Achieving Gender Equality in Disaster Management: a case study of the integration of women into community groups in Indonesia

By Ashley Carvalho

Article

Achieving Gender Equality in Disaster Management: a case study of the integration of women into community groups in Indonesia
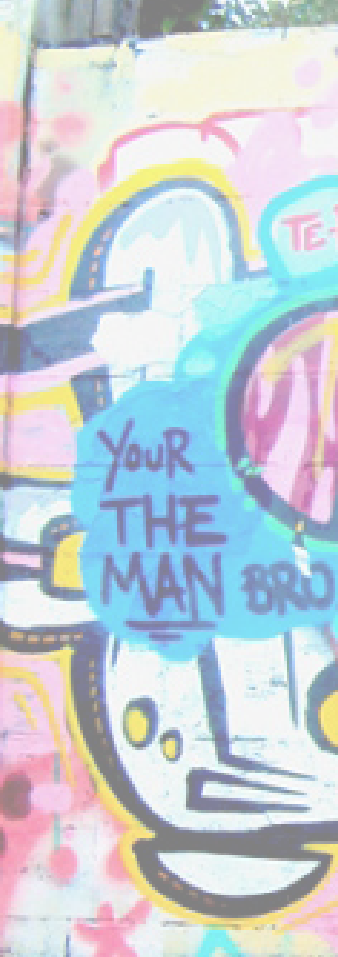
By Ashley Carvalho

ABSTRACT

The recent international commitment to the United Nations 2030 Sustainable Development Goals (SGDs) continues to recognise the need for the international development community to focus on achieving gender equality on a local and global scale. The SDGs invite the academic community to once again ask themselves about the practices that are currently in place in order to best provide equal opportunities for men and women. It is apparent that, currently, men continue to be privileged over women. However, the growing acknowledgment that gender equality is key to achieving other developmental goals provides a great platform to improve the current policies and practices used around the world.

This paper will focus on the role that women can play in management of a disaster. With a case study in Indonesia, a country very prone to natural disasters, this paper explores how involving women in decision-making roles leads to an increase in overall community resilience in the face of future disasters. Furthermore, this paper will conclude that there is a great need for communities to recognise the invaluable role that women can play in building community sustainability during disaster preparation and response.

INTRODUCTION

"Without the full participation and contribution of women in decision-making and leadership, real community resilience to climate change and disasters simply cannot be achieved," said Sálvano Briceno, former director of the Secretariat of the UN International Strategy for Disaster Reduction (Gender Perspectives, 2008, paragraph 3). The emphasis placed on achieving gender equality and building sustainable communities within the 2015 Sustainable Development Goals (SDGs) provides an unparalleled opportunity to re-evaluate the current practices and gender focus of disaster-management programmes. This paper suggests that gender equality and sustainable development goals are inextricably linked, and can therefore be best achieved through the integration of both at a policy level.

With the ever-increasing recognition that climate change will lead to an increase in disasters throughout the world, programmes that best enable communities to build resilience in the face of disasters is essential for the protection of human life and for the sustainability of communities. As a group that is disproportionately affected by disasters, women must be provided with full and efficient opportunities to participate in disaster management (Isik et al., 2015). This paper will be looking at Indonesia and how best to ensure the increased decision-making capacity of women at a local

level, namely within community-based programmes. Furthermore, this paper will discuss the need for gendered disaster management programmes and how to potentially best implement these into local communities throughout Indonesia.

GENDER INEQUALITY

First, we need a general understanding of what 'gender inequality' refers to and how it manifests in contemporary society. Gender inequality refers to the marginalisation of a woman's status relative to men (Austin & McKinney, 2016). The inequality between men and women limits women's opportunities, participation, engagement and development outcomes (Hendra, FitzGerald, & Seymour, 2013). While men and women are different on a biological level, the notions of femininity and masculinity are socially constructed (Shreve, 2016). Women tend to lose out through this exchange of ideas. Gender inequality is pervasive and affects a multitude of other sectors of society, hence its central position within the new development agenda (Hendra et al., 2013).

On a global level women are marginalised in a number of areas. Women are systematically denied access to certain assets, are paid less than men in equal work and are concentrated in vulnerable employment situations (Hendra et al., 2013). Women face persistent beliefs that they are inferior to men (Koehler, 2016). Women are subject to physical and sexual violence at a much higher rate than men (Hendra et al., 2013). Women are constantly faced with a lack of control in the public and private spheres (Koehler, 2016). This has resulted in exclusion from political, social and economic leadership roles (Koehler, 2016). These gender disparities are further evident during times of crisis (Shreve, 2016).

GENDER IN DISASTERS

Disasters impact men and women differently. Traditional gender roles are exaggerated during times of crisis, resulting in long-term detriment to women (Shreve, 2016). Particular vulnerabilities/factors that lead to women experiencing disproportionately negative effects in the face of disasters include the following:

1. **Lack of decision-making power**
   There is a history of under-recognising the potential for women to play a key role in disaster management. In the *UNESCO Science Report: Towards 2030* (2015) it was observed that, "women are not represented equally in the key climate-change related sectors of science as skilled workers, professionals or decision-makers" (p. 85).

