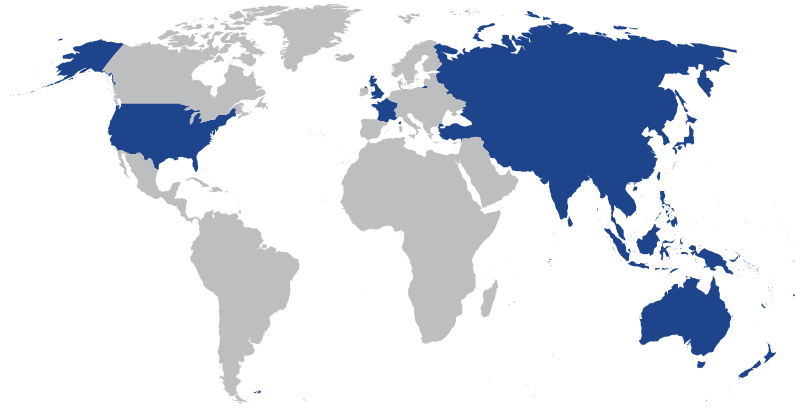# Complementarities between the ASEAN Community Vision 2025 and the United Nations 2030 Agenda for Sustainable Development:

A Framework for Action

UNITED NATIONS
ESCAP
Economic and Social Commission for Asia and the Pacific

asean

The blue areas of the map indicate ESCAP members and associate members

The Economic and Social Commission for Asia and the Pacific (ESCAP) serves as the United Nations' regional hub promoting cooperation among countries to achieve inclusive and sustainable development. The largest regional intergovernmental platform with 53 Member States and 9 associate members, ESCAP has emerged as a strong regional think-tank offering countries sound analytical products that shed insight into the evolving economic, social and environmental dynamics of the region. The Commission's strategic focus is to deliver on the 2030 Agenda for Sustainable Development, which is reinforced and deepened by promoting regional cooperation and integration to advance responses to shared vulnerabilities, connectivity, financial cooperation and market integration. ESCAP's research and analysis coupled with its policy advisory services, capacity building and technical assistance to governments aims to support countries' sustainable and inclusive development ambitions

Complementarities between the ASEAN Community Vision 2025 and the United Nations 2030 Agenda for Sustainable Development:
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Forewords

"Leaving no one behind" is an integral part of Thailand's sustainable development approach. It is also a fundamental principle behind ASEAN's ongoing efforts to build a people-centered Community as well as the international community's commitment to achieving the 2030 UN Agenda for Sustainable Development.

The confluence of these three processes, anchored on the shared commitment to ensuring that every person is part of and benefits from sustainable development, was the genesis behind the initiative of ASEAN and the United Nations Economic and Social Commission for Asia and the Pacific (ESCAP) based in Thailand to identify and enhance complementarities between the ASEAN Community Vision 2025 and the abovementioned Agenda for Sustainable Development. Based within the framework of ASEAN-UN cooperation, this "Complementarities Initiative", as it came to be known, became one of the high priority activities of ASEAN over the past two years.

Beginning with a comprehensive mapping exercise in 2016 which sought to identify possible synergies between the hundreds of action lines of the three ASEAN Community Blueprints and the various priorities envisaged under the 17 Sustainable Development Goals (SDGs), to brainstorming meetings at policy and expert level, ASEAN and UN ESCAP sought to identify and develop value added, cross-cutting regional catalysts that could simultaneously drive the ASEAN Community-building process while attaining several SDGs at the same time.

Endorsed by the ASEAN-UN Summit last year, these cooperative efforts between ASEAN and UN ESCAP have resulted one year later in this Report that is here before you. Indeed, this is likely the first report by any regional organization on enhancing complementarities between the regional integration efforts and the global efforts at achieving the SDGs, with the goal of attaining a regional Community and a global community of nations where no one is left behind.

As ASEAN Coordinator on Sustainable Development Cooperation, Thailand is proud to have played a small part in promoting closer engagement between ASEAN and the UN, through this ASEAN-UN ESCAP joint endeavour, to promoting sustainable development cooperation that would contribute to both the ASEAN Community-building efforts and the attainment of the SDGs. It is our hope that this Report will help serve as an inspiration and a platform to develop additional concrete and feasible initiatives that will maintain strong momentum in sustainable development cooperation, not only between ASEAN and the UN, but between ASEAN and other external parties as well as the international community. To this important goal for the region and for humanity, Thailand will continue to lend its full support.

Don Pramudwinai
Minister of Foreign Affairs of the Kingdom of Thailand

Over the past fifty years, ASEAN and ESCAP have forged a sound strategic partnership within the broader framework of ASEAN-UN collaboration. More recently, the two organisations have worked together to align the ASEAN Community Vision 2025 and the United Nations 2030 Agenda for Sustainable Development. ASEAN leaders recognized the potential this collaboration had when they formulated the Community Vision 2025, underlining "the complementarity of the United Nations 2030 Agenda for Sustainable Development with the ASEAN community building efforts to uplift the standards of living of our peoples". The two agendas are mutually reinforcing. An alignment of their planning, implementation and review will create the enabling conditions needed to accelerate the achievement of national, regional and global sustainable development objectives.

This report is among the first outputs of the "Complementarities Initiative", a partnership between Thailand as ASEAN's Sustainable Development Coordinator, the ASEAN Secretariat and ESCAP. It aims to demonstrate a practical approach to complementarities by identifying concrete ideas and recommendations for action that could help drive both Agendas forward. This report focuses on three main areas:

1. It provides a framework to study the complementarities between the two agendas based on values, principles and cross-cutting priority areas for action.

2. It undertakes a solid quantitative analysis based on the best existing data and includes scenarios on the future performance of ASEAN in the specific priority areas. The analytical work is based on trend modelling and is complemented by a gap analysis that identifies areas where further work is needed for the objectives of both agendas to be achieved.

3. Specific flagship initiatives and follow-up actions are suggested which could support ASEAN Member States to take advantage of the complementarities between the ASEAN Community Vision 2025 and the United Nations 2030 Agenda for Sustainable Development to simultaneously achieve their goals.

ESCAP will continue to work with ASEAN to implement the recommendations in this report and to support member States in creating value for their people. Our long-standing collaboration has become even more crucial after the adoption of the 2030 Agenda for Sustainable Development, which recognizes the importance of partnerships to foster sustainable development through sub-regional organizations. It is our hope that other development institutions and dialogue partners will use this report on prioritizing, planning and implementing actions at the sub-regional, national and local levels of ASEAN. ESCAP stands ready to cooperate with other development partners in this area of work and is committed to playing its role as a regional think-tank to support the implementation of the 2030 Agenda for Sustainable Development in Asia and the Pacific.

Shamshad Akthar
Under-Secretary General of the United Nations
and Executive Secretary, United Nations Economic
and Social Commission for Asia and the Pacific

As one of the most successful regional organisations in the world, ASEAN has played an important role in implementing global frameworks and programs. Concurrently, global frameworks and commitments such as the UN 2030 Agenda for Sustainable Development have also greatly influenced ASEAN Community building endeavours.

Promoting complementarities between the ASEAN Community Vision 2025 and the Sustainable Development Goals (SDGs) is, thus, prominent on the ASEAN agenda. In declaring the ASEAN Vision 2025, ASEAN Leaders recognised the importance of creating synergy and complementarities between the three ASEAN Community Blueprints and the SDGs, as demonstrated by the following statement of the Vision 2025:

"…underline the complementarity of the United Nations 2030 Agenda for Sustainable Development with ASEAN Community building efforts to uplift the standards of living of our peoples."

Strong political commitment at the highest level of ASEAN enables an environment where the ASEAN Vision 2025 and SDGs emphasise and improve each other's qualities, with the goal of improving the lives and well-being of the peoples of ASEAN.

In this regard, this Joint Report aims to support ASEAN in developing policies and strategies linking the ASEAN Vision 2025 with the SDGs through the analysis and identification of crosscutting priorities. The Joint Report also presents an analysis and recommendations focusing on the five priority areas of: (i) Resilience; (ii) Infrastructure; (iii) Sustainable Consumption and Production; (iv) Poverty Eradication; and (v) Sustainable Management of Natural Resources.

The publication of this Joint Report is timely. It is a welcome addition to the celebration of ASEAN's 50th Anniversary when the Association is ushering in a new era. Furthermore, the Joint Report represents fruitful collaboration and productive partnership between ASEAN and UNESCAP to leverage on complementarities between the ASEAN Vision 2025 and the UN 2030 Agenda. Such efforts can unlock the potential of regional groupings in achieving the UN 2030 Agenda for Sustainable Development and for the SDGs to contribute to regional integration and development.

Le Luong Minh
Secretary-General of ASEAN

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Executive Summary

ASEAN is committed to the implementation of two parallel, but inter related processes: the ASEAN Community Vision 2025 (ASEAN Vision 2025) and the United Nations 2030 Agenda for Sustainable Development (2030 Agenda). From the outset ASEAN Member States underlined the complementarity of these two agendas in their efforts to uplift the standards of living of the region's peoples. Building on Thailand's Revised Information Paper/Matrix: *Compilation of Possible Complementarities between the ASEAN Community Blueprints 2025 and the 2030 Agenda for Sustainable Development* that was reported to ASEAN Leaders through the ASEAN Coordinating Council (ACC) in 2016, this report identifies major complementarities between the ASEAN Vision 2025 and the 2030 Agenda, assesses progress for the implementation of selected areas of complementarity and provides a menu of options to implement the two agendas in an integrated way. What is the shared common vision is that no one should be left behind, either in the ASEAN community-building process or the global efforts to realize the Sustainable Development Goals (SDGs).

Analysis in this report show that ASEAN Member States have made notable progress in promoting economic, social and environmental advancement. In order to maintain this progress and to meet the Vision 2025 and the 2030 Agenda, ASEAN countries will need to accelerate efforts. The report shows that one of the best ways to achieve this is to focus on the complementarities between the two Agendas. The report identifies five priority areas of complementarity to help focus interventions and proposes seven flagship initiatives that could support concrete action to efficiently draw on limited resources and to deliver high-impact and inclusive benefits across a broad range of sustainable development priorities.

A framework for complementarities

The framework developed for this report presents complementarities at all levels of the ASEAN Vision and the 2030 Agenda, including: goals and objectives; values and operational principles; cross-cutting themes for actions; and implementation mechanisms. The report highlights the following set of common values and principles to underpin actions that are meant to simultaneously address the two agendas:

i. **People-centred: putting people first** in the vision of a prosperous society
ii. **Inclusive: leaving no one behind**, especially the vulnerable, as society develops
iii. **Sustainable**: providing social and economic benefits within planetary boundaries
iv. **Resilient** with enhanced capacity to respond to shocks and challenges
v. **Dynamic and innovative** in the provision of social services and health care
vi. **Built around peace, stability and justice** in a prosperous world.
vii. **Partnerships based**: collaborating to support implementation.

Furthermore, the report recommends that complementarities be approached in a systematic manner, with a set of operational guidelines that should be used in developing actions:

i. Actions should reflect **Commonalities** in both Agendas
ii. They should be **Non-conflicting** in commitments by countries to either ASEAN or the UN
iii. They should create **No new goals** but respect commitments already made by countries
iv. Actions should **Streamline** ASEAN and corresponding UN goals during implementation yet catalyse action and initiative based on these existing commitments
v. They should be **Synergistic**, providing multiple benefits; and
vi. The should be **Uniting**, ensuring all stakeholders, people and priorities are connected

Priority areas for complementarities

Taking into account the elements of the complementarity framework as well as the operational guidance for action, five (5) priority areas have been identified: poverty eradication, infrastructure and connectivity, sustainable management of natural resources, sustainable production and consumption, and resilience. These priority areas are composite: addressing one of them can lead to addressing other multiple interlinked, cross-cutting issues, and actions taken under these themes would simultaneously lead to implementation of an important subset of both the ASEAN Vision and the UN 2030 Agenda.

For each of the priority areas, the report provides analysis of the trend between 2000 and 2015 and the current status (by 2015). It also offers two scenarios for future development until 2030: an *Existing Trend Scenario* which assumes a continuation of past trends until 2030, and a *Doubling Effort Scenario* where efforts and achievement are doubled for the existing trend until 2030. The results of this analysis are presented in the following diagrams.

Natural Resource Management

- Material Footprint
- Forest Area
- Protected Area
- Air Pollution
- GHG Emissions

Sustainable Consumption and Production

- Resource Productivity
- Government Expenditure
- Household Expenditure
- Capital Investment
- Eco-efficiency of Industry

Resilience Capacity

- Economic Management
- Social Inclusion/Equity
- Public Sector Management and Institutions
- Structural Policies
- Overall Capacity

Poverty eradication. The analysis shows that over the past two decades many ASEAN countries have successfully reduced absolute and relative poverty and improved access to food for a large number of households. Efforts to completely reduce undernourishment will be especially important for infants and children to avoid the detrimental effects of wasting and stunting for their later ability to fully participate in education, employment and to lead fulfilled lives.

Infrastructure and connectivity. The gap analysis shows that major improvements in transport infrastructure, communication and the provision of modern energy, water and sanitation will need to occur over the coming decades to further improve the economic competitiveness, liveability and human capital and health in the ASEAN region. While the existing trend points in the right direction even doubling current efforts could leave a gap for most indicators that requires additional policy attention.

Sustainable management of natural resources. The analysis shows that natural resource use and waste and emissions are growing rapidly in most countries in the ASEAN region and this growth in part is supporting industrialization and urbanization, rising incomes and a growing material standard of living. Managing natural resources responsibly will be an important policy objective for the ASEAN region in the decades to come because of increased domestic resource scarcity in some countries and continuing volatility of world market prices for strategic resources that are increasingly imported from abroad.

Sustainable Consumption and Production (SCP). The analysis shows that the outlook for material footprint of government and household consumption and capital investment in the ASEAN region until 2030 suggests a strong increase in all aspects of consumption and additional growth in emissions. These will go hand in hand with the ongoing industrial and urban transition in the region. Making overall resource productivity and decoupling of economic activity from environmental pressure an overall policy objective of the ASEAN community would make it possible to align economic growth with environmental and social objectives and would place the ASEAN region in a globally competitive position comparable to, *inter alia*, Australia, China, Japan, the Republic of Korea, and the European Union which are all investing in policies that support resource productivity and decoupling in major areas of high resource use including housing, mobility, food, energy and heavy industry.

Resilience. The analysis shows that there are considerable gaps in four key capacities that need to be strengthened or established to improve resilience of a national economy and society, namely, adaptive, anticipatory, absorptive and transformative capacities. Empowering governments in ASEAN member countries to deliver conditions for resilience that enable adaptive governance and management will require new levels of transparency, cross-agency collaboration and new forms of communication that allow for experiments and innovation in enhancing resilience of people, processes and infrastructure to replace the traditional risk management and post-disaster focus.

The interlinked nature of the priority areas indicates that potential trade-offs should be carefully thought out, to avoid situations where impacts of action addressing one thematic cluster cancel out or have negative effects in another area.

Recommended actions

The report identifies seven concrete flagship initiatives as options that would address gaps and issues under the priority areas, advance the complementarities approach and support the ASEAN community to leap forward towards its vision (or Vision 2025).

Eradicating poverty in the future ASEAN Community includes ensuring children will have equal access to opportunities and resources. An initiative on **Improving Nutrition and Reducing Stunting in ASEAN** would enhance the ability of women and children in vulnerable groups to lead socially and economically productive lives, and in doing so strengthen their resilience and that of their communities. It would ensure food security through productive safety, and improve access to affordable and diverse diet in rural and urban households.

Addressing modern infrastructure needs in ASEAN Member States would involve a combination of technological advances to promote connectivity, zoning and urban planning for higher efficiency and people-centred interactions, and preservation of traditional aspects, community and public goods. An **ASEAN Council for Sustainable Infrastructure** would support development of infrastructure in ASEAN that avoids lock-ins, and is future-proof – taking into account changes in society and needs of people, and to avoid being obsolete shortly after completion. To promote connectivity across Member States, it would support transnational infrastructure planning and development, and also promote investment in public infrastructure, including through grants and public private partnerships.

A proposed **ASEAN Resources Panel**, possibly modelled after the International Resource Pane, could bring together national and regional scientists, experts, practitioners and governments to provide scientific research and knowledge base on natural resource use, issues and priorities, ensure a realistic framework for resource use policy and legislation, and support development of an ASEAN Roadmap on Sustainable Resources Management.

For sustainable consumption and production, a proposed flagship initiative would focus on Small and Medium Enterprises (SMEs), including micro enterprises, which together account for over 80% of total number of establishments and contribute to substantially more than half of total employment in the ASEAN Community. A flagship initiative on **Greening Small and Medium Enterprises in ASEAN** would contribute to the "ASEAN Strategic Action Plan for SME Development 2016-2025", by boosting the capacity for innovation and greening of businesses, including through cooperation between ASEAN countries on setting up SME helpdesks, benchmark schemes and common voluntary frameworks on greening SMEs.

Progressing the ASEAN development agenda relies in part on increasing resilience to the increasing risk of climate change and the wide range of adverse natural events, shocks and stresses to which ASEAN Member States are highly exposed. A proposed flagship initiative **ASEAN Risk Transfer Mechanism** would lessen the financial burden of disasters and support social and economic development, especially for the poor and also for governments which tend to be heavily underfunded in the face of increasingly frequent and more expensive disasters. The risk transfer mechanism would encourage regional risk pooling and scaling up parametric insurance products among ASEAN Member States, and strengthen social protection to reduce vulnerabilities.

Promoting and acting upon the complementarities will require establishing or strengthening institutional mechanisms that bring together major stakeholders including the ASEAN Secretariat, the United Nations including ESCAP and national government agencies to work with ASEAN Member States. One of the major recommendations emanating from this report is to establish an **ASEAN Centre for Sustainable Development Studies and Dialogue (ASEAN-CSDSD)**. Central to the role of the ASEAN-CSDSD is to interpret the complementarities mandate of the ASEAN community. It would mobilize resources for implementation, develop capacities, and support ASEAN Member States in optimizing opportunities under the ASEAN and UN frameworks.

In order to support the ASEAN-CSDSD and the ASEAN Secretariat, an **ASEAN Programme for Knowledge and Outreach on Complementarities** is needed. Such a programme could promote policy relevant research, create tailored knowledge for, and conduct extensive outreach on complementarities. These include, for example, setting up an ASEAN research unit for environmental and economic policy research modelled after European Union research funding, an ASEAN Complementarities Grant to support projects that showcase complementarities on a practical level, and an ASEAN Complementarities Award to recognise solutions that highlight complementarities.

ASEAN is uniquely placed to approach such complementarities in implementation. Not only does the Community play a key role in the global economy, ASEAN already has in place institutions and procedures that are mandated and capable of approaching implementation from a complementarity perspective. A complementarities approach allows ASEAN member states to draw on a wider net of resources and helps policy-makers to design implementation strategies that can help implement two transformative agendas for the benefit of ASEAN and its people.

1. Introduction

a) About this report

This report is the first outcome of an initiative to identify complementarities between the ASEAN Community Vision 2025 (ASEAN Vision 2025) and the United Nations 2030 Agenda for Sustainable Development (2030 Agenda), and to support ASEAN Member States to implement the two agendas in an integrated way. The report presents a framework for identifying complementarities, and proposes a number of flagship initiatives to support ASEAN countries to simultaneously translate the ASEAN Vision 2025 and the 2030 Agenda from political aspiration to practical implementation.

The report draws on existing national and ASEAN processes, plans and agreed regional priorities to articulate themes that emphasize complementarities. It highlights opportunities where governments and other stakeholders could efficiently draw on limited resources to deliver high-impact and inclusive benefits across a broad range of sustainable development priorities – to fulfil their regional and international obligations while ensuring prosperity in their countries.

This report is mandated by the ASEAN community and intended to support ASEAN Member States in fulfilling their commitments. The report aims to support ASEAN in taking action that will leverage synergy between the ASEAN Vision 2025 and the SDGs. This includes the identification of cross-cutting priority areas that are embedded in both documents to provide the opportunities to implement both agendas effectively. It provides an overview of the progress that needs to be made in selected priority areas under the ASEAN Vision 2025 and the 2030 Agenda. While the report is based on solid scientific analysis, it is not meant to be an academic document; it is formulated to inform decision makers, facilitate policy dialogue, and provide direction for advancing both Agendas through a complementarities lens in order to minimize pressure on limited government resources, optimize implementation and amplify impact.

The report is divided into four sections. Following this introductory section, Section 2 presents a broad framework for understanding complementarities, including underlying values, guiding and operational principles that connect the ASEAN and UN agendas; it further explains how this framework was used to select five cross-cutting priority areas that are used for further analysis and for the development of specific proposals. Section 3 provides quantitative and qualitative analyses of the five priority areas that have been selected on the basis of the complementarities framework presented in Section 2. The five cross-cutting priority areas, endorsed by the ASEAN community and analysed in this report, are i) poverty eradication, ii) infrastructure and connectivity, iii) sustainable management of natural resources, iv) sustainable production and consumption, and v) resilience. Each priority area provides an entry point from which to address multiple interconnected issues. Section 4 draws on the analysis in the previous section and makes recommendations on how actions could be taken to synchronize and advance the two Agendas. The monitoring and evaluation of the implementation of this report will be undertaken jointly by ESCAP and the ASEAN Secretariat and be reported to appropriate UN and ASEAN bodies.

b) A Mandate for the Complementarities Initiative

The ASEAN community is built on a commonly forged vision of shared prosperity in the region, and an active international role. To this end, in 2007, the Heads of States and Governments of

the ASEAN Member States declared in the ASEAN Charter the aspiration "to ensure sustainable development for the benefit of present and future generations, and to place the well-being, livelihood and welfare of the peoples at the centre of the ASEAN community building process" (ASEAN, 2007). This vision was recently further elaborated in 2015, when the ASEAN Member States formally adopted the "ASEAN Community Vision 2025: Forging Ahead Together". Here, they reaffirmed their will to consolidate the ASEAN Community, building upon and deepening the integration process to realize a rules-based, people-oriented, people-centred ASEAN Community (ASEAN, 2015).

While the ASEAN Community Vision 2025 highlights regional priorities, it also reflects and complements the larger vision of the 2030 Agenda for Sustainable Development (2030 Agenda) that was being negotiated within the framework of the United Nations (UN) around the same time and to which ASEAN governments are now committed. In fact, the ASEAN Community Vision 2025, explicitly recognizes the opportunity to address the two Agendas simultaneously through common measures – ASEAN Member States underlined "the complementarity of the United Nations 2030 Agenda for Sustainable Development with ASEAN community building efforts to uplift the standards of living of our peoples" (ASEAN, 2015).

ASEAN Member States began the political process of addressing complementarities at an early stage after the adoption of the 2030 Agenda. A Special Session of the ASEAN Foreign Ministers' Meeting Focusing on Sustainable Development was convened at the United Nations Headquarters in New York on 24 September 2016 to discuss and develop ways in which ASEAN could contribute to regional and global efforts in promoting sustainable development. In this connection, the ASEAN Foreign Ministers recalled the importance of individual and collective efforts to achieve the twin goals of realising the ASEAN Community Vision 2025 and its Blueprints and implementing the UN 2030 Agenda for Sustainable Development and attaining the SDGs, and to enhance complementarities between these processes and to help ensure that no one is left behind. They subsequently requested that priorities and a road map be developed to enhance the complementarities.

Acting as ASEAN coordinator for the 2030 Agenda, in 2016 Thailand, through the Ministry of Foreign Affairs organized consultations on the two Agendas, including one on support for complementarities activities as a part of ESCAP's contribution to the implementation of the ASEAN-UN Plan of Action 2016–2020 (UN & ASEAN, 2016). The ESCAP Executive Secretary and the ASEAN Deputy Secretary-General for Socio-Cultural Community provided keynote speeches at the side lines of the UN General Assembly in September 2016,[1] that developed guidance for setting up the "Complementarities Initiative", which was formally launched at the "High-Level Brainstorming Dialogue on Enhancing Complementarities between the ASEAN Community Vision 2025 and the 2030 Agenda for Sustainable Development", held in March 2017 in Bangkok (ASEAN, 2017)[2]. It requested that ESCAP, Thailand and the ASEAN Secretariat prepare a report on complementarities for submission to the ASEAN-UN Summit in November 2017 in Manila, Philippines.

The complementarities approach is now enshrined in the 2016–2020 ASEAN-UN Plan of Action (UN & ASEAN, 2016). As noted by the Secretary-General of the United Nations in his opening remarks at the 8th ASEAN-UN Summit in Vientiane, Lao PDR, in September 2016, "the ASEAN-UN Plan of Action gives [ASEAN and the UN] the opportunity to further the complementarity of ASEAN's Community Vision 2025 with the 2030 Agenda for Sustainable Development"

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[1] The Special Panel Discussion was organised by the Thai Ministry of Foreign Affairs, and titled "Regional Dimensions of Promoting Sustainable Development: Developing Complementarities between the 2030 United Nations Agenda for Sustainable Development and the ASEAN Community Vision 2025".

[2] The outcome of the High-Level Brainstorming Dialogue on Enhancing Complementarities between the ASEAN Community Vision 2025 and the 2030 Agenda for Sustainable Development appears in Annex 1.

2. A Framework for Complementarity

The 2030 Agenda is a global commitment by all UN Member States, including ASEAN Member States. In 2016, the Ministry of Foreign Affairs, Thailand and the ASEAN Secretariat took the initial step of conducting a mapping exercise[3], matching all the commitments in the ASEAN Vision 2025 to the goals and targets of the SDGs. The exercise and resulting matrix suggest cross-cutting themes and insights into some catalysts which could help meet a significant subset of SDGs at the same time as implementing the ASEAN Vision 2025.

