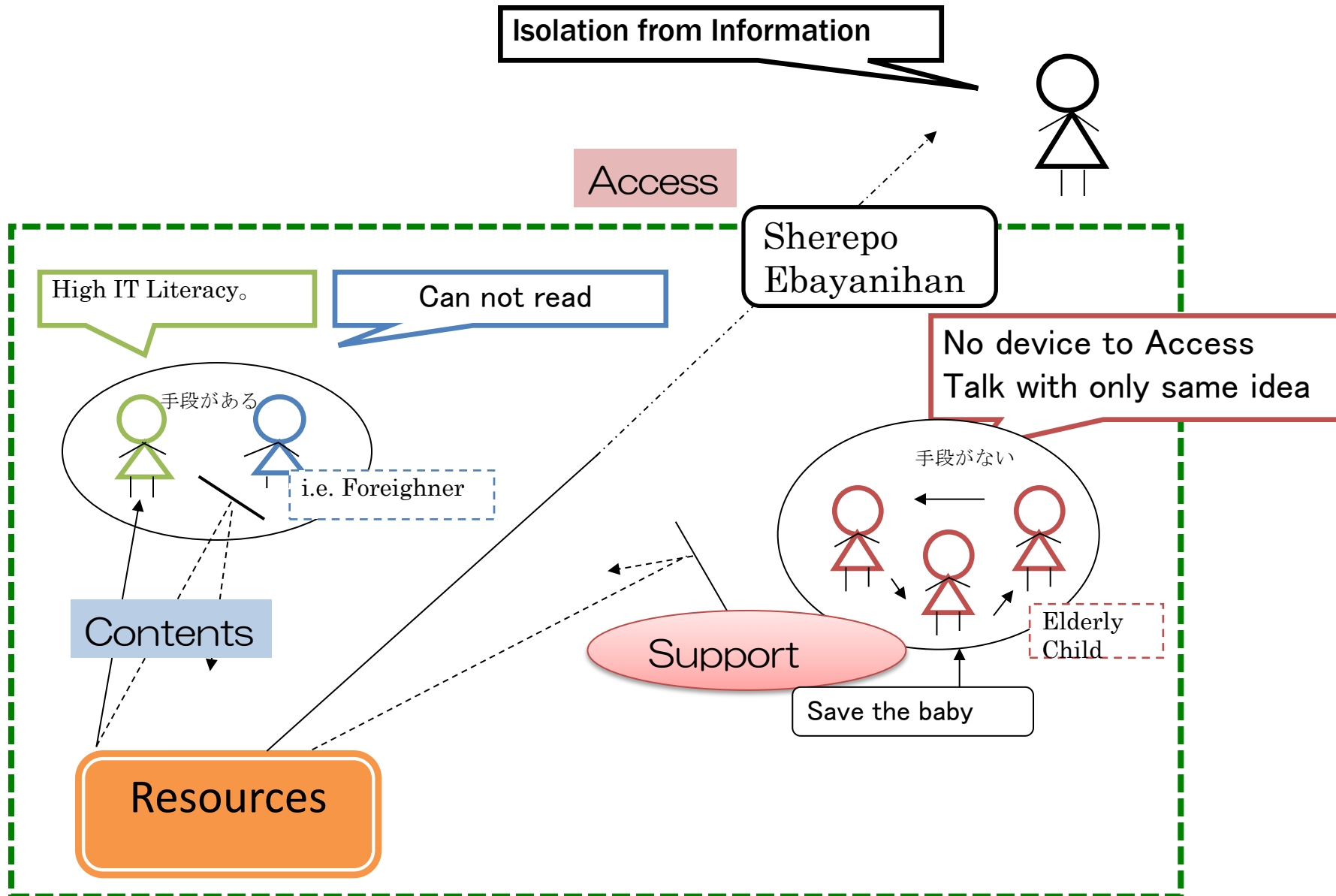


Health Issue and Vulnerability

Review of Nursing Research on Great East Japan Earthquake Disaster



Vulnerabilities of Information and Care needs



<Past Achievements>

Immediate Needs Based



Nurses

- Approx. 19.3 million nurses over the world
- 1,537,813 nurses in number of employed in Japan

Education and Training

- 234 universities offer nursing degrees
- Continuous education for Disaster Relief Nurses

Research

- Japan Society of Disaster Nursing
- WHO CC for for Nursing in Disaster and Health Emergency Management
- World Society of Disaster Nursing

Challenges & Tasks

Long-term, Social Problem-Solving
beyond Organizational Level

- Long-term Recovery Plans
- Community-based Disaster Reduction Plans
- Seamless & Continuous Support
- Comprehensive approaches to individual, family, and community problems
- Policy Proposal from Empirical Evidences
- Change Organization-Centeredness
- Review Disaster Ethics
- Experimental & Innovative Practices

Massive Human resource
But
No Bird's Eyes



Sherepo

Report the situation

Situation

Q1 食料 Food
状態を選択してください。

Q2 飲料水 Water
状態を選択してください。

Q3 衣類 Cloth
状態を選択してください。

Q4 建物 Shelter
状態を選択してください。

Q5 衛生 Sanitation
状態を選択してください。

Safety

Selector

Powered by Microsoft

Azure

Nothing
Few times a week
Once a day
Few times a day
Enough
Unknown

電源の状況は? Electricity
不明

通信の状況は? Communication
不明

施設ID :
[Input Field]

報告する Report!!

