THE

Challenge OF CLEAN WATER ACCESS IN RAPIDLY GROWING URBAN AREAS

DEEZCODE

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THE TEAM

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SUSTAINABLE DEVELOPMENT GOALS:

CLEAN WATER AND SANITATION

6.1 - SAFE AND AFFORDABLE DRINKING WATER

By 2030, achieve universal and equitable access to safe and affordable drinking water for all.

SUSTAINABILITES CITIES AND COMMUNITIES

11.3 - IMPROVE WATER QUALITY, WASTEWATER TREATMENT AND SAFE REUSE

By 2030, enhance inclusive and sustainable urbanization and capacity for participatory, integrated and sustainable human settlement planning and management in all countries.

CAN WE SURVIVE WITHOUT WATER?

INTRODUCTION

Lolit, age 48 years old, lives with her unemployed husband, 3 children and 2 grandchildren in Commonwealth Market, Quezon City. Twenty years ago, they moved to Manila from Surigao del Norte. She observed that since the drought last year, the flow of water in their home had lessened but their water costs have not. Before the dry season, she was paying about Php3200/month. With the drought and dwindling supply of water, she was paying P3500/month. Lolit feel strongly about her family's hygiene and sanitation needs heavily compromised (less bathing, less cleaning, washing after ablution, etc.) by the dry season during drought and the irregular water flow in their faucet.

PROBLEM

Water Scarcity is a problem that limits access to safe water for drinking and for practising basic hygiene at home, in schools and in health-care facilities (Water Scarcity, n.d.). It gets worse as cities grow and more people move in. As shown in Figure 1.1 and Figure 1.2, when more people live in cities, clean water access goes down. A major cause of urbanization is migration. This makes migration an important factor in the water scarcity issue.

" FOCUS "

