



**Asia-Pacific Countries  
with Special Needs  
Development Report 2015**  
Building Productive Capacities to  
Overcome Structural Challenges



UNITED NATIONS  
**ESCAP**

Economic and Social Commission for Asia and the Pacific

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# **ASIA-PACIFIC COUNTRIES WITH SPECIAL NEEDS DEVELOPMENT REPORT 2015**

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Building Productive Capacities to Overcome Structural Challenges

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# FOREWORD



The *Asia-Pacific Countries with Special Needs Development Report 2015* was prepared by the United Nations Economic and Social Commission for Asia and the Pacific (ESCAP) to inform policymakers about the development challenges and prospects of the region's 36 least developed countries (LDCs), landlocked developing countries (LLDCs) and small island developing States (SIDS).

The report is a contribution to the deliberations of the seventy-first session of the Commission, highlighting critical areas that should be assigned priority in Asia-Pacific countries with special needs (CSN), and offering concrete suggestions to accelerate progress towards the achievement of development goals and national aspirations.

Despite their diversity, the Asia-Pacific CSN share a number of common challenges that differentiate them from other developing countries of the region. Geographic remoteness, high trade costs and reliance on only a few commodities and low-value-added goods, are some of the key features that have hindered structural transformation of these economies, impeding both job creation and the increase in productive capacities.

Notable efforts have been made in many Asia-Pacific CSN to overcome these challenges, and to achieve the goals agreed in the respective global programmes of action. LDCs want to graduate, LLDCs are working to land-link their economies for rapid growth and development, while the SIDS aspire to establish sustainable blue ocean economies. ESCAP's research aims to track their progress towards these goals, helping our member States to better identify bottlenecks and priority areas for action.

This inaugural edition of the report focuses on productive capacities and economic diversification, which play a critical role in the growth performance, structural transformation and job creation of Asia-Pacific CSN. In addition to reducing economic vulnerability, diversification is also associated with higher gross domestic product, faster structural transformation and reduced competition in global markets. Countries can pursue alternative, sometimes competing, pathways to diversification. The results of this research show that Asia-Pacific CSN must reflect carefully when choosing their paths to diversification, with much still largely dependent on their country circumstances.

ESCAP is committed to providing evidence-based and practical policy recommendations, which is why potential new sectors, products and markets for successful diversification are identified in each of the 36 Asia-Pacific CSN. Such targeted analysis is the result of cutting-edge, in-house research, using large sets of empirical data combined with macroeconomic modelling simulations. It is targeted to support our Asia-Pacific LDCs, LLDCs and SIDS in building productive capacities and promoting economic diversification.

The list of potential new sectors for diversification is further complemented by the identification of specific increased export opportunities for each Asia-Pacific CSN. This should serve as a public good and will ideally encourage private sector investment in such new activities, as well as the strategic promotion of these new sectors by their respective Governments.

The fresh data, new perspectives, approaches and policy guidance presented in this report will be a significant contribution to the policy deliberations at the seventy-first session of the Commission, and will help to inform policymaking across the Asia-Pacific CSN and throughout the region.

A handwritten signature in black ink, appearing to read 'S Akhtar', with a long horizontal stroke underneath.

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

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# EXECUTIVE SUMMARY

## ***Asia-Pacific Countries with Special Needs Development Report 2015***

The dynamism and rapid economic growth of the Asian and Pacific region masks the fact that 36 of the 58 economies located within the region are considered as *countries with special needs* (CSN), which includes least developed countries, landlocked developing countries and small island developing States.

These countries and economies are characterized by persistent structural challenges and volatile economic growth that has limited the generation of productive employment and the reduction of poverty. Most of these countries and economies are also highly vulnerable to external economic shocks, volatile commodity prices, climate change consequences and natural disasters, making sustainable development a far greater challenge.

Over the years, international action programmes specifically tuned to the needs of these three sets of countries have come into being. The most recent of them are: (a) the Programme of Action for the Least Developed Countries for the Decade 2011-2020 (informally called the Istanbul Programme of Action); (b) the Vienna Programme of Action for Landlocked Developing Countries for the Decade 2014-2024; and (c) the Small Island Developing States Accelerated Modalities of Action (informally called the Samoa Pathway).

Implementing these programmes effectively in line with these priorities requires a good understanding of the characteristics of CSN. This report, the first in a series, is an attempt to fill the knowledge gaps with regard to Asia-Pacific CSN by: (a) providing a timely and comprehensive review and analysis of the status, challenges and prospects of each of these groups of countries and economies; (b) tracking progress towards their agreed goals and aspirations; and (c) presenting targeted policy options to accelerate progress.

In that connection, this report contains highlights of important areas that should be addressed as key priorities for CSN:

- (a) First, economic diversification is key to reducing economic vulnerabilities, creating jobs and promoting structural transformation;
- (b) Second, it has to be recognized that, with small domestic markets, external trade will continue to play a key role in the sustainable and inclusive development of CSN;
- (c) Third, official development assistance (ODA) and other external resources including foreign direct investment (FDI) are critical for Asia-Pacific CSN, both as a source of technology and know-how as well as of source of finance, given that domestic financial markets, in particular capital markets, remain underdeveloped in CSN;
- (d) Fourth, collectively there is need for stepping up regional as well as global partnerships including South-South cooperation to support CSN development and for bringing fresh impetus for advancing implementation of the international action programmes for CSN.

## ***Characteristics and development challenges***

CSN comprise a heterogeneous group of countries and economies in terms of economic size and stage of socioeconomic development, but they face several common challenges to their socioeconomic development. Geographic remoteness that has imposed high trade costs and kept these countries and economies isolated from global markets; lack of adequate transport, communication and energy infrastructure; poor-quality human capital; inefficient labour markets; low productive capacities; concentration on a narrow set of commodities/sectors; and persistent poverty and inequality are some of the more critical structural rigidities that hamper long-run growth and sustainable poverty reduction. These challenges have limited the structural transformation of their economy and kept the productive capacities low and preventing them from generating enough productive jobs.

Large population share in CSN among the economically active age groups can potentially produce a demographic dividend that can help in the socioeconomic development of these countries and economies. This requires policy measures that stress the creation of decent employment opportunities, especially for youth.

Most Asia-Pacific CSN are highly open economies and consequently their economic performance is linked to the performance of the global economy. However, their economic links are more common with countries in Europe and the United States of America, and relatively less with the faster-growing countries in the Asia-Pacific region. Consequently, Asia-Pacific CSN are not well placed to benefit from the growth recovery happening in many Asian economies.

The excessive dependence on a few commodities also exposes many of the Asia-Pacific CSN to volatility in the global commodity markets. The way ahead for these countries and economies is to diversify their economies in terms of products and export markets. For this, they will have to augment their productive capacities in other sectors and reorient their export markets to link up with the fast-growing countries in the Asia-Pacific region.