Nothing
Unstable
Stable
Unknown
Nothing
Internet
Phone
Both
Unknown

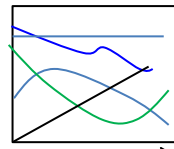
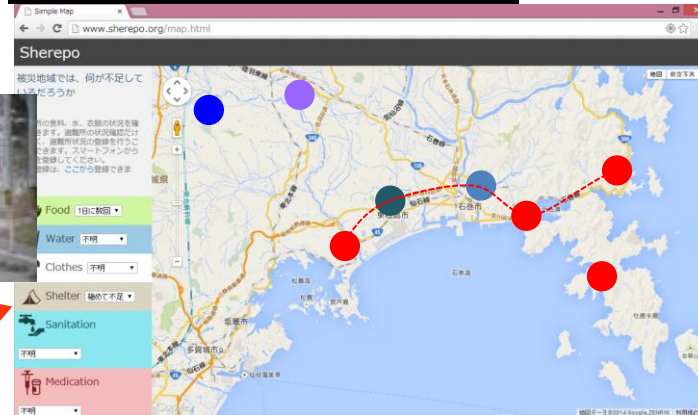
If users can not use any communication tool (internet) in their shelter, the information is stored on the phone and then submitted it whenever there is internet connectivity on the phone.

Use case in EOC

Situation of Food

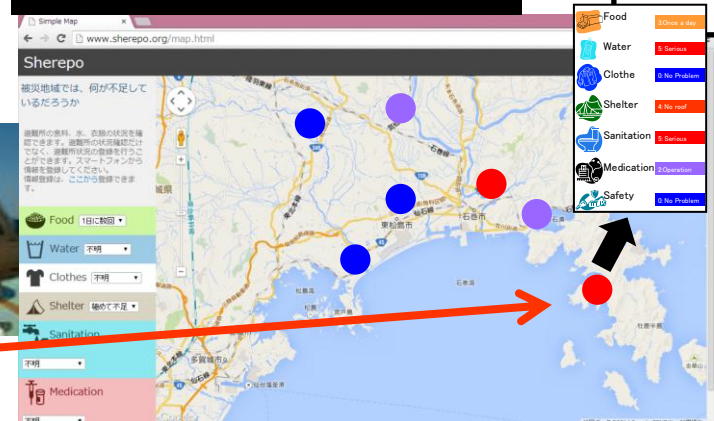


EOC



Trend

Situation of Medication



Official Reports

Rescue teams carry out actions depending on the situation

**Feasibility Study of Integrating Human
Dimension and Human Security in a
Disaster Management System:
Integrating eBayanihan and SHEREPO**

Subjects

Purpose

- Get information of the current situation related to human security, food shelter, drinking water, supplies, sanitary conditions, etc
- For specified/permanent shelters as well as temporary shelter

Intended users

Reporter (Information Provider)

- Shelter administrator, evacuees, reporting user, relief, etc..

Receiver (Information Consumer)

- NPO support planners, such as disaster prevention and departments of government.

Assumed available situations

- Up to 2 weeks after the catastrophe happened
- Information before evacuees support system is stabilized.



B

#1-1 : LESSON-LEARNED FROM DISASTER MARIO SHEREPO VISITS MANILA

SHEREPO Visit to Manila

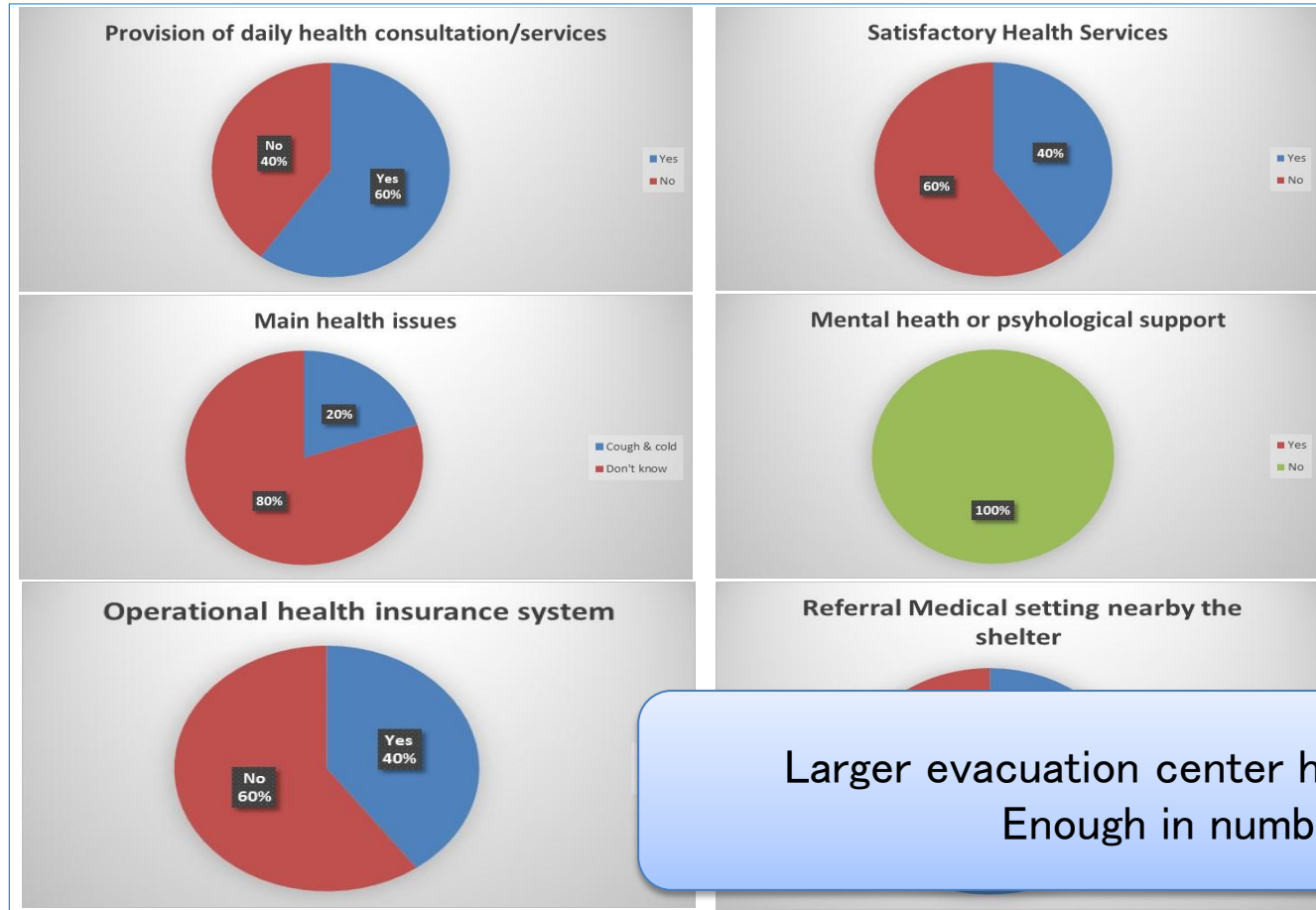
September 21, eBayanihan-SHEREPO representatives visited a barangay in Novaliches, Quezon City in the aftermath of Typhoon Mario. In the afternoon, the group went to Fort Santiago in Intramuros, Manila for a taste of Filipino history.



