Economic and Social Survey of Asia and the Pacific 2015 - Part II

Balancing the Three Dimensions of Sustainable Development: From Integration to Implementation

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ECONOMIC AND SOCIAL SURVEY OF ASIA AND THE PACIFIC 2015

PART II: BALANCING THE THREE DIMENSIONS OF SUSTAINABLE DEVELOPMENT: FROM INTEGRATION TO IMPLEMENTATION

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FOREWORD

The inclusive, resilient and prosperous future we want, for all the people of Asia and the Pacific, demands that we place sustainability at the heart of the development agenda beyond 2015. This requires an unstinting regional commitment to balance and integrate the three dimensions of sustainability — economic, social and environmental. Thus, the critical questions we face: What are the arguments for integration? How can we best align policy and institutional frameworks? What role can regional cooperation take in this context?

Despite decades of consensus on the interdependence of the three dimensions, there remains a lack of clarity and relatively little agreement on what balanced integration conceptually means and which strategies and policy frameworks will achieve the best sustainable development results. To address this gap, ESCAP's member States requested the secretariat to provide guidance on approaches to balancing the integration of sustainable development.

Asia-Pacific economies need a coherent and well-articulated conceptual framework that helps improve understanding of the mechanics of balanced and integrated development. This can, in turn, help Governments shape effective policy frameworks and responses that foster sustainable development. The foundation of such policy frameworks must be inclusive growth, which promotes shared prosperity within the Earth's carrying capacity through a well-designed incentive framework that penalizes violations of environmental law and rewards efficiency in resource use.

To harness the potential of better integration of the three dimensions of sustainable development, there is a need for deeper understanding of the fundamental principles, recognition of what is to be targeted and measured, agreement on policy priorities and establishment of institutional mechanisms. There are four essential elements of the work that needs to be done:

a) Grounding our efforts in principles of social justice and human rights to achieve universality is an ambitious but critical aspiration. Success will not be easy, given our binding constraints, including the finite natural resource base, planetary boundaries and fiscal capacities, which render the task of avoiding trade-offs between growth, the well-being of people and the protection of the planet even more complicated. The consequences of inaction or a lack of recognition of the interdependence of the elements of sustainable development will have seriously negative impacts on intergenerational equity.

b) There is a need to recognize both the complexity and necessity of the measurement of human well-being. Dissatisfaction with the reliance on gross domestic product per capita as the measure of economic well-being calls for a shift to better assess the impact of deployment of other forms of capital. To be consistent with the broad thrust of sustainable development, this requires going beyond the traditional measures of economic growth to valuing a wider range of physical and other parameters. It also entails assessing natural capital through enhancements in environmental accounting. It also must be recognized that degradation of (or improvements to) the environment and to human and social capital are too often unaccounted for and treated as externalities. All forms of capital should be valued and environmental and economic accounting integrated within systems of national accounts.

c) The high natural resource intensity of the region's economies and the levels of waste and emissions across the region call for enhanced action on efficiency in the use of water, energy, raw materials and ecosystem services. Among the many needed transitions, product and systems innovation, adoption of the right technologies and progressive taxation and other charges to decarbonize economies are necessary to promote such efficiency.

d) Strong political commitment and leadership are needed to establish and steer core institutions with the mandate to pursue multidimensional, multisectoral policy coordination functions. Such institutions have proven effective in balancing short-term and long-term development objectives in an integrated manner, across development planning sectors and national financing. Macroeconomic and sector coordination have to be achieved across all tiers of Government and will benefit from central government leadership. Good practices in some countries offer opportunities for the regional sharing of knowledge and experience, such as instituting national strategies to balance and integrate approaches to development and creating supportive coordinating institutions. There is much scope for regional collaboration in these areas.

This publication describes elements of a conceptual framework and the specific changes required in development strategies to catalyse a meaningful transformation to a more sustainable and inclusive region. It advocates the adoption of integrated solutions and taking a long-term perspective on sustainability, which can sometimes be at odds with short-term policies and decision-making because they typically seek to accommodate immediate needs. Mainstreaming inclusive and green growth strategies will help achieve the integration of the three dimensions of sustainable development.

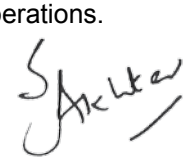
There are a number of Asia-Pacific countries making headway towards balanced integration — with bold and replicable policy innovations and institutions already geared towards the better coordination of and balanced investment in all three dimensions of sustainable development.

Despite this progress, much remains to be done across Asia and the Pacific to ensure the successful implementation of the development agenda beyond 2015. Environmental protection and the sustainable use of natural resources, for instance, must be informed by the best available science, implemented by the right technologies and fully engage all stakeholders. Governments need to find better ways to partner with the private sector, academia and civil society. At the same time, a shared understanding of sustainable development, social consensus and a new social contract must be forged.

Put another way, the countries of Asia and the Pacific need to shift to more future-oriented and sustainable paths to growth. These paths must be more resource efficient, able to meet the needs of both present and future generations, respect planetary boundaries and put people at the centre of development.

Such a shift is beyond the means of individual countries alone, which is why the Asia-Pacific region as a whole must lead this transformation through forward-looking and innovative approaches at the regional level. The secretariat recommends that a regional road map be developed to agree on priorities as well as on monitoring and accountability mechanisms.

For 2015 to indeed be a year of global and regional action on sustainable development, it is critical to first chart the practical steps needed for balanced and integrated implementation. This 2015 ESCAP theme study makes an important contribution to these deliberations.



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EXECUTIVE SUMMARY

With sustainable development at the core of the United Nations development agenda beyond 2015, the Asian and Pacific region needs a new development paradigm. Although the integration of the three dimensions of sustainable development — economic growth, social progress and environmental protection — is an agreed priority, the "how" of integration is less well defined.

This theme study outlines a conceptual framework and a set of strategies and policy options and then offers perspectives on institutional frameworks for integrating the three dimensions of sustainable development. In doing so, it also emphasizes the urgency of action in a rapidly changing development context while highlighting tremendous opportunities across the region as starting points.

The conceptual framework presented underscores the need for four normative shifts in policy stance. The basic conditions of social justice and ecological sustainability must become fundamental policy objectives. A shift from a predominantly short-term policy horizon to one that seeks long-term benefits for all is essential, while expenditures for the social and environmental sectors should be treated as investments. We must move away from a focus on gross domestic product as a measure of progress and develop metrics that encompass the three dimensions of sustainable development. Finally, the resources of the planet are not limitless, and resource constraints cannot always be addressed by technology. It is thus essential to confront the fundamental challenge of minimizing the physical scale of the economy without compromising the capacity of the economy to meet the needs of all people.

Integration of the three dimensions of sustainable development requires reformed institutional frameworks and strengthened capacities. High-level political commitment and inclusive and integrated visions are essential for realizing sustainable development. The primary responsibility for achieving sustainable development rests with Governments. The private sector, however, is also vital for realizing sustainable development objectives. Governments must take the lead and become adept at reconciling public and private interests, coordinating policies in different domains, facilitating and engaging a diversity of stakeholders and monitoring progress and policy impacts.

The prospects for achieving sustainable development will be defined by the ability of the region to align growth with sustainable development outcomes. The agreed priority of sustainable development — eradication of poverty and hunger — will depend on actions that reshape market and other incentives, lengthen the time horizons and reduce policy uncertainty so that investments in people and the planet can work in tandem to drive a virtuous cycle of growth that continually invests in, rather than exploits, the basis for shared prosperity within planetary limits.

Governments of the region should carefully consider the study and initiate a process of multi-stakeholder dialogue to develop their own responses. Specific strategies and reforms necessary to integrate the three dimensions of sustainable development, as outlined in this theme study, can be the starting points for implementing the development agenda beyond 2015. Overcoming trade-offs and fostering synergies between the economic, social and environmental dimensions of sustainable development require strengthened governance and a supportive institutional framework. Recommendations in this respect include:

- **Inclusively developed national visions** that embrace the integration of the social, economic and environmental domains that reaffirm national commitment to, and set the scene for, further action by stakeholders in their efforts towards integration.

- **Long-term strategic planning and design of sector-based strategies,** in which priority may be given to sectors with the most important implications for livelihoods, quality of life and resource use, such as industrial and trade policy, agriculture policy and infrastructure development, depending on the specific national situation. This must be supported by policy, institutional and financing interventions to close the financing gap, lengthen the time horizon of decision-making and provide an enabling environment for science, technology and innovation.

- **Institutions with clear mandates for strategy and policy coordination at the highest levels of political leadership,** where the realization of long-term development objectives requires a "whole of government" approach.

- **Strengthened capacity for stakeholder engagement,** where rights-based and participatory approaches create an enabling environment for civil society and stakeholder ownership, engagement and accountability. Specific mechanisms and capacities are needed to engage citizens in establishing societal consensus on the targets for social progress and for respecting planetary boundaries and for monitoring progress towards these targets. This will also require a strengthened science-policy interface and enhanced capacity to deploy analytical and decision-support tools suitable for integrated policy analyses.

- **Institutional mechanisms for monitoring and review, and for creating policy "feedback" loops** so that the impact of policies can be assessed across the three dimensions. This includes enhanced statistical capacity and holistic measures of progress.

- **Specific strategic and institutional interventions** to incentivize the private sector's participation in delivering on sustainability objectives, including the legislation of corporate sustainability reporting requirements.

Governments recognize the challenges and their responsibility for safeguarding and expanding the potential of both current and future generations. The Asia-Pacific region has many examples of national development strategies that are founded on shared cultural values and that demonstrate the commitment of Governments to implement bold policy innovations with a long-term vision. Experiences across the region showcase the potential for deepening and widening the scope of commitment to sustainable development and for engaging stakeholders in taking action.

Regional cooperation will be critical to maximize the opportunities for building synergies between the economic, social and environmental dimensions and to overcome the "first-movers risk" that may be presented in terms of short-term economic competitiveness. To realize "The future we want", the theme study concludes that the following initiatives at the regional level should be considered:

- **A regional road map for integrating the three dimensions of sustainable development.** Subsequent to a global agreement on the development agenda beyond 2015, Governments may want to establish a road map for the region to facilitate a transformative shift to sustainable development. The road map should define milestones, roles and responsibilities to ensure empowerment, coordination and accountability. Such a road map could emphasize support to countries with special needs. The road map could also identify a research agenda and specific monitoring and review mechanisms, such as an indicator framework and a supportive process, in line with the global agreements on the United Nations development agenda beyond 2015. The Asia-Pacific Forum on Sustainable Development and sessions of the Economic and Social Commission for Asia and the Pacific (ESCAP) can be considered as possible regional platforms for developing and supporting the implementation of such a road map.

- **Supporting regional economic integration initiatives as opportunities for sustainable development.** Further regional dialogue and action on strengthening the integration of the economic, social and environmental dimensions of sustainable development in various initiatives present significant opportunities for transformative shifts. The regional consensus represented in Commission resolution 70/1 on implementation of the Bangkok Declaration on Regional Economic Cooperation and Integration in Asia and the Pacific is an important platform for such follow-up action, particularly in the context of the forthcoming second Ministerial Meeting on Regional Economic Cooperation and Integration in 2015.

- **Strengthening regional platforms for promoting the integration of the three dimensions of sustainable development.** The Asia-Pacific Forum on Sustainable Development can, among many functions, take a primary role as a platform for policy dialogue and coordination; facilitate mutual learning through the exchange of information and experiences; and facilitate peer review of progress. The region's Governments can make specific recommendations on the types of support that such a regional platform may best provide. Other ESCAP and United Nations regional platforms must also take further steps, in sector-specific discussions, to integrate the three dimensions of sustainable development. Governments should mandate the various secretariats and processes to further action.

- **Strengthening United Nations and multilateral system support.** Strengthened support by a United Nations system that demonstrates a high degree of coherence and collaboration is needed. Support for the integration of the three dimensions of sustainable development also means rethinking the way the United Nations conceives its analytical, policy and operational work. The United Nations system response at the regional level, including possible reform of the Regional Coordination Mechanism and the United Nations Development Group Asia-Pacific, should be considered as follow-up action, to be supported by member States.

Political commitment, stakeholder engagement and support, enhanced capacity and a shared vision will be needed to deliver on the promise of sustainable development. This must be coupled with specific strategy and policy interventions and institutional strengthening. Only then can poverty be ended, lives transformed and the planet protected.

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ABBREVIATIONS AND ACRONYMS

Asia-Pacific Forum	Asia-Pacific Forum on Sustainable Development
ESCAP	Economic and Social Commission for Asia and the Pacific
GDP	Gross Domestic Product
High-level Political Forum	High-level Political Forum on Sustainable Development
ILO	International Labour Organization
IPCC	Intergovernmental Panel on Climate Change
MDGs	Millennium Development Goals
NAFTA	North American Free Trade Agreement
OECD	Organisation for Economic Co-operation and Development
SATNET	Network for Knowledge Transfer on Sustainable Agricultural Technologies and Improved Market Linkages in South and Southeast Asia
SAARC	South Asian Association for Regional Cooperation
SEEA	System of Environmental-Economic Accounting
SNA	System of National Accounts
UNDG A-P	United Nations Development Group Asia-Pacific
UNEP	United Nations Environment Programme

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1

SETTING THE SCENE

1.1 Introduction and context

After more than 25 years of global dialogue, sustainable development has moved to the centre of the development discourse as a priority in a world that is changing at increased speed. The convergence of economic, financial, climate and food crises in 2008 marked a watershed in the global policy landscape. It brought the interrelationships between the economic, social and environmental dimensions of sustainable development into focus and heightened political commitment to the ideals of sustainable development and to their translation into action.

It is now broadly recognized that the pursuit of short-term gains and private benefits over long-term development and shared prosperity has forged economic growth paths that are misaligned with sustainable development objectives. In Asia and the Pacific, advocates of sustainable development are calling for a rethinking of the growth model; they are looking for a model that balances inclusiveness, the need for economic growth and environmental sustainability as the basis for future prosperity. This reflects greater consensus that both the quality and quantity of growth are of equal importance as a basis for sustainable development.

The Brundtland report argued a quarter century ago for inclusive and sustainable economic growth, proposing that it involves progressive changes in the content of growth "to make it less material- and energy-intensive and more equitable in its impact." The seminal report further pointed out that "these changes are required in all countries to maintain the stock of natural capital, to improve the distribution of income and to reduce the degree of vulnerability to economic crises."[1] This is critical for reversing the accumulation of social and environmental costs of an unsustainable economic growth path that is evident across the region.

The Asia and Pacific region has arrived at an important crossroads. High levels of economic growth have lifted great numbers of people out of poverty. But if the region is to sustain the growth needed to achieve its development goals, it must shift to a different growth trajectory — one that is more resource efficient, able to meet the needs of present and future generations within planetary boundaries and that puts its people at the centre of development.[2]

These needs have been increasingly recognized as urgent priorities by the international community. The outcome document of the United Nations Conference on Sustainable Development (Rio+20), "The future we want", recognized that "eradicating poverty is the greatest global challenge facing the world today".

This record of global consensus on sustainable development places people squarely at the centre of sustainable development, with a commitment to "strive for a world which is just, equitable and inclusive" and to work together to promote "sustained and inclusive economic growth, social development and environmental protection and thereby to benefit all".[3]

Recent worldwide consultations on the United Nations development agenda beyond 2015 have also called for a "people-centred and planet-sensitive agenda" — an agenda with sustainable development at its core.[4] Implementing such an agenda requires action for the balanced integration of the three dimensions of sustainable development, as stated in "The future we want".[5]

In response to such calls, the seventieth session of the Economic and Social Commission for Asia and the Pacific (ESCAP) recognized that there was a need for new thinking on how to operationalize integrated approaches. Such approaches should be based on an allocation of resources and investments that maximize synergies and minimize trade-offs among the objectives of economic growth, inclusive social progress and environmental protection for all stakeholders of society, current and future.

The seventieth session requested that the theme study for the next session propose a conceptual framework to support the integration of the three dimensions of sustainable development, describe the institutions and policies best suited for balancing the integration and discuss the support needed at the regional level.[6]

1.2 The Millennium Development Goals — An unfinished agenda

The need to integrate social, economic and environmental development goals is the focus of this theme study. Integration is increasingly recognized as an essential basis for all future development. Efforts to improve human well-being have, since 2000, focused on the implementation of the Millennium Development Goals (MDGs). Joint assessments by ESCAP, the Asian Development Bank and the United Nations Development Programme[7] in the Asia-Pacific region reveal that rapid economic growth has led to significant progress in achieving the MDGs.

The region's track record of economic growth has been impressive. Driven by robust growth in emerging economies, especially China and India, developing countries, on average, grew at rates exceeding those of industrialized countries[8] and other regions. In 2008, the Commission on Growth and Development (the Spence Commission) singled out 13 countries for their high economic growth performance; of them, nine were from Asia.[9] The region has been an engine of growth for the world economy, attracting billions of dollars in foreign direct investment.[10]

As a direct result, since the Millennium Declaration, poverty within the region (the proportion of people living on less than $1.25 per day) and the proportion of people living without access to safe drinking water has more than halved. In addition, improvement in gender parity in primary and secondary education has been achieved through greater investment, which has also contributed to the achievement of several other goals and targets.[11]

Progress on the Millennium Development Goals has improved standards of living and opportunities for many people across the region. Increased income, greater access to basic services in many places and the "information revolution"[12] have transformed both work and life for a large share of the population. Civic engagement has had an important role in this process. Civil society organizations are providing models in such areas as community development, microfinance, natural resource management, public-private partnerships, human rights protection, advocacy and public policy research.