2. **Dependence on the natural environment**
   Gender inequality discourse argues that women are disproportionately affected by disasters due to their economic dependence on natural resources (Austin & McKinney, 2016). This is due to the patriarchal allocation of labour (Koehler, 2016). Women make up the majority of farmers on marginal lands, which are susceptible to droughts, floods and other hazardous events. These women, who live in less-developed countries, use the natural environment for household tasks such as fetching water, growing food and collecting firewood (Austin & McKinney, 2016). This means that women are often in the field during times of hazards and their source of income is often destroyed in the disaster.

3. **Physical and sexual violence**
   Violence against women is an ever-present phenomenon throughout the world (Hendra et al., 2013). However, this rises at times of vulnerability, such as during a disaster and the recovery period (Hendra et al., 2013). Furthermore, women experience a decline in sexual and reproductive health during such times (Shreve, 2016).

4. **Unequal death toll**
   Perhaps the most alarming difference between men and women in the face of disasters is the much higher mortality rate among women. Women are disproportionately represented in death and injury tolls (Haynes, Jonatan, & Toweres, 2010). For example, in the 1991 Bangladesh cyclone and flood, the death rate among women aged 20-44 was 71 per 1000,
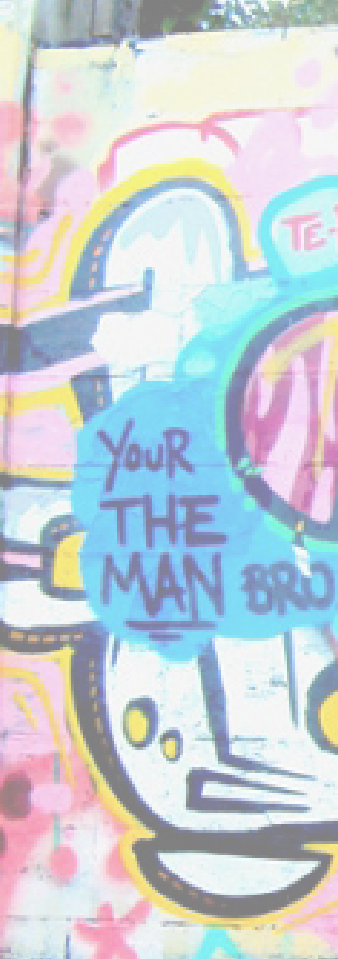
compared to 15 per 1000 for men (United Nations Development Programme, n.d.). This was attributed to the fact that women remained in their homes waiting for other family members (Pincha, 2008b). The case was the same after the tsunami in Asia in 2004, where women died at a rate of up to four times more than men (Oxfam, 2005). This outcome arose from a number of factors, such as women returning to save their children, and not being able to swim.

5. **Childcare and household duties**
   Women, as dictated by social norms, are considered to be the prime caregivers for children and receive no pay in return. During times of crisis this means that women continue to have the burden of caring for children (Shreve, 2016). Women also have to continue with their household duties at this time, such as cleaning and resource collection (Isik et al., 2015).

6. **Lack of education**
   In a number of countries, including Indonesia, women are often denied disaster risk education and training (Yumarni & Amaratunga, 2015). In these places, this leads to male domination in the areas of planning and training for disasters.

In summary, even if a woman survives a disaster, her physical and financial security, health, hygiene and nutrition are further impacted, and this leads to an increase in female suffering (Isik et al., 2015). Girls and women are too often denied the opportunities that would allow them to grow resilience in the face of disaster (Haynes et al., 2010). Resilience is an individual's tendency to cope with stress and adversity in their lives (Ayyub, 2014). For disasters, resilience describes the ability to bounce back to a pre-disaster state after a disaster strikes (Edwards, 2015). Furthermore, for women, sustainability is not just a humanity objective but is also a gendered concern due to the disproportionate rate at which they are affected by social inequality (Koehler, 2016).

GENDER-FOCUSED DISASTER PROGRAMME BENEFITS

Gender equality is a necessary component of reaching a prosperous and sustainable world (Sustainable Development Goals, 2015). Disaster risk reduction is the process of reducing risks through activities in order to reduce the effects of disasters and to mitigate any contributing factors of disasters (Sagala, Yamin & Rianawati, 2016). Disaster risk programmes look at the underlying reasons for a disaster occurring (Haynes et al., 2010). The incorporation of women into sustainable programmes is considered to be beneficial to women and the disaster preparation and recovery period for a number of reasons.

Firstly, it is because of the disproportionate amount of work that women do in fields directly affected by disasters that they have a weighted interest in sustainable development and better disaster management (Koehler, 2016). This disproportionate amount of work means that women are able to present unique perspectives and local knowledge of the impacts of disasters on the natural environment in ways that men are unable to. Women are therefore able to assist with the design of disaster mitigation programmes that cater to the protection of natural resources. This supports ecofeminist arguments that the incorporation of women into decision-making roles leads to greater environmental sustainability (Austin & McKinney, 2016).

Secondly, women hold unique views relevant to their lifestyles, particularly social problems that they face. For example, by placing women in positions of control in the design of post-disaster recovery, they can, by drawing from their shared experiences, try to create programmes that ensure greater physical safety for women in light of the increased physical and sexual abuse experienced. For women, having a step from which to speak and be heard means that policy won't trivialise women or de-prioritise their needs (Isik et al., 2015).

