SDG LOCALIZATION IN ASEAN: EXPERIENCES IN SHAPING POLICY AND IMPLEMENTATION PATHWAYS

DRAFT
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This report was written by Paavani Reddy, UNDP Governance Specialist from the Bangkok Regional Hub.

**LEAD AUTHOR:** Paavani Reddy, UNDP BRH

**CONTRIBUTORS AND CASE STUDY AUTHORS:**

**CONTRIBUTORS**

| Bishwa Nath Tiwari, UNDP BRH | Chapter 1: ASEAN Development Context |

**CASE STUDY AUTHORS**

**Enabling policy and institutional environment**

| UNDP China | China: SDG Innovation Pilot Zone Initiative, China |
| Isna Marifa, UNDP Consultant | From Policy Coherence to SDG Implementation at the Local Level in Indonesia |
| Badan Perencanaan Pembangunan Nasional (BAPPENAS), UNDP Indonesia |  |

**Data ecosystem for SDG Localization**

| Celia Reyes, President of the Philippine Institute for Development Studies (PIDS); Leader/Director of the Community-Based Monitoring System (CBMS) Network. | The Philippines: Using a community-based monitoring system for SDG tracking and prioritization |
| Rajesh Sharma, UNDP BRH | Risk Informed Public Investment Planning |
| Pulse Lab Jakarta | Big data and the SDGs |

**Stakeholder Engagement for SDG Localization**

| Kamolwan Panyasevanamit, UNDP BRH | Thailand: Public-Private Cooperation & SDG Financing |
| Sean O’Connell, UNDP Viet Nam | Supporting youth-led solutions for SDGs in Ho Chi Minh City, Viet Nam |
| Le Viet Dat, Saigon Innovation Hub |  |

**Financing for Sustainable Development**

| Sovannarith Hang, Lang Sok, Richard Marshal, UNDP Cambodia | Phnom Penh Special Economic Zone (PPSEZ) and its role in achieving SDGs in Cambodia |
| Kamolwan Panyasevanamit, UNDP BRH | Thailand: Tourism and development |

**Enabling Innovation as a cross-cutting priority for sustainable development**

| Paavani Reddy, UNDP BRH | Social Innovation to develop new transportation services in Makassar City, Indonesia |

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**Other contributors:** Pundaree Boonkerd, Vidhya Karnamadakala, Saengkeo Touttavong (cover page and graphic design), Andy Quan (editing)
PREFACE

2018 marks the third year of the implementation of the Agenda 2030. With only 12 years to go to transform the aspirations of Agenda 2030 into reality for the “dignity, peace and prosperity for people and the planet” the UN Secretary General calls for a sense of urgency for countries to take “immediate and accelerated actions,” along with collaborative partnerships among governments and stakeholders at all levels.

This call for urgency also applies to the ASEAN context. While ASEAN member states have made remarkable progress in achieving the MDGs, including lifting millions of people out of poverty and improving access to basic services, persistent development challenges remain. At present, 27 percent of the population in ASEAN live below the $3.10 poverty line. Growing inequality, increasing employment insecurity, environmental degradation and increasing disaster risks could undermine the gains that have been made and push more people into poverty.

The Agenda 2030 is clear that tackling complex development challenges will require collaboration and sustained effort from all levels of governments and various stakeholders. Specifically, sub-national and local governments have a larger role to play in localizing the global goals and in developing and implementing integrated approaches to achieve the goals. Local governments and local actors must be involved in shaping innovative and catalytic measures that transform socio-political and environmental conditions on ground.

Towards this end, countries need to focus on “enablers” to ensure that efforts at different levels of governments contribute to a more coordinated and coherent policy and action at the local level. Lessons from achieving the MDGs offer valuable insights in how governments at all levels can increase their efficiency and effectiveness, develop evidence-based policies and strategies, engage and collaborate with different stakeholders, collate resources from different sources and be held accountable for achieving sustainable development.

This publication provides a glimpse into the direction that countries and other stakeholders (specifically in ASEAN) are taking to achieve the sustainable development goals. Through a series of case studies, the publication highlights the different approaches that countries are taking to strengthen the core enablers for localizing the SDGs.

ASEAN and its member states, and UNDP have been working together to realize the ambitions of Agenda 2030 and for all ASEAN countries to achieve the SDGs. One such collaboration is the Annual Joint Symposium, organized in partnership with the Government of People’s Republic of China, to discuss, share experiences, and facilitate cooperation among member states, China, and UNDP to address some of the root causes hindering sustainable development and poverty eradication.

The symposium in Siem Reap (20-21 August, 2018) on the importance of localizing the SDGs for poverty eradication and achieving sustainable development is the third in the series of ASEAN-China-UNDP symposiums that began in 2016. The first symposium was on poverty and inequality and the second symposium held in 2017 was on financing for SDGs. We hope that this publication will inform discussions at the symposium as well as suggest a course of action that governments and other stakeholders can take to foster sustainable development.

Haoliang Xu
UN Assistant Secretary-General and
UNDP Director of Asia-Pacific
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EXECUTIVE SUMMARY

The 2030 Agenda marked a paradigm shift in global development at a time when the ASEAN region experienced (and continues to experience) high economic growth. Whilst many countries have achieved significant poverty reduction, many challenges remain that affect the achievement of the SDGs in ASEAN countries. A number of countries are still falling behind on the reduction non-income standards of poverty such as access to health, sanitation, housing and education services. Income inequality, spatial inequality and digital inequality etc., . There are also climate-related and geographic risks that are unique to the ASEAN region which increases vulnerability of poor populations and their risk of sliding into extreme poverty as a result of natural disasters.

The idea of localization emerged during the period of the Millennium Development Goals and it continues to be significant today. Although ASEAN countries continue to grow economically, there is still a need to address the challenges of non-income poverty and inequality that can only be addressed through a transformative and multidimensional approach that is localized. SDG localization requires a focus on strengthening the enabling environment for policy coherence, cohesion, coordination and collaboration between the national and local levels, translating the global goals, and integrating them in local plans, and enhancing partnerships for the implementation of SDG related initiatives.

The key question remaining is how SDG localization can be practically, efficiently and effectively implemented. The key barrier to effective localization is often found in weak institutions and systems of governance—and whilst countries face different governance constraints at different stages of their development, the importance of responsive, inclusive and accountable governance systems cannot be understated for SDG localization. In particular, the successful localization of the SDGs requires certain “core enablers” or institutional backing to create the conditions necessary for meaningful development. These enablers are briefly summarised below.

ENABLING POLICY AND INSTITUTIONAL ENVIRONMENT

This includes adoption of laws and regulations to ensure policy coherence, cohesion, as well as coordination and cooperation among all relevant stakeholders. The policy and institutional framework also includes national and local oversight institutions that monitor the implementation of SDG-related strategies and ensure accountability for the achievement of the SDGs. For example, as part of China’s SDG Localization strategy, the Chinese government launched the SDG Pilot Zone Initiative whereby local governments can pass new legislation, explore institutional reform, pilot alternative public servants’ performance evaluation and restructure public expenditure in line with the SDGs and in partnership with various organisations and experts.

STAKEHOLDER ENGAGEMENT

Countries should support the capacity development of CSOs (including women and youth) to participate in the prioritisation and implementation of the SDGs. By creating platforms to support engagement between stakeholders at the local level, innovation and skill-sharing can be fostered. For example, in Vietnam, Ho Chi Minh City (HCMC) adopted strategies to promote young engagement through social impact innovation. Private sector engagement is also a crucial aspect of localization, as evident by the public-private consultation mechanisms in Thailand which aim to create transparency and accountability in infrastructure projects and to eradicate corruption by placing strict requirements in public procurement contracts.

DATA SYSTEMS

Reliable and disaggregated data is imperative at the national and local level to allow for the monitoring, tracking, evaluation and reporting on SDG indicators, and to also support the other “core enablers” to use data in fulfilling their functions. Countries should adopt a multilevel governance approach to improve data ecosystems and share data among institutions. For example, national and local disaster data provides...
the evidence base for all levels of governments in Cambodia and Laos to reduce risk and losses from potential disasters. CSOs and the private sector should be involved to ensure data innovation and to assist in the development of skills and knowledge. For example, the Philippines presents how Community-Based Monitoring Systems can promote local-level data collection. Data excellence centres and capacity development support to key institutions can ensure quality assurance and the monitoring of standards.

FINANCING FOR THE SDGS

Financing the SDGs requires both public resources and mobilizing private investment to align with the development goals, especially through dynamic and new types of financing. Measures or strategies to enhance cost-effectiveness can encourage the equitable and efficient use of resources. For example, in Phnom Penh, the government introduced special economic zones (SEZs) whereby cost-effectiveness is achieved through the socially-responsible private concession model of infrastructure and industrial development.

INNOVATION

This cross-cutting enabler is vital for developing new ways and means to address factors that hinder other “core enablers”. It refers to not only to the use of technology to create efficiencies but also to the establishment of collaborative spaces for co-designing and testing solutions for achieving SDGs. Mainstreaming innovation also requires certain enabling factors such as measures to address the digital divide and promote digital readiness of public institutions to deliver services.. Makassar City in Indonesia presents a great example of enabling innovation to address its public transport issues. By partnering with UNDP and others, the City conducted studies to gather data and used that data to bring together relevant stakeholders to develop an innovative solution. The solution was then prototyped, successfully piloted and scaled up to inspire other Indonesian cities to adopt a similar approach.
INTRODUCTION

The adoption of the 2030 Agenda for Sustainable Development (2030 Agenda) is a truly historic and unprecedented event. This global plan of action represents a “win-win” agreement among all 193 UN member states on a “comprehensive, far-reaching and people-centred set of universal and transformative Goals and targets”\(^1\) to achieve all three dimensions of sustainable development – economic, social and environmental.

In other words, the 2030 Agenda is a consensus between developed and developing countries on how to achieve sustainable development while balancing the concerns of the present with the needs of the future generation, while ensuring that no one is left behind. The 2030 Agenda plan of action and its goals, the Sustainable Development Goals (SDGs), are far more complex and ambitious in their scope and significance than the Millennium Declaration and the Millennium Development Goals (MDGs). They reflect the reality and interconnectedness of the social, economic and environmental challenges that the world faces. The 2030 Agenda and the SDGs are also unique as they are “deliberately the product of a grassroots process”.\(^2\) Conscious efforts were made to seek inputs from and engage with a range of actors – civil society organizations, intergovernmental and multilateral organizations, individuals and other stakeholders.

The 2030 Agenda represent a paradigm shift in global development discourse and practice. It recognizes the eradication of poverty in all its forms and dimensions, including extreme poverty, as an indispensable condition for achieving sustainable development. At the same time, it also concentrates on addressing the structural causes of poverty and sustainable development, including by promoting equality; peaceful, just and inclusive societies; inclusive economic growth and shared prosperity; human rights; gender equality and the empowerment of women and girls; and protection of the planet and its natural resources.

Implementing such a complex and ambitious agenda that aims to eliminate the structural causes that hinder sustainable development requires cooperation and collaboration from all levels of governments, especially regional and local authorities, and sub-regional institutions. It also requires a robust partnership with international institutions, academia, philanthropic organizations, volunteer groups and others. As subnational and local governments are closest to the people, their involvement is critical for understanding local contexts and power asymmetries, and for translating the aspirations of the goals and targets into implementable plans and programmes on ground – or in other words: localizing the SDGs.

This publication is about SDG localization in the context of the Association of Southeast Asian Nations (ASEAN) – what challenges do countries in ASEAN face to achieve the SDGs? What is required for countries to adopt and implement integrated approaches? And what policy and implementation pathways have been undertaken so far that can lead countries towards sustainable development?

In answering these questions, this publication:

- Highlights the development context and challenges in ASEAN.
- Proposes and clarifies an integrated programming framework that is applicable across all three pillars (social, economic and environmental) of sustainable development.
- Offers an explanation of each of the components or ‘building blocks’ of the integrated programming framework – enabling policy and institutional environment, data ecosystem, stakeholder engagement, and financing.

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Underlines the challenges that countries face in establishing an appropriate policy and institutional framework for the SDGs, strengthening the data ecosystem, supporting meaningful stakeholder involvement, and financing the SDGs.

Presents innovation as a cross-cutting programming priority, and factors that can mainstream innovation into all other programming components.

Shares case studies to offer a glimpse at what countries, (including China), are doing to address challenges and develop more localized and integrated approaches to sustainable development. The experiences shared through the case studies are useful for promoting exchange around SDG localization among ASEAN countries, and can also be used by countries outside the sub-region.
CHAPTER I

THE DEVELOPMENT CONTEXT IN ASEAN
The Association of Southeast Asian Nations (ASEAN) is the home of more than 640 million people. It is the sixth largest economy in the world today, and is expected to become the fourth largest by 2050. Strong economic growth in recent decades has contributed to job growth, poverty reduction and overall human development. The level of unemployment is low in the region, hovering around two percent.

ASEAN’s middle class is growing. It comprises around 200 million people and will double by 2020. The number of households in ASEAN is expected to almost double by 2025. This will help sustain economic growth through increased consumption and domestic demand. Growth in many ASEAN economies is therefore expected to be robust and relatively stable in 2018, implying a better prospect for economic growth in the years to come.

The section below provides a brief overview of ASEAN countries’ progress in poverty eradication and human development. It also presents some of the existing challenges hindering sustainable development in the region.

**PROGRESS IN POVERTY ERADICATION AND HUMAN DEVELOPMENT**

a. Poverty eradication

With strong economic growth, ASEAN has been able to reduce extreme poverty (US$1.9/day) significantly, from 48.8 percent in 1990 to 7.2 percent in 2013. But poverty reduction is not uniform across its member states. The rate of reduction was highest in Myanmar followed by Viet Nam. In Viet Nam, the proportion of people living below US$1.9 a day decreased from 62.4 percent to 2.8 percent during 1990–2013. In these two countries, the decrease in poverty rate was similar to that of China where the poverty headcount reduced by almost 65 percentage points from 2001 to 2013.

![Figure 1. ASEAN Developing Countries and China, Poverty Headcount (%), 1990 - 2015](image)

**FIGURE 1. ASEAN DEVELOPING COUNTRIES AND CHINA, POVERTY HEADCOUT (%), 1990 - 2015**

Note: The data for poverty headcount ($1.9/day) from World Bank is available only for 7 out of the 10 ASEAN countries. The 3 countries for which there is no poverty data are Brunei Darussalam, Cambodia and Singapore. The poverty headcount for Cambodia is however presented in the above figure, based on national poverty line. The proportion of people below national poverty line in Cambodia decreased from 47.8% in 2007 to 13.5% in 2014.

Source: World Bank data

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3 The ASEAN Secretariat (2017), ASEAN Economic Integration Brief, No. 01, June 2017, p. 5.
4 Middle-income people with disposable income of US$16 to US$100 a day. See Southeast Asia’s middle class is diverse, confident, and growing richer by the day. Available at https://www.futurereadyasingapore.com/2016/quartz-bulletin1.html
7 The poverty rate for the ASEAN is based on the data of only following seven countries: Indonesia, Lao PDR, Malaysia, Myanmar, Philippines, Thailand, and Viet Nam.
66.6 percent to 1.8 percent during 1990–2013. Indonesia’s progress was close to Viet Nam’s where poverty incidence reduced from 58.8 percent to 9.4 percent (Figure 1). The high decrease in poverty in a big country like Indonesia, which shares more than two-fifths of ASEAN’s total population, has contributed to significant poverty reduction in the region.

Progress on poverty reduction varies widely across ASEAN countries and also within provinces of an individual country. For example, the current extreme poverty rate is negligible – less than 1 percent in Malaysia and Thailand – whereas it is still as high as 19.9 percent in the Lao People’s Democratic Republic and around 10 percent in three other large member states (Figure 2). Countries like Indonesia, Myanmar and Viet Nam achieved significant poverty reduction; however, their poverty rate is higher than the ASEAN average and significantly higher than that of China. These countries have several poverty hot spots requiring for efficient targeting that can be achieved through local-level efforts. For example, Rakhine and Chin are some of the poorest states of Myanmar though again the poverty incidence varies within these states. These states are also poor in terms of non-income dimensions. For example, only 42 percent of households in Rakhine states have access to improved water in the dry season compared to 95 percent in Nay Pyi Taw.8

b. Human development

ASEAN has also made a higher gain in non-income dimensions. The progress on the front of human development was significant over the last quarter century. Human development as measured by the Human Development Index with three dimensions – health, education and standard of living – increased rapidly in Cambodia, the Lao People’s Democratic Republic and Myanmar, making similar gains as China, although China had a higher starting and ending value (its HDI value was 0.738 in 2015). In turn, Singapore, Brunei Darussalam, Malaysia and Thailand have higher HDIs than China (Figure 3).

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As defined by UNDP’s Human Development Report, none of the ASEAN member states are in the category of low level of human development. Two of the 10 members (Brunei Darussalam and Singapore) are in the ‘very high human development’ category, two fall in the ‘high human development’ category (Malaysia and Thailand), and the rest in the ‘medium human development’ category. Such an achievement was also due to significant improvement on the education front in addition to the rise in economic growth and per capita income in ASEAN. Access to education has grown and is now above 95 percent at the primary level in all countries of the region (Figure 3, between 1990-2015).9

PERSISTING CHALLENGES

a. Multi-dimensional poverty

Compared to other developing regions, ASEAN made significant progress on non-income dimensions. This is evident from the multi-dimensional poverty index which measures deprivations in 3 non-income dimensions – health, education and standard of living—with 10 indicators. The multi-dimensional poverty headcount ($1.9/day) (obviously without the quotation marks) for developing ASEAN is 6.3 percent, less than the extreme poverty headcount of the region – 7.2 percent.

At country level, a comparison between the MPI headcount and the extreme poverty head count shows that the MPI is not consistently low in all the ASEAN developing countries, implying that there are some countries like Cambodia and the Lao People’s Democratic Republic where deprivations in non-income dimensions is higher and needs special attention (Figure 4). In Cambodia, the MPI headcount is 33.8 percent whereas the extreme poverty headcount is only 2.2 percent, suggesting the need for increasing access to health, sanitation, housing and education services, among others.

Although the MPI headcount rate is less in large countries such as Indonesia and the Philippines, the number of MPI poor is large there compared to Cambodia and the Lao People’s Democratic Republic where the MPI headcount is very high (Figure 5). The number of MPI poor in Indonesia alone is about 15 million whereas the number of MPI poor is 5 million in Cambodia, and 2 million in the Lao People’s Democratic Republic. In view of the principle of ‘leave no one behind’ from the 2030 Agenda, it is necessary to provide access to education and health services even in larger countries where the MPI headcount rate is low in aggregate, but the number of poor is large. There are thus MPI hotspots in larger countries that require local-level targeting.

FIGURE 4. PROPORTION OF MPI POOR AND EXTREME POOR (%) IN ASEAN DEVELOPING COUNTRIES AND CHINA, 2015

Source: UNDP HDR 2016.

9 UNDP (2017), Financing the Sustainable Development Goals in ASEAN.
b. Inequality

Inequality is as much of an issue in the region as anywhere. It is high between the ASEAN member states as well as high within the states themselves. There is an obvious gap between the richest members of ASEAN and those still in early stages of development such as the CLMV countries (Cambodia, the Lao People’s Democratic Republic, Myanmar and Viet Nam). However, the gap is closing rapidly as these countries attain high rates of economic growth.\(^\text{10}\) The ASEAN Vision 2025 intends to reduce the gap between member states. The ASEAN Economic Community (AEC) is ASEAN’s attempt at producing a single market in order to become more competitive as a region and boost economic growth. The AEC highlights the need for inclusive growth, aiming to close the development gap that exists in the region both within and between countries. The main institutional vehicle for combating inequality in ASEAN is via the Initiative for ASEAN Integration Work Plan focusing on the CLMV nations and helping them to fast-track their development and make ASEAN more competitive as an economic bloc.\(^\text{11}\)

FIGURE 5. POPULATION IN MULTIDIMENSIONAL POVERTY IN ASEAN DEVELOPING COUNTRIES

Source: UNDP HDR 2016.

FIGURE 6. GINI COEFFICIENT FOR ASEAN COUNTRIES

Source: World Bank data.


\(^{11}\) ibid.
Within countries, there are entrenched differences emerging internally. The share of national income held by the top one percent of the population, even in better-off countries, has been historically high and has increased in the recent past, though there seems to be a decline in recent years. Singapore, the most developed country of the region, has one of the highest shares of national income held by the top one percent of the population. The Gini coefficient – a measure of income inequality – is increasing in most of the ASEAN member states. It is only in Malaysia and Thailand has it been found to be decreasing (Figure 6).

The source of inequality differs across ASEAN member states. In Indonesia, where the four richest individuals hold more wealth than the poorest 100 million, access to education and health care in particular varies widely across the archipelago. This is mainly because of the lack of sufficient infrastructure due to a difficult geography that makes it arduous to make adequate local services available everywhere. Such a spatial inequality is also found between the states and regions of Myanmar. However, the inequality in Myanmar also traverses through the ethnic groups, resulting in a complex political and social landscape, making economic development difficult in large regions of the country.

**Digital divide**

Another form of non-income inequality that is increasing in ASEAN countries is digital inequality. The digital divide – the gap in access to information and communication technology – between and within ASEAN countries is considerable. The country ranking on the Huawei Global Connectivity Index, which measures the five core technology enablers for the digital economy – broadband, data centres, cloud, big data and the Internet of Things – shows that there is a wide gap between countries in the ASEAN region. Singapore ranks 2nd in the world, where as Indonesia ranks 64th out of 79, and countries with low internet penetration such as Cambodia, the Lao People’s Democratic Republic and Myanmar are not featured on the index (see tables below). This has an impact on the flow of information between ASEAN countries, and affects the overall push towards economic integration, specifically the digital economy.

Despite a high cellular presence, large segments of the population do not have access to the internet (including via mobile phones). Figures in ASEAN countries vary from 163 million (in Indonesia), 65 million (the Philippines), 49 million (Viet Nam), 28 million (Thailand) and 18 million (Malaysia). At the same time, South-East Asia is one of the fastest growing mobile internet markets with 70 million new users since 2015. The region’s population is also more engaged online, spending an average of 3.6 hours online per day. In addition, the gender gap in mobile connectivity in ASEAN is one of the lowest in the world, although the gap in access to the internet (and thus access to digital and net-based services) is much higher.

However, the existing digital divide prevents a significant number of people (especially those that are disproportionately poorer and more socially disadvantaged groups, including rural inhabitants and women) from benefiting from technological changes, and participating in the new avenues of citizenship such as having a digital identity and digital citizenship to interact with government and businesses and getting public services via digital channels.

<table>
<thead>
<tr>
<th>COUNTRY</th>
<th>INTERNET SUBSCRIPTION PER 100 PERSONS</th>
<th>CELLULAR PHONES PER 100 PERSONS</th>
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<tbody>
<tr>
<td>Brunei Darussalam</td>
<td>75.0</td>
<td>120.7</td>
</tr>
<tr>
<td>Cambodia</td>
<td>25.6</td>
<td>124.9</td>
</tr>
<tr>
<td>Indonesia</td>
<td>25.4</td>
<td>149.1</td>
</tr>
<tr>
<td>Lao PDR</td>
<td>21.9</td>
<td>55.4</td>
</tr>
<tr>
<td>Malaysia</td>
<td>78.8</td>
<td>141.2</td>
</tr>
<tr>
<td>Myanmar</td>
<td>25.1</td>
<td>89.3</td>
</tr>
<tr>
<td>The Philippines</td>
<td>55.5</td>
<td>109.2</td>
</tr>
<tr>
<td>Singapore</td>
<td>81.0</td>
<td>146.9</td>
</tr>
<tr>
<td>Thailand</td>
<td>47.5</td>
<td>172.6</td>
</tr>
<tr>
<td>Viet Nam</td>
<td>46.5</td>
<td>128.0</td>
</tr>
</tbody>
</table>

Source: ASEAN Statistical Leaflet: selected key indicators 2017

12 ibid.
13 ibid.
Chapter I The development context in ASEAN

<table>
<thead>
<tr>
<th>COUNTRY</th>
<th>RANK ON GLOBAL CONNECTIVITY INDEX</th>
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<tr>
<td>Singapore</td>
<td>2nd</td>
</tr>
<tr>
<td>Malaysia</td>
<td>32nd</td>
</tr>
<tr>
<td>Thailand</td>
<td>51st</td>
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<tr>
<td>The Philippines</td>
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<td>Viet Nam</td>
<td>61st</td>
</tr>
<tr>
<td>Indonesia</td>
<td>64th</td>
</tr>
</tbody>
</table>

Source: Huawei Global connectivity Index 2018

Gender inequality

The ASEAN region performs better than other regions in terms of gender equality. Except for Cambodia, Indonesia and the Lao People’s Democratic Republic, all other countries rank below the global average of 0.443 (the lower the score, the more gender equality). Singapore (0.068) and Malaysia (0.291) lead the way in addressing gender inequality. However, issues such as the gender pay gap, high levels of domestic violence, and limited judicial and other protections affect women’s political and economic participation. As progress on the gender equality goal enables progress in across other goals, more needs to be done to achieve gender equality in the region.

c. High vulnerability to poverty

Despite progress in reducing poverty, vulnerability to falling back into poverty is high in ASEAN. The unique geographic and climatic conditions of the ASEAN region make it one of the world’s most vulnerable regions to disasters caused by natural hazards as well as climate change impact. The region faces risks from earthquakes, volcanic eruptions, tsunamis and forest fires that take a heavy human toll and cause economic damage. These natural disasters are becoming more intense due to climate change and are causing increasing damage every year. More than 50 percent of global disaster mortalities occurred in

FIGURE 7. ASEAN DEVELOPING COUNTRIES, POVERTY HEADCOUNTS (%) FOR TWO POVERTY LINES, 2013

Source: World Bank data.

16 UNDP Gender Inequality Index. Available at http://hdr.undp.org/en/composite/GII
the ASEAN region during the period of 2004 to 2014. The total economic loss was US$91 billion. About 191 million people were displaced temporarily and disasters affected an additional 193 million people.

Climate change and environmental vulnerability has been derailing progress in poverty reduction in ASEAN member states. Some population groups, such as coastal groups or those living at the banks of rivers, are more vulnerable to floods which requires local-level initiatives to target them and address their vulnerability.

When a disaster hits, those who are just above the poverty line tend to fall back into the poverty trap. The proportion of such population groups in the ASEAN region is large. This is evident from the fact that when the poverty line is raised from US$1.9 to $3.2 a day, the proportion of poor below the poverty line increases sharply by four-fold from 7.2 percent to 29.3 percent. The large proportion of people living between the two poverty lines is a clear indication of the higher vulnerability of the region (Figure 7).

The rapid increase in the extreme poverty headcount with the rise of the poverty line is found in all but Malaysia and Thailand, suggesting that the proportion of the vulnerable population is higher in lower middle-income countries. The proportion of poor in Indonesia increases from 9.4 percent to 40.7 percent, and in the Lao People's Democratic Republic such an increase is from 19.9 percent to 55.2 percent. The increase is also higher in the Philippines which is the most disaster-prone ASEAN member state, where any large-scale natural disaster will push back a large number of people into poverty. In fact, poverty reduction in the Philippines has been slower compared to all other developing countries of the region, partly due to recurring natural disasters in the country.

d. High vulnerability to shocks in urban areas

Urbanization has been transforming ASEAN economies and societies at an unprecedented pace. The proportion of population living in urban areas of the ASEAN region was 15.5 percent in 1950; now almost 50 percent of the region's population is urban. Countries with the fastest increase in their urban share, between 20 to 22 percentage points, during 1950 to 2014, are the Lao People's Democratic Republic, Myanmar and Thailand.

Urbanization has helped millions escape poverty through increased productivity and employment opportunities, improved quality of life, and large-scale investment in infrastructure and services. However, the high density of people, jobs and assets in ASEAN cities also makes them extremely vulnerable to a wide range of natural and human-made risks. The effects of these risks are likely to be felt mostly by women and children, and the urban poor, whose informal settlements tend to be on land exposed to high risk from extreme weather events.

Many of the ASEAN cities are in coastal areas, increasing their vulnerability to storm surges and sea level rise. In fact, 14 of the world's 17 largest cities are located along coasts in the world. Eleven of these cities, including Bangkok and Jakarta, are in Asia. This, together with growing risks of pandemics triggered by climate change, can particularly affect more urban people, especially the poor and more vulnerable ones, due to dense urban living that facilitates the spread of infectious diseases leading to pandemics.

The Asia-Pacific cities suffer from the highest air pollution levels in the world, with as much as 80 percent attributable to transport. However, the ASEAN region also has cities with some of the most successful public transport programmes, such as Hong Kong and Singapore, where emissions have already been reduced.

Out of 700 urban slum dwellers in Asia-Pacific, 84 million live in South-East Asia, currently lacking adequate sanitation. With the projected huge increase of populations living in slums and the growing sophistication of transport networks between cities, the lack of adequate sanitation could facilitate the spread of infectious diseases further.

20 The poverty rate for the ASEAN is based on the data of only following seven countries: Indonesia, Lao PDR, Malaysia, Myanmar, Philippines, Thailand, and Viet Nam.
21 UNDESA 2014. World Urban Report
25 ADB. Urban Transport. Available at https://www.adb.org/sectors/transport/key-priorities/urban-transport
26 UN-Habitat 2016.
increasing the risk of global disease outbreaks. Coupled with rapid aging, non-communicable diseases are also becoming increasingly prevalent, particularly in urban areas of the region. The cost of treatment of non-communicable diseases is high and escalating, outstripping rises in income.

ADDRESSING DEVELOPMENT CHALLENGES AND PROMOTING SUSTAINABLE DEVELOPMENT

Growth is the major driver of poverty reduction and human development, and was instrumental in reducing extreme poverty by more than half between 1990 and 2013 in the ASEAN region.

Growth in the large ASEAN economies is expected to be robust and relatively stable in 2018. Overall, the region is expected to grow and become the fourth largest economy by 2050. Given the strong economic growth in ASEAN, rise in middle class and domestic consumption, it is likely that poverty will come down to less than four percent there.

However, as highlighted under the multi-dimensional poverty section, a large number of people continue to experience non-income deprivations such as access to education, health and other basic services, and even digital access. Data from the P20 Initiative, which tracks the progress of the poorest 20 percent of people to find out if their lives are changing for the better, also demonstrates that people often face...
multiple deprivations. The figure below (based on data from the P20 Initiative\(^\text{29}\)) shows that women from the poorest 20 percent who face deprivation in one area are more likely to face deprivation in another. The figure illustrates the overlapping deprivations in health care (lack of skilled attendant at birth) and education (no education or only preschool level) that women in ASEAN countries face.\(^\text{30}\) Similar overlapping deprivations exist in other areas too (for instance, a lack of sanitation can increase health risk, and sickness without adequate health care may push families into poverty).

This high level of deprivation also adds to the vulnerability of the population to risks and shocks, including disaster risks and climate change. Without adequate service delivery infrastructure, and the means to withstand shocks, people living just above the poverty line could fall back again into poverty.

The sustainable development agenda recognizes poverty in all its forms as the greatest global challenge. Eradicating poverty is imperative for ensuring that people live a life of dignity and equality. The agenda also recognizes that poverty eradication measures cannot be limited to economic growth. As highlighted above, addressing income poverty is not sufficient to address other kinds of deprivations that prevent people from enjoying a basic standard of living. The agenda recognizes that sustained, inclusive and sustainable economic growth, social inclusion, equality, and the protection of environment are interrelated and interconnected.

Thus, for the effective eradication of poverty and for the achievement of sustainable development, a social, economic, environmental and political transformation is required. This is only possible if countries and governments at all levels adopt policies and strategies that take into account all three dimensions of sustainable development – social, economic and environmental – and promote dynamic and people-centered economies; social and economic inclusion, women and youth empowerment; improved productive capacities of all people; universal access to affordable health care; clean air; reliable, sustainable and modern energy services; sustainable transport systems; and quality and resilient infrastructure, among others.\(^\text{31}\)

At the same time, such policies need to consider geographical, social and power/political contexts at the local level in order to be able to address “pockets of poverty” both in income and non-income dimensions. **Or in other words, there is a need for localizing the SDGs.**

In shaping these integrated policies and strategies, subnational and local governments have a critical role to play and can bring the needs and concerns of diverse sections of their local populations to inform policy development – and thus help to realize the “leave no one behind” objective of the 2030 Agenda. More importantly, subnational and local governments are key actors in the implementation of integrated policies and strategies, along with other local stakeholders. Ultimately, as policies and plans need to be implemented at the local level, it is the local governments that are accountable to their constituents on delivering basic services, safeguarding the environment, and promoting economic development.

But not all local governments are the same. Many lack the mandate, capacity and resources to deliver on local plans and strategies. A stronger focus on strengthening the governance systems at the local level can make a significant impact in developing and implementing inclusive and innovative policies, as well as harnessing local resources and partnerships for the sustainable development agenda.

\(^{29}\) Based on Multiple Indicator Cluster Survey and Demographic and Health Surveys data. For Thailand, the ASEAN P20 is replaced by the poorest 20 percent of people nationally. Data is from 2016 (Myanmar), 2014 (Cambodia and Viet Nam), 2013 (Philippines and Thailand) and 2012 (Indonesia and the Lao People’s Democratic Republic). Bubble sizes are roughly comparable within countries but the scale varies between countries. Each bubble represents an estimate of the number of women (aged 15–49) in each country who face each deprivation. For Thailand, the ASEAN P20 is replaced by the poorest 20 percent of people nationally. Data is from 2016 (Myanmar), 2014 (Cambodia and Viet Nam), 2013 (Philippines and Thailand) and 2012 (Indonesia and the Lao People’s Democratic Republic). Bubble sizes are roughly comparable within countries but the scale varies between countries. Each bubble represents an estimate of the number of women (aged 15–49) in each country who face each deprivation. In the Philippines for example, an estimated 2.8 million women have no education or preschool education only. Of those 2.8 million, 2.3 are also among the poorest 20 percent of people in the ASEAN region as measured by income (of who 8.4 million are in the Philippines). Similarly, of the estimated 5.3 million women in the Philippines who had no skilled attendant at a birth, 3.8 million are also among the poorest 20 percent of people in the ASEAN region. 1.5 million women are in all three groups.

\(^{30}\) UNDP (2017), “Financing the Sustainable Development Goals in ASEAN”

\(^{31}\) UN GA (2015) ‘Transforming our world: the 2030 Agenda for Sustainable Development’
CHAPTER II

SDG LOCALIZATION
The term “localization”, as it relates to achieving the sustainable development goals, has its own history. Early in the efforts to achieve the Millennium Development Goals (MDGs), countries, multilateral agencies and other development actors recognized that involving local governments, and considering the local development context was vital for achieving the goals. Localization was defined as the “process of designing and implementing local development strategies to achieve the MDGs. This involves promoting local ownership, understanding local needs and trends, and allocating resources to achieve targeted outcomes at the local level.” During the discussions leading up to the adoption of Agenda 2030, which were building on the experiences of localizing the MDGs, many actors argued for greater active involvement of local governments in achieving the sustainable development agenda.