Nevertheless, progress in MDG achievement has been uneven, and the agenda remains unfinished. Although South-East Asia has the highest levels of achievement across the targets of the MDGs, South Asia is yet to achieve universal primary school completion or gender parity in tertiary education. The North and Central Asia region is distinguished by its achievement of the full range of education-related targets and universal antenatal care but has not met the goal for safe drinking water. The Pacific has recorded gaps in achievement across the MDG framework.[13]

Middle-income countries are expected to achieve 13 of the 21 MDG targets, while low-income countries will achieve only 9 of the targets and the least developed countries will reach only 8 targets. More than 1.4 billion people still live on less than $2 per day, 1.7 billion people lack access to improved sanitation

and 2 billion people lack access to adequate energy services. Health and gender equality goals are of particular concern. Every year, nearly 3 million children die before reaching their fifth birthday, 75 million children are underweight, and more than 20 million women give birth without the support of a skilled attendant. Women continue to experience discrimination from participation in the formal labour force, access to education and economic assets, and remain underrepresented in higher levels of public service.[14]

1.3 The urgency of a paradigm shift to sustainable development

The Asia and Pacific region's future will be defined by its ability to close these development gaps and to overcome several interconnected development challenges: persistent poverty, widening income gaps, gender and other inequalities, lack of decent work (especially for youth), vulnerable employment, jobless economic growth, hunger, food insecurity, rising and volatile food and nature resource prices, resource constraints and climate change.

How member States close these gaps represents an important challenge — and opportunity — for policy. This theme study addresses these issues and the potential for greater gains through integration of the three dimensions of sustainable development. It argues that there is an urgent need to go beyond tackling development challenges in isolation from one another and, through examples from the region, documents where countries in the region have gained through integrated policy responses.

1.4 Persistent and emerging challenges — The opportunity for change

In Asia and the Pacific, the poorest 20 per cent of the population now accounts for less than 10 per cent of national income,[15] and the poorest in the major developing economies are experiencing declines in their income. Technological change and globalization, considered by some analysts to be the main drivers of the region's rapid economic growth, is also contributing to rising inequalities within and between countries.[16] Social protection and social justice concerns can no longer be seen in isolation or as secondary concerns and objectives. Across much of the region, economic growth is not generating sufficient decent and productive employment opportunities, and there is a large and growing share of workers in vulnerable employment,[17] who constitute the working poor.

Growing disparities in income and wealth as well as unequal social opportunities reinforce each other, disproportionately affecting women and the most vulnerable members of society, including people who are poor, youth, persons with disabilities, migrants and older persons. Inequality hinders participation in economic and political activities, inhibits entrepreneurship, reduces access to essential resources and services and undermines social cohesion. Inequality not only negatively impacts human dignity and social justice — the principles upon which human rights are grounded — but also undermines the three dimensions of sustainable development by stifling economic growth in the long run.[18]

Looking to the future, addressing inequality in all its dimensions will be a defining challenge for the region, with implications for both the environmental and economic dimensions of sustainable development. Rising to the challenge of sustainable development means meeting the needs and fulfilling the rights of all persons while securing the environmental resource base that ensures access to ecosystem services that are critical to people and to economies.[19] Increasingly evident, resource constraints and deterioration across a number of environmental indicators (including greenhouse gas emissions, air pollution, water stress, biodiversity loss and land degradation) are imposing both direct and indirect costs on human lives, health and welfare.

The region's population is expected to reach more than 5 billion in 2050, of which two-thirds will live in cities. Rising incomes mean that the Asia-Pacific region harbours the largest emerging middle class in history — a population projected at more than 3 billion by 2030.[20] Finding new ways to address needs as well as meeting the aspirations for a better life will be a critical challenge for the region.

This challenge is particularly daunting in relation to the implications of climate change. According to the Intergovernmental Panel on Climate Change (IPCC), the world is at the brink of entering an era of "committed warming" — a period in which the global mean temperature will continue to rise even if atmospheric composition is held constant.[21] The IPCC assessments[22] have gone from gentle persuasion to persistent warning. Put simply, the region must alter its development path towards greater integration of social, economic and environmental goals as the basis of sustainability.

The Sendai Framework for Disaster Risk Reduction[23] identifies climate change as a driver of the risks confronting the region in relation to natural disasters. The frequency and severity of climate-related extreme weather events continue to expose the region to economic and human losses and development setbacks.[24] More than 85 per cent of the people affected by disasters globally live in Asia or the Pacific.[25,26] The average number of disasters reported per year in the region has grown almost fourfold since 1970, from an average of fewer than 50 events per year during the 1970s to more than 180 events per year in the 2000s. Economic losses have increased over the same period, from $4.9 billion to nearly $75 billion,[27] while the region's gross domestic product (GDP) only grew fivefold. Building resilience to natural disasters will increasingly be a precondition for balancing the three dimensions of sustainable development.[28]

Climate change is a clear example of market and governance failure, but it has not been met with the swift and determined policy response that might be expected. At the same time, climate change is only one, albeit potent, symptom of a broader crisis: the large-scale degradation of natural systems that, if not checked and reversed, will constitute a great challenge for humankind.[29] A greater body of evidence now points to the widespread development implications of degraded ecosystems and the crossing of planetary boundaries. Such "tipping points" — points beyond which irreversible environmental change will occur – will have implications for the region for many decades to come.[30]

The region's development patterns remain highly resource-intensive and wasteful. Although per capita levels of carbon emissions and consumption of energy are lower than world averages, the Asia-Pacific region used three times the resources as the rest of the world to produce one unit of GDP in 2008.[31] Although much economic development to date has relied upon exploitation of natural resources and has been supported through lower-cost labour, the new economic context is increasingly characterized by rising prices and higher price volatility for most natural resources.[32] The region's economic and social transition increasingly requires a development strategy that promotes resource efficiency, social justice and investment in knowledge, technology and infrastructure.

1.5 Integration of the three dimensions — Towards a new regional development agenda

These challenges underline the urgency of the sustainable development agenda agreed to during the 2012 United Nations Conference on Sustainable Development. To paraphrase United Nations Secretary-General Ban Ki-moon,[33] ours is the first generation that can end poverty and the last that may be able to do so. If we do not take action, future generations will be left with a legacy of disaster, conflict, impoverishment and vulnerability to the consequences of degraded environments and ecosystems.

A development trajectory that continues to foster trade-offs between the objectives of social progress, environmental protection and economic growth is no longer appropriate to a context in which these challenges are intimately interlinked and in which the limits and needs in both the environmental and social domains are too important to be ignored.

Indeed, as the Brundtland report warned, "Growth has no set limits in terms of population or resource use beyond which lies ecological disaster…. The accumulation of knowledge and the development of technology can enhance the carrying capacity of the resource base. But ultimate limits there are, and sustainability requires that long before these are reached, the world must ensure equitable access to the constrained resources and reorient technological efforts to relieve the pressure."[34] It has taken a quarter century of neglect for the warning to become a reality – to which the region must now respond.

Chapter 2 lays out a conceptual framework for going forward, describes systemic constraints to the integration of those three dimensions and recommends strategies and policies to strengthen the inclusiveness and sustainability of growth as a fundamental response to the development challenges confronting the region.

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2

CONCEPTUAL FRAMEWORK, STRATEGIES AND POLICIES FOR INTEGRATION

2.1 Introduction

The fundamental argument for the integration of the economic, social and environmental dimensions of sustainable development inherent in "The future we want"[35] is that these systems are interdependent and co-evolving.

Sustainable development means ensuring the co-evolution of the economic, social and environmental systems, with appropriate and well-balanced policies that are backed by good governance.

There is consensus that this requires an integrated approach across the three dimensions. Yet, how to implement such an integrated approach has not been well defined.

This chapter provides a conceptual framework that helps to define the major shifts in policy stance and governance approaches required for the integration of the three dimensions of sustainable development. It also describes critical constraints to the balanced integration of sustainable development and then outlines interventions for aligning economic growth strategies with sustainable development.

2.2 A conceptual framework for the integration of the three dimensions of sustainable development

A conceptual framework guides the important shifts needed in policy stance and governance approaches to promote the integration of the three dimensions of sustainable development. The conceptual framework contains four elements, as the following articulates.

2.2.1 Development between planetary boundaries and social needs

The first component of the conceptual framework responds to the challenge of ensuring that the needs of all people are met. The United Nations synthesis report of the Secretary-General on the development agenda beyond 2015 proposes "a universal, integrated and human rights-based agenda for sustainable development, addressing economic growth, social justice and environmental stewardship and highlighting the link between peace, development and human rights — an agenda that leaves no one behind".[36]
This implies that the following three imperatives be met: (a) to stay within the biophysical carrying capacity of the planet, (b) to provide an adequate

standard of living for all and (c) to provide systems of governance that respect the basic needs of all and propagate the values by which people want to live.[37] These imperatives are not given any order of priority, yet they are not qualitatively equal. Rather, they occupy different positions in a hierarchy in which economic activities should be in the service of all human needs while safeguarding the biophysical systems necessary for human life.

The following discussion is thus based on a conceptual model that frames the challenge of ensuring universal access to the resources needed to implement a rights-based agenda for shared prosperity while living within the Earth's carrying capacity.[38] In this model, the natural environment's finite resource base is established as a boundary, with the premise that for development to be sustainable, the boundary must not be crossed.

Almost all forms of natural resources constitute a closed system. Sources, sinks and services related to the stock of renewable and non-renewable resources are finite. Sustainable development must thus abide the planetary boundaries — which are the thresholds that set the limits of critical Earth systems, as defined in the seminal article by Rockström and colleagues.[39] The physical scale of the economy must be maintained within these limits.[40]

Social needs, such as social protection requirements, nutrition and food security, education and health care, represent the minimum conditions that must be met in order for the development trajectory to be considered acceptable.[41] This means economic development must operate within those minimum limits prescribed by international agreements (notably the Universal Declaration of Human Rights), social consensus and legislative and institutional terms regarding the basic needs and opportunities to be provided and capabilities of individuals and society to be built.

To avoid catastrophic environmental change and reversals of social progress and to respect the principle of intergenerational and intragenerational equity, the physical scale of (and the goods and services provided by) economic activities must respect both biophysical and societal limits.

2.2.2 Balanced investments in all forms of capital

The second component of the conceptual framework addresses the need to secure all aspects of the foundations for a good quality of life. A focus on people-centred development requires a shared understanding of people's needs and what constitutes a good quality of life. According to the Commission on the Measurement of Economic Performance and Social Progress, "quality of life depends on people's health and education, their everyday activities (which include the right to a decent job and housing), their participation in the political process, the social and natural environment in which they live, and the factors shaping their personal and economic security." [42]

The various dimensions of a good quality of life depend on the provision, within the economy, of "better and more valuable services to ultimate consumers"[43] But it also depends on the flow of services provided by various forms of capital.

We can differentiate five types of capital, each of which is deemed necessary for a good quality of life and which contribute to the wealth of a society: financial, natural, produced, human and social.[44] Maintaining all forms of capital is essential for well-being; but because it is per capita well-being that ultimately matters most, sustainable development is achieved if per capita wealth does not decline over time. [45]

Financial capital includes stocks, bonds and currency deposits; human capital refers to the productive capacities of all people; produced capital consists of physical assets, including machinery and infrastructure; natural capital is in the form of natural resources, land and ecosystems providing services, such as water purification; and social capital, the hardest to measure, consists of a stock of trust, shared values and knowledge, social networks and institutions.

Degradation of (or improvements in) natural, human and social capital are too often unaccounted for and treated as "externalities". Fundamental and systemic trade-offs between different forms of capital are created by ignoring or undervaluing the contributions to the economy of people and natural resources. The externalizing of critical social and environmental values by markets and institutions leads to unbalanced investment in the various forms of capital. Rather than dismiss externalities, Governments have a responsibility to correct market imperfections while encouraging resource allocation and incentivizing efficiency through appropriate pricing. Creating shared prosperity in a context of increasingly evident resource constraints

and persistent inequality will depend on carefully considering how all socially and environmentally beneficial goods and services are produced and accessed.

All five forms of capital are critical for people-centred growth strategies. All forms of capital thus require investment and protection, incentivized and facilitated by market interventions and by strengthened institutions and governance arrangements.

2.2.3 Efficiency on both the demand and supply sides

The third aspect of the conceptual framework is the more efficient and sustainable use of resources within the economy. This reflects the fundamental challenge of minimizing the physical scale of the economy without compromising its capacity to provide for the needs of all people. The Asia-Pacific region is in the midst of an industrial transformation that goes hand in hand with large-scale increases in natural resource use and waste and emission production, in a context of widening inequalities.

Increasing resource efficiency will be vital, given the fast-depleting natural resources, growing water and energy scarcity and the decreasing absorptive capacity of ecosystems. Eco-efficiency needs to permeate across the economy, not only in terms of efficiency in the use of materials and ecosystem services but also the reduction of waste and support of waste-to-resource economies. This calls for changes in production patterns and for consideration of the environmental impacts of consumption levels and patterns.

This brings to the forefront the necessity of sustainable consumption and production: “the use of services and related products, which respond to basic needs and bring a better quality of life while minimizing the use of natural resources and toxic materials as well as the emissions of waste and pollutants over the life cycle of the service or product so as not to jeopardize the needs of future generations”.[46]

The call for sustainable consumption and production derives from the imperative that economic and social development must take place within the carrying capacity of ecosystems. Additionally and where appropriate, economic growth must decouple from environmental degradation by improving efficiency and sustainability in the use of resources and production processes.[47]

Public policy must therefore support a transition to sustainability, enabled by resource efficiency and systems innovation, despite the inherent growth dynamic of the industrial transformation taking place in Asia and the Pacific.

2.2.4 Redefining our understanding of growth and development

The fourth aspect of the conceptual framework addresses the need to redefine the basic notions of economic growth. Economic growth has been the hallmark of the Asia-Pacific region and the main focus of development policy.

However, incentives to prioritize short-term gains and private benefits over long-term development and shared prosperity have often led to growth paths that are misaligned with sustainable development objectives. “The future we want” seeks broader measures of progress to address the shortcomings in the conventional measures of economic progress, which constrain the ability of Governments to assess the performance of their economies in a holistic way. The calculation of GDP, according to the System of National Accounts (SNA) standard, is based on market prices and excludes beneficial but non-market activities, such as household activities. It also does not account for depletion of economic assets resulting from production.

The Commission on the Measurement of Economic Performance and Social Progress, established in 2008, pointed out that better measures of well-being are important “because there appears to be an increasing gap between the information contained in aggregate GDP data and what counts for common people’s well-being”. The Commission recommends, among other actions, working towards a statistical system “that complements measures of market activity by measures centred on people’s well-being and by measures that capture sustainability.”[48]

Measures of people’s well-being, the Commission proposes, should assess both objective and subjective aspects of well-being: Objective aspects are measured by discrete indicators, such as access to education, while subjective aspects require aggregate indices — such as Your Better Life Index or the Gross National Happiness Index.[49] Measures of sustainability, says the Commission,

Box 2.1 Integrated statistical systems

One of the challenges in forming an integrated view across the three dimensions of sustainable development is the scarcity of data that reflects the co-evolution of economic, social and environmental systems.

These relationships are not easily reflected by indicators currently available and the traditional boundaries for the frameworks used in official statistics were not designed to capture all the information requirements related to an integrated view of sustainable development. The calculation of gross domestic product (GDP), according to the system of national accounts (SNA) standard, is based on market prices. It excludes beneficial but non-market activities, such as household activities, and it does not account for depletion to economic assets resulting from production. Many of the forms of natural and social capital discussed in this report are beyond the boundaries of statistics produced through the SNA.

During the past decade, new methodological standards for official statistics trended towards more integrated systems of data compilation across the three dimensions of sustainable development. For example, the System of Environmental-Economic Accounting (SEEA) as designed to expand national accounting systems to integrate data on stocks and flows of natural resources and other forms of natural capital and also to account for flows of residuals (natural waste and other emissions). This system, essentially an expansion in scope from national accounts already produced in countries, can be used to create a more integrated and complete view of costs and benefits from different economic activities. The SEEA was adopted by the United Nations Statistical Commission as a new international statistical standard in 2012.

Another example is the ongoing development of revisions to international guidelines for statistics on time use in order to produce internationally comparable indicators on time use of men and women that are coherent and complementary to the standard definitions for measuring economic activity, work and employment. In Asia and the Pacific, the ESCAP Commission recognizes the need to create internationally agreed methods for compiling a basic range of statistics on natural disasters, and there is a growing recognition of the need to maintain coherence between these statistics and other statistical frameworks for producing a more a complete picture of the resilience of the social and economic systems to environmental hazards.

Implementation of these and other new international guidelines will make national official statistics systems generally more efficient and will result in official statistics that directly respond to the knowledge gap challenges for achieving sustainable development. National statistics offices in Asia and the Pacific have stressed that, with adoption of statistical guidelines and frameworks, additional training and technical assistance is needed so that governments can keep pace with the new norms and standards. The ESCAP Committee on Statistics, at its fourth session in 2015, emphasized integrated of statistics systems as a priority for statistics development in the region.

should be based on a "well-defined dashboard of indicators"[50] that assess stocks of natural capital as well as the proximity of environmental pressures to dangerous levels, beyond which damage is likely to be irreversible.

The System of Environmental-Economic Accounting[51] has integrated the SNA indicators of economic activity with the indicators of natural resources and the waste and emissions created from economic activity for use in producing adjusted GDP assessments (see box 2.1). The indicators form the basis of various assessments of green GDP that are ongoing or in operation in both industrialized and developing countries, despite methodological difficulties. There are several complementary indicators of performance in the environmental and social domains that also enable a broader assessment of progress, such as the Human Development Index and the Environmental Performance Index.