Thirdly, research by Austin and McKinney (2016) found that women use the power they have to promote programmes that are for the wellbeing of the entire community. Austin and McKinney determined that improving women's position in society reduces the number of deaths from disasters in developing countries. They further concluded that the inclusion of women in preparation efforts is invaluable because it leads to decisions being made that positively affect public health and mitigate the impact of future disasters. Gender inequality and gender-based discrimination are the two most widespread drivers of global inequalities (Hendra et al., 2013). Hence the international recognition
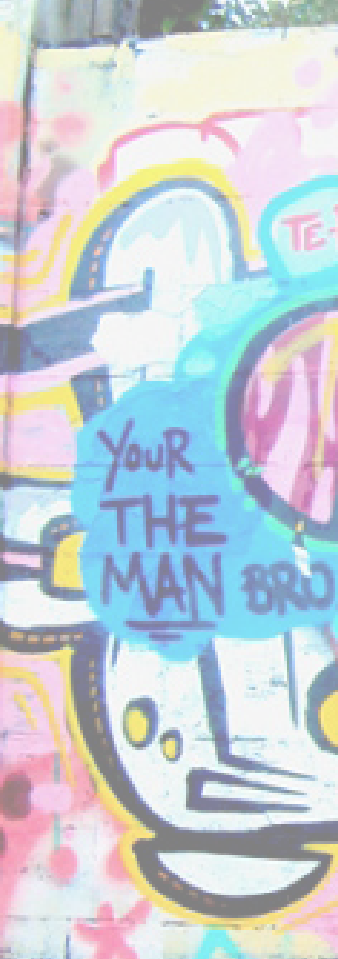
that by addressing gender inequality, other development imperatives can be targeted simultaneously (Hendra et al., 2013). For example, by providing women with equal access to health care, decent work and equal opportunities to hold decision-making positions, this will fuel the development of society at large (Sustainable Development Goals, 2015). Therefore, not only is the empowerment of women within the context of disaster relief beneficial to sustainability and community resilience, but it also improves the health conditions of the community.

Unless the status quo is to be perpetuated, disaster management must be more responsive to gender. This is what the SDGs hope to rectify.

SUSTAINABLE DEVELOPMENT GOALS

While the Millennium Development Goals were able to progress gender equality in the world, there is still a long way to go before equality can be achieved; the Sustainable Development Goals (SDGs) hope to achieve this by 2030. The SDGs, or *Transforming our World: The 2030 Agenda for Sustainable Development* are 17 aspirational global goals that the development community wants achieved by 2030, with 169 targets overall. They replace the Millennium Development Goals and are reflective of the changes in development rhetoric. As a result, a strong focus has been placed on reducing inequality within and among the countries of the world (Koehler, 2016). Within these 169 targets, 24 relate explicitly to gender issues. Goal 5, the agenda's dedicated goal for bridging the gap in gender equality, can be observed as crucial to gender equality achievements in the future. There are nine targets within the goal. One such target calls for women's full participation in all levels of decision-making: to "ensure women's full and effective participation and equal opportunities for leadership at all levels of decision making in political, economic and public life" (United Nations, 2015, paragraph 5.5). The SDGs articulate the need for women to have greater decision-making roles because the status quo sees women from all corners of the world being under-represented in both formal and informal decision-making settings (Hendra et al., 2013).

As a part of a change in the theoretical approach to development these new goals not only incorporate, but are named after, the concept of sustainability. Sustainability relates to the ecological environment and aims to produce and sustain a healthy planet (Koehler, 2016). There is a great emphasis within the SDGs on addressing climate change. The SDGs call for governments around the world to strengthen community and individual resilience, build on their adaptive capacity and reduce the impact of disasters (Austin & McKinney, 2016).
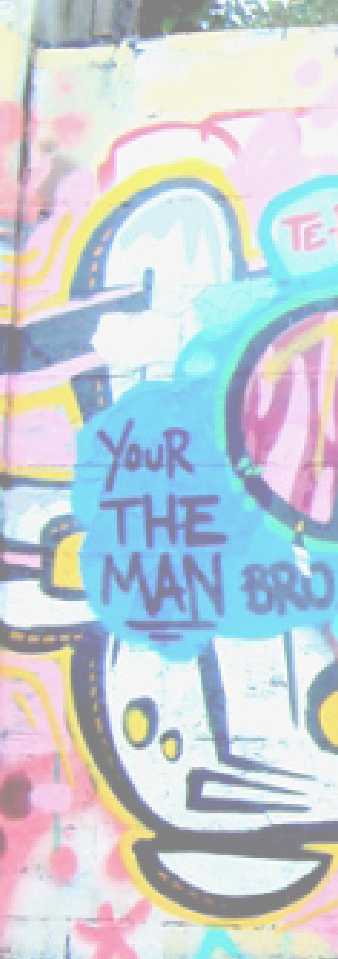
The SDGs provide a platform for the world's commitment to development to be re-kindled. Furthermore, for gender equality, there is an unparalleled opportunity to enact a transformative vision in the field of development (Hendra et al., 2013). The SDGs call for governments and NGOs to develop greater understanding of the structural constraints and unequal power relations between all groups within society (Hendra et al., 2013). However, even though the SDGs present prevalent focus topics, they do not articulate how to address systemic issues (Koehler, 2016). This paper connects the theory of the SDGs to the practical realities of Indonesia and how best to execute these developmental goals.