Complementarities ground ASEAN's vision of community building in a broader humanistic vision of development – one that is good for people and takes account of the environment. The 2030 Agenda, with its global mandate, provides ASEAN Member States with wider implementation support for delivering in their countries. For example, the SDG targets and indicators can help to measure holistic progress. Understanding complementarities between these two frameworks needs a systematic analysis – starting from the wider intentions of each framework and down to the detailed actions. For this report, complementarity is determined across all levels of the ASEAN Vision 2025 and the 2030 Agenda, as follows:

a) Complementarity of **goals and objectives** of both Agendas, to ensure shared destination;

b) Complementarity of underlying **values and operational principles**, to guide planning, decision-making, and choice of action;

c) Complementarity of **operational elements** and **implementation mechanisms**, including institutional arrangements, resource allocation, monitoring and reporting;

d) Complementarity on selected **cross-cutting priority areas** to determine where action should be focused, and avoid impacts where one action cancels out benefits of another.

a) Complementarity of goals and objectives

The ASEAN Vision 2025 of "an integrated, peaceful and stable community with shared prosperity" is lodged in respect for the environment and planetary boundaries. For example, the ASEAN Vision 2020, which charts a future for ASEAN countries, aspires to "a clean and green ASEAN with fully established mechanisms for sustainable development to ensure the protection of the region's environment, the sustainability of natural resources and the high quality of life of its peoples." While ASEAN Member States are developing their economies, they also agree to fulfil their international commitments beyond ASEAN. In the ASEAN Socio-Cultural Community Blueprint 2025, leaders acknowledge that "ASEAN's experiences, aspirations and destiny will be closely intertwined and influenced by global developments"; they note and link their development

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[3] Titled: "Thailand's Revised Information Paper/Matrix: Compilation of Possible Complementarities between The ASEAN Community Blueprints 2025 and The 2030 Agenda for Sustainable Development." Maintained by the ASEAN Secretariat with information regarding Sectoral Bodies, it is a living document, most recently updated on 12 August 2016.

agendas, especially to the sustainable development goals (SDGs) and their targets as part of the 2030 Agenda, especially for Sustainable Development.

The core principle of the UN 2030 Agenda is the need for development and well-being for all. It must benefit all human beings, and not only now, but also in the future, so they can enjoy prosperous and fulfilling lives in dignity and equality and in a healthy environment. Thus, development must be sustainable. The planet must be protected from degradation through sustainable consumption and production, sustainable management of natural resources and urgent actions on climate change. Economic, social and technological progress must occur in harmony with nature. These goals cannot be achieved unless there is global peace which in turn cannot be realized without sustainable development. Progress on the SDGs also requires a global partnership, based on a spirit of global solidarity and the participation of all countries, all stakeholders and all people.

The 2030 Agenda acknowledges the importance of regional and subregional dimensions, regional integration and interconnectivity in sustainable development. Regional and subregional frameworks can facilitate the translation of sustainable development policies into concrete action at the national level. Follow-up and review at the regional and subregional level can provide opportunities for peer learning, sharing of good practices and discussion of shared targets, while inclusive regional and subregional processes can draw on reviews at the national level and contribute to follow-up and review at the global level. The 2030 Agenda notes the importance of identifying the most suitable regional and subregional forums and building on existing follow-up and review mechanisms at the regional and subregional level. The cooperation of UN regional commissions and regional organizations, such as ASEAN, is critical.

b) Complementarity of values and principles

To advance its Community Vision 2025, ASEAN has developed clear characteristics to guide its activities, and values that should underlie the Community. These characteristics and values are reinforced under each of the three main pillars of ASEAN as follows:

- "Our ASEAN Political-Security Community by 2025 shall be a united, inclusive and resilient community."

- "Our ASEAN Economic Community by 2025 shall be highly integrated and cohesive; competitive, innovative and dynamic; with enhanced connectivity and sectoral cooperation; and a more resilient, inclusive, and people-oriented, people-centred community, integrated with the global economy."

- "Our ASEAN Socio-Cultural Community by 2025 shall be one that engages and benefits the peoples, and is inclusive, sustainable, resilient, and dynamic."

Principles for the UN 2030 Agenda are reflected in the preamble, as well as in the Sustainable Development Goals that constitute the main part of the Agenda.

- In the preamble, Heads of Governments declare it "a plan of action for people, planet and prosperity", for "universal peace in larger freedom". They highlight the need for "eradicating poverty" and for "all stakeholders acting in collaborative partnership". The preamble lists 5 Ps of the 2030 Agenda: people, planet, prosperity, peace, and partnership.

- More principles and details of the 2030 Agenda can also be distilled from the goals and targets. Examples include: to end poverty, end hunger, promote well-being, inclusive education, gender equality, resilient infrastructure and innovation, safe and inclusive settlements, reduce inequality, sustainable consumption and production, environmental sustainability, peace and inclusive societies, and global partnerships for implementation.

Considering the values and principles of Vision 2025 and the 2030 Agenda highlights where there are complementarities. The following are the main principles: **people-centred (putting people first); inclusive (leave no one behind); sustainable (multidimensional and integrated); resilient; dynamic and innovative; peace, stability and justice; and partnerships**. These will underpin actions that are meant to simultaneously address the two agendas. For this report, these principles are considered when specific analysis is performed for the five priority areas discussed in Section 3 and for recommended actions in Section 4.

i. People-centred: putting people first

Human dimensions are firmly placed at the centre of both Agendas, with the ultimate objective being to provide shared prosperity and well-being. The ASEAN Vision emphasizes a "people-oriented, people-centred ASEAN Community, where our peoples enjoy human rights and fundamental freedoms, higher quality of life and the benefits of community building, reinforcing our sense of togetherness and common identity" (ASEAN, 2015). Reflecting a similar importance, the preamble of the UN 2030 Agenda starts with: "This Agenda is a plan of action for people, planet and prosperity" (UNGA, 2015). Both Agendas promise participation towards, and in, a prosperous society, engaging all stakeholders, empowering people and strengthening institutions.

ii. Inclusive: leave no one behind

In addition to being people-centred, the human dimension is further strengthened in both Agendas through emphasis on being inclusive, with special focus on the poor and vulnerable groups. This is succinctly expressed in the 2030 Agenda preamble with the "pledge that no one will be left behind. Recognizing that the dignity of the human person is fundamental, we wish to see the goals and targets met for all nations and peoples and for all segments of society" (UNGA, 2015). In ASEAN, this includes reducing barriers to disadvantaged groups, ensuring equitable access for all, and promotion of human rights. In addition to a focus on the poor, the Agendas are particularly strong on gender equality and the empowerment of women.

In the 2016–2020 Plan of Action, ASEAN and the UN agree to: "Promote exchange of best practices, technical cooperation and capacity-building in social development, gender equality and women's empowerment, and elimination of all forms of violence and discrimination, including the care, protection, and access to services and opportunities of vulnerable groups, such as children, youths, the elderly /older persons, persons with disabilities, and migrants, and populations exposed to disaster risk subject to national circumstances, policies, laws and regulations" (UN & ASEAN, 2016).

iii. Sustainable: multidimensional and integrated

The ASEAN Socio-Cultural Community Blueprint highlights the need "to promote and ensure balanced social development and sustainable environment that meet the needs of the peoples at all times". Its aspiration is expressed in Vision 2025, in which members of the community "envision vibrant, sustainable and highly integrated economies, enhanced ASEAN Connectivity as well as strengthened efforts in narrowing the development gap". Fittingly, the 2030 Agenda provides the right framework with which ASEAN can bring its community-building approach in complementarity with its sustainability objectives as reflected by the four priorities in the Socio-Cultural Community Blueprint 2025: conservation and sustainable management of biodiversity and natural resources; environmentally sustainable cities; sustainable climate; sustainable consumption and production. All four priorities are also SDGs, respectively: Goal 15, Goal 11, Goal 13 and Goal 12. Both ASEAN and the UN have emphasized the need for sustainable development to address all three dimensions –environmental, social and economic – in an integrated manner.

iv. Resilient

As well as being sustainable, both ASEAN and the UN envisage societies that are resilient. The ASEAN Vision provides this guiding view of the future: "a resilient community with enhanced capacity and capability to adapt and respond to social and economic vulnerabilities, disasters, climate change as well as emerging threats and challenges." The characteristic of resilience is

also enshrined in the 2030 Agenda, with countries "determined to take the bold and transformative steps...to a sustainable and resilient path." Goal 9, for example, calls for a need to "build resilient infrastructure" and Goal 11 specifies resilience as a headline characteristic of sustainable human settlements: "make cities and human settlements inclusive, safe, resilient and sustainable". Both Agendas show complementarity of resilience in the context of infrastructure, communities, agriculture systems, biodiversity, climate change, natural disasters, and social and economic systems.

v. Dynamic and innovative
Innovations in research, technology, connectivity and societal organization have presented a strong and urgent need for adaptive change management. This is recognized in both Agendas. To foster economic dynamism, the 2030 Agenda is "promoting youth employment and women's economic empowerment"; to mobilize "technological and innovative capacities" in order to make "fundamental changes in the way that our societies produce and consume goods and services" (UNGA, 2015). These support ASEAN's goal of building a culturally tolerant and adaptive community; promoting education, training and free flow of information and ideas; nurturing "creative and inclusive social entrepreneurship for youths, persons with disabilities, women and vulnerable and marginalised groups" and "institutional and technical innovations in the provision of social services and health care" (ASEAN, 2015).

vi. Built around peace, stability and justice
One of the three pillars of the ASEAN community with a Blueprint under Vision 2025 is the Political-Security Community. ASEAN envisages "an integrated, peaceful and stable community with shared prosperity" (ASEAN, 2015). Similarly, Goal 13 of the 2030 Agenda addresses peaceful and inclusive societies for sustainable development, and access to justice for all. Under their recent Plan of Action, ASEAN and the UN agree on "cooperation with the UN to provide continued training assistance in peacekeeping to ASEAN, including training in humanitarian affairs and civil-military coordination, gender issues such as the role of women peacekeepers, health, safety and security arrangements, and support ASEAN's efforts in strengthening the ASEAN Peacekeeping Centres Network" (UN & ASEAN, 2016).

vii. Partnership Based
Great importance is attached to partnerships by both ASEAN and the UN. ASEAN acknowledges the role of effective multi-stakeholder partnerships that could bring together all actors to help mobilize and share knowledge, expertise, technology and financial resources, to support implementation of Vision 2025. In delivering benefits to the people, it lists, among others: "multi-sectoral and multi-stakeholder engagements, including Dialogue and Development Partners, subregional organisations, academia, local governments in provinces, townships, municipalities and cities, private-public partnerships, community engagement, tripartite engagement with the labour sector, social enterprises, government organisation, non-governmental organisation, civil society organisation (GO-NGO/CSO) engagement, corporate social responsibility (CSR), inter-faith and inter-cultural dialogue." The UN declares that "all countries and all stakeholders, acting in collaborative partnership" will be involved in the implementation of the 2030 Agenda and dedicates the goal 17 in partnerships and other means of implementation of the SDGs. To that end, it is revitalizing the Global Partnership for Sustainable Development (UNGA, 2015). The ASEAN Vision sees, for example, partnership with the private sector as important in providing input to design of regional strategies and initiatives; "in identifying impediments to realising deeper regional economic integration"; and in sharing risks, and providing additional sources of funding (ASEAN, 2015). It aims to strengthen public-private partnerships in order to support a private health care market, investments in providing universal health care in the region, and infrastructure development and maintenance.

c) Complementarity of operational elements and implementation mechanisms

The above subsection elaborated on complementarities in values and principles that should inform actions that simultaneously address priorities under ASEAN 2025 Vision and the 2030 Agenda. However, complementarities need to be approached in a systemic manner, and avoid creating new mandates or actions that go against the mandate given by ASEAN Member States. For this report the analysis and the recommendations meet the following elements:

i. Commonalities. They are common to both ASEAN VISION 2025 and 2030 Agenda frameworks, presented in a similar or even replicable manner;

ii. Non-conflicting. Do not conflict with commitments of ASEAN member states, especially avoiding conflicts between recommended actions under the three Blueprints supporting the ASEAN Vision 2025 and the SDGs under the 2030 Agenda;

iii. No new goals. Do not create new goals but respect commitments already made by member states under the two agendas;

iv. Streamlined. Help streamline ASEAN goals with corresponding SDGs and support national implementation;

v. Synergistic. Create synergistic effect(s), where implementation of activities leads to multiple benefits (beyond the combined objectives of the two goals);

vi. Uniting. Connect the ASEAN Vision to the 2030 Agenda and other frameworks that share similar objectives, connect people and stakeholders to each other and to opportunities, and connect priorities of the subregion to the relevant resources in order to drive sustainable development cooperation (ASEAN, 2016a)[4].

These operational principles have been applied to analysis of the priority areas introduced below, analysed in Section 3 and converted into recommendations in Section 4 of this report.

After ensuring complementarity of goals and objectives, values and operational principles, and priority areas under which actions can be taken, it is important to make sure that the modalities or mechanisms supporting the two Agendas are complementary. The ASEAN-UN Plan of Action 2016 – 2020 sets a clear tone for this, stating the need to: "strengthen coordination … through joint activities and other relevant activities undertaken by ASEAN and the UN respectively, as well as other relevant mechanisms including the Asia-Pacific Forum on Sustainable Development (APFSD), and support for the National Evaluation Capacity Development of ASEAN Member States … and enhanced collaboration between the UN and its specialised agencies with various ASEAN mechanisms and institutions" (UN & ASEAN, 2016).

The implication of operational complementarity at national level is the need to streamline. In order to reap full benefits, the same government ministries, departments and agencies need to be responsible for parts of the ASEAN Vision 2025 and corresponding parts of the UN 2030 Agenda that are in complementarity. Thus planning, resource allocation, undertaking of activities and monitoring and reporting need to be aligned. A systems perspective is needed, approaching complementarity themes in clusters, optimizing synergies and avoiding trade-offs.

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[4] According to the Master Plan on ASEAN Connectivity 2025 (ASEAN, 2016a) the three dimensions of Connectivity are physical connectivity, institutional connectivity, and people-to-people connectivity.

d) Complementarity on selected priority areas

As highlighted in the introduction, this report focuses on proposing a number of actionable recommendations to support ASEAN countries to simultaneously translate the ASEAN Vision 2025 and the 2030 Agenda from political aspiration to practical implementation. Taking into account the elements of a complementarity framework as presented above as well as the operational guidance for action, five priority areas have been selected. These five cross-cutting priority areas are[5]: **poverty eradication, infrastructure and connectivity, sustainable management of natural resources, sustainable production and consumption**, and **resilience**. These priority areas are also used as the basis for the actionable recommendations presented in the last section of this report.

The priority areas are cross-cutting in nature and while not exhaustive they represent high-leverage entry points for action to support complementarity. Taken together, these five priorities represent a significant subset[6] of the 2030 Agenda and summarize important outcomes of the ASEAN Vision 2025 which focus on economic prosperity, connectivity, people, well-being and environmental sustainability.

These five priority areas as addressed in this report are composite – reflecting a characteristic where addressing one of them can lead to addressing other multiple interlinked issues. The composite characteristic of these priority areas makes them suitable entry points to addressing complementarities between the ASEAN Vision 2025 and the 2030 Agenda – actions taken under these themes would simultaneously lead to implementation of both Agendas – with additional benefits of improved efficiency in implementation, monitoring and review processes due to optimized use of limited resources and time.

The priority areas are also linked to each other. Sustainable consumption and production, for example, depends heavily on sustainable use of natural resources, and must ensure that access to resources and consumption opportunities include the needs of the poor. Sustainable infrastructure needs to be resilient, and efficient in consumption of resources (e.g. energy). Poverty eradication is dependent on availability of infrastructure (e.g. for sanitation and education) and connectivity for jobs and access to markets, and on the resilience of local communities (e.g. from disasters and shocks to agriculture and food system). The interlinked nature of these priority areas also indicates that potential trade-offs should be carefully thought out, to avoid situations where impacts of action addressing one priority area cancel out or have negative effects in another area. In developing actions under these areas, the operational guidelines on complementarity under subsection c) above become very important.

These priority areas are analysed in detail in the following section.

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[5] These five priority areas have been discussed and finally endorsed by a "High Level Brainstorming Dialogue" organised jointly by the Ministry of Foreign Affairs of Thailand (in its role as ASEAN's Sustainable Development Coordinator), ESCAP and the ASEAN Secretariat. Recognising their composite nature, the high-level Dialogue that endorsed them further suggested that other important issues such as "inequality, trade and productivity, gender, micro, small and medium enterprises, agriculture and finance would be addressed through the priority areas identified" (ASEAN 2017).

[6] See Annex 2.

3. State and Progress on Complementarity Priority Areas

This section looks in more detail at the progress made over the last 15 years in the five priority areas introduced above (poverty eradication, infrastructure and connectivity, sustainable management of natural resources, sustainable consumption and production, and resilience). The previous section already highlighted how actions under the two frameworks both mandate action in these priority areas. This section deliberates on each priority area and provides the reader with:

- A short overview of the priority area and the main issues that require policy attention in each of the five priorities.

- Data analysis of the trend between 2000 and 2015 and two scenarios for future development until 2030 by selecting several indicators for each priority. We then report the current status (by 2015), an Existing Trend Scenario which assumes a continuation of past trends (as a simple linear regression) until 2030 all other factors equal and a Doubling Effort Scenario where we double the effort and achievement of selected parameters in the existing trend until 2030.

- A gap analysis to show the extent to which the current development pathway of the ASEAN community meets the objectives and aspirations of the Community Vision 2025 and supports the objectives of the SDGs by employing complementarities between the two strategic policy documents. We show the gap between Existing Trend, Doubling Effort and the ultimate Sustainable Development objective for each domain.

Data, Indicators and Scenarios

Indicators for each of the five priority areas have been selected to represent trends and improvements over the 15 years from 2000 to 2015. Data gaps have been filled and time series completed employing simple linear regression between data points. The selected indicators are good proxies for progress in each domain but do not represent the priority area in its entirety. For indicator selection we had to rely on data availability and concentrated on authoritative data sources (see table indicator overview).

We applied a simple stylized trend analysis to explore scenarios for future progress for each indicator by assuming a continuation of the trend observed between the years 2000 to 2015 for the following 15 years until 2030 "*Existing Trend*". We then assume a doubling of effort during the 15 years until 2030

and model this scenario by doubling the average yearly change rates of selected indicators until 2030 "*Doubling Effort*". This allows us to show the magnitude of progress that has been made over the last 15 years, demonstrate additional improvements that may be expected and the extent of remaining challenges in ASEAN region.[7]

It needs to be mentioned that the doubling effort scenario assumes linearity between effort and results. But as many scholars and studies indicate the real word is not always linear. The "Doubling Effort" scenario therefore it should be regarded as a proxy on where ASEAN could be in the specific priority area if it intensifies efforts and not as a quantitative statement of improvement per se. In all cases this scenario indicates that the positive trend in ASEAN under the business as usual scenario will substantially benefit from new policies.

We summarize the results for the five indicators for each priority area in a radar diagram scaled on a 1−10 scale where 1 represents a low level of achievement and 10 the highest possible level of achievement. Observed values for each indicator are normalized on the 1−10 scale. A value of 10 would signal fully achievement of the SDG outcomes for each priority and indicator.[8]

3.1 Poverty eradication

Overview

Poverty eradication features prominently in the ASEAN Vision 2025. The Socio-Cultural Community Blueprint acknowledges that although "the region has witnessed extreme poverty dramatically declining", "a large percentage of the population in a number of ASEAN Member States are very vulnerable to poverty or sliding deeper into poverty." Thus the Economic Community Blueprint would "engender a more equitable and inclusive economic growth in ASEAN that narrows the development gap, eliminates if not reduces poverty significantly".

Similarly, poverty eradication is at the heart of the UN 2030 Agenda, demonstrated by Goal 1 on ending poverty, Goal 2 on "ending hunger by achieving food security" and in access to essential provisions of water (Goal 6) and energy (Goal 7). Goal 8 expresses a strong expectation of economic growth, especially for the least developed countries[9], and outlines programmes to increase employment participation and household incomes, which will support further middle-class growth in ASEAN countries.

In short, improving material standards of living, enabling access to energy, water and sewerage, quality food, health care and education are at the core of the UN 2030 Agenda and expressed in a number of SDG targets. Alleviating poverty in all its forms is the unifying objective. Poverty can be expressed as a lack of access to necessary provisions or a lack of monetary means to access these provisions on the market. A thorough analysis of poverty should include a national measure of the poverty line for each ASEAN economy and should be adjusted to the purchasing power of national incomes.

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[7] In the absence of economic modelling we need to rely on stylized scenarios. We calculated yearly average change for available data points during the 2000 to 2015 period. If the yearly change was 2% we applied that rate for the following 15 years to establish a continuation of trend, all other factors being equal. We then doubled the rate of change to 4% and applied this rate to mimic more ambitious policy efforts. All trends are calculated for individual ASEAN countries and aggregated to the ASEAN regional trend. In doing this we demonstrate that, overall, a lot more effort would be required to comprehensively improve the living conditions of people in the ASEAN region. There are obvious limitations to this stylized approach, including that indicators that are linked in the real word are not linked in the scenario approach and that interactions between monetary and biophysical aspects of the economy are ignored.

[8] It needs to be noted that many SDG targets provide a development trajectory but often do not present a numeric target. The selection of indicators and the establishment of numeric targets is very much in flux which further complicates the analysis of trends and achievements.

[9] Cambodia, Lao PDR and Myanmar are classified as Least Developed Countries (LDCs) by the United Nations Department of Social and Economic Affairs and require special policy attention and technical assistance.

In short, improving material standards of living, enabling access to energy, water and sewerage, quality food, health care and education are at the core of the UN 2030 Agenda and expressed in a number of SDG targets. Alleviating poverty in all its forms is the unifying objective. Poverty can be expressed as a lack of access to necessary provisions or a lack of monetary means to access these provisions on the market. A thorough analysis of poverty should include a national measure of the poverty line for each ASEAN economy and should be adjusted to the purchasing power of national incomes.

Data analysis

A number of indicators are used in this report to measure the extent of poverty and to approach the issue of poverty eradication in ASEAN countries and the region as a whole.

> **Indicators for poverty eradication[10]**
>
> - Prevalence of undernourishment (% of population)
>
> - Poverty headcount ratio at $1.90 a day (2011 PPP) (% of population)
>
> - Poverty gap at national poverty lines (%)
>
> - Rural poverty headcount ratio at national poverty lines (% of rural population)
>
> - Population living in slums (% of urban population)
>
> Data is sourced from the United Nations Economic and Social Commission for Asia and the Pacific.

Undernourishment

Over the past 15 years, the ASEAN Community made great progress in reducing undernourishment.[11] In 2000, 118 million people were undernourished and this number had halved by 2015 with the largest absolute progress occurring in Indonesia and Viet Nam (ESCAP, 2017). Continuing current trends would see the region reduce undernourishment by another 50 per cent by 2030.

Overall, undernourishment was decreased from around one fifth of the population in 2000 to ten per cent in 2015 and is on track to further decline to under five per cent on the current trajectory (see Figure 1). Undernourishment will continue to affect a large number of people in the Philippines and Indonesia if current trends continue and requires special attention of policy and programmes to combat undernourishment, especially undernourishment of mothers and children which is a main cause of stunting. The complementarities between the ASEAN Vision 2025 of an integrated regional economy based on the free movement of capital, labour, goods and services and its focus on equitable economic development and the strong human development focus of the SDGs will help the ASEAN Community to address remaining pockets of poverty and increase the resilience of other groups not to fall back into poverty. The ASEAN Community Vision focuses on strategies, programmes and initiatives that enable the underlying economic development that will, if well managed, deliver growing material standards of living to people in the ASEAN region.

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[10] Suggestions for additional indicators to be investigated in the future for this priority area include the size of the middle class and wage inequality. The size of the middle class can be determined either as the income group that sits at the middle income level domestically or, perhaps more significantly, the share of people (households) that have consumption levels similar to middle classes in the OECD. Wage inequality is measured as the ratio between the best-paid 10 per cent and worst-paid 10 per cent of the working population

[11] Prevalence of undernourishment is used as a basic indicator of lacking physical conditions for reproduction. The prevalence of undernourishment, i.e. the percentage of people who do not get sufficient quantities and quality of food on a regular basis, can be seen as an indicator of a lack of fundamental physical well-being of people.

Figure 1 Prevalence of undernourishment, percentage of people affected
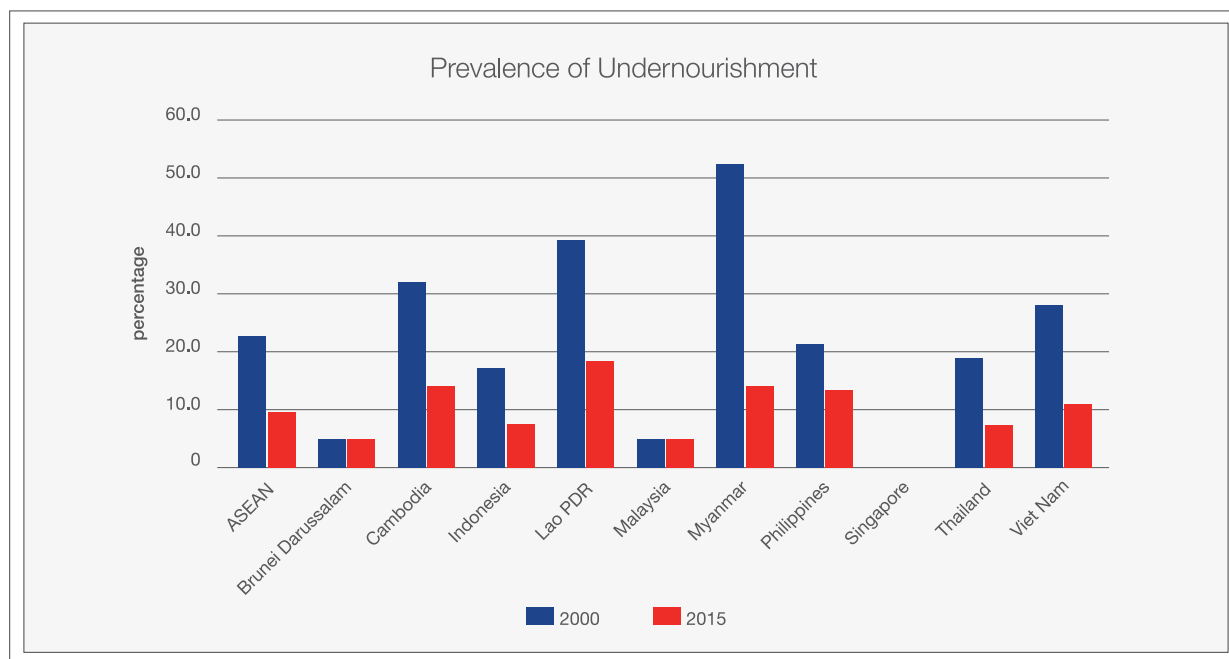
Source: Economic and Social Commission for Asia and the Pacific 2017

Extreme poverty

The ASEAN region has also very successfully reduced extreme absolute poverty[12] which dropped from 138 million people in 2000 to 44 million people in 2015 and is on track to be under 25 million people in 2030 if past trends continue (ESCAP, 2017). The population-rich countries of Indonesia and Viet Nam showed high levels of extreme poverty in 2000, which had a considerable impact on the overall number of people classified as extremely poor in the ASEAN region. Both countries also showed the most substantial progress in reducing absolute poverty; this is a successful outcome of development policy in these countries which have focused on industrialization and urbanization, have attracted foreign investment and invested in education creating a skilled labour force that can profit from the new employment opportunities in emerging industries.