A new information base is needed for setting appropriate policy targets and for tracking progress on sustainable development. At the same time, improved measures of progress that go beyond GDP should be placed in a monitoring and review framework that, as much as possible, is coherent with the sustainable development goals to be adopted in the context of the United Nations development agenda beyond 2015. Such a monitoring and

review framework should engage all stakeholders in agreeing on what should be measured, evaluating progress and in defining follow-up action.

2.3 Constraints to balanced and integrated sustainable development

Three major constraints hinder the wide application of the four elements of the conceptual framework for integrated and balanced distribution of resources and investments. These relate to incomplete costing, short-term time horizons of activities and pervasive uncertainties.

2.3.1 Incomplete costing of resources

Market prices often do not capture the full value of services provided by non-physical capital. The consequence of this incomplete costing is that market prices will invariably lead to the undervaluation of, and therefore underinvestment, in, social, human and natural capitals. The economic system would protect and build up the relevant components of capital stock if their prices as inputs to economic growth reflected the true values that they provide to development. The consequence of undervaluing natural capital has been a loss of biodiversity and natural resource depletion.[52] Nearly two thirds of ecosystem services provided by nature to humans are in decline worldwide.[53] These losses have a large economic impact; for example, the annual biodiversity losses in Europe have been estimated to be worth €50 billion.[54]

All segments of society are potentially impacted by the undervaluation of environmental externalities. For example, maintaining a low price for domestic coal resources enhances the profitability of coal-based energy but imposes additional costs on national as well as global societies, such as through air pollution and climate change, which are not accounted for in the investment calculus.

Similarly, undervaluing human capital by maintaining low wages may expand short-term profits but it erodes the human resource base, which, in the long term, will undermine economic competitiveness. Investing in human capital is necessary for economic competitiveness, higher productivity, higher resource efficiency, value-added production, economic dynamism and the resilience of the economy against external shocks.

The so-called trade-offs between economic, social and environmental goals are largely illusory — an impact of incomplete costing. And the more incomplete the costing is, the larger the trade-off becomes.

2.3.2 Short-term policy and decision-making time horizons

The long-term policy horizons of sustainable development often are at odds with the short- term policy and decision-making horizons of the private sector and its profit objectives and of Governments, which must act to meet the immediate needs of their citizens.

Policymakers are frequently dealing with multiple policy and investment dilemmas, and the ones that seem most urgent naturally command more immediate attention. Short-run shocks and long-run adverse trends affect society and policymaking differently. Climate change is a slow-moving crisis, the costs of which will far outweigh those of any other policy challenge. However, the accumulated costs of climate change will only become visible in decades and will be widely spread around the globe. In contrast, financial crises, terrorism or disease epidemics are “bumps” — fast-moving crises whose costs unfold in real time. The costs of inaction on these short-term shocks will accrue during the tenure of the incumbent policymakers, while the bulk of the costs of the long-term, persistent crises, even if more destructive in aggregate terms, will be visited upon subsequent Governments and generations.[55]

The provision of social services (such as education or health) or environmental services (such as air or water quality) are given lower priority than investments with immediate returns. This is especially the case if such investments are perceived to be in conflict with the objective of economic growth, even if the social and environmental investments offer higher returns over time.

In the public sector, the decision to favour either short- or long-term decisions and investments is affected by governance systems (political horizons, electoral cycles, transparency and accountability), the degree of social consensus around a particular issue, the quality of leadership and the availability of data and capacity for complex policy analysis, as well as by the extent to which costs and benefits are revealed in the market. For the private sector, a stable policy environment and effective regulatory

framework as well as financial incentives, are critical for encouraging profit-making firms to make investments that contribute to longer-term sustainable development objectives.

2.3.3 Policy risk and uncertainty

A third constraint on the willingness of decision makers to invest in integrated solutions is the lack of capacity to analyse the short- and long-term impacts of integrated policy options.

Due to shortcomings in data availability and analytical and statistical capacity, it is difficult for policymakers and scientists to assess how close environmental pressures are to dangerous levels, to compare the technological options to enhance resource efficiency and to determmine opportunities for substitution of resources. Knowledge gaps also exist in relation to disaster risks, among other aspects of the science-policy interface that are critical to sustainable development.

In an increasingly complex policy environment, multiple stakeholders' perspectives are important for informing policymaking and decision-making. Knowledge gaps are widened when the understanding of policy impacts, opportunities and risks is limited because certain stakeholders are excluded from participating in policy design, implementation and impact evaluations.

To establish social consensus for the integration of the three dimensions of sustainable development, the voices of all stakeholders, including marginalized groups, must be heard. This is a daunting challenge in the absence of adequate data, analyses, integrated analytical frameworks and decision-support tools. Institutional support for constructive stakeholder engagement, including diminishing policy uncertainty, is therefore crucial. Unattended, these challenges have social and political consequences because they enable the "capture" of the political agenda by short-term interests that may favour a limited number of people.

Balancing these diverse demands requires political leadership to sacrifice short-term political gains for long-term progress,and it requires that all interest groups concur on the goals and strategies for achieving them.[56]

2.4 Strategies for inclusive and sustainable growth

Integration of the three dimensions of sustainable development must focus on inclusive and sustainable growth. Economic competitiveness must be based on improvements in productivity and value-added production, economic dynamism and resilience to external shocks. And it must be based on value — not only on cost but on shared economic gains and employment opportunities.

People across all sectors of society should have equitable access to decent work and social protection and be enabled to lead productive lives through investment in human and social capital. Such an economic and social system should be reinforced by an increasingly secure environmental base, an adequate flow of ecosystem services, increasing investments in natural capital and sustainable consumption and production patterns.

2.4.1 Inclusive growth

Inclusive growth represents an attempt to enhance the quality of economic growth and calls for investments in human capital, social justice and economic dynamism. This needs to be accompanied by the enhancement of social security and equity considerations to improve access to opportunity and quality of services to all sectors of society.

Inclusive growth thus places people at the centre of the development agenda, ensures a productive labour force and calls for investments in human and social capital; it also requires adequate safety nets, policies to manage the demographic transition and capacity to generate social, technology and other innovations.

The underlying principles for this agenda were established through international agreements, starting with labour rights that the International Labour Organization introduced in 1919 and then the civil, political, economic, social and cultural rights articulated in the Universal Declaration on Human Rights in 1948. The Universal Declaration includes provisions relating to the right to social security and economic, social and cultural rights (Article 22), the right to "just and favourable remuneration ensuring for [individuals and families] an existence worthy of human dignity, and supplemented, if necessary, by other means of social protection" (Article 23) and the right to education (Article 26).

The benefits of investing to reduce inequalities are clear. Low levels of inequality tend to extend the length of economic growth spells. Countries with low levels of inequality also tend to have less pronounced household

debt and balance of payment deficits. Reducing inequalities therefore improves economic stability, enhances growth prospects and supports inclusive growth strategies.[57]

Lower levels of inequality also strengthen trust and bonds of solidarity between social groups. Reducing inequalities can have a positive impact on social cohesion and on lowering crime rates and social unrest.[58]

The development agenda beyond 2015 provides an opportunity for countries in the region to shift the discussion on social protection to a broader transformative perspective and generate a virtuous circle between tackling inequalities and promoting sustainable development. [59]

On one hand, improving social protection is an effective way to tackle inequality in all its forms. Market-led growth alone is not enough to achieve sustainable development because growth does not automatically lead to equality. The growing view is that the redistribution of resources strengthens an economy.[60] Social protection reduces inequality of outcome by redistributing income; it reduces inequalities of opportunity by providing access to health care and education; and it reduces inequalities across population groups by empowering women and girls, youth, older persons and persons with disabilities.

On the other hand, social protection is instrumental in integrating the economic, social and environmental dimensions of sustainable development. Social protection fosters inclusive growth by enhancing human capital and productive assets; it reduces social exclusion through the promotion of solidarity and mitigation of social unrest; and it promotes livelihood diversification by building more sustainable food systems and natural resource management. Social protection can be seen as an instrument that not only helps excluded and vulnerable groups cover their basic needs but it also contributes to the long-term well-being of all people while fulfilling the goals of shared prosperity, social equity and environmental sustainability.[61]

The experience of many industrialized countries[62] reflects the long-term benefits for social and economic development from investments in universal social protection. That experience presents sufficient evidence to demonstrate that investing systematically in social support systems — ranging from pension schemes, universal health care and child benefits to unemployment insurance — pays significant dividends in economic as well as social terms.

Fulfilling basic needs and reducing the disparities in access to other types of social services also requires institutional support to ensure that every person has a legal identity. Without a registered birth and civil identity, marginalized groups are excluded from basic services and participation in political processes and are unable to own property or start a business, open a bank account or apply for credit. The Ministerial Declaration to "Get Every One in the Picture" in Asia and the Pacific,[63] declares 2015-2024 to be the Civil Registration and Vital Statistics Decade for Asia and the Pacific and endorses the Regional Action Framework on Civil Registration and Vital Statistics in Asia and the Pacific.

There are a number of examples, both within the region (as discussed in chapter 3) and outside the region, such as Bolsa Família (or family grant), which the Government of Brazil introduced in 2003 as an expanded conditional cash transfer programme of social protection. By 2012, the programme had reached 50 million families (26 per cent of the population), helped to more than halve extreme poverty and slashed the Brazilian inequality coefficient by 15 per cent[64] — while supporting the country's rapid economic growth.

The *Economic and Social Survey for Asia and the Pacific 2015 — Part I: Making Growth More Inclusive for Sustainable Development*[65] presents a composite index of inclusiveness and proposes policy considerations for making economic growth more inclusive. In addition to strengthened expenditure on social protection, the report advocates for infrastructure development to attract investment to the rural sector and strengthened efforts to foster employment, among other measures. It also emphasizes the need to move the policy focus beyond inequality of income to promoting equality of opportunity.

2.4.2 Green growth

"Green growth" represents an approach for investment in natural capital for ecological sustainability and economic resilience. The Ministerial Declaration on Environment and Development issued in 2005 at the conclusion of the Fifth Ministerial Conference on Environment and Development in Asia and the

Pacific proposed green growth as a regional strategy for sustaining the economic growth necessary to reduce poverty in the face of worsening resource constraints and climate impacts. The outcome document, "The future we want", presents the green economy in the context of poverty eradication and sustainable development as a necessary strategy for achieving sustainable development.

Green growth proposes a transformation of the economic system to synergize economic growth and environmental protection. Investments in resource savings as well as the sustainable management of natural capital are drivers of growth, shifting away from the view that resource protection burdens economic development. An economy that is more closely aligned with ecological sustainability objectives provides opportunities to respond to development needs and reduces the vulnerability of socioeconomic systems to multiple shocks, including environmental change and resource constraints, in a way that is resource efficient and cost-effective.

Green growth initiatives aim to deliver on the promise of a green economy. The United Nations Environment Programme (UNEP) estimates that an investment of 2 per cent of global GDP annually into building a green economy would be enough to significantly change the economic outlook and risks related to resource scarcity and climate change within decades. In many industrialized economies, such an injection of redirected capital and the requisite enabling conditions may already be within reach (see box 2.2).

Cambodia, Fiji, Kazakhstan, the Republic of Korea, Mongolia, Viet Nam and other Governments have already adopted green growth strategies. Many others are applying green growth-related approaches in their national development planning.

There are tremendous opportunities presented by the unmet needs for basic services, such as water, energy and housing, fledgling markets and rapidly growing urban centres. There is also considerable potential for leapfrogging — avoiding the mistakes of a "grow now, clean up later" approach to economic growth — by deploying economic strategies that are better matched to a new economic reality and better able to meet evolving expectations and capacities. Governments have a decisive role in developing the economic incentive frameworks and policy reforms

Box 2.2 The potential for a green economy

Economic modelling commissioned by the United Nations Environment Programme (UNEP) investigated the macroeconomic impacts of investing 2 per cent of global GDP on an annual basis over the coming decades into business-as-usual and green economy scenarios. Under a green economy scenario, half of the investment is allocated to energy efficiency and the development of renewable energy sources. The remainder is devoted to improved waste management, public transport infrastructure and natural capital-based sectors, such as agriculture, fisheries, forestry and water supply.

The UNEP report *Towards a Green Economy* explains that the green investment scenario delivers long-term growth, from 2011 to 2050, while avoiding considerable downside risks, such as the effects of climate change, water scarcity and the loss of ecosystem services. Although there will be both winners and losers, the report concludes that returns on investment between 2011 and 2050, compared with the business-as-usual scenario, could include:

- savings on capital and fuel costs in power generation of about $760 billion per year;
- increased value added in the forest industry of more than 20 per cent, compared with business as usual, increased formal employment and increased carbon storage — from investing 0.03 per cent of GDP between 2011 and 2050 in paying forest landholders to conserve forests and in private investment;
- reduced demand for water by about one fifth, from annual investments of $100 billion to $300 billion in increased water efficiency in agriculture, industry and the municipal sector;
- transformation of agriculture from a major greenhouse gas emitter to greenhouse gas neutrality or a possible carbon sink, while reducing deforestation and freshwater use by 55 per cent and 35 per cent, respectively, based on the adoption of sustainable farming methods.

The UNEP report concludes that enabling conditions include establishing sound regulatory frameworks, prioritizing government investment, spending in areas that stimulate the greening of economic sectors, limiting spending in areas that deplete natural capital, employing taxes and market-based instruments to shift consumer preferences and promoting green investment and innovation, investing in capacity building and training and strengthening international governance.

Source: UNEP, 2011.

to ensure that the cost of economic development, especially in terms of natural, social and human capital, is truly reflected. Unless the underlying economic forces and financing mechanisms are directed towards ecological sustainability and social inclusivity, the momentum for green growth will be quickly lost — and any gains in environmental protection will be overwhelmed as economies grow.

Many strategies consistent with green growth, such as investing in public transport or improving water resources management, are not only sound environmental policies but also sound development strategies. Sustainable management of the "physical infrastructure" of the economy — both built and natural capital — is required as a basis for achieving a better quality of growth, especially in developing countries in which infrastructure needs are still great and in which incentives for degrading natural capital are large.

The rapid growth of investment in renewable energy highlights the possibility of acting in the absence of complete internalization of externalities into market prices through complementary policy and institutional support. The total global investment in renewable power and fuels in 2011 was $257 billion, representing an increase of 17 per cent in that year. Developing countries made up 35 per cent of this total, with the fastest expansion rate in India.[66]

Even though the UNEP-commissioned modelling exercise (box 2.2) demonstrated that the benefits for economic growth will be most evident in the medium to long terms, the Towards a Green Economy report highlights that in the short term there will be both winners and losers. This requires specific policy interventions; to capitalize on the potential of the green economy, the appropriate skills and knowledge base must be present, and investment in human capital is therefore a necessity. The potential of green growth to reduce poverty and improve the quality of life for all people will also depend on the elaboration of specific programmes, policies, financing and governance approaches, including institutional innovations, to ensure that growth is not only green but also inclusive. Green growth policies cannot substitute for sound social policies and good governance or directly redress all the root causes of persistent poverty.

2.4.3 Inclusive and green growth delivered in tandem

Because inclusive and green growth approaches specifically attempt to integrate social and ecological qualities with economic qualities, it is important that these two approaches are pursued simultaneously.

Inclusive growth approaches are highly likely to support green growth objectives. In societies with a higher degree of social cohesion (those that invest in social protection), there is also stronger public support for policies designed to protect the environment and "govern the commons".[67,68]

However, there has been substantial concern from some quarters that green considerations will increase non-tariff barriers to trade and increase the prices of basic consumer goods, energy and water. Specific attention to measures that counter the possible regressive impacts of policies to support green growth are thus needed. At the same time, these regressive impacts may be overstated. For instance, one study of carbon taxation in Indonesia found that carbon tax measures would have negligible impacts on the poorest in society.[69]

In terms of both inclusive and green growth, dealing with the financing gaps will be critical; so too will be an enabling environment for science, technology and innovation.

Addressing financing gaps by reforming the incentives framework

Sustainable development requires adequate financing. ESCAP estimates that it could cost $2.1 trillion to $2.5 trillion per year to close infrastructure gaps, provide social protection (including health care and education services) and to address climate mitigation and adaptation needs.[70] A priority framework and recommendations to harness the region's immense financial resources for inclusive and sustainable growth were endorsed at the Asia-Pacific High-Level Consultation on Financing for Development in Jakarta in April 2015. The framework identifies financing priorities, which include investment in social sectors to reduce social disparities and income inequalities, making financial markets more effective and efficient for infrastructure development, mainstreaming climate considerations into national budgets and setting up institutional and risk management framework for private investors to support climate mitigation and adaptation.

Financing modalities identified include raising tax-to-GDP ratios; adoption of harmonized regulation and institutions for domestic capital markets as a basis

for a regional capital market; and increased social impact investment and venture philanthropy to fund education, health and environmental protection services, particularly at the community level.[71]

Reforming market incentives can mobilize additional resources by directing investments towards sustainable consumption and production, complementing official development assistance, project financing and other financing sources. Simultaneously, such reforms can tackle incomplete costing, short-term time horizons for policy and decision-making and pervasive uncertainties.

For example, energy efficiency or renewable energy investments can be encouraged through policy measures, such as subsidies for energy-efficiency upgrades or feed-in-tariff arrangements that allow independent power producers to sell energy produced from renewable energy to the electricity grid. These policy and institutional interventions incentivize private sector and household investments in renewable energy without damaging economic progress and have expanded the installed capacity of renewable energy worldwide. Special support for such policy innovations may be needed for least developed countries with more limited institutional capacity and smaller markets.

