

“*Sambatan*”: A Form of Community’s Local Wisdom in Facing the Threat of Abrasion in Kragan, Rembang, Indonesia

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Abstract—Abrasion occurrence in coastal area of Kragan resulted in a tremendous loss. However, the loss frightened no inhabitants of Kragan coast towards the practically annual abrasion. Independently, they conducted *sambatan* as a form of their local wisdom. This study aims for explaining a local wisdom namely “*sambatan*” that had long been carried out. Method used was survey research with qualitative descriptive analysis approach. Data was gathered with in-depth interview towards several informants relevant to the research purpose. The result of the study revealed that community experience on mitigating abrasion was urgently needed by government on establishing policy. The experience brought about an act of mitigation regarding to abrasion which was a local wisdom, *sambatan*. Community was accustomed to conducting *sambatan* as an implementation of local wisdom aimed for cooperation and mutual assistance to lessen the shared burden whether or not the abrasion occurred. **Keywords:** Abrasion, *Sambatan*, Community’s Local Wisdom, Kragan Coast.

I. INTRODUCTION

Kragan District was one of districts in Rembang Regency which was prioritized to deal with abrasion. Rembang Regent, Abdul Hafid, claimed that Kragan would be budgeted as much as IDR 20 billion for dealing with abrasion. It was the impact of abrasion which often strikes the area from the eastern part of Kragan, Tanjungan Village, to the western part which is Summersari Village annually. Based on the records of abrasion in 2003 to 2014, Kragan was the largest area affected by abrasion covering IDR 923 million loss, loss of fisherman livelihood, 124 damaged boats, and public facility damage [2]. 2018 recorded the loss of those facilities comprising by concrete rebate road (IDR 152 million), coastal cliffs (IDR 199 million), mushola dyke, fisherman post (IDR 30 million), coastal cliff, and food stall (worth IDR 10 million) [3], [4].

On an account of researchers’ observation on June 23, 2019, again abrasion hit Kragan area. It was in Karanglincak, Kragan, and Karangharjo Village. The three areas suffered loss for public facilities and some

damaged houses. As the result, the income of inhabitants declined everyday as most of them worked as fishermen. The main factor causing abrasion was the construction of small port in the coast of Karanganyar Village by massive beach reclamation [2]. Once the port built, the abrasion started to exert profound impact on Kragan Coast.

Though the area has always been affected by abrasion, inhabitants showed no fears on establishing daily routine. They always tried to keep adapted to the surrounding where they settled. They had full preparedness on facing abrasion on their own way. This preparedness required them to keep being informed whatever the disaster is [5]. Their local knowledge was demanded on reaching collective decision on policy making of government [6]. This knowledge then became the basis of community to always adapt and be alert every time abrasion occurred.

Adaptation conducted by community was in form of making bamboo fence planted into the ground and piling big rocks behind each of their houses [7]. They performed it together voluntarily. This is interesting because it had a role as social capital on cooperating to help one another tackling abrasion [8]. They name it *sambatan*, a kind of local wisdom of coastal community with mutual assistance for all things. This is what made Kragan community had good capacity and ability on abrasion mitigation.

Sambatan became an obligation on doing any works in any condition whether abrasion strikes or not. To this point, authors are attracted to scrutiny the local wisdom called “*sambatan*” which has already been long performed as a form of helping each other especially on facing abrasion.

II. METHOD

Method employed in this research was survey research method with qualitative descriptive analysis approach [9],[10]. This study was conducted from September to Desember 2019 in coastal area of Kragan, especially in Tanjungan, Karangharjo, Kragan, Karanglincak, and Karanganyar Village. The

sites were selected purposively which was sample determination in accordance with suitable purpose and assumption of research by taking areas that had information needed, not probability based [11].

Data was collected through in-depth interview towards a number of informants tailored to the aim of the study to dig up information broadly and deeply. Selected informants were the Village Chief, village officials, fisherman group, public figure, and indigenous people who had experienced the impact of abrasion.