Shares of population in absolute poverty are highest in Lao PDR and Myanmar and also in the Philippines (see Figure 2) and these countries need to strengthen their policy frameworks for equitable regional economic development. Some ASEAN low-income countries have still a considerable share of their population engaged in subsistence agriculture which means they require a much lower level of monetary income than households that depend on the market.

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[12] Extreme absolute poverty is measured by a poverty headcount ratio at $1.90 a day (2011 PPP).

Figure 2 Extreme absolute poverty, percentage of people affected
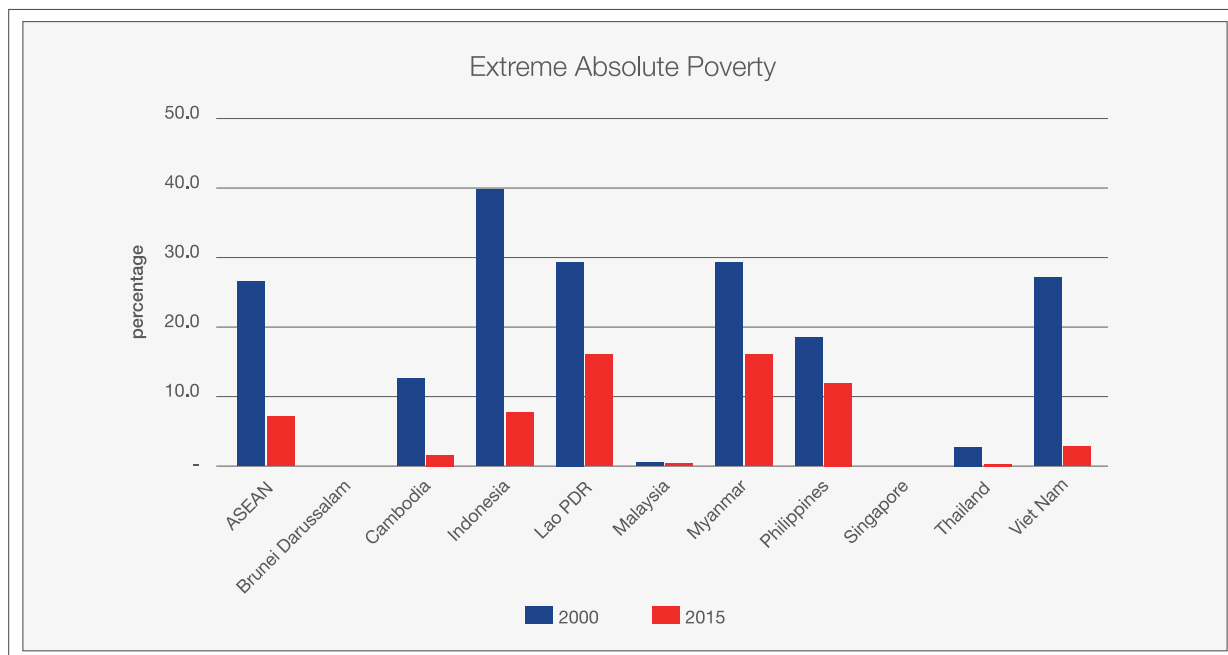
Source: Economic and Social Commission for Asia and the Pacific 2017

Relative poverty

The number of people classified as relatively poor[13] compared to national income halved between 2000 and 2015, from 165 million down to 86 million people (ESCAP, 2017). Further gains in reducing relative poverty will be harder to achieve, however, and require special attention of policy programmes. Relative poverty has been decreasing in all ASEAN countries-- most strongly in Viet Nam and Thailand-- with the exception of the Philippines where a fast-increasing population has outpaced the yearly improvements in poverty reduction.

Relative poverty remains highest in the Philippines, Myanmar and Lao PDR (see Figure 3) and policy programmes for reducing income inequality will help to reduce relative poverty.

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[13] Relative poverty is measured by the difference between a person's (household's) income and the mean income level. The poverty headcount ratio at the national poverty line shows the percentage of people living below the national poverty line and provides a good assessment of people lacking the financial means to service their necessary provisions of food, housing, mobility, energy and water.

Figure 3 Relative poverty measured at the national poverty line, percentage of people

Source: Economic and Social Commission for Asia and the Pacific 2017

Relative rural poverty

Relative poverty levels can be measured for rural and urban situations. In general, rural relative poverty levels are higher compared to poverty in cities and may also be more entrenched and harder to reverse.[14] The highest levels of relative rural poverty persist in Lao PDR, Myanmar and the Philippines (see Figure 4) and are concentrated in remote locations that also have low levels of infrastructure and service delivery.

Figure 4 Rural relative poverty measured at the national poverty line, percentage of people affected

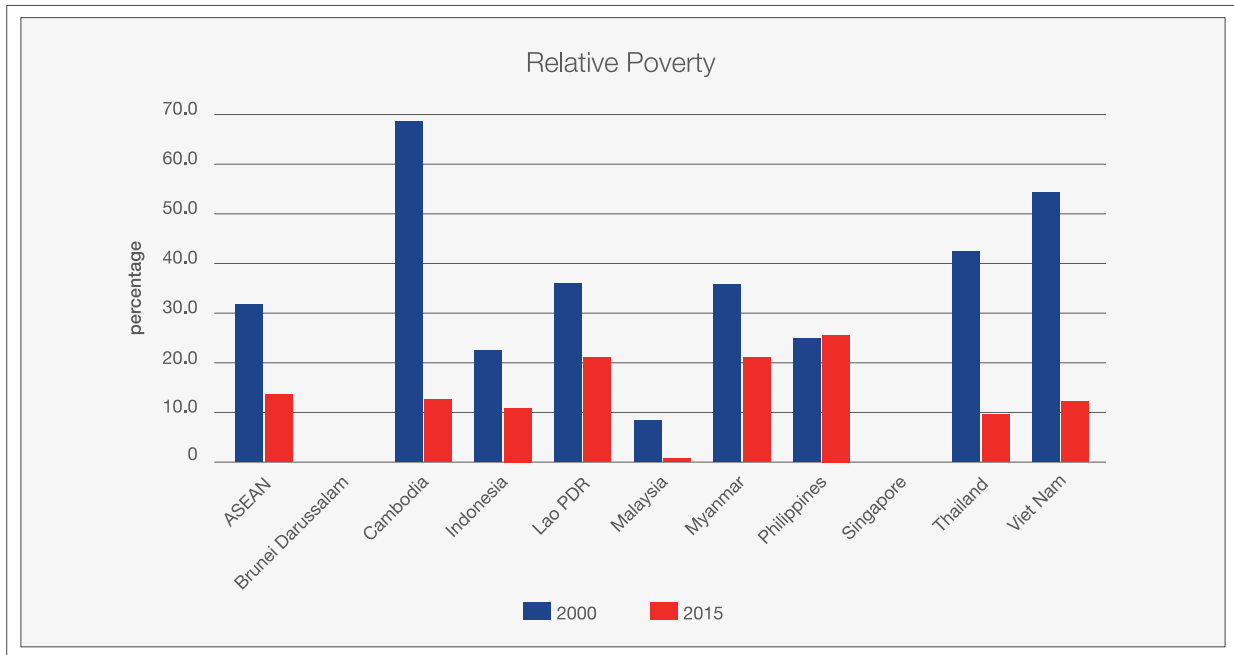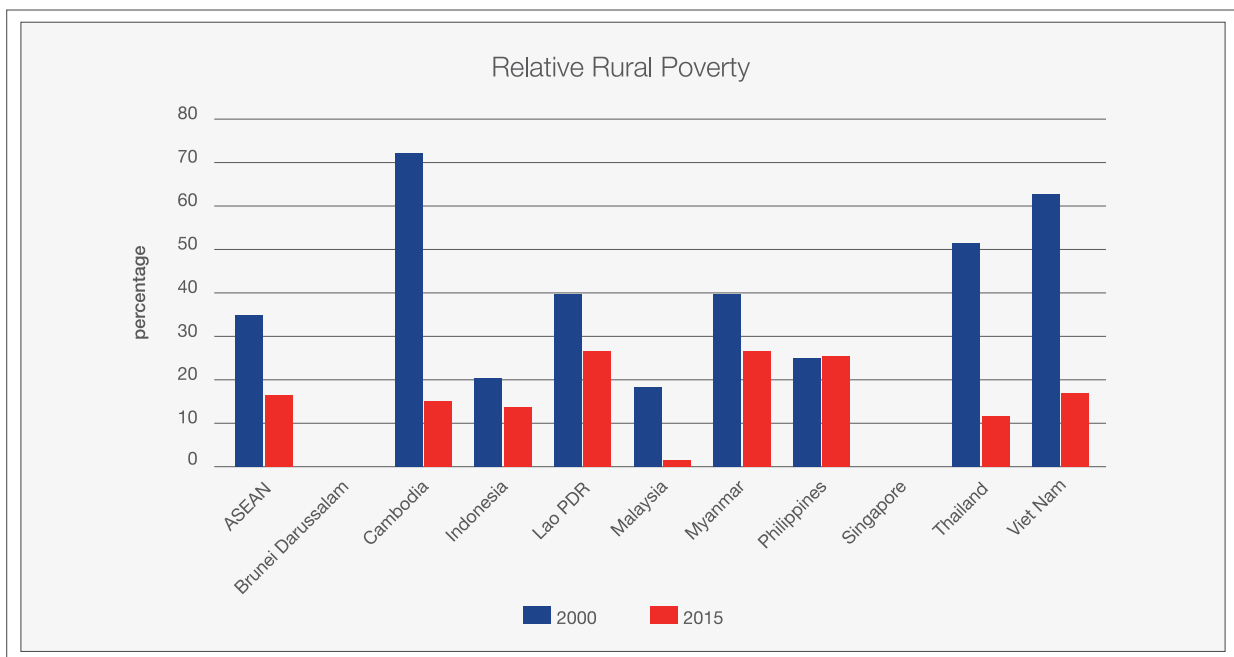Source: Economic and Social Commission for Asia and the Pacific 2017

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[14] Rural relative poverty is measured similarly to national relative poverty (see above).

People living in slums in cities

Informal settlements in cities can be areas of social mobility, innovation and aspiration but also lack sufficient infrastructure and service delivery. Whether they facilitate upward social mobility or entrench poverty needs to be investigated case-by-case and will also depend on infrastructure investments and policy design.

In 2015, 72.7 million people were living in informal settlements in Asian megacities and this number is projected to grow to 73.5 million people by 2030 if trends continue (ESCAP, 2017). Doubling the effort of improving informal settlements and bringing necessary services and utilities to people would still leave more than 50 million people in living arrangements which lack the most fundamental infrastructure and services in the ASEAN region. The issue of providing suitable housing options, service delivery and mobility to millions of people who migrate from rural areas to large cities in the ASEAN region continues to overwhelm urban and infrastructure planning and requires concerted policy effort aligning national and urban policies to improve cities for all urban dwellers.

Figure 5 People living in urban slums, percentage of people
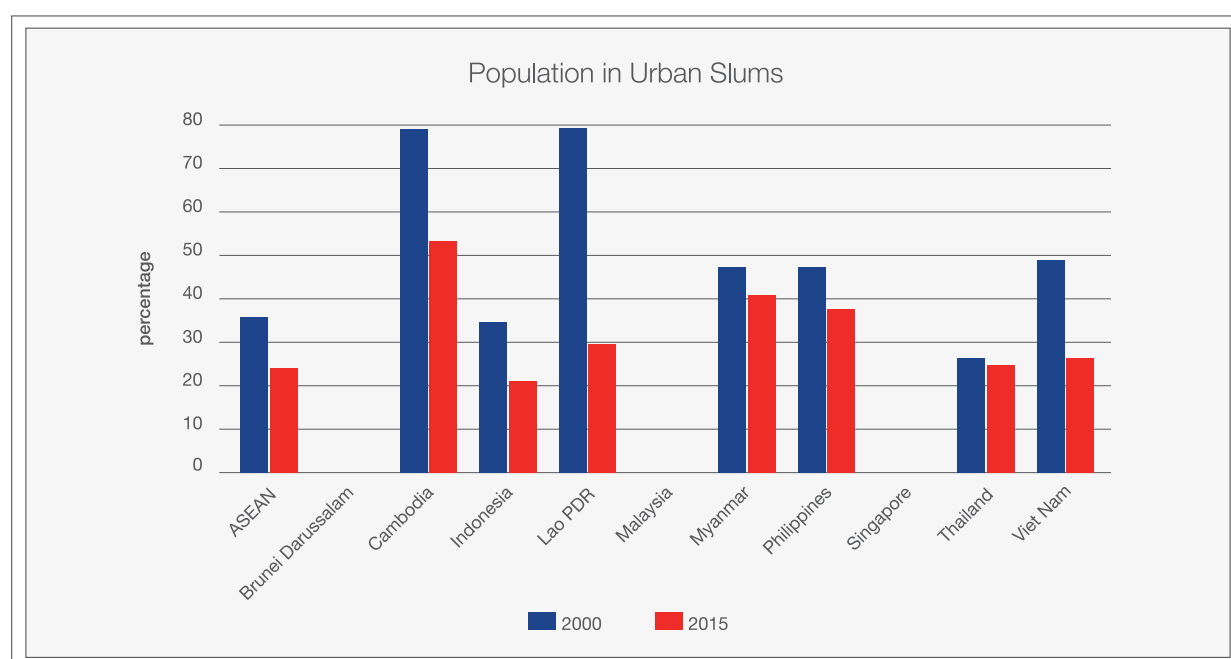
Source: Economic and Social Commission for Asia and the Pacific 2017

Rates of urban informal populations are only decreasing slowly in some of the population-rich countries and ranged between 20% in Indonesia and 40% in Myanmar and the Philippines in 2015 (see Figure 5). There have, nevertheless, also been real improvements in improving informal settlements and reducing the number of informal urban dwellers in many ASEAN countries enabled by urban planning and development initiatives that enhance the living conditions of low-income groups in cities.

Gap analysis

The radial diagram (Figure 6) contrasts the historical trend, current status and possible scenarios for each indicator and measures the distance from achieving the SDG target. The red pentagram shows the situation in 2000 and the yellow pentagram shows the status by 2015 for each indicator. The distance between the red and the yellow pentagram shows the extent to which the ASEAN region has been successful in combating poverty at the regional level. The light blue and deep blue pentagrams show the landing point for the two scenarios – *Existing Trend and Doubling Effort* by 2030.

The analysis shows that while the region continues to be very successful in reducing undernourishment and absolute poverty, some gaps remain for relative poverty reduction and the upgrading of urban informal settlements.

Figure 6 Progress in Poverty Eradication
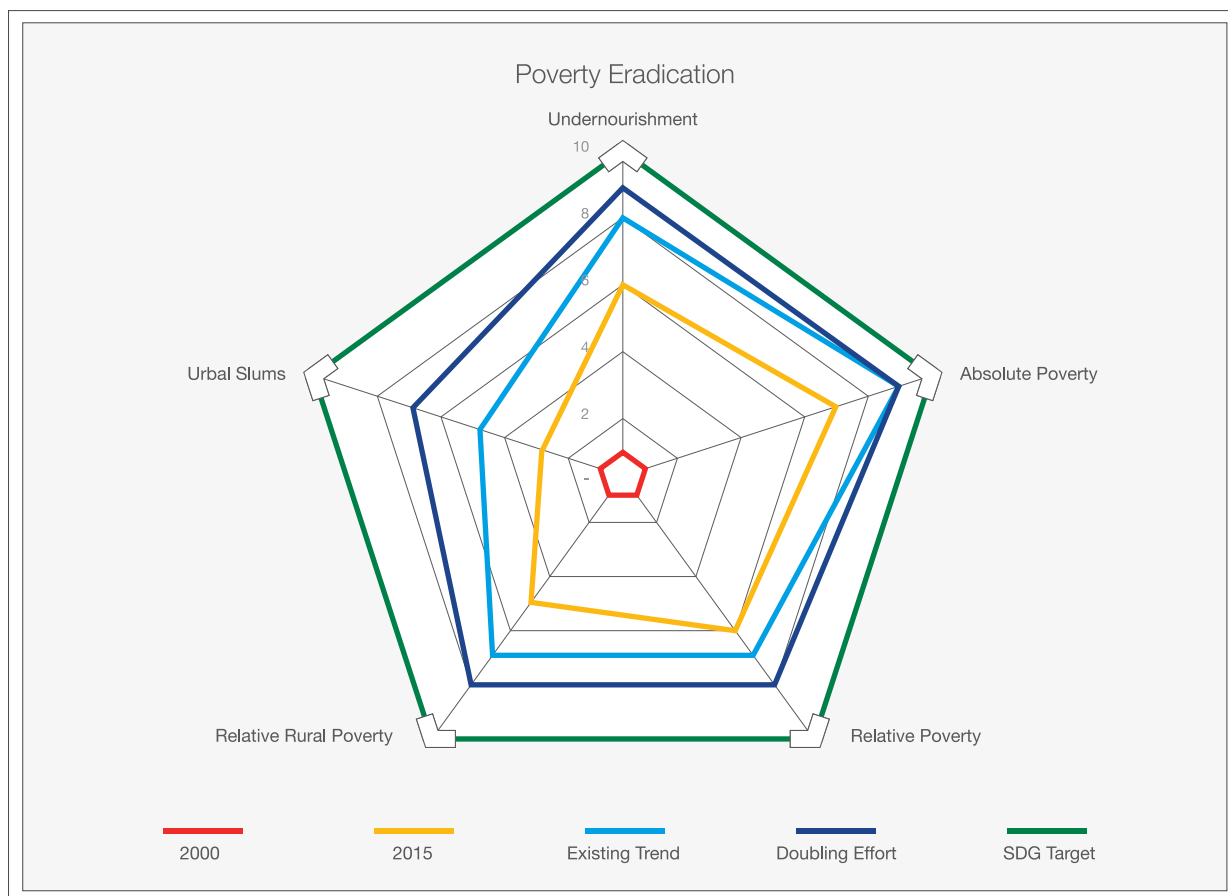
Source: Economic and Social Commission for Asia and the Pacific 2017

From the data available it appears that over the past two decades many ASEAN countries have successfully reduced absolute and relative poverty and improved access to food for a large number of households. Successfully reducing the incidence of undernourishment is especially important for infants and children to avoid the detrimental effects of wasting and stunting for their later ability to fully participate in education, employment and to lead fulfilled lives. If current trends of poverty reduction achievement continue or are intensified, ASEAN countries are in close reach of fully achieving some indicators of poverty eradication. Challenges remain in upgrading informal urban settlements, which requires large investment in infrastructure and in reducing rural poverty where progress is often constrained by the lack of economic and employment opportunity. Improving living standards in the least developed ASEAN countries is still closely linked to opportunities for social mobility in cities. Poverty is a problem in both rural and urban areas and while the qualitative and quantitative characteristics of poverty between rural and urban population are different there is ultimately a need to bridge the rural/urban divide through policies and programmes for poverty eradication by creating equal opportunities in both domains.[15]

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[15] Homogenous living standards, similar levels of service provision and consumption levels in cities and rural areas are usually achieved when industrialization and mechanization reaches the agricultural sector. This goes hand in hand with a sharp reduction in employment and incomes from agriculture and a full integration of rural areas into the industrial regime. Whether these patterns observed in the first industrialization are going to be repeated in Asia against the backdrop of large changes in energy provision to renewable decentralized energy needs to be seen. A different energy regime may well support new opportunities of rural development that are yet to be explored.

Reducing relative poverty is more difficult to achieve and is hampered by growing income and wealth inequality is a number of ASEAN countries.

A full understanding of the social change, and wage and wealth growth and distribution, in ASEAN countries is however hindered by the paucity of information and data and the absence of modelling capacity. Differences in wealth, household income and wages between urban and rural areas and within cities need to be better understood to develop well-functioning policies that achieve equitable economic opportunities for people in the ASEAN region. The differences in income levels and opportunities between ASEAN countries are also stark, which may lead to economic migration in the case that the movement of skilled and unskilled labour within the region is encouraged through policy settings.

Improving the knowledge base on poverty in the ASEAN region will need to go beyond measures of poverty that focus exclusively on income. It will need to include other factors such as educational status, health, access to services and infrastructure, vulnerability, social inclusion and access to social and financial capital which are the main determinants of poverty reduction and well-being. Poverty is not only prevalent in developing countries but also in OECD countries. The poverty report for Australia conducted by the Australian Council of Social Services identified 12.5 per cent of the Australian population in 2010 as living in poverty. In Japan, using a measure of relative poverty, around 15 per cent of households have income at or below half of the median household income. This puts the information available on people living below the national poverty line in ASEAN countries in perspective and suggests that knowledge gaps in measuring poverty need to be comprehensively addressed.

Investment in public infrastructure for housing and mobility, water and energy has a large positive impact on the lives of low-income households and is an area where infrastructure investment and poverty eradication policies can work together.

One important area of policy attention is the development of new and disruptive technologies such as driverless cars, robotics in manufacturing and 3D printing which will fundamentally alter traditional employment sectors and may affect relationships between living standards and wage labour. This may include minimum wage and provision arrangements for people who are not in work, which would put additional strain on public finances in many ASEAN countries and will add to the cost of public health and retirement spending systems.

3.2 Infrastructure and connectivity

Overview

The ASEAN Vision takes a very broad view of infrastructure, including transport infrastructure, tourism infrastructure, "sustainable and accessible infrastructure systems" that are disability-friendly, and infrastructure for food, water and energy provision systems. It also puts special emphasis on infrastructure that promotes connectivity, including information technology and communication "infrastructure with pervasive connectivity in ASEAN". Of particular note in this regard is the Master Plan on ASEAN Connectivity 2025. Accordingly, "Connectivity in ASEAN encompasses the physical (e.g. transport, ICT, and energy), institutional (e.g. trade, investment, and services liberalization), and people-to-people linkages (e.g. education, culture, and tourism) that are the foundational supportive means to achieving the economic, political-security, and socio-cultural pillars of an integrated ASEAN Community." The Connectivity Plan has five strategic areas: sustainable infrastructure, digital innovation, seamless logistics, regulatory excellence, and people mobility (ASEAN, 2016b).

The UN 2030 Agenda also covers infrastructure very broadly. For example, transportation is covered in SDG 9 and target 9.1 which focus on quality, reliability, affordability, equitable access and the resilience of transport infrastructure including trans-border infrastructure. Goal 11 has a focus on urban infrastructure with target 11.2 aiming to ensure accessible and sustainable transport systems with a high share of public transport. Energy is the focus of Goal 7, which asks for universal access to affordable, reliable electricity while improving energy efficiency and reducing the carbon intensity of the energy system. Goal 6 addresses water, including infrastructure for hygiene and sanitation.

Infrastructure systems are the foundation for economic growth and productivity. Business and commerce depend on roadways, water systems, pipelines, electricity lines and broadband connections to transport goods, gain access, provide services, communicate, and efficiently function.

Most ASEAN countries require substantial investment into their transport, communication, energy, water supply and sewerage infrastructure. The transport network, a traditional piece of infrastructure, plays an especially important role in the process of ASEAN economic integration by reducing transport time and costs and enabling trade volumes among ASEAN member countries to increase. This requires investment into all modes of transport and needs to focus on aligning transport and mobility needs with environmental considerations. Communication – especially the availability of broadband – is becoming a factor of similar importance to traditional infrastructure globally and in the ASEAN region to unlock economic potential.

Five aspects of infrastructure are highlighted in this report because of their importance for economic and human development:

- Transportation – the effectiveness and efficiency of moving people and freight by air, water, road and rail. This is covered in SDG 9 and target 9.1 which focus on quality, reliability, affordability, equitable access and the resilience of transport infrastructure including trans-border infrastructure. Goal 11 has a focus on urban infrastructure with target 11.2 aiming to ensure accessible and sustainable transport systems with a high share of public transport.

- Broadband – the effectiveness and efficiency of moving information (voice, data and images) at high speed over the Internet and other networks.

- Energy – providing electricity for business, residential, industry, transportation and agricultural sectors. This is the focus of SDG 7, which asks for universal access to affordable, reliable energy systems while improving energy efficiency and reducing the carbon intensity of the energy system.

- Water – Supplying water for communities, economies, and agriculture and removing wastewater and storm water from those locations. This is covered by Goal 6 with target 6.1 aiming for universal and equitable access to safe and affordable drinking water.

- Sanitation – SDG target 6.2 focuses on sanitation and sewerage systems to improve hygiene and health standards.

Data analysis

Indicators for transport and connectivity

- Road density (km of road per 100 km2)

- Mobile cellular subscriptions (number and number per 100 people)

- Lack of access to electricity (number and % of people lacking access)

- Lack of access to improved water sources (number and % of people lacking access)

- Lack of access to improved sanitation facilities (number and % of people lacking access)

Data have been sourced from the United Nations Economic and Social Commission for Asia and the Pacific and from the World Bank.