The important role of sub-national and local governments in shaping and achieving the SDG is highlighted in the UN Secretary General’s Synthesis Report on the Post-2015 Agenda, which states that “many of the investments to achieve the sustainable development goals will take place at the subnational level and be led by local authorities”.

This viewpoint is also reflected in the language of the SDGs. Goal 11 on sustainable cities and communities is seen as the lynchpin for localization, and is interlinked with 10 other goals, whose targets call for more integrated action at the local level. These targets also directly relate to the responsibilities of local and regional governments, specifically their ability to promote integrated, inclusive and sustainable territorial development. Without the involvement of the local government, it is likely that 65 percent of the SDG targets may not be achieved.

To enable sub-national and local governments to become the catalysts of change, there should be sustained exchanges between the global, national and local levels to negotiate and balance local needs and aspirations with that of the sustainable development agenda. Local actors need to fully participate, not only in the implementation, but also in the agenda-setting for, and monitoring of, the SDGs. In other words, the whole policy chain needs to be shared between all levels of government. All relevant actors must be involved in the decision-making process, through consultative and participatory mechanisms at the local and national levels. More importantly, effective measures should also be in place to ensure the accountability of all relevant actors for the implementation of policy decisions.

In summary, the concept of localization relates to several aspects:

- The SDGs provide a framework for local development policy while ensuring coherence and cohesion between national and local level policies;
- Framing the SDGs into action that are relevant, applicable, and attainable at the local level;
- Bottom up action that enlists local and regional governments to support the achievement of the SDGs — through partnerships, better resource allocation, and monitoring SDG achievement to ensure that no one is left behind.

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33 The Global Taskforce of Local and Regional Governments was set up in 2013 to bring the voices of local leaders and people to the international stage and influence the global development agenda. The taskforce was a channel for the joint advocacy work of major international networks of local governments.
35 Global Task Force of Local and Regional Governments, UN Habitat, and UNDP, ‘Roadmap for Localizing the SDGs: Implementation and Monitoring at Subnational Level’
36 See Localizing the SDGs, http://localizingthesdgs.org/about-us.php A joint initiative of the Global Taskforce of Local and Regional Governments, UN Habitat, and UNDP
37 Misselwitz, Philipp, and Jesús Salcedo Villanueva 2016: The Urban Dimension of the SDGs: Implications for the New Urban Agenda.
38 Localizing the SDGs, http://localizingthesdgs.org/about-us.php
39 Global Task Force of Local and Regional Governments, UN Habitat, and UNDP
However, putting "localization" into practice is not easy. Countries will have to rethink their governance systems in order to allow local governments to galvanize bottom-up action, and take on an active role in defining SDGs policy and implementation. Oversight mechanisms that promote transparency and accountability at all levels of government are also essential to ensure that policies are implemented and are achieving desired results (in a socially inclusive manner that promotes equal access to public services and opportunities).

a. Localization Challenges

The correlation between governance and growth has long been recognized in policy and practice. The sustainable development agenda explicitly recognizes the importance of inclusive and responsive governance systems for achieving the three strands of sustainable development. Governance is seen as both an “enabler” for achieving all sustainable development goals, as well as being a “goal” in and of itself. Establishing effective, accountable and transparent institutions; addressing corruption; ensuring participatory and representative decision-making; and ensuring public access to information and protecting fundamental freedoms, among other targets of Goal 16 (peaceful, inclusive, and just societies) are essential for achieving all the other goals.

The implication of weak governance on sustainable development is enormous. Evidence shows that good governance is essential for countries to move towards more inclusive, sustainable and sustained growth patterns. Better governance systems allow for the development of people-centric policies, efficient implementation of such policies, effective and transparent use of the national budget, more capable and responsive institutions, social inclusion, and other enabling factors, all of which are important for sustained economic growth and sustainable development.

Asian countries were long viewed as contradicting the correlation between good governance and economic growth, as in recent decades a number of countries in the region have shown consistently high economic growth despite relatively low ratings on governance. However, this is not the case. The Worldwide Governance Indicators (WGI) measures six dimensions of governance – voice and accountability, political stability and no violence, government effectiveness, regulatory quality, rule of law, and control of corruption.

While the data is collected every year, the WGI is more suitable for looking at trends in governance over a period of time. Recent studies comparing performance on WGI and economic development reveal that Asian countries are not an exception to the rule. Rather, better performance on governance indicators corresponds to higher economic growth. While all dimensions of governance are equally important, Asian countries that have higher scores on indicators related to government effectiveness, regulatory quality, and control of corruption have performed better economically.

The study recognizes that countries face different governance constraints at different stages of their development, and supporting governance reforms that alleviate these constraints can lead to sustained growth and development. The correlation between voice and accountability, rule of law, political stability and absence of violence, and development is stronger in middle and higher income countries, and can help them avoid middle-income traps.

Better institutions and the overall effectiveness of these institutions (from legal systems to health and education systems to financial systems) are essential for sustained economic growth in both low and high income countries.

40 The centrality of governance is recognized in the 2010 MDG Outcome Document and the 2012 Rio+20 Outcome Document. The two documents reaffirm the importance of good governance and protection of human rights for achieving the three strands of sustainable development (economic growth, environmental sustainability and social development) and addressing the emerging challenges of climate change. In addition, ASEAN countries ranked honest and responsive government fourth out of 16 priorities on the “World We Want” survey http://data.myworld2015.org/


42 See worldwide governance indicators http://info.worldbank.org/governance/wgi/#home


44 Ibid
FIGURE 9. ASEAN COUNTRIES PERFORM ON WORLD WIDE GOVERNANCE INDICATORS, 2000-2016

- **Voice and Accountability**
- **Political stability/no violence**
- **Government Effectiveness**
- **Control of Corruption**
- **Rule of law**
- **Regulatory Quality**

Legend:
- Brunei Darussalam
- Cambodia
- Indonesia
- Laos PDR
- Malaysia
- Myanmar
- Philippines
- Singapore
- Thailand
- Vietnam
Chapter II SDG localization

The charts and graphs above show the performance of ASEAN countries on WGI over nearly a two-decade period by looking at scores for the years 2000, 2010, and 2016. The performance of the ASEAN countries on WGI is not uniform. While some countries are high performers, others lag behind. Overall, the data shows that ASEAN countries need to do more to improve the quality of governance, including aspects such as voice and accountability which is key to the successful localization of the SDGs. As indicated above, weak governance affects the localization of the SDGs. Without mechanisms for strong stakeholder engagement, institutions for coordination, planning and delivery, mechanisms for oversight and accountability of such institutions to ensure that they perform in a resource-efficient and effective manner, the SDGs will continue to remain aspiration goals.

Given the importance of responsive, inclusive and accountable governance systems for localizing the SDGs and achieving the sustainable development agenda, the means through which policies and integrated strategies are developed and implemented (i.e. governance systems and institutions) must be reviewed and strengthened. Towards this end, countries need to pay attention to the core enablers for localizing SDGs.

ENABLERS FOR LOCALIZING SDGS AND ACHIEVING SUSTAINABLE DEVELOPMENT:

The core enablers or the “building blocks” are essential for creating the necessary conditions for localizing the SDGs- including developing integrated approaches, implementation, and monitoring of the achievement of the SDGs. These enablers are:

a. Enabling Policy and institutional Environment:

This refers to the enabling environment at multiple levels that would allow for effective SDG localization—or in other words a “whole of government” approach for SDG localization. It includes adoption of laws and regulations to ensure policy coherence, cohesion, as well as coordination and cooperation among all relevant stakeholders. This is not only vital for SDG integration into national and local planning and budgeting processes, but for achieving specific targets. Policies may need to be changed or revised (for example: to better ensure the inclusion of marginalized groups), or new means of services may need to be developed to achieve a specific target. A strong yet flexible and agile enabling policy and institutional framework is required to adopt and implement measures for achieving specific targets. The policy and institutional framework also includes oversight
Institutions that monitor the implementation of SDG-related strategies, and hold institutions and actors to account on the achievement of the SDGs. These national and local level accountability mechanisms, in addition to global reporting mechanisms for the SDGs, are needed to ensure that the process of achieving SDGs also creates a more responsive, transparent and accountable governance system on the ground.

b. Data systems: Data and statistical systems are an integral part of the overall enabling policy and institutional framework. However, it warrants a separate focus as data ecosystems of most countries need to be strengthened in order to respond to the additional demands to monitor, track and report on SDG indicators. Reliable and disaggregated data is imperative for decision-making processes and for ensuring that no one is left behind. Without strong data systems at the national and local level that provide baseline data and track achievement against SDG targets, countries will not be able to both prioritize initiatives, and also analyze co-relationships and causal relationships that would aid in developing a more integrated approach to the construction of SDG implementation strategies.

c. Stakeholder engagement: One of the core principles that underpins agenda 2030 is that multi-stakeholder engagement is critical for achievement of SDGs. No single country or organization can achieve the SDG by itself. It will require the sustained efforts of all stakeholders – civil society, private sector, academia, individuals, countries, multi-lateral organizations – to work together to develop and implement initiatives for achieving the SDGs. Without broad-base engagement from the relevant stakeholders, the aspirations of Agenda 2030 to transform socio-political systems may not be achieved. As ASEAN countries score low on fostering voice and accountability on WGI, more needs to be done to support and sustain spaces of engagement and facilitate collaboration around the SDGs.

d. Financing for the SDGs: Achieving an ambitious agenda such as the Agenda 2030 requires enormous amounts of resources, in the order of trillions of dollars per year. The Addis Ababa Action Agenda provides the framework for financing the sustainable development agenda. It calls for mobilizing public resources domestically and aligning private sector investment with the SDGs, as well as promoting equity, efficiency and effectiveness in the use of resources. With the financing landscape becoming more dynamic, new types of financing mechanisms are available for SDG achievement. Measures need to be put in place to leverage and align not only large-scale investments but also smaller financial initiatives that promote sustainable development.

e. Innovation: Innovation is a cross-cutting enabler and should be integrated into each of the above building blocks. Innovation refers to both social innovation that promotes collaborative engagement among all stakeholders to address development challenges, and to the use of new technologies to promote efficiency in administering SDG implementation strategies. However, more needs to be done to enable innovation within the public sector, including establishing collaborative spaces, and developing public sector capacities to leverage the collaborative spaces as well as new technologies to develop new initiatives for achieving the SDGs. The rise of smart cities offers an opportunity to revamp the public sector.

The subsequent chapters expand on each of these core enablers, highlighting the challenges faced by ASEAN countries, and measures taken by ASEAN countries to improve the conditions for localizing the SDGs. Each chapter contains case studies to illustrate ongoing initiatives that aim to address one or more challenges, and to create a more conducive environment for SDG localization.
The two case studies highlight different approaches to financing SDGs. The Cambodia case study is about creating special economic zones in collaboration with private sector to accelerate job creation, industrialization and incentivize entrepreneurship. Where as, the Thailand case study focuses on smaller scale sustainable development/financing initiative that protects livelihoods with minimal impact on environment. A critical mix of high impact and low impact financing initiatives are required to achieve SDGs.

The two case studies presented in this section show how countries have supported engagement of different stakeholders to inform policies, and influence development of solutions for achieving the SDGs – Ho Chi Minh City, Viet Nam promoted youth engagement to achieve the SDGs; Thailand case study showcases how engagement with the private sector can inform stronger policy frameworks, including for addressing corruption and promoting integrity.
Case studies from China and Indonesia showcase the steps taken by governments to raise awareness and set the policy and institutional framework for local governments to embrace SDGs, and integrate SDGs into local planning and budgeting processes.

The two case studies focus on a core challenge that countries face with SDG indicators – such as how to develop and use new data sources that complement national statistical systems? The Philippines case study presents how Community-Based Monitoring Systems, developed during the MDG period, continue to be relevant for collecting data at the local level that can help track SDG targets. The risk-informed planning case study shows how disaster loss databases are vital for developing risk-informed plans at the local level and highlights the challenges in integrating risk-informed planning in the public investment sector.

The case studies in this section illustrate how social innovation approaches can help to recognize and articulate needs and develop and deliver new services to meet the needs. The case study presents the whole journey of developing one new service in Makassar City (Indonesia)—from consultations to design to incubation to prototyping to scaling up and highlights some of the challenges along the journey.
CHAPTER III

ENABLING POLICY AND INSTITUTIONAL ENVIRONMENT FOR SDG LOCALIZATION
The term enabling environment is often described as the “political, economic, policy, social, legal and regulatory systems within which organizations and individuals operate”. In other words, it is the broader system within which individuals and organizations exist and function, and one that facilitates or hampers their existence and performance. Thus, the enabling policy and institutional environment for SDG localization refers to the range of laws, rules, regulations, policies and strategies as well as institutions at all levels of governments, and related to different yet interconnected aspects (political, economic, social, administrative, etc.). Together the enabling policy and institutional environment facilitates the shaping of policies and decision-making processes related to SDGs, define implementation mechanisms, monitor and evaluate results, and ensure transparency and accountability in the achievement of the SDGs. It should also promote coordination and collaboration between different levels of government and among different institutions (from parliaments to oversight institutions to sub-national institutions as well as CSOs and volunteer groups).

In order to strengthen the overall enabling policy and institutional environment, governments should not only adopt clear policies but also ensure that these policies are translated into institutional commitments, and that the roles, responsibilities and resources for delivering on these commitments are also clear. Official statistics and other sources of data should inform all the steps, and measures taken to create a conducive policy and institutional environment. More importantly, the enabling environment should be guided by certain key principles, such as inclusion, non-discrimination, participation, accountability etc., to ensure that the structural issues behind inequality and exclusion are addressed. It should also be informed by principles of subsidiarity and devolution which would ensure a greater role of local governments, and local actors in shaping and implementing SDG strategies.

An enabling policy and institutional environment also contributes to policy coherence or “Whole of Government” integrated approaches, which are critical for achieving the SDGs and national development priorities. Policy coherence can be defined as consistent efforts across all government departments to achieve shared goals.

CURRENT CHALLENGES

Countries are often burdened with conflicting laws, policy inconsistencies, institutional silos, and uneven inter-governmental relations (i.e. processes and institutions through which governments at different levels interact), along with existing power asymmetries. This makes establishing an enabling policy and institutional environment for achieving the aspirations of Agenda 2030, including poverty eradication and the promotion of inclusive and sustainable development, all the more complex and difficult. Other specific challenges that affect the overall enabling environment for SDG achievement include:

a. Government effectiveness:

The effectiveness of any policy and institutional framework will depend on whether the policy is applied through the relevant institutions and is having the desired result(s). It will depend on the commitment of the government and other relevant actors to allocate capacities and resources for policy implementation. The Worldwide Governance Indicators (WGI) defines government effectiveness as the quality of public services; the quality of the civil service and the degree of its independence from political pressures; the quality of policy formulation and implementation; and the credibility of the government’s commitment to such policies. Along with regulatory quality (policies and regulations that permit and promote private sector development), rule of law and control of corruption, government effectiveness determines whether or not policies are fully applied, and whether the institutions have the mandate and the functional capacities or public sector capacities are adequate for policy implementation.

The ASEAN countries performance on WGI varies widely – with Singapore ranked very high, and

46 UCLG ASPAC, Cities Alliance, UNDP (2018), ‘City Enabling Environment Rating: Assessment of the countries in Asia and the Pacific’
48 Worldwide Governance Indicators http://info.worldbank.org/governance/wgi/#home
Cambodia, Lao PDR, and Myanmar scoring very low. Large countries such as Indonesia, the Philippines, Thailand and Viet Nam are on the middle of the scale (scoring between 50-66 points, 2016). The countries' score follows a similar trend on other dimensions such as regulatory quality, rule of law and control of corruption. This shows that there is an enormous gap in public policy development and implementation. Understanding the factors that affect government effectiveness is vital for creating an enabling environment for achieving the SDGs. It will require adopting and adjusting institutional forms in ways that solve the specific problems that hinder pursuing wider reform or capacity development.49

Any enabling policy and institutional framework will have to create a conducive environment for SDG achievement at two levels – one improving the overall efficiency and effectiveness of governance systems for SDGs (i.e. national policies, coordination mechanisms etc.), two focused on creating the enabling environment for governance of SDGs (i.e specific policies and measures to achieve a specific target).

b. Decentralization and strengthening local governments’ role in SDG achievement

The whole of governance approach for SDGs complements the principle of subsidiarity by establishing a system of co-responsibility between institutions of governance at the central, regional and local levels, while increasing the authority and capacities of sub-national and local governments to deliver on SDG plans and actions. Thus, creating an enabling policy and institutional environment for SDGs will also involve strengthening the ability of sub-national and local institutions to set the policy agenda for SDGs. Given this, the level of political and fiscal decentralization and devolution has an impact on the engagement of local governments and actors in achieving SDGs.

Indonesia, Philippines, Malaysia and Thailand are some of the countries in the region that had embarked on decentralization reforms and where the regional authorities or sub-national government authorities have been increasing.50 However, despite efforts over the last three decades, decentralization remains incomplete. This has an implication on local governments’ ability to deliver services and their ability to ensure the participation of people, particularly marginalized sections of the population. Some of the decentralization challenges include: unclear functional assignments, poor fiscal decentralization and resource allocation frameworks (for example: Laos51, Thailand52), lack of capacity, weak planning and budgeting systems, poor expenditure rates (for example: Indonesia53 and the Philippines54), multiple layers of sub-national governments leading to inefficiency and weak accountability systems. These governance challenges have a direct implication on the ability of local governments to deliver services. For example in Indonesia, despite increased levels of investment in the education sector at the district level, evidence points to poor overall governance (i.e. local planning and budgeting) affecting the quality of education services provided at the district level.55 The Philippines is also affected by lack of coordination among various government agencies in the provision of services.

For creating an enabling policy and institutional environment for SDGs, countries may need to rethink the fragmented decentralization reform processes, and address the governance challenges faced by sub-national and local governments. Without strengthening decentralization, local governments may not be able to assume responsibility to implement the SDGs or report on the actual progress on SDGs and ultimately be held accountable for the SDGs.56

c. Limited awareness of local governments about SDGs.

Closely linked to the above point is the level of awareness of SDGs among local governments in the ASEAN region. In a survey of stakeholders

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52 World Bank (2012), ‘Thailand Public Management Review’
53 World Bank (2013), ‘Local Governance and Education Performance in Indonesia: Surveying the Quality of Local Education Governance in 50 Districts’
55 World Bank (2013), ‘Local Governance and Education Performance in Indonesia’
from ASEAN member governments to examine city-level expectations and priorities around SDG implementation, the survey found that there was limited awareness of SDGs at the local level.\textsuperscript{57} In addition, though local governments (especially elected governments) are directly accountable to the public, which often makes them more responsive to local development challenges, only very few saw the benefit of reframing or realigning local actions with SDGs. This is different from “frontrunner” cities that are leading in SDG integration into local planning processes (See box 2 on decentralization in the Philippines and how cities are align local plans with SDGs). The survey also found that data collection – even in frontrunner cities – is severely lacking, and needs to be incentivized.\textsuperscript{58}

Any enabling environment for SDGs needs to also support raising local governments’ awareness and knowledge of SDGs. As data is integral for evidence-based planning, systematic approaches to collect, monitor and utilize data need to be facilitated.

Other key aspects of an enabling environment such as data ecosystem, stakeholder engagement, and innovation are discussed separately in the subsequent chapters.

\textbf{BOX 1

INTEGRATION OF SDGS INTO PLANNING FRAMEWORK IN MYANMAR

Achieving the SDGs is a key priority for the Republic of the Union of Myanmar. At the 71st United Nations General Assembly, the State Counsellor stated that Myanmar’s 2016 national economic and development policy is designed to meet many of the SDGs, including strengthening infrastructure, agricultural productivity, small- and medium-sized enterprise development, and, in particular, poverty alleviation.\textsuperscript{57} In February 2018, the Government of Myanmar presented its draft version of Myanmar Sustainable Development Plan, aiming to connect and align the country’s numerous policies and institutions for the purpose of generating implementable solutions to achieve “genuine, inclusive and transformational economic growth”.

In Myanmar, coordinating work related to the 2030 Agenda and the SDGs is being led by the Ministry of Planning and Finance (MoPF), which also serves as the secretary of both the President-led Planning Commission and Finance Commission and the State Counsellor-led Development Assistance Coordination Unit. With support from various UN agencies, MoPF has coordinated efforts to raise awareness on the SDGs among different Ministries at both national and sub-national levels. Currently, the Union Civil Service Board provides SDG trainings as part of their regular training curricular for civil servants. The Ministry of Education has advanced on measuring SDG data on education goal. The Ministry of Social Welfare, Relief and Resettlement and the Ministry of Planning and Finance are jointly leading a cross-sectoral working group on SDGs for Children. On measuring SDG indicators, the Central Statistical Organization of the MoPF has published: 1) Readiness Report of Myanmar’s Official Statistics for the Sustainable Development Goals; and 2) Measuring Myanmar’s Starting Point for the Sustainable Development Goals: SDG Baseline Indicator Report. Myanmar Government’s commitment towards the SDGs is also shown in the Operating Guidelines for Sector Coordination Groups and the Development Assistance Policy. Currently, the Government of Myanmar is formulating the national indicator framework that will accompany the Myanmar Sustainable Development Plan 2018-2030.

At the sub-national level, government officials of the State and Region Governments have become aware of the SDGs. Among those, Mon State Government, Bago Region Government, and Rakhine State Government have been making a steady progress in integrating the SDGs as part of their local planning processes, through UNDP’s technical assistance. For example, 14 pilot townships in these States and Region have been adopting key enablers of the SDGs such as evidence-based planning, inclusive and participatory planning, policy coherence, among others. In particular, four Township Administrations in each of Mon State and Bago Region are currently preparing to conduct a package of surveys including statistical and perception surveys, in order to diagnose the status of local development, local governance and how investments in different sectors promote inclusive and sustainable development. This initiative is supported by UNDP Myanmar and Bangkok Regional Hub, and will inform further planning processes of the target Townships and the State and Region Governments.

57 Institute for Global Environmental Strategies (2018), Early Views of ASEAN’s ‘Frontrunner Cities’ on the Sustainable Development Goals (SDGs) and Local Data Management https://pub.iges.or.jp/pub/early-views-aseans-frontrunner-cities
58 ibid
**BOX 2**

**TRANSITIONING FROM MDGS TO SDGS: EXPERIENCE FROM THE PHILIPPINES’ FACES PROJECT**

The Philippines Development Plan (PDP) 2017-2022, is not only anchored on the national long-term vision, or AmBisyon Natin 2040, and on the Duterte Administration’s 0-10-point Socioeconomic Agenda, it is also informed by the Sustainable Development Goals. 63 of the global SDG indicators are reflected in the PDP. Given that the Philippines has a decentralized form of government, the Department of the Interior and Local Government (DILG) is responsible for localizing the envisioned results of the PDP 2017-2022, including integrating the selected SDG indicators of the PDP into provincial plans and budgets. A platform on SDG localization was established in 2015 that brought together national government agencies such as the DILG, Philippine Statistical Authority, The National Economic and Development Authority, Commission on Human Rights, League of Provinces, CSOs, Academic Institutions, to design an SDG localization approach for the Philippines.

DILG has extensive experience in localizing the global and national development goals into local plans. The experiences from MDGs has helped DILG to support localization of SDGs in over 34 cities since 2015. During the MDG era, it led the localization of MDGs and prescribed a framework for local governments focusing on the entire policy and implementation cycle – policy support, planning and budgeting, and monitoring and reporting. It also promoted innovations in local programming processes to achieve MDG targets. In collaboration with the Local Government Academy (LGA), the League of Cities of the Philippines, and with technical support from UNDP and UN Habitat, launched and implemented the MDG Family-based Actions for Children and their Environs in the Slums (MDG FACES). Initially implemented in 15 cities in 2008, it expanded to 127 cities by 2015.

MDG – FACES focused its intervention on children in urban poor communities in cities. In 2008, one in every three slum dwellers was a child. More than half of the Philippine population lived in urban areas, and of which 30 percent lived in the slums. MDG-FACES sought to address multiple deprivations faced by children in the slums. The programme focused on the lives of 20 girls and 20 boys from urban poor households in slums, and used the data collected to design targeted programmes to address multiple deprivations faced by children. Women played a central role in implementation and monitoring of the FACES project, and helped to develop quick response actions and solutions to address the needs of the children.

Building on the success of the MDG FACES projects, 34 cities have now transitioned to the SDG FACES Programme. The programme follows the same process as the MDG FACES programmes, but has expanded set of goals, targets and indicators. Following awareness raising of local communities on SDGs, each city engaged 20 girls and 20 boys from 40 poorest households and addresses the different deprivations (i.e. no access to education, water and sanitation, food) that they are currently experiencing to introduce governance reforms at the local level. The lives of the children and their respective households are tracked and monitored till the year 2030 to check if reforms are successfully implemented and have benefitted the households. Mothers, and third-party monitors called integrity circles monitor progress.

The FACES approach utilizes several tools to implement the attainment of goals and initiate reforms. These tools are:

1. **SDG Baseline**: building on existing poverty profiles of local governments, a baseline is put together priority SDGs of the city. Some cities utilized their existing Community Based Monitoring System (CBMS) Data and some utilized administrative reports on health, education, WASH, etc. or a combination of both.

2. **Family and Child Selection Criteria**: Cities formulated their respective criteria. The criteria include parameters of families and children who are left behind, such as:
   - Families who are not recipients of any government program such as the 4Ps or NGO-CSO programs such as child sponsorship of World Vision, and similar programmes.
   - Families with children with disabilities.

3. **Children who suffer from multiple deprivations – undernourished, not in school, sickly, etc.**

4. **Family Survey Tool**: Based on the selection criteria, the city government and community partners conducted a survey of prospective families who are qualified to be part of SDG-FACES. The results of the survey was used to choose the 40 families.

5. **SDG Family Covenant**: qualified families are encouraged to commit to help their respective local governments attain the SDGs by way of a covenant. The family choses which SDG they are committing to help achieve at the household level to improve the lives and the future of their children (for instance related to education or health etc.).
5. SDG Child Report Card: each of the 40 children enrolled in programme are monitored based on the priority SDGs selected by the families. Upon enrollment of the child in the programme, a baseline is established on the condition of the child. Thereafter, the child is monitored on a monthly basis to track progress related to his health, education, environment and the other indicators related to the SDGs.

6. Quick Response Tool: The quick response tool is a guide for parents in accessing necessary services that the family will need from the city government.

7. Guide to Implementing SDG Demonstration Projects: teaches the 40 families on how to implement projects in their respective communities that will help attain the SDGs.

UNDP supported the implementation of activities to transition the cities from MDGs to the SDGs and supported re-designing of the above tools. Currently, UNDP together with the Science City of Munoz is designing and developing a digital version of the SDG Child Report Card that will allow electronic monitoring of children’s progress. UNDP is also supporting LGUs to digitize frontline and basic services that will positively impact children’s lives such as nutrition, health care and education. For SDG-FACES, transforming the way cities deliver services into efficiently managed digital services is an accelerator that will bring the services to the most marginalized children.

AN EXAMPLE OF A BASELINE FOR SDG-FACES

Programme Results:

With a year of implementation, the city governments were able to:

1. Update the City Poverty Baseline, and align the City Poverty Monitoring System with the 17 SDGs.
2. Raise awareness of the 2030 Agenda and the 17 SDGs through city-wide consultations.
3. Policies on Localizing the SDGs at the city level have been formulated and are in force. The policies include:
   - the formation of city-level technical working group for SDG-FACES;
   - passage of an annual sustainability plan and budget for the SDGs
4. City level targets on the SDGs have been established, along with household level targets.
5. Alignment of SDG Targets with City Plans and Budgets.
6. City Council Resolution adopting the SDG Targets.
MEASURES TAKEN BY ASEAN COUNTRIES TO STRENGTHEN THE ENABLING POLICY AND INSTITUTIONAL ENVIRONMENT

During the MDG period, it took nearly 10 years to translate the MDGs into actual institutional commitments. ASEAN countries have used the valuable lessons from MDG implementation, and have taken quick actions to adopt legal and policy frameworks, and institutional coordination mechanisms to develop and implement programmes and initiatives for achieving the SDGs.

These measures, despite the gaps mentioned above, are critical for creating the enabling policy and institutional environment. The below section categorizes measures taken by countries into legal and policy measures for SDG localization and integration, and coordination mechanisms. The section is not an exhaustive list of all the measures taken but presents some key highlights.

* Policy measures for SDG localization and integration

Countries in the region have adopted legal frameworks that allow for localizing SDGs. The Philippines issued an executive order (order no. 27) requiring all levels of government to integrate SDGs into local planning policies, and Indonesia adopted a presidential decree that, in addition to aligning national development to localizing the SDGs, called for developing SDG roadmaps and action plans. The presidential decree paved the way for sub-national governments to adopt complementary legal frameworks (through a Governor’s decree). Malaysia has aligned SDG principles with the 11th Malaysia Plan, which will entrench the SDGs in all facets of Malaysia’s development. Myanmar has also taken steps to integrate the SDGs into a planning framework (see Box 1 below).

To promote local innovation for achieving SDGs, the China’s State Council issued its “Development Plan of China’s Innovation Demonstration Zones for the Implementation of the 2030 Agenda for Sustainable Development” in December 2016. It delegated the Ministry of Science and Technology (MOST) to lead the SDG Innovation Pilot Zone Initiative, an initiative representing the most practical way to localize the SDG.

* Setting up coordination mechanisms

Indonesia established a National SDGs Coordination Team that is supported by the SDGs Secretariat. The National Coordinating Team ensures both horizontal coordination at the national level (between ministries/agencies as well as between the government and non-state actors), and vertical coordination (between governments at the national and local levels). The National Coordinating Team also ensures all stakeholders involvements so that the principle of no one left behind is fully implemented. The implementation of the no-one left behind principle is also reflected in the data disaggregation for Indonesian SDGs (See case study 2 on Policy Coherence to SDG implementation at the local level, Indonesia for more details).

The SDG coordination mechanisms are also helpful for facilitating stakeholder engagement. In Singapore, the Inter-Ministry Committee on SDGs, co-chaired by the Ministry of Foreign Affairs and the Ministry of the Environment and Water Resources, consulted all relevant government agencies and stakeholders, including businesses, youth organizations and civil society, in order to obtain an accurate and holistic picture of Singapore’s progress on sustainable development (HPLF 2018 reporting).

Other ASEAN countries have also taken steps to establish coordination mechanisms at the national and local level to bring together and coordinate the efforts of different actors. In addition, the private sector is also engaged through these coordination mechanisms, enabling them to engage in policy processes and support implementation.

RECOMMENDATIONS:

Creating an enabling policy and institutional environment for SDGs is complex. It includes supporting governance systems for SDGs (i.e. national policies, coordination mechanisms etc.), and the governance of SDGs (i.e specific policies and measures to achieve a specific target). Towards this end, countries can:

* Raise awareness of SDGs at all levels of government
* Adopt laws or legal provisions that will set the overall framework for aligning the SDGs with national and local plans and strategies, and for establishing coordination mechanisms at all levels

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60 Source: HPLF / VNR
CASE STUDIES

The two case studies presented in the section show the steps that countries have taken to ensure national and local ownership of the process to integrate SDGs into planning process, and the coordination mechanisms established to support implementation, and monitoring of SDG strategies and plans.

The China case study highlights the support provided by UNDP to local governments to raise their awareness and strengthen their capacity to develop SDG-related projects and initiatives. It highlights national government’s SDG innovation pilot zones that allows municipal governments to develop innovative programmes, through collaboration with and participation of local citizens and others, to address sustainable development challenges. The Indonesia case study also highlights how the national government took measures to ensure overall policy coherence, and how that has facilitated localization of the SDGs. It also looks at institutional arrangements and coordination mechanisms for involving a wide range of stakeholders to achieve the objectives of the sustainable development agenda.

CASE STUDY 1: STRENGTHENING LOCAL CAPACITIES FOR IMPLEMENTING SDG INNOVATION PILOT ZONE INITIATIVE, CHINA

China played an important role in shaping the Agenda 2030. China’s position paper on the SDGs (2013) illustrated the prominence that the country places on eradicating poverty for achieving sustainable development. China was also one of the first countries to act to translate the global goals into national development plans, and local development plans. The Chinese President Xi Jinping set the policy agenda by requesting that the 2030 Agenda for Sustainable Development be included in China’s 13th Five Year Plan (FYP). He also proposed formulating country-specific plans to implement the 2030 Agenda. Chapter 53 of China’s 13th FYP (2016-2020) reflects this policy decision, and states that the country will actively implement the 2030 Agenda for Sustainable Development, and achieve the SDG targets.

However, to achieve the 13th FYP and the SDGs in China, local level initiatives are vital, as results from local initiatives will cumulatively inform national results and the country’s contributions to the achievement of SDGs globally.

The challenges related to SDG localization in China are numerous. These include:

- Address issues affecting government effectiveness in the region to ensure that gaps in developing and implementing policies are addressed, clarify institutional mandates and improve their functional capacities, and improve public sector capacities to implement SDG strategies and plans
- Strengthen decentralization to ensure a stronger enabling environment for SDG policy setting and implementation at the local level
- Improve public institutions’ and local governments’ ability to collect, collate, analyze and use data for evidence-based planning
- Awareness raising and capacity Development Support for SDG related project design and Implementation contributed to wider adoption of SDGs by local governments
- This support from UNDP also helped selected local governments to implement the SDG innovative pilot zone initiative, a comprehensive SDG localization strategy
- Several SDG related policies were issued BY Government of China, creating a strong policy foundation for local cities and governments; coordination mechanisms are also established to facilitate innovative programming for SDGs

Limited Awareness of Agenda 2030 and the SDGs: Local governments in China are not fully aware of Agenda 2030; how the 13th FYP aligns with the SDGs, and the means to achieve the SDGs, coupled with limited capacity to do so. Furthermore, there are myriad of overlapping issues and trade-offs that need to be considered in solving the country’s development challenges, and in achieving economic, social and environmental sustainability.
Limited understanding of local development challenges: China is a vast country with diverse local conditions. Each of its over 2,000 counties face unique development challenges, whether due to geographic location, specific economic conditions, natural resources, or cultural and social conditions. The development bottlenecks of each county differ and require careful analysis for nuanced understanding of the challenges. Any county-level solution to address the bottlenecks must be customized and its implementation tailored to local conditions. These solutions should also be aligned with the SDGs, to ensure congruency between the Goals and the 13th FYP.

Need for more experimentation and piloting: Pilot programmes are useful to test an idea or solution. Lessons from the pilot can inform scaling up of initiatives, and help to avoid expensive mistakes. In China, there is lack of effective pilot programs exemplifying how cities can localize the SDGs and achieve sustainable development. The effectiveness of these pilot programs must be demonstrable and replicable, so that other peer cities and counties in China can learn from them and begin to localize the SDGs themselves.

Mechanisms for peer to peer learning: There is a lack of peer learning in China (and globally) around localizing the SDGs. Although the SDGs are global goals, their realization will take place locally and driven locally – from contextualizing the goals, to prioritizing to implementation. Peer learning is a good way to inspire local cities and counties, through the example of frontrunners, to begin removing barriers to sustainable development and pursuing innovative policies and operational measures. Programs to encourage such experience sharing are much needed.