### ***Pathways to sustainable development***

Asia-Pacific countries with special needs are committed to overcoming poverty and underdevelopment and have made some notable progress in overcoming their structural impediments as they move towards achieving sustainable development.

### **Least developed countries**

Of the 12 Asia-Pacific LDCs, Bhutan, Nepal, Kiribati, Solomon Islands, Timor-Leste, Tuvalu and Vanuatu appear to have met the criteria for graduation from least developed country status as of 2013. This suggests that the region has already satisfied the Istanbul Programme of Action's goal of halving the number of LDCs. In addition, other countries, such as Bangladesh, Cambodia and the Lao People's Democratic Republic, are judged to have a good chance of meeting the graduation criteria by 2018.

The greatest challenges for the LDCs, particularly those that are also SIDS, is reducing their economic vulnerability, as none of the small island developing States LDCs meet the economic vulnerability index criteria for graduation.

### **Landlocked developing countries**

Asian LLDCs have performed relatively well over the past decade, but physical infrastructure development is still inadequate and poses a major obstacle for them to reach their full trade potential. In particular, new investment is needed to improve transport infrastructure and logistics services, especially along international intermodal transport corridors serving LLDCs.

Export diversification is generally uncommon among the Asian LLDCs. Rents obtained from exporting primary commodities could be effectively utilized to fund necessary investments in infrastructure, social development and research and development, and promote economic diversification.

### **Small island developing States**

Under the Samoa Pathway, a comprehensive set of actions has been proposed to support the sustainable development of the SIDS, covering a large number of areas. Owing to the unavailability of time series data on most of these areas, the selected indicators to track progress in the Asia-Pacific SIDS offer only a partial view of these economies' pathways to sustainable development.

Some success stories include the low percentage of out-of-pocket health expenditures in total health expenditures, broadband Internet connectivity in Maldives, Palau and Tuvalu, and renewable energy in Fiji, Papua New Guinea and Samoa.



## **Building productive capacities of Asia-Pacific countries with special needs: the role of economic diversification**

The productive capacity of Asia-Pacific CSN is low. They contribute less than 0.4% to global manufacturing production, 1.1% to merchandise exports, 0.5% to manufactured exports and 0.25% to high-technology exports.

Building productive capacities is critical for countries with special needs in Asia and the Pacific to: (a) overcome their structural challenges to benefit from greater integration into the regional and global economies; (b) increase their resilience to shocks; (c) sustain inclusive and sustainable growth, as well as poverty eradication; (d) achieve structural transformation; and (e) generate full and productive employment for all.

In principle, countries could increase their productive capacities by simply producing more of the same products and services, but implicit in the goal of increasing productive capacities is the idea of moving up on the technological ladder of production and to be able to produce different, more sophisticated goods and services.

Many CSN depend on primary commodities, the prices of which had been high in global markets in the past decade; thus, they favoured specialization in a few commodities. Historically, high commodity prices have driven increases in terms of trade, which tend to overappreciate the real exchange rate based on the costs of market goods. The results of ESCAP macroeconomic modelling show how diversification is reduced steadily to half of its potential, with single-digit appreciation of the exchange rate.

Beyond the standard conditions that call for diversification is compelling empirical evidence showing that the more diversified is an economy, the higher will be its GDP and the lower will be the competition its products face in global markets.

Strategies, policies and programmes that have shaped the productive transformation in selected countries show the fundamentally active role of the State in facilitating the movement of the economy from a lower to a higher level of development. This also stresses the central role of the market in resource allocation and the need for the State to play a facilitating role to assist firms in the process of industrial upgrading by addressing externalities and coordination issues.

Medium- to long-term changes in the global and regional economic landscape create challenges and opportunities for the economic diversification of CSN. The question for policymakers in CSN is how to foster the emergence of new and diversified economic activities. In the report, estimates of export opportunities are used to identify potential new sectors and markets with demand levels that could increase the chances for success in diversification. The map of products of CSN suggests sets of potential new products for encouraging economic diversification.

Some general recommendations to build productive capacities and foster diversification are as follows:

### **(a) Stable investment-friendly and competitive macroeconomic policy framework**

Exchange rates are key in promoting the emergence of new economic sectors. The main set of policies here would be aimed at maintaining a competitive exchange rate and neutralizing tendencies towards appreciation. Other monetary policies also support an increase in productive investments in new sectors. Macroeconomic stability, including moderate and stable inflation, and sustainable domestic and external imbalances also create an environment conducive to private sector investment in diversifying the economy.

### **(b) Industrial, trade and investment policies**

Creating strategic diversification requires the selective promotion of particular economic activities over others. Here, new economic activities should be promoted that would encourage greater levels of product complexity and allow for further diversification in the future. Active public intervention that is aimed at supporting infant industries and creating the necessary complementary productive infrastructure, including

industrial estates and economic zones is required. Intervention would also be aimed at encouraging marketing and export market development, expanding participation in regional and global value chains, attracting foreign investment while ensuring meaningful linkages and spillovers into the local economy, together with other promotional measures under industrial, trade and investment policies.

(c) Domestic resource mobilization

A third imperative for CSN is to provide access to a variety of financial services and products that support private investment in new economic activities. A diversified, well-regulated and inclusive financial system should promote savings and channel them into productive investments. On the revenue side, it is necessary for policies to be focused on broadening the tax base and introducing direct taxes.

(d) Global partnership to support CSN development

Collectively, there is a need for stepping up global partnerships to support CSN development and for bringing about a fresh impetus for advancing implementation of the international action programmes for CSN.

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# EXPLANATORY NOTES

Analyses in the *Asia-Pacific Countries with Special Needs Development Report 2015* are based on data and information available up to the end of March 2015.

Groupings of countries and territories/areas referred to in the present issue of the Report are defined as follows:

- Countries with special needs: least developed countries, landlocked developing countries and small island developing states.
- ESCAP region: Afghanistan; American Samoa; Armenia; Australia; Azerbaijan; Bangladesh; Bhutan; Brunei Darussalam; Cambodia; China; Cook Islands; Democratic People's Republic of Korea; Fiji; French Polynesia; Georgia; Guam; Hong Kong, China; India; Indonesia; Iran (Islamic Republic of); Japan; Kazakhstan; Kiribati; Kyrgyzstan; Lao People's Democratic Republic; Macao, China; Malaysia; Maldives; Marshall Islands; Micronesia (Federated States of); Mongolia; Myanmar; Nauru; Nepal; New Caledonia; New Zealand; Niue; Northern Mariana Islands; Pakistan; Palau; Papua New Guinea; Philippines; Republic of Korea; Russian Federation; Samoa; Singapore; Solomon Islands; Sri Lanka; Tajikistan; Thailand; Timor-Leste; Tonga; Turkey; Turkmenistan; Tuvalu; Uzbekistan; Vanuatu; and Viet Nam.
- Developing ESCAP region: ESCAP region excluding Australia, Japan, New Zealand and North and Central Asian economies
- Developed ESCAP region: Australia, Japan and New Zealand
- Least developed countries: Afghanistan, Bangladesh, Bhutan, Cambodia, Kiribati, Lao People's Democratic Republic, Myanmar, Nepal, Solomon Islands, Timor-Leste, Tuvalu and Vanuatu. Samoa was part of the least developed countries prior to its graduation in 2014.
- Landlocked developing countries: Afghanistan, Armenia, Azerbaijan, Bhutan, Kazakhstan, Kyrgyzstan, Lao People's Democratic Republic, Mongolia, Nepal, Tajikistan, Turkmenistan and Uzbekistan
- East and North-East Asia: China; Democratic People's Republic of Korea; Hong Kong, China; Japan; Macao, China; Mongolia and the Republic of Korea
- North and Central Asia: Armenia, Azerbaijan, Georgia, Kazakhstan, Kyrgyzstan, Russian Federation, Tajikistan, Turkmenistan and Uzbekistan
- Pacific: American Samoa, Australia, Cook Islands, Fiji, French Polynesia, Guam, Kiribati, Marshall Islands, Micronesia (Federated States of), Nauru, New Caledonia, New Zealand, Niue, Northern Marina Islands, Palau, Papua New Guinea, Samoa, Solomon Islands, Tonga, Tuvalu and Vanuatu
- Pacific island developing economies: Pacific excluding Australia and New Zealand
- Small island developing States: American Samoa, Cook Islands, Fiji, French Polynesia, Guam, Kiribati, Maldives, Marshall Islands, Micronesia (Federated States of), Nauru, New Caledonia, Niue, Northern Marina Islands, Palau, Papua New Guinea, Samoa, Solomon Islands, Timor-Leste, Tonga, Tuvalu and Vanuatu
- South and South-West Asia: Afghanistan, Bangladesh, Bhutan, India, Islamic Republic of Iran, Maldives, Nepal, Pakistan, Sri Lanka and Turkey
- South-East Asia: Brunei Darussalam, Cambodia, Indonesia, Lao People's Democratic Republic, Malaysia, Myanmar, Philippines, Singapore, Thailand, Timor-Leste and Viet Nam.

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Many figures used in the *Report* are on a fiscal year basis and are assigned to the calendar year which covers the major part or second half of the fiscal year.

Growth rates are on an annual basis, except where indicated otherwise.

Reference to “tons” indicates metric tons.

References to dollars (\$) are to United States dollars, unless otherwise stated.

The term “billion” signifies a thousand million. The term “trillion” signifies a million million.

In the tables, two dots (..) indicate that data are not available or are not separately reported; a dash (–) indicates that the amount is nil or negligible; and a blank indicates that the item is not applicable.

In dates, a hyphen (-) is used to signify the full period involved, including the beginning and end years, and a stroke (/) indicates a crop year, fiscal year or plan year.

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# ABBREVIATIONS

ADB	Asian Development Bank
CSN	countries with special needs
ECAFE	United Nations, Economic Commission for Asia and the Far East
ECOSOC	United Nations Economic and Social Council
EEZ	exclusive economic zones
EPZs	export processing zones
ESCAP	United Nations, Economic and Social Commission for Asia and the Pacific
FAO	Food and Agriculture Organization of the United Nations
FDI	foreign direct investment
GDP	gross domestic product
GFI	Global Food Security Index
GHI	Global Hunger Index
GNI	gross national income
GNIpc	gross national income per capita
HS	Harmonized System
ICT	information and communications technology
LDCs	least developed countries
LLDCs	landlocked developing countries
ODA	official development assistance
OECD	Organisation for Economic Co-operation and Development
PPP	purchasing power parity
RTAs	regional trade agreements
SIDS	small island developing States
SMEs	small and medium-sized enterprises
TPES	total primary energy supply
UN COMTRADE	United Nations Commodity Trade Statistics Database
UNCTAD	United Nations Conference on Trade and Development
UN-DESA	United Nations, Department of Economic and Social Affairs
UNDP	United Nations Development Programme
UNEP	United Nations Environment Programme
UN-HABITAT	United Nations Human Settlements Programme
UN-OHRLLS	United Nations, Office of the High Representative for the Least Developed Countries, Landlocked Developing Countries and Small Island Developing States
WDI	World Development Indicators
\$	United States dollars, unless otherwise noted









# INTRODUCTION

## CLOSING KNOWLEDGE GAPS REGARDING ASIA-PACIFIC COUNTRIES WITH SPECIAL NEEDS

The Asia-Pacific region conjures a picture of dynamic fast-growing countries, but that picture masks the fact that 36 of the 58 economies in the region are considered as countries with special needs. This group includes least developed countries, landlocked developing countries and small island developing States and economies (figure 1).

The Asia-Pacific countries with special needs are home to more than 380 million people, that is, a quarter of the population in Asia-Pacific developing countries excluding China and India, but they account for only 7.5% of the GDP of that group. None of the Asia-Pacific CSN is ranked among the top 50 countries in the world in terms of the human development index, and their progress towards achieving the Millennium Development Goals is lagging. High rates of infant, child and maternal mortality, inadequate provision/access to sanitation, and failure to achieve universal primary education are some of the areas of concern (ESCAP, ADB and UNDP, 2013).

The economies of the Asia-Pacific CSN are characterized by persistent structural challenges and volatile

economic growth that has had a limited impact on the generation of productive employment and enduring poverty reduction. Their exports are concentrated in a narrow set of commodities/low-wage manufactured products, which makes them vulnerable to changes in the global economy. Socioeconomic development remains constrained by many factors, such as limited structural transformation of the economy, low productive capacities, and geographic remoteness coupled with insufficient investment in connectivity infrastructure; these aspects have imposed high trade costs and kept these economies relatively isolated from global markets. Added to this situation, many of these economies are also vulnerable to natural disasters, making economic growth, poverty reduction and social development a far greater challenge (ESCAP, 2011; 2013).

The Asia-Pacific LDCs, for example, lag behind developing countries in the region on a number of socioeconomic indicators. Only 28% of their populations live in cities, in comparison to 45% of ESCAP developing countries. The under-5 mortality rate (53%) is 36% higher than in ESCAP developing economies (39%) and the share of their population

living in poverty (38.8%) is twice that of their developing counterparts (18.9%).<sup>1</sup> GDP growth over a 10-year period has been similar for least developed and developing countries in the region, but GDP per capita of the former (\$1,628) is just a little more than a quarter that of the latter (\$6,152).

