

THE ROLE OF COMMUNITY AND HIGHER EDUCATION IN THE ACEH POST-DISASTER RECONSTRUCTION

Prof. Darni. M. Daud, Ph.D.
Rector, Syiah Kuala University
Darussalam, Banda Aceh 23111
Indonesia

Abstract

Aceh is a province with religious (Islamic) personal and cultural strength. During the prolonged conflict, followed by the earthquake and tsunami which destroyed infrastructure in Aceh on December 2004, the internal personal and communal strength became a very influential drive in the process of reconstruction and recovery of life in Aceh which was then proved through a research investigation that the Acehnese did not experience any significant psychological impact or depression which could lead to psychological disorder. This cultural uniqueness is one of the main assets in the overall reconstruction of Aceh which was supported by many national and international organizations. Although Aceh is shadowed by a long-lasting conflict and which generated tough and stern personalities, it seems that this issue was handled by the spirit of togetherness, equality, and uniformity which is also supported by pioneer and charismatic leader motivation. This is one of the uniqueness of the ongoing and developing culture in Aceh. Currently, international academics and practitioners, especially experts from Japan, are discussing and sharing information on education with the community and educators in Aceh. Syiah Kuala University (SKU), the biggest education institution in Aceh, has played its important role in developing Aceh during rehabilitation and reconstruction period as both the producer of quality human resources, and the government think tank providing new ideas including disaster preparedness education in developing local and international networking as part of the effort of Aceh education acceleration. In Addition, most formal and informal leaders in the province come from this university. With its rich historical past, the contemporary, and the future role of SKU, it is easy to understand why this university is popularly known as the lovely heart of the Acehnese.

Keywords: disaster preparedness education and cultural uniqueness

A. Introduction

The earthquake and tsunami in Aceh at the end of 2004 was a ‘test’ to Indonesia, especially Aceh. The tragedy that killed not less than 250.000 people and destroyed unbelievable number of public and private facilities in Aceh alone was new to the archipelagic state in terms of handling a major disaster. Syiah Kuala University (known in Indonesian as Universitas Syiah Kuala or Unsyiah), as a higher education institution in Aceh, was also impacted by the tsunami with loss of personnel and infrastructure damage such as laboratory, housings and vehicles. However, with the human resource left, SKU

established a unit called UAR (Unsyiah for Aceh Reconstruction) to help accelerate the formation of blue print and initiation for the establishment of the Executing Agency (BRR NAD-Nias) together with Indonesia University Consortium and National Planning Board (Bappenas). BRR NAD-Nias was assigned to conduct Aceh rehabilitation and reconstruction. Historically, Aceh is a country with abundant heroic stories. Religious personality was one of the main reasons for any Aceh Movements in achieving their strong idealism which led to some long-lasting conflicts with idealism background. These prolonged conflicts became lessons learnt in building the personality and characteristics which can survive in difficult situations, emergency, with public facility and infrastructure-lacked condition. Although the conflicts had impacts on the people in terms of mental disorder such as being afraid of enemy, gun shot and mortar which led children to having firm but unstable personality, life skill-based and informal education support them to be more independent. With this equal education, they are trying to catch up what they missed during the conflict. In a conflict area, pragmatic attitude observed was the willingness to earn money and gain power although in reality there are no skills possessed and jobs available. In this case, life skill-based education is urgently required.

In addition, the phenomenon of cash for work also becomes a new issue of Aceh post-tsunami. Numerous institutions, both national and international institutions, expressed their sympathy for disaster victims and offered social assistance and supports. The organizations arrived in Aceh with various programs addressed to help people, especially the local community, recover their financial problems after the tsunami. People acknowledge the benefits of the programs.

Basically, the purpose of cash for work program was aimed at the recovery of the economy of the community. At practical level, cash for work program offered daily wages for the people who were willing to work on their lands damaged by the tsunami and the crops or the produce of the land fully became their property. This program seemed to be perfect but on the other hand had negative effect on character building of the community. It led to a major shift of livelihood orientation of the people. The community was moulded into laid-back entity and created a trend of asking for wages to work on their own lands. They became reluctant to work on their own land without getting paid. The condition was made worse by the unequally distributed aid received by different villages. In many cases, one village received various assistanship programs from one or more organizations but on the other hand, other villages were not even touched by any single program. This situation led to bigger gaps and misunderstandings among villages. This orientation deviation has been in place for years and has had impacts on the current society.