Finally, lack of technology and financial support for SDG localization: All the SDGs are conceptually and practically interconnected, reflecting the complexity and interdependent nature of development issues. Thus, development solutions must also be integrated such that their results are sustainable. Technology and financial support are key factors for ensuring the feasibility and impact of development solutions and for promoting the localization of the SDGs. Though, at present, there lacks a mechanism for identifying applicable, affordable and accessible technology and financial resources for local SDG implementation.

In response to the above challenges, and to promote local innovation for achieving SDGs, the China’s State Council issued its “Development Plan of China’s Innovation Demonstration Zones for the Implementation of the 2030 Agenda for Sustainable Development” in December 2016. It delegated the Ministry of Science and Technology (MOST) to lead the SDG Innovation Pilot Zone Initiative, an initiative representing the most practical SDG localization strategy thus far. To achieve this, an inter-ministerial meeting was established and coordinated by MOST, with active participation from the National Development and Reform Committee (NDRC), Ministry of Foreign Affairs (MOFA), Ministry of Environmental Protection (MEP), and other ministries. The Initiative stresses the need to utilize innovative thinking, problem orientation, diversified participation, the process of opening-up, and sharing as a principle, to build SDG pilot zones within the national agenda for the 2030 Agenda for Sustainable Development. It also focuses on producing replicable and promotable examples, examples that may inspire other regions in China to pursue sustainable development and provide other countries with an example of how to implement the 2030 Agenda for Sustainable Development.

Many cities welcomed this new initiative, and saw the SDG pilot zones as an opportunity to upgrade their local development efforts. 16 cities applied or started the application process to be the SDG pilot zones.

On March 23, 2018 the State Council announced the first batch of approved SDG pilot zones:

1. Guilin city -- focusing on the sustainable use of landscape and tourism resources;
2. Shenzhen city -- focusing on sustainable development and good mega city governance; and
3. Taiyuan city -- focusing on the sustainable transformation of resource-based cities.

All the pilot zones must include key features for achieving SDGs. These include: develop innovative policies and implementation mechanisms, experiment with creating better opportunities for public participation, and more importantly, aim for more seamless vertical coordination among the central government and provincial and city governments, and horizontal coordination among
different departments at both the central and local levels.

**MEASURES TO SUPPORT GOVERNMENT’S EFFORTS TO LOCALIZE SDGS.**

UNDP China is supportive of the government efforts to localize the SDGs. UNDP considers addressing some of the core challenges mentioned above, such as lack of awareness of SDGs, limited capacity to identify and address development bottlenecks, and lack of technological and financial support as major hurdles for meeting the sustainable development objectives. Therefore, through its SDG Localization Initiative (2016), UNDP China offered support to the local governments to increase their awareness of SDGs, and how it is relevant to and aligns with the 13th FYP, as well as support local governments to strengthen their partnerships with both public and private sector for sustainable development at the local level.

As part of the SDG Localization Initiative, UNDP China developed several small practical programmes that would contribute to both the SDG Innovation Pilot Zone initiative, and wider adoption of SDGs by local governments that are currently not part of the pilot initiative. In addition, the SDG Localization Initiative is also critical to realizing the “Five Development Concepts”, namely, Innovation, Coordination, Greening, Openness, and Sharing indicated in the 13th FYP. UNDP will continue to play a central role in promoting social and economic sustainable development.

**OVERVIEW OF UNDP CHINA’S SDG LOCALIZATION STRATEGY IN CHINA**

The programmes supported under the SDG Localization Initiative, include:
- SDG advocacy and awareness raising (SDG localization trainings/workshops);
- SDG advisory services (diagnostics);
- SDG-focused project design and implementation;
- SDG localization international exchange.

**FIGURE 12 THE SDGS MODEL**

![The SDGs model diagram]
Orientation through SDG MOOC\textsuperscript{62}: To promote public awareness and understanding of the SDGs, UNDP launched knowledge products to educate the public, as well as stakeholders from both the public and private sectors, about the SDGs. This promotion of SDGs laid a strong foundation for future SDG localization work. UNDP, in partnership and support from NetEase, developed the MOOC course on SDGs.

The SDG MOOC course consists of 19 modules, focusing on all 17 SDGs. It highlights how each goal is applicable within the Chinese context, and the current state of achievement of each goal in China. It presents opportunities and challenges for SDG implementation in China and provides recommendations. Participants taking the course get a UNDP issued certificate at the end of the MOOC course, after successful passing the tests at the end of the module on each of the SDGs.

When governments and educational institutes prove that 100 of their staff have taken and passed the MOOC, a special certificate from UNDP is issued congratulating the institution as a "promoter of the UNDP SDG MOOC". So far, the course received over 110,000 views, awarded certificates to 500 participants, and offered texts to more than 9100 people.

SDG trainings/workshops: Trainings were provided to help local government officials better understand the link between the SDGs and China's 13th FYP at both its national and local levels. This was to ensure that economic, social, and environmental sustainable development was worked toward more effectively, international professional expertise and support networks were accessible, the quality of local development was improved, and the sharing of local experience and operational models amongst cities in China (and worldwide) was encouraged and facilitated. These two-day trainings were to inform officials of relevant international professional experience and equip them with global support networks for localizing the SDGs.

As of the June of 2018, the initiative provided 16 one to one expert consultations to 340 senior government officials. SDG trainings covered 41 counties, delivered to 1337 governmental officials. Systematic and regular trainings will be carried out in 37 counties of 3 provinces, which are of the first batch of SDGs Innovative Pilot Zones.

The SDG training process includes four stages:

1. pre-assessment (needs and baseline assessment)
2. training content design
3. onsite training
4. conclusion report.

The training topics are designed and prepared based on information collected during the pre-assessment stage and from local conditions. Experts conduct trainings on a range of topics and seek to interact with the audience.

SDG advisory services: UNDP's advisory services include an in-depth interpretation of the SDGs; draft SDG plans according to local conditions; identification of bottlenecks to sustainable development and the proposition of solutions; support for industry innovation with multi-stakeholder participation; introduction of new development concepts and assistance with implementing them locally; the sharing experience in innovating for sustainable development globally; and a full and accurate evaluation of SDG implementation results.

SDG-themed project design and implementation (1-2 year projects): UNDP attaches high importance to SDG localization work. It encourages both the public and private sectors to be actively involved in local SDG implementation, including through collection of baseline data, evaluation of local needs and priorities, understands the goals, indicators and logics of the SDGs, design SDG-focused projects, and formulate implementation plans accordingly. UNDP also conducts process evaluations and produces results reports of assessment on new implementation plans. In Yunnan province, UNDP worked with Mary Kay (private sector partner) on SDG Village project. The aim of the project was to build capacity of the poor, particularly women of the Yi minority in Waipula Village, Yijiu Township, Yongren County, and within the local government to implement the SDGs in Yunnan Province. The project gives skill training and knowledge on business management, which enabled them to begin capturing development opportunities and reducing poverty by way of sustainable tourism\textsuperscript{63} under the SDGs' framework.

\textsuperscript{62} MOOC stands for ‘massive open online course’

\textsuperscript{63} Sustainable tourism is a national strategy to revive rural China. It was proposed by UNDP’s external development consultant, and accepted by the local government and villagers,
SDG Seal: The longer-term aspiration is for UNDP to develop a SDG Seal to recognize the institutions that have made significant achievements in implementing the SDGs. The idea is to use a set of assessment indicators to evaluate an institution’s level – gold, silver and bronze – of achievement and contribution to the SDGs. In this scenario UNDP will grant them a Seal commensurate with their results. At the time of this case study this initiative has not been implemented, and remains at conceptual level.

The SDG Innovation Pilot Zone Initiative: The SDG Innovation Pilot Zone Initiative, launched by the State Council, represents the most practical SDG localization strategy for implementing the 2030 Agenda for Sustainable Development in China to date. Local cities are building SDG pilot zones and formulating sustainable development plans to 2030, under the coordination of MOST and with the support of the Expert Committee to the Initiative. UNDP is the first and only international organization to have established an official cooperation relationship with MOST on this initiative; an MOU has been signed on 24th August 2017, outlining each party’s responsibilities. UNDP China also has been taking this opportunity to scale up its SDG localization work.

The process and stakeholders:

To obtain approval/recognition from the State Council, local governments need to go through the following steps:

- Commit their city to sustainable development and to localizing the SDGs therein;
- Obtain the provincial government’s official endorsement of their city as a candidate for an SDG pilot zone;
- Horizontally integrate by establishing a cross-departmental leading group dedicated to overseeing the prospective SDG pilot zone’s development. The group should be led by the highest ranking local official or the deputy;
- Prepare two documents to be reviewed by the Expert Committee of the SDGs Innovation Pilot Zone Initiative, namely, the city’s Overall Sustainable Development Planning to 2030 and Specific Actions Plan on the SDGs Innovation Pilot Zone. Local development bottlenecks shall be identified and each city will choose a “theme” to focus on, as the basis for formulating solutions, as well as an indicator system which aligns with the SDGs with the support of UNDP. Policy innovation is mandatory and local cities must issue new policies or change old policies to help remove all development bottlenecks. Social participation and private sector participation are welcome and encouraged.
- The Expert Committee of the SDG Innovation Pilot Zone Initiative shall review the two documents and provide consultation about how to improve them. There is no time limit for this review process; the application will thus not move forward until the Expert Committee is satisfied with quality of the documents. Cities shall also work with different departments to negotiate how to identify development bottlenecks, how to identify appropriate indicators, the kind of targets to be achieved long- and near-term, and the kind of action plans and projects to be designed, implemented, and included in the two documents. Throughout this process, local government officials and public servants are to learn more about the SDGs, given that they will be working on how to build an SDG pilot zone in their city.
- Share the finalized documents to the public and ask for their opinion and feedback; revise and improve them accordingly;
- The high-level group of experts will review and decide whether the city’s application will move forward or not; all decisions are to be made after the Expert Committee provides its advise on how to improve the two submission documents;
- The inter-ministerial meeting at the central government level will review if the city’s application is to move forward or not, after the high-level group of expert’s review;
- The State Council will review and decide whether to approve local cities’ applications or not, and grant the development of an SDG pilot zone to approved cities;
- Approved cities are to launch their SDG pilot zones and begin implementing their planning and action plan documents;
- Monitoring, evaluating, the creation of progress reports, and knowledge and experience sharing will be conducted during implementation.
“Leave no one behind” (LNOB)

Due to time and budget constraints, the case study is unable to conduct a full analysis of this issue. However, the following can be said on the issue:

- Public opinion consultation and participation, as well as social participation are in the official process for the development of SDG pilot zones;
- The indicators in the Overall Planning document cover numerous areas, including social protection and health and medical coverage. All such indicators were reviewed with the “leave no one behind” lens, and were aligned with SDG indicators;
- Each SDG pilot zone will identify different development challenges and bottlenecks to determine their respective zone theme. Important to note is that whatever theme is chosen, the zone must do better than the national average level in that area. China has committed to ending absolute poverty by 2020, 10 years ahead of the SDGs. This means that all level of government, SDG pilot zone or not, will need to work together to achieve this goal. For a city like Shenzhen, which has already achieved this target, they have upgraded their goals to use science and technological innovation to help other vulnerable groups.

Indicators and targets:

SDG pilot zone cities will work horizontally across city government departments to determine the list of indicators for monitoring the progress of their zones and the targets for each year of operation, based on consultation with and support from the Expert Committee. UNDP will also help them link their indicators to the goals and targets of the SDGs at the beginning. With more capacity building and champions on the ground, local cities will eventually be able to link their development indicators with the SDG indicators.

Funding mechanism

During the process of applying to be an SDG pilot zone, local cities shall invest the required seed funding themselves. In the Specific Action Plan for each city, there will be a list of projects for implementation, the funding mechanism of which will be diverse, including inflows from government funding, private sector funding, and blended financing from both the public and private sectors.

Key driving forces

- Strong commitment to the SDGs at the highest level. China’s leaders have expressed a strong commitment to SDG implementation. This is one of the key driving forces because of China’s governmental structure;
- Robust SDG policies. As mentioned before, China has issued many SDG-related policies, providing a strong policy foundation for national mandates and influencing local cities;
Internal need to transform China’s development path and find new development models;

The opportunity to launch policy innovations and consolidate resources to upgrade local development.

**Sustainability**

At the national level, the State Council has issued the official document, determined the implementing ministry, confirmed the involved departments and participating organizations, and established the inter-ministerial meeting to provide support to the SDG pilot zones.

At the local level, three SDG pilot zones have been approved and will pass designated legislation to confirm the city’s Overall Sustainable Development Planning to 2030. This will help ensure continuity despite the change of government officials. Local governments have also established cross-departmental leading groups filled by top-ranking officials, to enhance the coordination and implementation of the SDG pilot zones. Local cities are also establishing SDG-related institutions to conduct further implementation work.

**RESULTS ACHIEVED**

The major achievements are:

1. **Official cooperation agreement**: After the SDG Innovation Pilot Zone Initiative was officially released by the State Council, UNDP became the first and so far only international organization to successfully sign the LOI with MOST, thereby establishing an official cooperative relationship. This provides the legal foundation for UNDP to play a central role in the implementation of the SDGs in China.

2. **Official recognition of UNDP’s role in local governments’ planning documents**: The Overall Sustainable Development Planning to 2030 document identified the first batch of approved SDG pilot zone cities. Working with UNDP has been officially included into the planning document, which recognizes UNDP’s contribution as well as the impact of a professional development organization (this document is the master plan or blueprint of how local cities are to transform their development paths and build SDGs pilot zones in view of 2030. As the professional development organization, UNDP’s role is officially recognized in the planning document).

3. **Expert Committee to the SDG Innovation Pilot Zone Initiative**: UNDP is the only international organization sitting on the Expert Committee to the SDG Innovation Pilot Zone Initiative. It has been advising central and local governments on how to build SDG pilot zones as well as formulating and implementing national policies. Through this platform, UNDP has been able to demonstrate its strength as the professional development organization and SDG expert, and has received positive feedback and cultivated a good reputation among public and private sector partners. SDG bonds, an innovative financing tool, will help national and local governments to finance resources for achieving the Goals.

4. **Follow up actions and project-level cooperation**: UNDP is formulating an umbrella project on SDG localization programming with MOST, using the first three approved SDG pilot zones as a testing field for ideas on how to localize the SDGs and prepare for scaling nationwide. This scaling will be achieved as more cities begin building SDGs pilot zones and learn from peer experience.

**NEXT STEPS**

SDG localization will be scaled up through the SDG Innovation Pilot Zone Initiative. This Initiative aims to explore and pilot future development models for Chinese cities experiencing similar development conditions / challenges / opportunities. It also seeks to replicate these models across peer cities interested in scaling up SDG localization work.

UNDP has access to nationwide decision making and overall development plan setting and implementation through this Initiative, which will help scale up SDG localization work.

On the project level, UNDP has been working with MOST, China’s Administrative Center for Agenda 21 (ACCA21), and the Chinese Society for Sustainable Development (CSSD) on the Piloting Local SDGs Implementation Umbrella Initiative. The project document has been prepared and will be signed soon. Guilin city and Shenzhen city will join this umbrella project first, with more cities when they are ready. This project will also scale up SDG localization work.
LESSONS LEARNED

° Process vs outcomes: Showing concrete results in the short-term is a challenge. For example, UNDP being recognized as the organization supporting the SDGs in the State Council's SDG Innovation Pilot Zone Initiative's Overall Planning Document to 2030 is a significant achievement. However, there is no suitable mechanism for its recognition.

° Expertise: It is important to build up UNDP's internal expertise on the SDGs, increase the credibility of UNDP among external public and private sector partners, and maintain its advantages and competitiveness. Feedback from various partners show that it is possible for them to accept UNDP's value as the professional development organization and subject matter expert, instead of the donor. However, to continue and enhance this role, investments should be made to gain more experience, build internal expertise, and collect success cases to be used as evidence and taxonomy in convincing potential partners about the importance of SDG localization. There are still bottlenecks to achieving this, however, which require internal innovation to create an enabling environment. UNDP's current business model does not efficiently support this transition in role, a role that may require the management of a county's incoming and outgoing funds through UNDP. However, even if UNDP is the service provider and wins recognition through its expertise and professionalism, innovation is still needed. UNDP will be more efficient if bottlenecks such as legal instrument flexibility, country office and employee empowerment, performance and impact evaluation standards, long-term internal expertise development plans, and management innovation for the provision of services are solved.

° Adaption to country-specific conditions is important for soliciting endorsements, funding, and cooperation. Each country faces unique development challenges, making it imperative to have an in-depth understanding of such challenges first, before formulating solutions and SDG implementation plans. Linking SDG implementation with a country's development priorities / transformation goals is a good entry point. In China's case, the central government, as well as local provincial and city governments, have FYPs, which set their respective socio-economic development priorities. Many of the issues addressed in the current FYPs are aligned substantially with the SDGs. China CO has incorporated the convergence points of the SDGs and FYPs into its SDG training packages and received positive feedback. The SDG Innovation Pilot Zone Initiative is China's strategic endeavor to explore a practical model of development transformation, a model that has central and local government and policy support. UNDP took this opportunity to get involved in the process and advance SDG implementation work. The next steps are to use this channel to scale up SDG localization work nationwide and globally.

° UNDP's role of linking local development work with the objectives of the SDGs has been receiving increasing recognition, but still needs enhancing in-house expertise to generate a larger impact. Approved SDG pilot zone cities, and other cities like Pingwu, could be of strategic value for demonstrating how localizing the SDGs supports local development. UNDP should focus on positioning itself as the professional development organization and use Public Relations as a tool for enhancing its public brand image.
CASE STUDY 2: FROM POLICY COHERENCE TO SDG IMPLEMENTATION AT THE LOCAL LEVEL IN INDONESIA

CONTEXT

Indonesia is a large archipelagic nation, whose administration is divided into 34 provinces, 416 districts, and 98 municipalities. Since the year 2001, the nation functions under a policy of regional autonomy, aimed at promoting better delivery of government services and to raise the level of local government accountability. With Governors, District Heads and Mayors elected in regional elections, regional administrations are expected to deliver on their development agenda and promises. It is in this context that the localization of SDGs has entered the development arena in Indonesia.

LESSONS FROM MILLENNIUM DEVELOPMENT GOALS

Implementation of MDGs has taught Indonesia several lessons. In 2015, out of the eight MDG goals, 18 targets and 67 indicators, Indonesia showed achievements with respect to 49 indicators, while 18 indicators remained unattained. Accomplishments were recorded with respect to, among others, proportion of population with income less than one dollar a day, reproductive health, incidence of malaria and tuberculosis, and primary education and gender equality in all three levels of education.

Government’s evaluation of the MDG experience identified a number of shortcomings. Firstly, there are disparities among the many autonomous regions in the country, and among the different social economic groups. Secondly, the state’s resources are limited, and the previously top-down approach to fulfilling the MDG targets was not effective. Thirdly, communications and advocacy had many shortcomings.

Furthermore, Indonesia had to face the reality that incoherence public policies -both vertical and horizontal - had hindered the full alignment of MDGs with its mid-term development planning process and implementation. As a result, it encountered difficulty in harvesting systematic and consistent data to regularly report progress.

MEETING THE SDG CHALLENGE

As a large country, spread out across three time-zones, implementing the 17 goals of SDGs brings with it a major challenge. At the national level, the goals intersect with the mandate of nearly all of its 30+ ministries/agencies. Yet, most development programs are implemented at the ground level by 416 autonomous districts and 98 municipalities. Each district or municipality has diverse natural and social characteristics, which defines each of their development potential as well as needs. The provincial governments have a role in coordinating the efforts of the district/ municipal governments, and cascading down the policies of the national government. This makes for a complex web of development goals, actors and actions across the nation. Learning from the MDG experience, the national government understood that ensuring implementation of SDGs in this complex web requires a coherent set of policies and directives on the one hand, and, on the other hand, sensitivity to the diverse aspirations, potential and needs of the regions across the country.

Based on the Lessons from MDGs, the government of Indonesia adopted measures to ensure policy and implementation coherence from national to local level

The Presidential Decree (No. 59, 2017) provided the legal basis for mainstreaming SDGs into national and local planning processes.

SDG coordination Teams were established at the national and sub-national level. At the national level, the coordination team is guided by a steering committee headed by the President. The coordination team is supported by an implementation team and four working groups.
POLICY COHERENCE

When the international community adopted the 2030 Agenda for Sustainable Development and agreed to 17 Sustainable Development Goals in September 2015, President Ir. H. Joko Widodo had been in office for almost one year. His vision for development aspirations, called Nawa Cita, had been translated into the 2015-2019 national mid-term development plans. When Indonesia stated its commitment to the 2030 Agenda for Sustainable Development, this meant it was necessary to align the SDGs with the national mid-term development.

The National Development Planning Agency, tasked with leading the coordination of SDG implementation in the country, undertook a four-month effort to painstakingly assess which of the 17 SDGs goals and targets were already covered in the 2015-2019 mid-term development plans, and what indicators were already aligned. They found that among the 169 SDG global targets, 94 targets are aligned with the national development plans. The mapping of indicators further concluded that Indonesia will use 319 national indicators to monitor SDG progress. Of the 319, 85 indicators are directly aligned to SDG global indicators, 165 indicators will serve as proxies, and 69 indicators are used in addition to the global indicators.

The task to mainstream SDGs into the national development and governance structure meant that a coherent set of policies needed to be issued, and that the use of existing development tools needed to be well-defined. The first policy issued, that laid the legal basis for SDG mainstreaming was a Presidential Decree (No. 59, 2017) signed in July 2017. This decree requires the integration of SDGs into the national mid-term development plan, and mandates the preparation of a SDG roadmap and action plans. The Decree also establishes a SDG Coordination Team at the national and sub-national levels, as well as SDG Secretariat to support the National SDG Coordination Team on a daily basis. As an attachment, the Presidential Decree presents a matrix that clearly juxtaposes the SDG goals and targets in the 2015-2019 mid-term development plans. The Presidential Decree also set clear deadlines for the national SDG roadmap (2017-2030), the national and sub-national SDG action plan (2017-2019).

The Presidential Decree was followed by several crucial regulations. The National Planning Minister communicated with the Ministry of Home Affairs regarding mainstreaming of SDGs into the sub-national development plans. This led to the issuance of a regulation by the Ministry of Home Affairs (No. 7, 2018) which requires sub-national governments to use the existing tool of Strategic Environmental Assessments to integrate sustainable development.
into the local development plans. The findings of the Strategic Environmental Assessment would inform both the local development plans as well as the local SDG action plans. This policy provides a clear direction for provincial, district and municipal governments and ensures coherence with the mechanisms laid out in the Presidential Decree.

The Government also issued a set of technical guidelines, such as guidelines to prepare SDG actions plans, technical guidelines for each SDG pillar, and a summary of metadata indicators to be used for each of the targets. The set of guidelines were developed with participation of all stakeholders, and is intended to serve all stakeholders in planning and monitoring their activities.

Policy coherence is maintained at the sub-national level. Guided by the national policies, several provincial governments have taken the lead in efforts to integrate the SDGs into their respective development plans. The province of Riau is such an example (see box 3), followed by the provinces of Gorontalo and Lampung. These sub-national governments have issued Governor’s decrees or District Head decrees that put in place the legal basis for activities in their regions. Such vertical coherence, crossing all levels of government, is crucial for building SDG success.

CLEAR INSTITUTIONAL ARRANGEMENTS

The institutional arrangements towards SDG implementation is further elaborated in a National Planning Ministerial Regulation (No. 7, 2018) and a National Planning Ministerial Decision64 (dated 30 April 2018). The former describes the mechanisms for coordination, planning, monitoring, evaluation and reporting of SDG implementation, while the later appoints members of the SDG teams and working groups.

The National SDG Coordination Team is guided by a Steering Committee chaired by the President himself. The National Planning Minister/Head of the National Development Planning Agency is appointed as the Implementation Coordinator, which among other strategic duties, provides guidance and coordinates an Implementation Team. The Implementation Team is headed by a senior official in the National Development Planning Agency. An expert panel provides expert advice, and four Working Groups were established for each of the four SDG-Indonesia pillars, Social, Economic, Environment and Justice and Governance. The regulation also establishes a National SDG Secretariat to support the daily functions of the National SDG Coordination Team.

The membership of the Implementation Team and the four Working Groups are inclusive, including government representatives as well as non-state actors, such as civil society organizations, media, business and philanthropic organizations and academia. This inclusiveness was deemed important by President Ir. H. Joko Widodo, who wanted to see SDGs implemented not only as a program, but as a ‘movement’ involving all segments of society. Only with this inclusivity can the principle of “no one left behind” be achieved.

The Secretariat has supported the preparation of the National SDG Action Plan, finalized in the first quarter of 2018. This document becomes the basis from which provinces are expected to prepare Provincial SDG Action Plans.

At the sub-national level, the institutional arrangement mirrors that of the national level, giving coherence with respect to institutions. The provincial/district/municipal development planning agencies are expected to play a key role in coordinating SDG implementation in the respective regions. And a SDG Secretariat is set-up to support the work of the planning agency. This has proven to be an effective mechanism, as all SDG work crosses sectoral lines and requires budget allocations from the local governments – both the domain of the planning agencies.

Non-state actors have been enthusiastic about participating in the SDG ‘movement’ in Indonesia. At the national level, the Presidential Decree and consistent messaging from the Government has led non-state actors to eagerly demonstrate their commitment and contributions. Each actor is encouraged to work within their existing sphere of influence and to optimize on their strengths – all aimed at creating local synergies. A network of Indonesian philanthropic organizations and business sector has set up a communication forum on SDGs. At the sub-national level, a charity organization has synchronized its programs with the SDGs (see Riau
Universities in Java and Sumatra have set up SDG Centers, to support the movement with policy research, studies on possible innovations and to facilitate dialog among the many stakeholders. The SDG Center of Padjadjaran University in Bandung was the first of such centers, and has been working closely with the Government. The collaborative spirit is reflected in the preparation of the National SDG Action Plan, where close to 200 non-state actors participated.

To date, UNDP has provided technical assistance to the National SDG Secretariat, and to several sub-national SDG Secretariats, namely in the Province of Riau, Lampung and Gorontalo. UNDP has facilitated the implementation of various studies to support the integration of SDGs into the national and sub-national development plans.

**CLEAR MONITORING AND REPORTING**

Requirements and mechanisms to monitor, evaluate and report on the progress of implementing the national and sub-national SDG action plans are laid out in the National Planning Ministerial Regulation No. 7, 2018. The responsibility to conduct bi-annual monitoring rests on the line ministries at the national level, and, at the sub-national level, on the provincial government. These institutions shall report to the national development planning agency on an annual basis, at minimum. Reports are compiled and submitted to the President, as the Chair of the SDG Steering Committee, at least once a year.

The metadata indicators developed by the United Nations were used as a basis to develop and publish an official guide for all parties involved in SDG implementation and monitoring. The presence of four volumes of the metadata indicators, in the Indonesian language, and its reference to indicators in the annex of the Presidential Decree is expected to minimize errors in interpretation and to promote cohesiveness in use of indicators during monitoring and reporting. A common set of metadata indicators will also allow comparison between provinces and districts/municipalities, as well as comparison with other countries.

The National Statistics Agency has played and will continue to play a very critical role in setting up systems for data collection and management. So far, they have supported the development of the national roadmap by compiling and reviewing

**FIGURE 15. MAPPING ON SDGS INDICATORS**

Indicators used to report on SDG implementation in Indonesia. Source: Bappenas
relevant data from the past 10-15 years, to support 2030 projections of 70 indicators. Such projections are necessary to identify the need for additional policies and financing, beyond business-as-usual.

Data availability is an enormous challenge for this decentralized nation. All hands are on deck to tackle the challenge, with a focus on using information technologies to allow data consistency and sharing. The Government plans to operate a OneData portal as a data hub, coordinated by the National Development Planning Agency, the Office of the President, and the National Statistics Bureau. This will allow districts, municipalities and provinces to gather, compile and report on the correct indicators in line with the SDG and national development indicators.

For non-state actors, the Ministerial Regulation cites a voluntary reporting requirement, using the same set of indicators. Non-state actors will be expected to prepare self-assessments on their achievements and submit reports to the Government.

FINANCING INNOVATIONS

Indonesia is now recognized as a lower middle-income country, which means that it must be more independent in funding its development programs. To achieve the 2030 Agenda, the Government realizes that state budget alone will not suffice. Indonesia must galvanize funds from a variety of domestic sources, including from philanthropic organizations, the business sector as well as new financial instruments.

Zakat (Moslem alms) linked to SDG is one example of innovative financing being developed in Indonesia. The national zakat agency (BazNas) and an independent alms organization (Dompet Duafa) are synchronizing their charity and community development programs with the goals and targets of SDG. Their progress will be reported to the Government.

Public-Private Partnerships are considered an important approach for many infrastructure development projects. The Government has identified 19 sectors where this scheme is expected to contribute to achieving SDGs, including electrification, clean water and renewable energy sectors.

The Government is also motivating various stakeholders to develop green sukuk (syariah bonds) and social impact funds, and to expand an existing sustainability index linked to the Indonesian stock-market, managed by the CSO Kehati.

Corporations or foundations linked to corporate entities are also being embraced. The Tanoto Foundation and UNDP entered into an agreement to support collaborative efforts with the Riau provincial government to pilot SDG integration and implementation. The foundation provided an initial grant of USD 220,000 over two years, and has agreed to fund a second phase with a total of USD 600,000 to support technical assistance in 2018-2020. SDGs are in line with the Tanoto Foundation’s commitment to advancing human development and ending poverty in Indonesia.
Chapter III Enabling Policy and Institutional Environment for SDG localization

BOX 3

THE CASE OF RIAU PROVINCE

The Drivers

In 2014, the Province of Riau was at a crossroads. Continued low oil prices and unexpected changes in the top leadership led the provincial administration to realize that it needed to revamp its development approach as well as its governance system. While Riau was amid reviewing the provincial mid-term development plans, UNDP approached the Provincial government with an opportunity to serve as a pilot for localizing SDGs. Being the first province to integrate SDGs in local planning processes attracted the Provincial government. In addition, the SDG framework also informed the revision of the mid-term development plans, and the overall development goals of the province.

The Building Blocks

The first step was garnering support from the Governor of the Province and preparing local legislation to provide a legal framework for SDG work. A Governor’s decree was issued in February 2017, which establishes a local SDG coordination team at the provincial level, with membership from all technical agencies, and four working groups, with inclusive membership, including local NGOs, media, academia, philanthropic organizations. This was followed by establishment of a Secretariat to manage the day-to-day operations of the SDG coordination team.

The next decision, which proved to be instrumental was to assign functional staff to manage the Secretariat. Functional staff are professional planning staff of provincial planning agency, who are not tied to a position in the organizational structure, and thus able to support Secretariat on a full-time basis, not distracted by other structural duties. Seeing the effectiveness of this system, in two years, the number of functional staff in the Province of Riau has increased from three to 30 personnel.

The Value of SDGs

Integration of SDGs into local development planning has had several benefits. Firstly, both the provincial and district governments say that the SDGs have enriched their mid-term development plans. The SDG indicators are very specific, and stakeholder discussions held to align the targets and indicators have helped local authorities to refine their development plans. Commitment to the SDGs have also reminded local authorities of the importance of collecting and maintaining consistent data sets.

Secondly, the SDG’s inclusive approach has provided an impetus to communicating and sharing information between the government and non-government stakeholders, such as private sector, civil society and philanthropic organizations. SDG has provided a platform for synergistic collaboration among all actors to develop the Riau province.

The District of Pelalawan, in particular, sees this value. Being a relatively new district with enormous challenge to eradicate poverty and improve welfare in this coastal district, the SDG integration exercise has enriched their local development plans. The exercise has also made them fully aware of the need to improve their practices regarding data collection, archiving and management.

“At the time, Riau was selected as the only province in Indonesia to pilot localizing the SDGs. Success would bring prestige for Riau. We cannot fail in this effort”, said Mr. Ahmad Hijazi, the current Executive Secretary of the Province of Riau, reminiscing the moment when UNDP approached him in with SDGs. At the time he was serving as the Secretary to the Development Planning Agency of the Riau Province.

Source: riaurealita.com | Photo: Mr. Ahmad Hijazi, SE, M.Si., Executive Secretary for the Province of Riau.
Sample of the SDG Platform at Work

One of the members of the Riau Working Group on Social Development is the Riau Branch of Dompet Duafa, an independent philanthropic organization that collects donations (based on Moslem practices of zakat, infaq and sedekah). Since joining the Working Group, the Riau branch of Dompet Duafa, has integrated all its social welfare and community development programs and indicators with that of SDG. They now share information with local government agencies on needy families and potential beneficiaries, thus minimizing overlap of programs.

The number of donators in the Riau branch increased 100 percent in the past year, indicating increased public trust in Dompet Duafa’s ability to channel donations to those in need. They have also succeeded in blending different sources of funds and combining approaches for charity, community empowerment and product marketing, where appropriate. The Riau branch’s performance is of interest to the national Dompet Duafa organization, with possibility of emulating the model in other branches across the nation.

Intermediate Achievements

The Province of Riau completed the provincial SDG Action Plan on June 5, 2018, the first among Indonesia’s 34 provinces – one month prior to the deadline set by the national government. The Action Plan contains action plans from three pilot districts and action matrices from the remaining nine districts/municipalities.

To address the complex problem of data for monitoring and evaluation, the Governor of Riau issued a regulation to promote a one-data-one-map policy. SDGs are being used as a prototype for the province’s one-data-one-map effort, led by the province’s Agency for Communications, Information and Statistic. Such a prototype is expected to jump-start a more comprehensive data management system in the future.
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NEXT STEPS FOR INDONESIA

The accomplishments thus far lay the foundation for SDG implementation in the coming years. Several key next steps are highlighted below:

**Inspire and empower** all provinces and districts/municipalities to integrate SDGs into their local development plans, by disseminating experiences from pilot provinces and districts and developing capacity. In particular, regions in eastern Indonesia, whose capacity is generally lower than the western side of the country, will require further support.

To fulfill Indonesia’s commitment to leave no one behind, Indonesia will try to reach the ‘farthest’ first – those communities and families who have not enjoyed better living standards and basic services. These communities may be in remote islands or mountains, with poor access.

A **strong communications strategy** will be developed, especially to reach out and maintain communications with non-state actors. Consistent communications are necessary to build trust among all stakeholders – a crucial element to maintain partnerships for SDGs.

Maintain the momentum of SDG integration, especially as the country enters the implementation phase. The same level of attention and support must be extended to the sub-national level and non-state actors to nourish this national ‘movement’. Connection through provincial data hubs with the OneData portal will serve as a means to support the implementation phase.

Facilitate **further engagement of academia** in conducting studies and analysis that will support SDG implementation and development of innovations.