Subsidy reform is an integral component of a reshaped incentives framework. As an example, fossil fuel subsidies are not only expensive but they induce overconsumption of fossil fuels and reduce incentives to innovate in alternatives and thus contribute to global carbon emissions. The International Energy Agency estimates that the cost of government fossil fuel subsidies worldwide increased from $311 billion in 2009 to $544 billion in 2012; the latter figure jumps to $2 trillion, equivalent to 8 per cent of government revenues, once lost tax revenues are included.[72] In many cases, these subsidies have been found to benefit the lowest-income groups the least. Fossil fuel subsidy rates reportedly range from the very low (at about 3.8 per cent in China) to high (at about 65 per cent in Turkmenistan).[73] China, India and Indonesia, together with the rest of the Group of 20 economies, pledged at the 2012 summit in Los Cabos, Mexico to rationalize and phase out fossil fuel subsidies over the medium term while providing targeted support for the poorest segments of a society.[74]

Addressing these and other subsidies that impact the use of natural resources can enhance revenues and benefit the environment. The savings from subsidy reform can be redirected for spending on social protection and environmental technologies. Subsidy reform can create synergies between investments in people with investments in natural capital. The potential to deepen and expand progress on sustainable development is maximized when such reforms are coupled with long-term project viability guarantees and/or access to complementary financing.

Providing an enabling environment for science, technology and innovation

Societies will need to use the best science available to understand the complex interaction of economic, social and ecological systems and what the likely implications and impacts are from following a certain course of action. The composition of economies will likely need to change dramatically, with more emphasis on new ideas and business models that promote a move away from material consumption towards services, knowledge production and innovation.[75]

Innovation will be central to any successful strategy. The ability of societies to apply science, technology and innovation for sustainable development is largely determined through an enabling environment — the degree to which policies, regulatory frameworks, infrastructure investments and markets foster and support innovation. A strengthened science-policy interface is a requirement of the institutional framework for sustainable development.

Science, technology and innovation research is critical for both sustainability and competitiveness. The competitiveness of production systems is based increasingly on the reduction of waste and the enhancement of quality without necessarily using more materials or energy. The share of global income contributed by knowledge resources — software development, professional services, the health sector and research, ICT, branding, design services, management consulting and environmental activities — now exceeds the contributions of other sectors in several industrialized countries.

To harness the benefits of the green technology revolution, developing countries need to invest in research and knowledge production capacity. Space technology and geographic information system (GIS) applications have a critical role in strengthening much-needed cross-sectoral links and will contribute significantly towards achieving the sustainable development goals.[76]

2.5 Priorities for inclusive and sustainable growth in Asia and the Pacific

Inclusive and sustainable growth initially should be promoted in the policy domains that are potentially highly transformative — those that directly respond to the most basic of human needs and impact on populations as well as the rates of resource use and the natural resource base. Strategies to integrate the three dimensions of sustainable development for improving outcomes for people, the planet and the economy are outlined in the following sections on agriculture, industry and trade and infrastructure development.

Although these sectors are discussed individually here, an integrated policy framework is necessary to build synergies between them — for example, agriculture, industry and trade policy should be developed in complementary and synergistic ways, with due regard for the implications of each sector in terms of opportunities for social progress, natural resource use and environmental impacts.

2.5.1 Sustainable agriculture development

Perhaps no other sector more urgently requires a transformation towards sustainable development than agriculture. Agriculture is fundamental to the physical and economic survival of every human being yet is encumbered with multiple challenges. The continuing population and consumption growth in Asia and the Pacific are likely to result in intensified competition for land, water and energy, in addition to the overexploitation of fisheries that will affect the ability of Asia and the Pacific to produce food. The effects of climate change are a further threat to the food system.

Food security requires as much attention to increasing environmental sustainability as to raising productivity. This necessitates commitment to policies that support sustainable agriculture, including environmentally sustainable productivity increases; reduction in demand for resource-intensive foods and food waste; and governance systems that improve the efficiency and resilience of food systems, as well as making food accessible and affordable to all.

Forward-looking agriculture policies thus need to be integrated into the sustainable development agenda to identify agricultural practices that strengthen rural communities, improve smallholder livelihoods and employment and avoid negative social and cultural impacts, including loss of land tenure and forced migration.

2.5.2 Industrial and trade policy for sustainable development

Industrial policy refers to a strategic effort led by a Government to encourage the development and growth of leading sectors, activities or clusters. Traditionally, this has favoured manufacturing or heavy industry. But contemporary industrial policies also increasingly target non-traditional agriculture and services.[78] Sectors are generally chosen on the extent to which they demonstrate the potential for high productivity growth and strong backward and forward links to other related industries. Industrial policy strategies typically involve a suite of measures to strengthen the competitiveness and capacities of domestic firms and structural transformation. These include measures to boost capacity and know-how, for example, through training programmes or support for research and development.

Policymakers developing industrial policies must make strategic efforts to manage long-term structural issues, whether in human capital, infrastructure or the institutional and political environment. Solutions should be coherent and geared to generating the conditions in which businesses can grow and prosper. Each country or subnational region requires a tailored policy mix, specific to its areas of current and potential comparative advantage. Certainly, policies will need to adjust over time as economic development produces changes in specialization and trade patterns and as an economy's innovative capacity increases so that the sectors well placed to compete will evolve. The economic development paths of economies like China, the Republic of Korea or Thailand are good illustrations.

Forward-looking and transparent industrial and trade policies can contribute to sustainable industrialization by promoting a "race to the top" in which competitiveness is based on the capacity to strengthen contributions to social progress and environmental protection. Such policies can encourage structural changes towards higher value added, innovation, better employment opportunities and greater resource efficiency. Sustainable industrialization requires complementary measures and policies, including: proper pricing of resources; facilitating trade in technology and know-how; tax incentives to encourage job creation; and investments in skills and knowledge to support decent work and green jobs. Policies can also work to stimulate transformations in consumer preferences towards sustainable products.

Box 2.3 Assessing sustainable agricultural technologies

ESCAP, in collaboration with more than 40 organizations, is implementing the project Network for Knowledge Transfer on Sustainable Agricultural Technologies and Improved Market Linkages in South and Southeast Asia (SATNET). The project promotes innovation in agriculture, realizing that a transformation of the agriculture sector requires the adoption of new and innovative approaches that support sustainable outcomes.

National and international agricultural research organizations from the public and private sectors are providing solutions for enhanced agriculture sustainability; many of these have value beyond the specific setting for which they were developed. However, decision makers at all levels, including farmers, extension workers and programme managers, require better tools to determine practices and innovations relevant to specific situations. SATNET is one such tool.

Achieving sustainable agriculture must be based on the three mutually reinforcing dimensions of economy, society and environment. Assessments of sustainability across each of these dimensions should be based on specific criteria (such as gender-related and other impacts on societal outcomes), the net present value of a production practice that affects economic outcomes and the impacts on natural processes, water and biodiversity. Technology must be suitable for adoption or adaptation, meeting criteria that also reflect the environmental, economic and social dimensions of sustainable development,[77] in addition to being transferable.

Policymakers need to be careful when designing policies to safeguard against the sectors that are targeted for support seeking undue protection from competition at the expense of consumers. Likewise, policies need to be aligned with international agreements, such as those regarding subsidies.

Industrial and trade policy go hand in hand. Coherent development strategies need to integrate trade policy with broader industrial expansion to support economic growth and sustainable development. The work of ESCAP underscores that trade openness alone will not be sufficient to deliver inclusive growth outcomes, which are environmentally sound, pro-poor and supportive of the Millennium Development Goals.[79] Trade liberalization at all levels (unilateral or through multilateral and bilateral trade agreements) needs to be complemented with policies that are sensitive to the potential impacts on the most vulnerable. Concerns that need to be considered include the livelihoods of small farmers and producers, informal workers, food security and access to public goods, such as education and health services. Access to environmental resources also needs to be carefully considered.

Trade and environmental protection could be perceived as at odds with each other, if the unregulated expansion of trade is associated with the worsening of air and water pollution due to increased transportation and travel and the depletion of fisheries, forests and other natural resources. Certainly, resource-intensive trade can contribute significantly to such problems as the loss of biodiversity. However, intelligent trade policies can also contribute to improved environmental outputs. For instance, when resources are priced properly to capture environmental externalities, international trade encourages activities to take place in the most resource-efficient locations. Domestic policies to tighten environmental regulations, improve supply chain management or increase consumer awareness through product labelling can also ensure that traded products are more sustainable.

Trade agreements can help promote trade and investment in environmental goods, services and technologies and the adoption of common or mutual recognition of appropriate environmental standards. The North American Free Trade Agreement (NAFTA) has shown that regional trade integration is possible while promoting environmental conservation. The environment agreement — the 1994 North American Agreement on Environmental Cooperation[80] — is the lead instrument for ensuring that the three signatory nations cooperate on environmental standards, including by establishing monetary penalties and increasing citizen engagement.[81]

2.5.3 Sustainable infrastructure

It is well recognized that infrastructure has a critical role in the development of both rural and urban areas and that much of Asia and the Pacific have critical infrastructure gaps that impede growth. The region's rapidly growing cities are an important example. Today, 54 per cent of the world's population lives in urban areas, and this proportion is expected to increase to 66 per cent by 2050, adding an estimated 2.5 billion people to urban populations by 2050, concentrated mainly in Asia and Africa.[82] In the ESCAP region, the urban population is now estimated at 2.1 billion, and

the region will pass the threshold at which the majority of people live in cities in 2018. By 2050, two thirds of the region's population will live in urban areas.

However, while cities are contributing positively to the region's development experience and undoubtedly to its prospects, major infrastructure gaps are hampering the achievement of full socioeconomic potential, particularly of vulnerable population groups. The commonly cited "infrastructure gap" points to the economic and social implications of unmet needs, ranging from sanitation, pollution and congestion — with both economic and health costs to cities and its residents — to energy and housing, especially safe, resilient and affordable shelter.

In overcoming these diverse but related challenges, it is essential that infrastructure deficits be tackled in an integrated way that supports both sustainable and inclusive urban growth but also ensures that the economic potential of the region's cities is realized to thus improve the quality of life for all people. Beyond urban areas, infrastructure investments are needed for rural development, including greater rural connectivity and rural-urban linkages.

Infrastructure assets have a long lifespan, which "locks in" patterns of resource use and access to economic opportunity. A major opportunity exists for the region in meeting its infrastructure needs through sustainable, low-carbon and equitable forms of infrastructure that provide for greater connectivity and resource savings and that respond to the needs of growing economies as well as the needs of people who are poor. The relationship between access to infrastructure and poverty reduction is an established one; but there are greater opportunities to encourage managing infrastructure needs with technologies that contribute to more sustainable outcomes while providing affordable and quality access to impoverished populations. Public transport and mass transit are critical aspects of infrastructure that have strong backward and forward links across the economy, positive equity implications (by enhancing the access to mobility across a population) and environmental benefits. An important mass transit innovation found in several developing countries, the bus rapid transit system runs buses on dedicated, signal-free lines in urban areas and thus provides affordable mass transit. It was first introduced in the city of Curitiba, Brazil and later developed at a much larger scale in Bogota, Colombia; several countries in the region have now adopted this model.

In response to the persistent gaps in access to energy, the United Nations Secretary-General launched the global Sustainable Energy for All initiative to provide universal access to modern energy services, double the global rate of improvement in energy efficiency and double the share of renewable energy in the global energy mix. In support of these goals, community-focused energy solutions can be found, which would wed the need to create employment with energy generation and environmental protection (see box 2.4).

The infrastructure choices that _Government and policymakers make today will determine the prospects of competitiveness, quality of life and efficiency for years to come.

2.6 Reforming institutions for inclusive and sustainable growth

The chapter outlined a conceptual framework, strategies and policy options that promote balanced integration of the three dimensions of sustainable development. However, such integrated approaches require reformed institutions and strengthened institutional capacity. The following chapter offers additional guidance by reflecting on experiences and best practices from the Asia-Pacific region on governance approaches that support a sustainable development agenda.

Box 2.4 Creating jobs for the urban poor by turning waste into a resource

ESCAP, in partnership with Waste Concern, an NGO in Bangladesh, is implementing the project Pro-poor and Sustainable Solid Waste Management in Secondary Cities and Small Towns. The project involves creating local employment as well as improving environmental outcomes through the establishment of decentralized Integrated Resource Recovery Centres (IRRCs) in Bangladesh, Cambodia, Sri Lanka and Viet Nam. IRRCs use simple technology to convert waste into fertilizer, biogas, biodiesel or refuse-derived fuel. This conversion is done at low cost and with a high recovery rate and provides livelihood opportunities for urban poor persons. The IRRCs recycle up to 90 per cent of incoming waste. In Matale, Sri Lanka, for example, three plants, with a combined capacity of processing nine tons of organic waste and four tons of recyclables a day, treat all the organic waste produced by the city and generate employment for 20 urban poor persons.

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3

INSTITUTIONAL FRAMEWORK FOR THE INTEGRATION OF THE THREE DIMENSIONS OF SUSTAINABLE DEVELOPMENT

3.1 Introduction

Sustainable development requires courageous leadership and institutions that work together to synergize the goals of social progress, ecological sustainability and economic prosperity. This is essential if the region is to take on and transform the fundamental constraints to the integration of the three dimensions discussed in chapter 2.

Chapter 3 outlines the institutional framework and capacities that respond to this challenge. It proposes that Governments' responses should be twofold. First, Governments must lead the development of a shared vision and demonstrate high-level policy commitment to respecting the social imperatives and planetary boundaries as the two requirements for the goal of sustainable development. Second, institutional capability must be strengthened in three primary areas — high-level coordination, monitoring and stakeholder engagement.

3.2 Establishing a vision and high-level policy commitment

High-level political commitment and a long-term vision that integrates the three dimensions of sustainable development are essential for maintaining sustainable development. The social and environmental targets established through social consensus also provide incentives and opportunities for integration. These targets can establish "boundary" conditions for policy in the social and environmental domains. As emphasized in chapter 2, this is among the most critical of shifts in policy stance.

Those countries that have invested early in making this shift are now reaping the benefits. For example, the European Union has been pursuing sustainable development since 1997, when the concept was included in the Treaty of Amsterdam as an overarching objective of European Union policies. The 2008-2009 economic and financial crises became a call to action and, in 2011, Europe

2020 was launched as the European Union's long-term growth and job plan, based on three mutually reinforcing priorities: smart growth (developing an economy based on knowledge and innovation), sustainable growth (promoting a more resource-efficient, greener and more competitive economy) and inclusive growth (fostering a high-employment economy delivering social and territorial cohesion).[83]

European countries also have instituted systematic and increasingly comprehensive approaches to sustainable development. In **Denmark,** the Danish National Strategy for Sustainable Development of 2009 centred around three core principles: (a) commit and motivate all actors to take responsibility for sustainable development; (b) develop innovative and environment-friendly solutions; and (c) take long-term global consequences into account.[84] Despite the financial crisis affecting Europe in 2009, Denmark increased its spending on education, from 7.7 to 8.7 per cent of total GDP and now is among the States with the highest rate of investment in education.[85,86]

A historically heavy importer of oil, Denmark has, since the oil crisis of the 1970s, consistently focused on developing its renewable energy sector as the key to resilience against shocks. By leveraging a mix of taxes, feed-in tariffs and market liberalization policies over time, wind energy accounted for 28.3 per cent of all energy consumption in 2011.[87] In that same year, the Government announced the Energy Strategy 2050 and its core aim: to be fully independent of fossil fuels by 2050.[88] These concerted efforts, among others, have ensured that Denmark is consistently ranked among the top performers of the Human Development Index.

In **Sweden,** the idea that social justice and equality are both compatible and capable of stimulating economic growth is at the core of the Government's development strategy.[89] As environmental issues became more urgent, the previous strategy transitioned to one in which "a vision of a green welfare State represented a logical next step".[90] Associated policies have triggered a decrease in energy consumption per GDP unit, a steady investment in education — at an impressive 7 per cent of GDP — and an increase of 15.7 per cent (or an average annual increase of about 0.44 per cent) in Sweden's ranking in the Human Development Index between 1980 and 2014.[91]

As in other regions, national development strategies in many Asia-Pacific countries have given lower priority to the environmental and social domains in the face of financial and capacity constraints. However, there is greater recognition of the needed shift to investments in social justice and environmental protection. Rather than being treated as financial burdens on the State or the private sector, investment in human and natural capital should be positioned as important drivers of development through the integration of the three dimensions of sustainable development. Investment priorities should revolve around these drivers.

3.2.1 National strategies and plans

It is important to showcase where the development context is changing in the region to demonstrate what can be achieved through integration of the three dimensions of sustainable development. These examples and experiences are laying the groundwork for further regional mainstreaming and commitments. Several Governments have established long-term development strategies that inform their national development planning and work towards incorporating the economic, social and environmental protection goals.

The Twelfth Five-Year Plan for National Economic and Social Development (2011-2015) for **China** has three primary themes: (a) rebalancing the economy, (b) ameliorating social inequality and (c) protecting the environment. Correspondingly, the Government issued emissions reduction targets at both the provincial and sector levels, taking the following steps for implementation: enforcing regulations, investing in energy-efficient technology, improving policy measures on pricing of energy and natural resources and introducing a carbon pricing scheme. The goals for social welfare include, among others, proper housing and affordable health insurance and an improved social security system, including basic pension and medical insurance provision. Economic growth targets include a 7 per cent annual increase in the economy over five years, with qualitative improvement driven by a balanced mix of consumer spending, investment and exports.