Transport

We use the extension of the road network per square kilometre of land area to provide a good indication of overall investment into transport infrastructure in a country. Road density varies among countries and reaches 200 km per 100 km2 in the European Union and 175 km per km2 in the United Kingdom. Sweden by comparison has a road density of 95 km per km2 (World Bank, 2017). The ASEAN region starts at a low level of road density of around 23 km per km2 in 2000 which has risen to 36 km per km2 and is on track to double to 70 km per km2 (see Figure 7). There were stark differences among ASEAN member countries in 2015 with very low levels of road and transport infrastructure in Myanmar and Cambodia and fairly high levels, even by international comparison, in Brunei, Malaysia and Singapore.

Road infrastructure will be an important component in enhancing connectivity and trade relations within the region and will need to be complemented by rail infrastructure, especially for freight transport. Ambitious policies could achieve a road density of 95 km per km2 of land area by 2030 which would assist the trade ambitions of the region and help to connect the regional centres. Connections by sea and investment in harbour infrastructure will be required to connect the mainland with the island parts of the ASEAN region. Transport infrastructure requires large investment and the investment decisions over the coming decades, when a lot of additional infrastructure will be built, will have a lasting effect on the economic and environmental performance of the region. While road infrastructure will be the backbone of the mobility system in the ASEAN region, investment in rail and ship freight infrastructure will be important to enhance the environmental performance of freight transport. Many ASEAN countries have access to the sea and to major rivers which allows for maritime infrastructure roll-on roll-off facilities, and multi-modal transport hubs.

Figure 7 Road density, 100 km per 100 km^2 of land area
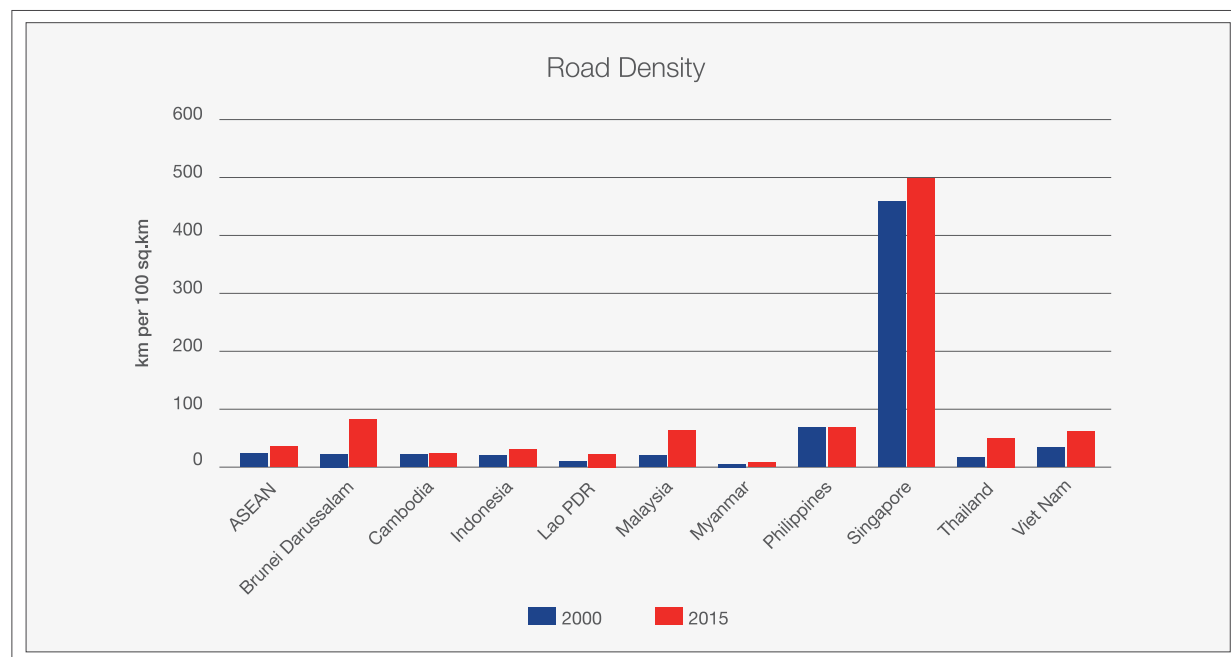
Source: Economic and Social Commission for Asia and the Pacific 2017

Another important aspect of ASEAN trade and transport policy will be a focus on regional strategies/policies within the ASEAN economic community to build support for strengthening regional/ local supply chains to reduce transport miles and embodied emissions in transport.

Communication

We use the number of mobile cellular subscriptions as an indicator of the extent of and access to communication infrastructure and hence the connectedness of people in the ASEAN region. The availability of modern means of communication is viewed as an important factor to achieving the outcomes of the development vision for ASEAN in seamless connectivity. The comparatively low levels of fixed telephone lines and broadband and the already high availability of mobile connections suggest technology leap-frogging but will not replace the need for very large investment in first-class communication and broadband infrastructure that will underpin economic development and innovation in the region. Developing an ASEAN broadband network is perhaps one of the major regional investment projects next to transport, water and energy infrastructure and of utmost importance for modernizing ASEAN economies and businesses.

Currently mobile cellular connections are at 125 subscriptions per 100 people on average in the ASEAN region which is already a high level (see Figure 8). Lao PDR and Myanmar have the highest need for additional infrastructure and if current trends continue subscriptions would rise to 150 per 100 people which is perhaps an unnecessarily high level. It demonstrates, however, the ambition and readiness of ASEAN people to embrace modern technologies and innovation. This suggests that the ASEAN community is on a path to developing a culture of innovation which could provide powerful momentum in the sustainability transition that needs to be embarked upon in the ASEAN region.

Figure 8 Mobile cellular subscriptions, per 100 people
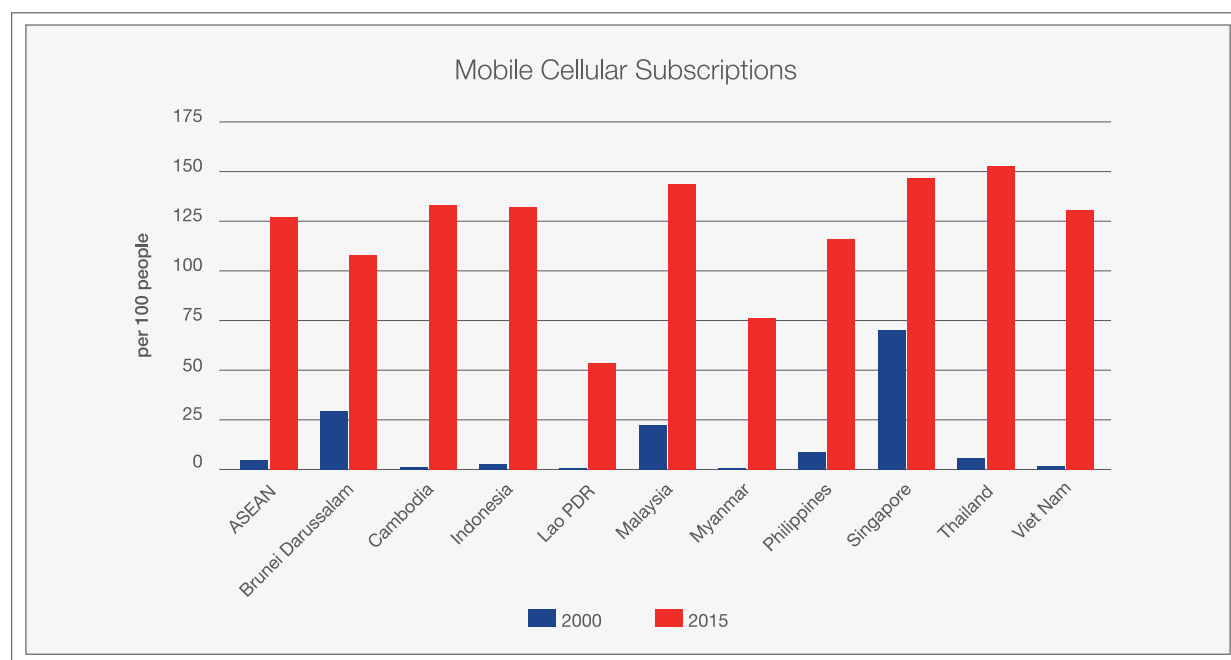
Source: World Bank 2017 World Development Indicators

Access to electricity

Access to electricity is fundamental for participating in modern society in terms of communication and enabling people to use electrical appliances that help reduce household chores and free up time for participation in the formal economy, especially for women. Hence, availability of electricity is also important for economic and social development. Access to electricity in a modern energy system is universal in Singapore, Malaysia, Brunei, Thailand and Viet Nam, and has reached a rate of around 87 per cent across the region. Under-delivery of electricity services is a continuing issue in some ASEAN countries especially in rural and remote settings. In 2015, 50 million people, i.e. 10% of the ASEAN population (see Figure 9) still lacked access to electricity, with the largest numbers of non-connected households in Myanmar and the Philippines (ESCAP, 2017).

However, the electricity access rate has increased in many ASEAN countries and full access will be achievable by 2030, especially when access in remote areas can be reached through renewable off-grid electricity provision. Renewable energy can play an important role in balancing the economic and environmental protection since it can contribute to reduce the emission of GHG. Since a lot of energy infrastructure is going to be built in the coming decades, investment should be shifted to renewable generation and storage and should include building standards and demand management aspects as well.

Figure 9 Lack of access to electricity, percentage
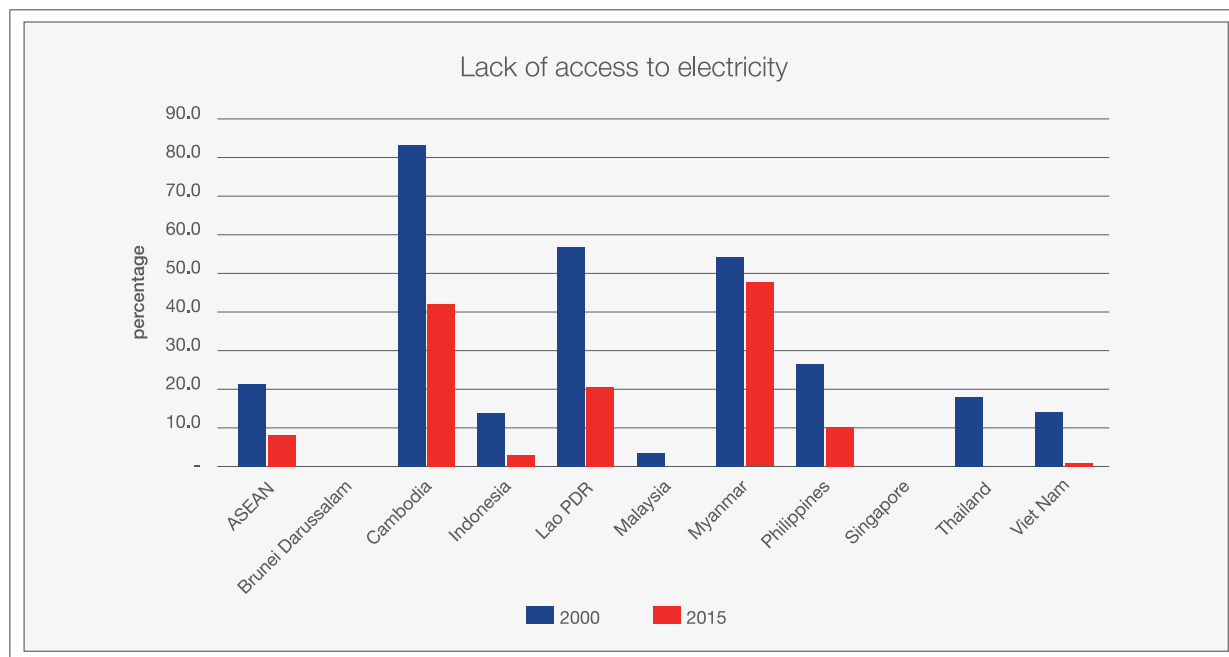
Source: Economic and Social Commission for Asia and the Pacific 2017

Access to improved water sources

Universal access to improved water sources, another fundamental aspect of human development, has been achieved in Singapore and Brunei and other countries such as Thailand, Viet Nam and Malaysia have come close to universal access. The ASEAN region as a whole has an access rate of about 80 per cent with prevailing differences between urban and rural areas. In cities around 86 per cent of all people have access whereas in rural areas only two thirds have access which meant that in 2015 around 60 million people (ESCAP, 2017) did not have access to improved water sources, with the highest percentages lacking access in Cambodia, Lao PDR and Myanmar (see Figure 10).

Figure 10 Lack of access to improved water sources, percentage of people
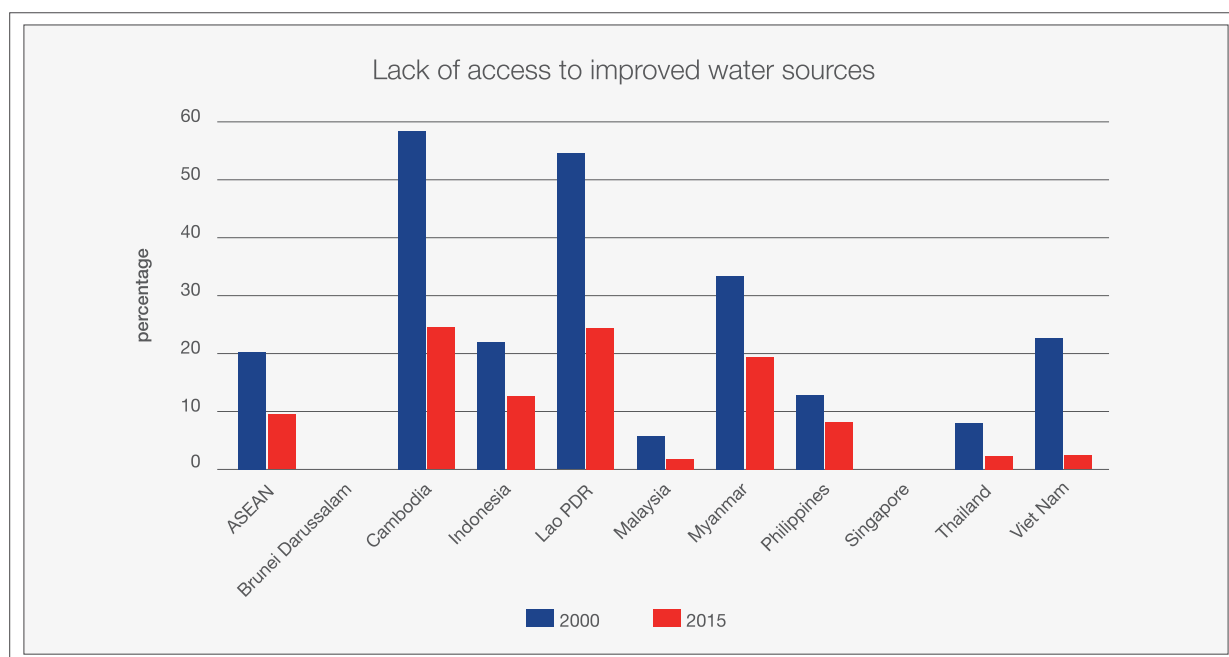
Source: Economic and Social Commission for Asia and the Pacific 2017

Access to improved sanitation facilities

Access to sanitation is another important indicator for infrastructure delivery with close linkages to health outcomes. Across the ASEAN region around 70 per cent of people have access to improved sanitation (see Figure 11) with a number of countries and rural areas lagging behind. This is a lower access rate than for water provision. Cambodia and Indonesia have the lowest access rates across the ASEAN community and in rural areas only 54 per cent of people have access which highlights an important investment need to connect additional 175 million people to modern sanitation (ESCAP, 2017). Delivery of water services and sanitation can be improved if they are seen as two sides of the same coin and are tackled with strategies of integrated water and sewerage management.

Figure 11 Lack of access to improved sanitation facilities, percentage of people
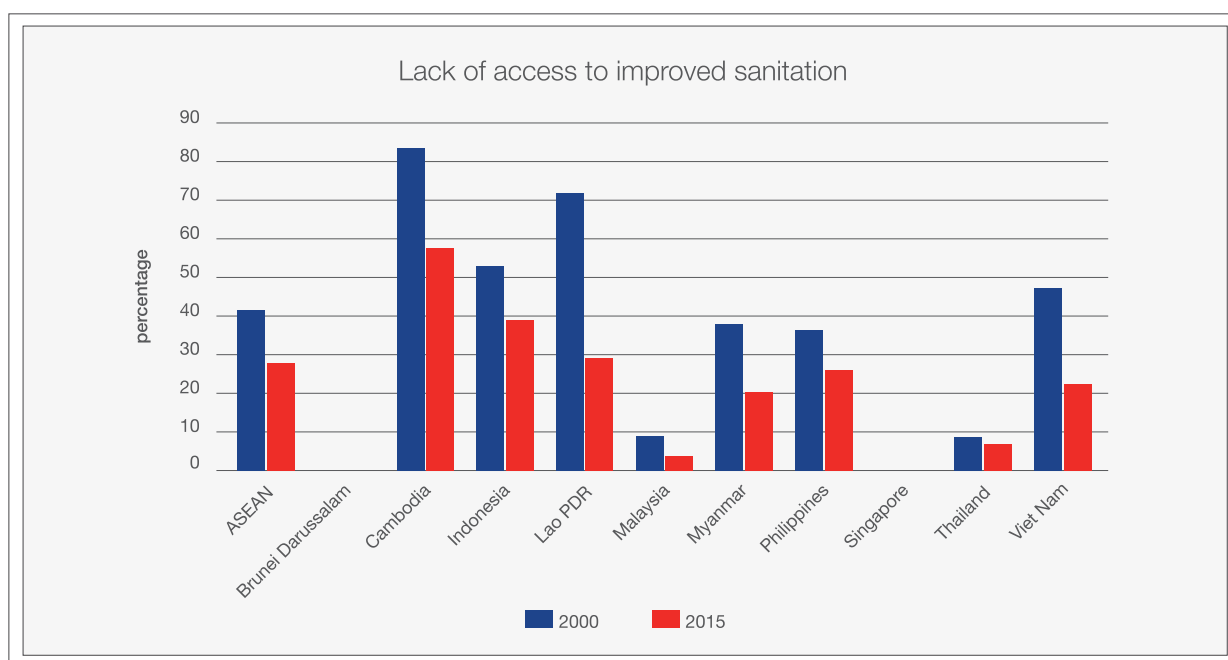
Source: Economic and Social Commission for Asia and the Pacific 2017

Taken together, the five indicators suggested are used as proxies for the current state of infrastructure development and connectivity in ASEAN countries and the region as a whole. The data demonstrates very large achievements in the 15 years from 2000 to 2015 and suggests further improvements if current trends continue. Infrastructure and communication are, however, important areas that need large investments to achieve the aspiration of the Community Vision and the SDGs. This may stretch the financial abilities of ASEAN governments and may need to rely on other funding models such as private-public partnerships and models of community ownership.

Gap analysis

The gap analysis shows that major improvements in transport infrastructure, communication and the provision of modern energy, water and sanitation will need to occur over the coming decades to further improve economic competitiveness, liveability and human capital and health in the ASEAN region. While the existing trend points in the right direction even doubling current efforts would leave a gap for most indicators that requires additional policy attention. If policies were well designed and finances provided, the next 15 years could see accelerated growth in road density and other transport infrastructure and modern sanitation catching up with the improvements achieved in water and electricity provision

Figure 12 Progress in Infrastructure and Connectivity
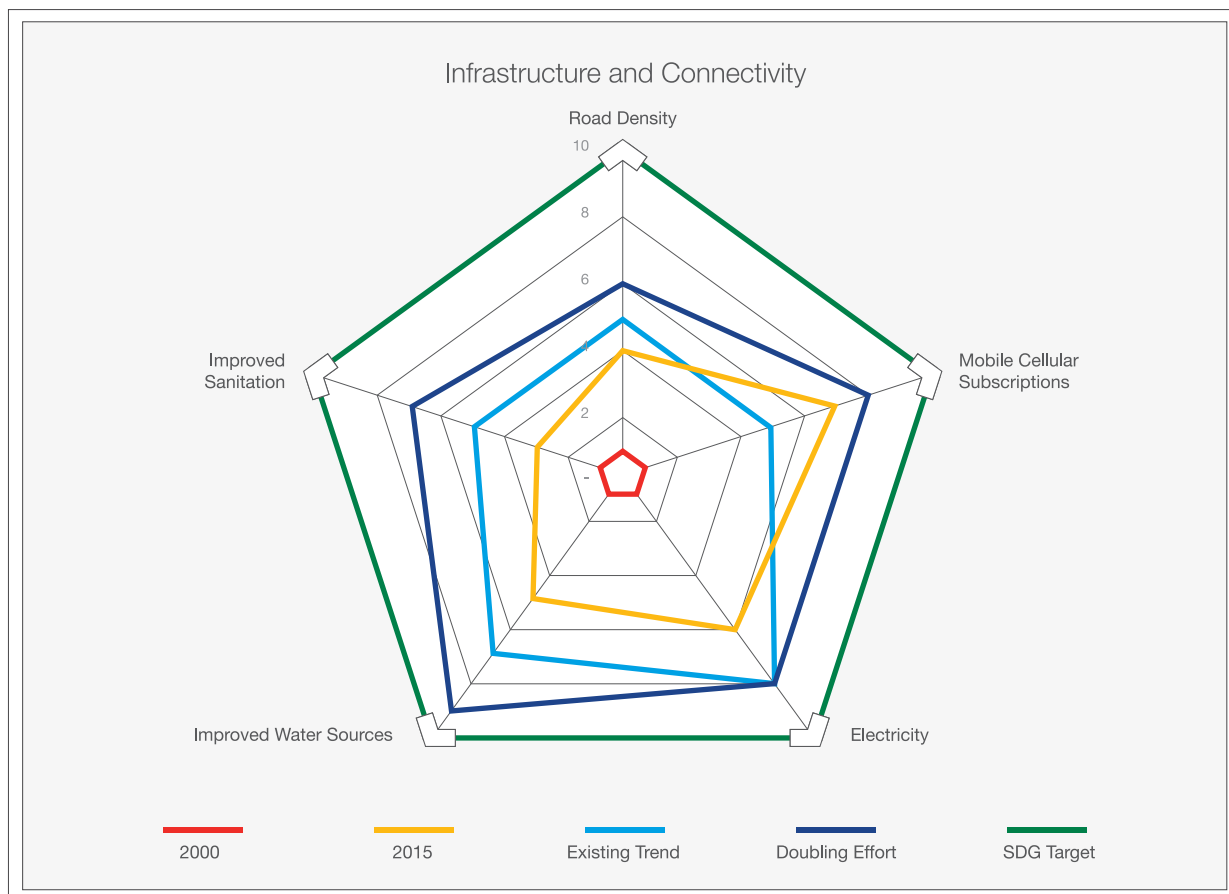
Source: Economic and Social Commission for Asia and the Pacific 2017, World Bank World Development Indicators 2017

Despite it being a financial and logistical challenge, infrastructure needs to be extended substantially to fulfil the objectives of the SDG agenda and Community Vision. This requires large investments, especially in transport and communication infrastructure, in countries where large gaps exist and to build connections between countries. Improvements are also required for sanitation and sewerage systems. Provision of modern energy and improvements of water sources appear to be achievable at existing extension rates of improvements though this is not the case for other infrastructure areas, which require additional investment. While enabling access is an important objective in itself, an assessment of infrastructure quality should be undertaken to understand further needs for technical improvements to existing infrastructure.

Infrastructure investments have a long-lasting legacy and need to enhance the environmental and social outcomes of the infrastructure networks that are extended and properly maintained or newly built. Investment priorities should include a preference for public transport, freight by rail and ship, a world-class broadband network, renewable and distributed energy solutions, water saving and wastewater reuse infrastructure, which are all strategies that would allow the ASEAN region to achieve the development and environmental sustainability goals of the SDGs and also meet the economic development priorities of the ASEAN Community Vision.

Infrastructure development that achieves economic, environmental and social outcomes simultaneously relies on good planning frameworks and processes, a combination of public and private financing and good institutional oversight. There is also a role for development cooperation, especially for least developed countries. Providing better services in rural areas in the least developed ASEAN member countries will continue to be a challenge due to the lack of financial and human capital. The remoteness of some areas adds additional difficulty.

Establishing a regional infrastructure council that supports planning, establishes technical standards and sets criteria for quality expectations and the adaptiveness of infrastructure development in the region and in countries will help create a strong focus on reliable and high quality infrastructure in the ASEAN region. Infrastructure financing will need to rely on private-public partnership and asset recycling models to create the substantial financial resources required for infrastructure maintenance and new infrastructure.

3.3 Sustainable management of natural resources

Overview

The ASEAN Economic Community Blueprint 2025 acknowledges that: "Protection of the environment and natural resources supports economic growth and vice versa". This acknowledgement manifests in the interest to "minimise the negative effects on natural resources such as soil, forest and water, and reduce the greenhouse gas emission". In the ASEAN Socio-Cultural Blueprint 2025, one of the key areas with corresponding strategic measures is on "Conservation and Sustainable Management of Biodiversity and Natural Resources" (ASEAN, 2015).

Under the UN 2030 Agenda, natural resource use features strongly under a number of goals, including towards sustainable consumption and production (Goal 12), sustainable agriculture (Goal 2), water (Goal 6), access to energy (Goal 7), combating climate change (Goal 13), conserving marine resources (Goal 14) and ecosystems (Goal 15). Sustainable natural resource use is well acknowledged in the SDGs in a number of targets which cover material use and waste, energy use and emissions, water, climate, and terrestrial and aquatic ecosystems. These require special policy attention in the populous ASEAN region during a period of fast economic growth and a focus on improved human well-being.

All economic activity and human well-being are underpinned by the timely availability of suitable and affordable natural resources – materials, energy, water and land. Natural resources and well-functioning ecosystems are necessary to build, maintain and fuel infrastructure, industries and households. Natural resources are embodied in products and services and while natural resources and ecosystem services do not feature in the production function of mainstream economics they are basic, indispensable ingredients for all social and economic processes.