CASE STUDY IN INDONESIA

Gender equality in Indonesia

In order to be able to create gender policy within Indonesia, a greater understanding of the sociocultural environment of the country, where women face many challenges, is needed (Martam, 2016). In developing countries, like Indonesia, there are large obstacles in the way of women's empowerment (Martam, 2016). As in line with the rest of the world, Indonesia's public decision-making is the domain of men (Haynes et al., 2010). Gender violence is also a grave issue within Indonesia (Martam, 2016). Cultural practices often mean that women have to enter into early marriages, depriving themselves of a full education (Martam, 2016). This is particularly pertinent to women and girls in rural areas of Indonesia (Martam, 2016). In Lampung, South Sumatra, men can be shamed for cleaning their house or washing the dishes, because these are considered womanly duties (Martam, 2016). This is because traditional Indonesian culture says that it is a woman's role to care for children and the home, while the man, as the financial provider for the family, should be catered to within the home setting (Martam, 2016).

Transforming the husband-and-wife dynamic into an equal partnership is a long-term project for Indonesia (Martem, 2016). It requires challenging the sociocultural values embedded into

Indonesian life. The pervasiveness of such cultural norms was also apparent in a study conducted by Haynes et al. (2010), which found that the views and abilities of men were considered superior to those of women. Both men and women were surveyed and thought men's capabilities to be greater than women's. Gender norms, for both men and women, indeed start before one is even born (Hendra et al., 2013).

Being an Islamic country by majority, the interplay between religious and social views is key to understanding Indonesian cultural values. The introduction of Sharia-based regulations in the Province of Aceh presents a particular challenge for the Indonesian Government (Jauhola, 2010). Misogynist policies continue to be implemented in these areas (Afrianty, 2015). The presence of Sharia law is a reflection of the rise of Islam in Indonesian politics (Jauhola, 2012). Thus, discussion about gender norms in Aceh is part of the debate about local customs and the international concept of human rights (Jauhola, 2010).

Impact of natural disasters in Indonesia

Natural disasters often occur without warning and present constant challenges to the world at large but are particularly harsh in less-developed locations (Austin & McKinney, 2016). Within Indonesia there are many areas that are very prone to the occurrence of natural disasters (Sagala et al., 2016); earthquakes, volcanoes and tsunamigenic earthquakes, in particular, are quite common (Haynes et al., 2010). In the western islands, flooding and landslides are frequent, while in the eastern areas drought and strong winds are common (Haynes et al., 2010). Some very well known natural disasters that have occurred in Indonesia include the 2004 tsunami in Aceh, the earthquake in Yogyakarta in 2006, and the Jakarta floods in 2007. Furthermore, it is the consensus of the scientific community that climate change and events that occur as a consequence (such as floods, storms, droughts) will continue to escalate in harshness and number (Austin & McKinney, 2016). This all means that Indonesia needs to ensure its disaster-management policy is best equipped to address these prevailing concerns.

When it comes to addressing disasters and trying to build community and individual resilience, a disaster-management plan needs to be created. This process looks at all stages of the disaster-management cycle, which includes mitigation, preparedness, response and rehabilitation (Isik et al., 2015). It is often the case that while the Indonesian people are aware of the constant threat that natural disasters pose to their communities, they do not take a proactive, preparatory stance, but rather they respond to the aftermath. However, it has been found that effective planning and preparation before disasters occur is one of the best ways to mitigate the impact of a disaster (Austin & McKinney, 2016). Though the SDGs and other international documents encourage this approach in theory, in practice the focus is still predominantly placed on post-disaster efforts rather than pre-disaster preparation (Austin & McKinney, 2016), however, a transition of thinking from reactive to proactive in the face of natural disasters is evident in Indonesia. The Indonesian National Disaster Management Agency (BNPB) was set up with the goal of building a resilient country in the face of disasters (Hiwasaki, Luna, Syamsidik, & Shaw, 2014). Furthermore, any sustainability development policies that incorporate women as key participants will need to ensure they are focused on proactive prevention rather than just having a limited focus on post-disaster relief. This will enable the most sustainable outcomes. Disaster management is most successful when risks are foreseen and used to optimise resources (Isik et al., 2015).

Current initiatives

How can we ensure that women are given equal opportunities to have decision-making roles in disaster management, in particular, in Indonesia? Existing structures in place can be utilised for this purpose:

1. *Community Based Disaster Risk Management*
   Community Based Disaster Risk Management (CBDRM) schemes have been found to be an effective means of integrating local knowledge into disaster management within Indonesia (Hiwasaki et al., 2016). These groups, formed by local citizens, are made with the intention of mitigating the consequences of future hazards and thus adopt a more proactive policy stance (ICCO and Kerk in Actie, 2012). They are present in areas that experience constant disasters, and have to rely on their own resources rather than external support (ICCO, 2012). It is through CBDRM that disaster-risk-reduction programmes are often brought to communities for the first time. In West Aceh, in areas affected by the 2004 tsunami, a CBDRM programme was implemented in the villages (Heijmans & Sagala, 2013). These programmes, through the support of NGOs, lead to the formation of disaster preparedness teams, which led simulations for the local community. The community appreciated the
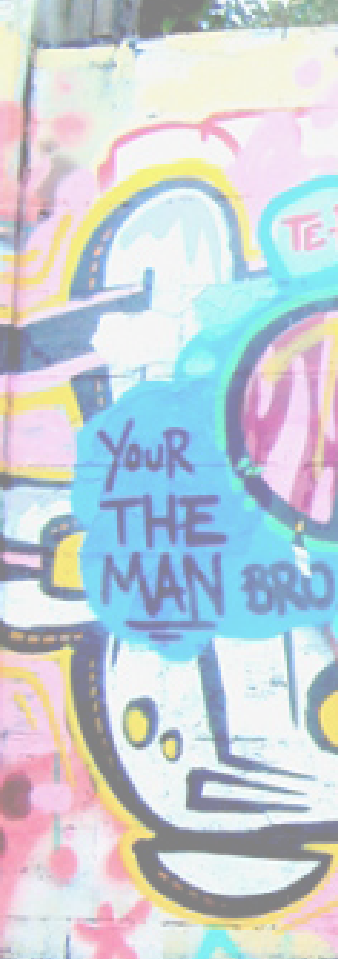
preparation teams and the simulations as it meant that they knew what to do should disasters occur in their villages in the future (Heijmans & Sagala, 2013).

In East Java, a CBDRM group was formed after the 2007 volcano eruption. This led to the formation of disaster preparation teams as well as a group called Jangkar Kelud, which was an independent information organisation made up of locals. The purpose of this group was to train other villages in what they had learnt in CBDRM training about disaster preparation, thus building a greater knowledge base (Heijmans & Sagala, 2013). CBDRM allows for the community to take ownership of their development (Haynes et al., 2010). It also assists in building a community's preparation for any future disaster (Heijmans & Sagala, 2013). Furthermore, CBDRM groups have provided an appropriate forum for communities to mobilise actions to assist them in disaster planning and relief. For example, a group of villagers who were a part of a CBDRM programme initiated a media campaign to lobby the government to address the flooding problem in the area in a more structural manner (ICCO, 2012). Again, a CBDRM team in Desa Kautamban, an area affected by flooding, stabilised riverbanks and slopes by getting the community to assist with the construction of gabions (Heijmans & Sagala, 2013).

On a practical level, every CBDRM programme is different in its design, structure and execution (ICCO, 2012). However, it was the observation of Heijmans and Sagala (2013) that CBDRM teams were made up predominately of individuals from less vulnerable groups within society, such as teachers and village officials. However, housewives were also listed as being a part of these programmes. It is important from a consistency perspective that such programmes are inclusive of women from all walks of life.

2. *PNPM*
Social protection schemes have the potential to provide sufficient protection for communities and individuals to cope with natural disasters (Wu & Drolet, 2016). The Indonesian government has three clusters when it comes to social protection: family-based integrated social assistance programmes, community empowerment programmes and the development of micro-enterprises. The second cluster, the national programme for community empowerment (PNPM), is the focus of this discussion. It is a large programme that assists local communities to improve living conditions through the involvement of community resources and individuals (Sagala et al., 2016).

The findings of Sagala et al. (2016) in the districts of Indramayu and Sleman, where PNPM programmes were implemented by the Indonesian government, were that community resilience relies on the participation of community members in the design of any programmes. The Government of Indonesia used the PNPM to set up disaster-recovery-management support post the 2010 earthquake in the district of Sleman, located in the northern part of Yogyakarta Province (Sagala et al., 2016). It was through the PNPM schemes that cash-for-work programmes were implemented, which acted as strategic initiatives during the transition from the emergency to the recovery stage (Sagala et al., 2016). This assisted the most vulnerable at the time.

It is held that, though the PNPM funds are relatively small, PNPM programmes have the capacity to bring about collective action that assists a community with disaster management (Sagala et al., 2016). PNPM is particularly able to provide funds to communities to redevelop infrastructure that will be able to assist with a community's preparation for future disasters (Sagala et al., 2016). For example, PNPM has set up road infrastructures which have a number of positive relay affects, creating a way of commuting, engaging in economic activity, and providing an evacuation route in times of disaster (Sagala et al., 2016). In this way the social protection provided by PNPM programmes was able to provide short-, medium- and long-term assistance with recovery. With strategic gender integration of women within the programme, PNPMs can be appropriate structures for women to have key decision-making capacity in terms of policy.