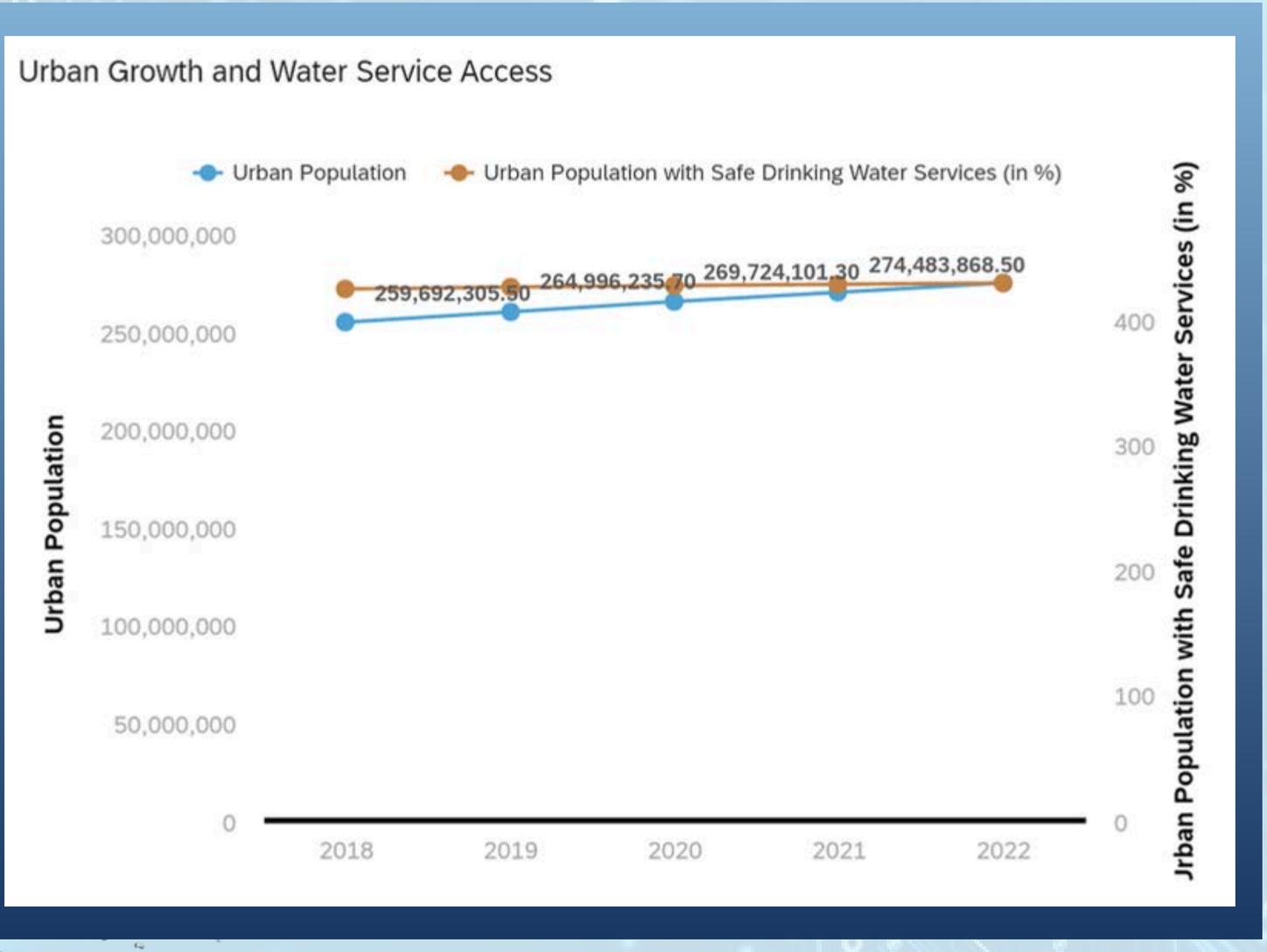


Figure 1.1

Figure 1.1 shows a steady increase in the urban population from 2018 to 2022, rising from around 250 million to over 274 million. During the same period, access to safe drinking water in urban areas also increased but at a slower pace.

