

Visual Communication Campaign Strategy in Building a Sustainable Local Community Preparedness Towards Tsunami

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Abstract: Indonesia is located between three active tectonic plates, stands as the biggest archipelago country with 95.181 kilometer long coastline which makes us prone to natural disaster occurrence such as tsunami. According to National Institute of Sciences, Indonesia has been stroked by tsunami for thirty times. The biggest is Tsunami Aceh on 26th December 2004 with around 70.000 casualties (<http://www.bbc.co.uk>, downloaded 0/27/2012 12.08 pm). Field studies point out that tsunami mitigation knowledge among people in Indonesia, especially the coastal community, is still inadequate. Due to the special characteristic of coastal community, their preference and behavior, certain communication strategy is needed to deliver the complex mitigation issues so as to be easily accepted and memorized.

This paper contains tsunami mitigation campaign strategy for coastal community, utilizing interdisciplinary study, combining mass communication and visual communication design, emphasizing on vernacular (folksy) content, applied verbally and visually on the strategic medias, to then expected to transform the coastal community's behavior by degrees to built a good community response towards tsunami.

Key words : *coastal, mitigation, tsunami, informational design, social campaign, mass communication, visual communication, vernacular.*

1. Introduction

Indonesia lies near three active tectonic plates (Eurasia, Pacific, and Indoaustralia), for this geographical position, added with 95.181 kilometer coastline length, the second highest in the world (<http://indomaritimeinstitute.org>, downloaded 9/24/2012 12.40 pm) Indonesia is prone to natural disasters such as earthquake, volcanic eruption, and also giant tidal wave-tsunami. Tsunami in Aceh last 2004 with around 70.000 casualties, was a world-shocking occurrence, unfortunately, it's not the only one, for all of the coastal areas in Indonesia-especially those which face Indian ocean, had been hit by tsunami. Pangandaran, Padang, Mentawai, and the latest one occurred in Simeuleu island 11th April 2012.

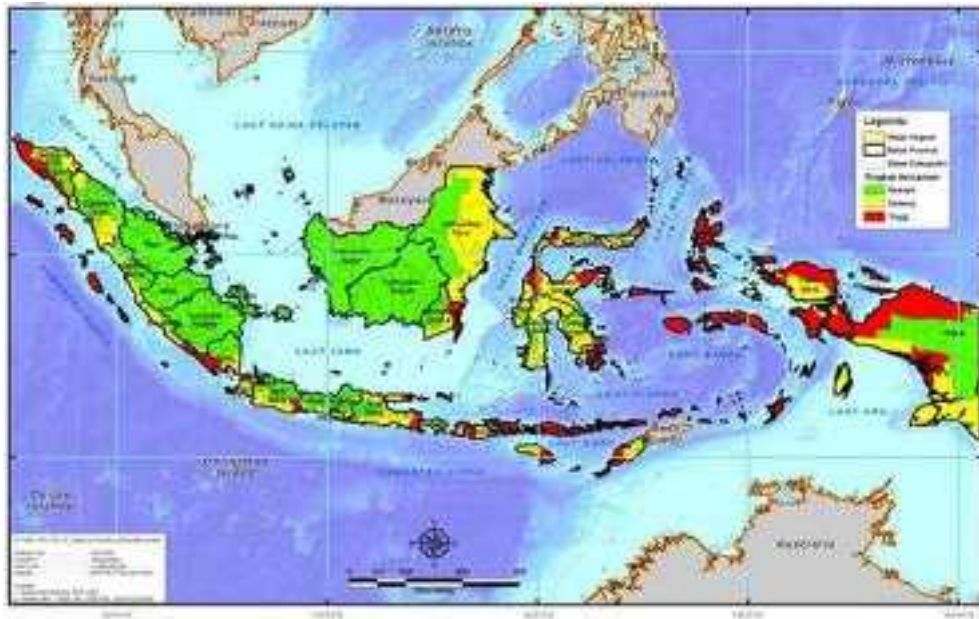


Figure.1 Map of Tsunami Prone Areas in Indonesia. (<http://geospasial.bnpb.go.id>)

Adequate infrastructure does play an important role in tsunami mitigation, yet without good public awareness, the mitigation process won't be succeeded. The absence of awareness can lead to infrastructure mistreatment, for example, tsunami tidal gauges (buoy) and evacuation route sign were being vandalized by local people intentionally and unintentionally. Local government has tried to conduct socialization about tsunami's mitigation strategy, yet the facts on the field show the socialization is not quite effective.

