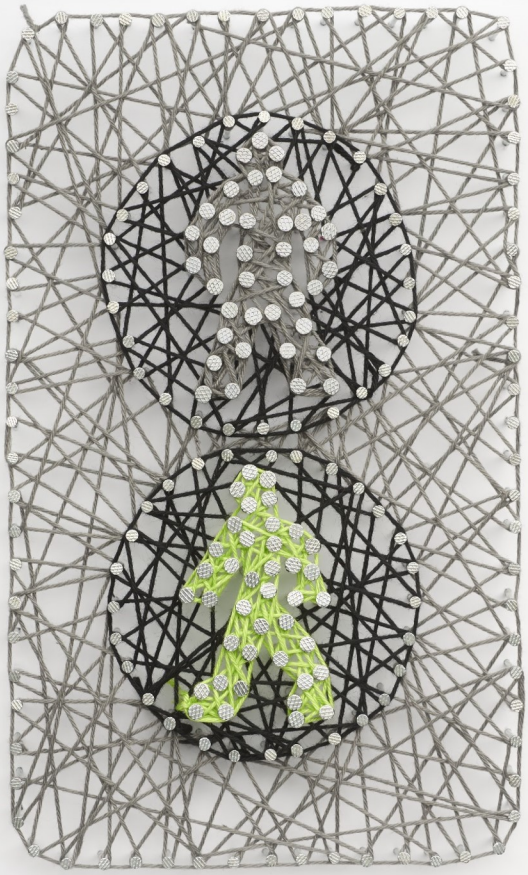
23rd ASEF SUMMER UNIVERSITY

Liveable Cities for a Sustainable Future

#ASEFSU23



Hackathon Challenges

Co-organised by:

ASIA-EUROPE FOUNDATION

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SHLC Centre for Sustainable, Healthy and Learning Cities and Neighbourhoods

University of Glasgow

Today, more than 55% of the world's population live in urban areas.
It is expected that this number will increase to 68% by 2050.

"We share a vision of cities for all, referring to the equal use and enjoyment of cities and human settlements, seeking to promote inclusivity and ensure that all inhabitants, of present and future generations, without discrimination of any kind, are able to inhabit and produce just, safe, healthy, accessible, affordable, resilient and sustainable cities and human settlements to foster prosperity and quality of life for all. [...]

We aim to achieve cities and human settlements where all persons are able to enjoy equal rights and opportunities, as well as their fundamental freedoms, guided by the purposes and principles of the Charter of the United Nations, including full respect for international law."

United Nations, The New Urban Agenda
adopted at Habitat III in Quito, Ecuador, on 20 October 2016

The **23rd ASEF Summer University (ASEFSU23)** is a 3-month long interdisciplinary Hackathon journey on "Liveable Cities for a Sustainable Future" for Asian and European students & young professionals. Implemented as a virtual programme between September and November 2021, the project connects young hackers, designers, innovators, urban planners and SDG experts to collaborate & develop urban solutions in three of the most populated countries in ASEM: Bangladesh, India & Pakistan. They will tackle the following challenges:

BANGLADESH

Creating *Clean* Cities: Tackling Urban Waste Management

SDG FRAMEWORK

Global urbanisation has been accompanied by a significant increase in urban waste generation which severely pollutes our soils and air. Sustainable urbanisation is therefore closely linked to the need to change how we produce and consume goods. To achieve SDG12 (Responsible Consumption and Production), a critical challenge is to reduce waste generation (target 12.5) and improve waste management.

Poorly managed waste has also alarming consequences on climate change (SDG13), contributing to a tenth of manmade greenhouse gases. Tackling the problem of urban waste management can thus not only contribute to more sustainable and cleaner cities, but also to global climate action.

THE PROBLEM

Waste generation is rising at an alarming rate, with the world's cities now generating more than 2 billion tons of solid waste per year. This is expected to increase by more than 70% by 2050. If not managed properly, urban waste will further contribute to environmental degradation and pollution, as well as disease spreading, both resulting in various adverse risks for people's health, safety and well-being.

Developing countries and the urban poor are disproportionately impacted by this growing concern which is particularly expensive to address for cities, often comprising 20-50% of their budgets. More than 38% of Bangladesh's population lives in urban areas. The country's rapid urbanisation, industrialisation, consumerism and lifestyle changes have induced a significant increase in solid waste production, including plastic waste, e-waste and organic waste. While urban areas are already generating 30,000 tons of waste every day, the country will likely produce more than 47,000 tons daily by 2025. Estimations suggest that 40-60% of waste remain uncollected, untreated and often dumped indiscriminately. This situation poses serious health and environmental threats requiring integrated and sustainable solutions.

YOUR CHALLENGE

Despite the government's strategies and frameworks on waste management such as the National 3R Strategy (Reduce, Reuse and Recycle), the situation in Bangladesh remains alarming due to various problems, such as lack of awareness and regulations on waste management, ineffective policy implementation, funding constraints, inappropriate technology and waste treatment infrastructures. Another key challenge relates to people's perceptions, practices & behaviour towards waste disposal and management, as seen in the uncontrolled dumping of waste in open drains, ditches or the outskirts of cities.

Develop a solution with digital components that encourages public participation, engagement and social support from urban stakeholders towards better urban waste management!

YOUR IMPACT

Together with your team members, you will

... Develop a concrete solution to the challenge of waste management, ready to be implemented locally in Dhaka;

... Contribute to a pool of innovative ideas that support more efficient and sustainable waste management in cities;

... Create positive environmental impact towards *clean,* sustainable cities & communities!

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INDIA

Creating *Healthy* Cities: Addressing Obesity among Children

SDG FRAMEWORK

Promoting sustainable urban livelihoods and advancing SDG11 requires a holistic understanding and approach, integrating efforts that contribute to people's well-being and urban health.