Develop **capacity across the nation**. Indonesia plans to develop an SDG Academy to facilitate certification of individuals with the necessary competence, and to organize study abroad programs. The Academy will maximize use of mobile learning applications and will use the Indonesian language to minimize language barriers. All materials will focus on persistent issues in Indonesia such as stunting and forest fires/haze.

Ensure the **next national development plans** (2020-2024), to be prepared in the coming year, continues to be **aligned** with the goals and targets of the SDGs. This alignment is critical to continue the work and achievements in the current period.

Continue exploring ways to garner new business models for **financing for development**, including: 1) enhancing the role of social entrepreneurs (start-ups) in addressing social, economy and environmental issues, 2) optimizing existing government financial instruments to be used by local governments.

LESSONS LEARNED

As a country with the fourth largest population, and largest Southeast Asian economy, Indonesia is committed to play its part in reaching the world’s sustainable development goals. In the past two years, Indonesia has spent considerable time and energy to build a strong and cohesive policy framework at the national and sub-national levels, and to embrace all development actors in creating a SDG ‘movement’ that reaches communities at the grass-roots level.

The lessons from the two years may be useful for other nations, as they embark upon their SDG journey:

- SDGs should be fully embedded into a country’s development plans and government system to have a chance to succeed;
- Some past barriers must be broken to pave the way for an inclusive way of working. Channels of communication must be opened and maintained to foster collaboration among state and non-state actors;
- For the government engine to work effectively towards meeting SDG targets, clear institutional arrangements, roles and responsibilities, as well as accountability must be established. This may require innovations with regards to staffing, allocating sufficient budget at the sub-national levels, and willingness to improvise with new approaches;
- A national secretariat is instrumental to assist government with ad-hoc studies and analysis needed to help align SDGs with the national development plans and systems. Timely and well-designed technical assistance has proven effective in supporting the Government fulfill its mandate.

Indonesia has a long way still to make the SDG dream a reality. However, with the progress it has made thus far, and the vertical and horizontal coherence it has established, stakeholders are optimistic about the
next phase of implementation. SDGs and national development aspirations are, in principle, one and the same – garnering much enthusiasm from all segments of society.
OVERVIEW OF CURRENT CHALLENGES AND MEASURES TAKEN

Relyable, timely, accessible and disaggregated data is imperative for informed decision-making, and in turn essential for good governance and accountability. For localizing the SDGs, stronger data and statistical systems are vital for collecting more localized and relevant information for policies and service delivery. Disaggregated data is also fundamental for ensuring that implementation (i.e. integrated policies and services) meets the ambition of Agenda 2030 – to “leave no one behind”.65

However, despite the call for a data revolution66 – which elsewhere is transforming how different types of data are produced and used – there is a dearth of data in developing countries, specifically when it comes to marginalized and vulnerable sections of the population. “Whole groups of people are not being counted and important aspects of people’s lives and environmental conditions are still not measured”,67 and thus hindering sustainable development for all.

The global indicator framework for the SDGs and their targets provides the basis for country-led monitoring of progress, possible development of complementary indicators,68 informing policy and ensuring accountability of all stakeholders.69 While measuring and tracking MDG indicators helped to improve the national statistical capacities of the majority of developing countries, the indicator framework for the SDGs is onerous. It consists of 232 indicators (more than 3 times the number of MDG indicators), and places a heavy burden on current national data and statistical systems to monitor, track and report on SDG indicators. Capacity issues related to data management become further exacerbated at the city and local level.

CURRENT CHALLENGES

Factors that may affect the establishment of appropriate data and statistical systems for SDG localization include:

- Different levels of methodological development and availability of data

The 232 SDG indicators are classified into 3 tiers depending on conceptual clarity, established methodologies, standards and collection of data at regular intervals (see Box 4).

As of 11 May 2018, the updated tier classification contains 93 Tier I indicators, 72 Tier II indicators and 62 Tier III indicators. In addition to these, there are 5 indicators that have multiple tiers (different components of the indicator are classified into different tiers).70 This tier classification is at the global level. Availability of data may vary from one country to another, and different countries may have their own national tier classification depending on data availability.

The different levels of development of methodology and different availability of data provides an opportunity for countries and other actors to think incrementally and iteratively on how indicators (specifically Tier III) can be refined and measured.

BOX 4

TIER CLASSIFICATION CRITERIA AND DEFINITIONS

Tier 1: Indicator is conceptually clear, has an internationally established methodology and standards are available, and data are regularly produced by countries for at least 50 per cent of countries and of the population in every region where the indicator is relevant.

Tier 2: Indicator is conceptually clear, has an internationally established methodology and standards are available, but data are not regularly produced by countries.

Tier 3: No internationally established methodology or standards are yet available for the indicator, but methodology/standards are being (or will be) developed or tested.

But, lessons from the MDG period and review of data ecosystems\textsuperscript{71} show that countries often face difficulties ensuring compliance of national and local data collection methodologies with international data standards, even when clear established methodologies and standards are available. Without clear investment in clarifying the definition of terms and methodologies, and the requisite capacities and investments for collecting data, countries may find it difficult to measure Tier II and Tier III indicators. Specifically, with regards to indicators pertinent to gender equality and women’s empowerment, 66 percent of the indicators fall under Tier II and Tier III categories. If clear methodologies and plans to collect data are not developed, the impact on women may not be fully measured – thus undermining the principle of leaving no one behind.

- **Limited data management capacities at sub-national and local level**

In addition to methodological difficulties mentioned above, sub-national and local government face a range of capacity challenges in localizing and measuring SDG indicators. Typically, national statistics offices lead the collection and analysis of data related to global frameworks and reporting processes, such as for the SDGs. But data management systems at the sub-national and local levels are “relatively dysfunctional, especially with the use of quantitative indicators to measure results and progress”.\textsuperscript{72}

Investment in data collection is very limited, and institutional capacity to collect, analyse and share data among local departments is lacking. This has negative effects. For example, though countries (including in ASEAN) have taken steps towards gender mainstreaming, the lack of investment in the collection and use of gender statistics, including data disaggregated by sex and gender affects the visibility of gender inequality and also hinders measures to develop policies targeted towards reducing gender disparities and promoting gender equality. Another example is that local-level disaster-loss data is essential for making evidence-based policymaking and strategies for disaster risk reduction.

Even those ASEAN cities that are at the forefront of localizing the SDGs are unable to fully align their plans and strategies with the SDGs and invest in data management systems that complement the data from National Statistics Office. Not having reliable data means local governments are not able to develop and provide reliable services, and this can “lead to the denial of basic rights” and continued environmental degradation.\textsuperscript{73}

- **Localizing and measuring SDG indicators**

To inform policies and strategies for achieving the SDGs, indicators need to capture the richness and reality of the development context at the local level. At the same time, there needs to be a balance between adopting indicators to fit the local context, and the universalization and harmonization of indicators for comparability of data within and between countries and meeting SDG reporting requirements. Proxy indicators can provide a solution and can help to measure the achievement of SDG targets at the local level. Local insights might also be vital for making sense of the data for proxy indicators. However, with existing capacity issues, including limited data literacy at the local level, ensuring coherence between proxy indicators used by different local governments to measure and track achievement of targets could be difficult.

- **Need for new data sources**

Subsequent to the adoption of the 2030 Agenda, the UN General Assembly also adopted a resolution related to strengthening data systems for the SDGs. The resolution calls for national statistical systems to explore ways to integrate new data sources into their systems to satisfy the new data needs of the 2030 Agenda for Sustainable Development, as appropriate.\textsuperscript{74} This means not only different types of data produced by civil society and the private sector, but also leveraging data produced from other means, for example from telecoms, social media and censuses, as well as citizen feedback and community-driven data, to get more holistic evidence for SDG planning and implementation. For discussion on big data and its relevance for achieving the SDGs, see Box 3.


\textsuperscript{72} IEGs (2018). Early Views of ASEAN’s ‘Frontrunner Cities’ on the Sustainable Development Goals (SDGs) and Local Data Management. Available from https://pub.iges.or.jp/system/files/publication_documents/pubs/policyreport/6359/IGES Policy Brief - ASEAN Cities Early Reactions to SDGs %28Final 7May2018%29_FINAL.pdf


\textsuperscript{74} UN (2017). Work of the Statistical Commission pertaining to the 2030 Agenda for Sustainable Development. https://undocs.org/A/RES/71/313
Again, this integration of new data sources into national statistical systems calls for clarity in data policy, increased data management capacities, and additional financial investments in national statistical offices.

MEASURES TAKEN BY ASEAN COUNTRIES TO STRENGTHEN DATA ECOSYSTEMS FOR THE SDGS

ASEAN countries have made tremendous contributions to shaping the global framework of SDG indicators. For example, the Philippines was the co-chair of the Interagency Expert Group on Sustainable Development Indicators. ASEAN countries have actively engaged in consultations on SDG indicators, and endorsed regional support for broadening stakeholders’ engagement in monitoring the SDGs. And countries have agreed to strengthen their statistical capacities for monitoring the SDGs and improving subregional mechanisms for sharing and exchanging knowledge related to data.

ASEAN established the Working Group on Sustainable Development Goals Indicators (WGSDGI) with an aim to strengthen statistical capacities to monitor and review the implementation of the SDGs in ASEAN countries. The working group is also responsible for developing the implementation plan for SDG data compilation at the ASEAN level, including defining the SDG priority indicators, harmonization of the indicators, data collection templates and procedures, and the communication and dissemination of data, in line with ASEAN Community Vision 2025.

In addition, ASEAN countries have taken steps to improve their overall data ecosystems, which is essential for the localization and measurement of SDG indicators. These include:

a. Policy and institutional framework for SDG data

Countries in the region have begun taking steps to improve the policy and institutional framework for the SDGs. The Philippines updated the Philippine Statistical Development Program 2011–2017 to ensure government support in the generation of data related to the SDGs. In addition, in 2017, the Philippines also adopted an open data policy and established an open data portal where government data from different agencies can be downloaded – allowing for greater transparency and accountability. The National Assembly and Government of the Lao People's Democratic Republic have approved the Statistics Law and Strategy for the Sustainable Development of the National Statistical System 2016–2025 and Vision 2030 in May 2017. Myanmar has adopted the Statistical Law and the National Strategy for Development of Statistics 2018–2023, as well as an action plan to implement the strategy. Indonesia, as part of its overall SDG implementation strategy, has developed 234 proxy indicators, and has clarified operational definitions, data sources, data collection frequency and disaggregation for each indicator to ensure that no one is left behind.

Furthermore, countries have taken steps to improve coordination among different agencies to strengthen the collection and sharing of data. The Philippines has established SDG Watch, which helps to monitor the relevant and available indicators. An SDG Focal Point from each agency that acts as a source of data helps to facilitate the coordination and data gathering of the indicators. Similar to the Philippines, Malaysia’s Department of Statistics is aiming to make data more people-centric and has launched a mobile application - MyLocalStats – which allows people to access district statistics. Indonesia is developing the One Data Portal that is coordinated by Bappenas, Office of the Presidential Staff and Statistics Indonesia.

b. Investments in different types of data sources

Countries in ASEAN have made investments in collecting data from sources to complement national statistics and support local decision-making processes. This includes the use of community-based monitoring systems to track information such as socio-economic indicators at the local level and the development of disaster loss databases which produce data used to informed local planning and public infrastructure investments.
C. A participatory and iterative process for SDG data systems

In adapting the global SDG indicator framework to the national level, countries have not only promoted collaboration between statistics offices, other government agencies (including oversight institutions) and academics but have also embarked on building partnerships, through consultations, with civil society and the private sector. More importantly, as part of the efforts to localize the SDGs, national institutions are also engaging with subnational and local government to define indicators through an iterative process. Multi-stakeholder partnerships between civil society and government, established through consultations, have been useful in advancing work on identifying and refining relevant targets for monitoring. In Indonesia, multi-stakeholder engagement helped to shape guidelines for formulating the National and Sub-National SDG Action Plans, and the SDG metadata – i.e. all the available data that can be used to measure and track SDG targets. The National Statistics Office of Cambodia is one of the two countries that are currently piloting the Statistical Data and Metadata Exchange (SDMX), which provides a common language and vocabulary for data-sharing and consumption. Lessons from the pilots will further inform finalization of the SDMX standard, which is expected to be adopted by countries and international agencies to improve data exchange, dissemination and transparency in the global and national reporting of the SDG indicators. Furthermore, multi-stakeholder engagement can help to develop and pilot new data mechanisms, specifically at the local level, that can complement national statistical systems.

Despite the above measures, the challenges highlighted continue to hinder the availability of and accessibility to reliable data that can inform development efforts. Furthermore, capacity constraints within institutions also affect the full utilization of available data.

RECOMMENDATIONS

Countries should:

- Adopt a multilevel governance approach to improve data ecosystems – to collect (high-quality disaggregated data), analyse and share data among institutions at all levels of government
- Involve other stakeholders (including CSOs and the private sector) to support data innovation (including drawing from local knowledge)
- Develop and provide appropriate capacity development support to key institutions that can use different kinds of data for planning, implementation and monitoring purposes
- Develop knowledge and skills of relevant personnel to design, deliver and monitor government services and programmes, using gender statistics including sex-disaggregated data
- Invest in establishing data excellence centres to set and monitor the use of standards and provide quality assurance.

CASE STUDIES

The two case studies presented below focus on a core challenge that countries face with SDG indicators – how to develop and use new data sources that complement national statistical systems? The Philippines case study presents how Community-Based Monitoring Systems, developed during the MDG period, continue to be relevant for collecting data at the local level that can help track SDG targets. The risk-informed planning case study shows how disaster loss databases are vital for developing risk-informed plans at the local level. Disaster loss and damages data will especially build resilience where it is shared and integrated into sectoral needs. This allows more efficient budget allocation to sector-specific issues, such as for example to improve the resilience of roads against floods. Mainstreaming disaster risk reduction into local SDG implementation plans is essential – and this allows for putting in place safeguards and contingency plans to reduce loss (financial and human) incurred due to disasters and help local communities to become more resilient.

The case study highlights the issues that affect the integration of risk information in public investment planning processes. It also presents entry points for improving the use of data in planning processes.

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CASE STUDY 3: THE PHILIPPINES – USING A COMMUNITY-BASED MONITORING SYSTEM FOR SDG TRACKING AND PRIORITIZATION

The Philippine Development Plan for 2017–2022, with the overall strategic agenda of providing universal and transformative social protection for all Filipinos amidst various risks and disasters, reflects the national government’s commitment towards aligning development priorities with the SDGs. This commitment implies the need for disaggregated data and indicators that will support more informed policymaking, programme implementation and impact monitoring overtime – to ensure that the needs of every sector of the population are identified and analysed in the context of the specificities of communities.

Since the passage of the Local Government Code of 1991, Local Government Units (LGUs) are placed at the forefront of delivering public services and have since been key players in the process of mainstreaming various national and global development commitments. These include commitments in terms of poverty monitoring, gender and development, migration and development, disaster risk reduction and management, climate change adaptation, meeting the MDGs, and now the localization and achievement of the SDGs. To localize the SDGs, LGUs are expected to (a) Integrate SDG targets in their development plans and programmes with corresponding budgets, (b) Enact and implement policies that will facilitate the achievement of the SDGs, (c) Establish local monitoring systems, and (d) Improve their delivery of basic services. This, in turn, further asserts the need to improve the capacities of LGUs in monitoring the status of their communities in terms of the SDGs, in identifying and prioritizing needs given limited resources, designing appropriate programmes and interventions, and monitoring the impacts of these programmes overtime.

The Community-Based Monitoring System (CBMS), developed by Reyes (1993), has been implemented by many Local Government Units in the Philippines since 2000 as a tool for local development planning and localizing various programmes and initiatives of the national government in line with the national and global development commitments described above. The CBMS has been earlier developed and pilot tested in other countries in Asia (Bangladesh, Cambodia, Indonesia, the Lao People’s Democratic Republic, Pakistan, Sri Lanka and Viet Nam), in Africa (Benin, Burkina Faso, Senegal, South Africa and Tanzania) and in Latin America and the Caribbean (Bolivia, Haiti and Peru) for analysing poverty, monitoring the impact of policy shocks, and examining issues such as providing social protection for the informal sector, youth unemployment and entrepreneurship. The CBMS methodology is also currently being used for SDG profiling and for examining specific thematic issues (i.e. youth unemployment, financial inclusion and entrepreneurship, women’s empowerment, and gender issues in agriculture and labour productivity and rural poverty) in selected pilot sites in Botswana, Burundi, Ethiopia, Ghana, Kenya, Nicaragua, Togo and Uganda.82

The core principle of the SDGs to leave no one behind requires disaggregated data (i.e. by age group, ethnicity, income group, and at different geopolitical levels) – particularly for local development planning and programme implementation that Official Statistical Systems cannot provide. While the Official Statistical System conducts regular censuses and surveys to generate poverty statistics among other development indicators, most of the data available is only aggregated at the national or at most regional levels. LGUs need reliable data to update their development profiles and serve as inputs for preparing and updating their plans, programmes and budgets. But there are many problems: the data is limited, in most cases it is not up to date, and it is not comparable as it is not collected at the same points in time.

82 With technical support from the CBMS Network Office.

• CBMS complements the existing official data ecosystem by collecting household-level socio-economic data, and monitoring a core set of poverty indicators covering multiple dimensions.
• Implemented across 77 provinces in the Philippines, it is updated every 3 years.
• used extensively by local governments to inform local policy and programmes
Chapter IV Data ecosystems for SDG localization

The CBMS complements existing the official data ecosystem by filling in data gaps for local planning and programme implementation that can lead to more targeted interventions towards meeting the SDGs. The CBMS can be used to generate SDG indicators at the local level including the multidimensional poverty index (MPI) and the required disaggregation for these indicators. Moreover, it facilitates identification of specific areas of deprivation that need priority intervention. It can also generate panel data which is necessary for monitoring development outcomes overtime.

Generating local-level SDG indicators through the CBMS

The implementation of the CBMS enables LGUs to collect, process and establish a local-level database using structured tools and training modules, taking into account local context and capacities. The CBMS gathers individual and household-level demographic and socio-economic data that can be disaggregated across subpopulation groups (by age, sex, ethnicity, sublocation, income and other socio-economic characteristics). It monitors a core set of poverty indicators covering different dimensions of poverty including health and nutrition, education, income and employment, access to safe water and sanitation facilities, housing, and peace and order. The CBMS also gathers data on physical characteristics of communities as well as available service facilities in the area through a community profile questionnaire that can be overlaid with the socio-economic data generated from the CBMS household census.

The existing CBMS data collection instrument in the Philippines can generate at least 39 local-level SDG indicators.

For instance, the status of SDG indicators in Panabo City, the Philippines, have been determined with the use of the LGU’s CBMS data for 2009 and 2016 as part of the pilot study, with support from UNDP, on the implementation of the local governance diagnostic (LoGOD) tool kit. See Box 5 for more details.

The CBMS-SDG indicators, generated from the socio-economic mapping of LoGOD have facilitated the identification of SDG priority areas for improvement in 2017 and have resulted in some improvements in programme and resource allocation.

Institutionalization of the CBMS as a tool for local governance in the Philippines

From 2000 to present, the CBMS has been adopted as a tool for governance by Local Government Units in 77 provinces (33 of which are implementing the CBMS province-wide) covering 1,053 municipalities, 102 cities and at least 29,586 villages (barangays). The direct costs of implementing the system — including training of local enumerators and data processors, field data collection, data processing and validation and dissemination are funded by the LGUs from their own funds. Technical support on the use of CBMS instruments and modules are being provided for free by the CBMS Network Office of the De La Salle Angelo

FIGURE 16. RESOURCE CONSTRAINTS AND DISTRIBUTIVE OBJECTIVES INCREASE THE DEMAND FOR LOCAL DATA THAT CAN SUPPORT TARGETING SCHEMES

The Local and Urban Governance Dashboard (LoGOD) was developed by UNDP Bangkok Regional Hub and is an assessment and data visualization tool that allows subnational and local governments to layer different sets of data to get a comprehensive picture of the local development context, and thus consider local priorities, vulnerabilities, resources and (governance) capacities to mainstream SDGs in local development plans and budgets.

LoGOD consists of three components: (1) Mapping of sources of data requirements, processing and analysis of relevant demographic and socio-economic data, (2) Review and analysis of fiscal data vis-à-vis the multidimensional poverty index and/or SDG indicators, and (3) Local governance self-assessment, and a local perception survey on the quality of service delivery as well as on local needs. LoGOD was piloted in Panabo City. The pilot provides some empirical evidence at the local level on the importance of key elements (i.e. local-level/ disaggregated data, local monitoring systems and the role of LGUs in service delivery) for SDG implementation being raised in policy discussions at the national level.

Under component one, CBMS data was used, and specific measures were taken to target the same households to see if there was improvement on certain indicators, such as the number of income-poor population, unemployment rate and access to safe water services.

In reviewing the fiscal data vis-à-vis SDG indicators, major gaps in allocation and expenditure were identified. While resources were better utilized by certain sectors such as health, education and target programmes to improve nutrition and end hunger, other areas (specifically access to water, urban areas development, urban resilience and climate change) were underperforming. Expenditure rates were as low as 19 percent for programmes focused on urban poor and informal settlements. However, the majority of local government respondents, 85 percent, to the question on expenditure rates indicated that the budget execution rate was between 51 percent and 80 percent, and the remaining 15 percent indicated that the budget execution rate was above 80 percent.

The local governance assessment and perception survey showed a noted difference among different groups of respondents on local priorities. Local officials emphasized industry, innovation and infrastructure, whereas households and NGOs and CSOs prioritized clean water and sanitation, and zero hunger. Local officials prioritized gender equality which was not on the list of priorities of most of households and NGOs, CSOs and People’s Organizations (POs). Meanwhile, the goals of achieving climate action and decent work and economic growth were commonly considered on top of the priorities by local officials and NGOs, CSOs and POs but were not part of the top priority goals among most of the households. Quality education, on the other hand, is considered a priority among households but not a priority among the other respondents.

Households also point to the following services that need to be prioritized by local government for improvement: (1) Access to water, (2) Local economic development, (3) Cleaning streets/public areas/garbage collection (solid waste management), and (4) Health.

The findings from the pilot were taken on board by Panabo City and have helped to shape priority actions for 2018.

The King Institute for Economic and Business Studies together with the Department of the Interior and Local Government (DILG) and its national and regional pool of CBMS-trained focal persons/trainers.

Various policies have been issued both at the local and national levels in support of the implementation and use of the CBMS for various thematic concerns, including:

- **National Statistical Coordination Board Resolution No. 6, Series of 2005**

Issued 24 January 2005, the resolution attests to the statistical and technical soundness of the CBMS.

Furthermore, it recognized the CBMS as a tool for strengthening the statistical system at the local level that will generate statistics for monitoring and evaluation of local development plans, including the progress of the local governments in attaining the MDGs. It also further resolved that the National Statistical Coordination Board (NSCB) Technical Staff initiate and coordinate an advocacy programme for the adoption of the CBMS by the LGUs, through the Regional Statistical Coordination Committees, the technical arm of the NSCB Executive Board in the regions.
FIGURE 17 USING CBMS DATA FOR LOCAL LEVEL SDG INDICATORS

<table>
<thead>
<tr>
<th>Goal</th>
<th>Indicator</th>
<th>2009</th>
<th>2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>Goal 1</td>
<td>Proportion of population below the international poverty line, by sex, age, employment status and geographical location (urban/rural); using 1.25 USD/day</td>
<td>18.9</td>
<td>18.5</td>
</tr>
<tr>
<td>Goal 2</td>
<td>Prevalence of malnutrition (weight for height &gt;2 or &lt;2 standard deviation from the median of the WHO Child Growth Standards) among children under 5 years of age, by type (wasting and overweight)</td>
<td>1.4</td>
<td>2.2</td>
</tr>
<tr>
<td>Goal 3</td>
<td>Under-five mortality rate, per 1000</td>
<td>1.2</td>
<td>1.1</td>
</tr>
<tr>
<td>Goal 4</td>
<td>Net enrolment rate in primary education</td>
<td>83.9</td>
<td>92.5</td>
</tr>
<tr>
<td>Goal 5</td>
<td>Proportion of individuals who own a mobile telephone, by sex</td>
<td>54.8</td>
<td>79.2</td>
</tr>
<tr>
<td>Goal 6</td>
<td>Proportion of population using safely managed drinking water services</td>
<td>36.8</td>
<td>45.6</td>
</tr>
<tr>
<td>Goal 7</td>
<td>Proportion of population with access to sanitation services, including a hand-washing facility with soap and water</td>
<td>99.4</td>
<td>97.8</td>
</tr>
<tr>
<td>Goal 8</td>
<td>Proportion of population with access to electricity</td>
<td>88.0</td>
<td>93.3</td>
</tr>
<tr>
<td>Goal 9</td>
<td>Unemployment rate, by sex and age</td>
<td>1.9</td>
<td>7.8</td>
</tr>
<tr>
<td>Goal 10</td>
<td>Proportion of people living below 50% of median income, by age, sex and persons with disabilities</td>
<td>19.3</td>
<td>22.2</td>
</tr>
<tr>
<td>Goal 11</td>
<td>Proportion of urban population living in slums, informal settlements or inadequate housing</td>
<td>2.6</td>
<td>0.7</td>
</tr>
<tr>
<td>Goal 12</td>
<td>Number of victims of intentional homicide per 100,000 population by sex and age</td>
<td>6.4</td>
<td>7.7</td>
</tr>
<tr>
<td>Goal 13</td>
<td>Proportion of individuals using the Internet</td>
<td>-</td>
<td>3.6</td>
</tr>
</tbody>
</table>

Source: CBMS Census 2009 and 2016, Panabo City, Philippines

FIGURE 18 CBMS COVERAGE IN THE PHILIPPINES AS OF MAY 31, 2018
**BOX 6**

**USES OF THE CBMS FOR GOVERNANCE**

“Our objective now is to use the CBMS-SDG indicators to direct us in our public service” – Mayor James Gamao, Panabo City (Key Informant Interview, LoGOD Project 2018)

“Through the roll out of capacity-building activities for LGUs and provision of necessary local and national data, the CBMS not only strengthens and empowers LGUs to undertake evidence-based and targeted policy making, it also aids the national government in improving its programmes and projects and keeping track of its international development commitments, such as the 2030 SDGs.” – Dr. Ernesto Pernia, Socioeconomic Planning Secretary and Director General of the National Economic and Development Authority, Excerpt of Published Message for the 14th CBMS Philippines National Conference, March 2018

“As a former local chief executive for nine years, data from the CBMS was critical in formulating our local development programmes. It was the basis for our discussions during local development council meetings. We cannot effectively govern without a plan and we cannot come up with a feasible plan without accurate and timely data. I believe the CBMS is an indispensable tool in public governance” – Representative Enrique Garcia III, 2nd District of Province of Bataan (Meeting on HB 4700-Institutionalizing CBMS in All Cities and Municipalities, Committee on Poverty Alleviation of the House of Representatives of the Philippines, September 2017)

“Community-Based Monitoring System (CBMS) is a proof that we, Local Government Units, are evolving to be more efficient and effective in our work in the forefront of service delivery to the Filipino people. Our use of CBMS is making our programmes more grounded and targeted, and we become more appreciative of using scientifically and systematically gathered data to respond to real and felt needs in our communities.” – Governor Alfonso V. Umali, Jr., Province of Oriental Mindoro, and National President of the Union of Local Authorities of the Philippines (ULAP)

- **League of Municipalities of the Philippines (LMP) Memorandum Circular 027-2006**
  Issued in June 2006, the circular enjoins all CBMS-implementing municipalities to adopt and sustain the adoption of the CBMS as a tool for local poverty diagnosis and ensure the incorporation of the MDG targets and utilization of CBMS data in the formulation of local development plans. In July 2006, this memorandum circular was amended to also enjoin municipalities to institutionalize the CBMS as part of the system of local governance.

- **Social Development Committee Resolution No. 3, Series of 2006**
  Issued on 19 July 2006, the resolution adopts the CBMS as the prescribed monitoring tool for the generation of the Core Local Poverty Indicator Database. It further notes that the Social Development Committee (SDC) has assessed the CBMS and found it to be a viable and cost-effective system that can be used in generating the 13+1 core local poverty indicators (CLPI), and ensure uniformity and standardization of CLPI databases by all LGUs. Thus, the SDC-Cabinet Level (CL) has recommended the adoption and use of the CBMS as the principal monitoring tool and system for the CLPI and enjoined the National Anti-Poverty Commission (NAPC), Department of the Interior and Local Government (DILG), other government agencies and LGUs to coordinate with the CBMS Network Team towards the fast-tracking and implementation of CBMS.

- **PhilHealth Board Resolution No. 982, S.2007**
  In March 2007, the Philippine Health Insurance Corporation (PhilHealth) adopted the CBMS as the principal source of data in identifying indigent families to be enrolled under the Philhealth Indigent Sponsored Program, the sponsorship programme of the National Health Insurance Program (NHIP). The programme is implemented in partnership with LGUs and PhilHealth. The LGU and the National Government through PhilHealth share the annual premium payment of P1,200 for the enrolment of each indigent household.

- **League of Provinces of the Philippines (LPP) Resolution No. 2011-01**
  Issued on 28 January 2011, the resolution urges the Department of Social Welfare and Development (DSWD) and the Department of Health (DOH) to adopt the CBMS and other locally developed poverty
monitoring systems as their targeting system in identifying beneficiaries to the Pantawid Pamilyang Pilipino Program (4Ps) and the Philhealth Indigent Sponsored Program.

- **Department of Budget and Management-DILG-DSWD-NAPC Joint Memorandum Circular No. 1, Series of 2012**

Issued on 8 March 2012, the joint memorandum circular identifies the collection of relevant economic and social data such as those that can be obtained from the CBMS, as one of the main components in empowering poor LGUs and in the bottom-up planning and budgeting approach.

- **DILG Memorandum Circular 2012-73**

Issued on 17 April 2012, the circular provides that the Local Disaster Risk Reduction and Management Fund can be utilized for disaster prevention and mitigation projects, including the implementation of a CBMS with indicators for climate change adaptation and disaster risk reduction management.

- **DILG Memorandum Circular 2012-142**

Issued on 10 August 2012, the circular enjoins all local chief executives to utilize the CBMS in planning and project development. It also recommends the adoption of the CBMS to coincide with the synchronized local planning and budgeting calendar and with the bottom-up planning and budgeting preparation calendar.

- **DILG Memorandum Circular 2016-69**

Issued on 23 May 2016, the circular provides policy guidelines for the implementation of the CBMS and capacity development projects on Gender and Development (GAD), Disaster Risk Reduction and Climate Change Adaptation (DRR-CCA) under the FY 2016 Bottom-Up Budgeting (BUB). The guidelines shall aid LGUs in the efficient and effective execution of subproject components, monitoring and reporting of projects under the BUB programme.

### PROCESS FLOW

The CBMS is an organized process of data collection, processing and validation, and the use of household, individual and geospatial data for local planning and programme implementation. The implementation of the CBMS entails the use of structured data collection tools. Household and village (community) questionnaires were originally administered by traditional pen and paper for field census operations, but since 2014 have been implemented using tablets with the CBMS Accelerated Poverty Profiling (APP) tools. The CBMS also utilizes customized data processing instruments (developed using freeware) which were designed considering existing local capacities and data requirements, particularly in monitoring core indicators of poverty and to generate necessary data that will serve as input to regular preparation of local development, plans and budgets of LGUs.

The implementation of the CBMS in the Philippines entails the establishment of partnership for technical collaboration between the CBMS Network Office, the DILG and the LGUs. The MOA stipulates the commitments and areas of responsibilities of each partner for all CBMS activities in the duration of the CBMS implementation of the LGU for a given period. Training workshops on the three core CBMS modules are conducted by CBMS trainers from the DILG. This includes training on (1) Data collection using the CBMS SCAN and Portal, (2) Data processing using the CBMS StatSIM and QGIS for CBMS poverty mapping, and (3) Use of CBMS data for preparation of local planning and budgeting. These CBMS modules are mainstreamed by the DILG as part of its capacity-building programme for LGUs for local planning.

Data is validated through the conduct of validation workshops at various levels (barangay, city, municipality and province) to present and discuss the results of the CBMS census on the core indicators of poverty in the communities and get additional information on the reasons behind the data and identify possible interventions needed by the community to address the problem areas.

Once the data is validated, databanks are established and maintained by the LGUs at their level for use in the formulation of plans and budgets. Findings are disseminated in regular planning activities and development consultation meetings, both at the local and national levels.
Updating the CBMS database by LGUs in the Philippines was recommended every three years by LGU stakeholders, as they want to be given the time to implement programmes in response to needs identified from their baseline data.

LESSONS LEARNED

1. The CBMS can complement the existing Official Statistical System by filling in data gaps – by providing the necessary disaggregated data to facilitate more informed planning and programme implementation for meeting the SDGs at the local level. It can produce the data requirements for preparing subnational SDG profiles and reports.

2. The CBMS can facilitate generation of panel data that can aid monitoring of impacts of programmes on development outcomes over time.

3. LGUs play a key role in the localization of the SDGs. In line with this, continued local capacity-building is important for establishing and sustaining databases and monitoring systems that can provide necessary indicators to track SDG achievement at the local level.

4. The CBMS can be used as part of local governance diagnostic and assessment tools (such as UNDP’s LoGOD and DILG’s Seal of Good Local Governance). In particular, the CBMS can provide the data for socio-economic mapping analysis and generation of development outcome indicators that can be used as a measure of impacts of LGU programmes, budget prioritization and programme implementation, particularly in the context of meeting the SDGs.

FIGURE 19 CBMS ACCELERATION POVERTY PROFILING
BOX 7

BIG DATA AND THE SDGs

By Pulse Lab Jakarta

This subsection examines the contribution of big data to official indicators with a focus on the localization of the SDGs. Together with partners, United Nations Global Pulse has been experimenting with big data analysis for tracking progress towards the SDGs.

Big data sets are as varied as the technology and services that produce them, ranging from satellite imagery, to mobile network transaction records, to public administration records, and beyond. Important characteristics of these data sets for the localization of the SDGs include their velocity and volume. When mined and analyzed using statistical learning methods these data sets can provide more timely insights at a higher spatial resolution, but with corresponding uncertainties.

Various tools and methods are necessary for making sense of big data, as the data are rarely in a clean format ready for analysis. Hardware configurations, cloud infrastructure and code libraries of different kinds are required. In terms of programming languages, Python and R are open source and popular with data scientists, along with QGIS for spatial analysis, to name a few. Free tutorials in these languages are available online.

In terms of examples of using big data for SDG progress at sub-national level, high resolution population distribution maps for Southeast Asia were developed by using settlement maps and land cover information derived from satellite imagery, combined with ancillary datasets on infrastructure (Gaughan et al, 2013). Another set of researchers used mobile network transaction records and a small survey of mobile network subscribers, to produce accurate predictions of wealth at a higher degree of spatial resolution than that afforded by traditional surveys and at much lower cost (Blumenstock et al, 2015). UN Global Pulse has been working on the early detection of food price anomalies by tracking price trends from social media, among other sources. Social media has also been useful in relation to sustainable cities and communities, where GPS-stamped tweets have been used to generate insights on commuter origins and destinations and the degree of access to public services.