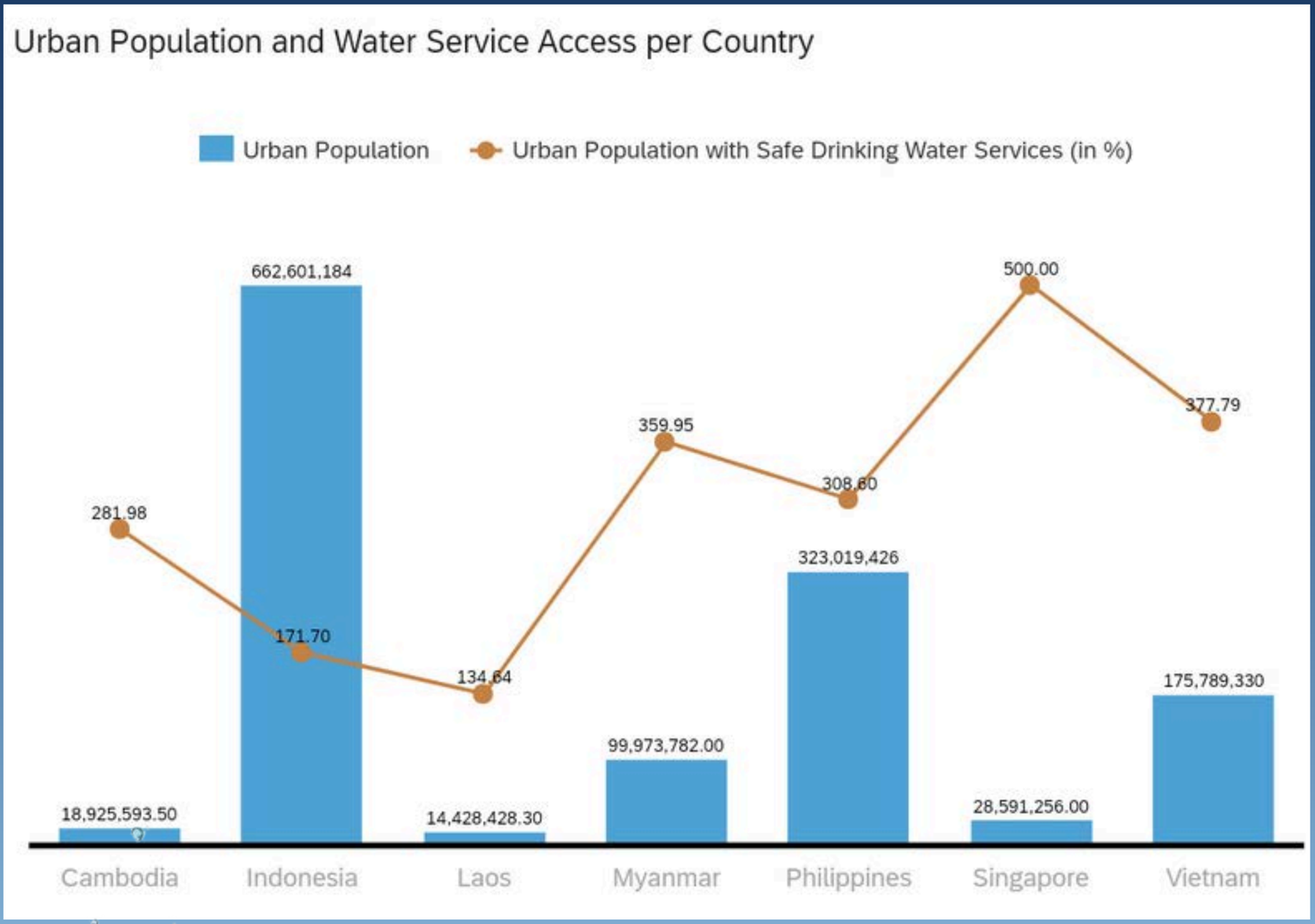


Figure 1.2

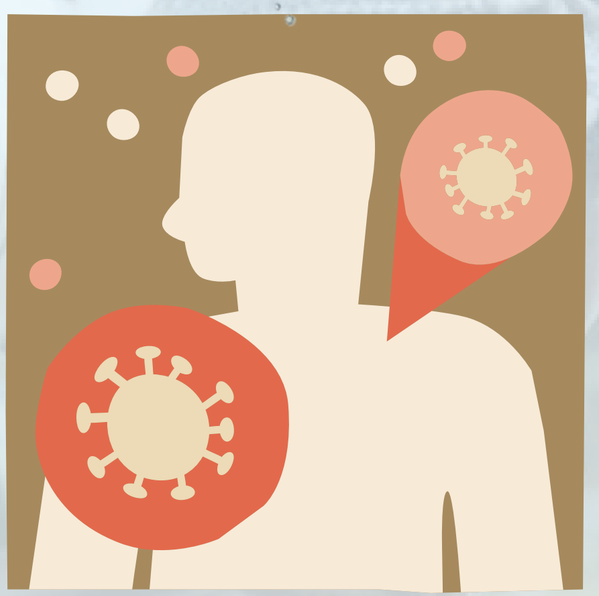
Figure 1.2 shows that Indonesia has the largest city population, but not many people have safe drinking water (only 171.70%). Laos has the smallest city population and also the lowest access to safe water at 134.64%. Singapore has the best water access at 500.00%, even though its city population is much smaller.

According to Water.Org, Indonesia is home to 273 million people and the largest economy in Southeast Asia. However, many families have little access to clean, safe water. Consequently, 18 million Indonesians are water insecure, and 20 million lack access to good sanitation (Addressing Water Insecurity in Southeast Asia: Causes and Solutions, 2024).

CONSEQUENCES:

What will happen if water scarcity continues?

Economic Impacts - An estimated $260 billion is lost globally each year due to lack of basic water and sanitation (An Economic Crisis, n.d.).



Health Crisis - More than 1 million people die each year from water, sanitation and hygiene-related diseases (A Health Crisis, n.d.).

