

## **EXPLORING OPTIMAL AID MIX IN HUMANITARIAN INTERVENTIONS: AN ARCHIPELAGIC PERSPECTIVE**

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### **ABSTRACT**

**Purpose:** The purpose of this manuscript is to explore whether a combined humanitarian assistance involving traditional aid delivery and cash transfer modalities is the optimal response in an archipelagic country? This paper aims to assess whether in such context, cash-based intervention may rise as a more suitable transfer model that is rapidly scalable given the wide-reach of the banking, mobile technology and financial sectors compared to the traditional aid delivery model.

**Design/methodology/approach:** A qualitative approach has been selected for the study. Data has been collected through a series of semi-structured interviews, and unstructured observations to obtain perspectives from various stakeholders.

**Findings:** The use of digital money, mobile wallets and e-cash arguably serves as an effective modality for humanitarian intervention in remote places in archipelagic countries. These cash based interventions offer greater flexibility for the disaster affected populations to restore their livelihoods and resume their normal lives. However, traditional aid delivery cannot be totally eliminated because of limited access to information, communication and technology infrastructure.

**Research limitations/implications** (if applicable): The study is an exploratory research and therefore is more conceptual than empirical. It is intended to gain further information to suggest hypotheses to the topic under review.

**Practical implications** (if applicable): Insights will be obtained from practitioners on the optimal mix of between traditional aid delivery and cash based programmes based on experiences in archipelagic countries.

**Originality/value:** As cash-based programming is anticipated to grow larger than the traditional supply chain of aid delivery within the next decade, many relief organisations have attempted to come up with the most suitable operational setup for both cash-based and voucher-based interventions but are lacking guidelines on the optimal mix.

**Keywords:** Cash-based programming, Archipelagic, humanitarian intervention

### **Background**

The sheer challenge to effectively respond to disaster situations have led the humanitarian community to recognise the need to promote a more collaborative, effective and accountable responses to crises. The recognition and eventual inclusion of NGOs in the response platform indicates the openness for stronger and closer partnerships on the basis of equality and humanity

Disaster situations are generally complex events with increasing magnitudes, potentially due to extreme weather conditions and climatic change. Developing countries are the ones who suffer the most. Lack of infrastructures, lack of response capabilities and capacity are among the two main challenges being faced, particularly in the case of Indonesia and Philippines. On several occasions during the last 15 years, Indonesia has made global headlines due to devastating natural disasters that resulted in hundreds of thousands of lives lost, and numerous damages to infrastructure, thus resulting in economic costs (Alamsjah et al, 2015) The same can be observed in the Philippines.

Indonesia and the Philippines are among the most disaster-prone countries in the world. Its geographic feature as a vast archipelago, located on The Pacific Ring of Fire (marked by numerous tectonic activities), poses a unique situation in terms of hazards and opportunities to deal with them. The ability to cope with constant tsunami risks, hydrological disasters, earthquake, and volcanic eruptions is a crucial requirement for the archipelagic state. Many regions within the country remain at risk in terms of dealing with both natural and man-made disaster hazards. Communities as well as regional government bodies have no choice but to deal with the challenge to prepare and respond to disasters.

Indonesia's 95.181 kilometres of coastline potentially offers an opportunity beyond the commonly pursued natural resources utilization for economic development, but rather for a more effective Humanitarian Assistance Disaster Response (HADR) operation to be conducted when disaster strikes (Kementerian Kelautan dan Perikanan, 2014). It offers accessibility when roads are destroyed, particularly in remote areas where infrastructures remain weak. There is another crucial need to have adequate amphibious capability through the availability of amphibious hardware as well as air force capabilities.

The availability of alternative solutions beyond traditional relief aid delivery through the introduction of cash-based program intervention is considered as one of the most feasible solutions given its lower threshold on immediate operational logistics requirement among NGOs that respond to emergencies in archipelagic countries, such as Indonesia and Philippines. However, the success of these programs is based on various external factors, including the bankability of the beneficiary groups identified, authorisation and control of restrictions associated to the approved commodities recognised under the cash-based program, as well as the need for proper coordination to allow both traditional and cash-based aid programs to run effectively at the appropriate phase of the response.