In **India,** a process involving 146 working groups, spearheaded by the Planning Commission and including sector experts from within and outside the Government, led to the drafting of the Twelfth Five Year Plan (2012-2017).[92] The national strategy, Faster, More Inclusive and Sustainable Growth, was designed to assure not only rapid economic growth

but that such growth was inclusive and sustainable. The Planning Commission's remit is to ensure that the benefits of growth reach all spheres of society, including minorities and disadvantaged groups. In the quest to reach integrated and sustainable development, it is the Government's intention to assist a growth process that is consistent with the protection of the environment. The Five Year Plan encompasses 25 targets, including many features that measure inclusiveness and sustainability as well as GDP growth.

In **Indonesia,** The long-term vision (2005-2025) of the National Development Planning Agency[93] breaks down into five-year mid-term plans, each with unique priorities. The previous midterm plan (2010-2014) promoted improvements in the quality of human resources, science, technology and economic competitiveness, with climate change adaptation and mitigation needs woven throughout all facets of the strategy. The agenda of the current midterm plan (2015-2019) is even more ambitious because it intends to build a foundation for sustained acceleration in the following years, in addition to serving the urgent basic needs of society. The midterm plan is characterized by "a strategy to generate growth for the greatest prosperity of the people in a sustainable manner"[94] in an attempt to give appropriate importance to the three dimensions of sustainable development.

The **Government of Kazakhstan** in 2102 launched Strategy Kazakhstan-2050: A New Political Course of the Established State to put the country on a "green growth" development path. Strategy 2050 contains clear guidelines for building a sustainable and efficient economy within planetary boundaries. It defines a green economy as one with high living standards and natural resource use that considers the interests of present and future generations. Strategy 2050 reflects international environmental obligations, including the Rio Declaration on Environment and Development, Agenda 21, the Johannesburg Declaration on Sustainable Development and the United Nations Millennium Development Goals.

In 2014, **Mongolia** adopted its Green Development Policy to "ensure the improved well-being and prosperity of Mongolian citizens by safeguarding the sustainability of ecosystem services, increasing the effective consumption of natural resources and ensuring economic growth that is inclusive and environmentally sound".[95] The Parliament's adoption of the National Strategy on Green Development was preceded by the establishment of the Ministry of Environment and Green Development[96] in August 2012. It is one of four Mongolian ministries with policy coordination responsibilities (along with the Ministries of Foreign Affairs, Justice and Finance). The Government also created the National Green Development Committee, headed by the Prime Minister, as a coordinating body.

Papua New Guinea launched the National Strategy for Responsible Sustainable Development in January 2014. The strategy rejects a "brown growth" model and seeks a new paradigm for development. It promotes a framework based on the principles of sustainable development, including intergenerational equity, the precautionary principle, internalization of environmental costs and the integration of environmental concerns into decision-making. The resource sector dominates formal economic activity in Papua New Guinea, accounting for up to 60 per cent of the economy.

The country's planning legislation is designed "to ensure that proper weight is given to both long-term and short-term social, economic, environmental and equity considerations in deciding all matters relating to environmental management, protection, restoration and enhancement".[97] The judiciary has a prominent role, with Supreme Court action pursued by communities against mining operations, based on the constitutional protection of the rights of future generations.

The experiences in Papua New Guinea and other countries in the region demonstrate the importance of conditions and a strong legislative and policy framework for sustainable development in resource-rich communities. These conditions include responsible leadership, supportive management, functioning institutions and organizations and an enabling environment for community participation (such as free, prior and informed consent processes).

Among the Governments that have high-level policy commitment to the integration of the three dimensions of sustainable development, several have applied philosophical principles as a foundation for their strategies — the following highlights the approaches of Bhutan, China and Thailand.

The **Gross National Happiness philosophy of Bhutan** integrates equitable socioeconomic development, poverty alleviation, good governance,

environmental conservation and the preservation of cultural values within a holistic approach to national welfare.[98] Environmental sustainability has also been placed at the centre of development planning and welfare accounting. The Government's integrated approach to national development has yielded concrete results: Poverty rates have dropped, from 36.3 per cent in 2000 to 23.2 per cent in 2007,[99] and there has been rapid progress in expanding access to improved water and sanitation, with near-universal access expected by 2015.[100] The Government also established a national policy target of maintaining forest cover at 70 per cent of total land area.

In response to concerns over increasing inequality emerging in its society despite the high levels of economic growth, the **Government of China launched the concept of "harmonious society"** in 2002: The well-being of people is prioritized alongside the sharing of social wealth,[101] participatory governance and the development of the country as an "ecological civilization". The harmonious society approach involves developing social productivity (a system in which everyone has a role in defining and overcoming social challenges), maintaining national economic strength, continuously protecting natural resources, reducing pollution and improving the quality of the natural environment.

The harmonious society concept is integrated into the Government's national planning, as reflected in its eleventh and twelfth five-year development plans. In the latter, the concept of a harmonious society is positioned alongside inclusive growth, which entails the sharing of the benefits of economic success across the country's population and greater protection of the environment.

Another example of an integrated approach to development is the concept of a **sufficiency economy in Thailand.** Established by His Majesty King Bhumibol Adulyadej as the main reference of the country's economic and social development plans,[102] the sufficiency economy concept embraces three "interlocking elements — moderation, reasonableness and self-immunity" and "two other conditions [that] are needed to make the principles of sufficiency economy work: knowledge and morality."[103] These principles and conditions can be applied at the individual, firm, community and national levels, and the concept helps shape economic policy in managing factors of production towards achieving quality growth.[104,105]

The sufficiency economy balances the quest for material profit with social and environmental concerns. Moreover, it is associated with participatory decision-making, wherein all stakeholders contribute to and benefit from inclusive, equitable and green growth.

Countries across the region are tailoring best practices to appropriately bolster sustainable development aspirations. Incorporating the rich culture and diversity of the Asia-Pacific region into sustainable development strategies is one such way that Governments are galvanizing stakeholder buy-in and adapting international commitments to nationally relevant forms. Although still nascent, the approaches highlighted here illustrate the deepening commitment towards achieving sustainable development; they also offer considerable potential for other creative and innovative strategies to leapfrog the transformation shift that the region must make.

3.2.2 Respecting social imperatives

The realization of equality, social justice and respect for human rights, which is integral to sustainable development, also requires institutional transformations. There is consensus at the global level regarding social development targets for education, health, decent work, social protection, ownership of productive assets and political representation. The "right to development" framework provides a comprehensive framework and approach to the policies and programmes of all actors (see box 3.1). These normative frameworks can greatly influence the integration of the three dimensions of sustainable development. For example, the right to development "facilitates a holistic approach to poverty by addressing its root and structural causes". The framework also "demands comprehensive and human-centred development policy [and] participatory development processes"[106] that are critical for balancing the interests of multiple stakeholders and for aligning private and public interests.

Among the various rights that have been agreed to internationally, social protection has been an important policy target for member States. Social protection is anchored in the universal rights of everyone to social security and to a standard of living adequate for the health and well-being of all individuals and their families.[107] The core idea is that no one should live below a certain income level, and everyone should have access to at least basic social services.

Box 3.1 Social consensus on human and other rights as a basis for sustainable development

International consensus on human and other rights provide an important basis for developing social consensus at the national level.

- The Universal Declaration of Human Rights (1948) defines, among other aspects, the universal rights of everyone to social security and to a standard of living adequate for the health and well-being of themselves and their family.
- The International Covenant on Economic, Social and Cultural Rights (1979) defines broad-based economic, social and cultural rights.
- The United Nations Declaration on the Right to Development states that the "right to development is an inalienable human right by virtue of which every human person and all peoples are entitled to participate in, contribute to, and enjoy economic, social, cultural and political development, in which all human rights and fundamental freedoms can be fully realized."
- The Millennium Declaration and the Millennium Development Goals framework are expressions of global commitment to improvements in access to basic services, some dimensions of environmental protection and to social progress.

In addition to fulfilling basic social and economic rights, the role of social protection in preventing people from entering into poverty and in reducing the duration of poverty has long been established. By reducing inequalities, social protection promotes sustainable development: It supports inclusive growth, facilitates social integration and contributes to positive environmental outcomes. Social protection is an effective measure for tackling disparities in income and unequal access to health and education services as well as empowering vulnerable populations.[108]

In 2009, the United Nations Chief Executives Board for Coordination launched the Social Protection Floor Initiative in response to the global financial and economic crises.[109] In 2011, the ESCAP Commission, in its resolution 67/8, endorsed the initiative and called for member States to "invest in building social protection systems that might form the basis of a social protection floor, which would offer a minimum level of access to essential services and income security for all, and subsequently enhancing the capacity for extension according to national aspirations and circumstances".[110]

Countries in the region have made substantial progress within the Social Protection Floor framework. Between 1996 and 2013, 23 of the 27 developing Asia-Pacific countries (for which data are available) increased their social protection spending as a share of total government expenditure.

For example, in **Sri Lanka,** high literacy rates, at 98 per cent for boys and 99 per cent for girls, are attributed to the universal education system. The 1978 Constitution mandates compulsory and free education, which was strengthened in 1997 through the Compulsory Education Ordinance. Free education is provided for all students up to the university level and is compulsory for children aged 5-13 years. The education system also provides access to nutrition in certain geographical areas, free books and free uniforms. Free and universal education in Sri Lanka has contributed to social mobility and poverty reduction. These investments in education are not only reducing inequalities but also contributing to the country's economic development.

In **Uzbekistan,** people of working age constituted around 67 per cent of the population in 2013. The Government has supported a social insurance system that provides extended income security to that part of the population since 1992. The social insurance system provides all citizens older than 16 (excluding self-employed) with unemployment allowance, disability benefits and insurance for work-related injuries. The system is financed by public investment — a strategic policy direction taken that is paying back significantly in terms of social and economic development.

Samoa demonstrates valuable experience in supporting persons of retirement age. In 2013, senior citizens accounted for 5 per cent of the population, with a projected proportion of 12 per cent in 2050. To provide income security for this population, the Government introduced a Senior Citizen's Benefit Scheme in 1990 that complemented the Samoa National Provident Fund, which only covers workers in the formal sector. The two schemes

are an essential part of the social protection floor and provide an old-age pension to workers in both the formal and informal sectors, including migrant workers.

A critical factor for all areas of development is the availability of affordable health care services.[111] Removing barriers to access, such as distance, cost and language, is fundamental. Achieving universal health coverage is an imperative to generate economic and social benefits. Investments in health result in more productive workers and increase economic security, social cohesion and job-led growth. Ensuring universal access to affordable health care is therefore also a fundamental component of sustainable development.[112]

Another example of universal health coverage system is **Thailand.** The Government introduced universal coverage in 2001 to ensure that all citizens can access health care; the system produced impressive results, including reduction in the rate of mortality among children younger than 5 years by 37 per cent. The system targets the population not covered by the contributory schemes and is inclusive of inpatient and outpatient care, medicines and medical supplies. This social investment provides coverage for 99.5 per cent of the population and even extends benefits to registered foreign migrants. The Universal Coverage Scheme is a nationally funded system that includes a component covering HIV prevention, treatment care and support; as of 2009, it had extended antiretroviral therapy to more than 75 per cent of the estimated eligible persons living with HIV.[113]

Japan and the Republic of Korea also have established universal health care. In the Republic of Korea, it was set up when the country had a GDP per capita of $142 — a level similar to that of Cambodia, Papua New Guinea and the Philippines currently. Legislation supported the provision of medical insurance, and institutional investments improved access. For example, the proportion of births attended by skilled personnel increased, from 57.2 per cent in 1977 to 99.2 per cent in 1993. Improved health services combined with affordability also rendered a significant decline in infant and maternal mortality rates. Improved access to health services in the Republic of Korea is associated with the introduction of social policies and social protection and with the country's economic growth.[114]

In **Pakistan,** the Benazir Income Support Programme provides financial assistance to low-income families through bimonthly cash payments in the country's largest aid programme and the Government's third-largest budgetary allocation.

The State has an important role in operationalizing other aspects of a normative framework. For example, the Government of **India** passed the Mahatma Gandhi National Rural Employment Guarantee Act in 2005 to work towards reducing rural poverty and unemployment. By seeking to meet the basic needs for employment, opportunities were also created for improving water and land management, responding to other natural resource conservation needs, increasing agricultural productivity and increasing access to basic infrastructure. The Act entitles working-age members of rural households the right to request up to 100 days of unskilled wage employment from village authorities, with full funding support from the Government. In 2014-2015, more than 36 million households benefited from the scheme.[115]

Much also can be achieved at the subnational level. Local approaches to meeting the needs of people provide tremendous opportunities for strengthening livelihoods and environmental protection, as the example in box 3.2 describes.

In **Indonesia,** the imperative to better meet social needs motivated subsidy reform that also encompassed the financial burden of fossil fuel subsidies and their environmental implications. Savings from the subsidy reform partially funded an enhanced non-conditional cash transfer programme. This approach can support social protection programmes in other countries.

3.2.3 Respecting planetary boundaries

Environmental priorities and recognition of the planetary boundaries provide urgent motivation for making better decisions around resource use and economic activities that create environmental impact. Environmental mainstreaming supports the "informed inclusion of relevant environmental concerns into institutional decisions that drive national and sectoral development policy, rules, plans, investment and action".[116] Normative frameworks, such as those presented by multilateral environmental agreements and to be established through the framework of sustainable development goals, provide critical support for member States.

Establishing normative frameworks to respect

Box 3.2 Samatha Dharani Project in India

In response to the specified needs of women and their communities and in collaboration with the United Nations Development Programme, the Andhra Pradesh Mahila Samata Society launched in 2000 the Samatha Dharani (Sustainable Dryland Agriculture Programme by Mahila Sanghams) Project. The Mahila Samata Society worked with 500 *sanghams* (village women's groups) across five districts to promote women's basic rights and their economic empowerment while bringing dry land into cultivation and ensuring household food security.

The project provided funds, farm implements and training to the *sanghams*. The women in the project each received 35,000 rupees (INR) to lease land in their name. The farm implements included cultivators, ploughs, sickles, sprayers and weeders. Villages shared larger equipment, such as multicrop threshers and maize shellers.

Training was provided to the women in soil testing, crop selection, soil and water conservation, non-pesticide management, dryland farming, intercropping and vermicomposting as well as legal literacy training. With the resources and training, the women grew vegetables, fruit, medicinal plants, millet and sorghum. The women also established businesses in dairying and biopesticide marketing.

The project had a positive impact on the women's lives, the agricultural land of Andhra Pradesh and the economic prosperity of communities. In particular, the status of the women rose in their villages in recognition of their knowledge and skills as farmers and their contributions to their household and to the food security of the village. As the women assumed non-traditional functions, prejudicial gender stereotypes about women's capacity and functions were challenged; in time, women found they had strengthened decision-making authority within the household and they were included in local governance bodies. In terms of positive environmental impact, the rented lands were rehabilitated and managed in a sustainable way; the produce provided food security for households and economic gains for each village. The women invested their profits into the education of their children, particularly girls, and in the improved care of pregnant women.

Source: Bhardwaj, 2011.

planetary boundaries is particularly important when natural resources are shared. Pacific small island developing States collectively manage a large part of the world's largest ocean and have established significant subregional cooperation arrangements for managing this shared resource (see box 3.3).

In addition to recognizing the economic, social and cultural rights of citizens, the constitutions of a number of countries in the Pacific, including **Fiji, Papua New Guinea and Vanuatu**, take the additional step of protecting the environment for current and future generations. This reflects a strong custodial tradition among Pacific island countries. Laws and policies governing development must balance the interests among the economic, social and environmental dimensions of sustainable development, which presents an immense challenge to all countries across the region.

China is often highlighted as a country that faces extreme sustainability challenges with rapid growth, urbanization, industrialization, environmental degradation, resource constraints and dramatic changes in lifestyle. In coping with this reality, the Government's Twelfth Five-Year Plan established ambitious resource efficiency and emissions reduction targets of 40-45 per cent from 2005 levels, renewable energy penetration targets of 15 per cent by 2020 and an energy intensity reduction target of -6 per cent by 2015. Taking into account biodiversity and ecosystem viability concerns, both the Five-Year Plan for National Economic and Social Development and the Land Use Master Plan articulate zones in which construction is permitted.[117]

These ambitious targets for environmental protection have led to important policy innovations, including a feed-in tariff for wind, solar and biomass energy production; trading markets for energy efficiency; renewable quotas and portfolio standards; mandated biofuel blending; fuel economy and vehicle emissions standards; financial incentives, such as subsidies, grants or rebates; tax incentives; and public investment in research and development institutions, loans and grants.

Combined, these targets and policy innovations have reinforced efforts of the Government to rebalance growth along a more sustainable trajectory. China has the third-largest number of green patents (after the United States of America and the European Union) and is also the world leader in energy investments — manufacturing half the world's total solar photovoltaic materials and wind turbines, predominantly for export.[118]

Box 3.3 The Ocean: Life and Future — Charting a Course to Sustainability

The Pacific region contains globally important natural resources, which are also essential in supporting the economies, lives and livelihoods of Pacific island peoples. In 2012, 2.5 million tons of tuna were caught in the western and central Pacific Ocean, providing significant income to Pacific small island developing States and supplying Asian markets, particularly in East Asia. In Pacific countries, up to half of households rely on fishing as either a primary or secondary source of income.

As a result, national fish consumption in Pacific islands is three to four times the global average, representing 50-90 per cent of animal protein consumed by many Pacific island peoples. The diverse marine ecosystems of the Pacific also provide a variety of regionally and globally important ecosystem services, including provisioning services (capture fisheries and aquaculture), regulating services (coastal protection and carbon sequestration) and cultural services (recreation, tourism, culturalidentity and non-use values associated with the preservation of biological diversity). Ecosystem services are essential components of human well-being in the Pacific but have not been fully considered in conventional economic analyses or decision-making.