SHEREPO Team
at Fort
Santiago

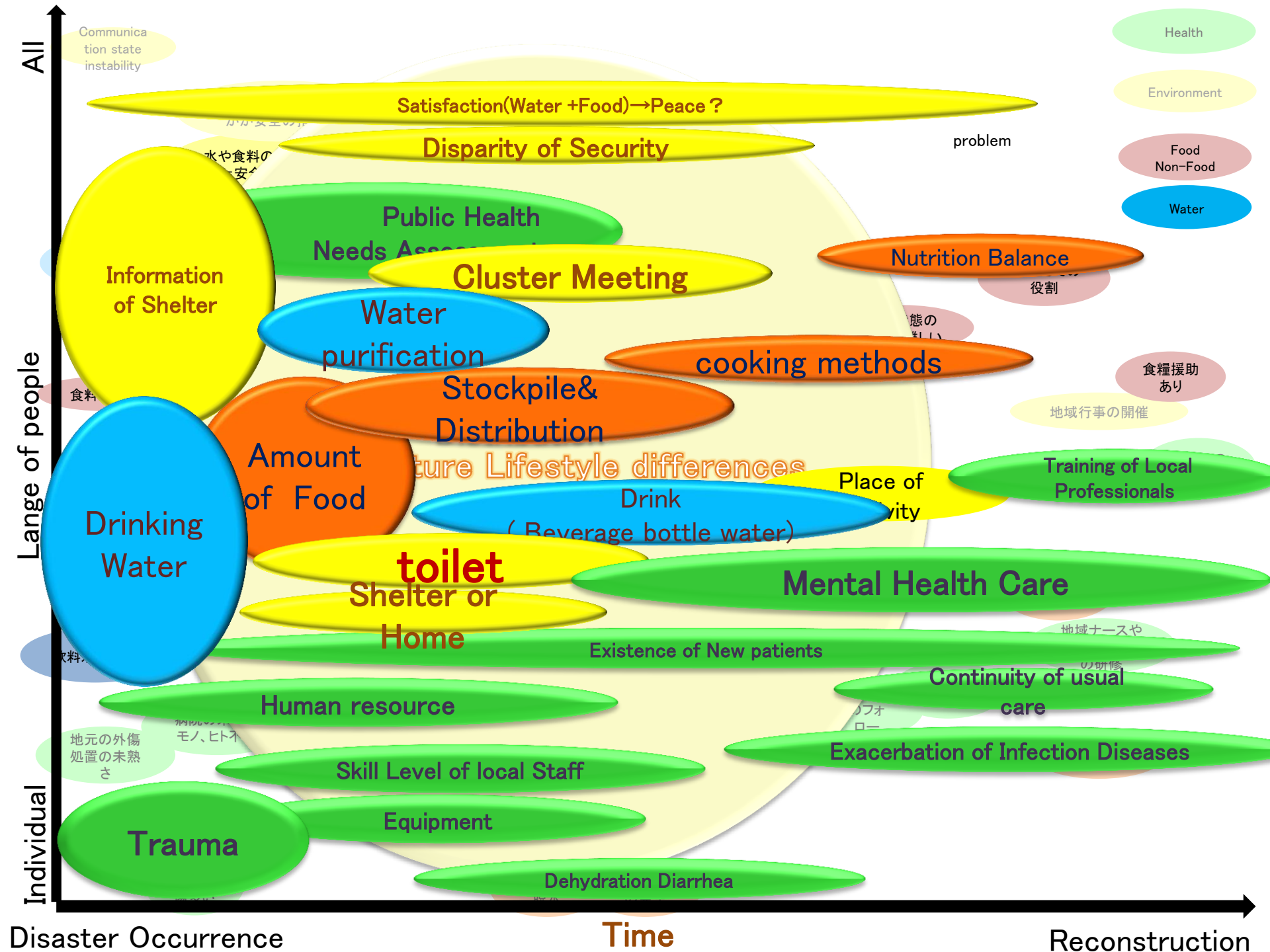
Survey results from data collected during Typhoon Mario

Local Barangay staff were contacted by phone and explanatory meetings held at Barangay offices. Five shelter managers were interviewed; they received 325 individuals and 30 families;



Larger evacuation center have equipment
Enough in number ?