The impacts were seen when the community ask straight forward questions to volunteer organizations planning to initiate a program in their villages. They might ask questions about the form of benefits they would receive, cash or other forms.

B. The Role of the Community

During post tsunami reconstruction, there were specific characteristics attached to the Acehnese, personal and communal, which accelerate the recovery process. These specific characteristics can be broken down into several factors.

- Strong brotherhood system. The Acehnese has a strong sense of brotherhood, which has a religious background. There are many events which make the Acehnese gather very frequently such as Religious Holidays, Weddings, feasts celebrating a circumcisions, parties for moving into new house, as well as mourning for a death in a family. This culture bounds the people together in a strong brotherhood, more widely known as Islamic Brotherhood.
- The role of *teungku*¹' leadership. A *teungku* is a spiritual leader that always motivates, provides advice and wisdoms continuously to people. A *teungku* also teaches how to maintain a clear, patient and stable physical and spiritual state in living life. In addition, a *teungku* also plays roles in ritual activities.
- The role of *tuhapeut*². *Tuhapeut* maintains the stability of values in the community. Values containing norms, etiquettes, and customs are usually spoiled by arrogance and personal ego. The most common norm spoiler is fight that has to be mediated by this *tuhapeut*.
- The role of *meunasah*³. Meunasah is the place where villagers gather to perform the five time prayers called *shalat*. *Shalat* has many philosophical values to be the guidance and ways in life.
 - Equality philosophy; in *shalat* no classification of people into different levels is recognized. There are no differences between the *imam* and *makkum* (the followers). They all pray at the same place and worship the same God.
 - Uniformity philosophy; in *shalat* everyone performs the same moves at the same time which is an indication of a united vision, harmony and togetherness.
 - Obedience philosophy; in *shalat* all followers perform the same move, no personal ego is demonstrated, and follow the *imam*'s moves. *Imam* always says *Allahu Akbar* in between moves he makes followed by the followers. This indicates the obedience on the leader's instruction.
 - Leadership philosophy; the person appointed to be the leader should be the one with best memory, knowledge, and attitude.
 - Silence philosophy (*khusyu'*); it trains people to contemplate, self-introspect, and correct egocentric issue manifested in the expression of "Rabbighfirlii....." which means "Dear God, May you forgive all the mistakes and my bad deeds....."

- Direction philosophy; everyone is facing to *kiblat* with the same vision, goals, and hopes. It is interpreted as having a strong vision for the future.
- Intimate relationship philosophy; by standing close to each other in the *shalat*, it builds trust among them and makes them more solid and gives love energy to each other. Love is a willingness to be close to each other and care for each other.
- Cleanlines philosophy; it prepares individuals with cleanliness all the time.
- The role of Islamic Schools (Madrasah). Madrasahs play their roles in moulding the attitude, skills and knowledge based on the values respected by the Acehnese.
- The inspiring characters (inspirator); The Acehnese has charismatic characters who have clear historical fighting/struggling line, and this influences the mentality of the community. These fighters (against the colonials) become legends to succeeding generations. Cut Nyak Dhien, Teuku Umar, Tgk. Imum Lueng Bata, Malahayati, Tgk. Daud Beureueh, Tgk. Muh. Jam are some illustration of this. One example of the works of the inspirators is *Hadith Maja* which are Acehnese Rhymes containing philosophical values. Below is an example of *Hadith Maja*.