### **Disaster Management and Cash-based Programming**

Cash-based programming as an alternative solution to traditional relief aid delivery has picked up momentum over the recent years as the characteristics of humanitarian crises has pushed many aid organisations to their limits. The complexity of crises require many aid organisations to stay longer and to provide aid to higher number of beneficiaries despite a depletion of resources. Technological advancements, improved banking access and government's preference to adopt cash-based programming offers a new opportunity for aid agencies to look for alternative ways to provide their service to disaster-affected population. Cash-based programming have increased in popularity among various government programs both in the Philippines and in Indonesia.

Given the archipelagic nature of the above two countries, traditional aid remains a critical response element in the event of a disaster situation. However, poor or destroyed transport and logistics infrastructure, negatively impacts traditional aid delivery and therefore cannot provide to the population in need. The capability to recover the transport and logistics infrastructure is going to be more costly than cash-based intervention as the countries struggle with physical deliveries during an emergency response.

### **Research methodology**

The approach for this study is based on a qualitative paradigm as not much is known related to the phenomenon under study. Primary data will be collected through a series of unstructured interviews and observations to obtain an initial understanding of the perspectives from various stakeholders. This paper aims to offer exploratory insights on the issue being discussed by basing the analysis from different stakeholders involved in humanitarian assistance.

### **Research questions**

Based on the conditions outlined above, it is therefore important to clarify on 2 particular issues:

1. What are the key lessons learned from recent humanitarian operations conducted in Indonesia and in the Philippines as both share similar geographical challenge as an archipelagic country?
2. Will a combined humanitarian assistance involving traditional aid delivery and cash transfer modalities be the most optimal response in an archipelagic country?

## **Discussion**

The International Federation of Red Cross defines the term of disaster as a sudden, calamitous event that seriously disrupts the functioning of a community or society and causes human, material, and economic or environmental losses that exceed the community's or society's ability to cope using its own resources (IFRC, n.d.). Vulnerability with regard to a disaster situation is essentially the lack of capacity of a population affected by the disaster to anticipate, respond and recover from the impact of a hazard.

Disasters have been traditionally categorized according to their causes (natural or man-made) as well as according to their speed of onset. On the latter, there are 3 categorizations that WHO define for all its emergency operations (World Health Organization, 2008), namely:

- Sudden-onset Disasters - This category to refer to disasters, regardless of their cause, for which there is little or no warning to the affected populations.
- Slow-onset Disasters – Disasters that take a long time to produce emergency conditions, for instance, natural disasters such as drought, marine ecological damages or socio economic decline, which are normally accompanied by early warning signs. At times, this category is aggravated industrial development that led to environmental damages.
- Complex Humanitarian Emergencies – A humanitarian crisis in a country, region, or society where there is total or considerable breakdown of authority resulting from internal or external conflict and requires an international response that goes beyond the mandate or capacity of any single and/or ongoing UN country program.

Disaster management is the sum of all activities, programmes and measures which can be taken up pre-, during, and post-disaster with a purpose to avoid, reduce its impact and recover from the losses caused by the unfortunate event (Khan, 2008). The most widely adopted cycle of disaster/emergency management activities are grouped in 4 main phases as illustrated in Figure 1 below. The model has been adopted by The United States Federal Emergency Management Agency (FEMA) since its early inception in early 1980s. It relates closely to measures to ensure that public safety and order is maintained and that continuity of public services is achieved to the best extent possible.

The Indian Ocean Tsunami of 2004 demonstrated that the scale and magnitude of natural disasters have a devastating regional impact across the region. The impact of recent disasters is not confined to a national border and that global issues, such as climate change may lead to a more severe disaster situation in the future.

Rising costs, more severe natural disasters, higher risks of man-made disasters increasingly require for a swift humanitarian response. Aid agencies, the first responders to the disaster emergencies, continue to suffer from donor pressures to be more effective and efficient, essentially demanded to do more with less. Such a situation is no longer sustainable without the participation of military capabilities to alleviate the burden and address the logistical challenges often faced by these agencies due to resources constraint and lack of capability to deal with the situation on the ground.