Data analysis was carried out to depict and summarize various social reality condition in community selected as the research objects which were those who got affected by abrasion. Besides, alignment through desk review activity was done for data in form of publication or statistical records available in various institution/agency, previous research/study, and other documentation material relevant to the research focus.

III. RESULT AND DISCUSSION

3.1 Public Knowledge: Local Wisdom of Community in Form of Experience Result (Mitigation of Abrasion Context)

Abrasion dictated community to adapt on changes presented on their surroundings. Community started to perform adaptation towards the constant impact of abrasion. Although government had tried to mitigate abrasion, it provided less satisfaction for community as abrasion presented every time. They called abrasion with “*ngerong*” term meaning as the erosion of land due to sea waves crashing. Most of inhabitant houses in Kragan coast directly faced the sea, making all of community activities were definitely related to coastal environment. *Ngerong*, abrasion term for society, became regular for its regular occurrence in Kragan coast.



Figure 1. House affected by abrasion (taken on June 23rd 2019)

Public knowledge on dealing with abrasion automatically emerged after experiencing the parallel incident almost every year. A recent abrasion just hit Karangharjo Village that ruined houses until parts of them collapsed (**Figure 1**). An estimation of loss was IDR 50 million as half of wall, roof, fence, and furniture were heavily damaged. That quite big loss did not become an excuse for community to depend on government since they were accustomed to perform construction independently by helping each other to their own limit such as with construction material, money, or craftsmanship on house renovation.

Based on interview towards all informants, community of Kragan coast had strong determination to not migrate to other area and they were comfortable with their condition though abrasion hit every year. They made a living by working as fisherman, fish monger, salted fish maker (*gereh*), head of fish company, and other profession related to sea. They were always watchful and had ways to predict the upcoming abrasion, yet uninformed about the strength of abrasion that would crash the land. Thus, there was no record of injuries or death for abrasion attack though majority of their houses were damaged. They always produced reliable forecast that abrasion would usually occur on east wind during April to August. However, some were probably on west wind during September to March. Apart of calculation based on season and month, they also made prediction employing the strength of wind around the sea, the size of waves, and other phenomenon that they noticed as the unique traits/ characteristic presaging abrasion.

It has been that experience that shaped into an inseparable local wisdom and would take part in law decision making of the authority [12]-[16]. Local government actively called for the community participation enacting law together through disaster education for them, disaster socialization, and the creation of fisherman group for abrasion mitigation. It is undeniable that disaster education has played a significant role on establishing society to be prepared for facing disaster [17]. Through this program, community has already begin to integrate their experience with modern education on mitigating disaster [16], [18]-[21].

The experience of community resulted in knowledge to mitigate abrasion independently and collaboratively. They were always alerted in any condition. Posts structured as a gathering site every day, days and nights, were available in a number of locations along Kragan coast. People always interacted and communicated there. This contributed on minimizing the number of abrasion victims.

3.2 Perception and Attitude of Community: Local Wisdom in Form of Action (Mitigation of Abrasion Context)



Figure 2. Seawall on preventing abrasion independently built by society (taken on September 8th 2019)

Perception is an integral matter as motivation for someone on having an attitude. People will act for something faced by considering perceptions that they think wise or bad according to what they understand [22]. People perception has been an attitude conducted by them on dealing with disaster on an effort to self-adaptation towards changes taking place in their environment [14]. People attitude was closely related to their perception about disaster. Perception will be influenced by differences of information each individual had, differences of value on act, and priority of each individual [23]-[26]. Perception subjectivity for disaster is affected by knowledge regarding to disaster, experience on facing disaster, and ability of individual to address the impact of disaster. Community living in Kragan coast had an attitude to stay in Kragan coast by doing preventive mitigation for abrasion.