Teubang bangka beuteugoh-teugoh

(Don't be too easy to cut manggoves down)

Bek sampe reuloh eumpung Keudidi

(It could destroy the nest of *Keudidi* birds)

Uteun di gle keuneubah majoh

(Forests on the mountains are the legacy from our ancestors)

Bek sagai takoh hana keucuali

(therefore, don't you cut any single tree down)

Ramphak langet meutabu bintang

(The sky is best when there are lots of stars)

Ramphak Rumoh lagak kupalang

(The house is best if it has beautiful shower walls; a well for showers is located in the front yard of an Acehnese traditional house)

Ramphak insan galak seumeula

(A person is best when he loves replanting)

- Human resource potential. Before Tsunami, there are a number of Acehnese who have studied overseas. This human resource then influenced and contributed in the process of recovery post tsunami, in education, social, and technological aspects.
- The power of bottom-up system. This specific characteristic of the Acehnese becomes strength to mobilize and move the Acehnese together to participate in handling the tsunami so that they respond very positively to government's programs. There are a number of programs facilitated by TDMRC-Unsyiah (Tsunami and Disaster Mitigation Research Center - Syiah Kuala University) to build the community resilience that have already been conducted.
 - National Tsunami Drill in Banda Aceh
 - Assessment of Evacuation Routes and Evacuation Speed
 - Indian Ocean wave Exercise involving the testing of the systems of 11 countries of Indian Ocean
 - Town Watching, in collaboration with JICA, Japan
- Culture as legendary stories. The power of story telling culture about a legendary story and experience is very influencing in the Acehnese community. Stories on disaster preparedness against tsunami in Simeulu Island become songs, rhymes, and hums memorized by children and adults on this island. One example of this is a story about a disastrous *smong* (tsunami) that happened in 1907.

Engel mon sao surito /Inang maso semona/ Manoknop sao fano/ Uwilah da sesewan/ Unen ne alek linon/ Fesang bakat ne mali/ Manoknop sao hampung/ Tibo-tibo maawi/ Angolinon nek malo/ Oek suruk sauli Maheya miyawali/ Fano me senga tenggi/ Ede Smong kahane/ Turiang da nenepta/ Miredem teher ere/Fesan navi-navi da/ Smong rumek-rumek mo/ Linon uwak uwak mo/ Elaik kedang-kedang mo/ Kilek suluh-suluh mo.

(Listen to a story/ once upon a time/ a village sank/ so was told/ an earthquake started/ followed by the pulling back of seawater/ the whole village suddenly sank / when a strong earthquake shakes/ followed by the pulling back of seawater/ find a place/ a highland to evacuate/ that called smong (tsunami) / the history of our ancestors / Keep this story in mind / message and advice/ Smong (tsunami) is your shower water / earthquake is your swing /thunders are your drum/ the lightnings are your lights)- (Yoppie Andri, Smong-Prahara Di Pulau Simeulue 1833, 1907, 2004 and kisah penulis, 2008).

- The role of community participation. A disaster-prepared community group with the slogan “doing together, contributing equally”, also known as Participatory

Rural Appraisal (PRA), is method and technique used to identify communities. This method used the community as the subject of the development and disaster preparedness. In this case, the community which is regarded as the ‘researcher’ and the very knowledgeable about their environment and neighbourhood then prepare their action plan. Thus, every community member is involved in collaborative planning and strategy.

The principles of PRA are as follows:

- learning from the community itself (from, by, and for the community)
- learning from each other, sharing experience among participants
- involvement of all community groups
- respecting differences
- triangulation (cross- check)
- learning from errors
- practical orientation
- sustainability over periods of time
- coordination

Events and activities organized collaboratively are under the following themes:

- Tracking the location historical routes, which includes: definition – benefits – implementing steps.
- Preparing Season/Disaster Calendar, which covers: definition – benefit – implementing steps.
- Mapping of vulnerable areas, which includes: definition – benefit – implementing steps.
- Tracking locations, including: definition – benefit – implementing steps.
- Institutional Relationship Chart, which includes: definition – benefit – implementing step.
- Organization: which includes: definition – benefit – implementing step
- Disaster Matrix, which includes: definition – benefit – implementing step
- Designing Action Plan, which includes: definition – benefit – implementing step

Looking at the basic potential in the community, a number of research results mentioned that: the Acehnese has reliable patience and strong spiritual resilience

in dealing with emergency period such as conflict, earthquake and tsunami disaster. It is also said that very few of them experienced depression or serious trauma that lead to psychological disorder. This is believed as a result of the specific characteristics as elaborated above which were based on internal power both personal and as a community, during the emergency and recovery periods in Aceh.

