

## CHAPTER 10

# Concluding discussion: Making sustainable landscapes the norm in the Asia-Pacific region

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### Key messages

- *If current processes impacting land continue, the region risks transgressing the boundaries of a “safe operating space”.*
- *A vision of sustainable landscapes can guide policymaking and administration from regional to local levels towards more effective cross-boundary management of interdependent ecosystems.*
- *Priorities for sustainable land management include mainstreaming biodiversity and ecosystem services into policy at all levels, bringing sustainability into governance, promoting landscape approaches within regional planning frameworks that span urban and rural divides, promoting local innovations and solutions for sustainable rural and urban landscapes, and market reform.*
- *Achievement of these priorities would be facilitated by a regional “landscape observatory” acting as a science-policy interface.*

## 10.1 Introduction

This report set out to provide a regional understanding of landscape transformations that captures the broad trends and their drivers, while also being sensitive to complexities and how the drivers manifest from place to place. It is based on a review of literature and secondary data as well as in-depth case studies that represent several of the major types of transformations taking place. This concluding discussion reflects on the review and case studies to draw out general observations and recommendations.

## 10.2 Unsustainable land use is a priority regional issue

In this report, land is understood as the Earth’s surface, i.e. the physical land, as well as its resources, including forests, fisheries and water. The motivation for this report was the concern that while the unsustainable use of land has underpinned the region’s economic growth in recent decades, if current processes impacting land continue, the region risks transgressing the boundaries of a “safe operating space” (Rockström et al. 2009) and eroding the resilience of major

components of Earth-system functioning. In other words, the Asia-Pacific region is risking functional collapses within Earth systems (ibid.).

Land exploitation has been instrumental in the region's integration with the regional and global economy, which has generated many benefits, but is also responsible for loss of biodiversity (genetic, species and ecosystems diversity) and the degradation and loss of ecosystem services. Poor land management is leading to land degradation and in some cases land abandonment. The harvesting of (potentially) renewable resources such as tropical timber has contributed to economic growth, but resources have been left depleted and landscapes heavily degraded across millions of hectares (Chapter 2). Some of the dominant patterns of resource extraction are characterised by inequity, with local communities losing access to the land and being directly exposed to the consequences of the resultant environmental harm. Urbanisation and industrialisation have contributed to greater labour productivity, but at the expense of biodiversity and ecosystem services (Chapter 2), and in some cases have increased the risk of natural hazards such as floods (Chapter 7). Through their growing demand for water, food, energy and materials, cities are indirectly contributing to resource depletion and the destruction of natural ecosystems in far-off places. Land and water bodies are being degraded by the region's massive and growing volumes of urban waste, which is still mostly disposed using open dumping and uncontrolled landfilling (Chapter 2). In rural areas, standardised high-input, high-output farming has greatly contributed to food security, but at the expense of crop genetic diversity, soil health, water quality and the health of adjacent ecosystems (Chapter 3). Traditional agrobiodiversity, and the rich biocultural diversity that goes with it, is in decline (Chapter 5). As pointed out in Chapter 1, the following figures provide an indication of the environmental damage done: 2,500 million ha of land is degraded (Gibbs and Salmon 2015); four fifths of the region's rivers are polluted or compromised (ADB and Asia Pacific Water Forum 2011); almost 25% of endemic species are threatened and the region could lose 45% of its biodiversity by 2050 (IPBES 2018); between 2001 and 2011, Asia was responsible for 44% of global emissions from agriculture and 22% of global emissions from forestry and other land use (Tubiello et al. 2014).

While perhaps not yet so apparent in GDP growth rates, the economic and social impacts of this environmental harm are already being felt by the region's population, for example through air and water pollution, natural disasters such as floods and landslides, and through a decline in land fertility over extensive areas. The loss of ecosystem services is especially felt by low income rural communities, who directly depend on them to meet their daily needs and rely on them as a safety net in times of crisis.

For many who are enjoying the benefits of economic growth, these impacts have not been so readily observable, but they will be felt more acutely over time. Unsustainable land use is contributing to climate change while also increasingly vulnerability to it through the loss of natural capital. Environmental harm and the exploitation of resources beyond sustainable rates will reduce opportunities for prosperity, increase exposure to risks and limit capacity to adapt to climate change (Chapter 1).