FACTORS

Employment Opportunities

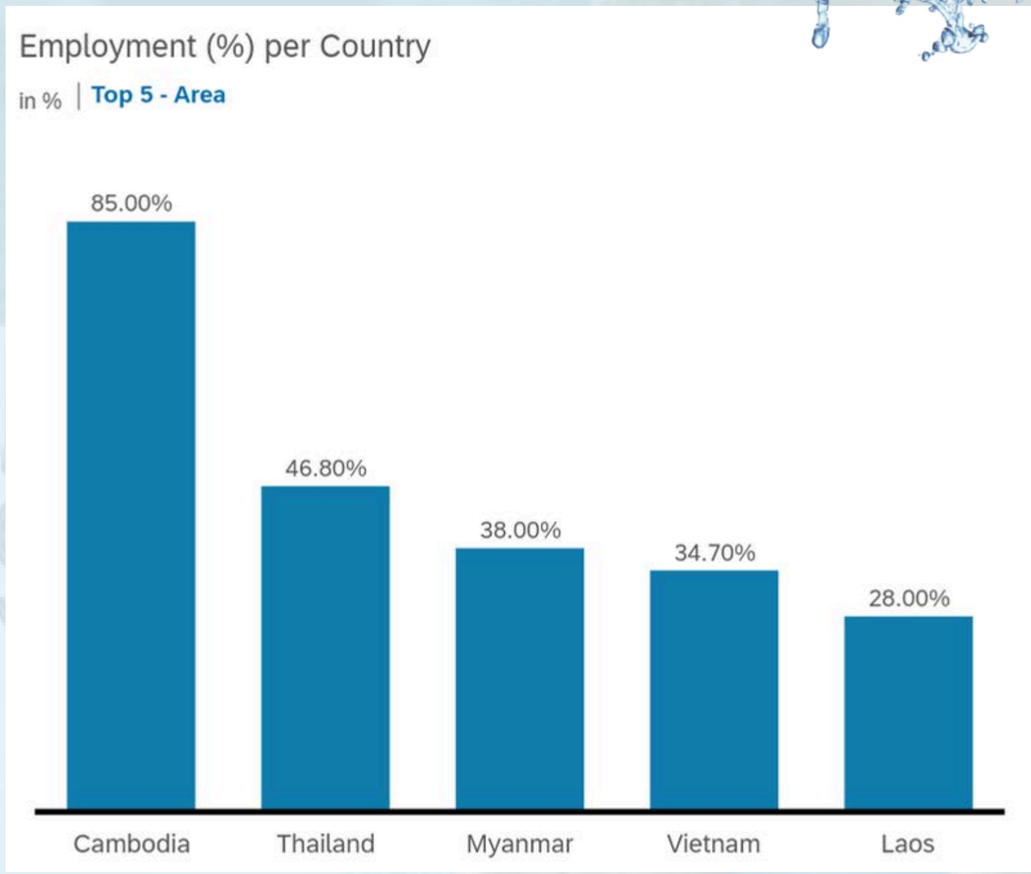
Environment

EMPLOYMENT OPPORTUNITIES

“I went to Batam because job opportunities in my hometown were very few. Also, my hometown’s minimum wage in Wonosobo was very less... only about IDR 1.1-1.2 million, while the prices of things were like other parts of Indonesia with higher minimum wages. I already had a family of my own back then, so it wasn’t enough. That’s why I moved here, as the wages were higher.” - Adhiaraja, labourer in construction sector, Indonesia (Venugopal et al., 2022).

EMPLOYMENT OPPORTUNITIES

Figure 2.1 shows employment percentages in five Southeast Asian countries. Cambodia has the highest employment rate at 85.00%, making it the top country in this group. In contrast, Laos has the lowest employment rate at 28.00%. The other countries fall in between, with Thailand at 46.80%, Myanmar at 38.00%, and Vietnam at 34.70%.