The way to prevent abrasion (**Figure 2**) covered seawall construction from rocks and timbers, use of fences that were abrasion resistant by some of people, development of concrete house that was sturdy against abrasion, prohibition for taking sand and coral, obedience on rules set by village to not take sand and coral for mitigating abrasion, participation on *sambatan* routine, and involvement on routine abrasion mitigation. Inhabitants of Kragan coast could be defined as quite religious society seen by annual *haul* (tradition to remember and pray for dead religious figures on the area). This *haul* activity was not only attended by Kragan community but also people from other areas who recognized the religious figures, local government, district government, and village government.

Members of this community always mitigated abrasion without the appeal of both village and local government. They have been accustomed to perform the act based on their own awareness and without coercion, with mutual understanding and respect [2]. Government also realized it because it was a local wisdom that was unalterable. This decent local wisdom made inhabitants living in harmony on performing anything [27]-[29]. They recognized that mitigation for abrasion was an obligation of each of them as well. They created the bond with their environment and had no desire to leave their birthplace for any reason, leading to ways for mitigation either traditionally or contemporarily that were always performed.

Local government had budgeted for mitigating abrasion every year by constructing abrasion barrier, observation post and discussion site for people, fish auction, and cleaning of slummy coast area. It was a form of collaboration between government and community on continues mitigation for abrasion. Government has always asked people for discussion to unify their perception towards mitigation abrasion since they have been the subject as well as the object who dealt with the phenomenon of coastal area on a daily basis [30]. Government through BPBD (Badan Penanggulangan Bencana Daerah/ Institution for Local Disaster Mitigation) of Rembang Regency constantly updated abrasion data every day for law decision making based on community's local wisdom.

3.3 “Sambatan”: A Form of Implementation for Local Wisdom of Community on Tackling Abrasion

Kragan coast community had unique habit which was conducting earth and sea donation every year, pray on the sea at certain time, *sambatan* to prevent abrasion, and certain rites to prevent the threat of abrasion. Those habits were generally for mitigating abrasion. Every week they cleaned the beach, held social gathering, gave levy, and dues for maintaining infrastructures in coastal area. Such activities were based on sense of community, so protecting and maintaining of coastal area has been a duty that cannot be infringed [2]. The same prevailed for newcomers who just officially being citizens there for the common good.

One of forms of local wisdom renowned in Kragan coastal area was *sambatan*. *Sambatan* was the way members of Kragan community work together, help and complete one another in all matters. In the context of abrasion mitigation (**Figure 3**), *sambatan* was carried out by community by constructing abrasion barrier structure, supplying rocks and timbers as materials for the structure, building discussion post for mitigating abrasion, and creating ship independently to use together by fishermen. *Sambatan* had major influence towards social capital in society. Social capital has been one of variable

capacity that can minimize the threat of disaster risk and improve the community's development sustainably [30]-[32].



Figure 3. Sambatan on dealing with abrasion (taken on September 8th 2019)

Sambatan was performed by inhabitants at any time they wanted even without instruction from government. They thought that *sambatan* could lessen the burden in all thing and ease the work as it done together. It was pivotal to acknowledge that *sambatan* was not just for public interest as even personal one could be done with *sambatan*. This was due to familyship among community that has passed the generation.

At the moment, central government has granted local autonomy to local government to conduct independent governance arrangement and it was also the case for village government to organize the village based on local wisdom. This local wisdom might not be possessed by other area so *sambatan* preservation should be always guarded.

IV. CONCLUSION

Inhabitants' knowledge derived from their experience on mitigating abrasion became the basis for government on making policy for abrasion mitigation. The knowledge resulted in action in form of a local wisdom called *sambatan* which was a way of community to cooperate, help one another, and reduce the burden of work, either for public or personal interest. *Sambatan* was the real form of local wisdom implementation of community in Kragan coastal area that must be preserved and guarded continuously and sustainably. Hence, local government will be assisted on formulating policy that is based on community's local wisdom.