How data science and analytics can contribute to sustainable development

1. **NO POVERTY**
   Spending patterns on mobile phone services can provide proxy indicators of income levels.

2. **ZERO HUNGER**
   Crowdsourcing or tracking of food prices listed online can help monitor food security in near real-time.

3. **GOOD HEALTH AND WELL-BEING**
   Mapping the movement of mobile phone users can help predict the spread of infectious diseases.

4. **QUALITY EDUCATION**
   Citizen reporting can reveal reasons for student drop-out rates.

5. **GENDER EQUALITY**
   Analysis of financial transactions can reveal the spending patterns and different impacts of economic shocks on men and women.

6. **CLEAN WATER AND SANITATION**
   Sensors connected to water pumps can track access to clean water.

7. **AFFORDABLE AND CLEAN ENERGY**
   Smart metering allows utility companies to increase or restrict the flow of electricity, gas or water to reduce waste and ensure adequate supply at peak periods.

8. **DECENT WORK AND ECONOMIC GROWTH**
   Patterns in global postal traffic can provide indicators such as economic growth, remittances, trade and GDP.

9. **INDUSTRY, INNOVATION AND INFRASTRUCTURE**
   Data from GPS devices can be used for traffic control and to improve public transport.

10. **REDUCED INEQUALITY**
    Speech-to-text analytics on local radio content can reveal discrimination concerns and support policy response.

11. **SUSTAINABLE CITIES AND COMMUNITIES**
    Satellite remote sensing can track encroachment on public land or spaces such as parks and forests.

12. **RESPONSIBLE CONSUMPTION AND PRODUCTION**
    Online search patterns or e-commerce transactions can reveal the pace of transition to energy efficient products.

13. **CLIMATE ACTION**
    Combining satellite imagery, crowd-sourced witness accounts and open data can help track deforestation.

14. **LIFE BELOW WATER**
    Maritime vessel tracking data can reveal illegal, unregulated and unreported fishing activities.

15. **LIFE ON LAND**
    Social media monitoring can support disaster management with real-time information on victim location, effects and strength of forest fires or haze.

16. **PEACE, JUSTICE AND STRONG INSTITUTIONS**
    Sentiment analysis of social media can reveal public opinion on effective governance, public service delivery or human rights.

17. **PARTNERSHIPS FOR THE GOALS**
    Partnerships to enable the combining of statistics, mobile and internet data can provide a better and real-time understanding of today’s hyper-connected world.
Some forms of big data are contributing to the census and other official statistics. For example, a project by UNFPA and Flowminder (2017) in Afghanistan provides a nice example of combining survey data and satellite imagery to create high-resolution population estimates. This progress is exciting, but very vulnerable groups will continue to require targeted research initiatives. There are no shortcuts in this area. A more symbiotic relationship between big data and traditional official statistics will grow as new methods and data collaboratives are developed.

At the same time, it is also important to understand the main blind spot of big data, namely coverage error. While many of the technologies that produce big data are very popular, they are not ubiquitous, thus some parts of the population will not appear in the data. Should the data subjects have different characteristics to those that do not appear in the data, then this implies bias and undermines the representativeness of the insights for the general population. Examples of bias could include:

- A bias towards the urban and wealthy demographics in mobile network transaction records.
- A bias towards larger objects in satellite imagery.
- A bias towards wealthy demographics in financial data.
- A bias towards extroverts in social media data.

If the bias can be quantified, via a survey of a random sample of the big dataset or via data fusion with auxiliary information, it is possible to use calibration or post-stratification techniques by reference to the census to improve the representativeness of the insights. But the robustness of these methods is a topic of debate among statisticians. Either way, it is important to be aware of this risk, as well as others like covariate shift, at the outset.

**Strengthening the Enabling Environment for the use of big data**

In terms of how to access new forms of data for the development of SDG-relevant insights, Idzalika et al. (2018) highlight that data partnerships are required. These take many forms. To build such a partnership, capacity, trust, an organizational strategy aligned with the objectives of the data partnership, and a regulatory environment that permits the research are required.

The owners of many new data sources reside in the private sector, therefore, the capacity of engaging in this kind of partnership is related to their abilities to share the data, and the availability of time to absorb the methods and approaches deployed by the researchers in developing insights from the big data. Because some big data sets are sensitive, the most appropriate form of sharing is to give researchers access to the data within the systems of the data owner, the so-called ‘walled garden approach.’ But, to do this, the data owner requires the capacity to set up, manage and monitor the server(s) accessed by the researchers throughout the project, as well as set-up and monitor the data flows to the server(s). These requirements may involve some initial data processing, anonymization and aggregation, or the construction of a model based on the original dataset to create synthetic data, all of which takes time and specialist skills.

In addition, assuming that the research projects and data partnerships are aligned broadly with the organizational strategy of the data owner, the capacity to absorb the methods used in the research is also important, such as designating the time of analysts to understand the analytical steps and the code developed by the researchers. Often data owners interested in entering into data partnerships, often do not have the capacity to do so. On the other side of the data partnership, the receiving organization or researchers must also have the capacity to manage data access, as well as to produce valuable insights from the data.

Concerning the regulatory environment, the data partnership must be legally compliant, which is becoming more complex considering the EU General Data Protection Regulation. But as we engage in the use of data for public good, data partnerships should go beyond being legally compliant; they should also be ethical. The informed consent of the research subjects and tight privacy protection should be important conditions for data partnerships in the social and public sectors.

Due to the limitations of big data, such as coverage errors and biases, multilateral data partnerships with many data owners and research organizations can be of merit. Multilateral data partnerships for public policy and social good encounter the same challenges as bilateral data partnerships, with an increase in administrative and legal complexity. For example, as the ‘walled garden approach’ is less applicable to multilateral data partnerships, the data owners must share data with some level of aggregation and ensure that sensitive insights to their business or its customers are not shared.

Data partnerships require trust and time to build, but they can be very beneficial to both the data owners and the recipients as they can uncover new value from data, new business opportunities, and new policy insights for tracking progress against the SDGs at the local level.
Trust is built on back-and-forth interactions, aligned incentives, and mutually satisfactory contracts between the data partners, such as non-disclosure agreements. Additionally, the credibility of the partners is also crucial, which is based on their reputation and past experience of successful data partnerships and research projects.

**The Way Ahead**

The potential of big data as a source of descriptive statistics or official statistics has been well documented. But the meaningful use of big data for tracking progress against the SDGs at both national and subnational levels requires a step change in collaboration, through data pooling. As highlighted above, this is a difficult pitch to make to private sector partners, but progress is being made, for example the data collaboratives initiative of the Gov Lab at NYU and other partners. Sustainable business, cryptographic and legal models are required to continue to scale this work.

In addition, as highlighted by Lee et al. (2018), a key gap in the academic literature on big data, concerns the medium to long term suitability of indicators drawn from these data sets as proxies for real-world social, economic and environmental changes. The current body of work, compares relatively short time frames of big data with ground truth data of some sort, following which some papers make predictions of real-world changes outside the timeframe of the ground truth data. But to move our understanding of the value of big data to the next level, and to begin to operationalize the data source in public policy, development practice and humanitarian action, we need to see much longer timeframes of the data source analyzed with reference to time-series ground truth data. With this we will understand whether the data set captures real-world changes over time, and, combined with the scaling power of data collaboratives, we will take big data for public good and SDG localization to the next level.

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- Gaughan et al., 2013, High resolution population distribution maps for Southeast Asia in 2010 and 2015.
- Idzalika et al., 2018, Big data for population statistics and social policies.
- Lee et al., 2018, Mobile network data for development and humanitarian action: increasing the evidence base with use cases from Vanuatu.
- UNFPA & Flowminder, 2017, High-resolution population mapping in Afghanistan.
- UN Global Pulse, 2012, Big Data for Development: Challenges and Opportunities.
- UN Global Pulse, 2014, Nowcasting food prices in Indonesia using social media signals.
CASE STUDY 4: RISK INFORMED PUBLIC INVESTMENT PLANNING IN CAMBODIA, AND LAOS

The unique geographic and climatic conditions of the ASEAN region make it one of the world’s most vulnerable regions to disasters caused by natural hazards as well as climate change impact. The region faces risk from earthquakes, volcanic eruptions, tsunamis, and forest fires that take a heavy human toll and cause economic damage. These natural disasters are becoming more intense due to climate change and are causing increasing damage every year. More than 50 percent of global disaster mortalities occurred in the ASEAN region during the period of 2004 to 2014. The large scale damage caused by disasters between 1970 and 2016 cost Asia and the Pacific $1.3 trillion in assets. About 191 million people were displaced temporarily and disasters affected an additional 193 million people. Since 1970, the average number of people killed by disasters has averaged at 43,000 annually.

Despite this, there was a paucity of data related to disasters and their resulting economic loss, and the development impact on key sections of the population. There have been little efforts to systematically analyze disaster data to understand the linkages between development efforts and disasters, as well as the socio-economic impacts of disasters on different sections of the population and sectors. Development decisions (such as where to build a connecting bridge or road or a housing complex, and avoid low lying areas prone to flooding) impact exposure and vulnerability of people and assets to risks. Specifically, in areas facing rapid urbanization and industrial development if risks and protection measures are not taken account, development can take place in hazard prone areas increasing damage to population and assets.

To support effective and risk-informed decision making, a strong evidence base with data as well as a multidisciplinary process (involving scientific community, government and stakeholders from different sectors) to analyze the data and inform decision making is required. However, limited investment in collecting data, and understanding vulnerabilities to disaster is adversely affecting integration of disaster risk in public investment planning (PIP).

**Importance of loss and damage database:**

The first step to generate information for risk informed planning and public investment is the establishment of national disaster databases with local resolution. The development of national disaster loss databases represents a low-cost and low technology, but very high impact initiative. Data can help identify areas prone of high risks and inform the need for prioritizing investments in sectors which can reduce risks and losses from potential disasters.

National and local disaster data provides the evidence base for national and local governments to develop disaster risk management applications to support decision-making, such as risk assessment, resources allocation, reporting for indicators, preparedness planning, Early Warning Systems, Public Investment Planning, etc.

84 This case study is mostly informed by UNDP’s Regional Synthesis Report on Risk Informed Public Investment Planning in Cambodia, Laos and Myanmar.
89 ASEAN Disaster Risk Management Initiative (2010), ‘Synthesis Report on Ten ASEAN Countries Disaster Risks Assessment’
The damages and loss database capture several sets of historical data over a long period of time (20 to 30 years or more). The database contains data for a set of parameters for each disaster that has occurred. Information includes:

- information about occurrences and impacts of disaster events,
- details of events (such as date, location, intensity, etc.),
- Population affected (death, injured, affected) by gender disaggregation.
- Damages and losses to sectors (education, road, health, etc.)
- Economic impact (including loss of hectares of crops and livestock)

The disaggregated data is usually entered at local level to allow temporal and spatial analysis at local level. These National Disaster Loss and Damage databases provide important data for targets and indicators of Sendai Framework for Disaster Risk Reduction and relevant SDGs.

However, not all countries have a national disaster loss database, and where such exist, geographical coverage of such databases are incomplete due to lack of availability of historical disaster data from reliable sources. Analyzing disaster data across countries requires that common definitions and terminologies are used so that data could be compared to derive useful conclusions for policy and decision-making. Globally, 94 disaster databases exists (covering 90 countries and 4 sub-national areas) and more countries are in the process of developing such databases.

In addition to the above, base data also includes high resolutions maps, satellite imagery, zonation, boundaries, various geo, hydro, meteorological, and climate data.

Compilation of disaster risk and impact information for all scales of disasters is essential to inform risk assessments and future planning at national and sub-national planning. Analysis undertaken at provincial, district and sub-district levels illustrate emerging trends and patterns of events and impacts may also serve as an indicator mechanism to monitor the dynamic nature of risk, and measure the effectiveness of disaster risk reduction (DRR) interventions.

**Integrating risk into public investment planning:**

Globally, UNDP has supported more than 35 countries in setting up national disaster loss and damage databases. In the ASEAN region, except Malaysia and Singapore, all countries have established a disaster
loss database. UNDP has proactively worked with the countries in ASEAN in setting up disaster databases, with the first one being in Indonesia in 2009.

Recently in 2015, UNDP and Asian Development Bank (ADB) partnered to support governments in Southeast Asia on the use of climate and disaster risk information (CDRI) in the entire project cycle of public investment projects – “pre-investment” appraisal and selection, implementation, and post-investment “resilient” operation, maintenance and evaluation. Three countries – Cambodia, Lao PDR and Myanmar – were initially selected for application of CDRI in PIP cycle. All three had recently established the disaster loss and damage information system. (i) Cambodia’s disaster loss and damage information system was launched in 2014 and is hosted by the National Committee for Disaster Management; (ii) the Lao PDR disaster loss database was launched in 2011 and is hosted by Ministry of Labour and Social Welfare; and (iii) the Myanmar disaster loss and damage database was launched in 2016 under development by the Relief and Resettlement Department, Ministry of Social Welfare, Relief and Resettlement.

**UNDP-ADB risk informed PIP in Road Sector**

ADB’s initiatives in these countries have focused on reconstruction of roads, including reconstruction after flood damage in 2011 and 2013 in Cambodia. ADB has focused on integrating disaster risk management to inform pipeline investments on road maintenance projects, and compliment Department of Road’s (DOR) efforts to mainstream DRM in the road sector. In the Lao PDR, the focus was on (i) incorporating road-related data fields of the national disaster loss database into the road maintenance and management systems database of the Department of Roads and Ministry of Public Works and Transport (MPWT; (ii) build the capacity of DOR, MPWT in collecting and analyzing disaster impact data for decision making; and (iii) strengthen coordination between DOR and the Department of Disaster Management and Climate Change, Ministry of Natural Resources and Environment (MONRE).

UNDP and ADB’s partnership leveraged UNDP’s ongoing work on national loss and damage databases in the three ASEAN countries. It focused on not only building national database infrastructure,

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90 Earlier it was hosted by Department of Disaster Management and Climate Change, Ministry of Natural Resources and Environment, now known as the Department of Disaster Management.


92 ADB (2014), ‘Enhanced Use of Disaster Risk Information for Decision Making in Southeast Asia (Financed by the Integrated Disaster Risk Management Fund)’
and processes for the flow of risk information (see figure adjacent), but also in building the capacities of different agencies and departments involved in the road sector to interpret and apply CDRI throughout the public investment planning process i.e. appraisal, selection, implementation, monitoring, operation, and maintenance.

Collection and integration of road-related disaster data (such as in Cambodia 10,191 kms of roads were submerged during 2000-2014 due to floods or rainwater, 47 percent was damaged, 21 percent was destroyed) into the disaster databases is also critical for other sectors. For instance, in providing and expanding access to social services post-disaster, historical analysis of road damages during disaster is important for transportation planning to access places where social services are located. In both urban and non-urban areas, analysis of disaster impacts on roads helps in developing plans in upgrading to disaster-resilient roads to ensure non-disruption of activities.

Understanding institutional capacities and public resource allocation for DRM

As part of the initiative, UNDP and ADB also supported DRM Public Expenditure and Institutional Reviews (DRM-PEIR) to understand how budgets and resources are allocated for DRM related activities. The review showed limited allocation for DRM specific activities. However, most DRM-relevant expenditure was embedded in infrastructure investment and other activities. Lao PDR allocated an average of 5.6 percent of total combined ministry and provincial budgets over four years. Most of the budget focused on pre-disaster preparedness, prevention and resilience building, primarily through capital investment expenditure. Only 1.6 percent of the DRM budget in Lao PDR was allocated for awareness and capacity building, research, early warning systems, and hazard mapping (compared with 1.1 percent in Thailand, and 18.3 percent in Viet Nam). Lack of specific investment focused on awareness, capacity building and research indicate
low priority of DRM in policy, planning and budget cycles. As the use of CDRI does not only depend on the availability and quality of CDRI data, but also depends on capacities and resources of receptive public planning institutions at the national, sub-national and local level, more efforts need to be made to build institutional capacities to use CDRI data in planning and budgeting cycles.

The institutional review also revealed that the collection of data and DRM responsibilities were spread across several agencies and department. However, the mechanisms for overall coordination and cooperation in collection, processing and analysis of base data for dynamic disaster risk assessment are not fully established. Furthermore, certain basic and fundamental measures such as systematic environmental or social impact assessment were not undertaken due to costs, except in Lao PDR where such assessments are obligatory for projects above a certain threshold. But for the most part, cost benefit analyses do not cover risk scenarios (i.e. calculating costs and benefits with or without risk reduction measures) due to related costs in undertaking such analysis. The risk assessment costs, and measures to reduce risks may add to the overall costs of the projects. This may affect project appraisal and selection and could be bypassed in favour of projects that can be implemented within the budget constraints. Lack of awareness and understanding regarding the importance of CDRI in PIP among key ministries is also a factor in not systematically conducting risk assessments.

**Building city-level resilience**

In addition to the partnership with ADB to put systems in place for systematic integration of CDRI in PIP processes, UNDP has also informed local city level resilience efforts. With more people moving to cities, the impact of disasters on cities’ population and assets is expected to be much higher. While a few sub-national loss and damages exist, the national loss and damages database contain geo-referenced base data which can be used by local government to integrate risk into their planning processes and strengthen city resilience. However, issues exist around the availability and applicability of the data. Local and city governments can also support local level data collection on climate change and disaster patterns to compliment and add to the data of national loss and damages database to make it useful for local development planning.

UNDP, in partnership with ICLEI, has worked with different cities, including Kampong Cham and Prey Veng in Cambodia, to support identification of disaster trends, and analyze the potential implications of the disasters on urban systems such as water, health, transport, and, food supply. The impact of disasters could include loss of connectivity or access, water contamination, exposure to vector borne and communicable diseases among others. In addition, the challenges faced at the national level in using CDRI – such as coordination and capacity issues – are also pronounced at the city-level. Based on these analysis, support was provided to develop City specific Disaster Risk Reduction – Climate Change Adaptation (DRR – CCA) action plans developed. Implementation of these action plans needs to be further supported.

**Constraints and Entry Points for integration of risk information in PIP and strengthening resilience:**

Agenda 2030 is closely linked with the Sendai Framework for Disaster Risk Reduction 2015-2030. Agenda 2030 recognizes the importance of disaster risk reduction to achieve sustainable development. DRR is a core development strategy for building resilience of people, communities, and economies from the impact of disasters, and is reflected in 25 targets across 10 of the 17 SDGs. The targets range from building resilience of poor people (goal 1), to mainstreaming DRR and climate adaptation into agriculture sector planning and investments in order to promote resilient livelihoods, food production and ecosystems (goal 2), to building and upgrading education facilities and ensuring healthy lives (goal 4), to building resilience infrastructure (goal 9), and improving resilience of cities, and specifically urban poor (goal 11), among others.

UNDP support to ASEAN countries in DRR, in partnership with other organizations such as ADB and ICLEI, has exposed several constraints in integrating CDRI in PIP at national and local level affecting efforts to strengthen resilience and achieve sustainable development. These constraints include:

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93 UNDP/ADB DRM Public Expenditure and Institutional Reviews (DRM-PEIR) in Lao PDR, Thailand and Vietnam
a. Lack of Legal Framework and Guidelines: Despite countries adopting strategies and plans on disaster risk management, the focus continues to remain on response post-disaster than on mitigation. Performance indicators related to DRR and climate change are yet to be adopted. At both national and local guidelines to ensure construction quality (including in road sector) does not highlight integration of CDRI into PIP process.

b. Limited Capacity for Planners, and commitment of responsible ministries and agencies: Key ministries and agencies at national and local level have limited understanding of the importance integration of CDRI into PIP, as well as are unfamiliar with methods to mainstream DRR/CC into policy planning.

c. Gaps in data collection: The datasets of loss and damages databases are from complete and systematic. The resolution of the geospatial data remains coarse. Risk profiles still lack monetary valuation. To date, CamDi (Cambodia loss and damages database) records only data on losses and damages of the transportation sector and there is a need to recording disaggregated data for other key sectors too.

d. National Budget Constraint: Often, integrating CDRI into PIP is seen as more cost adding up to projects which make them difficult to get selected.

e. Accountability in the use of allocated budget for DRR activities: One of the key constraints is the accountability on how the budget is used. Oversight institutions (including audit institutions) have limited understanding and capacity to monitor performance of responsible agencies and departments and hold them to account.

Entry points:

To fully mainstream the use of CDRI into PIP processes, a multi-layered cross-sectoral governance approach is required. This would allow for clear allocation of functions, roles and responsibilities across different institutions (from national to sub-national to local level), as well as support strengthening of institutions capacities (including financial capacities) to integrate CDRI in PIP. Furthermore, this would allow for engagement with other local organizations and draw on local knowledge of disaster risks.

More specific entry points include:

- Engage relevant ministries and agencies at the national level to set indicators to evaluate the performance of relevant line ministries and agencies on integration of DRR and climate change issues.
- Improve guidelines and codes for infrastructure development (such as road etc.) and building construction and enforce the use of codes for all projects.
- Provide training courses on DRR and climate change-based cost-benefit analysis at all levels of government.
- Work with oversight institutions (audit institutions, anti-corruption agencies) to ensure that disaster risk and climate risk resilient projects are approved and implemented.
- Strengthen partnerships with private sector, specifically around data innovation and use of new technologies to improve quality of the loss and damages databases, and use of relevant information for planning and land-use.
CHAPTER V

STAKEHOLDER ENGAGEMENT FOR LOCALIZING SDGS
OVERVIEW OF CURRENT CHALLENGES AND MEASURES TAKEN

The term ‘stakeholder’ encompasses a range of actors – including civil society, private sector (ranging from micro-enterprises to cooperatives to multinationals), academia, philanthropic organizations, research foundations and technical experts. It also includes one of the key focuses of the agenda – i.e. the people, and specifically those who are vulnerable and “whose needs are reflected in the Agenda”.

They include: all children, youth, persons with disabilities (of whom more than 80 percent live in poverty), people living with HIV, older persons, indigenous peoples, refugees and internally displaced persons and migrants.

The “means of implementation” section of the 2030 Agenda elaborates on the ways and means to achieve it. The 2030 Agenda recognizes that no single government or actor can achieve the scale and ambition of the SDGs. Rather, it calls for “intense global engagement” and collaboration between governments, the private sector, civil society, the UN system and other actors to mobilize resources and develop and implement strategies for achieving the SDGs. In other words, stakeholder engagement is not about different actors passively providing inputs into development strategies but about strengthening mechanisms (both formal and informal) for coordination and collaboration among the various stakeholders for problem solving and decision-making. It is also about enabling stronger public oversight, transparency and accountability of governments and service providers on their impact on sustainable development. As the closest level of government to the people, local and subnational governments are uniquely placed to engage with different stakeholders in local development processes, including localizing and achieving the SDGs.

FIGURE 23. IMPLICATIONS OF STAKEHOLDER ENGAGEMENT

96 Ibid.
CURRENT CHALLENGES

While there is broad recognition of the value of stakeholder engagement, there are several challenges that countries in ASEAN face:

- **The paradox of civic space**

Similar to the private sector, civil society organizations (CSOs) are comprised of a range of organizations that vary in size, focus, representation and ideology. They serve as an intermediary representing their interest groups in front of governments, other decision makers, and more generally to the broader public. CSOs serve as the voice of the groups that they represent. Civic space refers to the enabling environment within which CSOs operate. Over the last few decades, CSOs have become more active more active and representative, including in the ASEAN context.

Though the constitutions of ASEAN countries guarantee freedom of association and expression, translating that into laws and regulatory frameworks, and the application of the laws, varies greatly. In general, civic space has become more restrictive in recent years. This is due to inconsistent and ambiguous laws, restrictive provisions, state discretion in their implementation, lack of redress due to weak judicial or administrative oversight, and the high costs borne by CSOs to comply with the laws.

But at the same time, countries are actively engaging with civil society and citizens in designing and delivering policies and public services. Indonesia and the Philippines are part of the Open Government Partnership. Moreover, rapid evolution of information communication technology (ICT) is changing the very nature of public engagement in Asia. Micro-blogging and social media spaces are serving as a platform for people to come together around shared ideas and are shaping public discourse even in heavily regulated environments. However, these new channels of participation are not accessible to everyone, due to the existing digital divide (See Chapter VI).

Governments across the region have also taken measures to increase people’s access to information and participation (see Box 8 on Khoun Community Radio). To increase the public sector’s accountability, governments at the local and national level have established complaints and grievance redress mechanisms. Citizens’ feedback mechanisms, such as the PAPI index in Viet Nam (see Box 9), are informing efforts to improve public sector efficiency.

This inconsistency between the legal and regulatory framework, and measures to encourage civic engagement in policy processes affects the localization and achievement of the SDGs. Without the guarantees offered by an enabling legal and regulatory framework, voices representing different sections of society may be not heard in decision-making processes. Further, as mentioned in Chapter I, mechanisms should be put in place to translate the multitude of views and demands into coherent policies that promote sustainable development for all.

At the regional level, the main forum for civil society engagement with the ASEAN process is the ASEAN Civil Society Conference-ASEAN Peoples’ Forum (ACSC-APF), established in 2005. ACSC-APF constituents range from the urban poor and indigenous peoples to migrants and persons with disabilities. However, according to ACSC-APF, engagement with ASEAN remains at the surface level. The forum calls for a stronger engagement with ASEAN to make it more people-centric.

- **Engaging young people**

While youth organizations and youth-led organizations are part and parcel of the wider civil society, they warrant a specific attention as a demographic group. Young people – in developing and developed countries – have inherited the development challenges facing the world. The impact of not addressing these challenges and promoting sustainable development will have stronger impacts on young people and children than other demographic groups. Echoing this belief, youth are given specific recognition in the 2030 Agenda, and both explicit and implicit references to youth are found throughout the 17 SDGs. Young people are recognized as agents of change and are seen as the driving force for achieving the SDGs, and ensuring a world fit for future generations – but only if they are provided with the skills and opportunities...
needed to reach their potential, support sustainable development and contribute to peace and security.\(^{100}\)

There are about 213 million youth (aged between 15 and 34) in ASEAN countries. The youth population is expected to peak at just over 220 million in 2038.\(^{101}\) However, spaces for young people’s participation are limited. The 2014 survey by the Asian Barometer concluded that there is an untapped potential for youth engagement in political process, and consequently in local development processes. Nearly half of all the young people surveyed showed interest in politics. Young people lacked adequate social capital (including belonging to networks and membership in formal organizations) to engage in mainstream processes. Yet they demonstrated a preference to engage through different processes (through lobbying and activism) rather than elections.\(^{102}\)

This preference has a significant implication on young women’s political participation – as they face significant hurdles to participate in informal processes. More young women showed a preference to participate in formal processes, such as elections, than young men. Further, young people with more education and better access to internet were able to engage compared to those without. This means that young people without appropriate resources (such as education and digital access) are unable to engage in decision-making processes in the same way as their better-off counterparts.\(^{103}\)

For SDG localization, tackling the various challenges related to youth engagement is essential for making gains not only related to youth employment and education, but in guiding young people to shape the development agenda of the future.

- **Engaging private sector**

  The significance of engaging the private sector to achieve sustainable development became evident during the implementation of the Millennium Development Goals. Businesses provide 60 percent of the Gross Domestic Product, 80 percent of capital flows and 90 percent of jobs in developing countries.\(^{104}\) ASEAN is home to 227 of the world’s largest companies and if the countries are considered as one is the seventh-largest host of such companies.\(^{105}\)

  Thus, without the engagement of the private sector, efforts to address poverty, promote inclusive development and address climate change will not be viable. Recognizing the vital role of the private sector, the 2030 Agenda explicitly urges engagement with the private sector to create “shared value” (profits and positive development results) and “shared responsibility” to achieve the SDGs. It calls for more Public-Private-Partnerships (PPP) for providing services, and for leveraging the private sector’s skills, resources, and inclusive and innovative approaches to create opportunities for sustainable development. Specifically, at the local level, private sector involvement can go beyond service delivery, and can reshape business practices to improve the environment and promote inclusive development.

  ASEAN countries have taken steps to engage with the private sector and carve out a role for business to contribute to sustainable development both at the country and regional levels. This engagement is not only limited to shaping economic policies but also includes informing governance and regulatory frameworks to promote greater transparency and accountability.

  However, barriers such as regulatory environments, lack of information and a lack of systematic public-private sector collaboration is preventing the wider engagement of businesses in responding to the SDGs. Further, similar to other countries, there is a disconnection between how businesses and the private sector plan to contribute to the SDGs and to local priorities. This, in turn, could affect sustainability investments.\(^{106}\) In addition, to fully capture the development impact of the private sector, businesses...

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100 World Economic Forum. Why young people are key to achieving the SDGs. Available at https://www.weforum.org/agenda/2016/09/why-young-people-are-key-to-achieving-the-sdgs/


102 UNDP (2014). Youth and democratic citizenship in East and South-East Asia: Exploring the political attitudes of East and South-East Asian youth through the Asian Barometer Survey – Summary report. Available at http://www.asia-pacific.undp.org/content/rbap/en/home/library/democratic_governance/youth-n-democratic-citizenship-east-n-se-asia.html

103 Ibid.


Chapter V Stakeholder engagement for Localizing SDGs

must measure their impact beyond business metrics and quarterly profits, and include SDG parameters to understand additional value creation, markets (such as new services created for poorer people), and social impact, and as well as promoting human rights.

For a broader discussion on financing for SDGs, see Chapter V.

Measures to support stakeholder engagement for the SDGs in ASEAN

ASEAN and its member states have adopted a range of strategies to facilitate diverse stakeholder engagement in prioritizing and achieving the SDGs. For instance, Indonesia has recognized the importance of multi-stakeholder engagement and has established the SDG Philanthropy Platform – a vehicle for catalysing multi-stakeholder partnerships for the SDGs.

In addition, there are also several citizen-led initiatives. A new youth-led network, 2030 Youth Force, was established by 19 young people in 2016 with support from UNDP. The country chapters are fully youth-led and aim to raise awareness and empower youth to effectively engage with the SDGs.

Five countries in ASEAN – Cambodia, Indonesia, the Philippines, Thailand and Viet Nam – have a 2030 Youth Force Chapter. These chapters have been instrumental in bringing diverse groups such as persons with disabilities and the LGBT community to engage around the SDGs. In the Philippines, the 2030 Youth Force uses both offline and online (including through the University of the Philippines’s online TV platform) activities to raise awareness among young Filipinos. The “OnTheWheels” SDG Caravan focuses on “bringing” the SDGs to young people at the local level. Through the caravan, young people are encouraged to develop and incubate ideas and solutions to address local sustainable development challenges. Local governments are better placed to support civil society and youth engagement, provided appropriate mechanisms for such engagement are supported and sustained.

Apart from citizen-led initiatives, the participation and collaboration of the private sector is crucial to the creation of a strong foundation for the establishment of the ASEAN Economic Community (AEC). ASEAN has adopted the revised Rules of Procedures for Private Sector Engagement. The ASEAN Business Advisory Council, the peak private sector body, takes the lead in coordinating inputs from established business councils and entities in their interactions with various ASEAN sectoral groups, and supports the implementation of initiatives under the sectoral work plans. The objective is to move beyond initiatives supported through corporate social responsibilities and develop stronger public-private partnerships. ASEAN is also promoting business integrity and has adopted a regional strategy on business and human rights in line with the UN Guiding Principles on Business and Human Rights.

RECOMMENDATIONS

- Support the strengthening of enabling environments at the national and regional levels for stronger engagement of civil society organizations
- Support the capacity development of CSOs (including women and youth organizations) to participate in the prioritization and implementation of the SDGs (including through innovation solutions)
- Understand and develop special measures to support women and girls’ engagement in the SDGs
- Support businesses to use an SDG lens to measure their contribution to positive development results
- Create platforms to support stronger engagement between stakeholders at the local level.

CASE STUDIES

The two case studies presented in this section show how countries have supported engagement of different stakeholders to inform policies, and influence development of solutions for achieving the SDGs.

The Viet Nam case study highlights strategies adopted by Ho Chi Minh City (HCMC) to promote youth engagement to achieve the SDGs.

The case study from Thailand showcases how engagement with the private sector can inform stronger policy frameworks, including for addressing corruption and promoting integrity.
In the Lao People's Democratic Republic, a landlocked country in Southeast Asia with a population of 6.5 million people, 63 percent of the population lives in rural areas. The population is diverse, and 44 percent of the population is comprised of non-Lao ethnic minorities that speak local languages (such as Hmong and Khmu). With 80 percent of the country in hilly and mountainous terrain, many rural areas are remote and difficult to reach. As a result, despite rapid economic growth in recent decades, the rate of poverty reduction is four times slower in rural areas than urban centres, and rural areas lag behind on socio-economic development indicators such as health and education.

The government of the Lao People's Democratic Republic, in collaboration with UNDP, aimed to find an effective way of reaching rural communities that were isolated by geography and language differences. In 2006, the Ministry of Information, Culture, and Tourism worked with UNDP to develop the Community Participation and Communication Support Programme and facilitate a year of community training in Khoun District, one of the poorest districts in the country. With new resources and capabilities, members of the Khoun district started a local radio station to provide communities access to critical information. Khoun Radio was established in 2007 with the support of UNDP Lao PDR. The main objective of the project was to improve access to information and the voice of poor rural people, especially those from non-Lao Loum ethnic groups, women and disabled people. It provided information that was relevant to the community in the local languages (Hmong, Khmu and others) – from new agriculture methods to health awareness-raising and education. The station was supported by local volunteers and with the engagement of the local community.

Within the first six months of operation, Khoun Community Radio received over 7,000 on-air telephone calls from listeners. Volunteers at the community radio were enthusiastic about the positive response. “Receiving all these calls made me understand that every word of a broadcaster can inspire listeners. It is so important that I speak to them in their own language! The community radio has changed my life, from someone who felt they had nothing to contribute, to a person with useful knowledge,” said Community Radio Volunteer Seuth Maninta.

As communities received more information, participation in the development and implementation of local projects, such as adopting sustainable agriculture practices, and mother and child health promotion projects also increased. Rural villagers were able to shape local priorities, and Khoun district has since enjoyed significant socio-economic progress. Vaccination rates increased by 50 percent, and the number of women using health facilities during pregnancy increased by 70 percent, according to a 2017 Listeners Survey. The Khoun Community Radio station’s volunteers were awarded a labour medal by Lao Prime Minister Thongsing Thammavong in 2012, who also acknowledged their contribution to natural disaster preparedness and recovery.

Following the success of Khoun Community Radio, UNDP supported the government in launching 7 additional community radio stations broadcasting in 11 languages, reaching close to 300,000 people including from ethnic groups in rural and remote areas. Over 250 local volunteers, including 113 women, have become agents of change, actively sharing information to improve lives and strengthen communities across the districts. For instance, Lakhonepheng Community Radio was established in 2015; its basic education programme by volunteer Mouddal, who is a teacher at the local school, reaches more than 45,000 people – most of them struggling to access rudimentary education.