Natural resources are not only important for a well-functioning economy, but also have important linkages to the environment. The amounts of natural resources utilized determine the amounts of waste and emissions generated as an unintended consequence of production and consumption processes. The environmental pressures created by resource use are in turn responsible for a series of environmental impacts which include resource depletion, acidification and eutrophication of soils and water bodies, toxic waste, air pollution and climate change, among others. Environmental pressures and impacts need to stay within certain planetary boundaries for important ecosystem processes to support economic and human development (Steffen et al., 2015). If these boundaries are transgressed, environmental conditions as a whole become less favourable for all human activity.

Many communities in the ASEAN region rely directly on natural resources, generate their livelihoods in agroforestry ecosystems and depend on the viability of timber, fish and many non-timber forest products. Sustainable management of water resources, mitigation and adaptation to climate change, avoiding additional biodiversity loss and avoiding local resource depletion are important objectives for traditional environmental policy at the national and community level and need be a focus in all countries of the ASEAN region.

Sustainable management of natural resources requires decoupling of pressures and impacts from economic activity to achieve well-being at lower environmental costs, and rely on sound management of terrestrial and marine ecosystems.

Data analysis

Material footprint

We use per capita material footprint as a proxy for the overall environmental pressure and impact of a national economy's consumption (including households, governments and capital investment) across the whole supply chain, wherever resources are extracted and waste and emission flows occur in the global economy (Wiedmann et al., 2015). Material footprint is also a measure of the material standard of living of a country. Per capita material footprint is a good proxy of the overall pressure on natural resource systems per average person. As living standards rise material footprint increases accordingly signalling additional environmental and natural resource pressures.

Figure 13 Per capita material footprint
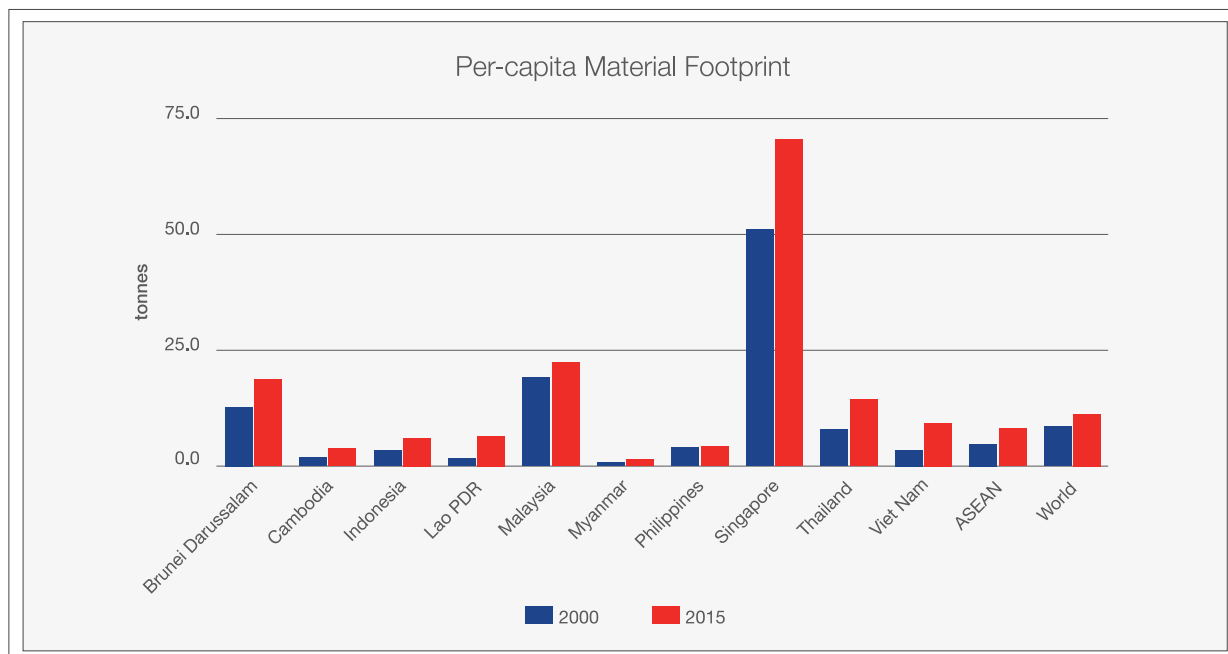
Source: UN Environment 2017 Global Material Flows and Resource Productivity database

The extremely high material footprint for Singapore is an anomaly related to Singapore's position as a high density and highly urbanized region that solely depends on resource inputs from abroad. Highly developed nations currently have a material footprint of between 25 tonnes per capita (Japan) and 35 tonnes per capita (Australia) and differences reflect variation in the material standard of living, such as the size of houses or the number of cars per household (UNEP,

2017). Large, less densely populated countries also have to cover a greater material overhead for infrastructure delivery compared to smaller, densely populated countries.

Most ASEAN economies are below the 25 tonnes of material footprint of Japan and in many cases they are well below. ASEAN on average was below 5 tonnes per capita in 2000 and recorded an average per capita footprint of 8 tonnes in 2015. Recent studies show that, currently, high human development (according to the Human Development Index) requires 15 tonnes of material footprint on average (UNEP, 2016). Only Singapore, Malaysia, Brunei and Thailand have reached this level. This indicates there will be substantial growth in material requirements of all other ASEAN economies as they further industrialize, urbanize, achieve greater wealth and implement the SDGs, signalling related growth in environmental impacts.

It is difficult to determine what a sustainable level of material footprint would be and there is no consensus in the scholarly literature. A recent study (Bringezu, 2015) aimed to determine a sustainable level of material footprint and suggested a level as low as 5 tonnes per capita which seems especially low for ASEAN developing countries that have to build a lot of additional housing and transport and communication infrastructure and will also need to update productive capital.

Forests

Forests continue to be important economically for domestic and export industries and for the livelihoods of remote communities in many ASEAN countries. They are also large reserves of biodiversity and genetic diversity that play an important role in the global carbon cycle. Deforestation poses multiple economic and environmental threats and the forest area in the ASEAN region declined from 2.2 million to 2.1 million square metres or from 51% to 49% of the total land area between 2000 and 2015 (ESCAP, 2017). Therefore, it is pertinent that, while focusing on economic growth and development, equal emphasis has to be given to promoting natural resource conservation and adequate attention paid to social and environmental aspects.

Some countries including Singapore, Thailand and the Philippines have a much lower share of forest cover (see Figure 14) and overall the region will lose an additional 70 thousand square kilometres of forest area by 2030 if trends continue (ESCAP, 2017). Enhancing sustainable forest management for the continuous production of forest goods and services in a balanced way and ensuring forest protection and biological diversity conservation, as well as optimise their utilisation, in a manner which is compatible with social and ecological sustainability is therefore an important environmental policy objective for the ASEAN region.

Figure 14 Forest area, percentage of total land area
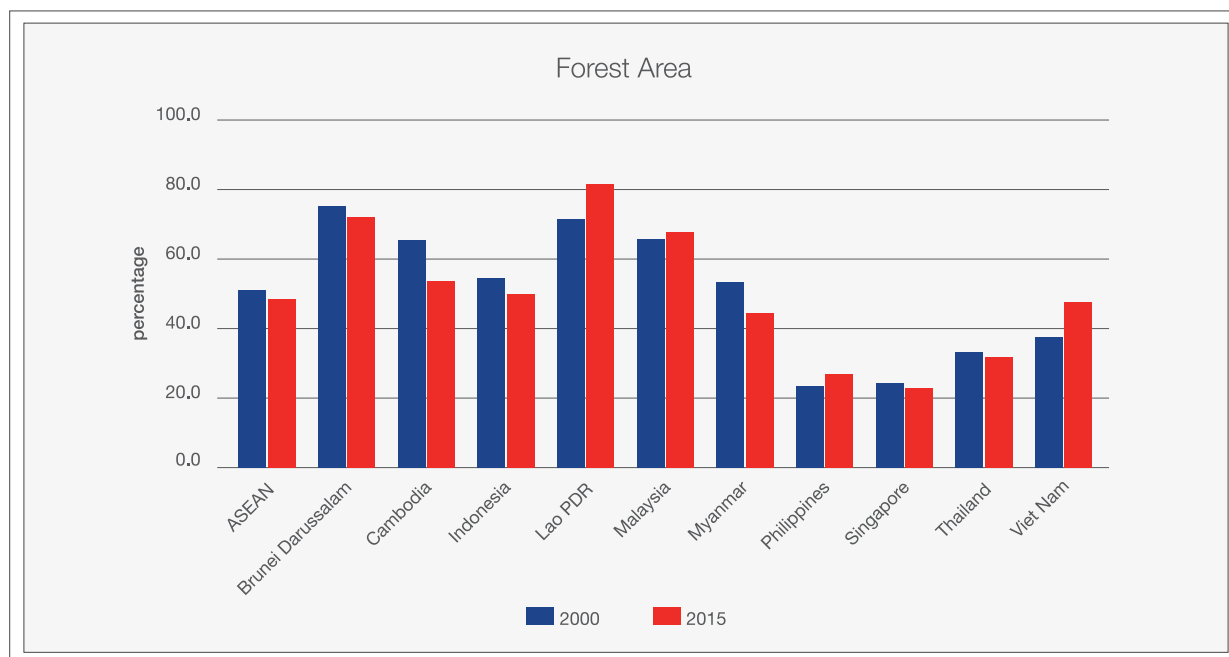
Source: Economic and Social Commission for Asia and the Pacific 2017

Protected areas

Protected areas play an additional role in biodiversity conservation. In general, protected areas have been growing and are on track to continue to grow across the ASEAN region, signalling successful environmental policy in conserving the unique biodiversity of Southeast Asia. Some countries are home to unique species and threatened species rates of mammals, birds, fish and higher plant species have been growing. Increasing protected areas may help reverse this trend.

There are stark differences among ASEAN countries in the extent of protected land area with Myanmar, Singapore and Viet Nam lagging behind other countries (see Figure 15).

Figure 15 Protected land areas, percentage of total area
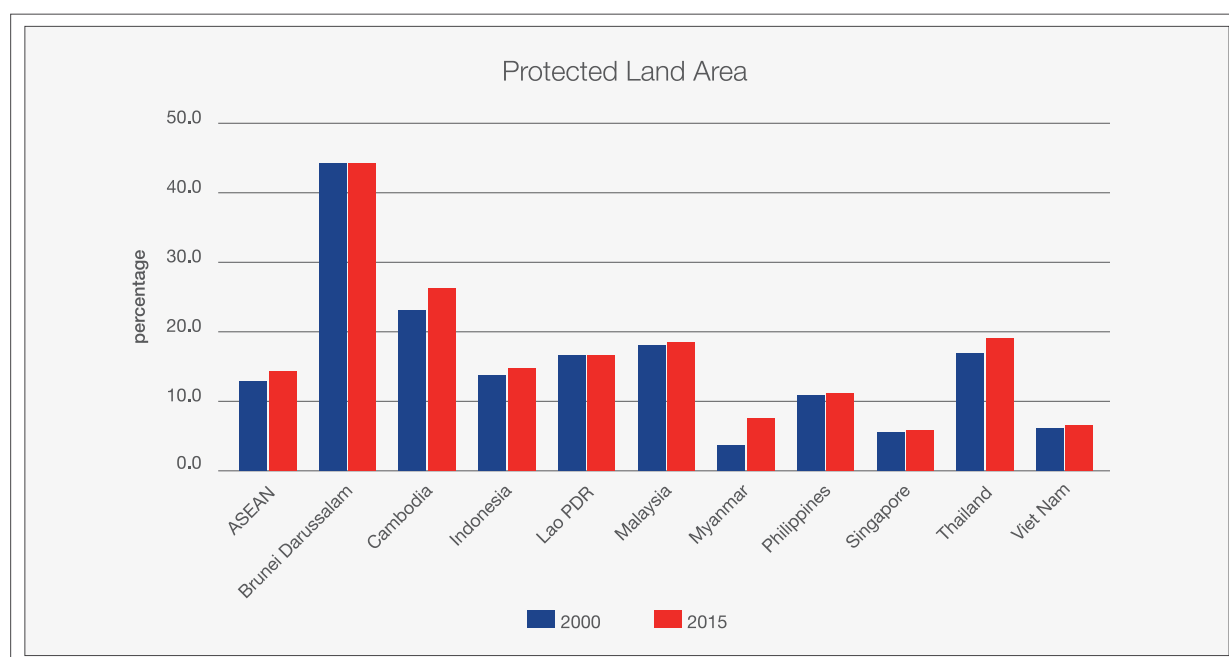
Source: Economic and Social Commission for Asia and the Pacific 2017

Air pollution

Another important factor in natural resource management is avoiding air pollution, which we measure here as population exposed to PM2.5 concentration levels exceeding WHO guideline values. Air pollution is extremely high in most urban agglomerations in ASEAN countries and is also an issue in many rural areas. It will be difficult to reverse the current trend if investments in coal-fired power stations and private motorized transport continue at the current rates.

According to the available data air pollution is a ubiquitous issue in ASEAN Member States[16] (see Figure 16) and improvements in air quality will be slow in a situation of fast-growing private and public mobility, fast-increasing freight transport and a coal-based electricity generation system.

Figure 16 Air pollution of PM2.5, percentage of people affected
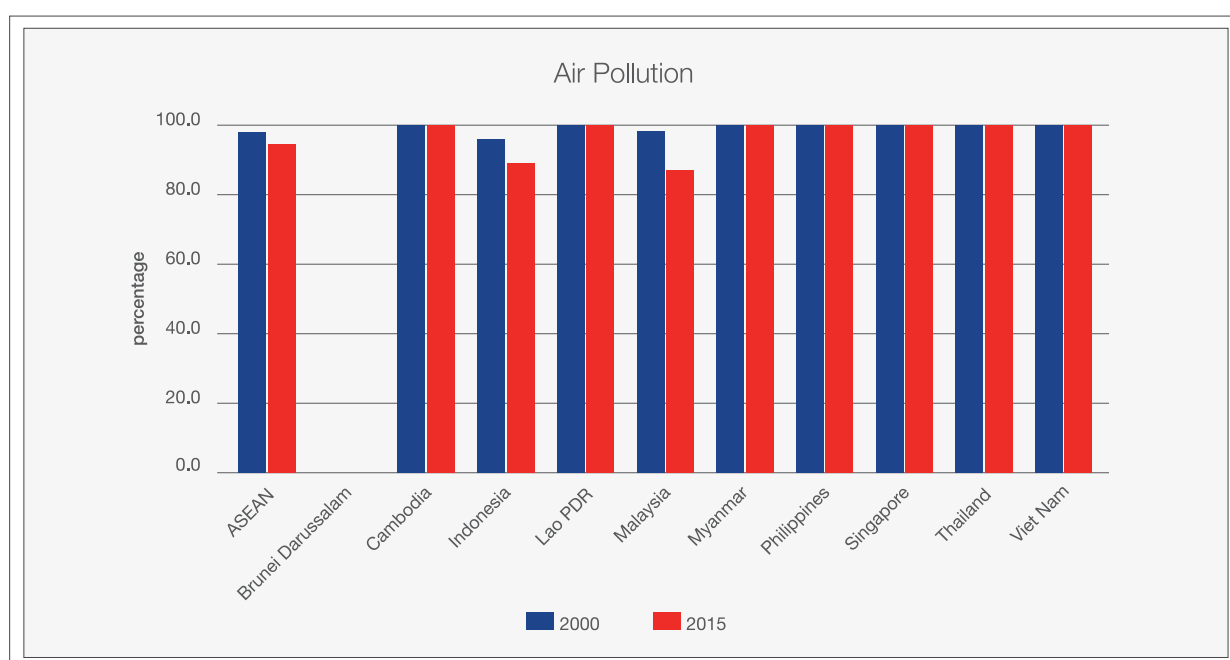
Source: World Bank 2017 World Development Indicators

Greenhouse gas emissions

GHG emissions measure the contribution of a country's economy to global pressure on the climate system. They are related to the production system and the territorial use of energy and other industrial and agricultural processes that produce GHG emissions of a country (territorial emissions).

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[16] Data for Brunei Darussalam is not applicable.

Figure 17 Per capita GHG emissions, tonnes of CO$_2$ equivalent
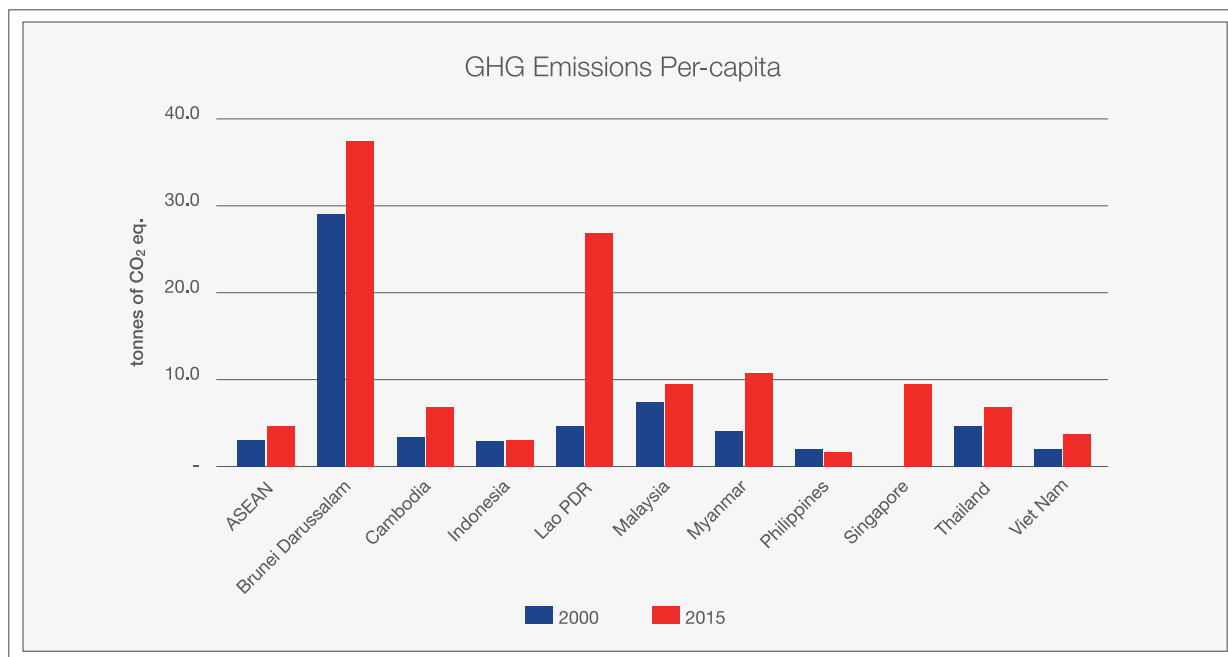
Source: European Commission 2017 Emissions Database for Global Atmospheric Research

In terms of greenhouse gas emissions per capita, levels are comparatively low by international standards, signaling future growth when the social and economic goals of the SDGs and the Community Vision are realized. Per capita GHG emission are beyond 25 tonnes per capita in the United States and Australia and between 5 and 15 tonnes in Europe. ASEAN, on average, had reached 5 tonnes of per capita GHG emissions in 2015 (see Figure 17) which is at the lower end of the spectrum.

Gap analysis

As a broad guideline, natural resource use and waste and emissions are growing rapidly in most countries in the ASEAN region and are supporting industrialization and urbanization, rising incomes and a growing material standard of living. Terrestrial and marine ecosystems are also changing fast and economic development and land-use change have contributed to biodiversity loss and ecosystem damage. There are large research gaps in understanding the relationship between changes in population, production and consumption and ecosystems and natural resources in the ASEAN region. These require investment in environmental policy research and integrated modelling of policy alternatives to simultaneously address economic and environmental objectives.

When we compare the existing trends in natural resource management indicators with policy objectives for sustainable natural resource management of the Community Vision and the SDGs we see the average ASEAN material footprint growing rapidly towards the 15 tonnes per capita which currently present the threshold for high human development. This fast increase is a result of industrializing and urbanizing ASEAN economies who achieve greater wealth and also of the changing consumption patterns of a fast-growing middle class. In our assessment we have set 15 tonnes per capita as the goal which helps address the lack of infrastructure and the need for increasing material standard of living of millions of people. On a global level, 15 tonnes per capita would still result in 135 billion tonnes of material use by 2050, much higher than the current 80 billion tonnes and perhaps unsustainable.

Figure 18 Progress in natural resource management

Natural Resource Management

Legend: 2000, 2015, Existing Trend, Doubling Effort, SDG Target

Axes: Material Footprint, Forest Area, Protected Area, Air Pollution, GHG Emissions
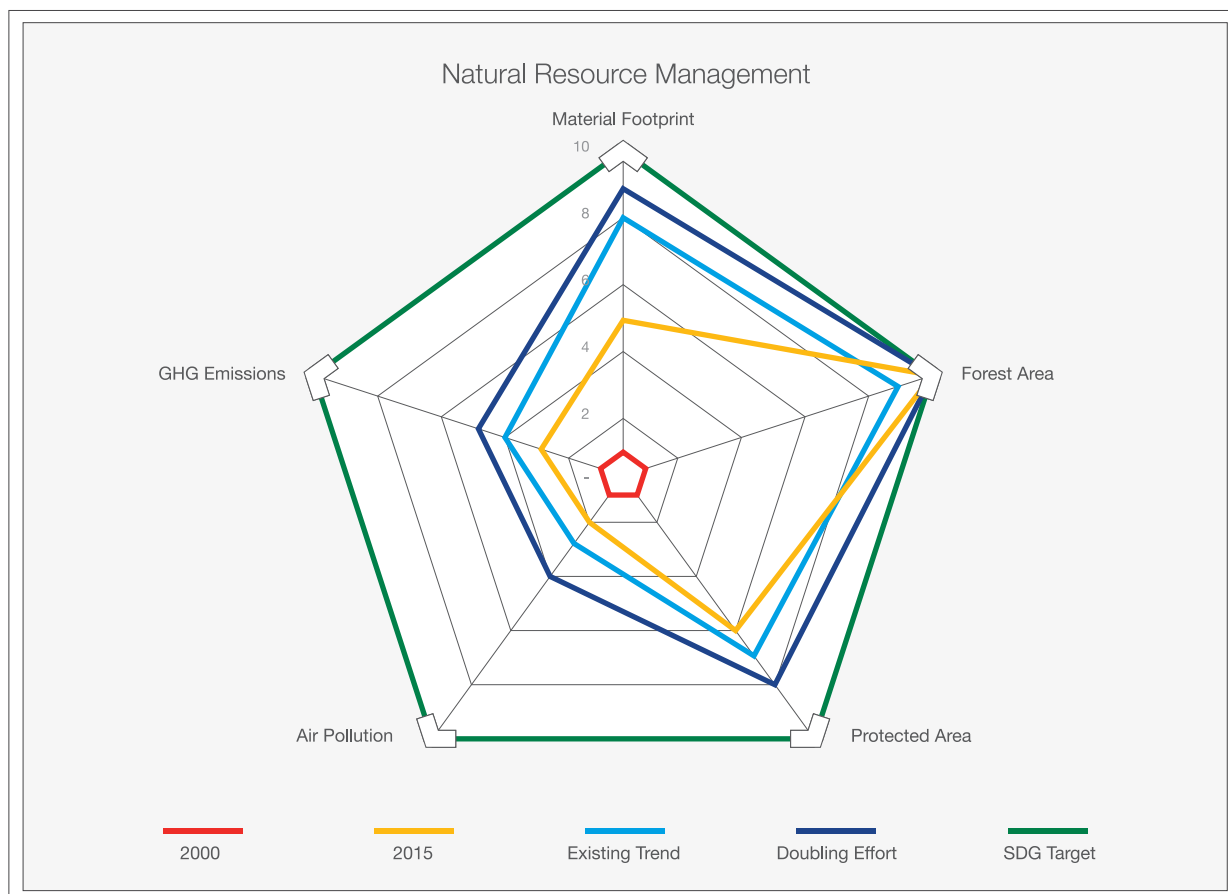
Source: Economic and Social Commission for Asia and the Pacific 2017, UN Environment Global Material Flow and Resource Productivity Database 2017, World Bank 2017 World Development Indicators, European Commission 2017 Emissions Database for Global Atmospheric Research

Overall environmental pressures are increasing fast under existing trends. If socioeconomic and human development objectives are successfully achieved this will come at an additional cost of natural resources and emissions unless current systems of production are changed to improve resource efficiency and are geared towards the minimization of waste and pollution (this will be addressed in the next section under sustainable consumption and production). Air pollution, especially, is a problem in almost all ASEAN countries and progress in reducing air pollution appears to be slow.

There is considerable demand for additional knowledge about natural resource management in most ASEAN countries, especially around waste flows and inequities between urban and rural areas, and wealthy and poor households. Measuring waste from households and industry that goes into landfill would provide important additional information, however, waste statistics are grossly inadequate for most countries.

There are significant differences in per capita material footprint and GHG emissions between urban and rural areas in most ASEAN countries. Cities have more potential for efficiency improvements and decoupling but also much higher per capita values of material footprint and GHG emissions compared to rural areas. This has to do with the fact that cities fast track modernization and enable middle-class consumption and are hence an important arena for infrastructure improvements (see section on infrastructure).

Per capita material footprint will also vary greatly between households of different income levels but no data are currently available to demonstrate this.

Managing natural resources responsibly will be an important policy objective for the ASEAN region in the decades to come because of increasing domestic resource scarcity in some countries and continuing volatility of world market prices for strategic resources that are increasingly imported from abroad (Schandl and West, 2010). With regard to natural resource management, economic and environmental objectives appear to be well aligned. What works economically also needs to address issues of resource availability, waste and pollution and climate change.

Another important issue related to environmental sustainability and the management of natural resources is the emergence of a broader middle class in ASEAN countries. The definition of middle class can either entail the middle strata in a national society or refer to the typical standard of living, purchasing behaviour and asset ownership of the global middle class. The latter definition is more relevant in the context of the SDGs. When households enter the middle class they engage in fundamental changes in their diets, housing and mobility arrangements and their need for resources and utilities. With the change in income comes a move to more meat and dairy in the diet, better housing, furnishing and modern appliances, and changes in mobility arrangements.