Similarly, LLDCs in the Asia-Pacific region have witnessed significant fluctuations in economic growth and export performance in recent years emanating mainly from the recent global financial crisis and the knock-on effects of sluggish growth in advanced countries. Despite notable progress, though uneven, Asian LLDCs continue to face difficulties in linking to global trade, thus preventing them from reaping the benefits of globalization and rising intraregional trade and foreign direct investment flows. In addition, the trade structure of most Asian LLDCs is characterized by export baskets that are highly dominated by primary commodities. Asian LLDCs have become more exposed to commodity-related risks compared with a decade ago, making their economies more vulnerable to declines in commodity prices in the global market (ESCAP, 2012). Their import baskets, on the other hand, are dominated by manufactured goods, indicating the need for creating a diversified manufacturing base in most of these countries.<sup>2</sup>

The Asia-Pacific small island developing States present a special case in sustainable development, given the challenges they face in pursuing development and reducing poverty, including their small size, remoteness from major markets and population centres, limited resource and export base, and exposure to global environmental challenges and external economic shocks. With their very small populations, they

face special limitations in terms of the number and type of economic activities that are economically viable in these countries. That is reflected in the few opportunities and productive jobs available in these countries.

Asia-Pacific SIDS are also particularly vulnerable to natural disasters and face a large range of impacts from climate change. For instance, the entire land area of Maldives and Tuvalu is less than 5 metres above sea level, which makes them particularly vulnerable to changes in sea level (OHRLLS, 2013).

### INTERNATIONAL PROGRAMMES OF ACTION

The Millennium Declaration specifically mentions the special needs of the LDCs, LLDCs and SIDS. For the LDCs, focus was given to market access, debt relief and development assistance, while for the LLDCs and SIDS, the thrust was on improving connectivity to overcome the constraints of geography, for which a call was made for increased financial and technical assistance. Over the years, international action programmes specifically tuned to the needs of these three sets of countries have come into place:

- The Istanbul Programme of Action for the Least Developed Countries, which was adopted in 2011, gave thrust to building productive capacities in the LDCs and achieving graduation from that status through structural transformation. Further, the Programme also stressed reducing the vulnerabilities of these countries to various shocks, such as the food, fuel and financial crises that have affected all countries in the world since the late-2000s, as well as climate change-related risks.

**Figure 1. Countries with special needs in Asia-Pacific**

	12 landlocked developing countries	21 countries and economies that are small islands developing States	
12 least developed countries	Afghanistan, Bhutan, Lao People’s Democratic Republic, Nepal	Kiribati, Solomon Islands, Timor-Leste, Tuvalu, Vanuatu	Bangladesh, Cambodia, Myanmar
	Armenia, Azerbaijan, Kazakhstan, Kyrgyzstan, Mongolia, Tajikistan, Turkmenistan, Uzbekistan	American Samoa, Cook Islands, Fiji, French Polynesia, Guam, Maldives, Marshall Islands, Micronesia (Federated States of ), Nauru, New Caledonia, Niue, Northern Mariana Islands, Palau, Papua New Guinea, Samoa, Tonga	

Source: ESCAP

- The Almaty Programme of Action: Addressing the Special Needs of Landlocked Developing Countries within a New Global Framework for Transit Transport Cooperation for Landlocked and Transit Developing Countries and subsequently the aforementioned Vienna Programme of Action were broadly to accelerate international cooperation for providing the LLDCs with greater connectivity in transport, communications and energy. Towards this goal, five priorities were established in the Almaty Programme of Action, namely fundamental transit policy issues, infrastructure development and maintenance, international trade and trade facilitation, international support measures, and implementation and review mechanisms. Reinforcing these priorities and expanding on them, the Vienna Programme of Action advocates regional integration and cooperation and structural economic transformation.

- At the United Nations Conference on Environment and Development (also known as the Earth Summit) held in Rio de Janeiro, Brazil, in 1992, the small island developing States were recognized as a distinct group of developing countries and economies facing specific social, economic and environmental vulnerabilities. The Programme of Action for the Sustainable Development of Small Island Developing States (informally called the Barbados Programme of Action) of 1994 provided a framework for international cooperation for assisting the small island developing States in their efforts towards achieving sustainable development. Later, the Mauritius Strategy for the Further Implementation of the Programme of Action for the Sustainable Development of Small Island Developing States of 1999 and the Samoa Pathway of 2014 have carried this agenda forward with suitable changes to meet current challenges. The Samoa Pathway laid down a clear set of priorities for six broad sets of issues of concern to the SIDS: (a) sustainable economic development; (b) climate change and disaster risk management; (c) social development; (d) sustainable energy; (e) oceans, seas and biodiversity; and (f) water and sanitation, food security and waste management.

## RATIONALE AND STRUCTURE

Implementing these programmes effectively in line with these priorities requires good understanding of the characteristics of the Asia-Pacific CSN, the nature of the challenges and vulnerabilities that they face, and the deficiencies and special needs that the international community can address.

The present report is an attempt to fill knowledge gaps with regard to Asia-Pacific CSN. In that connection, the analysis presented is aimed at showing:

- (a) Where these countries and economies stand – their current social and economic status;
- (b) How fast they are progressing towards their agreed goals and aspirations;
- (c) What are the policy options to accelerate their progress.

The first chapter provides an overview of the characteristics and development challenges of the Asia-Pacific CSN. Starting with the geographic specificity of most of the Asia-Pacific CSN, the chapter contains a discussion of the economic characteristics and the social and human development status of these countries and economies.

The second chapter offers economic analysis covering the macroeconomic performance of Asia-Pacific CSN in recent years; the short- and medium-term growth prospects; the structure of the domestic economy in terms of various production sectors, employment shares and final demands (private consumption, government, investment and the external sector); and the structure of the external sector of these countries (trade flows, evolution of trade deficits, exchange rate regime, capital account etc.). The objective is to present a broad view of the current situation of the Asia-Pacific CSN.

The third chapter is focused on tracking the progress of the Asia-Pacific CSN towards their agreed goals and aspirations. The LDCs want to reduce vulnerabilities, increase productive capacities and address new development challenges, including the effects of climate change, and ultimately meet the criteria for graduation from least developed country status. The LLDCs want to promote more effective integration into the global economy through improved transit policies, infrastructure development and trade facilitation, as well as promotion of inclusive economic growth to transform themselves from being landlocked to “land-linked” countries. The SIDS aspire to achieve development, with emphasis on such areas as climate change, sustainable energy, disaster risk reduction, and oceans and seas.

The fourth chapter is focused on a key development priority that is common to all Asia-Pacific CSN, which would accelerate their progress towards their goals and aspirations. The topics of productive capacities and economic diversification, which play an important role in the growth performance, structural transformation and job creation in these countries, are addressed in this first issue of the report.