The community radio initiative has also deepened partnerships between local communities and the public sector, as more communities are able to use the radio to articulate their needs, and programmes were developed to address them. In return, the radio station was used by local governments to raise the awareness of the local population on resources available to them, thus enabling wider access to basic services in the rural areas.

The station is a platform for community members to engage in issues that are most pertinent to the district. The radio station gives local ethnic groups a sense of participation, empowerment and community ownership, allowing them to shape the development of their local districts, while acquiring new skills in broadcasting, production and journalism. The project illustrates the power of giving people access to information in order to secure better life outcomes and building sustainable futures.

The Viet Nam Provincial Governance and Public Administration Performance Index (PAPI), published annually since 2009, provides extensive coverage of citizens’ experiences and satisfaction with public services. The philosophy behind PAPI’s monitoring approach is that citizens are the “end-users of public administrative services” and thus can assess governance and public administration in their localities, and support the state to become more people-centric, and meet citizens’ expectations. PAPI’s objective is to (a) create constructive competition and promote learning among local authorities; and (b) enable citizens to benchmark their local government’s performance and advocate for improvement.

PAPI covers 6 dimensions that are constructed from 22 sub-dimensions, 92 indicators and 516 substantive questions about Viet Nam’s policy matters. The six dimensions are: 1. participation at the local level; 2. transparency in decision-making; 3. vertical accountability; 4. control of corruption in the public sector; 5. public administrative procedures; and 6. public service delivery. PAPI captures both the percentage of users satisfied with public services, and the quality of the services. The public services provided by local governments included in the survey are: administrative services (certification, construction permits, land tenures and personal documents), health care, health insurance, primary education, water supply, solid waste collection, and access to electricity.

Started as a pilot programme in 3 provinces, from 2011 onwards PAPI has been conducted in all 63 provinces, covering 207 districts, 414 communes and 828 villages. To date, PAPI has captured and reflected the experiences of 103,059 citizens. In 2017, the sixth nationwide survey for PAPI collected data from 14,097 citizens who were randomly selected and who are a representative sample of different demographic groups across the country.

All the 63 provinces have convened diagnostic workshops to respond to PAPI results, 54 of them have action plan to improve local governance performance, and many provinces have passed directives to respond to and monitor PAPI findings. Central government has also instructed some provinces to use their socio-economic development plans to respond to PAPI findings.

PAPI shows several interesting trends related to political participation, control of corruption in the public sector, use of digital services and even implementation of key laws such as the revised Land Law in 2013. The largest increase was in the proportion of citizens reporting that local projects were monitored by Community Investment Supervision Boards: the rate surged from 21 percent in 2016 to 34 percent in 2017. A higher proportion of citizens also reported having a second candidate to choose from in village head elections – up from 42 percent in 2016 to 49 percent in 2017.

The most striking finding was a remarkable narrowing of the gender gap in land use titling: in 2016, 18 percent fewer women in rural areas reported having their names on land use certificates compared to men, but in 2017 the difference fell by half to 9 percent. Citizens reported improvements in both their perceptions and personal experiences of corruption. Only 12 percent of those surveyed searched for information about policies and laws. Within this 12 percent, only 1 in 5 people used online websites or portals. The two most crucial factors influencing the frequency of using online government services were educational background and gender – higher the education, higher the use of the online government portals. Meanwhile, men were more likely to use the internet to look for policies and laws than women.

PAPI is also a source for gauging public opinion on the most important issues facing the country. Poverty was the most important issue for citizens, followed by economic growth and jobs. Concern about the environment has risen in importance since 2015, and the 2017 found that all Vietnamese citizens, but particularly highly educated ones, are unwilling to sacrifice environmental protection for economic development.

Source: The Viet Nam Provincial Governance and Public Administration Performance Index. Available at http://papi.org.vn/eng/
CASE STUDY 5: SUPPORTING YOUTH-LED SOLUTIONS FOR SDGS IN HO CHI MINH CITY, VIET NAM

BACKGROUND

Viet Nam has the fastest growing middle class in Southeast Asia. The World Bank has ranked it in 78th place in its “ease of doing business index” and many young Vietnamese go to study abroad and return with valuable entrepreneurial knowledge and new ideas. The estimated number of start-ups in Vietnam fluctuates between 1,400 and 3,000, making the country the third largest ecosystem in South East Asia. The start-up landscape in Vietnam saw 67 investments in 2015, a 130 percent increase over 2014 which had 28 investments.

Despite this growth, Viet Nam faces many challenges which threaten the country’s continued development, including income inequality, the effects of climate change and rapid urbanization.

Of the population of Viet Nam, 27.7 percent is aged between 16 and 30 years. This places the young people of Viet Nam right at the center of efforts to achieve the SDGs. Development partners, start-up ecosystem builders and government agencies in Viet Nam have recognized the huge potential in the emerging start-up scene to help find market-based solutions to achieve the SDGs. Empowering young people to develop SDG solutions through new social impact start-ups can ensure young people are given a platform to innovate, provided with a safe space to fail, create secure employment for themselves and others, and ultimately fulfil their role as partners in achieving the SDGs. Indeed, a social impact start-up’s fundamental characteristic of creating a societal impact or benefit makes it a de facto partner in achieving the SDGs.

Key to achieving this in Viet Nam is through providing targeted support for young people to develop new ideas, create sustainable business models that have social impact, and establish and scale up their start-ups. However, the main challenge is in fostering a culture of innovation and creativity among young people. According to the Global Entrepreneurship Monitor Report for 2017/18, Viet Nam ranked 15 out of 54 countries for “entrepreneurial spirit” but placed number 48 out of 54 countries for innovation. Furthermore, although the Vietnamese start-up ecosystem is larger in terms of volume of start-ups than other markets in South East Asia, the levels of investment into Vietnamese start-ups is less when compared with Malaysia or Thailand. Thus, more work is needed to build a culture of innovation in Viet Nam, to develop the types of ideas that attract large international investment into the country, and help support impact start-ups to scale up. In addition, young people require appropriate skill sets for adapting and innovating in the 21st century job market.

The SDG Youth Survey for Viet Nam 2018, led by UNDP, the Ministry of Planning and Investment, and the Centre for Sustainable Development Studies (CSDS), revealed that young people in Viet Nam were most concerned about achieving SDG 4 on Quality Education.

Young people are becoming increasingly conscious of the importance of developing key 21st century skills, such as innovation, critical thinking and collaboration. They are also aware of the importance of using techniques such as human-centered design thinking for addressing pressing social and environmental issues.

To foster young people’s talent and skills development, the government issued Decision

108 Available at http://www.gemconsortium.org/report
109 SDG Youth Survey Viet Nam 2018 (UNDP, CSDS, MPI) (available online August)
1665 – which mandates integrating innovation and entrepreneurship into the public education system. CSOs are supporting these efforts through their own initiatives, such as the SOIN programme from the Centre for Social Initiatives Promotion (CSIP) and the Viet Nam student start-up challenge run by the Centre for Social Innovation and Entrepreneurship (CSIE).

Ho Chi Minh City’s support for SDG-oriented social entrepreneurship

In May 2016, the Government of Viet Nam issued Decision No. 844 on “Support to the National Innovation Startup Ecosystem by 2025”. This national policy is implemented at city level by the Department of Science and Technology (DOST) of Ho Chi Minh City through a programme of action on “supporting small and medium enterprises’ innovation, enhancing competitiveness and international integration”. The Saigon Innovation Hub, or SIHUB, was set up under DOST, with support from the Asian Development Bank. SIHUB brings together key players in the start-up ecosystem, by acting as a connection point for the start-up community of HCMC. SIHUB focuses on sharing experiences, knowledge and data to promote connection and cooperation between members in the start-up ecosystem.

SIHUB plays a key role in implementing Goal 8, Target 2 of the Viet Nam Sustainable Development Goals (VSDGs), as outlined in the SDG Action Plan for Viet Nam, namely to “build and develop a national innovation and creativity system”, and Goal 9 of the VSDGs, to “encourage creativity and innovation.”

SIHUB is empowering young people as partners in achieving the SDGs, as well as finding innovative SDG solutions, at both the early ideation and incubation stages of start-up development. SIHUB achieves this through two complementary approaches: first, by skilling young people on social innovation and entrepreneurship, and second, by providing mentorship and support for early stage impact start-ups to grow their business and strengthen their social impact. Towards this end, SIHUB has partnered with several organizations to develop specific programmes. These are:

1. Social Innovation and Entrepreneurship Skilling for Young People

SIHUB UNICEF UPShift Programme

The UPShift Programme was started in 2017 in collaboration between UNICEF and SIHUB in an effort to empower young people in HCMC, from ages 16 to 24, to develop innovative solutions to challenges faced by them and their communities. The programme works with young people to develop skills in entrepreneurship, design thinking, social innovation and other key 21st century skills. Participants receive mentorship from experienced entrepreneurs on scaling up their idea, where they also get a chance to pitch their idea to a panel of experienced judges. The programme has a strong focus on inclusion, working closely with young persons with disabilities and young persons from lower socio-economic backgrounds. The main objective of the programme is less about the ideas that get developed by young people, but focuses more on empowering young people to take the lead in finding solutions for social challenges, and giving them the skills to collaborate with others to design sustainable and effective solutions in the future.

SIHUB UNICEF Child-Friendly Smart City Programme

SIHUB, UNICEF and the HCMC Department of Architecture and Planning launched a summer programme consisting of 11 creative thinking workshops to engage 275 children from 8 to 14 years old to design and plan for smarter and more child-friendly areas of Ho Chi Minh City. The programme called “Children Innovate: A Smart and Child-friendly City” will be facilitated by Arkki – School of Architecture for Children and Youth and will also involve vulnerable and disadvantaged children. Participating children will use basic urban planning materials such as clay and wood, as well as the computer programs SketchUp and HoloLens to develop and express their ideas. Overall, they will learn about design principles, design thinking, architecture and urban planning and build 21st century skills through hands-on activities and work in project teams. In October 2018, a week-long exhibition will be organized at Saigon Innovation Week to showcase the ideas and projects of the children to urban planning experts, decision makers and the public.

SIHUB UNDP Youth Co:Lab

SIHUB partnered with UNDP Viet Nam for the Youth Co:Lab (YCL) initiative to be rolled out in HCMC, co-led by Citi Foundation and the Ministry of Science and Technology. The initiative seeks to strengthen the social innovation and impact start-up ecosystem in Vietnam by facilitating communication, collaboration and capacity-building between youth, government, the private sector, social enterprise, academia and other stakeholders, on solving the challenges none of them can effectively tackle alone. YCL in HCMC focused on two main activities:

- **HCMC Impact Startup Diagnostic Event (22 June at SIHUB):** This was a dialogue among key start-up ecosystem builders in HCMC on fostering impact start-ups to achieve the SDGs in Viet Nam. The event brought together different stakeholders to provide a platform for consultation to better coordinate and advance the impact start-up ecosystem, including participants from government, the private sector, development sector, academia, impact investors and youth entrepreneurs. At the end of the event, participants took part in an interactive session on diagnosing the impact start-up ecosystem in Viet Nam and explored developing a coordinated strategy on how to grow it in HCMC.

- **HCMC Training on Social Innovation and Entrepreneurship (23 and 24 June at UP Coworking Space):** 40 young people were selected through a competitive application process to join the training. Participants were taken through training on innovation, design thinking, 21st century skills development, SDG entrepreneurship and developing an impact start-up. The main objective of the training was to motivate, inspire and offer practical support to young social innovators and entrepreneurs on taking important first steps in developing an idea into an impact start-up. The training had a strong focus on inclusion of marginalized youth, including the participation of young persons with disabilities, LGBTI young, young ethnic minority persons and rural youth. One deaf participant, speaking through a sign language interpreter, commented that she felt her “voice was heard” during the training and she also felt a strong connection to the hearing participants, which she rarely experiences.

**2. Support for early stage impact startups**


Marginalized youth represented 42 per cent of youth at the training. Out of 88 participants, the training included 9 young ethnic minority persons, 12 LGBTIQ youth, 16 young persons with disabilities, and 2 young persons living with HIV.

Some of the best start-up ideas pitched at the trainings were submitted to Viet Nam’s flagship SDG business innovations competition, the SDG Challenge 2017. From over 200 applications, 4 were chosen for seed funding worth over $85,000 and a 12-month incubation and acceleration programme. The ideas represent creative and potentially powerful strategies to reduce plastic water bottle consumption, enable communication between people with and without hearing disabilities, extend IT training and decent work for persons with disabilities, and deploy wind turbines so that lower-income households can enjoy clean and affordable energy.

SIHUB partnered with UNDP and HATCH! to host the semi-final of the SDG Challenge in HCMC, where over 30 impact start-ups pitched to a panel of judges, with 4 selected to join the final. SIHUB supported the final event, as part of Saigon Innovation Week at the HATCH! Fair in HCMC.

Of the four finalists, ‘Save Your Ocean’ was the only winning start-up from HCMC selected to receive funding and take part in the incubation programme. Save Your Ocean uses Near Field Communication (NFC) technology to allow persons to refill their water bottles through a network of smart water refill stations at convenience stores across HCMC. The NFC sticker allows for quick and easy refills, while deducting a small amount of money from a prepaid account. One water refill station can help save up to 60 plastic bottles of water, with the aim of reducing plastic bottles finding their way into our oceans. Viet Nam is now among the worst five countries in the world for plastic pollution in oceans. The start-up is aiming...
to address SDG 12, to reduce plastic production and consumption, and SDG 14, to protect our marine life. Save Your Oceans are currently in discussions with the 7/11 convenience store franchise and the HCMC local government to scale up the idea. UNDP have supported Save Your Ocean to exhibit their idea at the Youth Co:Lab in Hanoi and HCMC, during the visit of the UNDP Administrator to Viet Nam, at the Sixth Assembly of the Global Environment Facility (GEF), and at the Forum on Youth Leadership, Innovation and Entrepreneurship, in Beijing.

“Being one of the winning teams in The SDG Challenge 2017 was a great opportunity for both me and my business to grow, and help bring our impact closer to community,” says Quynh Huong Hoang, founder of Save Your Ocean, SDG Challenge winner 2017. “It’s not only about what I have learnt through the incubation and acceleration programme, from the professionals and other start-ups but also about the mentorship and support we’ve been receiving so far. We really appreciate everything.”

In addition, over US$100,000 was raised in additional investment to support winning impact start-ups connecting them to impact investors through demonstration events and exhibitions. About 10 persons with disabilities were employed through support from the grant awards and the business incubation programme.
LESSONS LEARNT

**Competition format to promote social innovation and entrepreneurship**

Since 2016, there has been a strong focus on using innovation competitions to find new impact start-ups by ecosystem builders in Viet Nam. In 2017, there were at least 12 such competitions. While these initiatives can help motivate entrepreneurs to start a new business and enter a start-up idea, in particular where there is financial award for the winner, they often lack the necessary mentorship, incubation and technical support needed by early stage start-up entrepreneurs. The funding can be ineffective in growing the business without follow-up and mentorship. SIHUB, UNICEF and UNDP recognize the importance of instilling key skills for young entrepreneurs, which can help them adapt to the ever-changing business environment. Young entrepreneurs need skill sets which encourage them to take measured risk, fail and then have the ability to start again, or adapt their ideas. As a result, ecosystem builders now focus more on building the next generation of strong innovators, with the view that where the ideas are good enough, and where other key support is also available, funding will come by way of investment from within Viet Nam or globally.

**International experience sharing is highly effective in growing the ecosystem**

Feedback from trainings, diagnostic workshops and consultations consistently identify the sharing of international experience as most valuable among participants and stakeholders. In particular, sharing from countries similarly placed, or at similar levels of economic development, are very helpful in providing stakeholders in Viet Nam with practical and comparable steps to take to strengthen the national ecosystem. Regional partners from Malaysia, Thailand and Singapore have supported SIHUB, UNICEF and UNDP in sharing good practice in areas such as policy reform, talent development and attracting capital.

**Tailored training on innovation for marginalized groups**

In designing Youth Co:Lab training for young people, extra efforts were taken to promote diversity and inclusion among participants. This allowed for a wider variety of perspectives shared by young people during brainstorming and interactive sessions. This diversity of ideas helped to strengthen the quality of innovation pitched at the training. However, during the training and upon receiving feedback afterwards, it was clear that more care was needed in designing the training to accommodate the learning styles and preferences of certain marginalized youth groups, including young persons with disabilities. Deaf participants, despite having sign language interpreters, require strong visual aids to support their learning, whereas ice breakers, interactive sessions and field work must take into account the mobility issues of wheelchair users.
BACKGROUND

At the regional level, ASEAN has recognized the need for the private sector’s greater involvement to realize the vision of ASEAN Economic Community 2025. Providing a business-friendly environment is essential to boost growth and accelerate regional integration in ASEAN. The 2017 Business Outlook survey highlights that government transparency, regulatory efficiency and policy engagement should be priority areas in which ASEAN governments and business leaders could work together more productively.

In Thailand, private investment made up about 18 percent of the country’s GDP in 2017, while Thai investment abroad has grown rapidly in recent years as local companies expand internationally. Thailand has invested in recent years in efforts to improve the environment for doing business. According to the World Bank, Thailand ranked 26th for its ease of doing business in 2017, which is a significant improvement from its 46th ranking in the previous year. Thailand is ranked second among ASEAN countries, just behind Malaysia which ranks 24th on the index.

At the same time, the private sector in Thailand has increasingly taken its own steps to promote good governance and contribute to the 2030 Agenda for Sustainable Development. Besides the development of Corporate Social Responsibility programmes, some companies have formed coalitions to promote sustainable development models inside and outside the private sector. These range from initiatives to combat corruption and align with the Guiding Principles for Business and Human Rights to proactive efforts to promote and finance initiatives that contribute to the Sustainable Development Goals (SDGs).

This case study captures how the private sector in Thailand engages with the government as well as among themselves to contribute to the achievement of the Sustainable Development Agenda. Some of the examples are drawn from projects implemented by UNDP in various areas such as public procurement, transparency in public construction, and biodiversity financing. At the national level, the case study looks at existing public-private dialogue mechanisms for policy reforms and implementation, for instance to improve governance, strengthen public procurement and combat corruption. At the local level, it will explore how the ‘Pracharath’ public-private cooperation programme, which brings together the public sector, the private sector and civil society organizations, can contribute directly to local communities through targeted initiatives. Finally, it will highlight how the private sector is also championing initiatives on its own to promote sustainable business models, including through innovative financing mechanisms.

Public-Private Consultation Mechanisms

There are a number of public-private consultation mechanisms in Thailand, including at the local level, which will be described below.

The Joint Public and Private Sector Consultative Committee (JPPSCC) was established in 1981 as a formal public-private consultation mechanism for shaping laws and policies mainly to help improve Thailand’s economy. It has been used under every administration ever since and has now expanded to include JPPSCC at the provincial level, coordinated by the Ministry of Interior to ensure outreach at the local level. There are also JPPSCC for groups of provinces which focus on common thematic areas of interests such as sustainable tourism, agriculture and industrial production. The JPPSCC includes representatives from six private sector associations: the Board of Trade of Thailand, Federation of Thai Industries, Thai Bankers’ Association, Tourism Council of Thailand, Federation of Thai Capital Market Organizations, and Thai National Shippers’ Council. At the national level, the Committee convenes twice a year, while the timing varies at the provincial level.

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115 See http://www.jsccib.org/th/economy/region
PUBLIC-PRIVATE ENGAGEMENT TO SHAPE GOVERNMENT REFORMS IN THE AREAS OF PUBLIC PROCUREMENT AND INFRASTRUCTURE

With the support of UNDP in Thailand, the Royal Thai Government (the Government) has undertaken a number of significant steps to reform public procurement and monitor infrastructure projects, including through a regional project on Promoting a Fair Business Environment in ASEAN.

Recognizing the deficiencies and fragmentation of the public procurement regulations, the Government set up in 2015 a sub-national reform committee to better regulate public procurement through increased transparency and fair competition. This was in line with recommendations from UNDP’s integrity risk assessment of the procurement system to introduce a coherent legal framework for public procurement. Under Thailand’s National Reform Committee, a special multi-stakeholder committee was established to draft a public procurement law with inputs from various parties and technical assistance from UNDP. The special drafting committee consisted of representatives from private sector associations, civil society organizations and academia. As a result, the Government Procurement and Supplies Management Act (2017) was passed in August 2017. The Act applies to all government bodies – including local governments, state-owned enterprises (SOEs), independent organizations and government-run universities. The Act introduces the “value for money” principle, the professionalization of procurement functions and citizen participation. The private sector is a key partner, participating in the five committees established to oversee the implementation of the law.

Another example of private engagement in public reform is in the public construction. As the government plans its infrastructure investment for the next two decades, the country is expecting to see approximately US$127.4 billion dedicated to mega-projects, with 97 percent of them for transport and power supply. To mitigate management and integrity risks in public construction, the government introduced various tools such as the Integrity Pact (IP) and CoST Multi-Stakeholder Group:

- The Integrity Pact is an agreement whereby the contracting government agency and bidding parties pledge to not be involved in corruption or bribery of any form, and allow a committee of qualified, Independent Observers, which are mostly from the private sector and academia, to monitor and scrutinize the entire process. The public procurement law requires that high-value procurements over 1 billion Thai baht (approximately US$30 million) must be reviewed by the Anti-Corruption Cooperation Committee on whether IP shall be applied to that project. Available data indicates that the bid price falls between 14 percent and 28 percent lower than the estimated budget when Integrity Pacts were used to monitor procurement projects.

- The Construction Sector Transparency Initiative (CoST) was established in Thailand in January 2017 to increase transparency and accountability in infrastructure projects through a Multi-Stakeholder Group. Under CoST, construction projects must disclose information throughout five operational phases: project identification and presentation, project preparation, procurement, implementation, and project completion – according to the Infrastructure Data Standard. The Multi-Stakeholder Group, hosted by the Comptroller General’s Department, was appointed by the Prime Minister to include the Permanent Secretary of the Ministry of Finance, representatives from the Anti-Corruption Organization of Thailand (ACT), which is a coalition of private sector, as well as various industry associations. As of June 2018, there are already over 70 active projects – with 63 percent of these projects at the local government level.
Nonetheless, it remains to be seen how the structure of this mechanism evolve as Thailand’s economy and industries diversify and policy development may benefit from more diverse representation of the private sector.

Public-Private Cooperation (Pracharath)

In 2016, the government initiated the Pracharath public-private cooperation programme nationwide\textsuperscript{116} to promote rural development. Under this programme, public and private sector organizations partner with local people to help communities achieve sustainable development on the ground. The initiative establishes ‘social enterprises’ in each of Thailand’s 76 provinces with public and private funding, to leverage the community’s own knowledge or resources and the private sector’s expertise such as in marketing and business planning to create new economic opportunities for the locals. These social enterprises are clustered around agriculture, produce processing and community-based tourism. The focus of Pracharath enterprises in different areas vary according to the local context, demand and potential. The companies’ board structure include representatives from relevant government bodies, the private sector, and local civil society to ensure decisions are made following inclusive dialogues.

While the Pracharath programme is relatively new, making it difficult to measure any sustainable, long-term impact, there were already some success stories as of February 2017. One case is a farming community in Phetchabun province, whose income multiplied threefold since working with the local Pracharath enterprise.\textsuperscript{117} Companies offered farmers support in marketing, communication and financial management to increase sales channels. In addition, a group of 150 farmers started a savings campaign with funds deducted from the sales of their produce to provide them with a savings reserve and strengthen their financial stability.

Private-sector-led initiatives

The private sector in Thailand has championed various initiatives on its own to promote sustainable business models - through coalition-building, investment criteria based on Environmental and Social Governance, and providing financing for sustainable initiatives. The section below illustrates how the private sector has developed innovative financing mechanisms that contribute to the 2030 Agenda for Sustainable Development in Thailand.

Promoting Transparent and Effective Institutions – SDG 16

The Thai private sector has formed a number of coalitions to promote good corporate governance and combat corruption.

The Private Sector Collective Action Coalition against Corruption (CAC), an initiative led by a private sector coalition, helps companies establish and implement anti-corruption policies internally by providing capacity-building and a certification programme for clean businesses that successfully achieved CAC’s standards in practice with clear disclosure. To date, 907 companies have joined CAC, out of which 325 were certified. In January 2018, this certification programme was expanded to Small and Medium Enterprises (SMEs) to help businesses with less than 1 billion THB annual revenue join the anti-corruption network. This is remarkable progress since SMEs play a huge role in Thailand’s overall local development. They account for almost 80 percent of total employment,\textsuperscript{118} and are expected to contribute up to 45 percent of the GDP in 2018.\textsuperscript{119} These efforts contribute towards SDG 16, which includes targets on developing accountable and transparent institutions and ending corruption.

Another emerging practice in Thailand has been to include corporate governance standard assessments as prerequisites to accessing investment funding – with the set-up of the Thai Corporate Governance Fund (see box 11).

Leveraging private finance for biodiversity – SDGs 14 and 15 on Life Below Water and Life on Land

Her Royal Highness Princess Maha Chakri Sirindhorn recognized in 2017 that “It is not just the responsibility of the public sector; producers, consumers and also

\textsuperscript{117} See http://www.nationmultimedia.com/news/business/EconomyAndTourism/30305743
\textsuperscript{118} See https://www.bot.or.th/Thai/Statistics/Graph/Chart_Pack/Chart%20Pack.pdf
\textsuperscript{119} See https://www.bangkokpost.com/business/news/1468342/goal-for-smes-to-kick-in-half-of-gdp
the private sector directly or indirectly benefit from biodiversity and should consider investment in protecting and restoring biodiversity resources.”

In response to Her Royal Highness’s call to action, several high-profile companies have shown a commitment to contribute to the Biodiversity Finance (BIOFIN) programme, which supports biodiversity management by raising and managing capital, as well as by establishing financial incentives to promote biodiversity. For instance, Thai AirAsia provided in-kind transport and financial contributions for biodiversity-related activities; while several media channels dedicated free airtime to advocate for biodiversity. The total estimated funds and commercial promotion value received by the UNDP BIOFIN Thailand from the private sector was estimated at US$281,021.

Other BIOFIN member countries from ASEAN include the Philippines, Indonesia, Malaysia and Viet Nam.

**Sustainability reporting**

Among ASEAN countries, Thailand is leading the way in corporate sustainability reporting. Since 2014, Thai-listed companies are required to annually disclose information related to their Corporate Social Responsibility (CSR) measures towards their stakeholders, society and the environment – either as part of its corporate annual report or separately.

In 2015, the National University of Singapore and the ASEAN CSR Network conducted a study reviewing sustainability reporting across four ASEAN countries (Indonesia, Malaysia, Singapore and Thailand). The result shows that Thailand has a high level of disclosure and the highest quality of reporting.

Within the region, not only is Thailand leading in sustainability reporting, but its business conduct is being recognized more widely. Thai-listed firms achieved the highest inclusion in Dow Jones Sustainability Indices (DJSI) in ASEAN, with 17 listed companies selected in 2017 for inclusion in DJSI Emerging Markets, and 5 selected for DJSI World.

To be included in the DJSI, companies’ economic, social and governance (ESG) practices are reviewed through a ‘Corporate Sustainability Assessment’. There are various groups of DJSI based on various regions and scopes of businesses; for instance, DJSI

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120 See http://www.biodiversityfinance.net/news-and-media/hrh-princess-maha-chakri-sirindhorn-urges-private-sector-invest-more-protecting-and
123 UNDP internal report, for more information related to BIOFIN, please contact Ms. Niran Nirannoot (niran.nirannoot@undp.org).
124 Listed in chronological order of their participation.
125 Lawrence Loh et. al., Sustainability Reporting in ASEAN: State of Progress in Indonesia, Malaysia, Singapore and Thailand 2015, Joint Report by NUS Business School and ASEAN CSR Network.
World lists only the top 10 percent of sustainability leaders globally. Thus, this high rate of inclusion in the DJSI and leading position in corporate sustainability disclosure reflect Thailand’s success in private sector sustainable development according to international standards. This also renders the Thai market attractive to foreign investors who value sustainability and are looking to invest in this region.

CONCLUSION

Thailand’s experience demonstrates several ways in which the private sector can substantially contribute towards the achievement of the SDGs. It highlights the importance of having public–private sector dialogue mechanisms to shape policy reforms and address development issues. In Thailand, the private sector not only works with the government to shape policy reforms but also is an active stakeholder in their implementation and monitoring. In addition, the private sector is increasingly leveraging innovative finance mechanisms that contribute to the SDGs, whether towards good governance and combating corruption (SDG 16) or for biodiversity financing (SDGs 14 and 15). Finally, Thailand is leading the way in corporate sustainability disclosure among ASEAN countries.

As Chairman of ASEAN in 2019, Thailand will play a leading role in sharing various development experience with other ASEAN countries. Experience from Thailand on private sector’s role beyond corporate social responsibility programmes, as an active development actor toward achievement of SDGs is one of innovative and successful examples that will benefit other ASEAN countries and beyond.
OVERVIEW OF CURRENT CHALLENGES AND MEASURES TAKEN

Achieving the ambitious goals of the 2030 Agenda will require a considerable amount of financial resources being channeled for sustainable development initiatives. One estimate states that South-East Asia requires US$7 trillion in infrastructure, housing, and real estate investment just to support sustainable growth. This estimate, however, doesn't include the cost of achieving all 17 SDGs. While the 2030 Agenda emphasizes the role of international public finance, including Official Development Assistance, to mobilize public resources, the development financing landscape has become more dynamic and is constantly changing to include new sources of finance.

New sources and types of financing have emerged in the last decade, as described in the table below. These new sources and mechanisms complement traditional development cooperation and create opportunities for new partnerships and collaborations that can leverage the finance, expertise and networks for achieving sustainable development objectives. This rise of new financing sources and mechanisms could be a blessing for local governments, specifically those that are heavily reliant on fiscal transfers from national governments and are unable to mobilize local resources. With availability of resources, subnational and local governments can take a broader integrated approach to achieving SDGs rather than limiting initiatives to key priority areas. The availability of new financing mechanisms that are more focused on development impact can also be leveraged to strengthen multi-stakeholder engagement (see chapter IV on stakeholder engagement).

However, governance challenges, such as weak public expenditure capacities, complicated (and sometimes) unreliable fiscal transfer systems and when budgeting processes are not aligned with national or local development priorities, could hinder local governments’ ability to not only use allocated resources but also their capability to mobilize available resources at the local level.

CURRENT CHALLENGES

ASEAN economic integration has created a powerful economic block. Together, the 10 ASEAN countries have a GDP of over US$2.4 trillion (2013 figure), and ASEAN is projected to rank as the fourth-largest economy by 2050. At the regional level, all resource types – domestic and international, public and private - are growing in volume. Domestic public and private

<table>
<thead>
<tr>
<th>INSTRUMENT</th>
<th>DESCRIPTION</th>
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<tbody>
<tr>
<td>Blended Finance</td>
<td>Concessional public finance blended with non-concessional public aid or private philanthropic funds</td>
</tr>
<tr>
<td>Green and Blue Bonds</td>
<td>Bonds where proceeds are used for environmentally-friendly investments</td>
</tr>
<tr>
<td>Islamic financing</td>
<td>Islamic bonds such as sukuk which are asset-backed risk/reward sharing contracts</td>
</tr>
<tr>
<td>Guarantee Schemes for development</td>
<td>A policy that insures governments or other investors against investment risks in development</td>
</tr>
<tr>
<td>Diaspora financing schemes</td>
<td>Bonds, investments or foreign direct investments that are raised from the diaspora for development funding</td>
</tr>
<tr>
<td>Impact investment</td>
<td>Investments that aim to create positive social or environmental returns in addition to a financial return for investors</td>
</tr>
<tr>
<td>Crowdfunding</td>
<td>Funding a project or venture by raising monetary contributions from a large number of people</td>
</tr>
<tr>
<td>Social Impact bonds</td>
<td>A pay for success scheme where investors are repaid by donors/government if the desired social impact of the financed project was achieved</td>
</tr>
<tr>
<td>Countercyclical loan contracts</td>
<td>A loan where debt service automatically falls when a major shock occurs</td>
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<tr>
<td>Weather and disaster insurance schemes</td>
<td>Products that provide pay-outs to sovereigns or farmers when a major weather disaster strikes</td>
</tr>
</tbody>
</table>


128 UN (2015). Transforming our world: the 2030 Agenda for Sustainable Development. A/RES/70/1
130 Ibid.
resources are growing most rapidly, each increasing by around US$200 billion between 2007 and 2015. However, despite this growth, several challenges remain:

- **Key finance flows remain scarce and are growing slowly for some countries**

Finance landscapes at the country level vary widely within the region (see figure). Domestic revenues are rising in all countries, yet remain below US$600 per person in six countries (i.e. less than US$2 a day). Domestic private finance will be a key driver of progress but accounts for 35 percent of the total financing in ASEAN-5 countries compared with 22 percent in the ‘CLMV’ countries of Cambodia, the Lao People’s Democratic Republic, Myanmar and Viet Nam. **If domestic revenues are not improved**, and if revenue mobilization is not inclusive and ‘sustainable development friendly’, that is, designed considering their distributional impact or incentive on other aspects of sustainable development, for example, tax on carbon emissions and overall growth, it will constrain the ability of countries to achieve SDGs.

- **Stimulating sufficient quantities of quality private investment is a key challenge to unlocking private contributions toward the SDGs**

Despite growth in new types of financing, private investment has been highly volatile – plateauing in some countries (Thailand), declining relative to growing national income (Viet Nam), or limited to a major one-off project (the Lao People’s Democratic Republic and Myanmar). Foreign direct investment to the region is growing but remains highly concentrated: half goes to Singapore. Both the quantity and quality of private investment are a concern for policymakers.

**FIGURE 26. WITH DIVERSE FINANCE LANDSCAPES, COUNTRIES ACROSS THE REGION FACE A RANGE OF CHALLENGES AND OPPORTUNITIES TO FINANCE SUSTAINABLE DEVELOPMENT**

Notes: CLMV countries= Cambodia, Lao PDR, Myanmar and Viet Nam. ASEAN-5 countries = Indonesia, Malaysia, Philippines, Singapore and Thailand

Source: Numerous national and international sources: see Annex, data notes.

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132 Ibid
– how to stimulate a sufficient volume of investment to create jobs and grow new industries in Cambodia, the Lao People’s Democratic Republic and Myanmar, for example, while attracting investments in Thailand and elsewhere that can help drive a shift into higher value-added industries (and out of a middle-income trap). In all contexts, managing the trade-offs between attracting or stimulating private investment, for example with incentives or relaxed regulations, while maximizing its sustainable development impact – the jobs created, skills developed, innovation spurred on, green growth generated and so on – is a challenge. At the regional level, and beyond, it is important to manage competition between countries for investment, to ensure many of the benefits are not lost in a ‘race to the bottom’.

