# Leadership Coordinator of Search and Rescue Mission on Earthquake Event in Palu Central Sulawesi

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## Abstract

Earthquake that destroyed Palu Central Sulawesi in 2018 led to the gradual transformation of Incident Commander (IC) in disaster response phase. The former IC was Military Resort Commander of Tadulako, then the throne was replaced by Commander of Military Region XIII positioned by Head of Staff of Indonesian Army (TNI). Furthermore, the existence post was not optimally practiced for the coordination purposes. The referred posts were established by the IC or by Indonesian National Search and Rescue Agency (Basarnas) as Search and Rescue (SAR) Mission Coordinator, Local Government as well as Non-Government Stakeholders. Leadership factor had become one of significant parameters towards the success of SAR implementation in 2018's Palu catastrophe. This study aims to investigate the leadership on Head of SAR office as SAR Mission Coordinator. The position has vital role related to obligatory duty for earthquake and tsunami SAR mission in Palu, Donggala, Central Sulawesi. The method of this study applied descriptive qualitative combined with case study approach. Data was collected from field observation, focus group discussion and in-depth interview with the key figures when disaster occurred. Moreover, the study focused on exploring collaborative leadership conducted by the SAR Mission Coordinator in practicing a series of SAR activity even in pre-disaster through communication, coordination and partnership among relevant disaster enthusiasts.

The leadership roles of SAR Mission Coordinator are urgently needed for SAR operation achievement. Such collaborative leadership is considerably relevant for disaster response phase, particularly on earthquake SAR operation. Collaborative leadership led by the IC, SAR Mission Coordinator, as well as other relevant field coordinators was implemented through coordination, communication and exchangedinformation, as well as collaboratively undertaking activity before disaster and the response phase for betterment result. The innovation presumes to be effective in the case of SAR mission specifically for earthquake event.

Keywords: Leadership, Collaborative, SAR Operation.

## Introduction

Disaster management action requires three phases i.e. pre disaster, emergency response as well as post disaster. Cited from Law of the Republic of Indonesia Number 29 of 2014 concerning Search and Rescue in Article 29, verse (1) states that Indonesia's National Search and Rescue Agency (Basarnas) conducts roles for coordination and has responsibility in case of SAR Operation. Moreover, article 29 verse (3) regarding emergency response, SAR Mission Coordinator is mandated to be responsible operationally to Basarnas, as well as administratively to the SAR Coordinator, in this case is Head of Basarnas. Thus, such coordination also involves Indonesian National Agency for Disaster Management (BNPB) as the government institution which has duty in disaster risk reduction implementation.

In response to earthquake event in Palu Central Sulawesi, Head of SAR Office Palu reported the establishment of Search and Rescue Unit (SRU) which was not controllable under the SAR Mission Coordinator due to the immensity of affected area. The issue caused SAR implementation that had not been well-practiced as the expectation. Consequently, proper leadership is urgently needed in order to enforce the betterment of SAR mission and to merge multi relevant stakeholders, especially SAR potentials.

Study objectives are to investigate the leadership on Head of SAR Office Palu as the SAR Mission Coordinator in carrying out SAR operation in 2018's Central Sulawesi catastrophe. The mission has expectedly effective results, whilst at the same time it is able to reduce the mortality and the victims caused by the calamity. This study is academically intended to offer scientific contribution related to leadership issue in case of SAR operation, additionally the output of this study is likewise addressed to Basarnas for policy making in Human Resource Development, particularly concerning on leadership sector for SAR practice.

## **Review of Literature**

**Pre Disaster Activity:** Law of the Republic of Indonesia Number 24 of 2007 instructs disaster management activity. This law covers the roles and responsibility of the government (national and local) as well as the community in practicing disaster management; institutional arrangements; the phase that encompasses disaster risk reduction, emergency response and disaster recovery; funding schemes and management and stakeholders' duties for disaster reliefs.