In the regional context, The ASEAN Agreement on Disaster Management and Emergency Response (AADMER) was established in July 2005 to essentially strengthen the cooperation and collaboration among the ASEAN nations to deal with emergency situation in the South East Asia. AADMER's effectiveness is leveraged by stronger collaboration and preparedness initiatives through AHA Center, the humanitarian arm of ASEAN. Such cooperation will undoubtedly enhance ASEAN capacity to deal with disaster situations and stimulate trust among the various government actors that deal with emergency situations in terms of working collectively to ease the burden of the ASEAN population affected by the disaster events.

The integration of ASEAN as a community is taking shape across three fronts: economic, socio-cultural, and defence cooperation. This would imply a greater interdependence among the ASEAN nations to maintain peace and stability, as well as building trust and strengthen cooperation in responding to non-

traditional security threats, such as in disaster situations. This position is derived from the risk possibility that a large scale disaster event will potentially disrupt regional stability and may lead to economic and social chaos in a prolonged crisis. In order to understand the scale of disaster risks in the region, more than 50 percent of global disaster mortalities occurred in South East Asia region during the period of 2004 to 2014. 354,000 of the 700,000 deaths due to disaster events occurred in the region with more than US\$ 90 billion economic losses incurred (The Jakarta Post, 2015).

In the context of Indonesia, beyond the issue of humanitarian assistance, challenges remain with regards to inter-agency coordination of agencies involved in disaster response operations. Integrative capabilities with regards to surveillance, and emergency response remain far from ideal. Progress has been made with efforts from the public sector through the establishment of national cluster, however, there is still a long road ahead to reform and/or streamline Indonesia's disaster preparedness readiness from where it stands today across all levels of government leadership, especially in the remote areas of the country. The challenge to cover such a vast archipelago requires not only adequate hardware, software / systems and brain-ware to deal with all the potential threats that arise from a disaster situation.

### Lessons Learned

Based on recent events of disasters that took place in both countries and within the South East Asia region, there are a number of key lessons that can be drawn from multiple sources of post-action review and lessons learned reports based on disaster events in the above respective locations. This paper highlights the top three key findings that are very much relevant to the situations in both Indonesia and Philippines:

1. **The need for a more effective working mechanism with regards to aid delivery** due to lack of coordination in terms of assessment, lack of capacity on programme management or lack of resources (human, assets, supplies and access). In complex disaster situations that have devastating effects on poor infrastructures, such as Cyclone Nargis and Typhoon Haiyan. International response operations must systematically work with existing national and response coordination mechanisms (IRIS / Save The Children, 2013).
2. **There is still room for improvement for all participating humanitarian actors**, including local military forces, to be more efficient and effective provider of humanitarian operations based on the post-action review during The Padang earthquake in 2009 (Rand Corporation, 2013). Better coordination and improved communications between military and civilian partners are generally the common issues in every major / medium-scale disaster given the logistical requirements.
3. **The need to be able to respond to multiple disasters at the same time.** South East Asia has experienced a number of major disasters in the past decades. In particular countries, in Indonesia and the Philippines, occurrences of multiple natural disasters will require a better-prepared and effective response mechanism to be in place.

In the Incident Command System that The National Disaster Management Agency of The Philippines and Indonesia adopt in performing their roles and responsibilities during disaster situations, effective emergency response management requires a systematic approach that guides the management of resources, organizations, information and personnel involved in the response operations. This is due to the consideration that series of events that unfold may fall outside of normal circumstances, which carries a great potential for confusion or a loss of control to occur (FEMA, n.d.).

- **Preparedness Phase** – Readily prepare for any potential disasters by prepositioning relief supplies and equipment for deployment as soon as disaster strikes. The Navy can provide general facilities for the internally displaced populations that can be managed either by disaster volunteers or internal personnel. On immediate basis, coordination is arranged with BNPB /

BPBD in support of their efforts to respond to the emergency. Know-how support can be obtained from traditional fishermen and sailors on geographical knowledge of the area.