### **10.3 Major types of landscape transformations**

This report has identified several major types of landscape transformations taking place across the region. The major landscape transformations identified are:

- Expansion of agriculture into areas once occupied by natural ecosystems;

- Agricultural intensification, including on fertile lowland plains and upland areas where traditional shifting agriculture characterised by high crop diversity is being replaced by intensive cultivation of a few commercial crops;
- A “greying” of landscapes around cities, coastal areas and major transportation links, where urban boundaries are expanding over farms, wetlands and coastal ecosystems;
- The transformation of mostly farmlands and natural ecosystems around the cities to a fickle mosaic of urban and rural uses that is highly susceptible to change;
- A “greening” of landscapes, especially where governments have invested in national afforestation/reforestation programmes to restore ecosystem functions.

The last type of transformation indicates that it is not all bad. Efforts are underway to protect high conservation value areas and restore degraded land. In some cities and rural areas greening programmes have been successful in establishing healthy tree cover, which is providing both habitats for wildlife as well as important ecosystem services. Examples include the landscape greening that has taken place under Nepal’s community-based forest management programme and the woodlots established by households that now dominate the landscape in some parts of Java, Indonesia. These positive examples provide reason for hope, even though they are contrary to the overall regional trend, which is one of declining natural capital and ecosystems resilience.

## 10.4 Root causes of unsustainable land transformation

This report identifies economic growth, market failure, technological advances, development policies, weak governance, demographic factors (population growth and migration), urbanisation, poverty, insecure tenure and lifestyle changes as the major underlying drivers of unsustainable land use and land-use change. These drivers interact in complex ways and evolve in response to the feedback effects of changes in land use. The regional overview and case studies suggest two root causes for landscape transformation in the Asia-Pacific region. These are:

**Unprepared institutions and weak governance:** Unprepared institutions and governance failures constitute a major cause of unsustainable landscape transformations in the region. On the one hand, governments have introduced policies that have exposed land to powerful economic forces in the name of development, e.g. through concessions, agricultural development policies and policies supporting the liberalisation of trade and investment, and on the other they have failed to ensure that sufficient institutions are in place for sustainability. Governments are unable to keep up with the rapidity of change and find themselves forever trying to “catch up”, creating new institutions to accommodate current realities. Over recent decades, countries have made progress on environmental legislation, but implementation is stymied by weak governance, which results in inadequate resourcing of regulatory frameworks to ensure they are fully enforced. As noted in Chapter 9, progress on arresting the degradation of the Earth’s environmental support system has been disappointing.

The consequences of unprepared institutions and weak governance are clearly evident in the environmental impacts of urban growth. Urban areas have expanded physically, often outside of planning processes, at the expense of fertile agricultural land and areas with high conservation values (Chapters 2 and 7). Of even greater significance than this spatial growth are the impacts of urban consumption and production patterns on natural resources, biodiversity and ecosystem services (Chapter 2). Planning systems to coordinate urban and rural development are largely absent.

**Priority given to economic values and less on natural capital:** Of the many different values that land holds, economic values have for the most part been placed above other values in decisions over land use. The reasons for this differ between stakeholder groups, but it is clear that many, from local communities to transnational corporations, have an economic interest in land. From colonial times and earlier, there has been a strong interest in increasing economic returns from land, but it is the technological advances, development of infrastructure and economic integration and growth of more recent decades that have really made rapid landscape-scale transformations possible (Chapters 2 and 3). Technological advances enabled mechanisation of agriculture, the construction of transportation and communications infrastructure that facilitated the flow of people, information and money, and the exploitation of all types of natural resources. The means and incentives for landscape transformation increased greatly as a result of governments opening up their economies to international trade and investment. Regional integration and regional economic growth have had particularly significant impacts on land use within the past several decades. Land has been increasingly transformed by domestic finance and foreign direct investment from within the region to produce materials and products for processing and consumption by the region.

This root cause of landscape transformation is well illustrated in the case studies. It can be seen in the logging and later conversion of forests to oil palm plantations in PNG (Chapter 4), a pattern also evident in East Kalimantan, Indonesia (Chapter 6), and in the conversion of traditional rotational agricultural systems to intensive monocropping in Karen landscapes in northern Thailand (Chapter 5). In the Santa Rosa Watershed in the Philippines (Chapter 7), the pattern of transformation is different, from land mostly under agriculture to the chaotic development of commercial and residential areas, but the root cause of prioritising economic values is nevertheless evident.