**# 1-2 FOCUS INTERVIEW WITH FIRST
RESPONDER AT THE TIME OF
TYPHOON YOLANDA**





#2: DEMONSTRATION OF SIMULATION USING DISASTER SCENARIOS

eBayanihan – SHEREPO Training and Workshop in Japan (November 2014)

Highlights: Lessons Learned



•Simulation Training

- Define Roles (add Roles eg. need to assign community leader in shelter management when using online communication)
- Understand how system will be used by different groups
- Decision points are important in Simulation (e.g. who will make the final decision)

•Simulation Lecture

- Phases
- Disaster management should also consider how to manage wellness of the first responders

Highlights: Lessons Learned

- Field Trip
- Simulation Training
- Simulation Lecture

Question:

How will eBayanihan x Sherepo be helpful in this proactive approach?

- Preventive measures
- Risk Mapping / Exposure Mapping

- City is an exemplar of how we should do things in the Philippines
 - Proactive/Preventive Approach (breakwater, shelters, evacuation plans, signs)
 - Health Sector is an active part of Disaster Management


#3: TRIAL INTEGRATION EBAYANIHAN AND SHEREPO

Content Themes (Rapid Assessment)

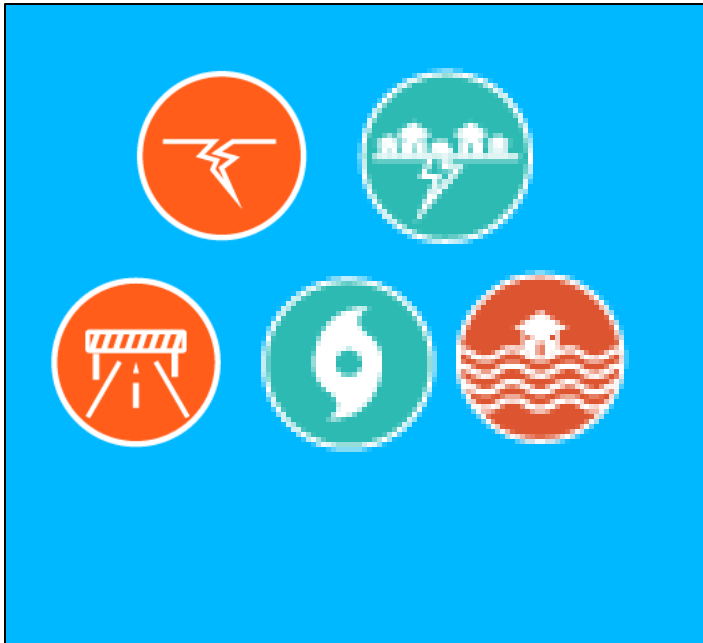
Questions:

1. Is the list complete?
(source of power, signal, communication, road access not part of 7)
2. Levels/Scale – define
3. What is expected interpretation?

- Elements of Rapid Assessment
 - Food
 - Water
 - Clothes
 - Accommodation / Shelter
 - Sanitation
 - Medical Treatment
 - Safety
 - Others

| | | |
|---------|--|----------------------|
| Q1 |  Food | Unknown |
| Unknown | | Unknown |
| | | None |
| | | 1 time / 2 |
| | | 1 time / day |
| | | More than once / day |

Content Access (User Interface)



- What content to gather?
- How to design?
 - Universal colors
 - Universal understanding
 - Localization
 - Devices
 - Mode of sending information (e.g. sms)

Content Form

(Access to existing Materials)

How to shorten information

Quick and Easy access

No cognitive overload (not much processing)

In just one click (not two, not three)

Language Translation validation

Localization

- Content to relevant information is important
- eBayanihan x Sherepo should provide this information

ICT Infrastructure and equipment

Questions:

1. SMS data vs Smart data
2. What is our back up if communication lines go down?
3. Engineer wearable gps
4. Use of satellite phones

- Very crucial as information will ride on the infrastructure

Access modalities

Questions:

1. What information is needed by institution
2. What information is needed by individual

- Institutional or Individual

Content Delivery

Questions:

1. From experience, when does communication line go down?
2. How much content can be placed on a local phone?

- Offline or online

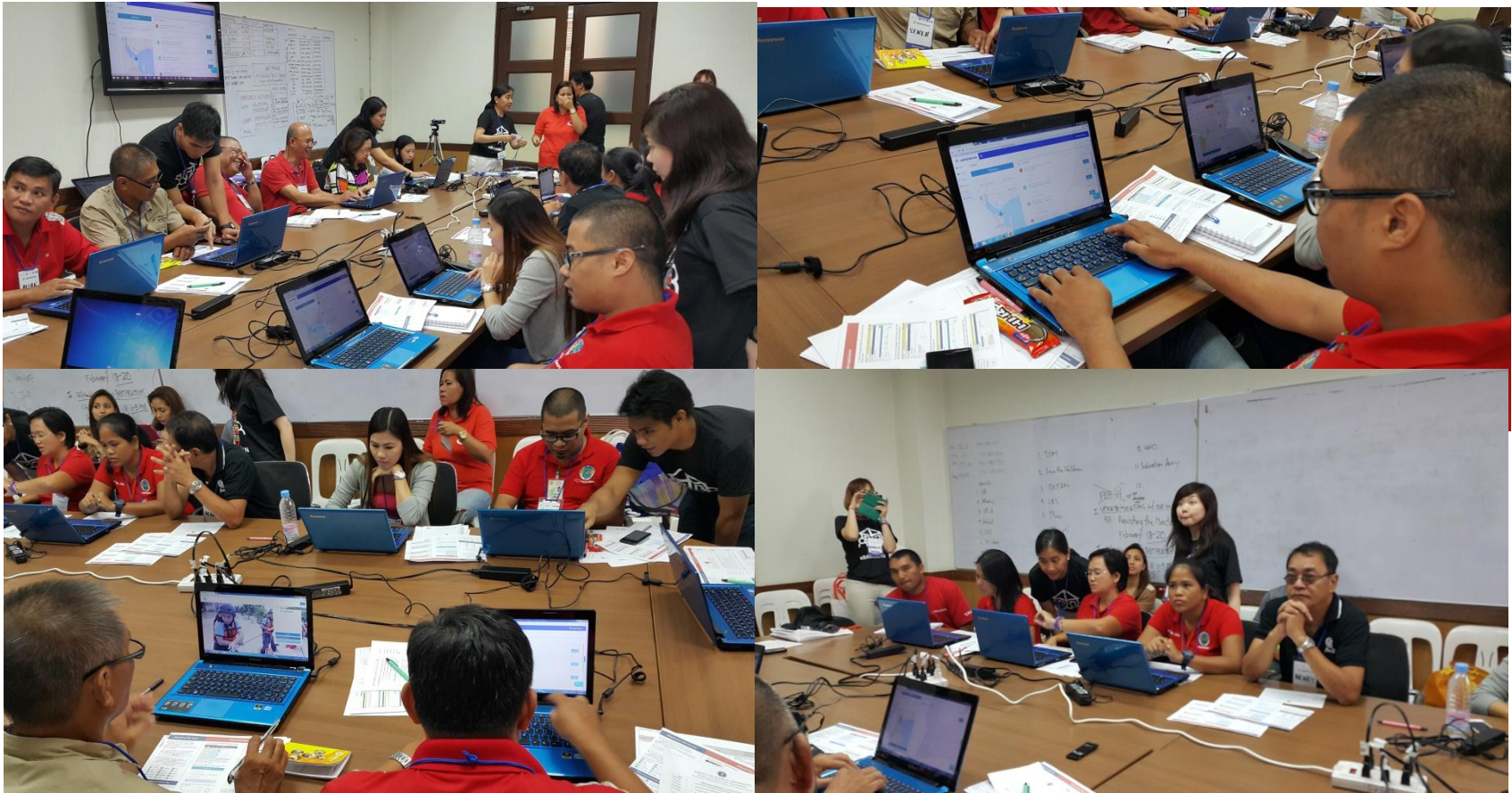
#4 :FEASIBILITY STUDY SIMULATION IN TACLOBAN



The Tacloban City Deployment of eBayanihan-SHEREPO started with a presentation by Ma. Regina Estuar, PhD of Project eBayanihan and Sakiko Kanbara of SHEREPO to Hon. Alfred Romualdez, City Mayor of Tacloban, Leyte.




The presentation was followed by Hon. Romualdez' s sharing of the city' s experiences at the wake of Typhoon Haiyan (Yolanda) and how the city has since worked towards recovering from the said disaster. Dr. Estuar and Dr. Kanbara also responded to the mayor' s questions regarding the systems (eBayanihan and SHEREPO).




After the presentation to the Mayor, the team commenced the training and simulation workshop with the participants, which include members of TACRU (Tacloban City Rescue Unit), a Tacloban CDRRMO representative, a TOMEKO-PNP representative, City Health Office representatives, and barangay officers (captains and treasurer) from Brgy. 5-A and Brgy. 95.



The attendees participated in the simulation exercise which allowed them to experience using the combined eBayanihan and SHEREPO web tools. This exercise was followed by an open forum through which the participants shared their sentiments about the combined tools and how these can be further enhanced.





Barbara Anne May

Home

Socials

Maps

eHanda

eUlat

SheRepo

Shelter Reports

Show

10

▼

entries

Search:

| Date | Name | Barangay | Municipality/City | Province | Action |
|-----------------------|-------------------------------------|------------------------------------|-------------------|----------|-----------------------------|
| Feb 17, 2015 11:13 AM | Tast Shelter 1 - School (Arcallana) | Barangay 69 | TACLOBAN CITY | LEYTE | View Report |
| Feb 17, 2015 10:40 AM | Test Shelter 4 - Hall | Barangay 105 (Suhil) | TACLOBAN CITY | LEYTE | View Report |
| Feb 17, 2015 10:39 AM | Test Shelter 1 - Schoolmot | Barangay 12 (Palanog Resettlement) | TACLOBAN CITY | LEYTE | View Report |
| Feb 17, 2015 10:38 AM | test shelter 3-church | Barangay 53 | TACLOBAN CITY | LEYTE | View Report |
| Feb 17, 2015 10:36 AM | Sacred Heart Parish Church (carla) | Barangay 6 | TACLOBAN CITY | LEYTE | View Report |
| Feb 17, 2015 12:08 AM | Test Shelter Profile 1 | Barangay 17 | TACLOBAN CITY | LEYTE | View Report |
| Feb 11, 2015 06:34 PM | Palo Elementary School | Salvacion | PALO | LEYTE | View Report |

Showing 1 to 7 of 7 entries

Previous

1

Next

New Report

Chat

Still using the simulation action cards provided, the participants successfully created and updated 5 shelter profiles using the SHEREPO tool on eBayanihan.