SDG3 (Good Health and Well-being) is closely linked to SDG11 (Sustainable Cities and Communities), not least because the urban environment where we live is a fundamental factor to lead healthy lives. This starts with the opportunity of outdoor physical activities, which depends on, among other things, air pollution levels, the built environment and access to urban green spaces. Likewise, availability and access to healthy food requires sustainable urban planning & management.

THE PROBLEM

The WHO recognises urbanisation as one of the leading global trends of the 21st century which has a significant impact on health. Urban environments can pose several challenges for the well-being and health of their citizens: inadequate housing & transport facilities, poor sanitation & waste management, air pollution, water & soil contamination, noise & urban heat islands, or the lack of space for walking, cycling and possibilities for an active living. Another risk factor that threatens the health of individuals are changes in urban lifestyle: urban living is often associated with inadequate physical activity, irregular eating habits and the increased consumption of sugar-based & processed foods. There is substantive evidence that urbanisation is linked with a growing prevalence of non-communicable diseases (NCDs), including obesity.

An important group affected by the increase of NCDs and obesity is children and adolescents. The World Obesity Federation predicts that by 2025, 268 million children and adolescents are likely to be over-weight with 91 million obese children. This will potentially result in several problems such as breathing difficulties, hypertension, diabetes, cardiovascular diseases and various adverse psychological effects.

YOUR CHALLENGE

Child obesity is a particularly acute problem in the Indian urban context. With 14.4 million obese children, India has the second-highest number of obese children in the world. The prevalence of overweight and obesity in children is 15%, caused by various factors such as consumption of food with low nutritional value, sedentary lifestyles & use of digital devices, limited physical activity or simply the lack of awareness on how to live a healthy life.

Develop a solution with digital components to reduce obesity among children between the age of 5 to 17 years!

YOUR IMPACT

Together with your team members, you will

... Develop a concrete solution to the challenge of child obesity, ready to support children in Delhi NCR;

... Contribute to reduce obesity prevalence among children in cities;

... Create a positive impact on the lives of children to achieve *healthy,* sustainable cities & communities!

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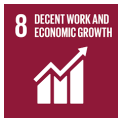
PAKISTAN

Creating *Accessible* Cities: Enhancing Urban Mobility

SDG FRAMEWORK



Urban mobility and transport systems are essential to the achievement of SDG11 (Sustainable Cities and Communities), as emphasised in target 11.2. Urban mobility also strongly contributes to SDG8 (Decent Work and Economic Growth) as it enables people to access job opportunities. The lack of safe, affordable and accessible mobility options often aggravates economic and social exclusion, particularly for people in vulnerable situations, including women, children and persons with disabilities. Promoting sustainable transport and mobility can therefore play a critical role in building accessible cities and contributing to better employment, work and economic opportunities for everyone (target 8.5).

THE PROBLEM

Urban mobility has become a staggering challenge faced by ever-expanding cities across the world. Congestion and public transport inadequacy, the lack of connectivity and infrastructure, accidents & safety issues as well as environmental pollution are some important factors which greatly impact people's quality of life. Unequitable access to urban mobility also hinders socioeconomic prosperity, limiting access to education & job opportunities.

Almost 50% of Pakistan's total 190 million population lives in urban areas, making it the most urbanised country in the Asia-Pacific. About two thirds of its urban population is concentrated in ten cities, which are witnessing an unbalanced reliance on a few modes of transport (private vehicles such as motorbikes & cars) and limited affordable mass transit options. Inefficient urban planning policies and practices, coupled with urban sprawl and a lack of sustainable modes of urban transport have made mobility either unaffordable or inaccessible for a large segment of the society, especially low and lower-middle income communities and people with disabilities.

Another key concern is the lack of safety in public transportation in Pakistan, especially for women and youth. According to a report by ADB, 31% of students, 23% of working women and 20% of homemakers decreased their use of public transport due to harassment. Among them, 40% avoid traveling after sunset which reduces their chances of employability and income generating opportunities.

YOUR CHALLENGE

According to a study by the Institute of Labour Economics (IZA), "many women [in Pakistan] avoid using public transport, particularly on crowded modes such as wagons. Women either switch to higher cost modes, adjust their travel timings and route or simply do not travel without a male family member. These challenges restrict women's lives substantially. They affect whether they work and the kind of jobs they take, where they can study and when they can visit their families. Women may have to give up better job opportunities that do not provide transport – or they may not find a job at all." 25% of women in Lahore said that better transport options would increase their chances of taking up a job opportunity.

Develop a solution with digital components that helps overcome barriers to women's mobility in Lahore!

YOUR IMPACT

Together with your team members, you will

... Develop a concrete solution to support women's access and safety to urban mobility, ready to be implemented in Lahore;

... Contribute to initiatives that facilitate more affordable, safe and gender responsive urban mobility in cities;

... Create a positive impact on women's participation in society and gender equality, to promote *accessible,* sustainable cities & communities!

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Visual Explainer

Yarns are a symbol of the cotton production and textile industry in South Asia which greatly contributed to its economy and opening up to the rest of the world. Along with this evolution, the region's growing urbanisation has been a driving force, reshaping modern cities and societies.

Like a fabric with its distinct pattern, a city is a network of interdependencies and intertwined social interactions: a complex eco-system where every element is closely connected to each other. This intricate crisscross is a fragile equilibrium contingent on every thread which needs to be carefully sewn and integrated within the broader structure. To shape urban frameworks and images, urban policy makers and planners need intentionality and a comprehensive understanding of all its constituting elements. To weave and build liveable cities for a sustainable future, holistic and transformative visions are needed. Our ASEFSU23 participants will develop these for Bangladesh, India and Pakistan during the project.