## ANALYTICAL FRAMEWORK

The analytical framework of the report is based on the structural school of economics, with elements of both old (Kuznets, 1979) and new (Lin, 2012) theoretical approaches, and on the tradition of ESCAP in considering economic development as a process of structural transformation with the shift of output and the distribution of employment from low- to high-value-added economic activities. That approach was reflected in early topics considered in the *Economic Survey of Asia and the Far East*, which were focused on post-war industrialization (*Survey for 1958*), the need to promote export diversification to strengthen productive capacities and promote structural change (*Survey for 1963*) and the interlinkages between agriculture and industry and the importance of an integrated strategy of development (*Surveys for 1964 and 1975*). The focus on structural transformation is even more evident in the *Economic and Social Survey of Asia and the Pacific for 1989*, which had as its theme the patterns of economic growth and structural transformation in the least developed countries and Pacific island countries and economies of the ESCAP region. In the discussion of the challenges faced by the least developed countries and Pacific island countries and economies, it was stated that “[i]n many respects, these economies face special impediments to the achievement of changes in the structure of their economies, such as in the composition of production or foreign trade, that are essential if the goal of sustainable economic growth and structural transformation is to be achieved”. Many of those impediments continue to be faced by the Asia-Pacific CSN today.

Aligned with the economic history literature that is focused on economic “catch up” (Johnson, 1982; Amsden, 1989; Wade, 1990), ESCAP has always recognized that growth and structural transformation are the result of the private sector acting within markets; however, it has also emphasized the critical role played by the Government in providing the institutional framework and support for structural change. That developmental role of the State is even more important for CSN in the context of globalization, which requires national development strategies to harness the growth in the few sectors where these countries have comparative advantage and to promote economic diversification and the dynamic creation of new sources of growth and employment in a highly unequal and globalized global economy, dominated by large multinational companies and characterized by fragmented global value chains.

The approach followed by the present report takes into consideration that structural transformation implies economic, social and environmental transformation, and such broad-based transformation is at the centre of the sustainable development agenda. Sustainable development implies exploiting mutually reinforcing synergies that ensure economic growth is aligned and integrated with structural change, a healthy ecological and social balance. The proposed sustainable development goals include the unfinished agenda of the Millennium Development Goals and a new set of goals related to energy, industrialization, infrastructure development, sustainable consumption and production, management of natural resources, and climate change. The transformation that is at the core of that agenda is what is required for Asia-Pacific CSN to overcome their structural challenges.

## THE WAY FORWARD: KEY PRIORITIES FOR ASIA-PACIFIC COUNTRIES WITH SPECIAL NEEDS

To promote growth and structural transformation in CSN, it is necessary to address both supply and demand-side constraints, as well as financial bottlenecks. In that connection, the present report highlights important areas that should be addressed as key priorities for CSN:

- (a) First, economic diversification is key to reducing economic vulnerabilities, creating jobs and promoting structural transformation. CSN policies need to promote competitiveness and diversification with supportive incentive frameworks, which, among other things, increase productive capacities, raise labour skills and facilitate countries' move up the technological and value chain;
- (b) Second, it has to be recognized that, with small domestic markets, external trade will continue to play a key role in the sustainable and inclusive development of CSN. In addition to improving supply capacities, this calls for cost-efficient integration with global value chain production structures;
- (c) Third, official development assistance (ODA) and other external resources including foreign direct investment are critical for Asia-Pacific CSN, both as a source of technology and know-how and as a source of finance, given that domestic financial markets in particular capital markets remain underdeveloped. Economic and political stability and an enabling policy and business environment are prerequisites for FDI flows;

(d) Fourth, collectively there is a need for stepping up global partnerships including south-south cooperation to support CSN development and for bringing a fresh impetus for advancing implementation of the international action programmes for CSN.

Asia-Pacific CSN need to promote structural transformation based on inclusive and sustainable development to enable their people – across generations – to participate and benefit from economic growth. These countries should not only increase their growth potential but also ensure that it is diversified and creates productive jobs, while addressing social and basic infrastructure service deficits and promoting ecological balance. The present report is an attempt to support Asia-Pacific CSN in their path towards sustainable development.

### Endnote

<sup>1</sup> ESCAP online database. Available from [www.unescap.org/stat/data/](http://www.unescap.org/stat/data/).

<sup>2</sup> Ibid.







# CHAPTER

# 1

## ASIA-PACIFIC COUNTRIES WITH SPECIAL NEEDS

CSN comprise a heterogeneous group of countries and economies in terms of economic size and stage of socioeconomic development. Yet they share similar structural constraints that make their development prospects more challenging when compared with the other developing countries of the region.

The group of Asia-Pacific CSN comprises less populous economies, such as Niue (population 1,000), Nauru and Tuvalu (10,000 each), and those with larger populations, such as Afghanistan (31 million), Bangladesh (158 million), Myanmar (53 million), Nepal (28 million) and Uzbekistan (29 million) (see table 1.1). Most of the least developed countries have lower income per capita – below \$3,000 in PPP terms – while Armenia (\$7,527), Azerbaijan (\$16,594), Kazakhstan (\$22,467), Maldives (\$11,283) and Palau (\$14,612) have higher incomes.

In the majority of Asia-Pacific CSN, more than half the population live in rural areas, varying from 62% in Bhutan and the Lao People's Democratic Republic to 74% in Afghanistan. The expectation of life at birth varies from 61 years in Afghanistan to 79 years in Guam. Health and education indicators are more heterogeneous, as indicated by the adult literacy rate, which varies from 57.4% in Nepal to more than 99% of the population aged 15 and older in the majority of the LLDCs, and the under-5 mortality rate measured

by the number of deaths of such children per 1,000 live births, which varies from 97 in Afghanistan to 10 in Maldives.

Despite those differences, Asia-Pacific CSN share common developmental challenges. All but three of these countries are LLDCs or SIDS, facing remoteness and isolation from international markets. They also have low productive capacities and are concentrated on a narrow set of commodities and sectors, with a large share of their populations engaged in low-productive work, which causes persistent poverty and inequality. This chapter provides a snapshot of the various structural and long-term development challenges faced by CSN, and brings out their “special needs” by highlighting their differences from other developing countries in Asia and the Pacific and the unique challenges that they face.

### GEOGRAPHY

Geography is an important factor affecting the socioeconomic development of Asia-Pacific CSN as it is evident from the fact that 12 of them are landlocked and 21 are small island States and territories. Being geographically remote makes connectivity with the rest of the world – transport and communications – a very important impediment to socioeconomic progress. Not surprisingly, trade costs are higher for many of these economies (figure 1.1).