C. The Role of Higher Education

When a disaster strikes, school-aged children are the most vulnerable to the impacts, especially when they are studying at schools when the disaster happens. In the 2004 earthquake and tsunami, 86,545 school-aged children died. Pakistan's earthquake in October 2005 killed 16 thousand children because of the collapse of the school buildings. Landslide in Leyte, Philippines, also killed 200 school-aged children.

Learning from three examples above, we should put more effort on protecting our children before a disaster happens. The World Conference on Disaster Reduction held on January 18 - 22, 2005 in Kobe, Hyogo, Japan, in adopting the Action Framework 2005 – 2015 under the theme “Building Regional and Community Resilience against Disaster” provides us with an opportunity to promote and encourage a strategic and systematic approach in reducing vulnerability and hazard risks.

The conference emphasized the urgency of identifying ways to build regional and community resilience against disasters. Disaster risks can be reduced significantly when the community has easy access to information and is introduced to the culture of prevention and resilience against the disaster which eventually involves the seeking, collecting, and disseminating of knowledge and information relevant to capacity and vulnerability. Therefore, several efforts are needed. (1) promoting the integration of disaster awareness education into school based curriculum, (2) promoting the implementation of disaster preparedness programs and activities at schools, (3) encouraging the initiatives of community based trainings by considering contribution of volunteers to build local capacity in disaster mitigation programs.

Schools have direct impacts in leaving legacy of disaster awareness knowledge from one generation to the next one, and school-aged children are the most vulnerable entity when disasters happen. Besides, there is a significant number of schools located in disaster vulnerable areas in Aceh.

a. Roles of Syiah Kuala University in Community Development

Syiah Kuala University has established a research center called Tsunami and Disaster Mitigation Research Center (TDMRC). It is a research institution which will develop disaster research capacity in Aceh. Besides, TDMRC is also assigned by the local government to be a think tank for science and technology and to build cooperation with national and international partnerships. The TDMRC has been trusted by some national and international institutions to conduct activities related to disaster in local, national and international scales. One of the international disaster framework originators (Hyogo

Framework) has also assigned Syiah Kuala University to conduct some other following activities:

1. Building the Official Website for TDMRC

Description: as an official website, TDMRC shares information to public and partners, both national and international, regarding institution, goals, action plan, performance, activities and other information. One of the relevant media is website.

2. Tsunami Documentation (books and videos)

Description: The tsunami in Aceh is a very important lesson learnt for the world in terms of its destruction, which is unforgettable moment for its survivors, and the rehabilitation conducted afterwards. The TDMRC endeavored to preserve that lesson learnt and experience in a documentation of survivors' testimony. They shared their sorrow experience and their effort to stay alive when they were hit by the tsunami. These testimonies were compiled from experience of some victims in Ulee Lheue, Ujung Pancu, and Ajuen. The documentation project which was prepared in collaboration with *Lingkar Pena Aceh* resulted in a book and documentary film entitled "Gelombang Maut itu Telah Berlalu (The Disastrous Wave Is Now A History)"

3. The Initiation of Aceh Digital Tsunami Repository

Description: TDRMC obtains financial support from Hyogo Perfecture, Japan, to implement the Tsunami Virtual Museum (TVM) project. The TVM is used to store digital information (DI) and data related to the tsunami disaster and the process of Aceh rehabilitation and reconstruction. This DI division is responsible to realize the application of Aceh Tsunami Digital Repository which will be based in TVM building. It is a web based digital repository application.

4. Training course of Management for Read Down Station of Tsunami Buoy Indonesia.

Description: this training activity was conducted by the Agency for the Assessment and Application of technology (BPPT), for operator staff the Read Down station of Tsunami Bouy on July 2008, it was represented by three delegates. During the training, the delegates from the Knowledge Management division were taught about the data readout from the Station of Tsunami Buoy.

5. Computer and LAND Accessory Procurement

Description: to support general administration activity at TDRMC and to actualize the TDMRC framework.

6. Internet Radio Procurement

Description: Internet radio is an information system application used by the National Meteorology and Geophysics Agency (BMG) for earthquake and tsunami early warning by using satellite communication. The internet radio equipment includes desktop computer, GSM modem, SMS gateway, and satellite receiver. This equipment has been put at TDRMC building since July 2008.

