

## ***Air dan Terang: Providing Access to Clean Water and Sanitation in East Nusa Tenggara, Indonesia***

Geraldine Santoso, Skidmore College '22, UWC Mahindra College India '18

Partnering with Yayasan Tangan Pengharapan, PT. Maju Gerak Kharisma, and William-Schön

East Nusa Tenggara, Indonesia

June 10<sup>th</sup> 2019- July 20<sup>th</sup> 2019

### **Background:**

Indonesia faces the challenge of providing universal access to clean and safe water. There is a significant difference in access to clean water between the urban and rural areas, with people living in poorer regions being 1.5 times less likely to have access to improved sources of potable water<sup>1</sup>.

Statistics from the Ministry of Health (2015) show that although access to clean water and proper sanitation are improving, there are large provincial disparities; regions such as DKI Jakarta and Yogyakarta are twice more likely to get their water from improved sources than those in East Nusa Tenggara<sup>2</sup>, the location of this project.

### **The Problem:**

East Nusa Tenggara (NTT) is one of Indonesia's most impoverished provinces. Its arid climate and mountainous terrain make finding clean water and good sanitation especially difficult. According to a report issued by the SUSENAS (2015)<sup>3</sup>, the percentage of people who practice open defecation is only a little less than the percentage of people who have access to basic sanitation, approximately 18% and 20%, respectively. The local government has tried to curb this issue through contracts and cultural festivals to promote proper sanitation practices such as the Festival Toilet Bersih, held in January 2019<sup>4</sup>. The lack of access to clean water and proper sanitation hence is in violation of Resolution 64/292 of the Human Rights Charter which states that access to clean and safe drinking water and proper sanitation is an essential human right.

East Nusa Tenggara suffers from a water crisis every year. This threatens the lives of the people in that region, as they are forced to use unhygienic water resources for basic needs such as consumption, cooking and cleaning<sup>5</sup>. Additionally, due to these contaminated water sources, children of the local villages are pulled out of school and are forced to walk around 2 km four times a day in order to fetch clean water. This issue contributes to a large part of the poverty present in the province<sup>6</sup>. In the South Central Timor Regency, improper health and sanitation habits have led to diarrhea being the leading cause of death in the district<sup>7</sup>.

In the village of Tliu, East Amanuban, South Central Timor, villagers need to walk a distance of 10km to the nearest river in order to get clean water to bathe. Water shortage in this area is attributed to the lack of rainfall in the region and the drying up of nearby rivers<sup>8</sup>. Taehue, another rural village in South Central Timor is 60km from the capital of So'E, suffers from a water crisis every year which largely undocumented, hence needs urgent attention.

### **The Solution:**

The primary goal of the Air dan Terang project is to provide access to clean water to the villages of Taehue and Tliu, South Central Timor, East Nusa Tenggara. This will be done through the building of a rainwater dam filtered water tank, which will provide schools and residences with potable water that is safe for drinking and cooking. This process will be undertaken by all stakeholders, including myself and my team, partner organizations and the local community, thus reinforcing the idea of harmony, togetherness, and solidarity for the mutual benefit and development of the region. The climate in the South Central Timor regency is interesting, wherein there is six month of heavy rain and six months of the dry season. Given this fact, rivers usually disappear completely, resulting in the droughts, and this is incredibly common<sup>9</sup>. Through creating a reservoir from rainwater, we aim at preventing the runoff and providing the community with clean water for their daily activities. These water tanks also serve as water filters and are stored on rooftops. This water can then be collected by the community via tanks or barrels that make the potable water accessible. Through helping them meet their basic needs of clean water, this project aims at resolving conflicts that arise due to their needs not being met, promoting the education of children and youth in that region, and to ultimately ensure their better livelihood.

Following that, the second goal of this project is to educate children and youth in the villages of Taehue and Tliu on the importance of proper sanitation and hygienic practices. The shortage of water leads to a larger health and sanitation issue, where it is said that 98% of villagers in NTT never wash their hands after using the latrine<sup>10</sup>. Open

<sup>1</sup> 2019. *Unicef.Org*. Accessed January 15 2019. [https://www.unicef.org/indonesia/SDG\\_Baseline\\_Report\\_on\\_Children\\_in\\_Indonesia\(1\).pdf](https://www.unicef.org/indonesia/SDG_Baseline_Report_on_Children_in_Indonesia(1).pdf).

<sup>2</sup> 2019. Ministry of Health 2015 Report, Accessed January 15 2019. <http://www.depkes.go.id/resources/download/pusdatin/profil-kesehatan-indonesia/indonesian%20health%20profile%202015.pdf>

<sup>3</sup> 2019. *Unicef.Org*. Accessed January 15 2019. [https://www.unicef.org/indonesia/SDG\\_Baseline\\_Report\\_on\\_Children\\_in\\_Indonesia\(1\).pdf](https://www.unicef.org/indonesia/SDG_Baseline_Report_on_Children_in_Indonesia(1).pdf).