Pre disaster is addressed in Article 33 and Article 34 concerning Disaster Management that involves three phases e.g. pre disaster, emergency response and recovery whereas pre disaster practices are implemented in the situation when disaster are not occurred, yet having the possibility to happen due to hazardous and other factors. Thus, the regulation becomes such foundation for more proactive in case of disaster risk management in Indonesia that includes the responsibility of government and the citizens as well as civil societies.

Sendai Framework for Disaster Risk Reduction 2015-2030 has been first adopted at third United Nations Conference in Sendai, Japan, on 18 March 2015. This collaborative framework is the result of cross-stakeholder consultation that started on March 2012 along inter-nation negotiation as it has begun from July 2014 to March 2015. The movement was initiated by United Nations for Disaster Risk Reduction (UNDRR) in conjunction with United Nations General Assembly (UNGA). Sendai Framework is the continuation of former instrument, Hyogo Framework for Action (HFA) 2005-2015. The existence of these frameworks is to provide further encouragement on international partnership under the presence of International Framework for Action in order to actualize Disaster Risk Reduction (DRR) practice which consists of agreeable points as follows:

- 1. Urgent needs and comprehensions related to betterment disaster risks covering all dimensions, vulnerability and hazard characteristics;
- 2. Strengthening disaster risk management covering national platform;
- 3. Accountability for disaster risk management; awareness for "Building Back Better" and
- 4. Recognition of stakeholders and their roles.

SAR Potentials Development should be part of disaster risk reduction and preparedness to improve disaster management practice, particularly in SAR mission. As referred from Government Regulation Number 21 of 2017 regarding SAR Potentials Development mentioning that Government ought to facilitate founding on the human resources. The objective of this action is addressed to individual and agency/organization that acquire human resource potentials for disaster SAR mission.

Furthermore, the founding towards this issue is based on Government Regulation Number 21 of 2017 Article 9 commanding the control of SAR that can be practiced through coordination, dissemination, education, technical training and rehearsal. The coordination is practicable in national and local levels by ways of facilitating forum for the potentials whilst at the same time aiming to spread information, reform synchronization and evaluation in respect to SAR Potentials Development.

## **Organization of Search and Rescue Operation**

According to Law of Republic of Indonesia Number 29 of 2014 regarding Search and Rescue, Basarnas is recognized as Government Institution Non Ministry taking responsibility for a series of SAR activity on urgent incidents such as shipwreck and airplane accident, cases require special handling, disaster events in emergency response phase and endangered condition for human.

As the breakdown policy of Law of Republic of Indonesia Number 29 of 2014 regarding Search and Rescue, the relevant arrangements are followed by Government Regulation Number 22 of 2017 Article 4 focusing Search and Rescue Operation along with Regulation of Head of Basarnas Number 16 of 2016 concerning Guidance for Search and Rescue Operation arranged in ad hoc organization that divides 1) SAR Coordinator positioned by Head of Basarnas, 2) SAR Mission Coordinator placed by Head of Local SAR Office or other dignitaries from different government institutions in case of the absence of SAR Office representative, 3) On Scene Coordinator led by relevant stakeholder representative, which is possible from Basarnas, Indonesian National Armed Forces (TNI)/Indonesian National Police (Polri), other government institutions and private sectors. The structural organization on disaster emergency response is displayed in figure 1.

**Search and Rescue Operation:** Addressed from Law of Republic of Indonesia Number 29 of 2014 concerning Search and Rescue and Government Regulation Number 22 of 2017 covering Search and Rescue Operation examining addresses that Head of SAR Office Palu is SAR Mission Coordinator on 2018's earthquake disaster. It means having responsibility to lead SAR potentials.

Drabek et al<sup>10</sup> found out the emergence of certain group in pre disaster and emergency response triggering the urgent need of coordination as well as the possible challenges. One of coordination achievement implies the leader willingness. Moreover, effective coordination depends on sovereign communication. Canton<sup>2</sup> explained comprehensive emergency management applying approaches through strengthening inter-sector partnership, additionally the study designs four phases of response management combining with preparedness, emergency response, recovery and mitigation in such integrated process.