3. *Village groups*
After the 2006 earthquake in Yogyakarta, known as the Bantul earthquake, it is the opinion of Yumarni & Amaratunga (2015) that the gender mainstreaming that took place in this recovery period was very effective. There was a large inclusion of women in the formation of disaster response. The input of women came from the village female groups, such as women's family welfare groups and women's credit associations. It was found that the
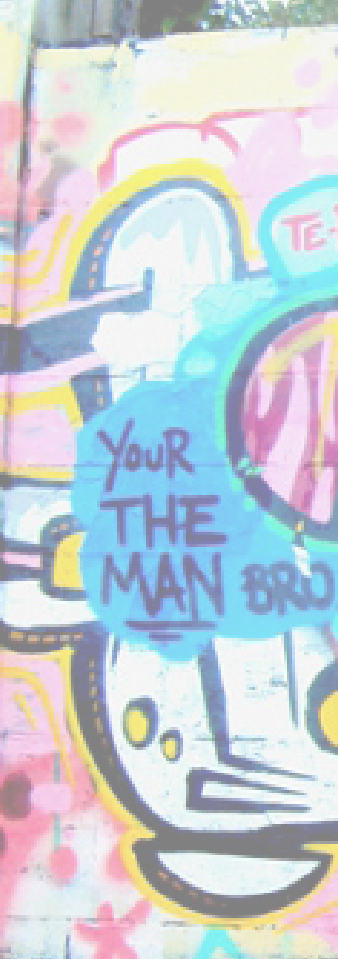
indigenous knowledge of women in the post-earthquake period was vital for the creation of sustainable recovery plans (Yumarni & Amartunga, 2015). These same organisations in the area have promoted the use of organic farming over modern farming practices, a reflection on knowledge and willingness to participate in decision-making processes (Yumarni & Amartunga, 2015). Throughout Indonesia there are women's organisations at the village level (Hiwasaki et al., 2014), for example, Empowerment Family Welfare (PKK) and Majelis Wirid Yasin. Hiwasaki et al. (2014) suggest that these forums can be utilised within the context of building disaster response and recovery (DRR) programmes.

Future actions for Indonesia

1. *Increase women's role in community-based groups*
   Despite the fact that children and women are largely the most affected by disasters, community-based groups in Indonesia are dominated by men (Haynes et al., 2010). Thus, the Indonesian government and local authorities need to understand the magnitude of positive flow-on effects of incorporating women into such groups, and to ensure that future policy in this area specifically incorporates female voices. In recognition of the call by the SDGs to increase female decision-making power, the Indonesian government should include the need for equal female representation in community disaster programmes within the next Indonesian National Disaster Management plan. The success of existing CBDRM and PNPM programmes can be enhanced by a requirement to have women present in numbers within the decision-making bodies. Furthermore, local village groups should be well resourced to ensure their existence and vital presence in times of emergency.

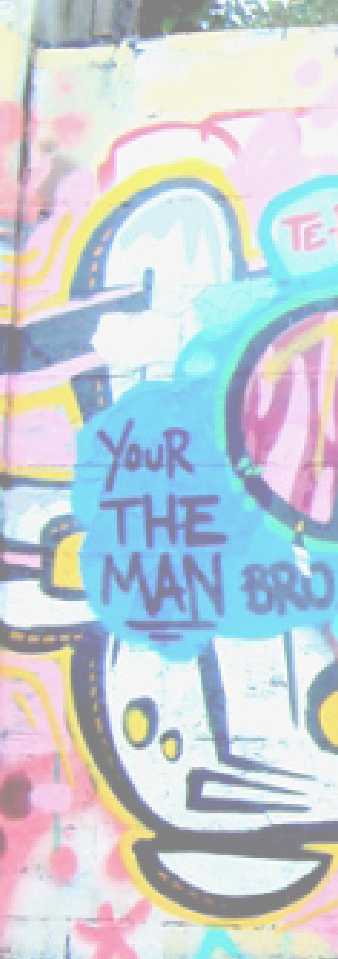2. *Gain wider traction for gender equality*
   Due to the ingrained nature of gender inequality within Indonesian culture, a widespread campaign needs to be implemented to break down the stereotypes associated with men and women. Built-in mindsets must be altered in order for the best gender-oriented programmes to be created. Even if women are put in positions of decision-making through the support of policy, unless the men of the community, and women too, believe this to be of value, then attempts at gender inequality will go astray. To this end, a greater understanding of the relationship between the Islamic religion and gender also needs to be developed.

3. *Generate more data on this topic*
   There is a great need for more data on gender to be gathered within Indonesia so that a better understanding of the disparities between men and women can assist with achieving the SDGs (Temin & Roca, 2016). There is international momentum for this cause, making it the opportune time for resources to be allocated to achieve a greater understanding of gender differences (Temin & Roca, 2016). The SDGs themselves place pressure on countries to update their gender data (Sustainable Development Goals, 2015).

Policy design essentials

1. Women are given equal opportunity to participate in community-based disaster groups. Furthermore, women can't just be invited into these roles but must be actively encouraged in order for them to understand the importance of their role. Indonesia must learn from past experiences of using democratic processes to put women in power, but then not empowering these leaders to exercise authority in order to address women-friendly issues (Afrianty, 2015).

2. Within the construction of these community groups it is vital that transparency and accountability mechanisms are put in place in order to prevent corruption and misuse. This is particularly pertinent to Indonesia, which is notorious for its corrupt bureaucracy.

3. One of the strengths of the post-earthquake recovery in Bantul was the cooperation between the grassroots organisations and those providing resource support from NGOs (Yumarni & Amartunga, 2015). This can be drawn on for future policy construction – there must be good cooperation between the locals and other assisting bodies.

Key stakeholders

1. *Women*
   Obviously, a gender-focused disaster programme could not function without the co-operation and interest of the women of the community. It is often the women who have the indigenous skills and expertise that will build sound disaster strategies (Yumarni & Amaratunga, 2015).

2. *Government*
   Due to centralisation in developing countries, the local government is in the position to enact and implement gender-specific development policies (Yumarni & Amaratunga, 2015). However, overall backing and support from the national government is required for this to be effective.