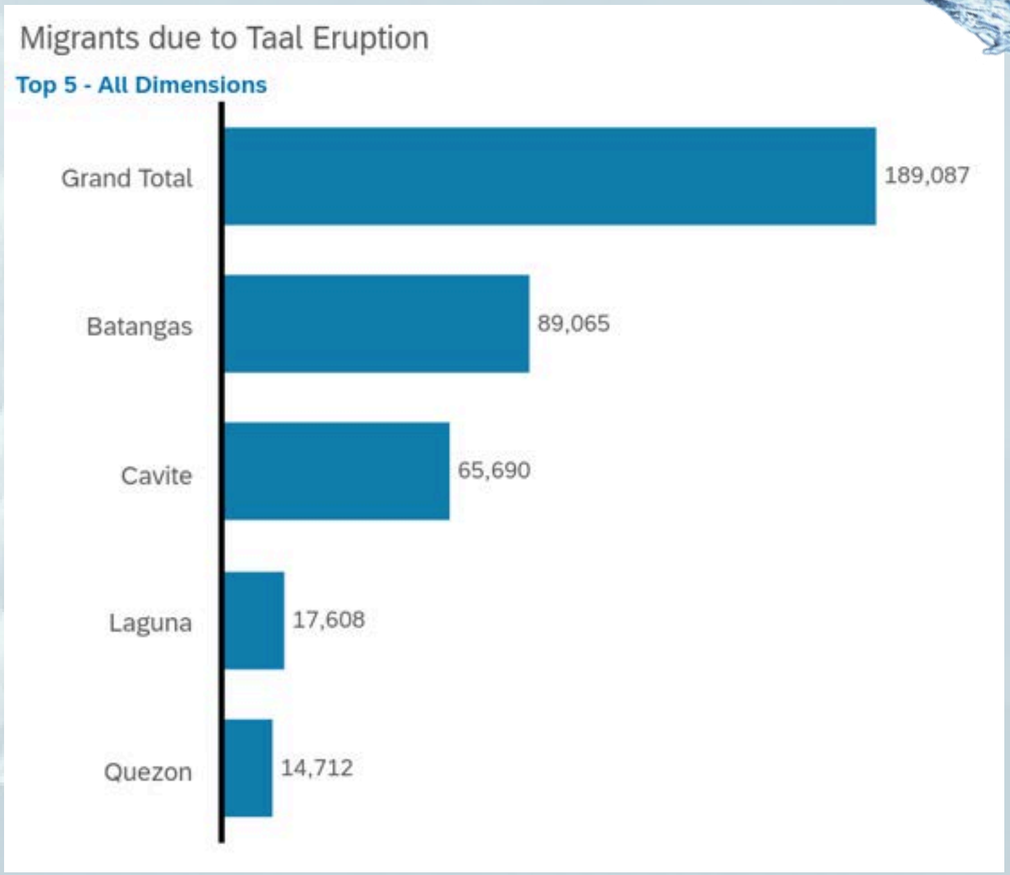


ENVIRONMENT

“My neighbors were shouting that Taal Volcano was erupting. I remember hearing a loud sound, like a huge rock crumbling beneath us. I knew then that Taal Volcano was really erupting. We immediately ran out of the house with nothing but a few clothes in a bag,” - Midona (Taal Survivor Shares How They Survived 2020, n.d.).

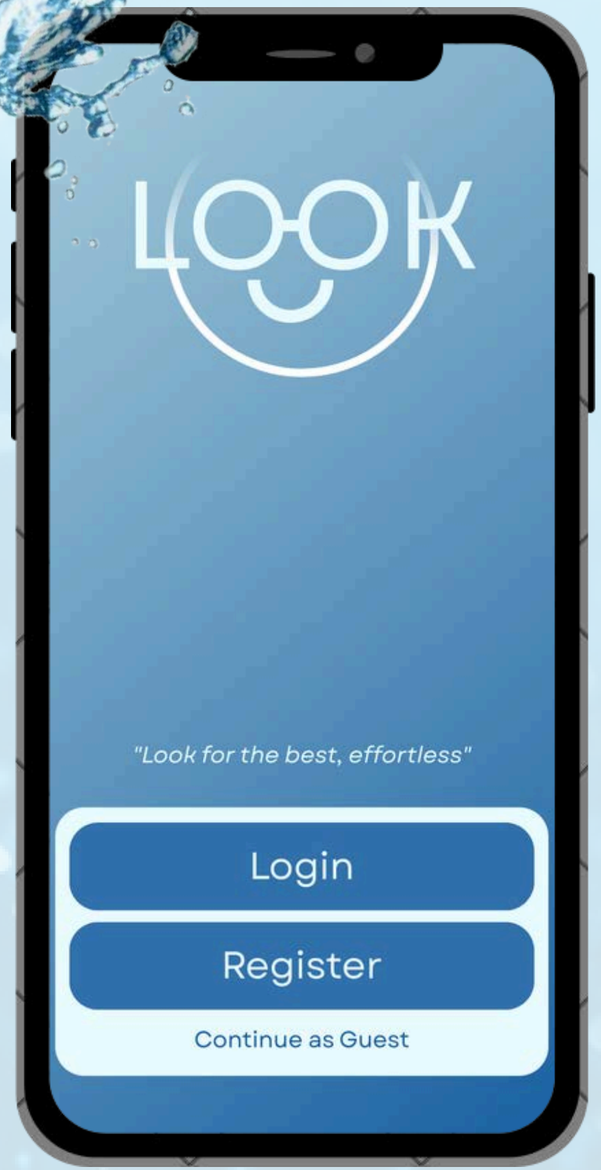
ENVIRONMENT

Figure 2.2 shows the number of migrants due to the Taal Eruption, with a total of 189,087 people affected. Among the provinces, Batangas had the highest number of migrants at 89,065, followed by Cavite with 65,690. Laguna and Quezon had significantly fewer migrants, with 17,608 and 14,712 respectively. This indicates that the majority of migration was concentrated in Batangas and Cavite.



RECOMMENDATION

We came up with the recommendation of an app called “LOOK”. This will be a revolutional app which will help People find workplaces, universities, and relocation Centers in their local areas. It will potentially show the exact location of facilities with their corresponding information. Eg: Workplaces will show potential time-based income, Relocation Centers will show healthcare services, and Universities will show their curriculum and potential achievements to be attained.



RECOMMENDATION

Once a user logs in, they are greeted with a very user-friendly interface. Once the user clicks a button, the interface shows the available options along with their corresponding information such as courses available for education, job opportunities for employment, and possible alteratives for migration due to environmental factors.

THANK YOU

FOR LISTENING

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