Furthermore, Canton<sup>2</sup> divided 3 categories of emergency response, namely 1) operational, where the required systems and resources are enabled to directly respond to the impact of an event; 2) tactical, in this case means the response is attempted through various agencies collaboration and resource needs anticipation as well as public information coordination and 3) strategic, accomplished with crisis management practice by considering the long-lasting impact of the event, determining long-term goals and objectives and setting priorities operational responses guidance.



Figure 1: Ad Hoc Organizational Structure of SAR Operation

These response categories deliberate the levels of crisis which are emergency, major disaster and catastrophe.<sup>2</sup> Emergency response execution for SAR operation entangling the human resources potentials is under multi-control. Therefore, the practice requires the coordination and report to SAR Mission Coordinator. Redriguez et al<sup>8</sup> stated the challenges related to the practice consisting of (1) cross-stakeholder communication, (2) authority ambiguity, (3) human resources management and (4) mass media issue.

**Collaborative Leadership:** Imperiale and Vanclay<sup>5</sup> studied the approach of command and control described as "chaos command and control" to imply the phenomenon when institutions consider disaster as controllable chaotic events. Consequently, a leadership approach is necessarily required for more accommodative and responsive practice to confront the calamity. In many cases, emergency response entails clear organization and planning, meanwhile, it occurs unpredictably. Such innovative, adaptable and improvisation performances are expectedly carried out in emergency response management.

Furthermore, the collaboration means the mechanism practiced by emergency response manager to complete the obligation in professional way. Collaborative leadership takes the vital role when it comes to networking business process, team-based and partnership-oriented<sup>3</sup> besides, the core competency of collaborative leadership involving self-leadership and required intelligence, as well as the ability to handle team synergy and to manage the networks.

The Roles of Search and Rescue Potentials and affected Community in Search and Rescue Operation: The official term for search and rescue is attached in the Law of the Republic of Indonesia Number 29 of 2014 concerning Search and Rescue. It describes human resources, facility and infrastructure, information and technology and animals excluding Basarnas, allowing to participate for SAR purposes. In other words, SAR Potentials are part of community from institution/agency/government and nongovernment organization.

Additionally, inside Government Regulation Number 21 of 2017 related to Search and Rescue Potentials mandating the training accommodated by Basarnas to the potentials through the establishment of norm, standard, guideline and policies related to SAR action, dissemination, education and training, rehearsal and coordination. These practices can be carried out with the existence of Forum Coordination for SAR Potentials in line with direct and indirect monitoring as well as certification.

The partnership entangling within multi groups in SAR operation is necessarily adopted. The teams consist of individuals from public sector and the combination between private and public sector. The more notable issue depends on the connectivity in developing relationship and tasks before and after disaster. As the result, existing human resources are identified as the individuals or organizations that transform traditional structure and function into more modern ones.<sup>9</sup>

United Nations Office for Disaster Risk Reduction (UNISDR) through Hyogo Framework 2005 and Sendai Framework 2015 legitimate that the community is able to take action to reduce victims and disaster risk and damage. Thus, cross sectors and levels shall stick on organizing combining with the ways of networking, collaborating and decentralizing.

The involvement of SAR Potentials and community under the control of SAR Office in accomplishing action is such effective way to alienate disaster risk. Wall and Hedlund<sup>12</sup> proposed that collaborative and decentralized paradigm is applicable tools to improve SAR performance. Moreover, Wall and Hedlund<sup>12</sup> explained local community participation significant role in the response time due to the closeness, velocity and efficiency. Turkey's Mamara earthquake in 1999 that killed 17,000 proves local community was the first group in rescuing neighbours and relatives with no officials in coordinating human relief issues.

Based on the survey, 34% interviewed victims received the aids after disaster from the neighbours, relatives and by own efforts, however only 10.3% respondents claimed the reliefs supplied by the government. In the end, local community likewise cooperates in the case of rescuing family member and neighbours from the debris, building temporary shelter, supplying foods for the victims, distributing reliefs and collecting funds via online.