Table 1.1 Most recent demographic and socioeconomic indicators, Asia-Pacific countries with special needs

Country/area	Total population (1 000s)	Urban population (% of total)	Life expectancy at birth (years)	Adult literacy rate (% of population aged 15 and above)	Under-5 mortality rate (deaths per 1 000 live births)	GDP per capita (constant PPP 2011 \$)	GDP (constant \$ 2005) growth (average % change per annum 2004-2013)	Poverty headcount ratio at \$1.25 a day (PPP) (% of population)	Poverty headcount ratio at national poverty lines (PPP) (% of population)
<b>Least developed countries</b>									
Afghanistan	31 281	26.3	61.3	31.7 (2011)	97.3	1 883.8	8.7	43.3 (2010)	35.8 (2011)
Bangladesh	158 513	33.5	71	58.8 (2012)	41.1	2 853.4	6.2	2.4 (2012)	31.5 (2010)
Bhutan	766	37.9	68.7	52.8 (2005)	36.2	7 167.2	7.6	10.1 (2011)	12.0 (2012)
Cambodia	15 408	20.5	72.3	73.9 (2009)	37.9	2 943.5	7.9	..	17.7 (2012)
Kiribati	104	44.2	69.2	..	58.2	1 796.3	1.6	..	..
Lao People's Democratic Republic	6 894	37.6	68.7	72.7 (2005)	71.4	4 667.3	7.8	30.3 (2012)	23.2 (2012)
Myanmar	53 719	33.6	65.3	92.6 (2012)	50.5	..	13.6	..	..
Nepal	28 121	18.2	68.8	57.4 (2011)	39.7	2 172.8	4.2	23.7 (2010)	25.2 (2010)
Solomon Islands	573	21.8	67.9	..	30.1	2 002.6	5.3	..	..
Timor-Leste	1 152	32.1	68	58.3 (2010)	54.6	..	7.9	34.9 (2007)	49.9 (2007)
Tuvalu	10	60.0	..	..	29.2	3 528.2	1.4	..	..
Vanuatu	258	26.0	71.9	83.4 (2012)	16.9	2 895.0	3.9	..	..
<b>Landlocked developing countries</b>									
Armenia	2 984	62.8	74.7	99.6 (2012)	15.6	7 526.8	6.2	1.8 (2012)	32.0 (2013)
Azerbaijan	9 515	54.4	70.8	99.8 (2012)	34.2	16 593.5	12.9	0.3 (2008)	5.3 (2013)
Kazakhstan	16 607	53.3	66.7	99.7 (2009)	16.3	22 466.7	6.9	0.1 (2010)	2.9 (2013)
Kyrgyzstan	5 625	35.6	67.7	99.2 (2009)	24.2	3 109.9	4.6	5.1 (2011)	38.0 (2012)
Mongolia	2 881	71.2	67.7	98.3 (2010)	31.8	9 132.3	9.2	..	27.4 (2012)
Tajikistan	8 409	26.7	67.4	99.7 (2012)	47.7	2 431.7	7.2	6.5 (2009)	47.2 (2009)
Turkmenistan	5 307	49.7	65.6	99.6 (2012)	55.2	13 554.9	10.6	..	..
Uzbekistan	29 325	36.3	68.4	99.5 (2012)	42.5	5 002.5	8.2	..	..
<b>Small island developing States</b>									
American Samoa	55	87.3	..	..	..	..	..	..	..
Cook Islands	21	71.4	..	..	..	..	..	..	..
Fiji	887	53.3	70	..	23.6	7 501.8	1.8	5.9 (2009)	35.2 (2009)
French Polynesia	280	56.1	76.5	..	..	..	..	..	..
Guam	168	94.0	79.1	..	..	..	..	..	..
Maldives	352	44.3	78.3	98.4 (2006)	9.9	1 282.8	6.1	1.5 (2004)	..
Marshall Islands	53	71.7	..	..	37.5	3 775.9	1.9	..	..
Micronesia (Federated States of)	104	22.1	69.1	..	36.4	3 285.8	-0.4	..	..
Nauru	10	100.0	..	..	..	..	..	..	..
New Caledonia	260	69.6	76.5	96.5 (2012)	..	..	..	..	..
Niue	1	100.0	..	..	..	..	..	..	..
Northern Mariana Islands	55	88.1	..	..	..	..	..	..	..
Palau	21	85.7	..	99.5 (2013)	17.5	14 611.7	0.7	..	..
Papua New Guinea	7 476	13.0	62.6	62.9 (2012)	61.4	2 457.6	5.9	..	39.9 (2009)
Samoa	192	19.3	73.4	98.9 (2012)	18.1	5 583.9	1.9	..	..
Tonga	106	23.6	72.8	99.4 (2011)	12.1	5 134.1	0.9	..	..

Source: ESCAP Online Statistical Database and World Bank's World Development Indicators.

Notes: Total and urban population, and life expectancy are for 2014; under-5 mortality rate and GDP per capita are for 2013; for the rest of the variables the latest year is given in brackets.

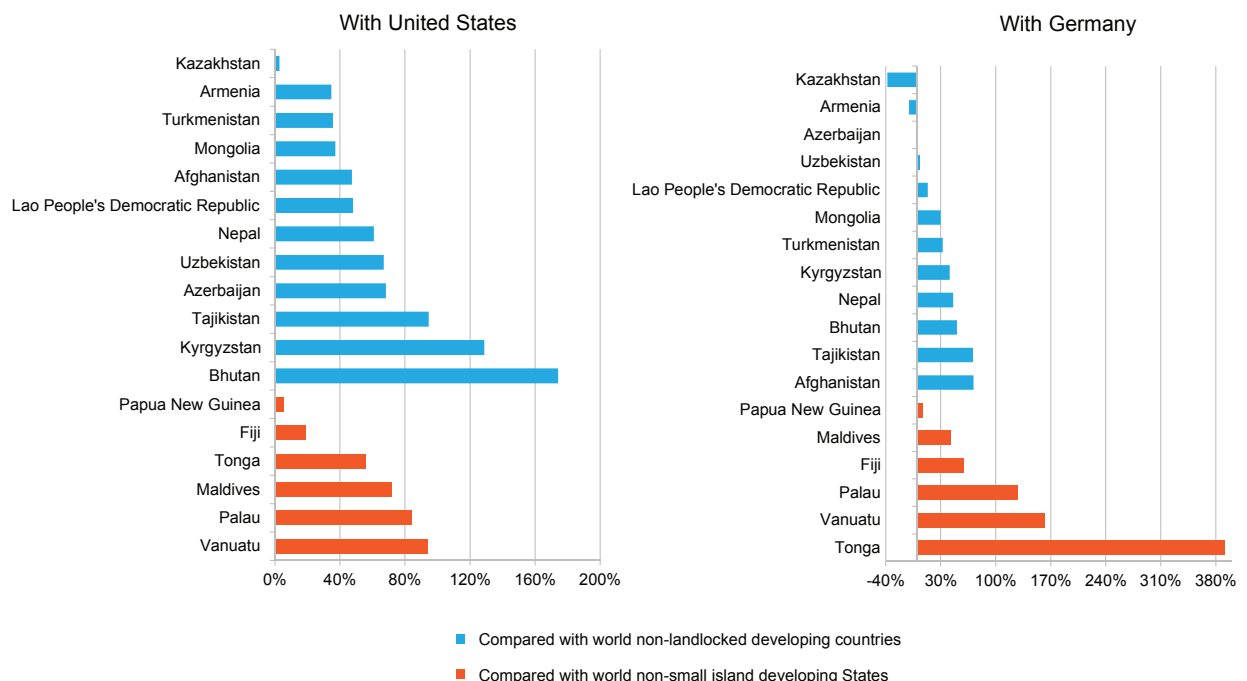
For LLDCs, access to sea ports is perhaps the most important constraint imposed by geography. A cursory look at a map would show that, for the majority of the Asian LLDCs, the nearest sea port is several hundred kilometres away in a neighbouring country. For them, transit rights through the neighbouring country is essential. Surveys of business executives from landlocked countries show that many of them perceive access to ports to be a major problem (table 1.2). Equally important is the quality of the infrastructure in the neighbouring country. Most of the Asian LLDCs typically share borders with relatively underdeveloped parts of the neighbouring country. For some of them – Kyrgyzstan, Tajikistan, Turkmenistan and Uzbekistan – the neighbours themselves are landlocked, which accentuates the problem further. Data on the percentage of roads in a country that are paved show that the Asia-Pacific LDCs are lacking in good quality roads within their borders, whereas most of the Asian LLDCs are much better placed in this regard (table 1.2).