Mitigation strategy itself is a pretty complicated material, meanwhile the targeted audience own special characteristic and insight, they come from mid to low education and economy class. This means, mitigation messages should be delivered in certain communication strategy to make it easily understand and memorable.

1.1 Problem Identification

Based upon the background in this study, authors propose the following problem formulation:

1. What is the best communication strategy to increase public awareness toward tsunami mitigation?
2. What media work best to deliver mitigation information?

1.2 Goal and Purpose

Goal :

To raise public awareness-especially people in coastal area- toward tsunami and building community preparedness.

Purpose :

1. To build a quick-response behavior among coastal society when tsunami strike.
2. To impart tsunami mitigation knowledge to coastal community, from the basic knowledge about tsunami, to the correct response and evacuation plan towards tsunami.

1.3 Issue Limitation

1. This study, scope on tsunami mitigation in high-potential tsunami area which is also a tourism site. Pelabuhan Ratu beach, West Java, Indonesia is taken as sample.

2. The main target audience is young adult, men and women, aged 20-40 years live in coastal areas, work as housewives, merchants, fishermen and lifeguards.

2. Problem Analysis

2.1 Theory Studies

These are the fundamental plane for designing communication strategy and solve the problem.

2.1.1 Tsunami and Mitigation

Tsunami derives from Japanese words 津 ; *tsu* means harbor, and *nami* means wave, therefore tsunami defines as big wave that occurred in the port. The causes are varied, from underwater landslides, volcanic eruption, and meteor hit, but 90% tsunami are caused by earthquake that centered under the sea. In deep ocean, tsunami waves can travel at the speed of 500-1000 km per hour. But the waves height in the deep ocean is only about 1 meter. Thus, the fisherman can't feel the accelerating wave. Conversely, when approaching the shore, the speed decreases to about 30 miles per hour.

Tsunami can't be predicted unless an earthquake has occurred, it means time range between early warning and actual hit is really short that people have to react real quickly to avoid the giant wave. In other hand, nature has its own alarm which can identify the approaching tsunami. Knowing those sign can help people to react early and save themselves.

2.1.2 Mass Communication

Harold D. Lasswell bring together mass communication element into this question:

?Who Says What in Which Channel to Whom With What Effect??

While mass communication characteristic are:

1. Publicly- inclusive, free-for-all and received collectively or by big number of people.
2. Rapid-designed to reach the mass briefly and simultaneously.
3. Transient-created to fulfill immediate necessity, consumed once only, tend to be sensational.

2.1.3 Informational Design

Informational design is the ability to shape information into more effective and efficient way. When a database is complex and disorder, visual representation can depict the data in clearer way. Information design aim for wide range and heterogenic target audience, therefore market segmentation and information management are needed. Informational design consists of info graphic and way finding. It characterized by the use of clear typography, pictogram and feasible content.

2.2 Pelabuhan Ratu Beach Social Culture Studies

The statistic below conveys Pelabuhan Ratu Beach resident come from low educational background, most of which only graduated from elementary school. They are also considered as lower economy class. Department of Family Planning (*Keluarga Berencana*) and Women Empowerment(*Pemberdayaan Perempuan*) Sukabumi said, from the family database in 2010, 52.27% family in Sukabumi Regency are clafified as poor.

Table 1 Total Population by School Participation Percentage Rate Group by Age and Sex in the Sukabumi District Year 2009. Source : Susenas 2009

AGE	GENDER		
	MALE	FEMALE	MALE + FEMALE
7 - 12 yo	98.83	97.48	98.14
13 - 15 yo	77.32	83.03	79.9
16 - 18 yo	56.29	31.49	44.3
19 - 24 yo	3.2	0	1.47

Another important aspect is their psychograph (behavior and insight). Based on conducted observation, target audience are open and modest by nature, they love *dangdut*, have low literal interest, spent most of their time gathering, humorous, and prefer simple and easy stuffs. We collect some data about their visual preference. These are taken from their surrounding; fisherman ship, public transportation and local magazine.