## **Research Method**

This research applied qualitative descriptive method combining with case study approach as it analysed event, phenomenon or case related to SAR operation on Palu's earthquake. Data collection methods used Focus Group Discussion and in depth interview with relevant stakeholders, SAR Office Palu officers and SAR potentials that include Indonesian Armed Force (TNI), Indonesian National Police (Polri), Local Government of Palu, SAR Enthusiasts and community. In addition, observation and survey were practicable in affected area hit by earthquake, liquefaction and tsunami in Palu, Central Sulawesi. Therefore, SAR report contributed as additional source. The research was conducted on 6 - 8 March 2020 in the City of Palu, Central Sulawesi.

## **Results and Discussion**

Pre Disaster Phase: Based on SAR Office Palu report, coordination meeting becomes the part of pre disaster event to socialize the policy and evaluation from National Agency for Disaster Management related to existing disasters. Training for the potentials has been periodically enforced twice yearly. Nevertheless, the unavailability of earthquake contingency plan seems to be another challenge. SAR Office Palu is not optimally executed. This issue consequently causes the lack of synergy in operating SAR action when earthquake occurs. Better coordination in response phase is determined by a series of training and activity before disaster. Drabek and McEntire10 defined coordination as collaborative process in way of multi-organization interactive to achieve common interests. On other hand, coordination is enabled to be carried out; still, however in many cases, pre disaster comprehension in form of planning and training among individual and stakeholder is still under the expectation.

The effectiveness regarding response command depends on the frequency of the meeting and transfer knowledge. Hence, the comprehensive practice in pre disaster participated by stakeholders and community becomes prominently key success in SAR practice.

Significant obligation mandated for stakeholders in DRR action concerning on pre disaster covers 1) Designing mutual agreement for disaster risk management, 2) Framing Standard Operational Procedure (SOP) for SAR operation, 3) Practicing coordination forum with SAR potentials participation as preparedness, 4) Education and training, 5) Dissemination, 6) Group training, 7) SOP comprehension for effective SAR operation and 8) Preparing contingency plan to ensure all parties understanding the roles. This collaborative agreement is implementable in pre disaster phase in order to perceive more effective output.

Furthermore, SAR Office Palu needs to improve the execution that focuses on strengthening all involved stakeholders in Central Sulawesi for betterment and responsive partnership, particularly in disaster emergency response.

**SAR Operation:** On 28 September 2018 at 17.02 PM (GMT+7), SAR Office Palu received disaster information and experienced earthquake and tsunami in Palu and Donggala, Central Sulawesi. The affected area was reported in diverse location i.e. Donggala, City of Palu, Petobo, Balaroa, Sigi, Mamboro, Biromaru and other sites around Central Sulawesi. SAR Units Palu immediately reached damaged locations and coordinated with TNI, Polri, local government and SAR potentials for SAR relief.

Based on the report, the damage of communication infrastructure caused by disaster becomes main problem that triggers to lack of coordination among Government stakeholders. Authorized officials in Palu conducted selfrescued as informed in off-duty. The National SAR Office commanded the branch offices to join SAR Office Palu for the operation. The consortium consists of SAR offices in Sulawesi and Kalimantan area and Basarnas Special Group (BSG) from national office as additional resources. Daily data and report by SAR Office Palu regarding the total mortality and survivor are presented in table 1.

SAR Office Palu accomplish optimal operation. However, the amount of victims and the extent of damaged location stricken by the catastrophe in Palu and Donggala is identified as another detention on optimal SAR operation. The statement is based on the fact whereas remote locations are unreachable in such quick period by SAR Office and SAR Post.

Additionally, the limitation of rescuer resources hampers the operation performance. Besides SAR Office Palu, SAR office branches from other provinces participate in SAR activity in emergency response.