- **Limitation of current fiscal systems and its impact on SDG at local level**

While countries in the region have undertaken decentralization reforms, fiscal decentralization is incomplete. Figure below shows that the spending share of subnational governments relative to nation expenditure varies greatly – from a mere 4 percent of government expenditure in Cambodia to 54 percent in Viet Nam. The reliability and timeliness of fiscal transfer (how much is allocated and when the money is transferred) remains much to be desired. Local governments often receive transfers much later in the year, and sometimes no criteria or formula is applied to determine allocations to subnational governments. This could result in some areas getting more money than others (above and beyond differences to reflect variations in geographic and demographic distribution) and could create conditions for inequality within countries. Often the fiscal transfers have conditions attached and local governments have very little leeway to manage resources based on local context. These challenges undermine local governments’ ability to engage with local stakeholders and make decisions around local spending.

Countries need to do more to improve fiscal transfer systems and adapt practices that would focus on building local fiscal capacities and encourage local governments to align resources to achieve SDGs. Such a focus can also help local governments to tap into new sources and types of financial resources. However, oversight capacities both at the local and national level need to be simultaneously improved to track the performance of local governments, and measure the achievement of SDGs.

**FIGURE 27. SUBNATIONAL GOVERNMENT SPENDING SHARE IN TOTAL NATIONAL EXPENDITURES, SELECTED COUNTRIES COUNTRIES IN SOUTH-EAST ASIA, FY 2012**

MEASURES TAKEN BY ASEAN COUNTRIES

All ASEAN countries are making progress in strengthening aspects of an integrated national financing framework and though policy and institutional contexts vary widely, there are opportunities for reform that can increase overall efficiency, effectiveness, and equity in all countries.

The extent of coordinated, senior-level leadership over financing in government differs considerably. In many cases, there are clear mechanisms for managing public finance investments in sustainable development, but there are few examples of this extending to policy toward private sector development. Most countries have clear visions for results in national development plans, but vastly different degrees of understanding and consensus about them among key stakeholders. Few are costed and the strength of the links between long-term visions and medium- and short-term plans and implementation varies widely. In the Philippines, cabinet-level committees scrutinize budget proposals to ensure alignment between annual budgets and the medium-term vision.

No ASEAN governments have developed comprehensive financing strategies, though some have taken steps toward such a strategy or have developed comprehensive financing strategies at the sector or thematic level. Indonesia’s green budgeting and planning policy is one example at the thematic level. Despite its crucial role in driving forward progress, finance does not feature centrally in many national monitoring frameworks and where it does, the focus is on public finance. Finally, platforms for public–private dialogue could be strengthened in most contexts as a means for developing more responsive and targeted policy for stimulating impactful private sector development. Malaysia has developed an innovative system of ‘labs’ for multi-stakeholder consultative planning and Myanmar has recently set up a private sector development committee to coordinate public–private dialogue.

Chinese investment to the region has grown rapidly in recent years and China and ASEAN have set a target of two-way investment reaching US$150 billion by 2020. The Belt and Road Initiative and growth of funds such as the China-ASEAN Investment Cooperation Fund offer significant potential for funding of infrastructure and related areas. Ensuring that this growing portfolio of investment is aligned to regional and national development priorities will be vital for maximizing its contribution to the SDGs.

RECOMMENDATIONS

The report of the joint ASEAN-China-UNDP symposium on ‘ Financing the Sustainable Development Goals’ held in 2017 made critical policy recommendations to increase the volume and impact of finance, and strengthen integrated national financing frameworks for SDGs. In addition, countries also should take steps to:

- Support strategies to improve fiscal systems to ensure that public resources are used to promote efficiency, effectiveness and equity
- Adopt measures or strategies that can enhance cost-effectiveness and efficiency, synergies and/or favour a more equitable distribution of resources (e.g. enterprise challenge funds, national climate funds)
- Focus on mobilizing both internal and external resources for SDGs (including through impact investments)

CASE STUDIES

The following two case studies highlight different approaches to financing the SDGs. The Cambodia case study is about creating special economic zones in collaboration with the private sector to accelerate job creation and industrialization and incentivize entrepreneurship. The Thailand case study focuses on a smaller-scale sustainable development and financing initiative that protects livelihoods with minimal impact on the environment. A critical mix of high-impact and low-impact financing initiatives are required to achieve SDGs.

134 This section is based on UNDP (2017). Financing the Sustainable Development Goals in ASEAN – Strengthening integrated national financing frameworks to deliver the 2030 Agenda
CASE STUDY 7: PHNOM PENH SPECIAL ECONOMIC ZONE (PPSEZ) AND ITS ROLE IN ACHIEVING SDGS IN CAMBODIA

INTRODUCTION

Special Economic Zones (SEZs) are geographically demarcated areas within a country, which function with different administrative, regulatory and/or fiscal regimes, and so, aim to spur entrepreneurship, accelerating industrialization and unlocking economic development. The model relies on removing constraints on businesses, while also promoting the collocation of value chains, so enabling investment and commercial activity to flourish.

Cambodia’s zones follow this model, but rely less on tax and regulatory concessions and more on the enabling principle – zone operators aim to provide a secure operating environment, easier infrastructure and energy supply, and allow for quick investment and easy set up. Cambodia has over 30 zones located throughout the country (see map below). Cambodian SEZs are private concessions, and serve as de facto property and business service providers delivering a complete business location support package. They typically play host to medium to large enterprises, many of them foreign-owned firms.

The links to the SDGs although not immediately apparent, are substantial. The model has a direct fit with most of the economic and livelihood-based goals: reduce poverty (SDG 1), create decent jobs and boost economic activity (SDG 8); and enrich the competency of local workers (again SDG 8). They also have wider direct structural effects, promoting industrialization and sustainable urbanization (SDGs 9 and 11). In turn, they have a host of conditional impacts on the broad set of social and environmental goals - but realizing these is dependent on the evolution of business practices in the zones and how social and environmental outcomes are motivated and incentivized.

These direct effects and potentials are especially important for Cambodia, given the country is at a nascent stage of industrialization. UNDP’s engagement with our key partner, the Phnom Penh SEZ Company, has sought to capitalize on the direct links, but additionally expand the potential to deliver indirect wider impacts, specifically, in the social sphere, SDG 5 on gender equality and SDG 10 to reduce all inequalities, and in the environmental sphere, SDG 6 clean water and sanitation, SDG 7 on energy and SDG 12 on responsible consumption and production. This implies the partnership we have formed (adding in SDG 17) aims to leverage private sector actions to deliver 9 of the 17 goals, and with a further knock-on effect in many others.

The SEZs also offer a strategically useful mechanism in Cambodia, and represent its new industrial base. They are export-oriented and play an important role in the industrialization process and Cambodia’s internationalization. They are “exemplars” therefore, and UNDP has deliberately partnered with the Phnom Penh SEZ as a leading operator – an “exemplar among the exemplars”. Looking at the bigger picture, we seek through delivering practical projects, and then via demonstration effects, to affect wider change. We have several focus areas, but our primary impact is delivered by direct technical assistance, and with support from UN Social Impact Finance, unlocking access to global impact capital – with both interventions promoting smart SEZ development that is inclusive and sustainable.

The Phnom Penh Special Economic Zone (PPSEZ) Company is led by renowned businesswoman Madam Lim Chhiv Ho, one of the few women business tycoons in Cambodia. PPSEZ has partnered with UNDP, UNSIF and others to engage in solid waste management projects, encourage affordable housing and to ensure decent work opportunities.
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FIGURE 28. CAMBODIA’S SPECIAL ECONOMIC ZONES

(MoU), which provides a framework of cooperation to facilitate and strengthen collaboration between UNDP Cambodia and PPSEZ, on a non-exclusive basis, in areas of common interest.

At the national policy level, the partnership fits well with the objectives set out in the Royal Government’s Industrial Development Policy (IDP/2015-2025) – the transformation and modernization of Cambodia’s industrial structure from low value-added, labour-intensive activities to ones rooted in high skills and technology. In practical terms, UNDP and PPSEZ have focused our work and efforts in four areas: (1) promoting the circular economy, through solid waste management and recycling; (2) enabling the building of affordable housing for workers; (3) greening the productive process – via solar electricity and efficient water use; and (4) promoting youth employment training.

This case study explores that partnership and offers insights on how UNDP and PPSEZ aim to support the delivery of the SDGs. After this introduction, the next section reviews the context – the Cambodia SDGs or CSDGs – and closely analyses the SEZ model and the PPSEZ. The third section examines the partnership between UNDP and PPSEZ, the roles of the partners and the areas of activity. Finally, a conclusion and look to the future, suggesting how the partnership and specifically UNDP’s role might develop in the near and longer term.

SETTING THE SCENE: CAMBODIA’S SUSTAINABLE DEVELOPMENT GOALS – THE CSDGS

The SDGs recognize the twin priorities of delivering environmental sustainability (specifically combating the threat posed by climate change) and eradicating poverty once and for all. Compared to the MDGs, the SDGs are more expansive, running to 17 goals and 169 targets, and are also much more ambitious. The SDGs aim to be transformative for all countries, whatever their level of development, and require that no one, no people and no group is left behind.
Crucially, they are premised on the task of delivery being everyone’s business – the state, the public and private sectors and the people; and that the SDGs are owned and driven by each country. These two key facets – the necessity of all actors being engaged, and national ownership, are key to this case study.

The Royal Government of Cambodia (RGC) has built a solid foundation for and signalled its commitment to SDG achievement by developing a national framework – the Cambodia SDGs or the CSDGs. RGC also recognizes that the CSDGs imply a new level of ambition and new ways of working, and this includes efforts to harness the contribution other stakeholders – including business. Cambodia started the process in late 2015 by reviewing and mapping the global goals and targets to national priorities. In addition to the 17 global SDGs, an additional goal related to clearance of land mines and of explosive remnants of war was added. Some 89 targets were selected from the global set; with an additional 2 for CSDG 18, this brought the total to 91 targets. Subsequently, 240 indicators were selected.

The CSDG framework, alongside the Government’s socio-economic platform – as set out in the Rectangular Strategy (RS) – will provide the basis for the new cycle of the five-year National Strategic Development Plan (NSDP), and all subsidiary plans and policies. The CSDG framework, after being subject to further consultations, is set to be adopted by the Royal Government later this year.

Moreover, given the timeframe (to 2030), the CSDGs are a direct counterpart to the Government’s Vision 2030 and 2050, which seek the attainment of upper-middle and high-income status respectively. And like their global counterparts, the CSDGs place a high emphasis on leaving no one behind, and ensuring that all Cambodians share in the country’s future prosperity; and match this with a commitment to sustaining the nation’s abundant natural capital for future generations, while also playing Cambodia’s part in combating climate change.

**DRILLING DOWN: CAMBODIA’S SPECIAL ECONOMIC ZONES AND THE PPSEZ COMPANY**

Cambodia’s Special Economic Zones (SEZs) were introduced by the Royal Government in December 2005 under Sub-Decree No. 147, which restructured the functions of the Council for Development of Cambodia (CDC) – creating the Cambodian Special Economic Zone Board (CSEZB), and mandating it to roll out the SEZ concept. The following sub-decree, No. 148, established special economic zones themselves, and some 13 years later a draft SEZ Law, is under consideration, which will give formal statutory backing for the zones.

SEZs lie at the heart of Cambodia’s development policy approach, and have proved very successful in promoting the development of a manufacturing industry in Cambodia. They have supported foreign direct investment, both inside and outside the zones, are a central feature of the Industrial Development Policy and are a key driver of structural change. They have also brought socio-economic benefits. It is estimated that SEZ investments have created around 68,000 jobs (ADB, 2015), with generally better pay, conditions and prospects than alternatives. Their environmental record has also been positive and the zones typically play host to the most technologically advanced enterprises in Cambodia operating the most efficient and green plants. SEZ operators’ control of energy supply within their zones has also promoted innovation in green – particularly solar – energy.

All of the zones are operated by private land companies under long-term lease arrangements, and by adopting a private sector concession model, Cambodia has avoided the large and sometimes wasteful public sector costs associated with zone establishment. However, the SEZs are still relatively small, some face connectivity challenges as concessions, and the public infrastructure budget tends to be less coordinated than state-led models. Similarly, the tax and regulatory incentives are limited, and while less distortive, this has raised questions about their effectiveness as a longer-term magnet for foreign direct investment and technology transfer. The main motivation is the ease of doing business, whereby all public infrastructure services, including roads, water and wastewater, and energy are operated by the concessionaire. Their performance, perhaps as a result, has varied between localities, with SEZs in the core doing better than those in the periphery.

The PPSEZ Company received approval as a developer...
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and zone operator from the Royal Government on 19 April 2006. The company manages three zones. Its main site in Phnom Penh is over 357 hectares in size and plays host to more than 80 international companies from 15 different nations (although around 60 percent are from Japan). Around 17,000 workers are employed at the site, and enjoy good working conditions, and varied career opportunities.

PPEZ operates a further concession, the Poipet SEZ, close to the Thai border (see map). PPSEZ has strategically selected its localities to take advantage of geographical synergies along Cambodia Economic Corridor, radiating from the country’s heart and expanding to the borders (again see map below).

PPSEZ’s vision is to be a lead developer and operator of SEZs in Cambodia and to create long-term value for their stakeholders, boosting income flows and appreciating the value of the land concessions – and also do this on the basis of an inclusive and sustainable business model. As the figure illustrates, an explicitly socially responsible business strategy has been adopted. PPSEZ also defines its strategic direction in terms of promoting employment, enhancing knowledge and skills, improving health care, and promoting socially responsible business conduct.

Their approach especially emphasizes the value of human capital by seeking a high-quality and motivated workforce; gains from compliance with the highest socio-economic and environmental standards; and the importance of building partnerships with local communities and employees.

SOLID WASTE MANAGEMENT (SWM)

A waste crisis is emerging in Cambodia, driven by vastly increased quantities of waste resulting from economic growth, demographic changes and urbanization; and by poor solid waste management regulations and practices. On average, only half of the municipal solid waste is collected – with serious sanitary and environmental consequences. The annual amount of waste reaching landfill is projected to reach 2.1 million tonnes a year by 2029, around double the current level. 136

Work with PPSEZ has involved recasting SWM as a private sector value chain, and hence offering opportunities for market-based solutions. This approach disaggregates the process into five blocks, and looks for opportunities to improve efficiency and capture income streams: Generation – where big gains are likely to arise from segregation (separation) of different types of waste; Collection and Transportation – where again segregation would enable other forms of disposal or recycling; Recycling/Composting/Digestion – where recycling is a key source of profitability; Energy Recovery and Capture – where industrial scale biogas/RDF technologies offer potentials; and Disposal with systems for proper disposal (landfill and other methods) offering commercial opportunities.

PPSEZ is responsible for the entire SWM value chain within the zone, and clients who are willing and able to meet their disposal commitments. This represents a near unique opportunity for examining

FIGURE 29 PPSEZ LOCATIONS IN CAMBODIA

136 Synthesis report of SWM Diagnostic Workshop (12 May 2017), UNDP Cambodia
the commercial potentials of SWM, and it offers a means of piloting approaches that might be scaled up nationally. The partnership is currently exploring setting up a joint venture company covering waste collection, recycling and composting. This company would seek to exploit market opportunities, and hence, reduce the cost burden on firms located in the SEZ whose waste is currently taken to landfill – while also offering clear environmental gains.

**AFFORDABLE HOUSING FOR LOW- AND MIDDLE-INCOME WORKERS**

Phnom Penh’s urbanization is accelerating as the city expands to the west. Land scarcity and hence, housing costs are growing exponentially. While workers have job opportunities, they cannot afford rising rents, especially those earning below average wages. Equally, businesses and factories, including many within the zone face huge difficulties in attracting and retaining employees, of which there are likely to be 23,000 in the Phnom Penh SEZ by 2023 (see chart).

Housing is both a key issue for businesses and for sustainable development. Securing low-cost decent housing, based on modified forms of ownership is an effective option. Secure, decent and affordable housing for the workers is also a net positive for the wider economy.

An affordable housing project was an early and clear choice for the PPSEZ-UNDP Partnership (see Figure #): offering businesses within the zone a reliable and more productive workforce and delivering very clear social benefits to households and the community. The latter include: low transportation costs, decent living conditions, and with effective planning, access to basic facilities including green spaces. These together promote a sense of community allowing residents to lead lives of dignity. Crucially, this level of demand and the ability for potential residents to meet housing costs also marked this project out as a genuine opportunity for impact investors.

The Partnership’s affordable housing project will form part of the third phase of PPSEZ expansion, and makes use of land located close to riverside behind the current development (see site map). Construction of 3,136 units will take place over 6 years from 2019 to 2025, on an area of 70,000 square meters. The indicated unit selling price of US$17,000 aims to ensure affordability based on a household wage of US$200 to US$400 per month. This is premised on combined interest and repayment monthly mortgage payments accounting for no more than...
30 percent of a couple’s take-home salary. Residents will acquire their homes based on mortgages offered by PPSEZ, with the company serving effectively as both developer and lender.

UNDP has offered a number of inputs to this signature project – the principal contribution being UNSIF support, assisting PPSEZ to secure finance via international markets (debt and equity capital channels). Going forward, UNDP will serve as the impact partner certifying the social bottom line. It will also work alongside a financial investor sourced by UNSIF, with PPSEZ as project manager.

UNDP also worked with Building Trust International, a leading international non-profit charity specializing in human-centered design and sustainable architecture to design and develop the project. With UNDP support, and prize money provided by pooled funds, BTI organized a design competition for the housing units via its network of more than 100,000 architects globally. Launched in May 2018, the result is expected to be announced in September at an event presided over by the Minister of Land Management, Urban Planning and Construction. Unit costs, dwelling quality and environmental impact (a low carbon footprint) are the key selection criteria, with extra consideration given to intelligent use of space, ease of construction, and use of locally sourced material.

As with all partnership activities, this project has applications outside PPSEZ and addresses a key need – the provision of housing options for low-middle-income workers in a rapidly urbanizing Cambodia. The project is also well-aligned with the RGC’s Affordable Housing Policy (launched in 2017), which encourages the development of low-cost housing, improving livelihoods and enabling the low-middle-income population to buy their first homes. And notably, in mid-2018, RGC called for...
the submission of affordable housing projects from private companies, which will receive tax and other incentives.

**Greening the manufacturing process:** As part of its expansion plans, PPSEZ aims to green production and the factories operating within the zones they manage – utilizing green design methods and renewable building materials, and by harnessing the use of solar energy and recycling water. Its forthcoming eco-rental space factory, at Poipet, will apply a new benchmark for Khmer eco-design (based on Japanese standards), and will install solar panels on all factory roof spaces.

Moreover, both the Poipet and Phnom Penh zones will be equipped with systems to capture rainwater, and recycle wastewater for sub-surface irrigation, benefiting the zone, the surrounding community and the wider environment. The benefits include: providing a dependable and locally controlled water supply; adding an additional source to reduce diversion of water from sensitive ecosystems; and decreasing discharge and pollution to nearby rivers. In the longer run, these efforts will help financially by saving energy and reducing water supply and treatment costs.

**Employee training for decent work:** The acquisition of knowledge and skills is vital to enabling individuals to access new opportunities and boost household incomes and livelihoods, and to the profitability of businesses. This in turn, has a series of economy and SDG-wide impacts. Skills training remains weak in Cambodia, beset by poor provision and by firms’ reticence to invest in human capital for fear of losing trained workers to other employers. The poor quality and rigidity of the official training system have also been identified as key weaknesses.

PPSEZ have a longstanding partnership with the Thailand-Japan Technology Promotion Association (TPA) and the Japan-Thailand Economic Cooperation Society (JTECS) to provide training services to
the workers within tenants’ factories. Regular training courses include: time management and planning, communications, teamwork, personal financial planning, and personal hygiene. UNDP is looking to link these activities to its work on youth programming. We are exploring the use of a social media platform to deliver a soft and key skills training qualification covering some of the elements of the existing training work, but also promoting access to the formal national TVET system.

**FUTURE DIRECTIONS AND UNDP’S CHANGING ROLE**

UNDP views its partnership with PPSEZ as a pivotal intervention for the SDGs, given its potential for mobilizing private sector actions and resources, and to motivate behavioural change by firms and workers. A key dimension is the demonstration and learning impacts of SEZs generally, and PPSEZ specifically as exemplars for modern commerce in Cambodia. There is strong potential for the SDGs to be realized alongside the promotion and adoption of progressive business practices, as part of the evolution of a more cooperative and responsible model of Cambodian capitalism.

UNDP defines its role as a catalyst, using the partnership to shape change, and develop a future platform that might be stylized as a Sustainable Economic Zone. This would generate positive social, economic and environmental impacts, while simultaneously maximizing the commercial returns to PPSEZ and other operators. In the near term, the partnership’s focus is on implementing the portfolio of practical initiatives as described above, and demonstrating the operational and financial viability of the approach. Success on the ground has the potential to build momentum for private sector contributions to the SDGs within SEZs and in Cambodia generally. The partnership will also look to grow as PPSEZ itself expands in other sites and specifically Poipet. In the longer term, we would aim to sensitize other zone operators and business and disseminate key messages and learnings.

A key issue throughout has been the need to access capital finance for projects and initiatives with strong social benefits but lower financial returns. Impact investment remains an obvious vehicle for meeting these needs. UNSIF is therefore a key participant in the partnership in meeting financing requirements, and in time, helping to develop a Cambodia SDGs social impact investment platform, enabling impacts to be realized at scale. This will broaden the range of financing options to promote sustainable development, and harness the still rapid expansion of Cambodia’s private sector and its modernization and changing character.

UNSIF will continue to play a central role in facilitating access to capital at an affordable rate, sourcing investors at regional and global levels to connect to investment forums and pitch and present investment proposals. And working with UNSIF, UNDP and PPSEZ will seek to finalize a financing deal for low-cost housing in the very near term. UNDP will also continue to support PPSEZ on many technical issues and activities, including: business planning; human-centered design approaches; conducting social and environmental impact assessments; M&E and double/triple bottom line reporting; and accelerating policy solutions via a dialogue with government.

Finally, to reiterate, the PPSEZ Partnership offers a model which can be replicated with other SEZ operators, and ultimately with Cambodia’s dynamic commercial sector as a whole. UNDP in time will seek to develop these approaches to promote the long-run inclusive and sustainable growth of Cambodia and the delivery of the SDG agenda.
TOURISM AND DEVELOPMENT IN THAILAND

Tourism is a major driver of economic development in Thailand. Over 35 million tourists visited Thailand in 2017, an increase by 14 million from 2015. Tourist revenue had risen to more than 1.8 trillion baht (US$56 billion) in 2017.

As a major driver of Thailand’s economic growth – with its total contribution to the country’s GDP at approximately 20 percent, tourism comes with the expense of social and environmental degradation, especially at the local level. Hence, a sustainable model of tourism is crucial for sustainable growth.

According to Chulalongkorn University, approximately 80 percent of tourism-generated profits flow to foreign or large companies rather than being distributed to locals. This not only drives unequal income distribution from the tourism industry, but it can also lead to a lack of accountability or stewardship towards local interests.

The Royal Thai Government (RTG) adopted the SDGs as a framework for national development. Recognizing the challenge of inequality in the country, RTG sees community-based tourism as instrumental for SDGs localization, redistributing income from the tourism industry to the community level as well as maintaining sustainable livelihoods of local people.

To this end, RTG through the Tourism Authority of Thailand (TAT) intensively promoted “second-tier tourist provinces” and community-based tourism (CBT). In 2017, TAT launched the “Go Local” campaign to create a more balanced distribution of tourists between urban and rural attractions by supporting the growth of new, sustainable and community-based destinations. As well, the Ministry of Finance provided tax reduction incentives for domestic travelers.

The ‘Sufficiency Economy Philosophy’ and community development

Over the past decades, Thailand’s development policy, including at the community level, has been guided by the Sufficiency Economy Philosophy (SEP), conceived by H.M. the late King Bhumibol Adulyadej, who was awarded UNDPs first ever ‘Human Development Lifetime Achievement Award’ in 2006. “Your Majesty’s ‘Sufficiency Economy’ philosophy – emphasizing moderation, responsible consumption, and resilience to external shocks – is of great relevance worldwide during these times of rapid globalization. It reinforces the United Nation’s efforts to promote a people-centred and sustainable path of development,” said Kofi Annan, Former Secretary-General of the United Nations.

Rooted widely in Thai society in response to the 1997 Asian Financial Crisis, SEP has helped communities to establish sustainable livelihoods. Today, several communities have become an example of sustainable development at the community level.

UNDP has supported Thailand in localizing SDGs to community level through various projects and programmes. The ‘Sustainable Tourism for Human Development’ project was implemented in four communities across Thailand’s different regions, thus, localizing several SDGs: SDG 17 (Partnerships for Development), SDG 1 (No Poverty), SDG 2 (Zero Hunger), SDG 5 (Gender Equality), SDG 8 (Decent Work and Economic Growth), SDG 11 (Sustainable Cities and Communities), and SDG 12 (Responsible Consumption and Production).

Under this initiative, UNDP helps address income inequality by redistributing income from the tourism industry to local communities. UNDP aims that tourists can experience sustainable livelihoods in line with the National Agenda on the SDGs, the Tourism Authority of Thailand’s vision to expand tourism to smaller or “second-tier” cities has proved successful in redistributing income to the community level.

CBT in Thailand is crucial not just for local economic development, but also for the local development of human capacity and resilience. It assists with the social integration of the youth, increases local pride and generates incomes.
local communities and replicate it in their home and other communities.

Realizing the importance of partnership for development (SDG Goal 17) and with a financial contribution from TAT, in 2017, UNDP worked with Local Alike, a Thai social enterprise, to prepare and enhance the capacities of these four selected communities, which adopted “sufficiency economy philosophy” by applying it with a wide range of sustainable livelihoods practices, such as multi-cropping, organic farming, sustainable consumption and conservation of local species, to be tourism destinations. Local mechanisms for fair income distribution at the local level were designed and developed by community members.

THE JOURNEY TO SUSTAINABLE COMMUNITY-BASED TOURISM

UNDP leverages both government and private sector resources to develop local capacity. Building on its longstanding relationship with the government, UNDP partners with TAT to expand TAT’s mandate beyond tourism promotion and to also include sustainable tourism development.

The initiative employs an innovative approach by engaging a social enterprise start-up to help communities develop their business models and enhance local capacity to operate as sustainable community-based tourism destinations. The key processes include:

1. **Community survey**

   The journey begins with an initial survey trip to determine the potential and interest of the communities to develop their community into a sustainable tourism destination. The survey considers potential attractions in that village and its vicinity, the capacity of the community to host tourists and common interest among community members for being a part of the project. Positive results will lead community members to learn more about Community-Based Tourism (CBT) in a workshop, after which they determine their interest to proceed with CBT development through the project.

2. **Business Model Canvas**

   Once the community decides to work towards CBT, UNDP then provides support in designing their Business Model Canvas (BMC), which considers the nine following aspects of CBT operations: customer segments (target tourist groups), value propositions, channels (for communication), customer relationships, revenue streams, key resources, key activities, key partners, and cost structure.

   To make the concept more accessible to the locals, these terms are simplified to:

   ![FIGURE 33. ASPECTS OF CBT OPERATIONS](Source: Local ALike Social Enterprise)
• Vision – goals and models for tourism operations as a vehicle for community development

• Creating activities – brainstorming the design of activities that can be presented to tourists that will be a great learning experience for them

• Us and them – targeting customers for our goods and services: what kind of tourists does the community want to attract?

• Presenting what we have – what are the village’s landmarks?

• Make it outstanding, make it famous – identifying outstanding aspects of the village, be it in local wisdom and innovation, services, places or products which best present the community’s identity to tourists

• Friends for the journey – finding partners or networks that the community wants to work with to support each other in expanding and becoming more efficient

• How to find us – channels to communicate tourism and products to potential customers

• Cost and income – evaluating operational costs and knowing sources of income to enable more efficient tour management

• Impact – anticipating the impact from tourism, both positive and negative

The details of the BMC then inform the operation model, tourist package, price, narrative, partners and more.

3. Storytelling

To help foster a sense of local pride, especially in the younger generation, and preserve authenticity and uniqueness in their connection with tourists, the community is then engaged in a ‘storytelling workshop’. Through a process of reflection and identification, the community decides on their ‘key messages’. They consider the following: important things that are interesting to tell; important things (to us); seemingly insignificant things to tell; and insignificant things to not mention. Through these points, they form the narrative of stories they will share with tourists, and potentially come up with jokes or storytelling gimmicks.

4. Test trip

Once the design of the presentation and operations have been concluded by the local community, the project conducts a ‘Test Trip’, whereby UNDP and Local Alike invite a sample group of tourists for a pilot session, to provide feedback and assess the readiness of the community.

A tourist learning how to make local dishes at an organic farm in Sakhon Nakhon.
THE CASE OF BAN NONG SAN COMMUNITY

Ban Nong San Community in Sakhon Nakhon province, situated in Thailand’s northeastern region, is one of the key success stories from this project. Due to limited education and employment opportunity, young adults have to leave the village to continue their secondary studies or seek employment in bigger cities. As a result, about 70 percent of the population living in Ban Nong San are people aged between their 50s and 90s, with 25 percent children 15 and under. This leaves the youth and working age group as just 5 percent of the habitants there.

The main source of income of Ban Nong San community comes from farming. By local estimates, each household earns approximately 20,000 to 30,000 THB (US$625 to US$950) annually from the sales of their agricultural products, which mainly consist of rice and cassava. Before the project starts, youth in Ban Nong San piloted community-based tourism in the community, which has generated some income to the community.

The project started a systematic and comprehensive journey in 2017 with a survey trip to assess the community’s potential as a tourist attraction, which includes its uniqueness, security, accommodation facilities and capacity, and diversity of natural and cultural resources. The survey also explored the social structure in the community and their initial interest.

These considerations were all factored in as the project conducted a SWOT analysis, an analysis of Strengths, Weaknesses, Opportunities and Threats, and then decided whether to proceed in its engagement with the communities. The analysis also informed which areas of improvement should be targeted as part of sustainable CBT development.

Afterwards, a CBT workshop was conducted to ensure all of the community stakeholders understood the pros and cons of CBT, and how this form of alternative tourism differs from mainstream, mass tourism. This again reaffirmed the community's various stakeholders' commitment in pursuing CBT development, and their deepened understanding also enabled them to better participate in the next phase of the project: the Business Model Canvas workshop.

Once the business strategy had been established, a ‘storytelling workshop’ facilitated locals’ communication with potential visitors and tourists. The community gathered to reflect on their common past and present, and how they see themselves together in the future. This helped them form a general narrative from which they could choose highlights to share with tourists. As a result of this series of capacity-building, Nong San community has developed a unique community story.
TABLE 1. SWOT ANALYSIS OF BAN NONG SAN COMMUNITY

<table>
<thead>
<tr>
<th>STRENGTHS</th>
<th>WEAKNESSES</th>
</tr>
</thead>
</table>
| • Abundant natural resources (e.g. Phu Phan Mountain, waterfall, nature trail) and cultural resources (e.g. indigo dyeing, bamboo weaving, local dishes, a workshop for souvenirs)  
• Has some social media presence  
• Organized CBT structure and defined roles, with strong leadership and youth base (for continuity) | • Inconvenient transportation  
• Limited number of toilets |

<table>
<thead>
<tr>
<th>OPPORTUNITIES</th>
<th>THREATS</th>
</tr>
</thead>
</table>
| • Online marketing and sales channels  
• Implementing sustainable agritourism  
• Easily marketed to youth | • Cooperation and coordination among community members |

TABLE 2. BUSINESS MODEL CANVAS OF BAN NONG SAN COMMUNITY

<table>
<thead>
<tr>
<th>VISION</th>
<th>US AND THEM (TARGET CUSTOMERS)</th>
<th>CREATING ACTIVITIES</th>
</tr>
</thead>
</table>
| • Sustainable development, guided by the Sufficiency Economy Philosophy – using CBT  
• Human and economic development, going hand in hand  
• Preservation of local wisdom and cultural heritage  
• Community pride: identity and way of life  
• Outsiders understand the Nong San way of life  
• Youth participation | • Working age (25 to 40 years)  
• Youth  
• Foreigners  
The community has also determined that their hosting capacity is about 20 tourists per day | • Traditional indigo dyeing (tourists can bring back dyed cloth as a souvenir)  
• “Isan” (northeastern) organic farm tour  
• Cooking classes  
• Visits to natural attractions e.g. waterfall, nature trail and collecting herbs for cooking  
• Bai Sri cultural ceremony  
• Giving alms to monks in the morning (Buddhist practice) |

<table>
<thead>
<tr>
<th>PRESENTING WHAT WE HAVE</th>
<th>MAKE IT OUTSTANDING, MAKE IT FAMOUS</th>
<th>FRIENDS FOR THE JOURNEY</th>
</tr>
</thead>
</table>
| • Beautiful rice paddy fields  
• Thai northeastern architecture  
• Local organic farm, managed according to the SEP  
• Indigo dyeing and weaving  
• Phu Phan Royal development study centre nearby | • “Mountain, Rice Field, Forest, Indigo Dyeing” | • Tourism Authority of Thailand  
• Local municipality |

<table>
<thead>
<tr>
<th>HOW TO FIND US</th>
<th>COST AND INCOME</th>
<th>IMPACT</th>
</tr>
</thead>
</table>
| • Facebook  
• Instagram  
• Brochures distributed at various locations such as Sakhon Nakhon airport, TAT information counters  
• Local Alike website | Cost/principal:  
• Natural resources  
• Local knowledge about indigo dye, farming  
Income:  
• Indigo dyeing and farming  
• Tourism and souvenirs | Positive:  
• Supplementary income  
• Community pride  
• Exchange of knowledge and ideas between local hosts and tourists  
Negative:  
• Tourists’ high expectations (possibly unrealistic)  
• Potential loss of way of life if tourism becomes too large of a business and affects locals’ social dynamics |
Example of the story developed by the workshop

Ban Nong San Community had a complex past history with the Thai government. Thailand had a period of insurgency in the late 1900s, and some of the movement resided in the Phu Phan area where Nong San is. As a result, the government responded by expanding its local governance to ensure extensive and sufficient public service delivery, including by supporting local livelihoods through water management to support farming and promoting local development to demonstrate that they are not leaving the people behind.

H.M. King Bhumibol established the Phu Phan Royal Development Study Centre nearby to conduct research and disseminate agricultural knowledge to the farmers, as well as provide livestock and seeds. It was testament to how well H.M. the King knew even the rural parts of his country, as he recognized that the soil and farmland in that region differed from the Central Plain. Thus, a decentralized approach was needed, not just for economic development, but also for research and development of knowledge to suit grassroots needs in distinct locales.

Having been practising sustainable development, Ban Nong San is now a community where people can learn about the history of Thailand and His Majesty’s Legacy on human development.

TABLE 3. INCOME FROM THE PROJECT

<table>
<thead>
<tr>
<th></th>
<th>Average monthly income from tourist activities before the project</th>
<th>Average monthly income from tourist after the project</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>30800 THB</td>
<td>87733 THB</td>
</tr>
<tr>
<td>Change</td>
<td></td>
<td>185%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>US$1000</td>
</tr>
<tr>
<td></td>
<td></td>
<td>US$2600</td>
</tr>
</tbody>
</table>

Today, the community has started to produce local products to generate a new source of income. Initially, local crafts such as handwoven, indigo-dyed bags and shirts were sold as souvenirs for visitors and gradually expanded to online sales through the community webpage. These products are now also being sold through a Thai handicrafts distributor that targets the international market.

