INDONESIA
Statistics*

Population (est.)		**262.7** million*
Life Expectancy		**73.2** years
GDP Per Capita (est.)		**US $12,400**
Mobile Penetration		**151%**

AtmaGo

Increasing Public Safety and Climate Resilience Through a Mobile App and Web-based Technology

Globally, the increasing threat of disasters far outpaces the ability of humanitarian and government agencies to respond. The total cost of disasters in 2017 was US $306 billion, nearly double the cost in 2016.[1] Tens of millions of people, particularly those in emerging regions, face growing risks from natural disasters and human-caused dangers. The AtmaGo mobile app connects and empowers local communities to share emergency warnings, take action to reduce their risk, and build social cohesion to improve their resilience.

Challenge

- A United Nations Office for Disaster Risk Reduction Report notes that climate change has made hurricanes, heatwaves, droughts and floods more frequent and deadly. People in low- and middle-income countries are seven times more likely to die from natural disasters.[2] Women and children are 14 times more likely than men to die in a disaster.[3]

- Globally, people are at risk from human-caused dangers, including armed conflict, terrorism, pandemic disease, crime and unsafe development.[4]

- From 2005-2014, global damage from disasters totaled US $1.4 trillion. Approximately 1.7 billion people were affected, and nearly one million people were killed.[5] Indonesia[6] ranks fourth on a list of countries with the most disasters.

- Neighborhoods with high levels of community interaction and organization fare far better than others in the aftermath of a disaster.[7]

- There is a need for Early Warning Systems to reach and serve the most vulnerable communities.

Solution

- AtmaGo aligns with the Indonesian government's vision for using Information and Communication Technologies (ICT) to improve disaster management.[8] It aligns with UN Sustainable Development Goals, specifically Goal 9: target to build resilient infrastructure, and Goal 13: Take urgent action to combat climate change and its impacts.

- AtmaGo was launched in 2015 in Indonesia by Atma Connect as a neighborhood-level social network that can be accessed via Android app or a mobile-optimized website. The app is tailored for low-end mobile phones and environments with intermittent internet access, and addresses the need for effective, low-cost, place-based communication.

- AtmaGo crowdsources real-time, user-generated, disaster-related information, such as reports of fires and floods; geographically organizes the content; and then delivers the information to users' mobile phones via mobile web and Android app.

- The tool is also used to communicate emergency reports and disaster risk reduction (DRR) information. In the Jakarta area, AtmaGo provides alerts from government sources directly to users via the mobile app.

- Atma Connect organizes citizen journalism camps to train women to publish posts on AtmaGo.

- A 2017 study in five neighborhoods in the Greater Jakarta area focused on the potential impact of AtmaGo in improving disaster preparedness and response. The research sought to understand how people get emergency warnings and DRR information, whether AtmaGo can provide these warnings in an actionable way, and the potential benefits of successful warning systems in terms of avoided damages and the prevention of mortality and morbidity.

*Sources: CIA World Factbook (https://www.cia.gov/library/publications/the-world-factbook); mobile penetration data provided by Ovum World Cellular Information Service and based on market intelligence

1 https://www.swissre.com/media/news-releases/2017/nr20171220_sigma_estimates.html
2 https://www.unisdr.org/archive/61121
3 https://www.unisdr.org/files/48152_disasterandgenderstatistics.pdf
4 Ostadtaghizadeh, et al, 2015
5 UNISDR: EM-DAT Database. Centre for Research on the Epidemiology of Disasters (CRED). Infographic. https://www.flickr.com/photos/isdr/16111599814/
  https://www.citylab.com/solutions/2017/02/recovering-from-disasters-social-networks-matter-more-than-bottled-water-and-batteries/516726/
6. pg 19; https://www.emdat.be/sites/default/files/adsr_2016.pdf
7. https://www.newyorker.com/magazine/2013/01/07/adaptation-2
8 According to Law No. 24/2007, science and technology are one of the key principles of disaster management in Indonesia.

Impact

2.5 million users across Indonesia

More than 2.5 million users, most of whom are economically disadvantaged, have benefitted from AtmaGo. In addition to providing disaster alerts, the tool allows users to share information about roads and infrastructure, job fairs, entrepreneurship and government services.

Improved social cohesion

Sixty eight percent of surveyed users report sharing AtmaGo posts and, on average, each user shares AtmaGo posts with 28 other people, helping to quickly and efficiently spread news and information during emergencies. Additionally, 79 percent of users found AtmaGo "very" and "extremely" helpful in connecting them with the community.
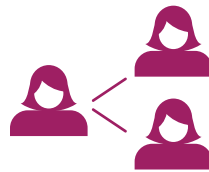
Effective preventive action

Thirty percent of surveyed users who receive warnings take preventive action such as moving valuables, warning neighbors or evacuating.

Reduced morbidity and mortality

Taking effective action can reduce the impact of disasters by about 50 percent. AtmaGo has the potential to reduce morbidity and mortality caused by floods and other disasters by 643 years of healthy life lost per 100,000 population.

Increased women's access to disaster-related information

By increasing women's access to disaster-related information, AtmaGo addresses a lack of local and supportive peer networks among women and empowers them as key agents of community change and social cohesion.

Avoided property damage and loss

AtmaGo emergency alerts have the potential to reduce property damage caused by floods and other disasters by US $324 per household per year for residents of the Jakarta region. If AtmaGo reaches a scale of five to ten percent of households in this area, this would equate to an avoided damage benefit of US $53 million to US $106 million per year.

Note – All Impact statistics are from the Impact evaluation report https://atmaconnect.org/wp-content/uploads/2018/10/AtmaGo-CIPG-2018-Can-mobile-phones-improve-disaster-preparedness_fin.pdf

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