S.N.	Day and Date	Survivor	Mortality
1.	1 / 28 Sep 2018	7	8
2.	2 / 29 Sep 2018	45	229
3.	3 / 30 Sep 2018	15	35
4.	4 / 1 Oct 2018	55	290
5.	5 / 2 Oct 2018	31	39
6.	6 / 3 Oct 2018	-	68
7.	7 / 4 Oct 2018	-	110
8.	8 / 5 Oct 2018	_	81
9.	9 / 6 Oct 2018	-	110
10.	10 / 7 Oct 2018	-	38

Table 1 Number of Disaster Victims

The complexity in SAR operation covers searching, rescuing and evacuating the victims as the primary duty. However, additional important roles include issuing official information to the public and supplying logistics for SAR teams. Press conference to the public likely becomes separate pressure in addition to complete SAR mission. In the end, the unavailability of fuel for supplier transportation denotes another difficulty and communication facility that is enabled to connect 5 days after the shocks.

**SAR Operation Organization:** SAR Operation Organization is the part of disaster management organization. The joint posts are formed on the basis of appointment of Korem Commander to replace the IC. However, the event ends up in three days as Commander of Regional Military Command occupies the position. The last replacement was finally led by Head of Staff of Indonesian Army (TNI). As the result of thrice transformation, disaster operation seems not fully optimal and quick in response to the emergency phase. In addition, toward the same issue, destruction in remote area is only identified by the locals.

Disaster response was conducted as in line with the existing condition and demands due to the absence of preparedness manners, such as disaster socialization cited in the laws. Korem Commander 132/Tadulako as the IC designs emergency response organization in local level following command management implemented in TNI. The confederacy organization consists of integrated (Kogasgabpad) that forms four sectors e.g. Parigi Montong, Sigi, Palu and Donggala in order to simplify coordination. Sector Commander (Dansektor) led by Military District Commander (Dandim) 1306/Donggala Lieutenant Colonel Cavalry I Made Maha Yudhiksa is to accelerate command line in local level. This position is according to affected location or sector.

The IC initiates the task force for SAR, security to minimize looting, logistics distribution and management, evaluation and health division. In the structure of disaster emergency response organization, SAR Office Palu is represented by the Head of Operations Section as the Head of SAR Division in Palu Disaster Task Force. The role of each task force is carried out with full responsibility according to its authority to conduct SAR operation. The leadership pattern is categorized as lateral and coordination based, although the organization structure designed vertically. The control mechanism for the performance and implementation of the task force is to evaluate in daily basis at the main post located at Field Command for Military Resort 132/Tadulako.

SAR Office duty is based on the organizational structure of SAR operations regulated in Law of the Republic of Indonesia Number 29 of 2014. However, the organization established by Basarnas is the part of formed organization mandated in Law of the Republic of Indonesia Number 24 of 2007 concerning Disaster Management. In relation to SAR operation, the Head of Basarnas appoints the Head of SAR Office Palu as SAR Mission Coordinator. SAR Office Palu covers the entire Central Sulawesi Province and offers the services to all community focusing on SAR operation requests. SAR Office Palu is assisted by two SAR posts in Luwuk Banggai and Parigi Moutong. The number of human resources in SAR Office Palu is 53 officers consisting of 4 structural officers, 8 administrative and financial officers, 1 communication officer, 5 ship crews and 35 rescuers.

Interview result with officials of Korem Tadulako Palu explained that TNI forms another organization, namely Integrated Joint Task Command (Kogasgabpad). Meanwhile, BPBD is evaluated not fully handling in the secretariat during the response phase. Furthermore, the command and executing function are not found on BPBD practice as its mandatory roles. This official government institution for dealing with disaster risk only delegates information instead. Nevertheless, due to the existence of various organizational structure, other obstacle confronted including bias information was related to the impact of disaster. This responsibility ought to be under BPBD authority as the information centre for more accurate and valid data.