Figure.2 Local society visual preference (personal documentation)

In relation to visual and verbal culture, the findings shows that the visual content including colours, typography, images, and tone and manner used in the environment often shows bright or primary colors, emphasizing images using border line, delivering messages trough bold and diverse typography, with fun tone and manner and often accompanied by attractive young woman as the illustration. The language used is witty, often said in local or slang words, which corresponds with their humorous and expressive nature.

From open interviews, we found out that coastal society knows about tsunami and are afraid of its occurrence, unwilling to attend tsunami mitigation socialization held by local government, which lead to a relatively low tsunami mitigation knowledge, which then also lead to vandalism of the mitigation facilities like buoy and sign system.

2.3 Media Studies

Based on research, observation, and interviews, it can be concluded that the key to built tsunami awareness is by conducting effective communication methods using medias that can respond the unique character of coastal society. Dealing with big number of people, mass communication strategy is likely to be used. Applied in an integrated campaign strategy using wide range of medias which are familiar and can be found easily by target audiences, corresponding tone and manner, expected to be an effective communication strategy.

Medias used are, for example; crossword books, radio, wayfinding, poster, sticker, calendar, tablecloth, gameboard, various gimmick and brand activation with consistently attached campaign messages. The whole media package will deliver mitigation messages subtly, avoid creating scary impression toward tsunami but still emphasizing the urgency of being prepared.

2.4 Problem Solving

Coastal community has certain preference toward vernacular- visually and verbally, this fact help us to create the creative strategy which emphasize in social-culture approach, easy to understand, noticed, and sustainable.

Moreover, the mitigation socialization should be :

1. Done in systematical way through certain range of time
2. Longlasting impact
3. Applying vernacular language both verbally and visually.

Information should be split into clusters depend on target audience type based on their actual role and capabilities.

1. Housewives. They are suitable to be given preparing emergency kit task which can be brought instantly when tsunami strikes. They also suitable for emergency kitchen duty in shelter.
2. Fishermen. They're the first person who'll know whenever tsunami signs show up. Therefore they should be able to give early warning for other people.
3. Merchant. Merchant is one of the largest community. The number of human interaction at the market is quite big that can be used to spread campaign message.
4. Lifeguard. They are capable to see tsunami sign thus inform coastal society. Besides, they interact with lots of people including tourist, so they're expected to be tsunami informant especially for tourists.

3. Conclusion

Due to Indonesia's geographical circumstance, tsunami becomes unavoidable. In order to overcome the destructive impact and minimize it as low as possible, Indonesia coastal society must be prepared. They have to understand tsunami sign as well as what action should be taken once they see the sign. Tsunami come in a matter of minute, it's important to be agile, react quickly not in a rush mean, but take precise action at minimum time. Based on previous social culture and media studies, this idea of being agile will be packaged into one whole social campaign named *Gesit?me* means being agile

Communication Message

Being agile to face tsunami threat

Tone and Manner

Vernacular, witty, and direct.

Expected Goal

Build agile habit within coastal society, especially regarding react upon approaching disaster.

3.1 Campaign Step

AISAS (attract, interest, search, act and share) method will be used to change coastal society behavior gradually.

- a. **Attention.** Appealing visual can make word of mouth, thus they'll grow interest in people's mind to read and share the contained information.
- b. **Interest.** Encourage people to understand 'Agile Tactics' and attract them to search more about agile tactics. The fact that tsunami threat is exist will begin to be told through ambient media and collectable items such as tourism map and tourism tips will be used to imply tsunami mitigation information subtly.
- c. **Search.** People will be engaged to search more regarding mitigation tsunami. Media used are book for Merchant and fishermen, calendar for housewives, and t-shirt for beach lifeguard. Socialization based on cluster also occupy this step, as reward, participant will get gimmicks which surely contain mitigation messages, which are more personal and close with each target audience cluster.
- d. **Act.** Holding public event will be the highest stage of this campaign. As the media, the annual event-the one people already accustomed of like fisherman day celebration (hari nelayan) can indeed help to build people awareness and give a brand experience.
- e. **Share.** This is the stage where people already comprehend the tsunami mitigation concept, Gesit community will be established to continue socialization at least 3 times a year and able to encourage the community in making their own region become 'Gesit area'.