Policy initiatives that would facilitate improvements in natural resource management may include income from carbon plantings, ecosystem services payments and more generally pricing of externalities which would be an area of complementary effort within the SCP policy domain.

3.4 Sustainable consumption and production

Overview

In its pursuit of sustainable economic development, the ASEAN Economic Blueprint 2025 states that "ASEAN would actively promote green development [that] enhances sustainable consumption and production, and including it in national development plans" (ASEAN, 2015). Sustainable Consumption and Production (SCP) is reiterated as one of the key areas of the ASEAN Socio-Cultural Community Blueprint 2025. It highlights the need for SCP across various stakeholder activities and at different points of value chains, including "integration of Sustainable Consumption and Production strategy and best practices into national and regional policies or as part of CSR activities", resource efficiency, and "sustainable consumption and green lifestyles at all levels" (ASEAN, 2015).

SCP has been declared by the United Nations as one of the "overarching objectives of, and essential requirements for, sustainable development" (UN, 2002). It prominently features as an SDG (Goal 12: Ensure sustainable consumption and production patterns) in the 2030 Agenda, which calls for the implementation of the 10 YFP with shared but differentiated responsibilities for developed and developing countries. Furthermore, it is reflected as a cross-cutting objective of the larger framework, including in addressing social objectives such as to end poverty (Goal 1) and hunger (Goal 2), promoting well-being for all (Goal 3), and employment (Goal 8), and as means to sustainability objectives such as sustainable management of water and sanitation (Goal 6), resilient infrastructure (Goal 9), and access to energy (Goal 7).

Sustainable consumption and production is perhaps the most promising policy framework for achieving decoupling between economic activity, human well-being and global environmental pressures. The principles, tools and policy instruments required for SCP are outlined in the 10 Year Framework of Programmes (10 YFP) adopted at the United Nations Conference on Sustainable Development (Rio+20) in 2012. It includes sustainable public procurement, responsible household consumption (sustainable lifestyles), sustainable infrastructure and sustainable industries (eco-efficient production).

In light of environmental degradation and persistent global poverty, supply management in government agencies is mentioned in SDG target 12.7, which asks agencies to contribute to achieving the sustainable development goals through the inclusion of environmental and social criteria within public procurement processes. Sustainable public procurement (also known as green public procurement) refers to the capacity of governments to strategically use their role as a main consumer to change their environmental and social footprint of consumption and to influence the environmental performance of main suppliers. This may help to stimulate sustainability in the private sector.

Household consumption (target 12.8) is another important contributor to overall environmental pressure, especially in a context where household incomes are rising and the increasing number of middle-class consumers is ratcheting up the environmental pressures of household consumption. The environmental and social footprint of household consumption can be measured in a similar way to government consumption using environmentally extended input-output analysis.

Sustainable infrastructure, i.e. the delivery of housing, commercial buildings, mobility and energy to households and businesses, is another important factor in the environmental performance of a national economy. The ways in which these provisions are delivered are closely linked to urban development and urban planning. Infrastructure decisions that favour green and sustainable solutions have a long-lasting legacy as infrastructure investments usually have a lifetime of decades.

Another important factor in achieving SCP, and addressed in target 12.6, is the eco-efficiency of industry and the amounts of resources, waste and emissions required in the production of goods and services. The potential for eco-efficiency is often large and delivers a double dividend in cost savings and better environmental performance. Implementing eco-efficiency strategies at the industry level can also contribute to a positive perception of the social and environmental responsibility of a business, raising social licence to operate and increasing consumer demand for the products of such businesses.

Targets 12.3 to 12.5 of the SDGs formulate traditional environmental policy goals around preventing food waste, reducing waste generation more generally through recycling and reuse (circular economy) and the management of toxic and hazardous waste.

The ASEAN Community Vision also makes reference to environmentally sustainable development and environmental protection and can rely on the more detailed formulation of SCP objectives in the SDGs without contradicting the Community Vision.

Data analysis

Indicators for sustainable consumption and production

- **Material productivity – GDP per unit of Domestic Material Consumption (DMC) (US$ per kg)**

- **Material footprint of government expenditure per capita (tonnes per capita)**

- **Material footprint of household expenditure per capita (tonnes per capita)**

- **Material footprint of capital investment per capita (tonnes per capita)**

- **Eco-efficiency of production – Direct Material Input (DMI) per unit of GDP (kg per US$)**

Data sourced from the UN Environment Material Flow and Resource Productivity database.

Material (resource) productivity

During their industrialization and urbanization, ASEAN economies will use increasing amounts of materials and energy, and waste and emissions will grow accordingly. Some of the growth in resource use, however, may be offset by resource productivity measures (UNEP, 2017). At the level of the national economy resource productivity is expressed as Gross Domestic Product (GDP) per unit of domestic material consumption (DMC).[17] Material productivity is a measure of the economic benefit accrued by using natural resources efficiently. Resource productivity improvements are an important policy objective, especially for developing and transition economies. While most ASEAN countries will see their absolute and per capita resource use grow as they further modernize and urbanize their economies, resource productivity will allow some decoupling between economic activity and environmental use to occur. Resource productivity is also an important goal in industrialized countries and features as an indicator in the Japanese Sound Material Cycle Society high-level policy framework (Takiguchi and Takemoto, 2008).

Material productivity is low in most ASEAN countries (see Figure 19) and well below the current world average of 0.75 US$ per kg of material use (UNEP, 2016). Some resource productivity gains will happen spontaneously when ASEAN economies mature and have a higher share of tertiary sector activities that generate high incomes but have low material intensity. Nevertheless, SDG 8.4 suggests a focus on gradual improvements in material productivity through policy settings and incentives. This will be especially important for ASEAN countries which currently only achieve one third of the global average in material productivity.

Figure 19 Resource productivity, US$ per kg
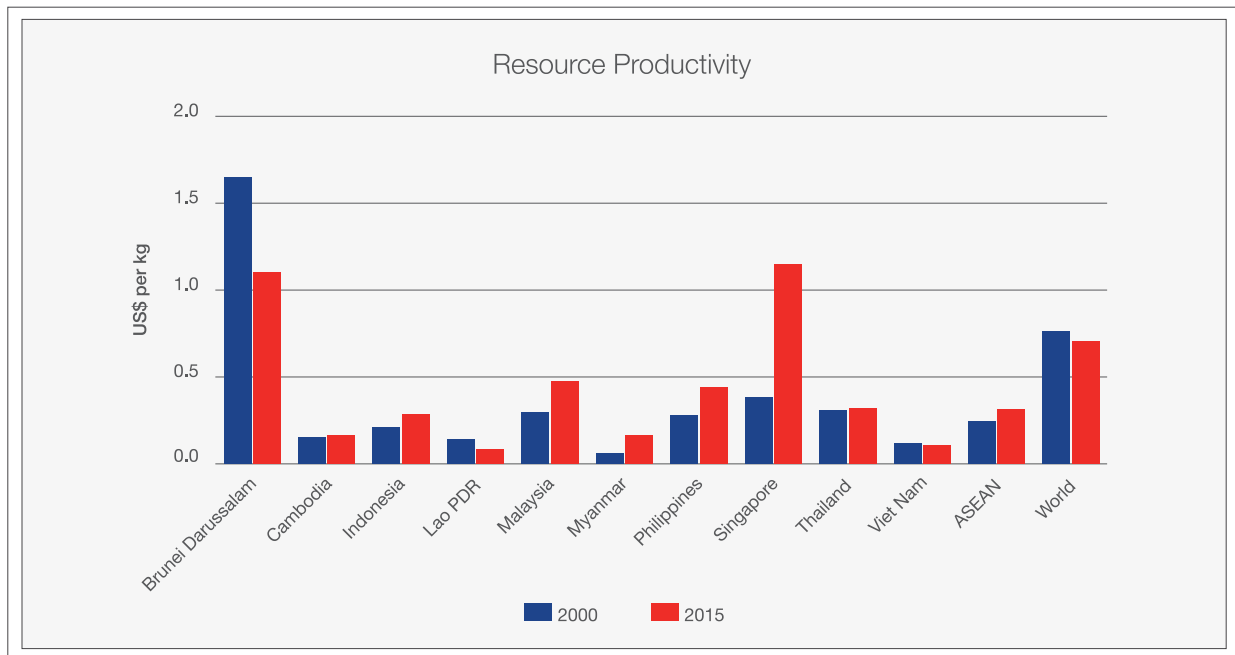
Source: UN Environment 2017 Global Material Flows and Resource Productivity database

Measuring the extent of green public procurement requires new data, indicators and assessment methods. The System of National Accounts (SNA) provides information on government expenditure but does not classify whether investment decisions contribute to increasing or decreasing environmental and social impacts. Footprint analysis enables such assessment by identifying the material, energy, water, GHG emission and waste footprints of government expenditure by attributing resources, emissions and waste associated with procurement across the whole supply chain.

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[17] Domestic material consumption (DMC) is an indicator from material flow accounting. It is the sum of all material imports plus domestic extraction of materials minus all material exports (a measure of apparent consumption).

Government consumption

Material footprint can be disaggregated by final demand categories. The material footprint of government consumption shown for ASEAN as a whole is low and shows substantial growth over the next 15 years to 2030 under current trend. If the socioeconomic outcomes of the community vision come to bear the footprint of government consumption will grow even stronger. This regional trend is replicated at the country level where stark differences between countries prevail (see Figure 20).

Figure 20 Material footprint of government expenditure
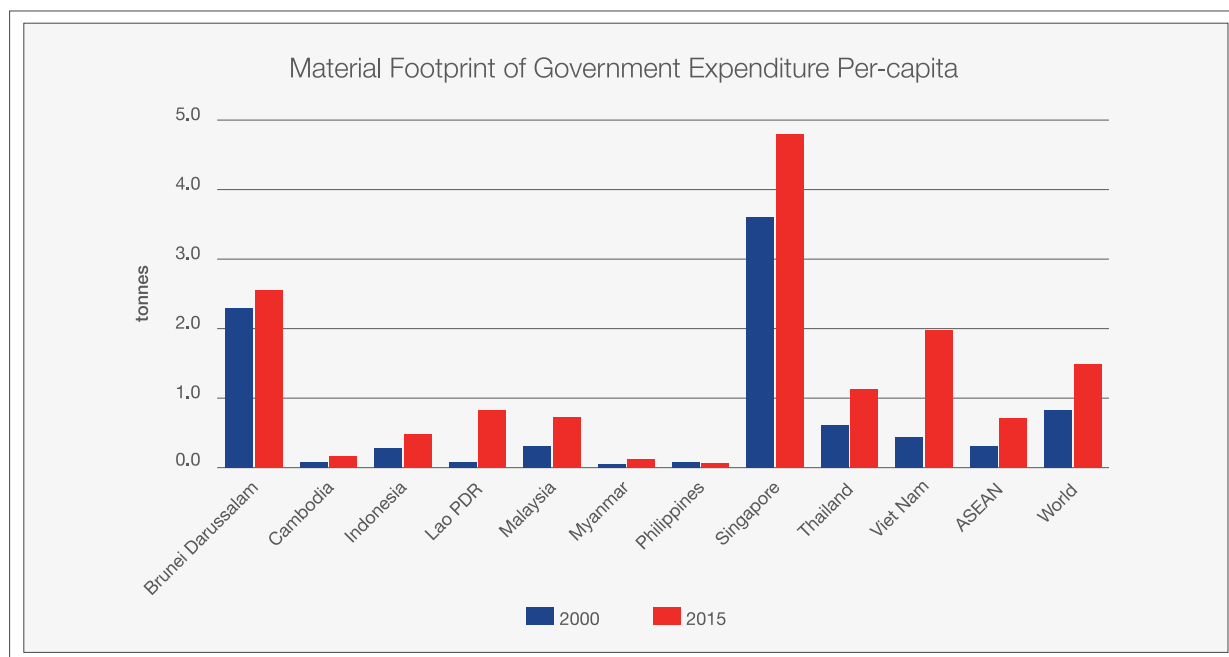
Source: UN Environment 2017 Global Material Flows and Resource Productivity database

Household consumption

In the absence of direct data, the environmental and social footprint of household consumption can be measured in a similar way to government consumption using environmentally extended input-output analysis. Similar growth patterns to government consumption can be discerned for household consumption. On a per capita basis, material footprint of household consumption is highest in Singapore and Brunei and is growing strongly in Thailand, Malaysia and Viet Nam (see Figure 21).

Figure 21 Material footprint of household expenditure
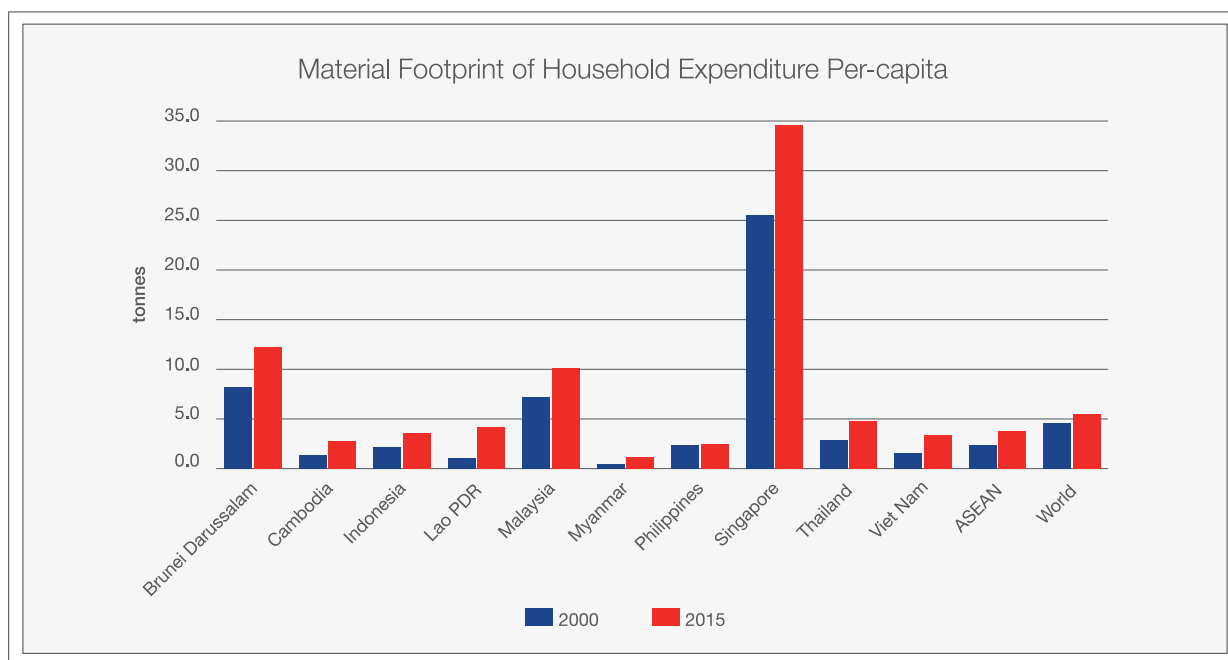
Material Footprint of Household Expenditure Per-capita

Source: UN Environment 2017 Global Material Flows and Resource Productivity database

Capital investment

The environmental footprint of infrastructure and capital investment, across the whole supply chain, is established using similar methods to those described above. Physical infrastructure is mostly established in the higher income countries of Singapore, Malaysia and Thailand (see Figure 22) with other countries falling behind.

Figure 22 Material footprint of capital investment
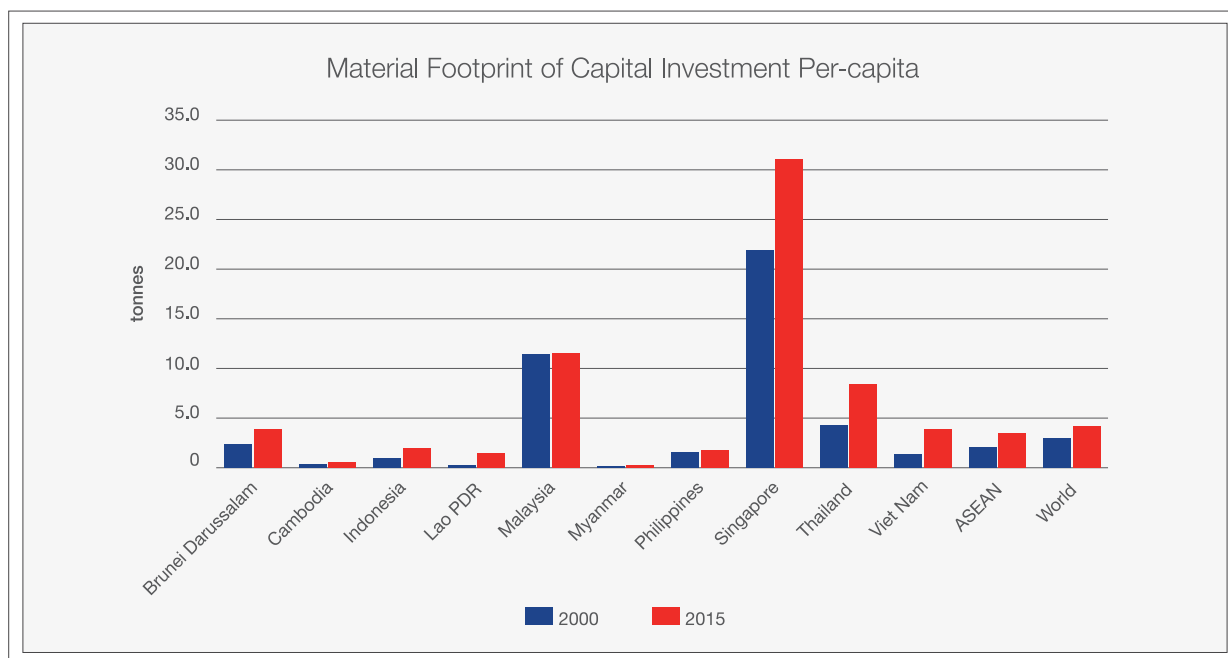
Material Footprint of Capital Investment Per-capita

Source: UN Environment 2017 Global Material Flows and Resource Productivity database

Capital investment incurs embodied GHG emissions. Recent research has shown that the second wave of urbanization in many developing countries will require a very large amount of embodied GHG emissions, consuming more than three quarters of the remaining GHG emissions (Pauliuk and Muller, 2014). Thailand and Malaysia are well ahead of other countries in infrastructure expenditure in the region, only surpassed by Singapore, which is expressed in around 10 tonnes of materials per capita per year for building houses, roads and other essential infrastructure.

The eco-efficiency of productive activities in a country can be expressed as the overall material input from domestic and foreign sources per unit of GDP that is accrued using these and other factor inputs.
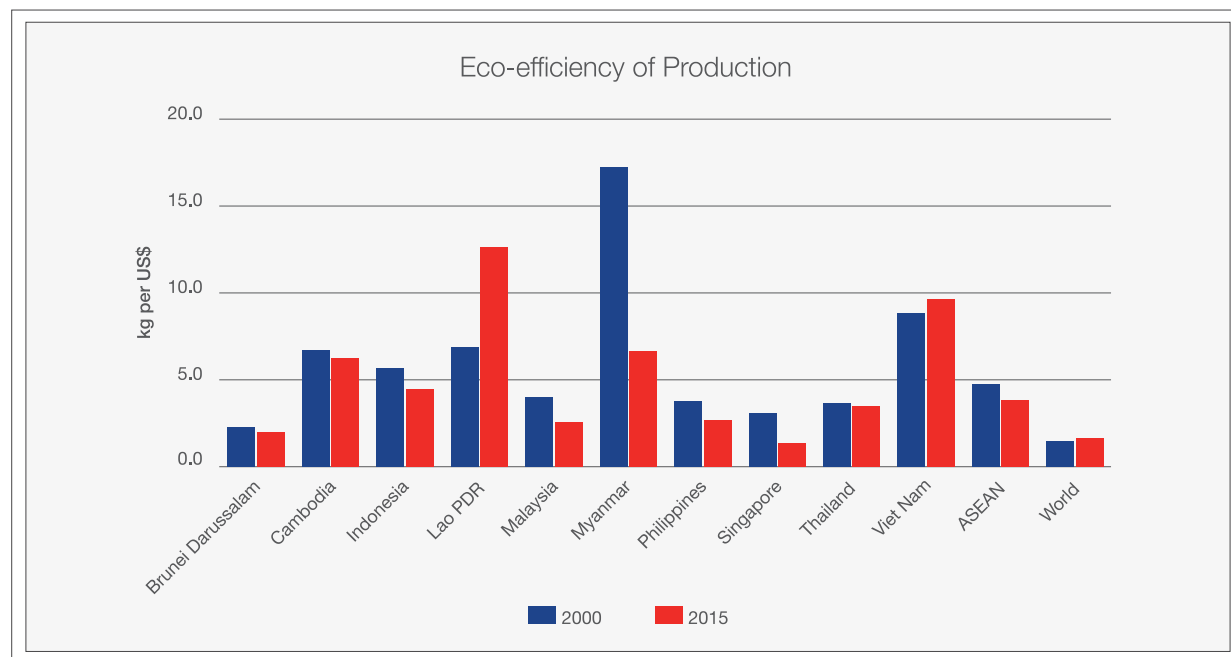
Figure 23 Eco-efficiency of industries

Source: UN Environment 2017 Global Material Flows and Resource Productivity database

The lower the material intensity of the overall economy, the higher the eco-efficiency of the average business. Most ASEAN countries have shown improvements in their material intensity over time, with the exception of Laos and Viet Nam. Both of these countries have invested in a resource-intensive economic development path, leading to rising material intensity over time. Overall, only Singapore appears competitive internationally in eco-efficient industrial production (UNEP, 2015). Most other countries display unfavourable overall material intensities which lead to higher production costs and larger environmental impacts (see Figure 23).

Gap analysis

Making overall resource productivity and decoupling of economic activity from environmental pressure an overall policy objective of the ASEAN community would make it possible to align economic growth with environmental objectives and would place the ASEAN region in a globally competitive position comparable to Japan, China and perhaps the European Union which are all investing in policies that support resource productivity and decoupling in major areas of high resource use including housing, mobility, food, energy and heavy industry. With ambitious policy settings material productivity gains could double compared to existing trends, yielding superior economic outcomes in the medium and long term (Hatfield-Dodds et al., 2017).

Figure 24 Progress in Sustainable Consumption and Production[18]

Sustainable Consumption and Production

Legend: 2000 | 2015 | Existing Trend | Doubling Effort | SDG Target
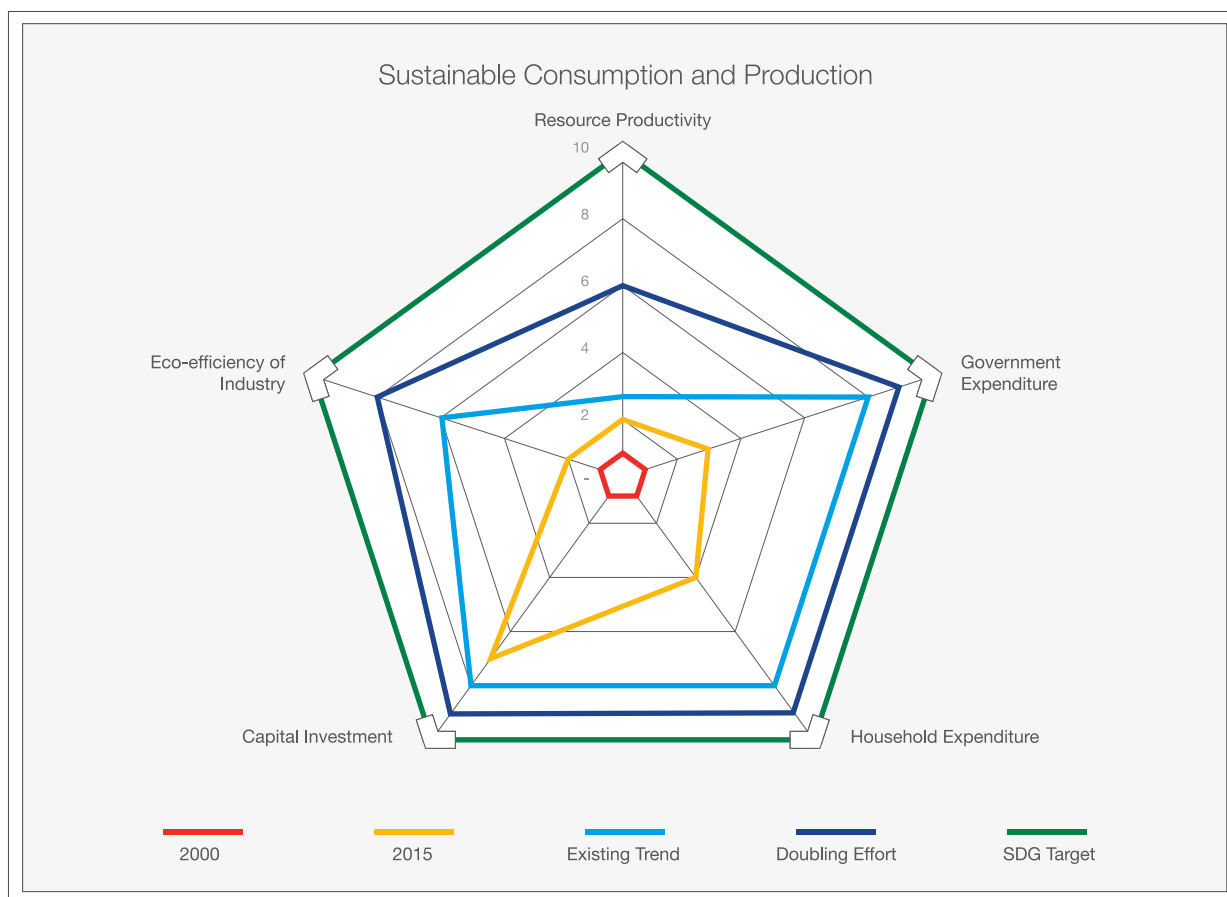
Source: UN Environment Global Material Flows and Resource Productivity database 2017

The outlook for material footprint of government and household consumption and capital investment in the ASEAN region until 2030 suggests a strong increase in all aspects of consumption and additional growth in emissions. These will go hand in hand with the ongoing industrial and urban transition in the region. Aggregate final demand (government and household consumption, plus capital investment) are heading towards 15 tonnes per capita. The short-term potential for economically attractive resource efficiency is also considerable with regard to optimizing industry and business operations through enhancing recycling and remanufacturing. In the medium and long terms investing in resource efficiency and greenhouse gas abatement will yield stronger economic and employment outcomes compared to business as usual. The eco-efficiency of businesses and industries seems to improve faster than aggregate economic resource productivity. For overall material footprint to stay within the limits of 15 tonnes per capita or below massive improvements in overall resource productivity are necessary to offset some of the material requirements of achieving the human development targets of the SDGs. If material use and waste and emissions spiral out of control, and if climate impacts intensify, the economic and social achievements of the ASEAN region would most likely be undermined and current progress would be reversed.