## 10.5 Solutions for sustainable land management

Unsustainable land use is a “wicked” problem, meaning it is complex and difficult to resolve (Chapter 1). Effective solutions will not be single interventions; rather, they will consist of carefully synchronised suites of policies and measures. They will contribute to the SDGs in a holistic manner, i.e. they will not only contribute to poverty reduction, food security and other SDGs that have an immediate link with wellbeing, they will also contribute to the wise use of natural resources, biodiversity conservation and the protection and enhancement of ecosystem services.

A key to achieving the SDGs is to bring prosperity and environmental conservation and restoration together. How might this be possible? A suite of policies and measures for the forestry sector that could contribute to these outcomes is suggested as an example.

Unsustainable logging of natural production forests is a problem that many countries are facing (Chapter 2). This threatens the sustainability of the industry, harms biodiversity and diminishes ecosystem services. To stop unsustainable logging by placing all forests allocated for production under protection could be proposed, but this would not win wide support. Logging provides employment, generates foreign revenues, provides local infrastructure and supports domestic wood industries, and the gains from protecting all production forests would not counterbalance the loss of these benefits for some key stakeholders, including, in some cases, local communities.

An option that stakeholders are more likely to agree on would be to allow logging to continue, but at higher levels of environmental and social performance. This would require strengthening and/or reform of governance, administration and institutions, including markets. In terms of governance and administration, budgets could first be increased to ensure sufficient monitoring of existing

forestry operations. This could be timed with the introduction of measures to ensure the forestry department is free of political interference to act on violations. If lacking, transparency and anti-corruption mechanisms could be introduced. The strengthening of institutions could start with a national review of the forestry regulatory framework, with the aim of ensuring it supports sustainability of the industry and fully takes account of biodiversity and ecosystem services. To strengthen markets so that they provide signals for sustainability to forest managers, processors and traders, consideration could be given to initiatives to put environmental labels on products, educate consumers, block illegally harvested timber from entering markets and assist companies to develop corporate social responsibility strategies, including sustainable sourcing policies. Inclusive community-based forest management regimes and partnerships between communities and companies could be supported to give communities a direct stake in forestry. Through these policies and measures, production forests would provide a sustainable flow of economic benefits to key stakeholders, while hosting high levels of biodiversity and providing important ecosystem services. Similarly, suites of policies and measures that contribute to the SDGs in a holistic sense with carefully staged implementation are needed to address other major land issues the region is facing, such as lack of controls on and overharvesting of other natural resources, unsustainable agriculture, urban sprawl, dumping of waste, and inequity in access to land and its benefits.

Effective solutions to the problem of unsustainable land use will include a policy mix that provides tangible outcomes in the short term and delivers transformational change over the long term. Short-term results are needed on immediate pressing concerns, such as the harvesting of natural resources above replenishment rates, the illegal dumping of waste, food security and income generation, to send signals that change is possible. If the focus is solely on transformational change and results are slow to appear, some stakeholders could lose interest in the processes. Combinations of policies and measures delivering early gains and transformational change over the long term are therefore needed. For example, to combat land degradation in farming areas through sustainable agriculture practices, relatively quick results might be achieved by strengthening rural extension and credit services for agroecological approaches in areas where farmers are already familiar with the basic elements of the concept (Chapters 2, 3 and 5). At the same time, processes to substantially reform agricultural policy involving multistakeholder dialogues could be introduced. These would require more time than the usual expert-led processes, but could encourage transformational change by increasing accountability and opening discussion on a wide range of interests in land.

Reflecting on the discussion in the preceding chapters, actions that could contribute solutions for sustainable land management are summarised below, including what can be done at local/subnational, national and regional/international levels.

### **Policy integration and coherence for land**

Simple technical fixes and sectoral approaches are unable to address the region's complex land issues. The water-energy-food nexus approach discussed in Chapter 8 highlights the necessity of policy coherence across sectors for the achievement of the SDGs as a whole, and, more specifically, for sustainable land management. For this, integration of all policies that impact land across sectors is needed. Policies that need to be integrated for sustainable land management include policies for natural resources, biodiversity, agriculture, banking and investment, water, energy, industry, infrastructure, urban development, trade and foreign affairs. Central governments can ensure their SDG processes identify, assess and take action on trade-offs and synergies associated with decisions affecting land across these policies. Local governments can use the SDGs as a broad

framework to ensure their visions for sustainability are comprehensive and that their land-use plans are aligned with these visions. Central and local governments can use the reorganisation of SDGs in Chapter 9 to better understand SDG interlinkages relevant to land. International and regional organisations should promote a holistic approach to SDG interpretation and implementation, where environmental targets in SDG 15 and other SDGs are not considered secondary (Chapter 9).