<sup>4</sup> <https://regional.kompas.com/read/2019/01/10/11565341/gubernur-ntt-canangkan-festival-toilet-bersih>

<sup>5</sup> <https://en.antaranews.com/news/99631/president-jokowi-serious-about-resolving-water-problem-in-ntt>.

<sup>6</sup> <https://www.thejakartapost.com/news/2017/06/03/southeast-asian-volunteers-build-clean-water-sanitation-facilities-in-e-nusa-tenggara.html>.

<sup>7</sup> <http://www.irinnews.org/news/2011/03/22/latrine-%E2%80%9Ccontracts%E2%80%9D-fight-open-defecation>

<sup>8</sup> <https://www.hidayatullah.com/berita/berita-dari-anda/read/2016/06/13/96338/untuk-mandi-warga-desa-tliu-harus-jalan-kaki-10-kilometer-ke-sungai.html>

<sup>9</sup> <http://www.timorleste.tl/east-timor/about/geography-climate/>

<sup>10</sup> <https://jakartaglobe.id/news/no-toilet-no-clean-water-sanitation-challenges-flores-interior/>

defecation, a practice that 21.6% of the people living in the region still participate in, contribute a large part to the prevalence of diarrhea in the region. In addition, the local community will also be at the forefront of this project, especially during the infrastructural process. On one hand, they will actively participate in the process of the construction of these water tanks, and they will also be trained on the use and maintenance of these water tanks. This will also ensure the smooth transition of this project for the future.

### **Project Timeline (Subject to change):**

#### **Week 1-2 (Pre-Arrival):**

- Work on strategies, logistical issues and debriefing of project goals, with partnership and guidance from *Yayasan Tangan Pengharapan*.

#### **Week 3-6:**

- Arrival in Taehue, South Central Timor, East Nusa Tenggara.
- Meeting with local administration, figure out last logistical issues.
- Purchase of materials and equipment for construction.
- Construction of the tank begins.
- Education project of children and youth in the community (Simultaneous project alongside construction).

#### **Week 7:**

- Handover project to the community.
- Debriefing project.
- Departure from South Central Timor.

#### **Week 8 (Post-departure from East Nusa Tenggara):**

- Discussion and meetings with stakeholders to make sure the project is still undertaken and is running smoothly in the community.
- Documentary exhibition in Citylight Community Centre, Bandung.

### **Our Vision:**

The Air dan Terang Project seeks to provide access to clean water and proper sanitation to the community of the South Central Timor district, as well as their persona and communal education in order to create a safer and cleaner living environment.

### **Our Mission:**

This project is named Air dan Terang because we believe that through the provision of clean water (*air* in Bahasa Indonesia) and access to proper sanitation, East Nusa Tenggara could be a beacon of light (*terang* in Bahasa Indonesia) to the people in surrounding communities in spreading awareness regarding the importance of clean water and sanitation.

### **Sustainability Model:**

The Air dan Terang project is sustainable by nature. Through the success of this project, we hope that the commitment could be further implemented by the community beyond just the people, but also by people who hold positions of power, such as the local government as they have made previous commitments to improve the condition of the people in the region. Moreover, since the main target population of education in this project are the children and youth of East Nusa Tenggara, they will be armed with the knowledge of the importance of these practices, ensuring the sustainability of this education to future generations.

Additionally, I plan to raise awareness of this project in two exhibitions; one in Bandung, Indonesia, in the Citylight Convention Center, to raise funding for the project's sustainability and one in Skidmore College. At both events, I plan on screening, *Mata Air*, a documentary, I made with Monique Santoso (Middlebury '21) that chronicles the issue of clean water and lack of sanitation in Indonesia. Social media will also be used in order to promote and spread awareness about this project and the issue it tackles, thus hoping to create a space of dialogue and action.

### **Team and Support Network:**

Our partner organizations and advisors have experience with public health, education, and conflict resolution. Organizations with whom we have initiated contact and plan on partnering with are *Yayasan Tangan Pengharapan*<sup>11</sup>, an organization with expertise on the issues in East Nusa Tenggara, *Citylight Community Church*, and *PT. Maju Gerak Kharisma*. Individual advisors include Professor Joowon Park, Professor of Anthropology at Skidmore College and William Erastus, founder of *William-Schon*. Geraldine Santoso is a freshman from Indonesia and is well-versed with the social justice and is extremely passionate about the issue of access to clean water, and sanitation and hygiene education.

---

<sup>11</sup> <http://www.tanganpengharapan.org/en/program/project-change/>