3. *Community*
   The community members themselves must be approached and their specific desires and circumstances need to be taken into account.
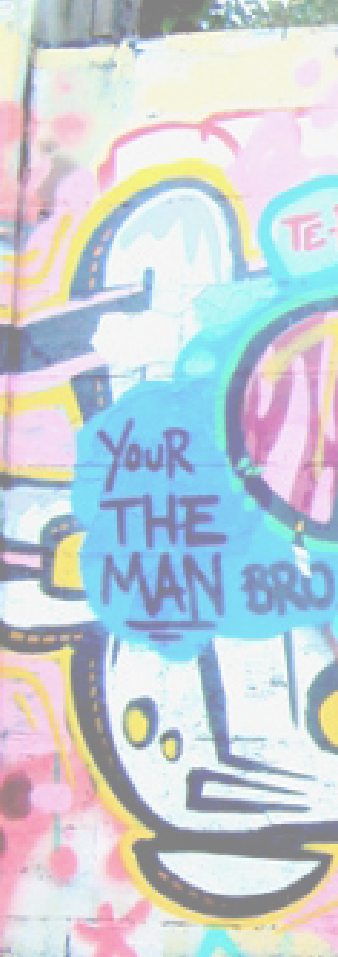
4. *Men*
   It is essential to the success of gender-focused programmes that men are incorporated in planning and execution. Harden at al. (2013) conclude that the mobilisation of men and boys in gender relations is necessary. This is because the structural rigidities of society that underpin gender disparities are unable to be altered by one gender only, but rather require all of society to support such changes. Furthermore, men, the gender currently in power, are the ones who are best placed to call for changes to be made and ensure that they are in fact implemented. Study on the relations between the sexes in this field is severely lacking (Shreve, 2016). Hence, men and boys remain an untapped resource within the study and practice of gender equality (Hendra et al., 2013).

Conclusion

Indonesia's proneness to experiencing natural disasters means that the construction of efficient policy in the area of disaster management is crucial for the wellbeing of those living in the community, as well as for the structural and natural environments themselves.

This paper calls for future policy in the area of disaster management to explicitly mandate the inclusion of women in positions of power. This will aid the pursuit of ecological sustainability whilst simultaneously providing one way to achieve gender equality. This paper has discussed how women continue to be affected disproportionately by disasters, which can be linked to their lack of voice in policy construction within this domain. Hence, there is a need for women to have an active role in the mitigating, planning, response and rehabilitation processes of disaster management. Decisions at all levels of the disaster-management process need to account for the productive and constructive role that women play at every stage. For Indonesia, this means equal participation in existing community groups and provision of support to local women's village groups that can be drawn upon in times of crisis.
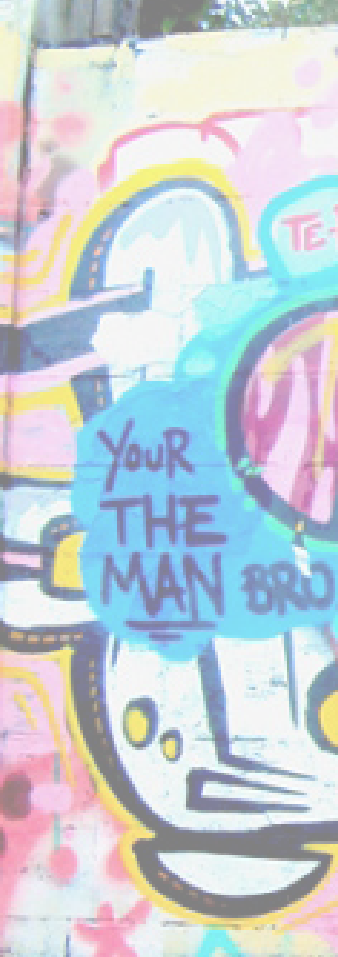
Investment of resources into women's empowerment is not only beneficial for gender equality goals but has been shown to have a flow-on effect in reaching other development goals (Hendra et al., 2013). Thus, the allocation of resources towards gender equality is able to assist a great number of the Sustainable Development Goals. By empowering women, the ability of the community to respond to disasters is enhanced, making disaster management and gender equality inextricably linked (Austin & McKinney, 2016). In order to preserve human life, build sustainable communities, all at the same time as empowering women and redressing gender inequality, it is imperative that disaster development programmes mandate the inclusion of women as key active participants in the mitigation of disasters, thus, simultaneously achieving two key aims of the SDGs.

Ashley Carvalho is a student at the University of Notre Dame, Fremantle, Western Australia. She recently completed a Bachelor of Arts, majoring in politics, and is currently working towards a Bachelor of Law. She completed a semester abroad in Indonesia, at Paraghyangan Catholic University, Bandung, in 2016. She has an interest in international relations and community development.

REFERENCES

Afrianty, D. (2015). Indonesian women and local politics: Islam, gender and networks in post-Suharto Indonesia. *Southeast Asian Studies*, *4*(3), 614.

Austin, K. & McKinney, L. (2016). Disaster devastation in poor nations: The direct and indirect effects of gender inequality, ecological losses, and development. *Social forces*, *95*(1), 355-380.

Ayyub, B. (2014). Systems resilience for multi-hazard environments: Definition, metrics, and valuation for decision making. *Risk Analysis*, *34*(2), 340-355.