Where environmental trade-offs occur, existing policies should be strengthened or new policies introduced to ensure that biodiversity and ecosystem services are fully mainstreamed across all relevant sectors. For example, national agricultural policies should be reviewed to ensure they promote sustainable agriculture and not just focus on annual crop production targets.

### **Bringing sustainability into governance**

Bringing sustainability into decisions is key to achieving sustainable land management. Governance of matters impacting land has largely been characterised by centralised, state-led decision-making in which directives come from the top down and involve little engagement of stakeholders. This form of governance is mostly unable to respond to highly contextualised situations and has largely been unsuccessful in organising the coordinated management of large ecosystems or landscapes that cut across jurisdictional boundaries (Chaffin, Gosnell, and Cosens 2014). Forms of governance that are able to address landscape-scale issues in a flexible, dynamic and responsive manner are needed (ibid.). “Whole of government” approaches are required for coherence in policy content and implementation (Chapter 8). Efforts to strengthen governance should focus on innovations in decision-making that open space for stakeholder participation, innovations in administration that provide structures for land management at the most effective scales, and the strengthening of linkages between higher and lower levels of government (Chapters 1, 2 and 8). Effective forms of governance are likely to be adaptive, inclusive/collaborative, multilevel and multi-scalar.

**Adaptive governance:** As land-use change is complex and uncertain, governance of issues affecting land should be adaptive. As noted in several chapters, conventional forms of governance are unable to keep abreast of rapidly evolving contexts. Land planners and administrators struggle to cope with the scale, speed and consequences of the land changes taking place. When governance is adaptive, it includes learning mechanisms that accumulate knowledge on the effectiveness of governance structures and processes in an evolving context, and governance is modified as lessons are learned. Adaptive governance monitors and is responsive to the emergence of new environmental threats and opportunities associated with economic development, technological advances and the rise of new stakeholders, stakeholder networks and social practices. This is especially important in fast-growing cities and mixed-used areas susceptible to rapid change, and is also relevant to rural areas exposed to strong land-use change drivers.

**Inclusive and collaborative governance:** Governance that is inclusive and collaborative can be expected to benefit policy design by bringing a wider range of concerns, views and knowledge into processes than conventional state-centered forms of governance. This means higher likelihood of equity in outcomes and of policies matching realities. They may also contribute to implementation, as stakeholders are likely to feel more committed to environmental policies when they have been involved in policy formulation processes. National, city and local governments can innovate with and monitor the performance of inclusive and collaborative forms of governance. International and regional organisations can contribute by supporting and documenting governance innovations, monitoring and assessing outcomes, and sharing experiences across countries.

Collaborative governance includes community-based natural resource management regimes under which communities accept responsibilities for managing natural resources in return for use rights. Such models have been widely adopted in the region, especially for the management and restoration of degraded forest areas, and have contributed to landscape greening, livelihood diversification and the enhancement of ecosystem services. National governments can ensure that community-based natural resource management regimes include processes for the meaningful participation of women and groups with low economic and social status. Lessons can be extracted from existing regimes to apply this collaborative approach to other types of ecosystems and natural resources.

**Multilevel governance:** Asia-Pacific countries have decentralised many key elements of natural resource management, meaning that management of these resources now depends heavily upon effective governance at various levels (Chapters 1, 2 and 4). Multilevel governance of natural resources necessitates vertical coordination of the various levels of decision-making – local, regional and national, as well as metropolitan and district. Decentralisation can be achieved quickly through policy and administrative changes, but effective vertical coordination processes require time to build and necessitate continual monitoring. Coordination mechanisms are also needed to link initiatives on integrated landscape management at local levels, such as villages, towns and cities, with national plans for SDG targets relevant to land. Central governments can create mechanisms to strengthen and monitor vertical coordination, as well as provide technical training and adequate and predictable financial transfers to the lowest tiers of government for sustainable land management. Capacity building and resourcing of local governments for spatial planning and stakeholder engagement are priorities.