Ambitious policy frameworks for enabling resource efficiency and greenhouse gas abatement would facilitate and enable future economic growth. Rising living standards in the region need to be pursued in an environmentally sustainable way to minimize the costs of inefficient resource use and climate impacts. Governments and the business community would need to work together to service the infrastructure and consumption needs of a still-rising population through green infrastructure, shared consumption and eco-efficient products and services.

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[18] Data for Viet Nam is not applicable.

The extent which current systems of production and consumption need to be transformed to deliver goods and services and infrastructure at much lower environmental and social costs is large and the required change will not occur spontaneously. Important elements of a well-designed policy package on ambitious resource efficiency and greenhouse gas abatement need to include a price on carbon emissions that helps drive emissions towards a two-degree warming pathway and programmes that drive investment into renewable energy and allow energy regulators to keep up with the new management demands of an initially hybrid energy system and finally a fully renewable energy system.

Investment in R&D to improve the resource efficiency of and minimize emissions from industry, green building standards and replacement of ownership by access will be an important feature of achieving the ASEAN Community Vision and SDGs, especially in populous urban regions of Southeast Asia. This investment could be sourced from a price on primary resources. The proceeds from such a resource tax would need to be used both to compensate low-income households and to be directed towards R&D investment in those sectors of the economy that most successfully reduce resource use.

Achieving the right policy mix between resource efficiency and greenhouse gas abatement policies will be instrumental in achieving economically attractive outcomes that also deliver environmental and social objectives.

3.5 Resilience

Overview

The notion of resilience has gained widespread interest in the context of anticipating and reducing the vulnerability of social and economic systems to risk and hazards and to transition from non-resilient (highly exposed and vulnerable) to resilient (less exposed and of greater coping capacity) social and economic structures and infrastructure.

In a world of increasing disasters and accelerating environmental, social and economic risks it is important for countries to reduce vulnerabilities and enhance the resilience of the economy, of communities and people, and of buildings and infrastructure to reduce exposure and mitigate risk. Rising inequality and diminishing social cohesion, volatility of economic development, climate impacts, and the lack of food and water security are pressure points that are converging rapidly creating a more unpredictable context for policy and planning in the ASEAN region and elsewhere. These changing risk profiles will require ASEAN governments to engage in adaptive governance and to build capacity to enhance the resilience of their societies and economies towards pressure points and shocks.

The concepts of resilience, adaptation and transformation are useful tools for the policy community and have been included in aspirational goals both in the context of the Sustainable Development Goals (SDGs) and the ASEAN Community Vision 2025 to guide policy development. Resilience is used in the SDGs in the context of food security, reducing vulnerabilities of poor people, with regard to infrastructure and urban development and in the context of accelerating climate impact risks. (Goals 1,2,3,9,11 and 13). Resilience is also a guiding principle of the ASEAN Community Vision in the context of forming the economic community and more specifically about the adaptive capacity to respond to social and economic vulnerabilities, natural disasters and climate change impacts, as well as new and emerging threats and challenges including disruptive technologies that may change the ways in which essential provisions are delivered.

There are challenges, however, in taking these concepts from policy objectives to operationalization in policy and management domains. Policies that aim to improve resilience at the national level require methods to evaluate the current state of resilience and to identify expectations and

needs with respect to adaptation and transformation. Such effort is complicated by the fact that resilience, adaptation and transformation are concepts that cannot be easily quantified, and certainly not at the national level.

The literature identifies four key capacities that need to be strengthened or established, namely, adaptive, anticipatory, absorptive and transformative capacities to improve resilience of a national economy and society. These capacities are interdependent; they overlap and reinforce each other. They underpin the resilience of a nation, from households and communities to states and markets.

- Adaptive capacity refers to the ability of social systems (for example households, communities or nations) to adapt to multiple, long-term and future risks, and to adjust after a disaster. Adaptive capacity describes a form of governance and decision-making that allows consideration of when conditions are about to change or have changed and to adapt policies and programmes accordingly.

- Anticipatory capacity refers to the ability of social systems to anticipate new threats and shocks and to reduce their impact through preparedness and planning. This can help in avoiding or reducing exposure, or minimizing vulnerability to specific disasters, and may include elements of precautionary planning.

- Absorptive capacity refers to the ability of social systems to absorb and cope with the impacts of disasters, shocks and stresses. It involves disaster and recovery management.

- Transformative capacity is the ability to make intentional change to systems that create risk, vulnerability and inequality through policy innovation.

While all these capacities need to be developed in inclusive, cross-government approaches (including different line agencies and levels of government) they are best applied in a concrete context of provision systems such as agriculture and food, transport and mobility, and construction, housing and shelter. They also refer to critical infrastructure for transport, communication, energy, water and sewerage. Increasing vulnerabilities that are not mitigated may also lead to economic disruption, social disruption and loss of life.

Data analysis

> **Indicators for resilience capacity**
>
> - Economic management (1–6 scale)
>
> - Social inclusion/equity (1–6 scale)
>
> - Public sector and institutions (1–6 scale)
>
> - Structural policies (1–6 scale)
>
> Data sourced from the World Bank.

Indicators for resilience are about the institutions, frameworks and capabilities in place to provide adaptive governance at the national level, for certain provision systems or infrastructure elements. There needs to be a discussion on how best to measure the state of resilience in ASEAN countries. The Country Policy and Institutional Assessment (CPIA) framework of the World Bank is an example of a diagnostic tool that annually assesses the quality of policies and the performance of institutional frameworks. For the ASEAN region data exist for four countries which are also foreign aid recipients. The tool allows a rating of countries against a set of 16 criteria grouped in four clusters: economic management, structural policies, policies for social inclusion and equity,

and public sector management and institutions. Each cluster is rated using a 6-point Likert scale from high (6) to low (1) capacity.

Economic management capacities refer to the availability of a viable banking sector, the availability of loans and microcredit and the level of indebtedness of the State, businesses and households. The overall financial situation of the State, or businesses and households will determine the capacity to compensate and remediate damages that may occur to infrastructure, businesses and households.

Figure 25 Economic management
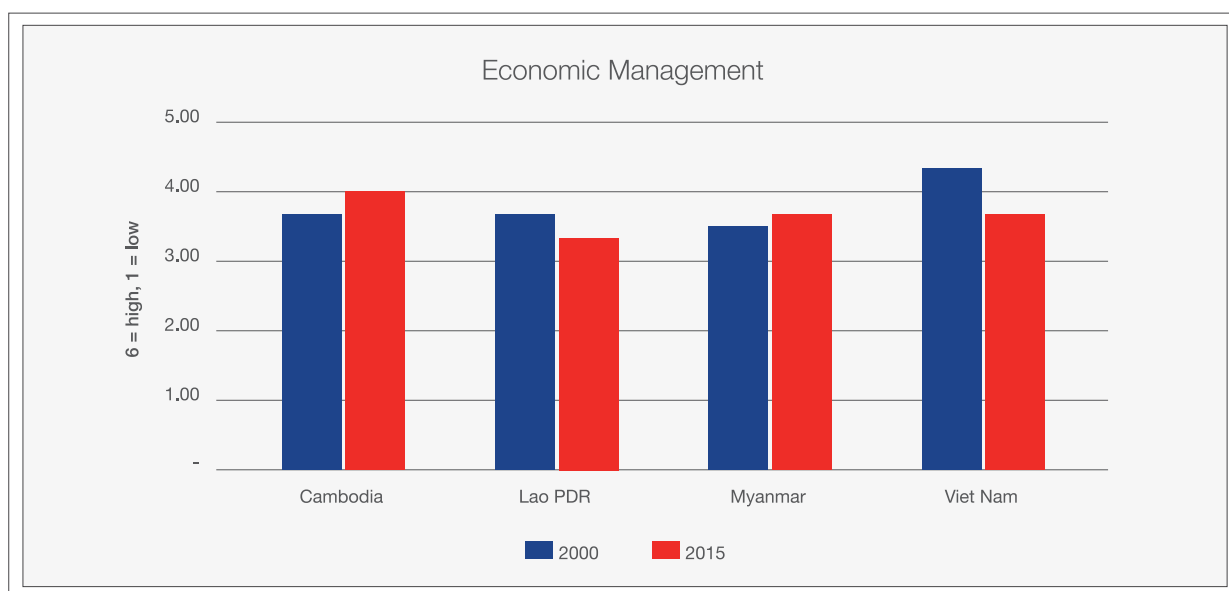
Source: World Bank World Development Indicators 2017

Social inclusion and equity looks at the income and wealth inequality that exists in a country and at transfer schemes which redistribute income and reduce inequality. A more inclusive and more equitable society will have a higher level of social cohesion and will be better suited to collaborate and to work together in times of adversity.

Figure 26 Social inclusion/equity
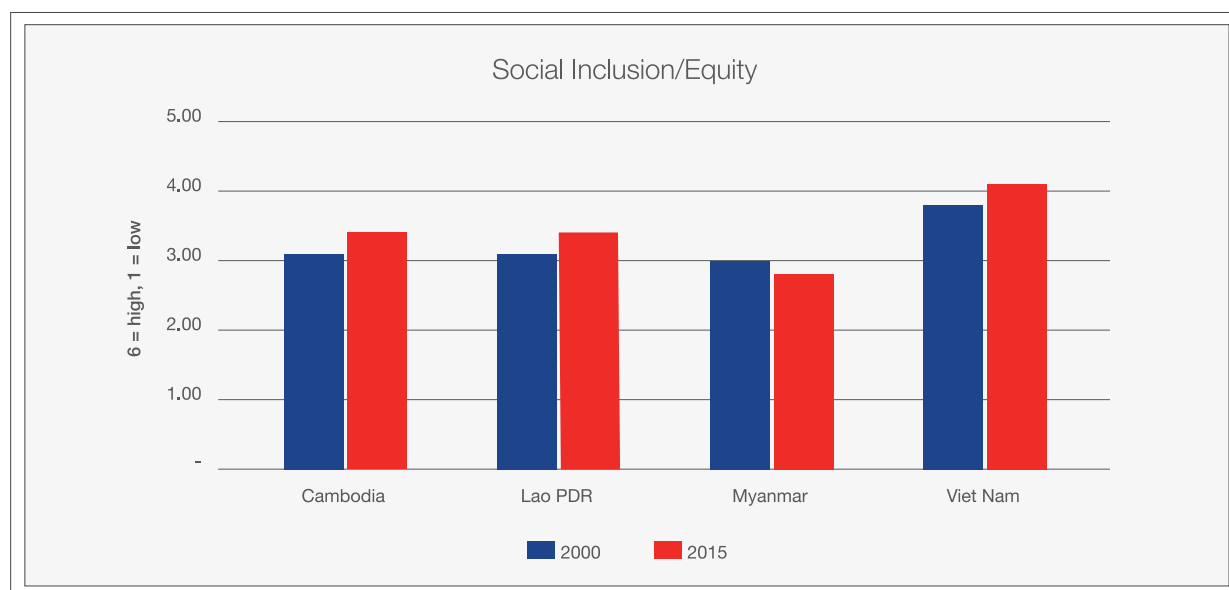
Source: World Bank World Development Indicators 2017

Governance and institutions and the ability to assess risks and observe hazards and to react and plan accordingly is perhaps the greatest asset that a country may have and will define the overall resilience and adaptive capacity of the country.

Figure 27 Public sector management and institutions
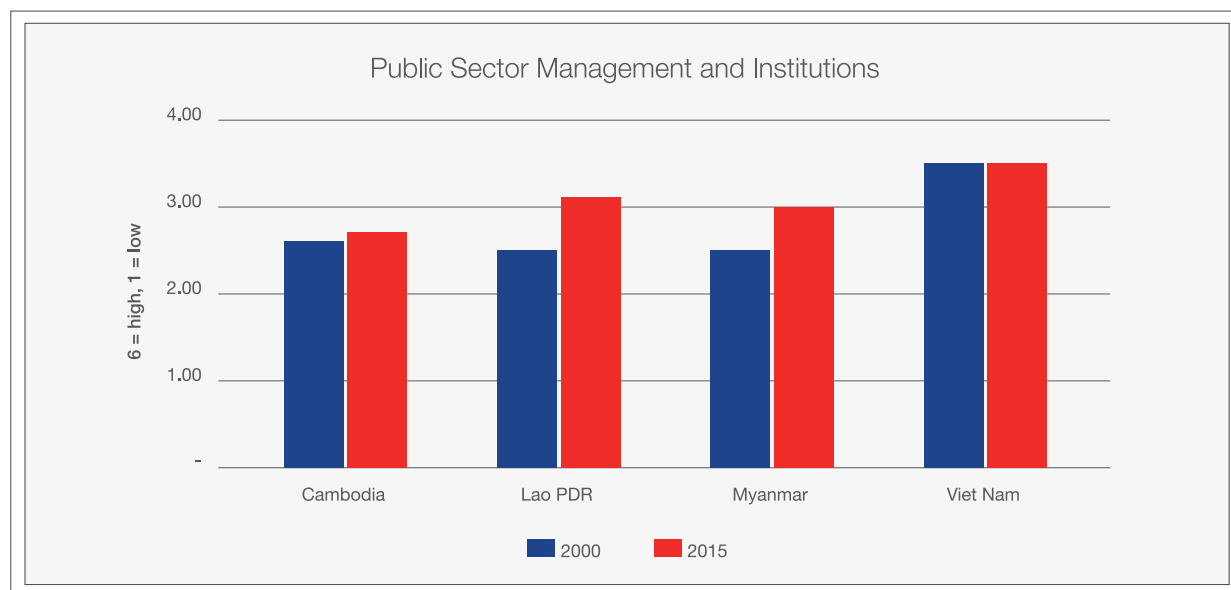
Source: World Bank World Development Indicators 2017

Structural policies play a supporting role and lay the foundation for balanced economic growth by helping lower inflation, enable a stable level of consumption and investment, and help reduce government deficits. They create the conditions for good economic management. All four dimensions work together to create a resilient society, an economy built upon resilient communities.

Figure 28 Structural policies
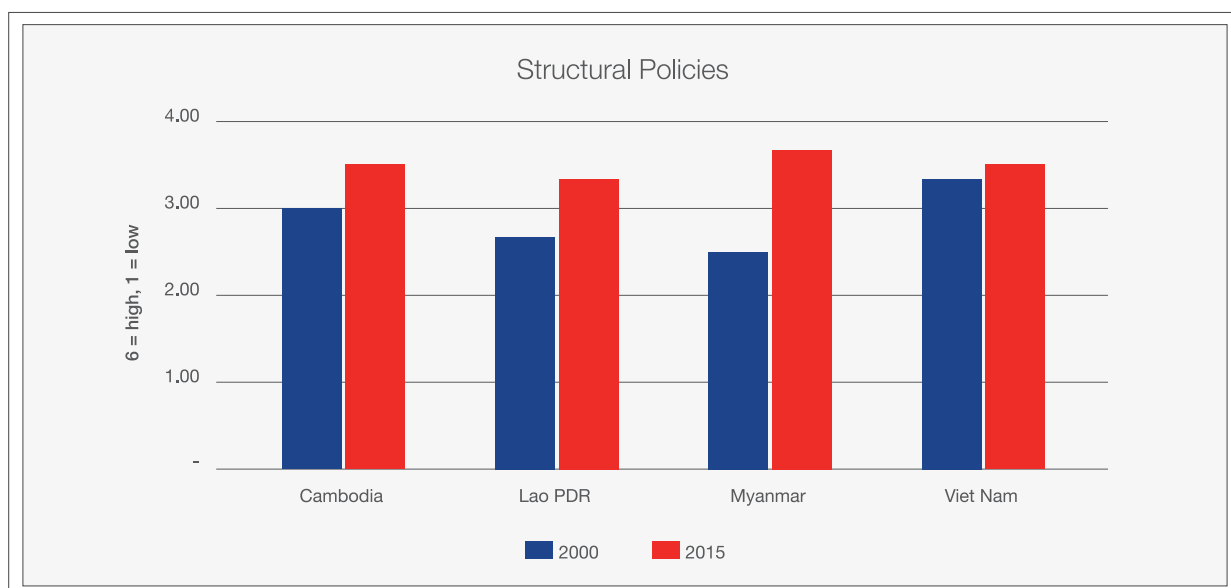
Source: World Bank World Development Indicators 2017

Assuming that the World Bank assessment is not easily generalized to all 10 ASEAN member countries a similar scheme would need to be developed focusing on such aspects of institutional capacity for adaptation, insurance and compensation for risk that occur with regard to global

environmental change and globalization. This scheme would need to be based on available data allowing for resilience indicators at the national level, which would be a novelty, but not require additional data gathering.

Gap analysis

On the basis of the gap between the current institutional capacity countries hold, measured by CPIA, and the desired capacity for improved resilience we can distinguish between two scenarios. One scenario named Existing Trend depicts developments that are already in train and which will occur without additional policy efforts. The other scenario, *Community Vision*, is about achieving a high capacity for adaptive management in the face of accelerating environmental pressures and impacts and rapid socioeconomic and technological change.
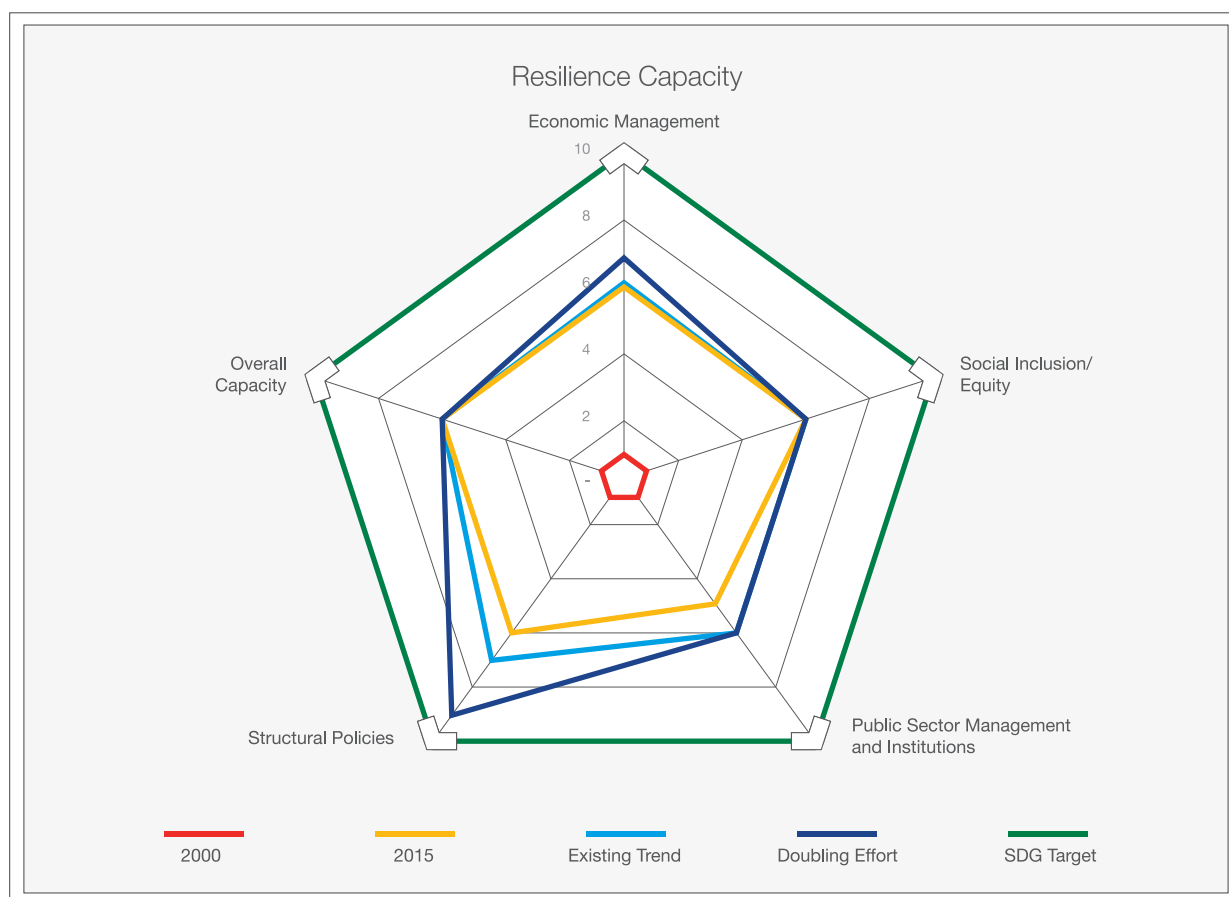
Figure 29 Progress in building resilience capacity

Source: World Bank World Development Indicators 2017

Enabling governments in ASEAN member countries to deliver conditions that enable adaptive governance and management will not just rely on traditional ways of collaboration between government agencies under the leadership of a line agency or special commission. It will require new levels of transparency, cross-agency collaboration and new forms of communication that allow for experiments and innovation in enhancing resilience of people, processes and infrastructure to replace the traditional risk management and post-disaster focus.

A resilience, adaptation and transformation focus needs to be mainstreamed into other policy domains of infrastructure, poverty eradication, sustainable consumption and production and natural resource management to ensure that domain-specific decisions meet the requirements of enhancing resilience.

4. Way Forward: Taking Action on Complementarities

This section draws from the analysis in the previous chapters to recommend a pathway to action on complementarities. We describe measures to address each of the priority areas and related sub-themes. We recommend for each priority area a flagship initiative that can support the ASEAN Community to leap forward towards its vision. While derived from regional analysis and cross checked with ASEAN commitments, the proposed flagship initiatives, activities and outputs form a menu of options for consideration. After a short description of each flagship a matrix of some immediate and midterm outputs that could result from the flagship initiative is presented as ideas that would feed into any further exercises undertaken for the flagships to be developed for implementation. Such further exercise could also include the compilation of a "Complementarities Roadmap" that would: i) further define the flagship initiatives and identify operational arrangements for their implementation; ii) align and link the proposed flagships and outputs to the work of ESCAP, ASEAN Secretariat and ASEAN Centres and identify implementation modalities; and iii) identify funding opportunities for the implementation of the proposed actions. Finally, we discuss institutional mechanisms and recommend two additional flagships to ensure the Community and its people get the full benefit of activities implemented through the complementarities approach.

4.1 Measures for Action on Priority Areas

4.1.1 Poverty Eradication

To further advance poverty eradication, a perspective of the multidimensionality of poverty is important. Policies and programmes work best when they reflect social, cultural, and geographic factors; when they address education, health, and livelihoods simultaneously and build economic and social resilience of people and communities to avoid reversing success in poverty eradication. For poverty to be eliminated in the ASEAN region it will not be enough to just raise the daily income of the poor but also to ensure that the future of ASEAN, i.e. the children, will have equal access to opportunities and resources.

Flagship initiative: Improving Nutrition and Reducing Stunting in ASEAN

Despite huge efforts on reducing undernourishment, stunting remains a challenge in ASEAN. Prevalence of stunting is still high in many ASEAN countries. As per data available from the World Bank prevalence of stunting is 43% in Lao PDR, 36% in Indonesia, 35% in Myanmar, 33% in the Philippines and 32% in Cambodia. Relatively lower rates are observed in Thailand (16%) and Viet Nam (19%). A recent report from UNICEF, WHO, ASEAN and the EU highlights also that *"the situation assessment of malnutrition in the region shows that prevalence of stunting and wasting in*

children under five remains unacceptably high in many ASEAN Member States"[19] The same study highlights also that investing in fighting malnutrition has a very high economic efficiency with *"every dollar spent on nutrition in the first 1000 days of a child's life bringing a saving of an average US$45 and in some cases as much as US$166"*. A flagship programme on improving nutrition and reducing stunting in ASEAN could therefore enhance the ability of women and children in vulnerable groups in ASEAN to lead socially and economically productive lives, and in doing so strengthen their resilience and that of their communities. Such an initiative could address the main underlying cause of stunting, namely inadequate household food security, inadequate care for mothers and children and poor medical and environmental health services, with targeted interventions such as:

- Improve capacity of local authorities, subnational authorities and state line ministries to plan and implement nutrition-specific and nutrition-sensitive activities.

- Improve food security through productive safety net, asset creation programmes and behaviour change.

- Increase hygiene and reduce drastically open defecation as well as improving wastewater treatment.

- Improve access to affordable and diverse diet in rural and urban households.

Indicative Outputs	
Developing Capacity	- Develop rural awareness programmes on nutrition; - Integrate nutrition into school education including topics such as heathy diets and the awareness of food security issues; - Train teachers and school staff and improve knowledge on nutrition issues.
Instruments (voluntary)	- Establish community-based participatory planning to help communities identify their food security problems and design solutions; - Design community-based support programmes to improve nutrition in households with severe malnutrition issues.
Mobilizing Financial Resources	- Mobilize financial resources for investments on wastewater treatment in rural communities and urban slums.
Measuring Progress	- Intensify the collection and analysis of data on nutrition, stunting and its underlying causes, and develop regular updates to measure progress.