For island States, too, connectivity with the rest of the world could be problematic if they are

geographically located far from major economic centres/trade routes. Distance increases transportation costs and trade/economic activity tends to bypass such countries. Again, a look at a map would show that this indeed is the case for the majority of the Asia-Pacific SIDS. This is borne out in the data contained in the liner shipping connectivity index, which measures the extent to which a country is connected to global shipping networks (table 1.2). The Asia-Pacific SIDS fare poorly in this regard. Not surprisingly, the various international programmes of action have stressed investments for improving connectivity.

Only three countries among the Asia-Pacific CSN are littoral, Bangladesh, Cambodia and Myanmar. For these three Asia-Pacific LDCs, geography does not impose a constraint to developing connectivity with rest of the world for accelerating socioeconomic essential. Indeed, in recent times all three countries have seen a spurt in economic activity and investment, including foreign direct investment, especially in infrastructure. Nevertheless, all three countries face problems with regard to ports, roads and

**Figure 1.1** Additional trade costs paid by Asian landlocked developing countries and Asia-Pacific small island developing States in trading with the United States and Germany, as percentage of trade costs paid by world non-landlocked developing countries and non-small island States, 2013



Source: ESCAP, based on ESCAP and World Bank Trade Cost Database.

shipping connectivity. Business executives from these countries rate poorly the quality of their port infrastructure (table 1.2). A major part of the road network in these countries is unpaved, and all three of them have a low score in terms of the liner shipping connectivity index.

## DEMOGRAPHY

The population growth rate has steadily declined in Asia-Pacific CSN, but slower than the average for the region (figure 1.2). Current population projections suggest that by 2020 the annual growth rate in Asia-Pacific CSN as a whole would average 1.3% compared with 1.0% for Asia-Pacific developing countries excluding China and India. The averages for the Asia-Pacific LDCs, LLDCs and SIDS for the decade ending in 2020 are expected to be 1.3%, 1.5% and

1.8%, respectively. Considering that the Asia-Pacific SIDS together have the least geographic area among Asia-Pacific CSN, the relatively higher growth rates in their populations suggest that there will be greater pressure on the environment in these economies in the foreseeable future. Projections for the future suggest that the population growth rate would decline to just 0.4% in Asia-Pacific LDCs, 0.6% in Asian LLDCs and 1.1% in Asia-Pacific SIDS by 2050.

Life expectancy at birth has steadily improved in all Asia-Pacific CSN, and there has been a dramatic reduction in variation across these countries over time (figure 1.3). Although no clear geographic pattern is seen across these countries, in general the Asia-Pacific SIDS seem to have a somewhat higher life expectancy at birth than do the Asia-Pacific LDCs and Asian LLDCs.

**Table 1.2. Transport infrastructure and shipping connectivity in Asia-Pacific countries with special needs**

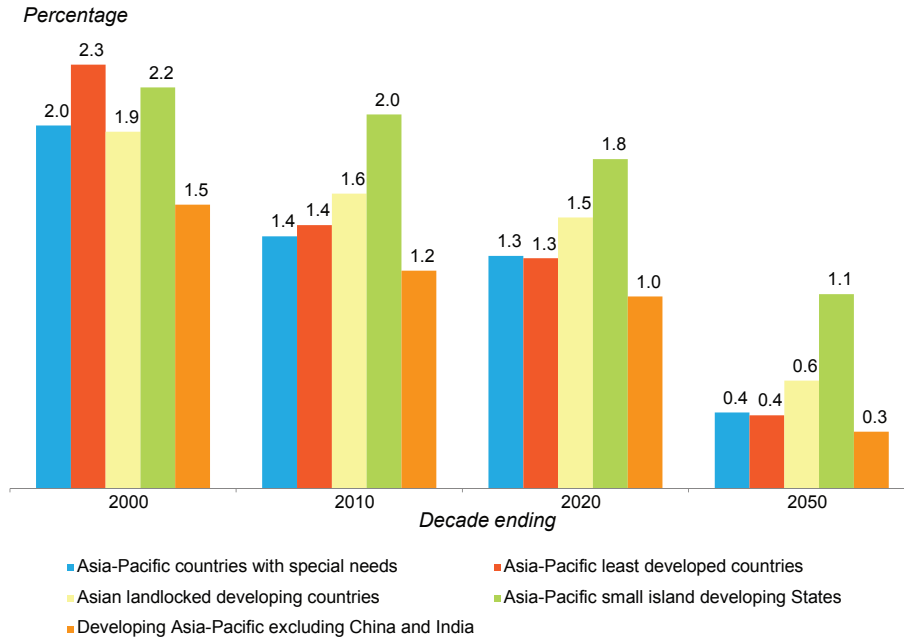
Country/area	Rating of port infrastructure 2014	Paved roads (% of roads) 2012	Liner shipping connectivity index 2014
<b>Least developed countries</b>			
Afghanistan	..	36.4	..
Bangladesh	3.7	9.5	8.4
Bhutan	2.1	34.2	..
Cambodia	3.6	6.3	5.5
Kiribati	..	..	2.9
Lao People's Democratic Republic	2.6	13.7	..
Myanmar	2.6	45.7	6.3
Nepal	2.2	53.9	..
Solomon Islands	..	2.0	6.9
Timor-Leste	2.2	..	..
Tuvalu	..	..	..
Vanuatu	..	24.0	6.4
<b>Landlocked developing countries</b>			
Armenia	2.5	96.8	..
Azerbaijan	4.3	55.6	..
Kazakhstan	2.7	88.7	..
Kyrgyzstan	1.3	91.0	..
Mongolia	1.7	3.5	..
Tajikistan	2.1	82.7	..
Turkmenistan	..	81.0	..
Uzbekistan	..	87.0	..
<b>Small island developing States</b>			
American Samoa	..	..	4.4
Cook Islands	..	..	..
Fiji	..	49.0	9.4
French Polynesia	..	..	12.1
Guam	..	..	8.4
Maldives	..	100.0	7.8
Marshall Islands	..	..	3.0
Micronesia (Federated States of)	..	18.0	1.3
Nauru	..	..	..
New Caledonia	..	..	9.5
Niue	..	..	..
Northern Mariana Islands	..	..	4.1
Palau	..	..	1.3
Papua New Guinea	..	4.0	9.0
Samoa	..	14.0	4.4
Tonga	..	27.0	3.6

Source: ESCAP Online Statistical Database and World Bank's World Development Indicators.