**Multi-scalar governance:** Disparity between the scale of governance and landscapes/ecosystems can be avoided through multi-scalar governance. Governance at transboundary scales is important for effective management of the region's major river basins and habitat connectivity. The unbalanced and spontaneous integration of urban and rural areas necessitates governance at regional/territorial scales to provide coordinated planning and management of the urban-rural continuum. Closely interlinked ecosystems demand governance at the landscape scale.

Landscapes/ecosystems are not constrained by jurisdictional boundaries, necessitating governance arrangements that reach over these boundaries. Governance across jurisdictions can be achieved by mechanisms that coordinate existing policies and administrations and/or by establishing new governance structures at effective scales for reconciling economic development and conservation. National governments can start by establishing cross-sectoral steering mechanisms, such as high-level coordination bodies, to facilitate policy coordination for sustainable land management. They can tackle the unbalanced and spontaneous integration of urban and rural areas by introducing regional/territorial planning and establishing governance structures that span urban and rural divides, as well as coordinate district- and provincial-level planning where landscapes and large ecosystems cut across jurisdictional boundaries. Support can be provided for landscape approaches (Chapter 8) by providing access to financing for activities that generate outcomes agreed and prioritised through multi-stakeholder processes for land management. International and regional organisations can encourage and support the transboundary management of river basins, landscapes and ecosystems, drawing on the experiences of existing transboundary management regimes.

## **Local innovations and solutions for sustainable management of rural landscapes**

Landscapes and economy are interdependent. In a sustainable landscape, land contributes to the economy while the economy provides resources for sustainable land management. Sustainable rural landscapes are likely to be areas not only where there is stewardship of biodiversity and ecosystem services, but also where economic productivity is increasing without compromising land quality, and where the economy is diversified and has a strong competitive base.

As threats and opportunities associated with land are highly contextualised, local innovation is important to landscapes and the economies they host. The innovations can be in the type of governance regimes, as described above, and economic activities tied directly or indirectly to land. As a result of decentralisation and economic integration, opportunities for livelihood and business innovation at local levels have increased. Various forms of assistance can be provided to local households and communities to build their capacities to use these opportunities, with a view to them generating a strong interest in sustainable land management. This assistance can include awareness, training and extension on sustainable forms of agriculture and sustainable harvesting of natural resources, financial and technical services for production and value-added processing, and support for marketing of sustainable products (Chapter 3).

The potential to develop new markets tied to sustainable land management can be explored, tapping into the Asia-Pacific's growing middle-class, which includes health-conscious consumers, people searching for new experiences, and people interested in alternative medicines, etc. In socio-ecological production landscapes, local communities can be assisted with developing community enterprises that utilise their local and indigenous knowledge, traditional agricultural products, cultures (in positive ways), and unique landscape points of attraction (Chapter 5). Partnerships between local governments, private sector actors, communities, non-governmental organisations and research institutes can be encouraged to promote sustainable agriculture and locally-based forestry, local businesses that add value to local products including sustainably harvested natural resources, and farmer's markets for sustainable produce. Partnerships will be key to tapping new sources of finance that can support sustainable rural landscapes, such as REDD+ (Chapter 8) and other payment for ecosystem services schemes.

## **Healthy living within sustainable urban landscapes**

As centres of high productivity and innovation, cities can contribute solutions for sustainable land management both within and outside metropolitan boundaries. To increase the quality of urban living and to give urban dwellers daily opportunities to experience nature, city governments can include the protection of urban biodiversity and the creation of green spaces using native plants in their master plans and designs. Cities can consist of compact forms with mixed-use areas, pedestrian-friendly environments and well-developed public transportation infrastructure. These design elements help avoid the low-density sprawl that results from car-dependent development, while also making cities liveable (Chapter 2).

Metropolitan spatial strategies can ensure that sensitive areas, the best agricultural lands and natural assets are protected from urban sprawl. Where formal planning is difficult, city governments can employ action-planning processes, focusing on critical problems and demonstrable benefits. Cities can reduce their material and environmental footprints through waste reduction, recycling, efficient transport infrastructure and services, the use of renewable energy, green building codes and other initiatives that reduce greenhouse gas emissions. Innovative means of food production such as urban and vertical farming (Chapter 3), and initiatives to change food habits towards

healthy and sustainable choices can be considered. National urban policies informed by a vision of sustainable and inclusive cities can guide city development towards these solutions. Regional/international organisations can promote city-to-city cooperation between Asia-Pacific cities sharing similar challenges and trying out various solutions to bring new ideas on sustainability to city governments (Chapter 2).