At the 2014 Pacific Islands Forum Leaders meeting in Palau, Pacific leaders agreed to the Palau Declaration on The Ocean:Life and Future — Charting a Course to Sustainability to support efforts to conserve and sustainably oversee ocean resources though integrated ocean management, including large- and small-scale marine protected areas and adaptation to climate change.

The Declaration links regional and national commitments for implementation and reporting. Leadership on ocean management in the Pacific has inspired large-scale marine protected area commitments. This includes the Phoenix Islands Protected Area (408,250 km^2) in Kiribati, the Palau National Marine Sanctuary (500,000 km^2, or 80 per cent, of the country's Exclusive Economic Zone), the Cook Islands Marine Park (1.2 million km^2) and the Natural Park of the Coral Sea (1.3 million km^2) in New Caledonia.

Under the Micronesia Challenge, five Micronesian States have committed to conserve at least 30 per cent of near-shore marine resources and 20 per cent of land across Micronesia by 2020. Protected area networks represent integrated management approaches to sustain ecosystem services and viable commercial fisheries. Innovative mechanisms, such as the "vessel day scheme", are also utilized in the Pacific, representing legal and economic instruments that increase economic returns to governments and help sustainably manage tuna stocks.

This collaborative arrangement for natural resource management promises to secure the natural resource base for current and future generations.

Source: Pacific Islands Forum Secretariat, 2014.

As the case of China illustrates, environmental protection targets can be met through economic policy instruments that provide appropriate economic incentives or disincentives. These instruments also can provide avenues for generating funds to address environmental, social and economic objectives. In this way, environmentally or socially undesirable activities, such as pollution or greenhouse gas emissions, can be discouraged while environmentally and socially desirable activities, such as natural resource management or investments in renewable energy, education or other aspects of social protection, can be financed (see examples in box 3.4).

3.3 Cross-sector coordination for intergration

Coordinating functions ensure that sustainable development visions, policy commitments and the financing frameworks discussed in chapter 2 act in synergy and that market prices and other financial incentives are aligned with objectives, in particular social and environmental imperatives, to address incomplete costing and short-term time horizons.

In the context of sustainable development, cross-sectoral policy coordination and realization of long-term development objectives requires good governance[119] and institutions with clear mandates, capabilities and resources.

Thus, integration of the three dimensions of sustainable development requires a "whole of government" approach with long-term planning and commitments by policymakers, alongside collaborative engagement of public and private sector actors as well as stakeholders from civil society. This underlines that coordination for the balanced integration of the three dimensions of sustainable development must go beyond coordinating sectoral

interventions. Specific mechanisms for synergizing the objectives of different government functions are required.

Single entities mandated to pursue multisectoral, multidimensional policy coordination functions have proven effective in balancing short-term and long-term development objectives in an integrated manner, across national financing and development planning. By contrast, competition among ministries for resources is not conducive to the adoption of integrated sustainable development policies, plans and strategies.

Coordination is also an issue applicable to national, provincial and local government entities and to civil society. As well as providing coordination and guidance functions, central Governments can learn from successful local practices and integrate them into national plans.

There is emerging consensus that operationalizing sustainable development requires a high-level authority that performs a multisectoral, multidimensional policy coordination function, with attention to short-term and long-term development objectives. Several Governments in the Asia-Pacific region have established or strengthened such national entities, often chaired by the Head of State.

Entities such as national councils for sustainable development carry out an essential function in ensuring a rights-based and participatory approach to development, with the needs, interests and perspectives of the diversity of stakeholders heard and addressed in national and local development planning. Institutional reforms, however, are needed to establish and maintain enabling environments for the meaningful participation of civil society and for the upholding of human rights for all persons, without discrimination.

3.3.1 High-level coordination bodies

At the 1992 United Nations Conference on Environment and Development in Rio de Janeiro,

Box 3.4 Fiscal reform for incentivizing sustainable development

In addition to a generalized programme of fiscal reform, a number of specific sectors can provide win-win options, combining revenue enhancement and environmental and social benefits. Subsidy reform helps to internalize some of the environmental and social costs associated with resource use, such as energy and water resources. The following describes a few examples from the region.

Carbon tax in India. In 2010, India imposed a carbon tax on both domestically mined and imported coal at the rate of INR50 (around $1) per ton of CO^2. Revenues generated from the tax go into a National Clean Energy Fund.[a]

Indonesian fossil fuel subsidy reform. In January 2012, the Government of Indonesia announced a major reform plan to reduce gasoline subsidies. After a delay in implementation due to strong opposition, the reform took effect in June 2013, increasing the price of subsidized gasoline and diesel by 44 and 22 per cent, respectively. With an estimated savings of 85.2 trillion rupiah (IDR) in 2014, the Government used the opportunity to scale up and reform its emerging social protection programmes, including two programmes for tuition support, a conditional cash transfer programme and a comprehensive fuel subsidy support package. IDR29.05 trillion ($3.2 billion) was allocated for this compensation package in the revised 2013 budget. In November 2014, further subsidy reforms were implemented and anticipated inflationary impacts addressed by the Indonesian Central Bank, which raised its policy rate.[b]

Ecotax reform in Japan. In 2003, Japan introduced forest environmental taxes to be paid by the beneficiaries of forest ecosystem services. The revenues from the tax are channelled through a fund for direct payments to forest owners for forest management work to protect critical watershed areas.[c] This overall objective of the tax was to reverse a trend towards degradation of forests resulting from a turn to monoculture and a growing loss of biodiversity.[d]

Environmental protection tax law in Viet Nam. The Viet Nam Environmental Protection Tax Law enacted in 2010 targeted fossil fuels along with other pollutants (such as plastic bags and some chemicals) and channelled the revenues towards environmental programmes.

Sources: [a]ESCAP, 2012, [b]World Bank, 2013; [c]Hayashi, 2010; [d]Forestry Agency of Japan, 2010.

Governments committed to establishing National Sustainable Development Strategies as a mechanism to achieve sustainable development. With little progress reported, this call was repeated in Johannesburg at the World Summit on Sustainable Development in 2002. Defined as a "coordinated set of participatory and continuously improving processes of analysis, debate, capacity-strengthening, planning and investment which seeks to integrate the short-term and long-term economic, social and environmental objective of society",[120] the National Sustainable Development Strategies were intended to build on existing approaches, including the National Biodiversity Strategies and Action Plans and the Poverty Reduction Strategies.

The need for setting up a national coordinating structure was also stressed — the national councils for sustainable development, which would manage both the horizontal and vertical integration of policies.[121,122]

Initially, the councils were mostly administered by environmental ministers, who exerted limited influence over economic and social policy planning. More recently, the councils appear to reflect wider-ranging membership. However, the track record of these bodies on involving a diverse range of stakeholders to support coordination and direction setting for sustainable development has been uneven.

Several countries in the Asia-Pacific region have established other high-level coordination bodies to support national development planning regarding sustainable development. Some examples include the Presidential Committee on Green Growth and the Presidential Commission on Sustainable Development in the Republic of Korea and the National Council on Sustainable Development and Competitiveness Improvement in Viet Nam. The following descriptions touch on these and other institutional frameworks for high-level coordination.[123]

Afghanistan: Secretariat for the national development strategy

In Afghanistan, a secretariat was established under the Senior Economic Advisor to the President to draft the country's national development strategy, bringing together a diverse range of more than 11,000 stakeholders (of which 40 per cent were women), including representatives from the central and local Governments, civil society organizations, academia, the private sector and the international community. This involved the consolidation of the sectoral plans and strategies of line ministries. The Office of Administration and Cabinet is accountable for carrying out the strategy, with budget monitoring vested in the Ministry of Finance. The Ministry of Economy monitors progress against the specified goals.

Armenia: National Council on Sustainable Development

The Government of Armenia established a National Council on Sustainable Development in 2002 under chairmanship of the Prime Minister to coordinate and manage the country's sustainable growth. The 23 members of the Council represent diverse ministries, civil society organizations, academia and the private sector; they meet periodically to discuss the challenges associated with sustainable development. The Council's decisions are considered as binding government protocol. The Government's Perspective Development Programme for 2012-2025 articulates four priorities: (a) increasing employment, (b) developing human capital, (c) improving the system of social protection and (d) modernizing the system of administration. The overarching goal, to which the four priorities contribute, is sustained increase in the welfare of the Armenian people.

Bangladesh: Sustainable Development Monitoring Council

Established in 2009 in Bangladesh, the Sustainable Development Monitoring Council oversees the pursuit of sustainable development and, specifically, monitors the various elements of the national strategy. The Council's role is to ensure that the country develops through the sustainable use of its resources, including by (a) prioritizing citizens' rights; (b) creating social safety nets; (c) promoting sustained economic growth; (d) reviewing government commitments to multilateral environmental agreements; and (e) highlighting issues of quality education and women's empowerment.

Initially conceived as a monitoring body, it was later reformed, with the Ministry of Planning given the chairmanship to ensure a true coordination role. The new architecture allowed the Council to

better align with the national vision and to combine planning and coordination roles for sustainable development.

Islamic Republic of Iran: National Committee for Sustainable Development

The National Committee for Sustainable Development in the Islamic Republic of Iran comprises representatives from government ministries, scientific and academic institutions, non-governmental organizations and the Environment Supreme Council. The Committee is responsible for the overall development and formulation of the country's national sustainable development strategy, in coordination with related organizations. The secretariat responsibilities are housed in the Management and Planning Organization of the Department of Environment. The Committee also consults and advises the Environment Supreme Council in developing a unified and coordinated policy approach to environmental conventions and proposes common executive and research projects.

Republic of Korea: Coordination bodies for sustainable development

In the Republic of Korea there are two overarching bodies responsible for coordinating sustainable development: the Green Growth Committee of the Government of the Republic of Korea under the office of the Prime Minister (originally the Presidential Committee on Green Growth) and the Commission of Sustainable Development. The main functions of the Green Growth Committee are sustainable development planning; establishment and enforcement of the country's green growth policy; researching and developing the legal framework for green growth; and nurturing and promoting a skilled workforce and green industrial sector. It comprises public officers (including public officers from the Ministries of Finance and Strategy; Agriculture, Food and Rural Affairs; and Education) and experts from the fields of climate, industry, energy and construction.

Viet Nam: National Council on Sustainable Development and Competitiveness Improvement

In Viet Nam, the National Council on Sustainable Development and Competitiveness Improvement, chaired by the Vice Prime Minister, advises the Government and the Prime Minister on developing, implementing, monitoring and evaluating the country's sustainable development strategy: Strategic Orientation for Sustainable Development (for the twenty-first century) and the Strategy for Sustainable Development in Viet Nam for the Period 2011-2020. The secretariat of the Council is the Sustainable Development Office, located in the Ministry of Planning and Investment, which is also the focal point ministry for sustainable development in Viet Nam. The Ministry of Planning and Investment attributes its success in executing the national strategy to three factors: (a) ensuring strong government commitment and determination to deliver on sustainable development objectives, manifesting as a systematic and aggregate approach to mainstreaming sustainable development across all levels of Government; (b) mobilizing stakeholders to actively participate in delivering on sustainable development; and (c) combining internal resources with international cooperation.

3.3.2 Stakeholder engagement

Given that there is great diversity in viewpoints and interests related to sustainable development, participation of all stakeholders — public and private — is critical to jointly discuss and decide what future strategies are acceptable to different individuals and groups. Governments must take the leading role, however, in establishing a shared vision and mission for the country and in bringing together the diversity of multiple stakeholders' perspectives that are critical for sustainable development.

These facilitating functions are those that engage stakeholders and build ownership of integrated programmes. Coordination mechanisms help strengthen the rights-based and participatory approaches and ensure that multiple stakeholders' views on sustainable development beyond the government sector are reflected in national and local development planning. Institutional reforms are needed to create and empower an enabling environment for civil society and private sector participation and to enforce human rights, including for women. Access to information and justice — as provided by the Convention on Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters — are also essential areas of focus for institutional reforms to enable stakeholder engagement.

Facilitating and managing the participation of various stakeholders is a fundamental building

block of sustainable development policies and includes both the institutionalization of participation in the development and delivery of strategies and the building of trust. The integration of the three sustainable development dimensions into national policies is also highly dependent on the participation of the different national stakeholders in decision-making processes and in the governance structures associated with the economic, social and environmental sectors.

Stakeholder engagement relies on analytical tools that address the integrated nature and complexity of sustainable development. These include economic modelling that integrates environmental and social dimensions into input-output analysis and multi-criteria policy analysis as well as environmental and social impact assessments and strategic environment assessments. These analytical tools and techniques include the use of valuation techniques to inform decision-making so that the long-term values created by investments in human and natural capital are revealed to decision makers and incorporated into scenarios investigating alternative policy options. These tools and techniques are essential for the development of shared and integrated visions for society.

Countries in the Asia-Pacific region have pursued participatory practices in formulating their sustainable development policies and plans. This includes the recently concluded consultation for the **Sustainable Singapore Blueprint 2015,** which engaged more than 100,000 stakeholders. The **Tenth Malaysia Plan 2011-2015** is also the product of a participatory process. In 2010, 800 representatives from Government, the private sector and non-governmental organizations came together in a workshop to determine the 12 National Key Economic Areas that constitute the country's Economic Transformation Programme. Subsequently, 12 Economic Area "labs" brought together 500 persons from the private and public sectors to formulate 131 entry point projects and 60 business opportunities that would help achieve Malaysia's gross national income targets by 2020. After the Cabinet approved the plans, three "open days" were arranged to inform and consult the *rakyat*,or general public.[124]

Stakeholder consultation is also integral to the operation of the National Council for Sustainable Development in **Armenia**. Under the chairmanship of the Prime Minister and in coordination with the Interdepartmental Commission for the Implementation of the Recommendations of "Rio+20" Summit, representatives of Government, civil society, academia and the private sector engage in discussions, planning and decision-making on the country's sustainable development.

3.3.3 Ensuring accountability through monitoring and adaptation

Monitoring and review mechanisms assess progress against specific policy targets, track sustainability challenges (whether persistent or emerging) and promote compliance with international and national commitments.

Monitoring and review functions include (a) regular data collection; (b) dissemination of data and information in accordance with the principles of transparency; and (c) support for review and critique of progress. Monitoring and review mechanisms should address issues of efficiency, effectiveness and equity, should be established at the global and national monitoring and review mechanisms and should be both rigorous and participatory.

Monitoring and review can boost progress towards sustainable development goals when complemented by "remedy" mechanisms that facilitate the revision of strategies, plans and policies in response to the results of monitoring and review.

As part of the response, adaptive governance approaches that help refine policy responses over time can be explored to promote resilience and transformation. An important component of adaptive governance is the capacity to design and follow through on policies that are responsive to complex, anticipated and surprise situations. With emphasis on social networks that promote learning and self-organization, adaptive governance lowers the costs of collaboration and conflict resolution while providing the flexibility needed to adapt to changing circumstances.[125,126,127]

Developing resilient societies and economies requires a shift in governance, from an emphasis on controlling change to managing the capacity of social-ecological systems to cope with, adapt to and shape change. To build and strengthen socioeconomic resilience, institutional structures should help communities and sectors in developing solutions to social, political, environmental or other "shocks"; integrate feedback loops; and engage the perspectives of multiple

stakeholders. Adaptive capacity is particularly fostered through participatory rather than centralized top-down governance approaches.

Also key to accountability is empowerment and decentralization across the various levels of governance, which support the institutionalization of sustainable development. New forms of reflexive and polycentric governance models can be explored to facilitate the active engagement of persons from all levels of society in economic, social and environmental transformation. In particular, transparent and participatory monitoring and review mechanisms are critical for the successful integration of the three dimensions of sustainable development. Again, the State has an important responsibility to expand the national capacity to measure, evaluate and report on progress towards the realization of sustainable development goals.

To strengthen this process, national institutions need to set up specific feedback loops so that information from local actors factors into policy improvement. This includes developing reliable monitoring frameworks.

The **Sustainable Penang Initiative in Malaysia**, for example, developed a series of indicators for assessing sustainable development in the State of Penang. Indicators were created through consultative discussions, consisting of participants from Government, academia, business, industry, youth groups and community groups. Stakeholders deliberated and agreed on a framework of 40 indicators.

Their recommendations were used in formulating the Penang Strategic Development Plan. Several other organizations were then formed, such as the Water Watch Penang, and continue to contribute to building environmental awareness in Penang. The Sustainable Penang Initiative was successful in terms of multiple stakeholder participation and in garnering political support for development plans formulated through the process. The success is attributed to, in part, active civil society engagement, a state Government open to a participatory process and adequate resources.[128]

3.4 The roles of the public and private sectors

Although the primary responsibility for sustainable development rests with Governments, engagement of the private sector is essential for realizing sustainable development objectives. The role of the State is conceived as both regulating business behaviour and facilitating responsible business practices. As agreed during the 2011 Asia-Pacific Business Forum,[129] in advancing corporate sustainability, Governments need to (a) make their position clear on what expectations they have regarding what constitutes "responsible" practice; (b) create a more enabling environment for responsible business activity by leveraging core government operations (such as procurement, export credits and investments); and (c) improve coordination between ministries and increase coherence on responsible business activity-related issues between national and local levels.

Policy tools available for establishing a broader enabling environment for responsible business activity include the International Labour Organization's international labour standards, including those relating to decent work;[130] sustainability reporting frameworks; integrating sustainability considerations in government procurement and financial support; reducing corruption; and providing small and medium-sized enterprises with information and training on corporate social responsibility; and support to the "greening" of capital markets.

3.4.1 A bolder role for the State

The 2008-2009 global economic and financial crises, increasing inequalities and climate and other environmental crises highlighted the centrality of the State in developing, strengthening and revising sustainable economic systems.