Edwards, J. (2015). The structure of disaster resilience: A framework for simulations and policy recommendations. *Natural Hazards and Earth System Sciences*, *15*, 827-841.

Haynes, K., Jonatan, L., & Toweres, B. (2010). *Child centred disaster risk reduction and climate change adaptation: Roles of gender and culture in Indonesia*. Brighton, UK: Institute of Development Studies. Retrieved from http://www.preventionweb.net/publications/view/17381

Heijmans, A. & Sagala, S. (2013). *Community self-reliance: A report for design study on community resilience.* Canberra, Australia: Australia-Indonesia Facility for Disaster Reduction. Retrieved from https://www.researchgate.net/publication/280093208_Community_Self_Reliance_a_report_for_design_study_on_Community_Resilience

Hendra, J., FitzGerald, I., & Seymour, D. (2013). Towards a new transformative development agenda: The role of men and boys in achieving gender equality. *Journal of International Affairs*, *67*(1), 105-122.

Hiwasaki, L., Luna, E., Syamsidik, & Shaw, R. (2014). *Local and indigenous knowledge for community resilience: Hydro-meteorological disaster risk reduction and climate change adaptation in coastal and small island communities*. Jakarta, Indonesia: UNESCO. Retrieved from http://unesdoc.unesco.org/images/0022/002287/228711E.pdf

ICCO and Kerk in Actie. (2012). *CBDRM and its transformative potential: Re-working power relations to reduce disaster risks at community level*. Utrecht, Netherlands: Act Alliance. Retrieved from https://portal.icco.nl/documents/344840/722460/CBDRM+and+its+transformative+potential/deba033c-dc2b-4880-ab1e-37f83762983a?version=1.0&previewFileIndex=

Isik, O., Ozer, N., Sayin, N., Mishal, A., Gundogdu, O., & Ozcep, F. (2015). Are women in Turkey both risks and resources in disaster management? *International Environment Research and Public Health*, *12*(6), 5758-5774.

Jauhola, M. (2010). When House becomes home: Reading normativity in gender equality advocacy in post-tsunami Aceh, Indonesia. *Gender Technology and Development*, *14*(2), 173-196.

Jauhola, M. (2012). 'Natural' sex difference? Negotiating the meanings of sex, gender and kodrat through gender equality discourse in Aceh, Indonesia. *Intersections: Gender & Sexuality in Asia and the Pacific*, *30*, 8.

Koehler, G. (2016) Tapping the Sustainable Development Goals for progressive gender equity and equality policy? *Gender & Development*, *24*(1), 53-68.

Martam, I. (2016). Strategic social marketing to foster gender equality in Indonesia. *Journal of Marketing Management*, *32*(11), 1174-1182.

Oxfam. (2005). *The Tsunami's Impact on Women*. Oxford, UK: Oxfam. Retrieved from http://policy-practice.oxfam.org.uk/publications/the-tsunamis-impact-on-women-115038

Pincha, C. (2008a). *Gender sensitive disaster management: A toolkit for practitioners*. Mumbai, India: Earthworm Books for Oxfam America and NANBAN Trust.

Pincha, C. (2008b). *Indian Ocean tsunami through the gender lens*. Mumbai, India: Earthworm Books for Oxfam America and NANBAN Trust.

Sagala, S., Yamin D. A., & Rianawati, E. (2016). Social protection, disaster risk reduction and community resilience: Evidence from rural areas in Indonesia. In J. Drolet (Ed.), *Social development and social work perspectives on social protection* (pp. 260-280). London, UK: Routledge.

Shreve, C. (2016) Economic efficiency or gender equality: Conceptualising an equitable "social framing" for economic evaluations to support gender equality in disaster risk and environmental management decision making. *Difficult Decisions in Disaster Risk and Environmental Management*, *5*(3), 25.

Temin, M. & Roca, E. (2016). Filling the gender data gap. *Studies in Family Planning*, *47*(3), 264-269.

UNESCO. (2015). *UNESCO science report: Towards 2030*. Paris, France: UNESCO.

United Nations Development Programme. (n.d.) Gender and environment and energy. Retrieved from http://www.undp.org/content/undp/en/home/ourwork/womenempowerment/focus_areas/women_and_environmentalchange.html

United Nations. (2008). *Gender perspectives: Integrating disaster risk reduction into climate chance adaptation: Good practices and lessons learned*. Geneva, Switzerland: United Nations International Strategy for Disaster Reduction. Retrieved from http://www.un.org/waterforlifedecade/pdf/2008_isdr_gender_perspectives_disaster_risk_reduction_cc_eng.pdf

United Nations. (2015). Sustainable development goals: 17 goals to transform our world. Retrieved from https://sustainabledevelopment.un.org/sdg5

Wu, H., & Drolet, J. (2016). Adaptive social protection: Climate change adaptation and disaster risk reduction. In J.Drolet (Ed.), *Social development and social work perspectives on social protection* (pp 96-119). London, UK: Routledge.

Yumarni, T. & Amaratunga, D. (2015, October). Resource capability for local government in mainstreaming gender into sustainable post disaster reconstruction: Evidence from Bantul Indonesia. Paper presented at the 3rd Planocosmo and the 10th SSMS International Conference on 'Resilient City, Resilient Region', Institute Teknologi, Bandung, Indonesia.