View Shelter Report English ▼

Shelter Information

Water

Sanitation

Medication

Food

Clothing

Safety & Protection

Shelter Name

Tast Shelter 1 - School (Arcallana)

Shelter Type

School

Reporter Role

Evacuee

Shelter Capacity

Complete

Total Male Evacuees

10

Total Female Evacuees

10

Relief Agency/NGO Managing Shelter

CSWDO

Region

EASTERN VISAYAS

Province

LEYTE

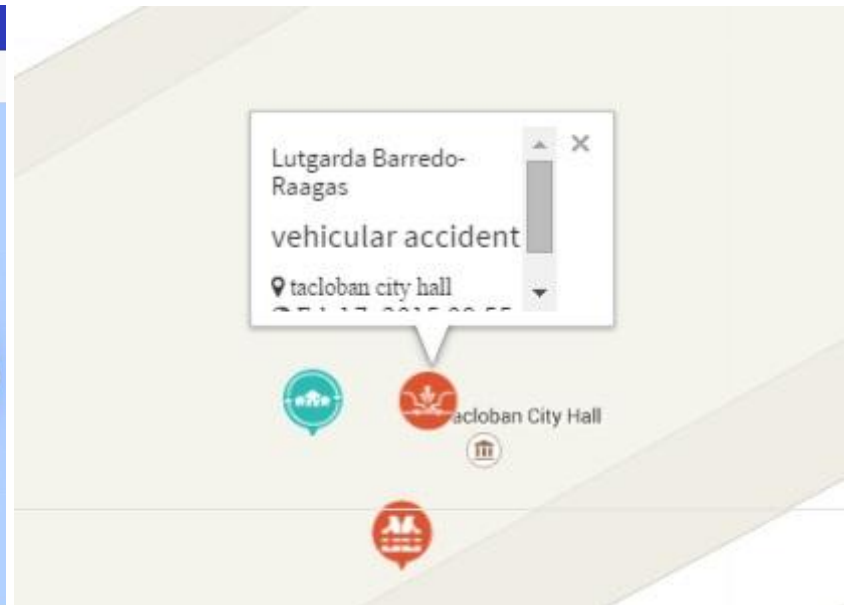
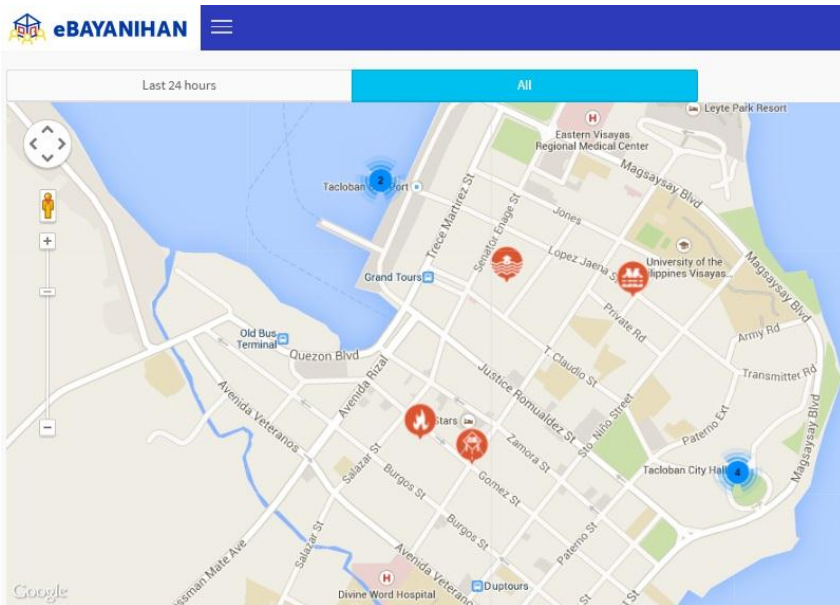
City/Municipality

TACLOBAN CITY

Barangay

Barangay 69

The simulation action cards provided sample data that the participants used to create shelter profiles using the SHEREPO tool. The participants added to the sample data to fill in the rest of the shelter profile form (e.g., location).



Using the simulation action cards provided, the participants successfully posted 12 CitReports on eBayanihan, all of which are visualized on the Map.



The training and simulation workshop concluded with the presentation of certificates of participation as well as eBayanihan tokens for the participants.



The eBayanihan-SHEREPO team likewise presented Hon. Romualdez with tokens of appreciation for having accommodated both projects in Tacloban City.