7. The procurement of Mini server for Read Down Station Tsunami Buoy

Description: this mini server is used to receive data about sea water surface after earthquake from the tsunami buoy installed in Indonesian and Aceh waters. At this moment, the data receiving is still conducted offline. The most recent data from the tsunami buoy is sent by staff at BPPT to staff at TDMRC in email. The DI staff updates the data in mini server afterwards.

Meanwhile, the step which has been conducted in cooperation with Banda Aceh Government covers understanding dissemination, encouraging community participation and building school community commitment to initiate prepared school model from elementary to junior high school. This program is called Disaster-Prepared School.

In the education division of DDR segment, TDRMC collaborates with partners like LIPI-UNESCO ISDR, UNDP, AMBROSS, JICA to build Disaster-Prepared School Model. The schools which have been used for the pilot project will be extended to disaster vulnerable areas in Aceh.

In 2006, the TDMRC of Syiah Kuala University collaborated with LIPI and UNESCO-ISDR conducted preparedness training for government officials, community and school in Aceh Besar which includes 13 schools (460 students and 100 teachers) consisting of seven senior high schools (230 students and 70 teachers), four junior high schools (153 students and 33 teachers), and two elementary schools (77 students and 17 teachers). The results of the study show that the school community preparedness level in anticipate disaster is low (with the score of 50). The school preparedness total index is very low (with the score of 17 out of 100).

Most schools in Aceh do not have a school policy regarding disaster preparedness (10), emergency plan and early warning system at school (27), resource mobilization capacity (19). The index score for teachers and students (individually) is better, 67 and 69. The score for knowledge and attitude based on previous experience after the 2004-tsunami is 65 and 72, individual emergency plan is 76 and 62. However, the index score for resource mobilization is still low, 75 and 48.

The program covers building school awareness in disaster vulnerable areas by using the following media:

- Posters, pocket books, leaflets, information and announcement boards.
- Textbooks, storybooks or comics.
- Religious books covering about disaster.
- Books about disaster
- Games which generate disaster understanding.
- Art and cultural activities such as vocal, drama and legend.

b. Basic Strategy for School Preparedness Development

- a. campaign, which is conducted intensively in groups to obtain extensive community support, including school support.
- b. Integrating disaster study into school curriculum
- c. Training of Trainer (TOT) and building school awareness in elementary school, junior and senior high school, university, youth and volunteer group levels.
- d. Building Disaster-Prepared School Model as a reference for other schools in building disaster-prepared culture.
- e. Nature and Sea Lover Forum including students, teachers, environment conservators, and divers.
- f. National and local events such as exhibition and expedition.
- g. Town Watching that is the activity of observing environment by discussing disaster potential in groups.
- h. Games and Art about disaster
- i. Electronic Media
- j. Earthquake simulation in classroom

D. Conclusions

Aceh is benefited from international organizations which have participated in providing education to community, especially on disaster and discovery. The situation in Aceh became normal within five years after the tsunami and economic level rises by 4 per cent. Many activities and a number of infrastructures such as main roads, and market places which was destroyed are visited by crowds now.

Being aware of tremendous loss due to the disaster, sustainable activities are conducted to understand the importance of preparedness, especially for earthquake and tsunami, as well as disaster map optimizing.

Disaster vulnerability can be coped by awareness and unity, togetherness and perception analogy about disaster.

E. Recommendations

The dynamics of the Acehnese role after the disaster become an inspiration to create an education pattern after the disaster and long lasting conflict. There are a lot of unique activities and situations which have contributed to education policy after this disaster.

1. Education plays a very important role in building preparedness earlier to school-aged children.
2. Disaster potential and vulnerability can be anticipated quickly by awareness, practical education, and building understanding to all people.
3. Internal power influences recovery and reconstruction process.
4. Participative method is very beneficial because all people are responsible to create environment security and disaster preparedness capacity optimization.
5. Local and international partnerships become opportunity for future plan on assessment and program contingency.

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¹ *Teungku* is name for an Islamic Religious Leader in Aceh.

² *Tuhapeut* refers four senior people in a village to whom people ask for wisdom.

³ *Meunasah* refers to a village hall where the villagers gather to perform prayers, hold meetings, and other social events.