Rock and others argue that though the private sector, the market can be influenced by globalization to shift modes of production and consumption, but the extent and direction of influence depend largely on how "global forces interact with local socio-political landscapes — the political-economic institutions, values and regulations broadly guiding an economy."[131] The authors provide examples of how the so-called capitalist development states in Asia and the Pacific enabled the transition of industry sectors to flexible and globally oriented production while ensuring environmental management practices.

Malaysia and Singapore illustrate the essential role of the State in governing the economy in alignment with the principles of sustainable development. In both cases, the Governments focused on attracting foreign direct investment and ensuring that local

firms are prepared to take advantage of opportunities of a globalizing supply chain. In each situation, the Government took an instrumental role in facilitating the growth of particular industries; in developing partnerships with national stakeholders and with multinational operators; in maintaining political and macroeconomic stability; in appropriately regulating factor markets (such as labour, capital or raw materials); and in providing infrastructural services in transport, communication and power to the benefit of the population through preferential financing arrangements.[132]

Engaging the national scientific, technological and innovation community is an important starting point. A good example can be found in the **Republic of Korea**, where the Government assembled networks of firms, industry associations, government agencies, research institutes and universities in at least 35 industry-specific working groups. These working groups were asked to identify and overcome constraints on technological transitions in their respective industry. At the operational level, the groups experimented with a variety of mechanisms for overcoming constraints.[133]

The Government worked with a network of actors involved in technological transition to set performance goals by industry and firm and to monitor performance relative to them. Those industries and firms that met or exceeded the goals were rewarded with additional promotional privileges, while those that fell short were taxed or lost privileges. Thus, industrial development and trade policies were used not only to promote manufactured exports but, more importantly, to guide a transition to more productive socio-technical regimes.

Initially, the process focused on simple technologies in labour-intensive industries, such as spinning and weaving, ready-made garments, electroplating, electronics assembly, shoes and other leather goods. But as education and skill levels improved and dynamic comparative advantage shifted away from these industries, the transition process was used to steer firms out of these industries and into more knowledge- and capital-intensive industries, such as semi-conductors, wafers, automobiles and steel-making.[134]

It is this kind of state-centred policy and institutional architecture that could be redirected to focus on transforming Asia and the Pacific, with a focus on sustainable and inclusive growth for long-term sustainability within the planetary boundaries and supporting social justice imperatives. Examples from around the globe demonstrate the importance of state leadership and accountability for sustainable development — from strengthening the delivery of public goods to regulating markets so that they support sustainable production and consumption patterns.

Evident from the preparatory discussions for the July 2015 Addis Ababa Conference on Financing for Development, a multitude of equitable and sustainable options are available to Governments (and the international community) in managing financial flows and ensuring socially and environmentally desirable investments.

For example, Governments can use public procurement to direct production and consumption towards greener and labour-intensive activities by the private sector. With such a large expenditure on procurement, Asian and Pacific countries can leverage the private sector to move towards more green and labour-intensive activities. This can be an important instrument of fiscal policy for inclusive and sustainable development. For a Government to perform its development role in a sustainable manner, it must take serious steps in expanding and strengthening its fiscal space.

Balancing the roles of the private and public sectors requires a rethinking of macroeconomic policy to strengthen the development role of the public sector and its capacity to engage the private sector in pursuit of sustainable development goals. One way is to more closely scrutinize the composition of government expenditure; gender-responsive budgeting is another way of increasing accountability of government expenditure for development outcomes. The private sector is increasingly looked at as an important source of development financing. Enabling policy environments, including incentive schemes, ensuring good governance and long-term predictability of market conditions are fundamental for establishing a longer-term investment horizon.

In some countries in the Asia-Pacific region, there has been a trend towards the devolution of the provision of public goods (such as health care and education) to the private sector, on the basis that it will lead to the enhanced quality of services and more rapid application of technological advancements. Without adequate safeguards, however, devolution has been associated with inequitable access to public services, such as education and health. Service provision options should be carefully assessed and

all stakeholders, not just the private sector, should be included in such an assessment.

3.4.2 A strategic role for the private sector

Once a Government sets the "rules of the game", a private sector shift to sustainable development can be fostered. The Global Compact, responsible trade practices and corporate social responsibility programmes are three relevant normative frameworks. For their own viability, private sector actors need to view long-term investments in human and natural capital as business opportunities, promote resource efficiency and incorporate disaster and climate risk-sensitive considerations into their investment and business processes, among other shifts in investment focus.

The public sector is increasingly encouraging the strengthening of business accountability and transparency. Sustainability reporting is an important tool to present an organization's values and governance model and to demonstrate the link between its strategy and its commitment to a sustainable global economy. Establishing a sustainability reporting process helps companies set goals, measure performance and manage change.

The disclosure of sustainability information is featuring more and more on the agenda of international forums. It was afforded unprecedented attention during the United Nations Conference on Sustainable Development, where Governments agreed on the importance of corporate transparency and sustainability reporting and the role they have in advancing it.[135]

Sustainability reporting has moved from a pioneering undertaking to become standard practice for companies. According to the *KPMG Survey of Corporate Responsibility Reporting 2013*, 71 per cent of the 4,100 companies surveyed in 41 countries in 2013 carried out corporate responsibility reporting. These companies have benefited from internationally recognized guidance on sustainability reporting, such as the Global Reporting Initiative's Sustainability Reporting Framework,[136] the United Nations Global Compact's ten principles, the United Nations Guiding Principles on Business and Human Rights, the OECD Guidelines for Multinational Enterprises, ISO 26000 Guidance on Social Responsibility, the ILO Tripartite Declaration of Principles Concerning Multinational Enterprises and Social Policy[137] and the European Union's Eco-Management and Audit Scheme.

Of the 100 companies in the KPMG survey, the biggest overall increase in reporting was in the Asia-Pacific region — from 49 per cent in 2011 to 71 per cent in 2013. Formal sustainability reporting requirements have been established in China, India, Indonesia, the Republic of Korea and Malaysia among others. India, Indonesia, Malaysia and Singapore have demonstrated exceptional rapid growth in reporting rates. In India and Singapore, it is likely that much of the growth was due to the introduction of mandatory and voluntary reporting requirements.

This increase in transparency and accountability will support and strengthen the integration of sustainability considerations into the day-to-day operations of private enterprises. The following highlights several examples of firms that have built their strategy for competitiveness around ensuring that human rights, decent work, environmental and anti-corruption considerations are integrated into their business operations.

Fuji Xerox, based in Japan, adopted a green strategy aimed at reducing the environmental impact of its products. Some Fuji Xerox products now are 99.97 per cent recyclable. Fuji Xerox has also built an international resource-recycling system, whereby old products are collected and recycled back into the production process. The strategy started with Thailand in 2004 but serviced South-East Asia; the company now has resource recycling systems in additional countries across the region.[138]

In 2013, MAS Holdings, a Sri Lankan textile company producing apparel and sportswear for large global brands, was awarded the Women's Empowerment Principles' Cultural Change for Empowerment Award for its Women Go Beyond programme. Launched in 2003, the programme works to empower and support female employees for leadership positions through the provision of maternal health clinics; training programmes on sexual harassment; awareness programmes on sexual and reproductive health and HIV; workshops on managing personal finances; and an awards programme for Empowered Women.[139]

CADP Group Corporation in the Philippines (involved in the manufacture and sale of sugar and allied products) is committed to the fight against child labour. The CADP Group Corporation uses a community-wide approach to tackling the root causes of child labour. For instance, programmes

and services aim to improve the living conditions and health of families in the communities in which the corporation operates. This includes offering scholarships and financial assistance for education, supporting feeding programmes for undernourished families and providing nutrition classes for mothers.[140]

In 2008, Infosys, a large Indian company in the IT service sector, rolled out targeted resource-efficiency initiatives that substantially reduced its consumption of electricity. The per capita electricity and freshwater consumption was reduced by 44 per cent and 35 per cent, respectively, over a six-year period due to such initiatives as green retrofits; sensors for building automation and lightning; rainwater harvesting; use of water efficient fixtures; and re-use of 100 per cent of wastewater. The company sources 30 per cent of its electricity from green power and has installed 2MW of solar photovoltaic plants on its premises.[141]

Viyellatex, an export-oriented knit-garment manufacturing company in Bangladesh, provides working conditions for its employees that exceed the prevailing industry standards. All Viyellatex workers have written contracts and are paid twice the minimum wage. Some employees have access to a retirement fund, with employee contributions matched by the company. Viyellatex monitors working hours and provides (a) lunch at no cost; (b) maternity benefits; (c) free medical treatment on a biweekly basis as well as annual free eye check-ups and treatment; and (d) regular awareness-raising activities among its workers on their rights. The company was accredited as a fair trade manufacturer in 2007 and has received numerous awards for its environmental and social contributions. Although Viyellatex is considered one of the most socially responsible factories in Bangladesh, further efforts are required to uphold the rights of employees.[142]

Photo: livcool / Shutterstock.com

4

CONCLUSION: THE WAY FORWARD FOR INTEGRATION AND TRANSFORMATION TOWARDS SUSTAINABLE DEVELOPMENT

4.1 Introduction

This year, 2015, is a defining one for the sustainable development agenda. Member States will agree on the sustainable development goals and will need to establish governance mechanisms and institutional frameworks to implement this new agenda.

Chapters 1 to 3 of this theme study outlined a conceptual framework, four normative shifts in policy stance and a set of strategies and policy options and offered perspectives on institutional frameworks for integrating the three dimensions of sustainable development.

Although integrated implementation approaches should respond to national realities, regional cooperation will be critical to maximize the opportunities for building synergies between the economic, social and environmental dimensions. There is a need to move beyond the actions of individual States and towards realizing integration of the three dimensions of sustainable development at the regional level to achieve critical scale. Regional cooperation is also vital to mitigate "first-mover risk", discuss and agree on normative approaches that strengthen economic and social links, exchange experiences and best practices, and develop specific cooperation initiatives on sustainable development.

This theme study therefore concludes by proposing four areas of follow-up action at the regional and subregional levels:

- Establish a regional road map to support the implementation of the United Nations development agenda beyond 2015.
- Bring integration of the three dimensions of sustainable development to the forefront in ongoing and emerging economic integration

processes.
- Strengthen regional platforms for sustainable development.
- Work towards a more coherent and collaborative United Nations system.

4.2 A regional road map to support the development agenda beyond 2015

A road map should draw lessons from years of work towards the Millennium Development Goals and inspiration from "The future we want" to guide the transformative shift. Such a road map could focus, subject to further dialogue and intergovernmental decision, on the means of implementation (covering science, technology, trade, capacity development and finance); on strengthening institutional frameworks and capacity for integration of the three dimensions of sustainable development; and on establishing a platform for policy dialogue and the exchange of best practices.

To complement that work, such a road map should establish an agenda to meet urgent research priorities — extending the capacity of the region to undertake state-of-the art analysis, including decision-support tools that can deal with the complexities of integration of the three dimensions of sustainable development.

Such a road map should emphasize additional assistance to countries with special needs, beyond the general support all countries may need. The road map could also establish specific monitoring and review mechanisms, such as an indicator framework and reinforcing process that is in line with global agreements on the United Nations development agenda beyond 2015. The Asia-Pacific Forum on Sustainable Development and ESCAP Commission sessions can be considered as possible regional platforms for drafting such a road map.

Any road map should be formulated on the basis of an inclusive process and identify stakeholders, partnerships and modalities for implementation, as highlighted by the secretariat note to the 2014 Asia-Pacific Forum.[143]

4.3 Regional economic integration as an opportunity for sustainable development

The rapid growth of preferential trade agreements signed by Asian and Pacific countries has been both a response to rising intraregional trade and integration and also a driver of it. Of a total 262 preferential agreements that were in force in April 2015,[144] around 60 per cent were in the Asia-Pacific region.[145]

Regional integration of markets can drive sustainable development in a number of channels, including: more efficient use of resources while creating opportunities for decent jobs; lower production costs resulting from the economies of scale and scope; increases in available products and services variety and quality; and opportunities for shared use of natural resources and energy. Regional economic integration can facilitate common policies that address environmental and social aspects.

Regional economic integration can contribute to sustainable development through increased flows of environmental goods, services and technologies and thus sustainable production and regional green value chains.

Expanding and deepening initiatives for regional and subregional economic integration, such as the ASEAN Economic Community, the South Asian Association for Regional Cooperation (SAARC) and the Framework for Pacific Regionalism of the Pacific Islands Forum, provide ideal channels for member States' efforts at integrating the three dimensions of sustainable development as a basis for sustainable development pathways.

In its resolution 70/1 on implementation of the Bangkok Declaration on Regional Economic Cooperation and Integration in Asia and the Pacific, the ESCAP Commission mandated the secretariat to organize the second Ministerial Meeting on Regional Economic Cooperation and Integration in 2015 to expand the dialogue and action on advancing regional cooperation and to provide an opportunity for strengthening integration across the three dimensions of sustainable development.

These efforts can build on the large body of experience with integrating social and environmental considerations in regional economic integration efforts in other regions, such as Europe (European Union), Africa (Economic Community of West African States) and the Americas (NAFTA and Mercosur).

The social dimension of sustainable development requires further attention in regional economic

integration efforts. Several issues are yet to be satisfactorily resolved, including the rights of migrant workers or compensation for communities affected by foreign direct investment projects. However, there is far more progress in integrating the environmental dimension.

The environmental dimension is the main focus of several landmark agreements, notably in Europe. Such instruments include the Espoo Convention,[146] the Water Convention,[147] the Aarhus Convention[148] and the Code of Practice for the Safe Transport of Radioactive Substances. Some multilateral environmental agreements can strengthen the contribution of regional economic integration to sustainable development if fully implemented. Such trade-related multilateral environmental agreements include the Convention on International Trade in Endangered Species of Wild Fauna and Flora, the Montreal Protocol on Substances that Deplete the Ozone Layer and the Basel, Rotterdam and Stockholm conventions, or the so-called "chemicals conventions".

4.4 Regional platforms for the integration of the three dimensions of sustainable development

Implementation of the United Nations development agenda beyond 2015 will benefit from an intergovernmental platform at the regional level that facilitates regional consensus and the development and adoption of normative frameworks, encourages mutual learning through the exchange of best practices and experience and emboldens the peer review of progress.

Member States have mandated ESCAP to promote the integration of the three dimensions of sustainable development. At the global level, this task falls to the High-level Political Forum on Sustainable Development, for which the General Assembly in its resolution 67/290 assigned a wide-ranging mandate.

Regional commissions are invited to contribute to the work of the High-level Political Forum, including through annual regional meetings. The inaugural session of the Asia-Pacific Forum on Sustainable Development, for example, took place in Pattaya, Thailand in May 2014. Participants, including representatives of government, international organizations and major groups and other stakeholders, made recommendations on the preparatory process for the High-level Political Forum at the regional level.

In line with a recommendation in the Chair's summary of the Asia-Pacific Forum's seventieth session,[149] the Commission, in resolution 70/11, requested the Executive Secretary to "launch an intergovernmental consultative process, within the broad framework of General Assembly resolution 67/290, to determine the future architecture of the Asia-Pacific Forum on Sustainable Development, including its mandate, scope of work and other procedural aspects, and to submit a report on those matters to the Commission at its seventy-first session".[150]

There is a broad understanding that the regional meetings on sustainable development should closely align with the High-level Political Forum in providing "political leadership, guidance and recommendations for sustainable development, follow up and review progress on the implementation of sustainable development commitments, enhance the integration of the three dimensions of sustainable development in a holistic and cross-sectoral manner at all levels and have a focused, dynamic and action-oriented agenda, ensuring the appropriate consideration of new and emerging sustainable development challenges".[151]

The role of other regional platforms, such as those related to human rights and gender equality, in promoting sustainable development should be strengthened. Other ESCAP and United Nations regional forums can offer supplementary roles for more sector-specific discussions. Such forums may include the Asian and Pacific Energy Forum, the Asia-Pacific Water Forum and the Asia-Pacific Urban Forum.

4.5 United Nations system support

Implementing a sustainable development agenda will require strengthened support from the United Nations system. The paper highlighted the report of the United Nations Secretary-General that emphasized how sustainable development "requires a fundamental rethinking of the way the UN conceives its analytical, policy and operational work".[152]

Transformational change requires stronger United Nations system collaboration and coherence, in line with the mandates presented in the "The future we want" that call for the United Nations system to

provide coherent support to implementing Rio+20 outcomes. General Assembly resolution 67/226 on quadrennial comprehensive policy review of operational activities similarly stressed the need for consistency, coordination and links between programmes of the United Nations system, within programme countries and between national, regional and global levels.[153]

Hence, the United Nations system is undergoing a process of introspection and analysis to determine the critical areas of reform to make it "fit for purpose". At the regional level, the primary modalities for United Nations system coordination are the Regional Coordination Mechanism and United Nations Development Group Asia-Pacific (UNDG A-P).

The Regional Coordination Mechanism, chaired by the United Nations Deputy Secretary-General and organized by ESCAP, works towards the strengthening of policy coherence within the United Nations system, promoting coordination and collaboration among United Nations entities and other partners in addressing regional development issues; provides an important means of articulating regional concerns and priorities at the global level; and acts as a bridge between global, regional and national agendas.

UNDG A-P, organized by the United Nations Development Programme, provides United Nations country teams with strategic guidance and policy advice, coherent and timely technical support. Civil society has highlighted the need to increase the attention of the Regional Coordination Mechanism on such issues as human rights, trade and development, macroeconomic issues and inclusive growth.[154,155]

The international community must better use these modalities to build partnerships and strengthen its collaboration and coherence in support of member States.