Result

| | CONTENT | USEABILITY |
|---------------------------------|---|---|
| PROBLEM | Confidentiality | Adaptability to local community |
| BEST FEATURE | Health Sector – SHEREPO First Responders – eBayanihan | Translation to top 10 dialects |
| IMPROVEMENT/ RECOMMENDATIONS | Demographic Info on: 1. High Risk 2. PWD 3. Children below 5 y.o. 4. Pregnant 5. Senior Citizens Mobility Levels | Cross-posting Printed version of reports Open-ended reports |

REVISIONS

New Report

Shelter Reports

 Home

New Report

Shelter Reports

Show entries

Search:

| Date | Name | Barangay | Municipality/City | Province | Action |
|-----------------------|------------------------|-----------|-------------------|----------|-----------------------------|
| Feb 11, 2015 06:34 PM | Palo Elementary School | Salvacion | PALO | LEYTE | View Report |

Showing 1 to 1 of 1 entries

Previous **1** Next

Chat

The screenshot displays the eBAYANIHAN web application interface. The top navigation bar includes the eBAYANIHAN logo and a user profile for Regina Estuar. The left sidebar contains navigation links for Home, Socials, Maps, eHanda, eUlat, and SheRepo. The main content area is titled 'Shelter Reports' and features a 'New Report' button. Below this is a table with the following data:

| Date | Name | Barangay | Municipality/City | Province | Action |
|-----------------------|------------------------|-----------|-------------------|----------|-----------------------------|
| Feb 11, 2015 06:34 PM | Palo Elementary School | Salvacion | PALO | LEYTE | View Report |

Below the table, it indicates 'Showing 1 to 1 of 1 entries' with 'Previous', '1', and 'Next' navigation links. A search bar is located at the top right of the table area.

In the bottom right corner, a chat window titled 'eBAYANIHAN' is open. It shows a chat history with messages from 'Chatbox' and 'restuar'. The chat input field at the bottom contains the text 'Enter chat here...' and a 'Post' button. The system clock in the bottom right corner shows 9:51 PM on 2/15/2015.

Forms

New Shelter Report

English ▾

 [Back to List](#)

Disaster Shelter / Evacuation Site

Water Provision

Sanitation & Hygiene

Health Services

Food Items

Non-Food Items

Protection

Shelter Name

Shelter Type

School ▾

Reporter Role

Evacuee ▾

Shelter Capacity

Unknown ▾

Total Male Evacuees

Region

-- Select a Region -- ▾

Province

 ▾

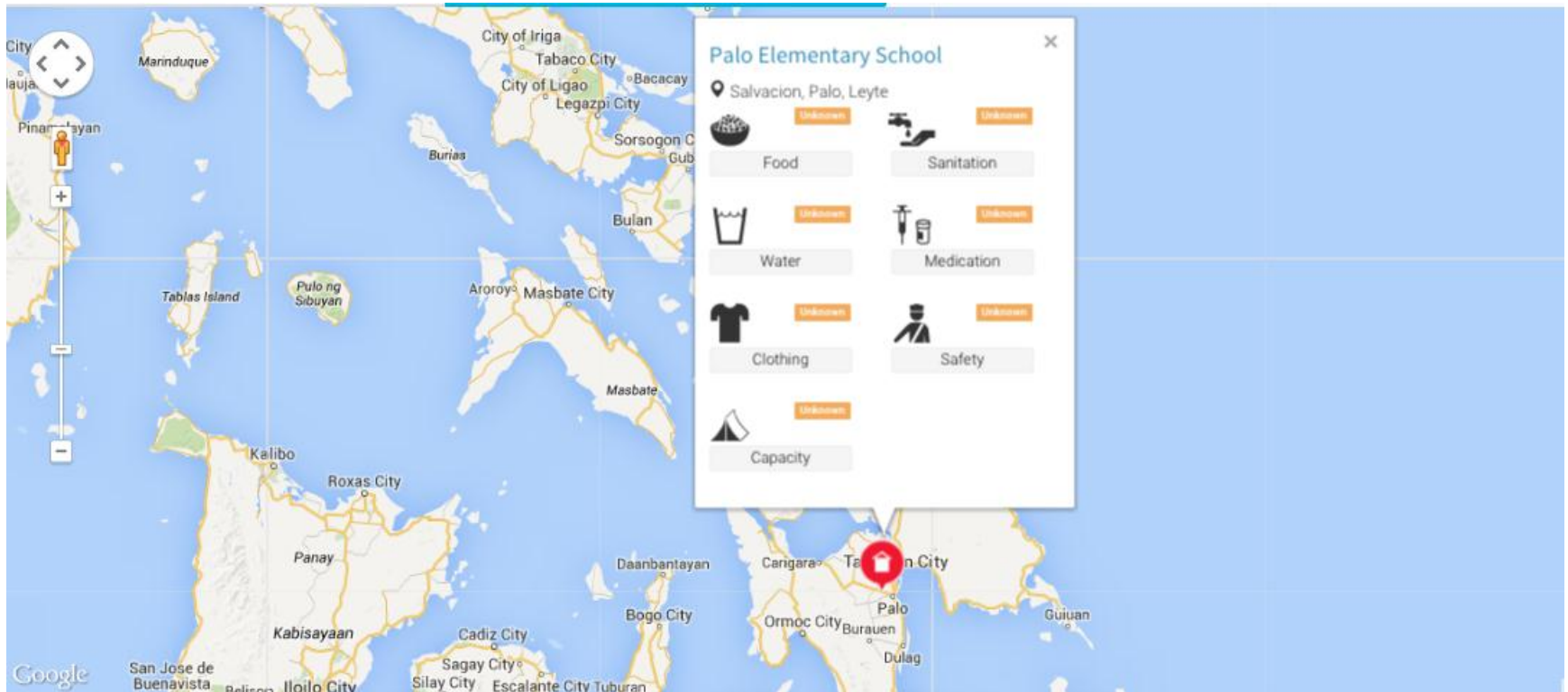
City/Municipality

 ▾

Barangay

 ▾

View



Success

- Integration of two systems
- Outreach to affected area
- Collect information of survivor
- Useful for first responder of health sector