### **Reforming markets**

Fundamental economic reforms are central to the transformational changes required for sustainable landscapes to become the norm across the Asia-Pacific region. Without fundamental economic reforms, land managers will continue to receive market signals that encourage the unsustainable conversion of natural ecosystems, the overharvesting of natural resources and intensive use of chemicals and irrigation systems that degrade the quality of agricultural land. Sub-regional and global organisations promoting economic integration can provide support for the necessary reforms (IGES 2015). Through the market liberalisation processes they have promoted, land has been exposed to market forces unconstrained by environmental conditionalities. Sub-regional, regional and international organisations can develop management and product standards for sustainability and facilitate their uptake, encourage the development of public and private sector procurement policies, support “green” building, and promote sustainability certification incorporating eco-labelling. Efforts to reduce environmental externalities should target all major commodities with high environmental risks and engage as many countries and companies as possible to ensure their positive actions do not merely result in a shift in the flow of commodities to less responsible buyers and markets (Chapter 2).

### **Regional landscape observatory**

As a “wicked” problem, unsustainable land use can only be resolved through a comprehensive understanding of its drivers. The drivers are complex, existing at various scales and evolving over time, so the study of drivers is neither a simple nor once-off exercise. In an increasingly interconnected world, drivers can spring up from unexpected places and at unexpected moments, such as “land grabbing” in the wake of the 2007/2008 global financial crisis. They also emerge from local cultural, social, economic, institutional and biophysical factors, and their interactions, which can vary widely from one place to another. As land use changes over time, the drivers that impact land also change, and this too needs to be monitored. The urban periphery, peri-urban areas and the growing mixed-use areas (“desakota”) around the region’s megacities are especially vulnerable to rapid use change, the drivers and consequences of which require regular reassessment.

The major landscape transformation types identified in this report could also be further broken down into sub-types. For example, the greening of landscapes could be classified in terms of greening as an outcome of national landscape restoration programmes and greening resulting from woodlots and plantations established to supply timber to markets. There are likely to be other types of transformations that are less obvious in terms of scale but nevertheless significant. Research to further elaborate the types of landscape transformations would help create a more detailed regional picture of the transformations taking place. This would be useful for initiating and informing a regional dialogue on land.

A regional “landscape observatory” is suggested as a science-policy interface to support these processes. The observatory would make an important contribution to sustainable land management by monitoring and analysing landscape transformations in terms of their major features, drivers and

impacts, and extracting lessons from initiatives to strengthen land governance. Drawing on the experiences of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services, it would bring together scientific and indigenous and local knowledge for monitoring and assessing land cover and land-use change. The regional landscape observatory would be a key source of data and analysis for periodic regional environmental assessments as well as for monitoring progress on the SDGs relevant to land.

## 10.6 Conclusion

If current processes impacting land continue, the Asia-Pacific region risks transgressing the boundaries of a “safe operating space”. Certainly, there have been enormous economic gains associated with landscape transformation, but over 2.5 billion hectares of the region’s land is now degraded, most of its rivers are heavily polluted, biodiversity is being lost at a rate comparable to that of the mass extinctions in Earth’s history, ecosystems are losing resilience, which is exposing Earth systems to the risk of functional collapse, and land use and land-use change are driving global climate change. Growth in the region is undermining itself. Without transformational changes in economic production systems, consumption patterns and values, the region will continue heading towards a future of greater risk and uncertainty for human security.

While the task is immense, positive experiences and developments in the region provide reason for hope. Governments have introduced and strengthened regulatory controls and incentives for improved environmental performance, planning processes are increasingly addressing environmental issues, decentralisation and economic reforms have opened spaces for economic innovation, and the Asia-Pacific region has a rapidly growing middle-class able to pay more attention to environmental issues.

This report has highlighted some of the policies and measures that can make sustainable landscapes a regional norm. It argues that a vision of sustainable landscapes can guide policymaking and administration from regional to local levels towards more effective cross-boundary management of interdependent ecosystems. Policy priorities include mainstreaming biodiversity and ecosystem services into policy at all levels, bringing sustainability into governance, promoting landscape approaches within regional planning frameworks that span urban and rural divides, promoting local innovations and solutions for sustainable rural and urban landscapes, and market reform. Achievement of these priorities would be facilitated by a regional “landscape observatory” that serves as a science-policy interface for monitoring and analysing land-use change as well as for extracting and sharing lessons from initiatives to strengthen land governance.

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