- **Response Phase** - Conduct surveillance missions to obtain aerial knowledge of the disaster affected areas and ensure that evacuation has proceeded accordingly and adequately. Provide logistical support and set up a command post to facilitate aid provision and provide logistical support using military or civilian assets. Traditional fishermen and sailors can assist in providing guidance for big ships carrying relief supplies operating in the area. Oil companies can offer provision of communication support and evacuation assistance in their rig platforms upon request from government or local military force. Local Fisheries industry can provide assistance in disaster situations by delivering aid supplies to the disaster zones. All local ports, regardless of size, can provide key side assistance and temporary storage / staging arrangement for relief cargo prior to delivery to the disaster zone.
- **Recovery Phase** – Focus efforts on recovery operations by rebuilding damaged infrastructures, and provide temporary facilities to relieve the suffering of disaster affected population. Conduct performance evaluation / post-action review in order to analyse on what went well and what went wrong for future improvements.
- **Mitigation Phase** – The local government unit / provincial NDMO can direct the general populations towards safety, provide safety shelters, and provide arrangements and protections in the displacement area

### **The role of cash-based programming**

In an archipelago the size of Indonesia, it is unrealistic to put the burden of responding to disaster situations solely on the National Disaster Management Office. Local capacity building among the communities and local BPBD agencies is critical as they will be among the first responders with local knowledge. Such capacity building initiative can take many forms from transfer of knowledge, simulation exercises, practical drills, installation of early warning / alert systems and instituting disaster preparedness aspect in government infrastructure projects.

Centuries of local practices, way of living, and cultural values should be embodied in developing thousands of resilient kampongs (villages) or Desa Tangguh (National Geographic Indonesia, 2012). They will become a network of capable first responders when urgency arises in a disaster situation. The various humanitarian actors must proactively be involved in these capacity building programs in collaboration with BNPB/BPBDs and other local agencies for coastal villages as potentially when land access to these areas are hindered, delivery of humanitarian assistance will need to be done by sea. This is where identified respondents recognised the need to enhance the effectiveness of emergency response through the introduction of cash-based program.

Within this domestic context, the local military forces in both countries are arguably the only institution that has the mobility and means to be able to arrive at a crisis area in strength. Their presence carries two-fold benefits of providing a sense of security in the disaster area, and be ready to provide assistance by delivering humanitarian relief operations directly or by supporting other relief agencies or the government bodies already responding in the disaster area. This is the distinctive factor which, demonstrates the capability of military professionalism and efficiency when and where it is desperately needed. However, it does not eliminate the need for significant funding required to support the necessary response operation. The respondents highlighted inconsistencies of preparedness level within the provincial and municipality level suggesting the risk of inefficiencies and ineffectiveness during response operations.

Respondents' suggest that there is further need for government agencies to explore and introduce a stronger mechanism of cash-based intervention through proper management of risks associated with the implementation of various cash-based programs. Weaknesses, at times detected at the identification phase, of the right beneficiary groups due to a lack of governance on identity management is recognised. This single identification system is inadequate among government services in Indonesia, or the limited control mechanism imposed on cash program distribution operated by government agencies in the Philippines.

Most of the respondents agree that cash-based programs carry the potential to be central to future humanitarian response while reserving the role of traditional relief aid to be complementary to address market breakdowns in the immediate effect of a disaster event. There are also suggestions to replicate existing e-money solutions that exist within the financial sector that can carry specific restrictions in terms of its usage for a specific period declared under emergency response phase and to make it usable by retail merchants / vendors that have demonstrated resilience in their supply chain, primarily modern trade retailers.

### **Conclusions**

Given the lack of empirical evidence that exist in both Indonesia and Philippines with regards to the significance of efficiency and effectiveness of cash-based intervention program in comparison to traditional relief aid delivery, the respondents suggest that there is a need to conduct a systematic comparative/benchmarking analysis of the two types of interventions. Some respondents also suggested the maintenance of consistency of the program and disbursement characteristics during and post-disaster emergency response phase. Coordination is a risk area recognised among most of the respondents as they express concerns related to the transparency and robustness of such a cash transfer program involving government services.

An initial solution can be initiated through the use of commercially available electronic cash solutions, be it in the form of mobile phone credit or e-money solutions that are already widely accepted across the country.

However, respondents disagreed on the conditionality of cash-based intervention as some respondents consider it as a limiting factor to the beneficiaries in their efforts to restore their livelihoods. However, imposing conditional restrictions to the cash transfer program also has its merits in educating the beneficiaries in streamlining their priorities by imposing certain rules and restrictions in the usage of the cash offered through the program. Government and aid agencies also need to be more aligned in their response and to be more selective in their assessment process to ensure effective and fair distribution of cash transfer program to have a wider reach to the beneficiaries in need.

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