Note: Way forward

- Integration of the data
- Visualization to decision make
- Sustainability
- Continuous monitoring pre-disaster
- API to government system
- Find out offline area
- Prioritize the vulnerable place

Possible Research Collaboration

Non – Technical Paper

- *Creating a Framework for Disaster Simulation
- Understanding Roles of Persons and Information in Disaster
- Cultural Differences and Similarities in Understanding Disaster Icons (– share transcultural nursing)
- *Creating Meaningful Information from Human Security Data in eBayanihan x Sherepo
- *Measuring UX from Simulation

Technical Papers

- Systems Integration Between Two Disaster Management Systems
- Visualizing Human Security and Disaster Events
- Creating Predictive Models on Human Security during Disaster Events
- Datamining Disaster Information in Japanese Language
- Pre-allocation of Resources on Disaster (Tactical and Logistical) – eg. Delivery systems
– eg. Donor system
- System Validation of eBayanihan x Sherepo

Achievements

1. Sakiko Kanbara, Satoru Yamada, Miho Watanabe, Ngatu Rogers, Satomi Kubota, Yoko Nakayama, Sayumi Nojima, Hiroko Minami, Disaster Nursing on The Great East Japan Earthquake Disaster from Published Articles in Japan Society of Disaster Nursing March 2011–August 2013, World Disaster Nursing Science,
2. S. Kanbara, N. Roger, M..R.J. E. Estuar, M. Nishigawa, M. Morosawa Y. Nakayama, Provision of Foods and Non-Foods in Manila Shelters during ‘Super Mario’ related Flood Disaster.
3. S. Kanbara, K. Hiramoto, M..R.J. E. Estuar, Y. Ishimine, Y. Nakayama, S. Nojima, Development of Application for Shelter Information Sharing on Health Security and Disaster Nursing, 19th World Congress on Disaster & Emergence Medicine (WCDEM)
4. Estuar, M. R., Sakiko, K.N., eBayanihan x SHEREPO. Asia Resilience Forum. Sendai, Japan. April 2015.



UN World Conference on
Disaster Risk Reduction
2015 Sendai Japan

Invited to UNWCDRR Public Forum in Sendai

Asia Disaster Resilience Forum
2015 –Building ICT-enabled
Disaster Resilient Societies in
Asia from the grassroots

Organized by World Bank –



Next plan (FY 15-16)

- Installed by international NPO (J/P)
- Development of tool kit of simulation gaming education
- Propose next design

Sherepo2

<http://sherepo2.azurewebsites.net/> <http://sherepo2.azurewebsites.net/Analytics>

- Operational framework for the future is under consideration, though implemented by Shelter Report team.
- Infrastructure such as cloud ensure by company contribution
- The planned response training
- To ensure stability, Twitter changes to the API for outgoing
- Adapted into "shelter status report" format of local governments
- Set of training mode



Powered by Microsoft Azure

Philippine Ateneo Team

| | | | |
|------------------------------|----------------------|--|--|
| Ma. Regina Justina E. Estuar | Associate Professor | PHD Social Psychology MS Computer Science | Data Mining, Mobile Applications, Social Computing |
| Marlene M. De Leon | Technical Specialist | PHD Computer Science | Text Social Computing, Project Management |
| John Boaz Lee | Technical Specialist | MS Computer Science | Social Network Analysis |
| John Owen Ilagan | Web Developer | MS Computer Science | Web Developer |
| John Sixto Santos | Web Developer | MS Computer Science Student | Web Developer/ Data mining |
| John Noel Victorino | Research Assistant | MS Computer Science student | Mobile web Programming |
| Jhoanna Isla | Web Developer | MS Computer Science Student | Web programming |
| Maria Dianne Santos | Graphics Designer | BA Information Design | Graphics Design |
| Barbara May | Project Staff | | Communications, Logistics, Documentor |

Philippine Partner Agencies

- Project NOAH (Nationawide Operational Assessment of Hazards) – Dr. Mahar Lagmay, University of the Philippines
- Project AGOS by Rappler.com – Maria Ressa
- Office of Civil Defense (OCD)
- National Disaster Risk Reduction and Management Council (NDRRMC)
- Department of Science and Technology (PCIEERD–DOST)
- Department of Local and Interior Government (DILG)
- National Anti-poverty Commission (NAPC)

Japan Team

| | Academic degree | Specialty | Role expectation |
|------------------|---------------------|---------------------|--------------------|
| Sakiko Kanbara | Ph.D(Med.) | Disaster Nursing | Coordinator |
| Sayumi Nojima | D NSc. | Family Nursing | Consultation |
| Satoru Yamada | Ph.D(Eng.) | Nursing Management | System Coordinator |
| Yoko Nakayama | Ph.D(Ns.) | Psychiatric Nursing | Field work |
| Ngatu Rogers | Ph.D(Med.) | Public Health | Field work |
| Miho Morosawa | Master Student | Nursing | Field Work |
| Megumi Nishigawa | Master Student | Nursing | Field Work |
| Masanori Osaki | | | Web Design |
| Kenji Hiramoto | University of Tokyo | | Consultation |
| Masanori Hidaka | Infocom | | Coding Sherepo |

Japan Partner Agencies

- University of Tokyo
- Keio University
- National Institute of Health
- Infocom
- Eyes, Japan
- Fixer
- Heart Beats
- Automation.jp

Maraming salamat

ありがとうございました。

THANK YOU