3.2 Verbal Concept

'*Gesit, Bergegas ke Bukit*' (Quick, run straight to the hill!) will be campaign title and slogan. To it make more familiar, slogan can be applied onto various local languages based on the location. For example, in West Java coast, where local language is sundanese, the slogan will be '*Dur Jelegur! Geuwat ka Luhur!*'; '*DurJelegur*' is a representation of tidal wave's thundering sound, while '*geuwat ka luhur*' means go straight to higher ground.

3.3 Visual Concept

Visual concept tells about color, typography, and visual style. Determined by target audience's preference, this campaign identity use bold primer color (red, blue, yellow). Moreover, the typeface will consist of three, including script type and bold stroke typeface, they're typical typeface that you can find on ship's body, traditional restaurant and in other folksy environment. Mitigation information will be illustrated into fun style. All of this concept are built upon local coastal society preference.



Figure.3 The campaign's logo

The campaign itself will be presented by this logo which directly inform to run into higher ground when tsunami strikes.

3.4 The Media

These are the messenger agent of mitigation information. All of them are common media in local coastal society everyday life.

a. Crossword puzzle book, sticker, and paintings

Crossword puzzle books are quite popular among middle to lower class society. The book itself contains two main informations, identifying tsunami early sign and evacuation plan brief direction. Some of the crossword questions ask about tsunami related material where the answer can be found on infographic. Cover design doesn't portray about mitigation at all, this is intended to make it convenient with the people. Along with this book, people will get sticker as bonus. This sticker used to remind people where to go when tsunami strike.





Figure.4 Crossword puzzle book , sticker and paintings design

b. Poster

The complete package of evacuation bag is essential in mitigation. To remind people, especially housewife preparing emergency bag, posters are placed at local convenient stores, so when people come to shop, they'll remember what items should be bought for emergency preparation.



Figure.5 Poster design

c. Calendar

Calendar can be placed everywhere, at home, market, *warteg* (?*Warung Tegal*?, traditional restaurant), people can see it anytime when they're doing daily routine. Thus, this media is considered suitable to remind people of Tsunami sign. The illustrative infographic is accompanied by rhymed copywriting that tells people what to do if certain sign came.



Figure.6 Calendar design

d. Game Board

People tend to wait for their orders in the restaurant. This opportunity can be taken to spread the mitigation information in a fun way. We create a game board containing informations about tsunami and placed it on the restaurant so that people may gather the informations while they are playing.



Figure.7 Game board design, applied on restaurant's table

e. Wayfinding

Apart from illustrative infographic, wayfinding also provided especially for the newcomer who haven't familiar with the area yet. Wayfinding consist of map and evacuation sign system.



Figure.8 Wayfining

f. Brand activation, social media, and advertorial

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Figure.9 Brand activation

To built brand experience between the coastal community and the campaign, a brand activation is an effective media which is not only entertaining but also educate people in most fun ways. For example through marathon competitions we can simply educate people about the evacuation track and so on. Though they are in low economy status, facebook is something really familiar with this community, therefor social media can effectively be used as tools to bulit Gēsīt community? advertorial in local government website for example, is also used to share and attract people to join the sequence if this campaign.

g. Radio Ad



Figure.10 Radio Ad script ver. ladies chat

Another media used to spread the campaign among coastal community is radio. Maximizing the usage of radio, from radio ad to talkshow. The vernacular, witty, and direct tone and manner will still resemble this media.

4. Conclusions

Due to Indonesia's geographical circumstance, tsunami becomes unavoidable. In order to overcome the destructive impact and minimize it as low as possible, Indonesia coastal society must be prepared. They have to understand tsunami sign as well as what action should be taken once they see the sign. Tsunami come in a matter of minute, it's important to be agile, react quickly not in a rush mean ing, but to take precise action at minimum time. Gēsīt's campaign wich understand as being agile can be considered as an effective option to overcome the tsunami mitigation problem especially in such a unique society with a strong cultural background auch as coastal community. Vernacular approach that applied in certain medias, wrapped by proper visual communication strategy which is designed and planned based on the surveys and observations can be a good way to penetrate the

mitigation information to coastal community and built a sustainable mitigation on present time and in the future, reducing the loss cost by tsunami.

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