REFERENCES

- [1] Pemerintah Kabupaten Rembang, "Penanganan Abrasi Kragan Diusulkan Rp. 20 Miliar," 2020. <https://rembangkab.go.id/berita/penanganan-abrasi-kragan-diusulkan-rp-20-miliar/> (accessed May 12, 2020).
- [2] N. Hamid, "Study of Community Capacity in Dealing With The Threat of Shore Erosion in Kragan Subdistrict Rembang District," *Pancar. Pendidik.*, vol. 7, no. 3, pp. 57–70, 2018, doi: 10.25037/pancaran.v7i3.193.
- [3] Pemerintah Provinsi Jawa Tengah, "Penanganan Abrasi di Rembang Akan Dibuat Permanen," 2018. <https://jatengprov.go.id/beritadaerah/penanganan-abrasi-di-rembang-akan-dibuat-permanen/> (accessed May 12, 2020).
- [4] A. Syaefudin, "Sudah Sebulan Desa di Rembang Ini Diterjang Abrasi," 2018. <https://news.detik.com/berita-jawa-tengah/d-3890864/sudah-sebulan-desa-di-rembang-ini-diterjang-abrasi> (accessed May 12, 2020).
- [5] N. Hamid, "Kesiapsiagaan Masyarakat dalam Menghadapi Gempa Bumi (Mengenang 14 Tahun Silam Gempa Bumi Bantul, Yogyakarta)," *ALTRUIS, J. Community Serv.*, vol. 1, no. 2, pp. 81–89, 2020, doi: <https://doi.org/10.22219/altruis.v1i2.12184>.
- [6] M. Barber and S. Jackson, "Knowledge Making': Issues in Modelling Local and Indigenous Ecological Knowledge," *Hum Ecol*, 2015, doi: 10.1007/s10745-015-9726-4.
- [7] L. Ronggowulan, "Adaptasi Masyarakat terhadap Bencana Abrasi di Kecamatan Kragan dan Kecamatan Sarang Kabupaten Rembang (Sebagai Materi Suplemen Kontekstual Mitigasi Bencana di Kelas X SMA IPS)," Universitas Sebelas maret, 2015.
- [8] F. Y. Sumirat and M. S. Rochansyah, "Strategi Masyarakat Dalam Menghadapi Abrasi dan Gelombang Pasang di Pesisir Kecamatan Kragan Kabupaten Rembang," Universitas Gadjah Mada, 2015.
- [9] S. Effendi and Tukiran, *Metode Penelitian Survei*. Jakarta: LP3ES, 2012.
- [10] N. Muhajir, *Metode Penelitian Kualitatif*. Yogyakarta: Rake Sarasin, 2000.
- [11] Koentjaraningrat, *Metode-Metode Penelitian Masyarakat*. Jakarta: Gramedia Pustaka Utama, 1994.
- [12] K. M. Jorgensen, *The Meaning of Local Knowledge*. Aalborg East: Danish Research Unir for Industrial Dynamic, 1999.
- [13] G. R. Padmasiri, "Management of Indigenous Knowledge in Sri Lanka, with Special Reference to Indigenous Medicine," *Inf. Dev.*, pp. 1–14, 2017, doi: 10.1177/0266666917721594.
- [14] N. Pouw et al., "Participatory Assessment of Development Interventions: Lessons Learned