At the same time, the United Nations system must strengthen its capacity to respond to Member States' capacity-development needs, drawing on guidance regarding their implementation needs, including that provided through this theme study. Such areas of capacity development could be defined through the proposed regional road map but will be particularly important in the area of statistics to support monitoring and assessment in progress towards sustainable development.

Political commitment, stakeholder engagement and support, enhanced capacity and a shared vision at all levels will be needed to deliver on the promise of sustainable development. This must be coupled with specific strategy and policy interventions and institutional strengthening. In this way, poverty can be ended, lives transformed and the planet protected.

Endnotes

1 World Commission on Environment and Development, 1987.

2 See ESCAP, 2013c.

3 General Assembly resolution 66/288, annex.

4 ESCAP, 2014c.

5 A/RES/66/288, annex.

6 E/ESCAP/70/25/Rev.1

7 For more on the partnership, see ESCAP, “Millennium Development Goals”. Available from www.unescap.org/our-work/macroeconomic-policy-development/millennium-development-goals/about (accessed 4 May 2015).

8 Kutasovic, 2013.

9 Commission on Growth and Development, 2008.

10 United Nations Conference on Trade and Development, 2014.

11 ESCAP, Asian Development Bank and United Nations Development Programme, 2015.

12 Also called the third industrial revolution, the first two being energy (coal and steam) 1775-1830 and electricity and chemicals 1875-1905.

13 ESCAP, Asian Development Bank and United Nations Development Programme, 2015.

14 ESCAP, Asian Development Bank and United Nations Development Programme, 2015.

15 ESCAP, 2014d.

16 Asian Development Bank, 2012.

17 ESCAP, 2013b.

18 Results of analyses of different economic contexts and across different time periods “deliver a consistent message: inequality is detrimental to long-run growth” (Benabou, 1997, p. 13).

19 These ecosystem services are defined as “the services provided by ecosystems to people”. See the Millennium Ecosystem Assessment reports, available from http://millenniumassessment.org/en/index.html.

20 Kharas, 2010; Ernst & Young Global Ltd, 2013.

21 Solomon and others, 2007.

22 See the IPCC assessments at www.ipcc.ch/publications_and_data/publications_and_data_reports.shtml

23 A/CONF.224/CRP.1.

24 ESCAP, 2014f.

25 This is evident from several tragic examples, from the earthquake in Yunnan Province of China, the Indian Ocean tsunami, typhoon Haiyan in the Philippines, Tropical Cyclone Pam to the Pacific, with the worst destruction caused in Vanuatu, the massive floods in the Indus, the persistent drought in Western Asia and the spread of such disease vectors as dengue, Asian flu and SARS.

26 ESCAP, 2015b.

27 In constant 2005 US dollars. All dollar ($) currencies in this report are US dollars.

28 ESCAP, 2013a.

29 The first refers to the depletion of the finite mineral and other natural resources of the planet, such as the debate over peak oil; the second refers to the adverse impacts of the irresponsible proliferation of chemicals in the environment; and the third refers to the degradation of renewable natural resources through overuse and pollution and the consequent loss of biodiversity, resilience and stability.

30 Rockström and others, 2009, pp. 472-475.

31 ESCAP, Asian Development Bank and United Nations Environment Programme, 2012.

32 Schandl, 2015.

33 “We can be the generation that can end poverty and put our planet on a sustainable course before it is too late.” (United Nations, 2013).

34 See United Nations Conference on Environment and Development, 1987, Section 1.

35 A/RES/66/288.

36 A/69/700.

37 Robinson, 2004, pp. 369-384.

[38] See Raworth, 2012.

[39] Rockström and others, 2009.

[40] Malghan (2010, pp. 2261-2270) notes that "the primary precept of ecological economics is that the economy is an open subsystem of the larger biophysical system that contains and sustains it. This represents an ontological departure from neoclassical economics that studies the physical environment as a subsector contained within the larger economy." He underlines that the result of this "ontological shift" is that "the physical size of the economy relative to the ecosystem that contains it — scale — becomes integral to understanding our ecological and economic predicaments."

[41] International agreements, such as the Universal Declaration of Human Rights and the United Nations Social Protection Floor Initiative, are expressions of the different dimensions of those minimum acceptable conditions.

[42] Stiglitz, Sen and Fitoussi, 2009.

[43] Ayres,1996.

[44] United Nations Economic Commission for Europe, Organisation for Economic Co-operation and Development and the Statistical Office of the European Communities, 2009.

[45] United Nations European Commission, International Monetary Fund, Organisation for Economic Co-operation and Development, World Bank, 2003.

[46] See United Nations Environment Programme, "What is SCP". Available from www.unep.org/10yfp/About/WhatisSCP/tabid/106246/Default.aspx (accessed 4 May 2015).

[47] At United Nations Conference on Sustainable Development, Member States adopted the ten-year framework of programmes on sustainable consumption and production patterns (10YFP), which is a global framework of action to enhance international cooperation to accelerate the shift towards sustainable consumption and production (SCP) in both industrialized and developing countries. The Roadmap for the 10YFP Implementation in Asia and the Pacific includes "indicators and comprehensive outputs to mainstream SCP in different 10YFP Programmes and sectors, such as tourism, buildings and construction, public procurement, product sustainability information, lifestyles and education for sustainable consumption". The Asia-Pacific region is considered a pioneer in the promotion of Sustainable Consumption and Production, with bodies such as the Asia-Pacific Roundtable for Sustainable Consumption and Production created in 1997 and the ASEAN Forum on Sustainable Consumption and Production as well as the adoption of the strategy of environmentally sustainable growth, or green growth at the regional level. See "Asia and Pacific" of the United Nations Environment Programme website, available from www.unep.org/10YFP/Activities/RegionalActivities/AsiaandthePacific (accessed 4 May 2015).

[48] The Commission was mandated to "identify the limits of GDP as an indicator of economic performance and social progress, including the problems with its measurement; to consider what additional information might be required for the production of more relevant indicators of social progress; to assess the feasibility of alternative measurement tools, and to discuss how to present the statistical information in an appropriate way" (Stiglitz, Sen and Fitoussi, 2009, p. 21).

[49] The Organisation for Economic Co-operation and Development established Your Better Life Index; the Government of Bhutan established the Gross National Happiness Index. For other measures of well-being by the United Nations, see Dag Hammarskjöld Library Research Guides, "International day of happiness – measuring well-being: quick guide". Available from http://research.un.org/en/happiness (accessed 4 May 2015).

[50] Stiglitz, Sen and Fitoussi, 2009, p. 21.

[51] The System of Environmental-Economic Accounting was adopted by the United Nations Statistical Commission as a new international statistical standard in 2012. The International Recommendations for Water Statistics and Energy Statistics, endorsed by the United Nations Statistics Commission in 2010 and 2011, respectively, both recommended utilizing the classification for economic activities used in economic statistics as the basis for producing nationally disaggregated indicators of resource use efficiency. This was a significant departure from previous practice, whereby energy and water statistics were usually considered domains of statistics distinct and relatively isolated from economic statistics.

[52] Sukhdev, Wittmer and Miller, 2014.

[53] Millennium Ecosystem Assessment Board of Directors, 2005.

[54] Braat and ten Brink, with others, 2008; European Commission, 2010.

[55] Smil, 2009.

[56] Oates and Portney, 2003, pp. 325-354.

[57] Berg and Ostry, 2011.

[58] Khatiwada, n.d.

[59] United Nations Economic and Social Council, 2014.

[60] Ostry, Berg and Tsangarides, 2014.

[61] World Bank, 2012.

[62] European governments began by offering pension programmes to government workers in the nineteenth century, followed by unemployment insurance in the early twentieth century, then health care and child care programmes a little later.

[63] Adopted at the Ministerial Conference on Civil Registration and Vital Statistics in Asia and the Pacific, 24-28 November 2014. Available from www.un.org/ga/search/view_doc.asp?symbol=E/ESCAP/MCCRVS/4&Lang=E.

[64] Deborah Wetzel, 2013, "Bolsa Família: Brazil's Quiet Revolution" World Bank, 4 November 2013. Available from www.worldbank.org/en/news/opinion/2013/11/04/bolsa-familia-Brazil-quiet-revolution.

[65] ESCAP, 2015a.

[66] UNEP, 2012.

[67] Stiglitz, 2012.

[68] Ostrom, 1990.

[69] Yusuf and Budy, 2007.

[70] ESCAP, 2015c.

[71] See the Regional Action Plan, conference papers and other documents from the Asia-Pacific High-Level Consultation on Financing for Development, Jakarta, 29-30 April 2015. Available from www.unescap.org/events/hlcffd2015.

[72] *The Economist* (2014). Fuelling controversy. 11 January.

[73] Asian Development Bank, 2012.

[74] Group of 20, 2013.

[75] Daly, 2002.

[76] For 20 years, the ESCAP Regional Space Application Programme for Sustainable Development has provided policy advisory and technical assistance in this area.

[77] Environmental criteria can include impacts on local biodiversity, impacts on natural biological processes and energy and water use characteristics; societal criteria can include land area required, share of female technology adopters, risk of disturbance, persons involved and employment potential; and economic criteria can relate to the net present value of the benefit provided.

[78] Rodrik, 2007.

[79] ESCAP, 2014a.

[80] Yang and others, 1999.

[81] The Commission for Environmental Cooperation facilitates and reinforces environmental policy alongside an independent secretariat that reports on the programme without need of approval from its governments. Additionally, NAFTA's environment deal has innovated processes to upkeep its shared natural environment, such as a procedure that allows a party to impose a taxing instrument on another if it is found to have persistently failed to enforce environmental law with underlying competitive effects (a race to the bottom) in the NAFTA region. This monetary penalty does not benefit the party that has been harmed, but instead the Commission uses the money to improve the environment or enforcement of environmental law in the accused country. It has also created a citizen submission tool with which groups or individuals can claim a country is failing to enforce its environmental laws. Through the Commission and its constituent bodies, NAFTA engages in trade with environmental accountability and transparency. The trilateral trade agreement between the United States of America, Canada and Mexico demonstrates how a high-level transformative initiative can promote sustainability and growth without putting pressure on the environment. See the North American Free Trade, available from www.naftanow.org/agreement/default_en.asp.

[82] United Nations, Department of Economic and Social Affairs, 2014.

[83] European Commission, 2010.

[84] Danish Ministry of the Environment, Environmental Protection Agency, "Danish strategy for sustainable development". Available from http://eng.mst.dk/topics/sustainability/sustainable-development-in-denmark/ (accessed 4 May 2015).

[85] World Bank, "Government expenditure on education, total (% of GDP)". Available from http://data.worldbank.org/indicator/SE.XPD.TOTL.GD.ZS/countries/1W-DK?display=graph (accessed 4 May 2015).

[86] Denmark, Ministry of Higher Education and Science, "OECD: Denmark invests most in education", 25 June 2013. Available from http://ufm.dk/en/newsroom/press-releases/2013/oecd-denmark-invests-most-in-education-1.

[87] See the chapter on Denmark (Shukla and Sawyer, 2012, pp. 54-63).

[88] "Release of Danish energy strategy 2050", Denmark. 24 February 2011 (accessed 19 May 2011).

[89] Sweden, Ministry of Sustainable Development, 2005.

[90] Ibid.

[91] United Nations Development Programme, 2014.

[92] India Twelfth Five Year Plan (2012-2017).

[93] BAPPENAS, Badan Perencanaan Pembangunan Nasional.

[94] Presidential Decree No. 2 of 2015 on the National Medium Term Development Plan 2015-2019.

[95] Unofficial translation of the Mongolian Green Development Policy by the Ministry of Environment and Green Development of Mongolia. Policy passed by State Great Khural (Parliament of Mongolia) on 13 June 2014.

[96] Now the Ministry of Environment, Green Development and Tourism.

[97] Papua New Guinea Environment Act (2000).

[98] United Nations Development Programme, 2012.

[99] With reference to the national poverty line.

[100] United Nations Development Programme, 2012.

[101] Boyce and Pastor (2001) defined social wealth as "wealth that is controlled, neither by private, nor public sector corporations, but is instead valued and shared by and between communities to enhance the common good".

[102] See 2007 Constitution of the Kingdom of Thailand, Section 78.

[103] Mongsawad, 2010

[104] Mongsawad, 2007. cited in Mongsawad, 2010.

[105] "Sufficiency economy" is a philosophy that stresses the middle path as the overriding principle for appropriate conduct by the populace at all levels. This applies to conduct at the level of the individual, families and communities as well as to the choice of a balanced development strategy for the nation so as to modernize in line with the forces of globalization while shielding against inevitable shocks and excesses that arise. "Sufficiency" means moderation and due consideration in all modes of conduct as well as the need for sufficient protection from internal and external shocks. To achieve this, the application of knowledge with prudence is essential. In particular, great care is needed in the use of untested theories and methodologies for planning and implementation. At the same time, it is essential to strengthen the moral fibre of the nation, so that everyone, particularly political and public officials, technocrats, businesspeople and financiers, adhere first and foremost to the principles of honesty and integrity (see Mongsawad, 2010).

[106] Office of High Commissioner for Human Rights, n.d.

[107] International Labour Organization, 2010. These rights re prescribed within Articles 22 and 25 of the Universal Declaration of Human Rights (1948) and Articles 9, 11, 12 and 13 of the International Covenant on Economic, Social and Cultural Rights (1979) (International Labour Organization, 2010).

[108] World Bank, 2012.

[109] International Labour Organization and World Health Organization, 2011.

[110] The Social Protection Floor framework corresponds to a set of essential social services and income security measures that all persons everywhere should enjoy in order to fulfil the entitlements embodied in human rights treaties. The essential social services and income security along the life course, or components of the Social Protection Floor framework, ensure that all in need have access to social services in the sphere of health as well as income security for children, the working-age population and older persons (International Labour Organization, 2012).

[111] Universal access to health care is enshrined in Article 25 of the Universal Declaration of Human Rights (1948) and Article 12 of the International Covenant on Economic, Social and Cultural Rights (1966).

[112] ESCAP, forthcoming.

[113] ESCAP, 2011.

[114] Mehotra, Park, and Baek, 1997.

[115] India, Ministry of Rural Development, Mahatma Gandhi National Rural Employment Guarantee Act. Available from http://rural.nic.in/netrural/rural/sites/downloads/latest/PRC_Agenda_for_AGENDA1314.pdf.

[116] Climate and Development, 2014.

[117] Yukuan and others, 2010.

[118] Yao and Anbumozhi, 2015, pp. 15-38.

[119] Good governance is understood as governance that is participatory, consensus-oriented, accountable, transparent, responsive, effective, efficient, equitable, inclusive and following the rule of law.

[120] See Organisation for Economic Co-operation and Development, 2001, p. 25.

[121] United Nations Environment Programme, 2006.

[122] Horizontal policy coordination integrates the environmental, social and economic dimensions of sustainable development by involving different actors in different sectors, including the needs of present and future generations. Vertical policy coordination integrates local, national, regional and global action for sustainable development (United Nations Environment Programme, 2006).

[123] The examples here include five countries from which responses to an ESCAP questionnaire administered in 2014 were received (Afghanistan, Armenia, Islamic Republic of Iran, the Republic of Korea, New Caledonia and Viet Nam).

[124] Performance Management and Delivery Unit of Malaysia (PEMANDU), 2011a; PEMANDU, 2011b; PEMANDU, 2012.

[125] Folke and others, 2005, p. 441-473.

[126] Lebel and others, 2006.

[127] Pahl-Wostl, 2009, pp. 345-365.

[128] Asian Development Bank, 2000; Leng, 2005, pp. 29-43; Fazal, 2009, pp. 421-426.

[129] ESCAP, 2011.

[130] See International Labour Organization, 2012.

[131] Rock and others, 2009

[132] United Nations Development Programme, 2013.

[133] Republic of Korea, Ministry of Science, ICT and Future Planning, 2014.

[134] Ibid.

[135] See A/RES/66/288, annex, para. 474.

[136] The majority of these reporting companies used the Global Reporting Initiative's (GRI) Sustainability Reporting Framework as a basis for their sustainability reports. In addition, 93 per cent of the world's largest 250 companies issued a sustainability report, of which 82 per cent referred to the GRI Sustainability Reporting Guidelines. It is the GRI mission to address and support the private sector through the free provision of its Guidelines as a global public good. GRI helps to ensure that data on economic, environmental, social and governance issues informs the decisions of companies, governments and other stakeholders by making available a single global framework for sustainability reporting.

[137] Organisation for Economic Co-operation and Development, 2009.

[138] Fuji Xerox, 2013.

[139] United Nations Women, 2013.

[140] United Nations Global Compact. n.d.

[141] Infosys, 2013

[142] Srivastava and others, 2013.

[143] ESCAP, 2014f.

[144] World Trade Organization, "Regional trade agreements". Available from www.wto.org/english/tratop_e/region_e/region_e.htm (accessed 6 May 2015).

[145] ESCAP, Asia-Pacific Trade and Investment Agreement Database (APTIAD). Available from www.unescap.org/resources/asia-pacific-trade-and-investment-agreement-database-aptiad (accessed 30 April 2015).

[146] Convention on Environmental Impact Assessment in a Transboundary Context (1991).

[147] Convention on the Protection and Use of Transboundary Watercourses and International Lakes (1992).

[148] Convention on Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters (1998).

[149] ESCAP, 2014b.

[150] E/ESCAP/70/11.

[151] A/RES/67/290.

[152] A/68/79–E/2013/69.

[153] A/RES/67/226.

[154] The Regional Coordination Mechanism's work is carried out through thematic working groups in the following areas: education for all; environment and disaster risk management; gender equality and empowerment of women; health; international migration including human trafficking; poverty and hunger; as well as a joint RCM/UNDG Asia-Pacific working group on youth.

[155] ESCAP, 2014f.

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