Social integration

Community-based tourism at Nong San involves two groups of community members: the hosts and the tour guides. These two groups have to work together before and after each tourist visit to plan. Approximately 80 percent of the hosts are elderly women, while 75 percent of the tour guides are youth. Before joining the project, both groups had limited conversation with each other due to a lack of common interest and the demands of farming. The dialogue required for preparing activities has become a tool to bridge gaps of communication between two different generations and tighten the family fabric.

“I rarely talked to my mother in the past. She is always busy cleaning and cooking at the home while I am always busy taking care of farming. But after joining the project, we have talked more, loved each other more. We feel that we are again family.” – Mr. Pacharapol, 25 years old, who rejoined his mother to develop community-based tourism at Ban Nong San.
Bringing back local pride

Community-based tourism requires the younger generation to lead tours. This incentivizes young people to explore their roots in depth, explore their heritage, and to practise public speaking, including in English. There are opportunities to grow within the community. Learning the history of the local community, and receiving interest from tourists and positive feedback from social media where they sell the tourist package, has brought back pride to the local community. The group hopes to encourage more young people to join the team.

Moving forward, the elders hope that more of the young generation will return to Ban Nong San given the prospect of new job opportunities. The community hopes its young people will recognize the beauty of their heritage, both cultural and environmental, and remain connected to it as they realize that a sustainable source of income is only available if they continue to nurture it.

COMMUNITY DEVELOPMENT FUND

Another important development instrument of community-based tourism is the community development fund. During the Business Model Canvas, community members agreed to establish a community development fund by deducting 10 percent from their revenue and putting it towards a savings account, before distributing the rest to each participating household. This communal fund is meant to be used for the benefits of the whole of the community, and each expenditure is decided by its CBT group members.

For example, in July 2017, Ban Nong San was flooded during the rainy season. The CBT group decided to use the fund to rebuild the village roads to quickly restore the community’s ability to exchange and access supplies they need from outside the area. Not only the families involved in tourism benefited from the fund, but other non-participating households also started to see the indirect benefit the community stands to gain from tourism.

Since the flood, the group continued to save 10 percent of their income, and have been using portions of it to enhance their capacities. For instance, the CBT group agreed to provide funding to young tour leaders to learn from one another through ‘field trips’ where these tour leaders can visit another CBT site. The CBT members agreed on how they would spend their funds, and have agreed on investing in local capacity to further develop community-based tourism by learning from others.
CONCLUSION

Community-based tourism has proved instrumental for localizing SDGs at the community level. Much of the revenue from mainstream tourism is not equitably distributed to local operators and presents a risk of insufficient stewardship and reinvestment in local capacity and environment. In line with the National Agenda on the SDGs, the Tourism Authority of Thailand’s vision to expand tourism to smaller or “second-tier” cities has proved successful in redistributing income to the community level through this pilot project in four communities.

The implementation of the ‘Sustainable Tourism for Human Development’ project has been both timely and strategic. Awarded a Grand Prize from the Pacific and Asia Tourism Association, the project has demonstrated inclusive design, planning and the implementation of community-based tourism, which has proven to be a tool not just for local economic development, but also for the local development of human capacity and resilience. In this project, UNDP in Thailand has leveraged its partnerships with both the government and private sector to enhance the capacity of the community for locally driven development initiatives and equip them with the capacity for sustainable growth, well after the project’s conclusion, as evidenced by the example of the Ban Nong San community.

The success of the four pilot communities is an evidence that people in communities can truly benefit from Sustainable Development Goals if the goals are localized to community level and many more people can benefit from community-based tourism if it is replicated and scaled up to other local communities.
CHAPTER VII

ENABLING INNOVATION AS A CROSS-CUTTING PRIORITY FOR SUSTAINABLE DEVELOPMENT
OVERVIEW OF CURRENT CHALLENGES AND MEASURES TAKEN

Integrated approaches are needed for achieving sustainable development. They must recognize the indivisibility of the SDGs and the interconnectedness of economic growth, environmental sustainability, and social development for all. This will need new ways of developing and delivering goods and services, including through technology – from food supply to health care and from water and sanitation to education. It will also require new forms of social practices, partnerships and organizations to promote inclusivity and ensure that no one is left behind. Thus, innovation needs to be at the centre of all efforts to drive the achievement of sustainable development.

The concept of innovation has evolved from one closely linked with science and technological development to more of a systems model that focuses on identifying more effective solutions to development challenges – with an emphasis on people and their governments. In other words, it is not about technological innovation for its own sake. Instead, it is about dynamic experimentation for problem-solving; incremental improvements to existing systems; supporting the redesign of public service delivery; engaging stakeholders of different demographics (e.g. socio-economic, gender, age, sexual orientation) through formal and informal mechanisms; encouraging digitization and data innovation; and using behavioural insights to shape policies, processes and methods for achieving the SDGs.

Challenges

Translating this broader understanding of innovation and its importance in achieving the sustainable development agenda into action is hindered by several challenges:

a. Need for more focus on public sector innovation:

The dominant narrative about innovation continues to be one of supporting economic growth and job creation, and that innovation-led growth is a key driver of social progress and welfare. The ASEAN Declaration on Innovation uses innovation within the framework of science and technology, and the promotion of inclusive economic growth. However, despite rapid economic growth, inequality and poverty – both relative and multi-dimensional – has also grown. To addressing issues such as inequality, the unequal access to services (including digital access), and marginalization, governments must play a stronger role to reach those left behind and protect the rights of all. And for governments to do so, innovation is required in the public sector to meet the challenges of the 21st century. Achieving the SDGs requires a paradigm shift in how services are provided – including reshaping systems, procedures and methods of public administration. It also requires both embracing technology and fostering conditions for people to participate and collectively address development challenges.

Innovation in the public sector has the potential to trigger a bigger process of transformation and produce positive benefits for citizens through better services and improved service delivery. Public sector innovation can set the framework for pro-poor, inclusive innovation. Social innovation can assist ASEAN countries to deliver better services. Cities and local governments often act as innovation catalysts – reshaping systems, facilitating strong collaboration between institutions and stakeholders and co-creating new services. With a clear innovation strategy, cities can foster innovation for sustainable development – for example new health services – and support innovation in sustainable development, including the specific targets related to innovation across the SDGs.

b. Innovation capabilities and ecosystem

Promoting and sustaining innovation requires an investment in a wide range of skills, not only in technology but also in design, engineering,
management and more. It also needs a high-quality networked infrastructure that can support the entire process – from an idea to a product to scaling up successful products. At present, much of the innovation infrastructure and ecosystem is driven by the private sector. For instance, enormous investments have been made into establishing tech start-up hubs in South and South-East Asian countries, where tech startups received nearly US$8 billion of venture funding in 2017, more than three times of that in 2016.\textsuperscript{144}

In the public sector, motivated and skilled public officials are required to lead the innovation process, and act as a bridge between government machinery and public expectations. Enabling learning and networking within the public sector can assist public officials to reach out and coordinate with other institutions to adapt new technologies and develop more efficient ways and methods to deliver public services. For example, Singapore, among other countries in ASEAN, has focused on integrating the use of new technologies in the public sector and has established specific departments and agencies to support the process.

Public sector capabilities are also critical for supporting social innovation, in the collaborative engagement with stakeholders to innovate for meeting social needs and promoting well-being. The public sector can work with the private sector to drive innovation to develop products and services for poor and marginalized sections of the population, who have traditionally been excluded from the benefits of innovation. At the local and municipal levels (spaces where SDG localization and implementation should happen), institutions and public officials need to have both the mandate and the capabilities to engage with a wide range of stakeholders operating at the local level. Focusing on collaborative spaces and social innovation can help local governments to develop ways and means to tackle governance challenges such as institutional silos and limited resources, and find new approaches to service delivery.

c. Digital divide

As discussed in Chapter I, one of the biggest hurdles in sustaining an inclusive innovation ecosystem is the widening digital divide. Furthermore, as cities evolve to become ‘smart cities’, where connectivity and access to technology will determine access to services, the digital divide needs to be addressed. Governments and other stakeholders, both at the national and local level, need to develop innovative and coherent programmes (including skills programmes) that assure digital connectivity and participation in digital economy. Short of developing such programmes, large segments of the population will continue to be left behind, and “the digital divide becomes a digital chasm”.\textsuperscript{145} In other words, people with better access will be able to continually take advantage of the changing technology, and those that don’t have access will continue to be at a disadvantage. Digital inequality will amplify existing social and economic inequality. Therefore, there is an urgent need for policymakers and industry to prioritize and develop measures to address any widening inequality (see also Box 12 on the impact of the Fourth Industrial Revolution).

**MEASURES TAKEN BY ASEAN COUNTRIES TO PROMOTE INNOVATION**

As mentioned above, the main driver of innovation is the use of science and technology to create new products and services that can bolster economic growth and job creation. The **ASEAN Declaration on Innovation** set the regional policy framework for promoting innovation. It emphasizes the importance of policies and strategies to promote innovation, foster entrepreneurship, and encourage stronger links among government, academia, industry and society for greater impact from the use of science and technology. The Declaration also reiterates the importance of innovation for achieving the SDGs, and calls for further use of science, technology and innovation to address global challenges and societal concerns such as food security, health, energy, water, transport, environment and disaster-related problems.\textsuperscript{146}

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\textsuperscript{146} ASEAN (2017), ASEAN Declaration on Innovation 2017. Available at http://asean.org/asean-declaration-on-innovation/
THE FOURTH INDUSTRIAL REVOLUTION AND OPPORTUNITIES FOR LEVERAGING 4IR FOR THE SDGS

In a report commissioned by UNDP, the Economist Intelligence Unit describes the ‘Fourth Industrial Revolution’ (4IR) of today as fusing physical, digital and biological spheres through robotics, the Internet of Things (IoT), Artificial Intelligence (AI), additive (3D) printing and robotic software automation. To date, the literature on automation and AI focuses mostly on its potential impact on employment, but there are broader worries such as the prospect of ‘premature de-industrialization’ in developing economies, the loss of a successful economic growth model (in the form of labour-intensive, export-focused manufacturing), and even the abuse of new powerful technologies like AI by nefarious actors, whether it be through spying and surveillance, or the use of algorithm-driven social media platforms to spread misinformation and foment tension.

AI and automation have significant implications for the public sector, from reducing government bureaucracy to optimizing service design. But there are also risks, including the embedding of racial, ethnic and gender biases in algorithm-based public service decisions such as those of policing and justice. AI and machine learning can ‘bake in’ prevalent biases from the past into the future, for example image databases or algorithms that associate women with domestic chores and men with sports. The attainment of SDG 5 – gender equality and empowerment of all women and girls – will be undermined if AI tools are developed without oversight of such flaws. A second AI risk in the public services domain relates to privacy protection. The rise of facial recognition and AI-embedded street cameras, and the use of predictive analytics and big data in monitoring health could breach privacy and lead to, for instance, unfair insurance policy practices or biased surveillance.

The 4IR presents both challenges and opportunities for achieving the SDGs. For reasons mentioned above, 4IR can negatively impact the achievement of the SDGs. At the same time, it also presents opportunities to transform the economy and reshape public services for achieving them. Governments, in collaboration with other actors, need to take policy measures and divert investments to make use of some of the early opportunities.

With the growth of the digital economy, countries have an opportunity to establish and regulate digital platforms – businesses based on enabling value-creating interactions between external producers and consumers. Digital platforms leverage ‘demand economies’ of scale through which every participant joining the network – whether drivers and passengers in ride-hailing, or sellers and buyers in e-commerce – makes the platform more valuable for all participants and the data that platforms acquire through that activity is in turn commercially valuable. A sound data regulation policy, along with policies to promote innovation should underpin the transformation to digital economy. Specifically, countries in ASEAN need to enact privacy legislation and consumer protection regulations in the e-commerce domain. In addition, education reforms need to be undertaken to provide the requisite skills for people to participate in the changing economy. This should be coupled with investment in lifelong education and entrepreneurship programmes that allow adults to re-skill in cases of redundancy.

The opportunities provided by 4IR can help improve the overall efficiency of the public sector and can assist in developing data-driven public services to provide targeted services. For instance, in case of the healthcare sector, machine learning can improve monitoring, and be used to identify emerging risks and health patterns which can inform public health policies and programmes. The benefits of AI and machine learning can also be applied to other sectors – such as the energy sector and transportation – to improve overall efficiency.

More importantly, stronger social protection is required to address the disruption caused by 4IR, and build societal resilience. The function of social protection should be to provide every citizen with a basic, dignified standard of living regardless of employment status, disability or disadvantage. Deteriorating mental and physical health, and inadequate financial means to access information about new work opportunities, retrain or migrate to new job opportunities, can lock individuals into permanent poverty. Well-designed and sustainable safety nets can thus ensure a smoother transition, and an elastic, responsive labour market that adapts to change.

Governments, private sector and other stakeholders need to focus on strengthening unemployment benefits, including the possibility of introducing universal basic income. In addition, continuing to strengthen mechanisms for cash transfer and implementing employment guarantee schemes could limit some of the negative impact of 4IR.

ASEAN countries have focused on supporting innovation as part of the changing nature of the economy, as well as public sector innovation, specifically around smart cities. These include:

- **Ecosystem for innovation**
  Countries in the region have made significant investments to nurture the ecosystem for innovation, including establish tech hubs – i.e. spaces designed to foster and support tech start-ups and other innovation centres. Singapore has become a global tech hub and has as part of its policy framework, a clear digital strategy to spur innovation. Indonesia has established over 50 tech hubs – half of which are in Jakarta. A strong commitment by the government (including through specific programmes such as ‘1000 Startup Digital’), banks, corporations and mobile operators to develop appropriate infrastructure is one of the main reasons for the tech-startup ecosystem and this has attracted a number of international accelerators to set up programmes in Indonesia.\(^\text{147}\) Malaysia’s MaGiC, global innovation and creativity centre, is another government-driven innovation centre to provide space and assistance to the tech-startup community. Similarly, the Philippines, Thailand and Viet Nam have also taken steps to promote tech-based start-ups.

While the focus of the start-up ecosystem may be on tech-innovation, many of the solutions developed are also applicable to the public sector and can be solutions for sustainable development challenges. National and local governments have also applied the start-up approach to the public sector to support innovation, including establishing spaces supported by local and national governments focused on generating innovations for citizen engagement and service delivery.\(^\text{148}\) For example, the Philippines Social Innovation in Health Hub is based in the University of the Philippines Manila and collaborates with the Department of Health, the Philippine Council for Health Research and Development under the Department of Science and Technology, and other key health and innovation organizations to transform the healthcare system through social innovation. It champions social innovation in health with a range of stakeholders through research, capacity-building.

\(^{147}\) GSM Association (2018), *The Mobile Economy of Asia-Pacific*.

SDG Localization in ASEAN: experiences in shaping policy and implementation pathways

Smart cities in Southeast Asia can deliver real quality-of-life improvements.

- **260k–270k** Kilotons of GHG emissions avoided (Equal to the total emissions produced by Laos)
- **4,900–5,000** Unnatural deaths averted annually (Equivalent to 50% of Malaysia’s yearly total)
- **8M–12M** Disability-adjusted life years (DALYs) reduced (More than the total DALYs for all of South Korea)
- **1.2M–1.5M** New jobs created (Equivalent to 20–30% of the workforce in Jakarta, Bangkok, Manila)
- **$9B–16B** Savings on the cost of living (Equivalent to 2–4x Brunei’s total household expenditure)
- **6M–8M** Man-years saved in commuting time (2x more than Singapore’s workforce spends commuting)

*Source: McKinsey Global Institute analysis*

and influence. UNDP is supporting Makassar City to establish a public innovation lab for service delivery. China is another good example of a country setting a national but locally led agenda for public sector innovation, as well as tech innovation ecosystems (see Box 14 on the Hydrogen Bus).

- **Smart cities:**

  Closely linked to tech innovation is the emergence of smart cities. “Smart” does not simply mean the use of ICT tools to improve overall efficiency and develop and deliver new services. It is about reinventing cities from the bottom-up by improving the overall quality of life in cities and responding to needs on the ground – whether combating and mitigating effects of climate change and disaster risks, reducing traffic congestion, improving air quality or ensuring greater transparency and accountability of the municipal administration towards its constituents. In other words, smart cities are people-centred. The potential impact of adopting smarter solutions is presented in the figure below. This has direct implications on the achievement of at least 70 percent of the SDG targets.

Cities across ASEAN – from major cities such as Bangkok, Jakarta and Manila to secondary cities such as Bandung, Danang, Makassar and Phuket – have embraced smart initiatives and continue to devote resources to become smarter cities. In Malaysia, the Federal Department of Town and County Planning – PLANMalaysia – is leading the efforts on an agenda for smart cities. The Integrated Land Use Planning Information System (i-plan) is one of the smart initiatives developed by PLANMalaysia and it provides geospatial reference information related to land use planning, which makes it easier for local governments and federal departments to collaborate and make decisions around land use. It is also an easy monitoring and tracking tool for local actors.

Singapore is ahead of the rest of the ASEAN countries and is the only country in the world to become a people-centric “Smart Nation” (see Box 13 on the Case of Singapore as a Smart Nation). Singapore

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Chapter VII Enabling Innovation as a cross-cutting priority for sustainable development

BOX 13

A SMART NATION: THE CASE OF SINGAPORE

“ULTIMATELY, CITIZENS, NOT TECHNOLOGY, ARE AT THE HEART OF EVERY ‘SMART CITY’.”

Singapore started 36 years ago with a clear vision to solve complex challenges through technology and innovation. First, it invested in the massive National Computerization Plan from 1981 to 1985. It has achieved convergence and connectivity since 2000, and Singapore became the world’s first “Smart Nation” in 2014. Singapore defines a smart nation as one that a) anticipates the needs of people, b) delivers services more efficiently through technology, and c) empower citizens to solve problems.

The smart nation initiative calls for a whole-of-nation approach. It requires government agencies to collaborate and remove their silos, as well as for people, within and outside the government, to pool together their diverse knowledge, viewpoints and ideas to find potential solutions. Prior to the Smart Nation Initiative, various channels and agencies tended to operate in silos, where systems of information, activity and governance are isolated from each other. This posed a challenge for the delivery of public services. By harnessing data, Singapore can now identify problem areas and formulate solutions to work around them. For example, using sensors on bus fleets, 12 million records of public transport were captured and data analytics was performed to decongest the streets of Singapore. Identifying where more buses are needed has reduced congestion by around 90 percent and commuters’ wait times on popular routes by 3 to 5 minutes.

Further, the government has created next-generation platforms such as a nationwide sensor network (Smart Nation Platform) that will enable the public sector to pull together data from multiple sensors and help agencies in the efficient running of the country, including maintenance, urban planning, and incident response. The government has also built a new developer portal to make open data much simpler for all agencies. This helps agencies publish real-time streams of data to app builders, enabling the co-creation of solutions with citizens and businesses. Digital technology is also utilized to empower citizens in sharing governance responsibility. An example is the OneService app, which is a convenient way for members of the public to give their feedback on municipal issues, without having to find out which agency is responsible for the issue. The city is also experimenting with crowdsourcing models such as the myResponder app that enables qualified private volunteers to assist people suffering from cardiac arrest near their location.

The government strives to facilitate innovations by the public and the private sector. It puts in place appropriate policies and legislations to nurture a culture of experimentation and encourage innovation and the eventual adoption of new ideas. At the heart of Singapore’s entrepreneurship action is the Launchpad, a dedicated zone for start-ups, where they can build a proof of concept and then scale it up quickly, leveraging government support and a ready network of accelerators, incubators and venture capitalists in the ecosystem. In addition to offering test beds for knowledge sharing, business collaboration and deal-making, the government has shared some 9,000 government data sets for the world’s tech community to use to explore and test new ideas.

With a rapidly ageing population, Singapore recognizes that the ageing population will be supported by a smaller working-age population and can impact citizens’ ability to use resources such as energy, food and water sustainably, and will add pressure on current healthcare systems. Singapore is developing specific programmes to train and engage the older population, as well as develop more targeted initiatives such as a telehealth rehabilitation system where data is transmitted wirelessly through sensors to enable preventative and out-of-hospital care.

has leveraged its experience and has established the ASEAN Smart Cities Network (ASCN). ASCN, established in 2018, is a collaborative platform where cities can work towards the common goal of smart and sustainable urban development. The platform aims to facilitate cooperation on smart city development; catalyse bankable projects with the private sector; and secure funding and support from ASEAN's external partners. Twenty-six cities have signed up to be pilot cities of ASCN. The network has the potential to set standards, introduce regional smart initiatives, and share best practices.

RECOMMENDATIONS

- Develop measures to address the digital divide – including programmes to develop the skills of the population to participate in the digital transformation of the economy and the public sector.

- Prioritize and support public sector innovation (including at the local level) through a "whole of government" approach to improve efficiency and collaboration between different institutions and agencies for more people-centric services.

- Support the digital readiness of public institutions to deliver digital services.

- Strengthen and support local governments' ability to engage with a wide range of stakeholders and establish collaborative spaces and partnerships to address local challenges and needs.

- Leverage the current enthusiasm for smart cities to support a clear policy framework and infrastructure to make smart cities more people-centric and promote basic rights of all.

CASE STUDIES

The case studies in this section illustrate how social innovation approaches can help to recognize and articulate needs and develop and deliver new services to meet these needs. The case study presents the whole journey of developing one new service in Makassar City – from consultations and design to incubation, prototyping and scaling up – and highlights some of the challenges along the journey.
Chapter VII Enabling Innovation as a cross-cutting priority for sustainable development

CASE STUDY 9: SOCIAL INNOVATION TO DEVELOP NEW TRANSPORTATION SERVICES IN MAKASSAR CITY, INDONESIA

THE PROBLEM

Makassar City is the provincial capital of South Sulawesi, Indonesia. This port city is the centre of official, commercial and social activities. According to the 2010 census, the city has about 1.3 million people and the greater metropolitan region, which includes 17 surrounding districts, has 2.4 million inhabitants. Makassar is also considered as the hub of Eastern Indonesia and attracts visitors from the region. The capacity of the city streets exceeds that of the current traffic, and the situation is expected to worsen in the near future. At present, there are about 500,000 vehicles, and 2 million motorcycles on the city streets.

The city’s public transportation system consists of Bus Rapid Transport (BRT) or Busway (about 7,600 vehicles), privately owned modified minivans, which are called ‘pete-pete’ (4,111 vehicles) and tricycles (becak). The BRT is managed by the provincial government, while the city administration has the mandate to regulate pete-pete and becak.

The city’s Transportation Master Plan prioritizes the development of an integrated transportation system to ease congestion and improve public transportation – including the introduction of smart pete-pete, a modified and upgraded version of the pete-pete with both sitting and standing capacity, free wifi and other features, and implementation of multi-use ticket schemes like “one day-one ticket”.

Several challenges persist in developing a people-centric public transport system. These include: lack of relevant and recent data on mobility patterns and user needs, the unreliability of different modes of public transport, lack of information on service providers’ challenges, a mismatch between demand and supply of transportation, and a lack of coordination between provincial and city administration to improve routes (specifically the BRT). In 2016, the city administration at the time wanted to introduce smart pete-pete as a means to improve public transportation system in the city and also comply with the Presidential Order Numbers 61 and 71 of 2011 on reducing greenhouse gas emissions. However, implementation issues persisted. The city is still seeking easily implementable solutions to make public transportation services smarter and people-centric.

MAKASSAR CITY AND INNOVATION

Makassar City brands itself as the “Sombere [kind hearted] and Smart City”. It has adopted several innovative solutions to improve public services in the city. It has taken steps to collect and use real-time data to improve decision-making processes and day-to-day administration. It has introduced smart-cards in schools to track students’ activities and progress, and a waste-to-energy initiative. The city’s ‘operation room’ allows for tracking of different services such as garbage trucks and ambulances, However, the tracking of services is still in the prototype phase and the city will have to invest financial and human resources and improve municipal governance systems to scale-up and redefine public service provision.

Based on the city’s ongoing efforts to transform public services, the Mayor’s office and the city transport department (DISHUB) wanted to find

° Social innovation approaches allow for collaborative codesign of services. It can promote local ownership of solutions and increase commitment to find solutions for implementation challenges.
° Local spaces for stakeholders to engage in the iterative process of developing a minimum viable product is vital.
° Management arrangements and financial sustainability issues should be considered from the onset and solutions should be developed at every stage of the innovation journey.

The last survey to determine the number of pete-pete required for providing adequate services was conducted in 2007: Department of Transportation (DISHUB), interviews.


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innovative solutions for its public transportation issues. The city sought UNDP’s assistance to resolve the issue of the pete-pete mini-vans and make the public transportation system more user-friendly.

UNDP, using social innovation approaches, supported collaboration between all relevant stakeholders to develop and implement a solution. The below figure shows the different phases of the approach, along with the timeline for each phase. The rest of the case study highlights the whole process – from initial consultation to scaling-up of the solution.

**RESEARCH AND PROBLEM IDENTIFICATION**

As a first step, UNDP, in collaboration with **UN Pulse Lab Jakarta (PLJ)**, the Department of Transport (DISHUB) and other partners, conducted a mobility pattern study to gain insights into user's experiences and corroborate findings from other research studies on the transport sector in Makassar. The study provided insights into people's attitudes and preferences, and some governance challenges affecting the provision of efficient transport services. These include the high cost of public transport compared to private ownership of transport, the lack of reliability of the public transport system leading to a reliance on private transportation (including by students), and unequal geographic distribution of services, that some areas are better served than others.

**IDEATION**

Based on the insights from the study, UNDP, PLJ, DISHUB and the local partner **BaKTI** organized a three-day multi-stakeholder design and ideation workshop to bring together all relevant stakeholders to develop solutions for some of the problems identified through the mobility study. The three-day workshop brought together over 40 participants from the city's Department of Transport (DISHUB), the Provincial Transport Authority, the pete-pete owners’ association (Organda), transport sector experts, students, teachers, disability association representatives, urban planners, the local design community and others. Six solutions were developed during the design workshop which were then combined into three solutions:

a. Pasikola: “re-purposing” pete-pete to provide reliable school transport services
b. Bajikia: improving feeder routes to existing bus routes
c. eNassami: apps and offline information system on bus schedules

The ideas developed through the multi-stakeholder design workshop did not solve all the issues related to making public transportation system more user-friendly, but provided some solutions for easing traffic congestion and providing reliable school transportation services.

**INCUBATION**

This is a critical phase, as it determines whether an idea can be developed into a minimum viable product or service. A six-week incubation process (Jan–Feb 2017) helped the participants to further refine their ideas, explore the feasibility of the ideas with different stakeholders, and develop business plans to make prototypes of the ideas and pilot-test them. Participants decided that it would be more useful to merge the different ideas into one and develop one integrated solution.

‘Pasikola’ was the new integrated solution. The service derives its name from the local **Makassarese**
Pasikola aims to provide reliable school bus service for elementary and junior high school students. Pete-pete will be repurposed and refurbished to make them more child-friendly. Each new vehicle can transport 10 to 12 students and include several new features (see box). During the incubation phase, a detailed business model was developed for prototyping and testing the service. The business plan included suggestions for management arrangements, and financial sustainability— including fee for service. In addition, it also included the user interface design for the app, and a description of the backend system and tracking data availability.

In this phase, DISHUB and Organda (the association of pete-pete owners and drivers) were fully engaged and provided valuable information related to the city’s transportation system’s gaps and costs. Their contribution helped to shape the business plan.

**Prototyping and Piloting**

This phase involved both developing the prototype and rolling out the service, and identifying and resolving all aspects of providing a service—the overall business model, application development, refurbishing vehicles, client interface, the management arrangement, standard operating procedures, and the code of conduct for drivers.

This phase includes several subphases and was implemented by the local NGO BaKTI, with financial assistance from UNDP. First, one vehicle was refurbished, and the base application was developed. With assistance from the Department of Education, one school was identified to pilot test the service. Parents of the students were informed about the piloting of the Pasikola service. Following successful pilot testing, 4 additional vehicles were added to the fleet and later expanded to 10 vehicles covering 7 schools. More details on the achievements from the piloting phase are included in the infographic below.

More importantly, as far as the management arrangement of the service was concerned, the Mayor of Makassar City signed the regulation, following public consultations, to incorporate Pasikola as a service offered by the city through the Dinas Perhubungan (Department of Transport). The new regulation, which comes into force in 2019, allows for the city to allocate a budget for Pasikola. The Pasikola team will continue to function semi-independently and run the day-to-day operation of the service. The city plans to establish a Badan Layanan Umum Daerah Unit Pelaksana Teknis Dinas (BLUD-UPTD) to run the service as an extended service unit. This will allow the city to retain an overall management and oversight role, but the day-to-day operations of Pasikola will be run independently. The Pasikola office will be soon established within the premises of DISHUB.

**Pasikola Features**

- Fully functional and safe vehicles, evaluated and approved by DISHUB
- Modified doors to include steps to make it easier for younger students to enter and exit the vehicle
- Redesigned seats
- Child-safe windows
- Water dispensers for students to stay hydrated during commuting
- Audio entertainment systems with contents that students help curate and contribute
- USB power corners (for charging phones)
- Trained and certified drivers
- Code of conduct for bus drivers
- An app to notify parents about pick-up and drop off, and route tracking
- In-app calling to facilitate communication between parents and drivers
- In-app games on road etiquette
SCALING UP

The steps to scale-up the service and make it financially sustainable started in earnest from May 2018. In this phase, the fee structure and payment mechanism was tested and expanded. The positive feedback from the clients (the parents) and requests for increasing the service has attracted the attention of private sector companies. Discussions are currently underway to identify the exact areas of support from the private sector. This could include in-kind support such as fuel subsidies or covering service fees for students from disadvantaged families. Private sector support will also be valuable to improve the overall business model of the service and increase the capacity of the core team to manage the expanded services. Given that Makassar City has over 100,000 students and limited reliable transportation services, there is scope for Pasikola to expand and absorb all 4,400 pete-petes that are currently operating in this city. This could bring down traffic congestion considerably in the city during peak hours.

The development and implementation of the Pasikola service also contributed to other positive results. It raised interest in social innovation approaches among other departments in the city. UNDP organized workshops on design thinking for 18 of the city departments. The city is currently planning to establish an innovation lab to facilitate the collaborative co-design of solutions to some of city’s most intractable challenges. There is also interest from other cities in Indonesia to replicate Pasikola and address traffic congestion issues. Cities – especially medium and small cities – are willing to use social innovation approaches to develop implementable solutions in their cities. Pasikola also contributes to the achievement of SDGs, especially SDG 4 on quality education, and SDG 11 on sustainable cities and communities.
LESSONS LEARNT

Pasikola addresses several issues: a) meeting an unmet need – in this case, reliable school transportation, b) reducing traffic congestion, c) saving time for caregivers (up to two hours per day), and d) providing an alternative livelihood to pete-pete drivers. Pasikola's journey from an idea to a scalable service also offers several lessons for supporting successful social innovation initiatives. These are:

- **The importance of involving officials from key institutions**
  
  This social innovation initiative offered one of the rare opportunities for city officials to think about solutions rather than focus only on problems. This created a strong sense of ownership among officials and sustained their involvement in the whole journey – from the research phase onwards. DISHUB officials contributed to the development of the service in every phase, and have presented the service in several forums in Indonesia.

- **The importance of a local lead organization to facilitate the innovation process**
  
  One of the key factors for success is the support provided by the local NGO, BaKTI. BaKTI is a recognized organization with a long history of facilitating knowledge exchange and supporting local solutions. BaKTI contacts and its resources proved valuable for leading Pasikola from an idea to a full-fledged service. BaKTI reached out to schools and parents to encourage them to participate in testing Pasikola. It facilitated discussions between all concerned departments and organizations (including Organda) to iron out issues during the piloting phase.

- **Establishing the core team**
  
  The core team was critical for running the day-to-day operations of the services. People with the requisite skills were hired to complement and support the team that developed the idea for Pasikola to roll out the service, and fill gaps following attrition. The drivers were also seen as part of the core team and were involved in all discussions related to financial sustainability.

- **Clarifying the management arrangements and financial sustainability issues**
  
  The management arrangement and financial sustainability were two issues that were prioritized starting from the incubation phase. This focus helped to advocate for the adoption of a mayor's regulation related to Pasikola during the pilot phase and an agreement to establish Pasikola as an extended service unit within DISHUB. In addition, the focus on financial sustainability also helped to forge new partnerships to offset some of the costs related to Pasikola.
INNOVATION BEHIND THE WHEEL: THE CASE OF HYDROGEN BUSES IN CHINA

With rapid industrialization, urbanization and growth since the 1990s, China is the world’s largest producer and consumer of energy and the largest emitter of greenhouse gases. China has pledged to reach its peak emission around 2030, and has steadily increased its investments in clean energy technologies. China also set a target for non-fossil fuels consumption to account for 15 percent of its primary energy consumption by 2020 and 20 percent by 2030. However, it is anticipated that China’s oil consumption will grow, due to demands from the transport sector.

One potential solution to reduce fossil fuel consumption is to develop vehicles that use new energy, New Energy Vehicles (NEV). Hydrogen technology, in both its fuel cell and energy storage and generation capacity suits the need of a NEV. Establishing a hydrogen economy would allow cities to have functioning clean energy transportation. Through a project funded by the Global Environmental Facility, UNDP China started the pilot project in 2003 on fuel cell buses for public transport. UNDP worked in close collaboration with the Ministry of Science and Technology to demonstrate the viability of hydrogen-fueled vehicles. The vehicles were first presented to both a national and global audience at the 2008 Beijing Olympics, and later at the Shanghai World Expo in 2010.

This created sufficient traction for progress, and helped UNDP create a platform of partners around the issue, as well as the International Hydrogen and Fuel Cell Association. UNDP also helped to organize the annual Fuel Cell Vehicle Congress. This platform allowed for promotion of not just the buses, but also fuel cell passenger cars, cargo trucks and utility vehicles, and had an impact on national policy.

UNDP engaged with smaller cities to assess their interest and the prospects for clean transportation, and specifically an interest in fuel cell vehicles, and also integrate hydrogen storage, heat and energy production. This would enable the creation of the first hydrogen economy in China. Local government eagerly embraced the idea and agreed to fully fund the project.

UNDP’s focus was on establishing the full ecosystem for the use of hydrogen technology - from hydrogen production through renewable energy, industry recycling and reusing, developing industry technical standards, and building energy storage and refilling stations. Towards this end, UNDP expanded the fuel cell bus pilots to five other cities, and established refueling stations in Foshan and Beijing, and a hydrogen separation plant in XX. There is a growing demand from cities to participate in the ecosystem of hydrogen technology, which has grown to a US$12.6 billion industry of research and development and production since the start of the project in 2003.

One of the main reasons for the success of this project was the overall enabling environment to adopt an innovative solution, and making use of different opportunities to expand the scope of the solution to create the overall ecosystem required to sustain the solutions. This was made possible because of the plan to scale up from the outset, innovative financing (reaching 100 percent government funding) and identifying non-traditional partners that can support scaling up.