4.1.2 Infrastructure and Connectivity

Investing in infrastructure (such as for housing, transport and mobility, water supply and sewerage, and energy) that achieves social and environmental outcomes simultaneously will also support economic growth, reduce poverty and inequity, and mitigate environmental pressures. Action on infrastructure and connectivity will address the urgent infrastructure needs of the Community with a focus on enabling universal access to essential services of electricity, water and sanitation. It will also look at options for improved urban planning to make cities better able to weather natural hazards and climate change impacts, but also to allow low-income groups to fully participate in the economic opportunities of urban settlements through housing, mobility and energy infrastructure that underpin a more equitable future city. One approach to this involves a combination of technological advances to promote connectivity, zoning and urban planning

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[19] https://www.unicef.org/eapro/Regional_Report_on_Nutrition_Security_in_ASEAN_%28Volume_2%29.pdf

for higher efficiency and people-centred interactions, and preservation of traditional aspects, community and public goods.

Flagship Initiative: ASEAN Council for Sustainable Infrastructure

In the next several decades (through the course of the ASEAN Vision 2025 and 2030 Agenda) ASEAN and its Member States will invest large amounts of resources (including financial, human and natural resources) in developing infrastructure in the region. Infrastructure types have evolved drastically in the last several decades, with advances in technology (especially connectivity technology) changing how people communicate and go about their lives in society. This will continue to be the case, with changes in design and types of infrastructure needed. An ASEAN council for sustainable infrastructure could:

- Bring together a multi-stakeholder group of government, planners, private sector, academia and civil society to promote planning and development of sustainable infrastructure among ASEAN member states. The composition of the suggested council should thus be multi-sectoral, comprising representatives of these groups;

- Support development of infrastructure in ASEAN that avoids lock-ins, and is future-proof, to take account of changes in society and needs of people, and to avoid being obsolete shortly after completion;

- Ensure that critical infrastructure, especially for mobility, housing, health, education, leisure, etc., is people-centred, to ensure shared prosperity – that no one is left behind;

- Support transnational infrastructure planning and development, promoting connectivity across the Community;

- Promote investment in public infrastructure, including through grants and public-private partnerships.

- Ensure the facilitation of technology transfer and knowledge sharing, thereby maximizing the effect of infrastructure investments in developing countries. Such a council should also promote technical cooperation, foster collaboration, exchange knowledge/capacities, and share policy successes and best practices.

- In addition to PPP, concessional loans and grant assistance as established modes of infrastructure development, innovative financing models such as hybrid arrangements should be considered to streamline the processing of projects from conception to implementation, as well as maximize the benefits of such investments.

- Work in partnership with the ASEAN Connectivity Coordinating Committee (ACCC). Views of the ACCC will be sought on any potential development of this initiative in the future.

- Such a council should avoid duplication of efforts with the ACCC or other ASEAN bodies.

The time frame or timeline for the establishment of such a council would be determined further by ASEAN.

Indicative Outputs	
Developing Capacity	- Conduct: a) assessments of current and future infrastructure needs, b) analysis of barriers to investments in sustainable infrastructure, and c) a study on enablers and accelerators for sustainable public infrastructure in ASEAN.
Instruments (voluntary)	- Provide national guidelines for implementing the ASEAN Master Plan for Connectivity 2025; - Develop standards for sustainable buildings, public infrastructure, etc., and other standards, with policy recommendations on mainstreaming best practices.
Mobilizing Financial Resources	- Together with the ASEAN Infrastructure Fund develop a regional priority portfolio for investment in infrastructure; - Organize an ASEAN Forum on financing sustainable infrastructure.
Measuring Progress	- Set up and continuously maintain an ASEAN knowledge management and capacity development system that builds on or enhances existing platforms including development and deployment of data indicators, lessons from case studies, training modules, and other material on sustainable infrastructure development.

4.1.3 Sustainable Management of Natural Resources

There is a need to strengthen traditional environmental and observation policies in line with international arrangements for biodiversity, water and ecosystem management. Action here would need to focus on the sustainable management of soils, forests and water bodies to reduce environmental degradation and biodiversity loss while enhancing economic opportunities. Action will also need to focus on investigating governance mechanisms, economic incentives, financing needs and legal requirements for encouraging communities, businesses and people to use natural resources effectively and efficiently and to enable a regional development path that allows the region to achieve the ASEAN Vision, meet its commitments under the 2030 Agenda and contribute to global development within planetary boundaries.

Flagship Initiative: ASEAN Resource Panel

The International Resource Panel (IRP)[20] has provided a model of how to build and share the knowledge needed to decouple economic development from resource use. While this has operated at the global level, there is need for such service to be context- or region-specific. In fact, India has already adopted the model and set up an Indian Resource Panel. Responding to the need for sustainable management of natural resources, we recommend that ASEAN and relevant bodies could explore the idea of establishing an ASEAN Resource Panel (ARP) that would serve all ASEAN Member States individually and collectively.

The ARP would go beyond merely conducting analysis and actively engage policymakers and relevant stakeholders in translating results of such analysis into policy and practice. It would pool together national and regional scientists, experts, practitioners and governments to conduct analysis and provide advice and connections between policymakers, industry and the community on ways to improve global and local resource management. The ARP would lead to:

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[20] The overall mission of the IRP is to provide independent, coherent and authoritative scientific assessments of policy relevance on the sustainable use of natural resources and, in particular, their environmental impacts over the full life cycle; and contribute to a better understanding of how to decouple economic growth from environmental degradation. http://www.resourcepanel.org

- Solid research and a knowledge base on natural resource use, issues and priorities in ASEAN and in ASEAN Member States;

- A shared agenda for legislative framework for resource use, and policy recommendations to ASEAN and its member states on sustainable resource management;

- A road map and action plan for achieving sustainable resource management under the ASEAN Vision and complementary international frameworks.

Indicative Outputs	
Developing Capacity	- Database of national level and ASEAN regional expertise on resources issues; - Regional and national training for policy design and implementation; - Promote/identify best practices on resource management in each ASEAN state that could be replicated in other countries.
Instruments (voluntary)	- Understand impact of pricing and trade on resource use, and develop guidelines for use and export of natural resources; - Promote of international sustainability standards in the agriculture, forestry and fisheries sector.
Mobilizing Financial Resources	- Recommend structure and levels for resource taxes; - Identify opportunities for investment in renewable resources; - Introduce markets and income streams – e.g. carbon planting, ecosystem services payments, pricing of externalities; - Organize a symposium on pricing of externalities and ecosystem services in ASEAN.
Measuring Progress	- Develop benchmarks and guidelines for monitoring and evaluation of resource use, resource efficiency and relevant indicators.

4.1.4 Sustainable Consumption and Production

Sustainable consumption and production (SCP) will be key to restructuring provision systems, infrastructure, cities and businesses in the ASEAN region to meet the dual objectives of human development and economic prosperity and a healthy environment. Action here for a sustainability transition of production and consumption systems in ASEAN will allow the region to position itself at the forefront of innovation. It will help build new coalitions between stakeholders and decision makers and will raise the environmental agenda to the level of economic decision-making.

Flagship Initiative: Greening Small and Medium Enterprises in ASEAN

The provision of sustainable goods and services created by economic units is at the core of the SCP concept. As the ASEAN Secretariat highlights "Small and Medium Enterprises (SMEs), including micro enterprises are integral to the economic development and growth of the ASEAN Member States. They constitute the largest number of establishments and contribute significantly to the labour force of ASEAN Member States (AMS). SMEs account for between 88.8% and 99.9% total establishments in AMS and between 51.7% and 97.2% of total employment. The contribution of these enterprises to each AMS' GDP is between 30% and 53% and the contribution of SMEs to exports is between 10% and 29.9%"[21]. There is an opportunity therefore to mainstream SCP in SMEs and ensure that more sustainable goods and services will be created in ASEAN and find their way to consumption channels. Such action will also contribute to the "ASEAN Strategic Action

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[21] ASEAN portal as accessed on 16 October 2017 at:
http://asean.org/asean-economic-community/sectoral-bodies-under-the-purview-of-aem/small-and-medium-enterprises/

Plan for SME Development 2016–2025" which includes as one strategic goal the promotion of "productivity, technology, and innovation", all of which are main elements in promoting SCP in SMEs. The flagship could:

- Improve the capacity of SMEs to use innovation and technology for greening their businesses and at the same time improve their productivity;

- Support cooperation between ASEAN countries on setting common voluntary frameworks on greening SMEs;

- Increase investments on green technologies in SMEs.

Indicative Outputs	
Developing Capacity	- Set up a help desk for coaching ASEAN SMEs on applying sustainable practices; - Compile a repository of training programmes for SMEs on cleaner and sustainable production.
Instruments (voluntary)	- Develop minimum standards for life expectancy, warranties, reparability of goods in the ASEAN subregional market; - Develop common voluntary sustainability standards in important economic sectors such as tourism and manufacturing, and set up an independent certification unit for products and services in the ASEAN subregion; - Establish an ASEAN scheme on Extended Producer Responsibility.
Mobilizing Financial Resources	- Provide incentives for eco-innovation and new business models which are less energy- and resource-intensive.
Measuring Progress	- Set up an ASEAN benchmark scheme for green SMEs.

4.1.5 Resilience

While the ASEAN region transitions to new models of economic management enabled by sustainable consumption and production, it will need to build resilience to risks that are either locked in the system such as disasters and climate impacts or hazards that cannot be calculated and foreseen. It is advisable that the region invests in collaborative strategies and programmes that may include resilience towards the increasing risk of climate change which includes sea level rise and storm surges, severe winds, heat waves, drought and flooding and bush fires. ASEAN Member States are highly exposed to a wide range of adverse natural events, shocks and stresses. Each year, on average, the region suffers damage in excess of US$4.4 billion as a consequence of natural hazards. Many of the governments have insufficient funding arrangements in place to deal with the consequences of shocks. Few have safety nets in place for the most at-risk segments of the population. The ability to reduce economic and fiscal impacts from shocks and stresses, and build resilience for its most vulnerable populations, will have important implications in achieving the ASEAN Vision 2025 and the 2030 Agenda for Sustainable Development and the critical stipulation of "leave no-one behind." This will help the region to grow economic resilience towards fluctuating world markets for primary resources, food and energy, to combat shortages of strategic materials and to weather financial market instability. Achieving the ASEAN Community Vision and the 2030 Agenda will ultimately depend upon and in turn create strong social stability, democracy and peace in the ASEAN region and will make it a place of choice for talent and investment based on stable social relations, the ASEAN innovation culture, agility and the region's rich human and environmental and ecological resources.

Flagship Initiative: ASEAN Risk Transfer Mechanism

Social security, safety nets, and other effective risk transfer mechanisms such as insurance schemes are needed for sustainable development. Promoting disaster risk transfer mechanisms as a critical tool for resilience building has been recognized internationally. If expanded to reach the poor, these mechanisms can lessen the financial burden of disasters and support social development and economic growth for the poor. There is growing evidence that investments in risk transfer mechanisms can enhance access to fast and cost-effective funds to disaster-affected people, especially to marginalized groups. One example is an agricultural insurance scheme for small subsistence farmers in Mexico, which uses macro-level climate catastrophe agricultural index products to provide a social safety net.

These mechanisms are particularly underdeveloped in the Asia-Pacific region. The percentage of insured loss in the Asia-Pacific is substantially lower than that of Europe and North and Central America. From 1979 to 2015, insured losses modestly rose to about US$10 billion, while uninsured losses have skyrocketed from around US$5 billion to US$80 billion. The challenges for disaster risk transfer and financing are from both the demand and supply side. On the demand side, low awareness, insufficient understanding and a mistrust of legal and regulatory enforceability dampen uptake. On the supply side, there are limited product development and delivery channels, and a lack of technical capacity. On this basis a flagship initiative on an "ASEAN risk transfer mechanism" could:

- Explore regional risk pooling and scaling up parametric insurance products to allow ASEAN member states to pool risks in a diversified manner and transfer the residual risk to international markets.

- Bring together key ministries, especially finance and sectoral ministries, to engage in multidisciplinary dialogues for planning, budgeting and costing disaster risk.

- Strengthen social protection to reduce vulnerabilities in times of social and economic crises, natural disasters and environmental changes, and political crises.

Indicative Outputs	
Developing Capacity	- Develop knowledge products to support increased accuracy in parametric risk models which lead to more effective risk transfer solutions; - Compile a study on disaster risk insurance opportunities for ASEAN.
Instruments (voluntary)	- Set up a multi-country risk pooling mechanism; - Building on the existing early warning and disaster management strategies, develop a blueprint for improving national systems to be better suited to cope with natural hazards.
Mobilizing Financial Resources	- Develop "enhanced and optimized financing systems, food, water, energy availability, and other social safety nets in times of crises by making resources more available, accessible, affordable and sustainable" as per the ASEAN Vision 2025; - Organize with the insurance industry a forum on "Investing for Resilience", and develop affordable and trustworthy disaster insurance schemes, especially for farmers, low-income households and SMEs.
Measuring Progress	- Improve the collection and analysis of resilience-related data and information and standardize measures for resilience across ASEAN.

4.2 Institutional Mechanisms for Enhancing Complementarities

Achieving the ASEAN Vision and the 2030 Agenda ultimately depends on institutions and governance mechanisms that can simultaneously address issues of environmental scale, allocation of scarce resources and fair distribution. In the short term, this would need dialogue and consultations to be organized to advance the two frameworks in complementary ways. However, finding an institutional home for complementarities goes beyond dialogue and meetings. Because of the large differences between financial and human capital in different countries within the region, there is a need for collaborative mechanisms for information exchange, capacity-building and policy learning to address the ambitious policy objectives of the Community through well-designed policies, programmes and initiatives, such as those presented above. This would require deliberate efforts and coordination. Here we recommend two additional flagships to move the complementarities initiative forward:

- ASEAN Centre for Sustainable Development Studies and Dialogue (ASEAN-CSDSD)

- ASEAN Programme for Knowledge and Outreach on Complementarities.

Flagship Initiative: ASEAN Centre for Sustainable Development Studies and Dialogue

There is need for an institutional mechanism and a systematic approach to interpret the complementarities mandate of the ASEAN community, and to support ASEAN Member States in optimizing opportunities under the ASEAN and UN agendas. In doing so, such a mechanism would dig deeper into the five priority areas analysed above, seeking first to address the gaps identified, and then facilitating concrete actions, including the indicative actions and outputs in matrices above. We therefore recommend the establishment of an ASEAN Centre for Sustainable Development Studies and Dialogue (ASEAN-CSDSD). The Centre would:

- Link recommended flagship initiatives and corresponding outputs in this report to the work of ESCAP, the ASEAN Secretariat and relevant ASEAN bodies and platforms, and support initiation of concrete projects including the development of indicators to measure implementation of SDGs;

- Assess and respond to capacity needs of ASEAN institutions, including mobilization of resources to support Member States in accessing opportunities presented through the complementarities approach;

- Organize consultations and dialogues among Community stakeholders to advance action under complementarities.

- Develop networks of cooperation with other centres in the region that deal with sustainable development cooperation (such as the *ASEAN Institute for Green Economy (AIGE)* in Myanmar and the *Sustainable Development Solutions Network (SDSN)* in Indonesia, Malaysia, and Philippines.

- Enhance data collection, dissemination, and analysis of relevant offices in order to establish proper monitoring and evaluation mechanisms of the SDGs.

Indicative Outputs	
Developing Capacity	- Organize an ASEAN-UN High-Level Brainstorming Dialogue as an annual event on sustainable development to advance the UN 2030 Agenda and the ASEAN Community Vision 2025; - Facilitate exchange of best practices: identification and compilation of best practices of Agenda 2030 Implementation in each ASEAN Member State that could be replicated in other countries.
Instruments (voluntary)	- Develop a complementarities roadmap for ASEAN in consultation with Member States, ASEAN institutions and national and regional stakeholders, incorporating recommended flagship initiatives and outputs contained in this report.
Mobilizing Financial Resources	- Develop facilitation guidelines and set up a consultation process among donor agencies, regional and development banks, and other funding bodies to align funding programmes with action under the five priority areas on complementarities.
Measuring Progress	- Enhance statistical capacity, including that of the ASEAN statistical division as a regional data hub, for monitoring progress of the ASEAN Community Vision 2025 and SDGs in collaboration with UN Statistics and enabled by capacity-strengthening activities; - Institutionalize the Gini coefficient as an official measure of inequality and support the capacity of national governments to collect relevant data and report on the state of inequality and poverty.

Flagship Initiative: ASEAN Programme for Knowledge and Outreach on Complementarities

This report has demonstrated information and knowledge gaps that hinder the development of evidence-based policies at the regional and country level. It also highlights the limited awareness of opportunities and thus limited engagement and implementation of the ASEAN Vision 2025 and the 2030 Agenda in complementarity. To address this gap, we recommend a flagship initiative to grow policy-relevant research, create tailored knowledge for, and conduct extensive outreach on complementarities. The ASEAN Programme for Knowledge and Outreach on Complementarities would:

• Grow the knowledge base and relevant research to support sustainable development and complementarities in the region;

• Develop tools and instruments to promote the complementarities approach to stakeholders across the Community;

• Continuously engage with major regional platforms including the Asia-Pacific Forum on Sustainable Development, the Forum on Financing for Development and the ESCAP Commission, and other appropriate ASEAN events and platforms where promotion of complementarities is important.

Indicative Outputs	
Developing Capacity	- Organize regional policy dialogues of stakeholders in regional sustainable development such as ASEAN parliamentarians, academics, business leaders etc. An example is a meeting of ASEAN Parliamentarians on the 2025 Vision and 2030 Agenda, organized with the involvement of the ASEAN Inter-Parliamentary Assembly; - Establish an ASEAN research unit for environmental and economic policy research modelled after European Union research funding; - Undertake an ASEAN-wide campaign on complementarities, targeting government agencies, businesses, NGOs, etc., and highlighting successful examples and opportunities through the complementarities approach.
Instruments (voluntary)	- Develop a set of adaptive tools and incentives for Member States to promote action on complementarities at national level.
Mobilizing Financial Resources	- Set up and oversee a Complementarities Grants programme, supported by a fund to extend small grants for implementation of projects that showcase complementarities at the practical level (and work with development and financing agencies to support the fund); - Institute regional and national Complementarities Awards to recognize specific efforts of public and private institutions on promoting integrated solutions that highlight complementarities.
Measuring Progress	- Develop guidelines for monitoring and reporting on complementarities at the UN High Level Political Forum.

4.3 Concluding Remark

This report has developed an operational and action-oriented framework for complementarities between the ASEAN Vision 2025 and the UN 2030 Agenda for Sustainable Development, building on the long standing cooperation between ASEAN and the UN and dedicated to the shared goal of leaving no one behind. ASEAN is uniquely placed to approach such complementarities in implementation. Not only does the Community play a key role in the global economy, ASEAN already has in place institutions and procedures that are mandated and capable of approaching implementation from a complementarity perspective. A complementarities approach allows ASEAN Member States and sustainability stakeholders to efficiently draw on a wider net of resources to design implementation strategies and to deliver high-impact and inclusive benefits across a broad range of sustainable development priorities – fulfilling their regional and international obligations while ensuring prosperity in their countries and the region.

Ultimately, this Report is intended to serve as a resource for ASEAN and the UN to consider how to best promote complementarities between the ASEAN Community Vision 2025 and the UN 2030 Agenda for Sustainable Development.

It is envisaged that the ideas, initiatives, and recommendations contained in this report will be explored, considered, and developed further as appropriate by and in close consultations with the relevant ASEAN bodies, in accordance with ASEAN principles and processes and in the spirit of ASEAN-UN partnership, and close ASEAN-ESCAP collaboration. Any implementation of the suggested initiatives should avoid duplication of existing ASEAN mechanisms and financial implications. As the Report is not intended to be prescriptive but rather explanatory, it is hoped that the report will also inspire additional ideas and initiatives by all concerned to advance sustainable development cooperation for the benefit of people in ASEAN and beyond.

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Annex 1.

Co-Chairs' Summary of the High-Level Brainstorming Dialogue on Enhancing Complementarities between the ASEAN Community Vision 2025 and the United Nations 2030 Agenda for Sustainable Development

31 March 2017, Bangkok

1. The High-Level Brainstorming Dialogue on Enhancing Complementarities between the ASEAN Community Vision 2025 and the United Nations 2030 Agenda for Sustainable Development was convened at the United Nations Conference Centre in Bangkok, the Kingdom of Thailand, on Friday, 31 March 2017. The Dialogue was co-chaired by His Excellency Mr. Don Pramudwinai, Minister of Foreign Affairs of the Kingdom of Thailand, as ASEAN's coordinator on sustainable development, and Her Excellency Dr. Shamsad Akhtar, Under-Secretary-General of the United Nations and Executive Secretary of the Economic and Social Commission for Asia and the Pacific. Ms. Victoria Kwakwa, Vice President for East Asia and the Pacific of the World Bank and Mr. Vongthep Arthakaivalvatee, Deputy Secretary-General of the ASEAN Secretariat participated in the Dialogue as did high level development experts of ASEAN Member States, high level representatives of UNDP, and UN Women. Representatives of Germany, which is ASEAN's Development Partner, were also present as guests of the Co-Chairs.

2. The Dialogue was a concrete follow-up to the Special Session of the ASEAN Foreign Ministers' Meeting focusing on sustainable development which was convened in New York on 24 September 2016. It is part of the ongoing efforts to develop priority cross-cutting areas for the region that would help ASEAN and its Member States to undertake the Community's Vision 2025 while helping attain the Sustainable Development Goals (SDGs).

3. The meeting had wide ranging and in depth discussions on how to concretely advance the shared goals of enhancing complementarities between the ASEAN Community Vision 2025 and the United Nations 2030 Agenda for Sustainable Development. It reaffirmed the commitment to enhance such complementarities and to transform this vision into reality through concrete projects.

4. The main outcome of this meeting was the endorsement of the proposal to undertake a joint report by UN ESCAP, Thailand and the ASEAN Secretariat on how to concretize such complementarities. The report would be jointly submitted to the ASEAN-UN Summit in November this year in Manila by UN ESCAP, Thailand and the ASEAN Secretariat. The report aims to help ASEAN Member States to develop strategies and policies that will leverage the complementarities between the ASEAN Community 2025 Vision and Blueprints and the 2030 Agenda for Sustainable Development through the identification of priority cross-cutting areas that are embedded in both agendas and which provide the opportunity for implementing both agendas effectively. The report would also identify and propose specific implementation actions. The report aims to catalyse action that would simultaneously promote ASEAN Community-building and the SDGs.

5. The Meeting strongly supported the priority areas identified and it was agreed that the report would focus on these issues: resilience, infrastructure and connectivity, poverty eradication, sustainable production and consumption, and sustainable management of natural resources. At the same time, issues such as inequality, trade and productivity, gender, micro, small and medium enterprises, agriculture and finance would be addressed through the priority areas identified.

6. The Meeting also appreciated the efforts of UNDP, UN Women and the World Bank in submitting concrete project proposals that would help serve as a catalyst to enhancing complementarities between ASEAN Community-building and attaining the SDGs. In this connection, the Meeting welcomed fast tracking a number of these project proposals and ideas including the UNDP's MY World 2030 Survey: MY ASEAN Edition, UN Women's proposal to hold a workshop/conference to promote the economic empowerment of women, and the World Bank's proposal on addressing malnutrition and stunting, within the broader objective of achieving prosperity for all. The meeting agreed that the projects would be aligned with the priority areas of complementarity identified.

7. The Meeting looked forward to continuing dialogue and discussions between the relevant organizations and ASEAN, as well as to the ASEAN Secretariat's continuing efforts to help coordinate this matter with the relevant ASEAN sectoral bodies, including the latter's views with regard to Thailand's Revised Information Paper/Matrix: Compilation of Possible Complementarities between the ASEAN Community Blueprints 2025 and the 2030 Agenda for Sustainable Development, as instructed by the ASEAN Coordinating Council in September 2016.

8. The Meeting reaffirmed the importance of ensuring that no one is left behind in sustainable development efforts that would remain people-centred. The participants expressed their appreciation to the Royal Thai Government and UN ESCAP for hosting this High-Level Brainstorming Dialogue.

Annex 2. Sustainable Development Goals (SDGs) and the Complementarity Priority Areas

The matrix below showcases the relation between the complementarity priority areas of this report and the SDGs. A more detailed version of the matrix is available at:

http://www.mfa.go.th/asean/contents/files/asean-media-center-20170419-095040-450424.pdf

SDGs	Goal 1 No Poverty	Goal 2 Zero Hunger	Goal 3 Good Health and Well-Being	Goal 4 Quality Education	Goal 5 Gender Equality	Goal 6 Clean Water and Sanitation	Goal 7 Affordable and Clean Energy	Goal 8 Decent Work and Economic Growth
Poverty Eradication	X	X				X	X	X
Infrastructure and Connectivity						X	X	
Sustainable management of natural resources		X				X	X	
Sustainable consumption and production	X		X			X	X	X
Resilience	X	X	X					

	Goal 9	Goal 10	Goal 11	Goal 12	Goal 13	Goal 14	Goal 15	Goal 16	Goal 17
	Industry, Innovation and Infrastructure	Reduced Inequality	Sustainable Cities and Communities	Responsible Consumption and Production	Climate Action	Life Below Water	Life on Land	Peace and Justice Strong Institutions	Partnerships for the Goals
									X
	X		X						X
				X	X	X	X		X
	X			X	X				X
	X		X		X				X

ASEAN countries have committed themselves to the implementation of two parallel but inter-related processes: the ASEAN Community Vision 2025 (ASEAN Vision 2025) and the United Nations 2030 Agenda for Sustainable Development (2030 Agenda). From the outset ASEAN Member States underlined the complementarity of these two agendas in their efforts to uplift the standards of living of the region's peoples. This report identifies major complementarities between the ASEAN Vision 2025 and the 2030 Agenda, assesses progress for the implementation of selected areas of complementarity and provides a menu of options to implement the two agendas in an integrated way. Analysis in this report shows that ASEAN Member States have made notable progress in promoting economic, social and environmental advancement. In order to maintain this progress and to meet the Vision 2025 and the 2030 Agenda ASEAN countries will need to accelerate efforts. The report shows that one of the best ways to achieve this is to focus on the complementarities between the two Agendas. The report identifies five priority areas of complementarity to help focus interventions and proposes seven flagship initiatives that could support concrete action to efficiently draw on limited resources and to deliver high-impact and inclusive benefits across a broad range of sustainable development priorities.