**Leadership Issue in Search and Rescue Operation:** Based on ad hoc organizational structure, SAR Mission Coordinator is hierarchically positioned at the middle level. This means SAR Mission Coordinator is considered to run strategic policy from SAR Coordinator as well as practice SAR operation. Wukich and Robinson studied the role of middle level for emergency response management. The Mission Coordinator is a middle-level leadership that is enabled to occupy emergency manager for designing and responding cross-stakeholder structure, adding the effort to invite more disaster enthusiasts. Therefore, the Mission Coordinator is expected to build partnership within relevant parties, not only coordinate members in consortium.

Collaborative leadership in implementing SAR operations properly integrates when it brings diverse stakeholders. This kind of leadership directs to interconnected structural and cultural sides in the organization to pursue more optimal benefits. This event implies the consortium willing to work across organizational boundaries and leaves the culture of independency. Besides, sectoral ego culture from an "T" transformed into a "we" orientation. As the result, this initiative aims to achieve optimal output based on commitment to help fellow creatures of God Almighty attached with humanitarian value.

Collaborative leadership is the source of competitive advantage which has been increasingly vital in SAR mission consisting of some points, inter alia highly networked, teambased and partnership oriented. SAR Coordinator reinforced to work with informal teams and community. Good relations are to be established in all phase of disaster management. Preparedness and action plan are enforced in pre disaster with bringing community into SAR action.

Group discussion and interviews with actors come to the proof that the leadership issue by the actors in handling Palu's disaster seems out of box – daring to take any risks, fast, decisive, practical and directed in making operational decisions. The actors required the competence: 1) having proper knowledge and experience related to operational issue, 2) spry and resilient ability to carry out SAR operation, 3) able to lead and make decision, 4) capable to coordinate with other organizations in order to achieve common goal quickly and precisely, 5) raising informal leadership and owning special character to eliminate sectoral ego, 6) transmitting survival skill to community, 7) emotional intelligence considering the pressure in carrying out the task that should be fast, 8) spreading peaceful condition to the victims, 9) must be courageous, patient and responsible and 10) the leaders are willing to be in the field for SAR activity.

Furthermore, the officials require to be capable to quickly make decision and command, as well as supported by experience and knowledge. These basics are practiced by leaders to think quickly, determine the next action such as establishing shelters to handle SAR operation for effective coordination and collaboration. In relation to collaborative leadership, it is in line as Hurley<sup>3</sup> exploration that concluded core competency of collaborative leadership comprising self-leadership, relational intelligence, ability to manage a team and multi networks.

**Roles of SAR Potentials and Community:** As per the explanation of Head of SAR Office Palu in interview, SAR potentials involve during the earthquake disaster. The team includes nature lover communities, youth association, volunteer organization that have been trained by SAR Office Palu. However, the previous education and training are not entirely effective for SAR mission in 2018's earthquake event. There are quite a lot of SAR training such as Medical First Responder (MFR) training that introduces first aid to handle earthquake victims. In addition, companies from other districts or cities, excluding ministries/government agencies/TNI/Polri provide the assistance for SAR operations, such as donating heavy equipment.

Meanwhile, Focus Group Discussion with SAR Office Palu and Local Government of Central Sulawesi states there are SAR potentials that actualize direct SAR operation to affected locations without supervision from any official entities. In different case, the potential resources for SAR operation are not utilized effectively. In addition, some volunteers come forward to SAR Office Palu to initially coordinate and join the team under controlled by SAR Office Palu. SAR Office Gorontalo and Balikpapan join the coalition for SAR Mission through bringing transportation and SAR equipment, as well as inviting the trained potentials.

Nevertheless, some potentials are refused due to unqualified skills and competencies. Special expertise is the requirement to join SAR Mission team, inter alia urban disasters or earthquake handling to rescue people inside collapsed and closed buildings. Therewith, SAR potentials can also involve K-9 dogs with the ability to detect victims in collapsed buildings.

Head of SAR Palu offers registration, coordination meeting and training for the potentials during preparedness stage. These gradual initiatives are supposed to form such good coordination for more effective synergy in earthquake emergency response, particularly in SAR Mission. Additionally, Head of SAR Palu Office reports the fact that potentials in SAR Mission come from outside Palu area. This moment is caused by the limitation of meeting coordination, which is only held once yearly. Therefore, some availability trainings are facilitated by other organizations.