- From a New Evaluation Methodology in Ghana and Burkina Faso," *Am. J. Eval.*, vol. 38, no. 1, pp. 47–59, 2017, doi: 10.1177/1098214016641210.
- [15] M. A. Sam and Ktunaxa, "An Indigenous Knowledges Perspective on Valid Meaning Making : A Commentary on Research with the EDI and Aboriginal Communities," *Soc Indic Res*, vol. 103, pp. 315–325, 2011, doi: 10.1007/s11205-011-9848-z.
- [16] S. D. Santha, P. Gahana, and V. Aswin, "Local Knowledge, Early Warning and Coastal Hazards : Participatory Inquiry Among Fishworkers in Kerala, India," *Action Res.*, vol. 12, no. 3, pp. 273–292, 2014, doi: 10.1177/1476750314532504.
- [17] N. Hamid, "Urgensi Pendidikan Kebencanaan Kepada Masyarakat," *Equilib. J. Pendidik.*, vol. VIII, no. 2, pp. 232–239, 2020, doi: <https://doi.org/10.26618/equilibrium.v8i2.3444>.
- [18] T. A. Smith, *At the Crux of Development? Local knowledge, Participation, Empowerment and Environmental Education in Tanzania*. Glasgow: University of Glasgow, 2012.
- [19] J. Smylie, N. Kaplan-Myrth, and K. McShane, "Indigenous Knowledge Translation : Baseline of Health Knowledge in Three Indigenous Communities in Canada," *Health Promot. Pract.*, vol. 10, no. 3, pp. 436–446, 2009, doi: 10.1177/1524839907307993.
- [20] J. Corburn, "Bringing Local Knowledge into Environmental Decision Making - Improving Urban Planning for Community at Risk," *J. Plan. Educ. Res.*, vol. 22, pp. 420–433, 2003, doi: 10.1177/0739456X03253694.
- [21] A. Hunter, "Local Knowledge and Local Power, Notes on the Ethnography of Local Community Elities," *J. Contemp. Ethnogr.*, vol. 22, no. 1, pp. 36–58, 1993.
- [22] J. Tedeschy, S. Lindsfold, and P. Rosenfeld, *Introduction to Social Psychology*. St. Paul: West Publishing Company, 1985.
- [23] D. Kim and J. E. Kang, "Integrating Climate Change Adaptation Into Community Planning Using a Participatory Process : the Case of Saebat Maeul Community in Busan, Korea," *Environ. Plan. B Urban*, vol. 45, no. 4, pp. 669–690, 2018, doi: 10.1177/0265813516683188.
- [24] A. N. Klopfer, "' Choosing to Stay ': Hurricane Katrina Narratives and the History of Claiming Place-Knowledge in New Orleans," *J. Urban Hist.*, vol. 43, no. 1, pp. 115–139, 2017, doi: 10.1177/0096144215576332.
- [25] G. Sansiritaweesook, N. Muangsom, M. Kanato, and A. Ratanasiri, "Effectiveness of Community Participation in a Surveillance System Initiative to Prevent Drowning in Thailand," *Asia-Pacific J. Public Heal.*, vol. 27, no. 2, pp. 2677–2689, 2015, doi: 10.1177/1010539513502522.
- [26] J. W. R. Genilo, "Communication and the Construction of Local Knowledge in Thai Rice Farming Villages," *Millenn. Asia*, vol. 1, no. 2, pp. 197–214, 2010.
- [27] B. Chang, "Patterns of Knowledge Construction," *Adult Educ. Q.*, vol. 68, no. 2, pp. 108–136, 2018, doi: 10.1177/0741713617751174.
- [28] G. Callaghan and G. Wistow, "Can the Community Construct Knowledge to Shape Services in the Local State? A Case Study," *Crit. Soc. Policy*, vol. 28, no. 2, pp. 165–186, 2008.
- [29] P. A. Guareschi and S. Jovchelovitch, "Participation, Health and the Development of Community Resources in Southern," *J. Health Psychol.*, vol. 9, no. 2, pp. 311–322, 2004, doi: 10.1177/1359105304040896.
- [30] B. Kusumasari, *Manajemen Bencana dan Kapabilitas Pemerintah Lokal*. Yogyakarta: Penerbit Gava Media, 2014.
- [31] S. H. Bhuiyan, "Social Capital and Community Development : An Analysis of Two Cases from India and Bangladesh," *J. Asian Afr. Stud.*, vol. 46(6), pp. 533–545, 2011, doi: 10.1177/0021909611401511.
- [32] B. Kusumasari and Q. Alam, "Local wisdom-based disaster recovery model in Indonesia," *Disaster Prev. Manag. An Int. J.*, vol. 21, no. 3, pp. 351–369, 2012, doi: 10.1108/09653561211234525.