The challenge of implementing decentralization collaborative paradigm implies significant gaps between the expectation and real practice among actors and stakeholders regarding lack of collaboration in disaster management. According to UNISDR final report in 2014, Government of Indonesia has received attention to improve coordination quality within ministries and to strengthen comprehensive linkages between central government and local communities. These obstacles should be resolved to accelerate the application of decentralization collaborative for SAR operation undertaken by Basarnas. Thus, the leadership formulation is necessitated in case of spontaneous response mobilization for volunteer groups and individuals from both inside and outside affected community before the mobilization of formal organization. The key of Basarnas performance lies on the resources and capacity in emergency response time.

All stakeholders are required to carry out duties and functions according to mandated regulations and based on determined clusters i.e. pre disaster, emergency response and post disaster. This practice is to minimize duplication of the function and work based on the existing SOP. It is necessary to formulate mutual agreement, SOP and contingency plan dealing with SAR operation. The completed action offers the output for relevant stakeholders to have more sharp understanding, cooperation and good relation. Referred to regulations, each cluster in disaster management has been determined with responsible entities based on competence, duties and functions.

Community resilience program is manifested through empowerment activities such as dissemination and understanding the resources. Thus, relevant stakeholders should accommodate training to the community that focuses on survival knowledge and techniques to obtain resilience capability during and after disaster.

Further, the SAR potential role is not considered as fully optimal since the lack of disaster SAR training for all aspects. Many volunteers are not reportedly working based on the functions, moreover the existence of sectoral ego hampers the organizational structure for emergency response that has been formed by BNPB and directed by the Head of SAR Office Palu. In response to this issue, urgent need to compile contingency plan should be immediately accomplished through integrating triple-helix entangling government, community and entrepreneurs.

Coordination forum for SAR Potentials is highly demanded with collaborative, coordinative and participative. The phenomenon is triggered by some problems during disaster such as uncontrollable aids distribution in Palu, whilst it results over relief supply in some area. This similar challenge occurs on SAR Potentials confronted by over quantity due to poor manageable towards this issue that likewise leads to prolonged miss-coordination.

## Conclusion

SAR operation as the response to earthquake, tsunami and liquefaction in Palu, Donggala, Central Sulawesi has been carried out by way of stakeholders involvement from various levels such as BNPB, BPBD, Basarnas, Local SAR Office, TNI, Polri, PMI, BUMD, NGOs and SAR potentials and enthusiasts. On the contrary, primary problems in SAR mission are found consisting of the lack of preparedness among stakeholders in running disaster management SOP, the ineffectiveness of coordination between posts or shelters and replacement of the IC during emergency response. SAR mission coordination and communication has been accomplished through morning briefing. Morning briefing examines preparations, improvement and problems as well as best solutions for SAR operations. Meanwhile, debriefing after the operation reports and evaluates related to SAR results. However, SAR/SRU are not fully incorporated under the same control of SAR Mission Coordinator. There are several SAR units without communication and coordinating with the Mission Coordinator. This condition impacts to disparity distribution of resources in the field.

Collaborative leadership should exist on SAR Operation in Central Sulawesi calamity. Collaborative leadership is better executed in all phases of disaster including pre disaster. This stage needs the involvement of stakeholders and community to organize a more planned SAR operation in forms of coordination forum and program that is in accordance with the needs. The development of collaborative leadership competency for SAR Mission Coordinator can be upgradable through controlling and synchronizing networks and groups.

From the result of the discussion, SAR Mission Coordinator requires collaborative leadership by ways of having capability on technical issue for SAR operation, carrying responsibility and including resilience competency to lead SAR mission in consecutive days, strong characteristic as quick decision maker and rapid response to take risk. In the end, additional qualification shall be prompt and decisive and will be able to manage networks from different parties, both government and non-government humanitarian activists.

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