Notes : (i) The Liner Shipping Connectivity Index (computed by UNCTAD) captures how well countries are connected to global shipping networks based on five components of the maritime transport sector: number of ships, their container-carrying capacity, maximum vessel size, number of services, and number of companies that deploy container ships in a country's ports. The index takes a value 100 for the country with the best connectivity in 2004.

(ii) Rating of port infrastructure measures business executives' perception of their country's port facilities from the World Economic Forum's Executive Opinion Survey. Scores range from 1 (port infrastructure considered extremely underdeveloped) to 7 (port infrastructure considered efficient by international standards). Respondents from landlocked countries were asked how accessible are port facilities (1 = extremely inaccessible; 7 = extremely accessible)

**Figure 1.2** Population growth rate

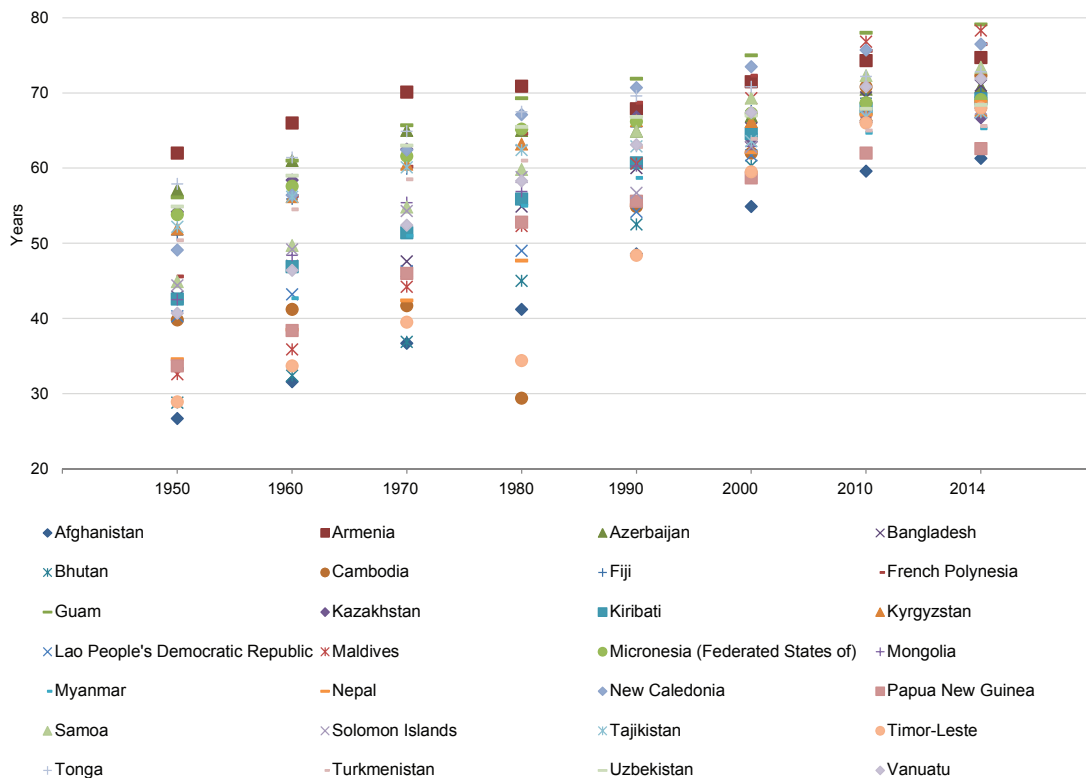


Source: Based on data from UN-DESA *World Population Prospects: The 2012 Revision*, extracted from ESCAP website.

Notes: (i) Annual growth rate (%) is first calculated from the population data (including for the projections up to 2050) and average of the annual growth rate (%) for decade ending (DE) 1960, 1970, etc., is plotted here.

(ii) Differences in bar sizes are due to rounding.

**Figure 1.3.** Expectation of life at birth



Source: UN-DESA, *World Population Prospects: The 2012 Revision*, extracted from ESCAP website.

Most of the Asia-Pacific CSN have a fairly large population of children younger than 15 years age – ranging from 20% in Armenia in 2014 to almost 46% in Afghanistan (table 1.3). The adult population in the age group 15-64 years age – who can be expected to be economically active – constitute well over half the population in these countries. The proportion is highest in Azerbaijan (72% in 2014) and lowest in Afghanistan (52%). Significantly, current projections suggest that by 2050 all these countries will have well over 60% of their populations in this age group.

Such a large population in the economically active age group can potentially result in a so-called demographic dividend that can help in the socioeconomic development of these countries. This requires policy measures that stress creating decent employment opportunities, especially for the youth who will enter the workforce in the next couple of decades; such measures can help improve the standard of living of the people. This is all the more critical in averting social conflict in the coming decades given the age profile of the population in these countries.

### **PERSISTENT POVERTY, VULNERABILITY AND INADEQUATE AVAILABILITY OF PRODUCTIVE JOBS**

Much of the poverty in Asia-Pacific CSN is concentrated in the Asian LDCs (table 1.4). In general, poverty rates in the Asia-Pacific LLDCs (excluding the LDCs among them) are quite low, less than 10%, and that too on a low population base. Among the Asia-Pacific SIDS, data on poverty are available only for Fiji, Maldives and Papua New Guinea. Of these three, only the latter has a high percentage of poverty. Despite the significant progress achieved in reducing extreme poverty, a substantial number of people in Asia-Pacific CSN continue to live under dire conditions, with less than \$1.25 (PPP) a day.

Strikingly, between the 1990s and the latest year for which data are available, the annual rate of decline in the poverty rate is higher for extreme poverty (less than \$1.25 (PPP) a day) than when the poverty benchmark is raised to \$2 (PPP) a day. This suggests that the number of poor people who are just barely above the extreme poverty line remains quite high if \$2 (PPP) a day is taken as the poverty benchmark (table 1.4). In other words, the nature of poverty appears not to be changing in these countries even as extreme poverty levels are declining.

For people whose income exceeds \$1.25 (PPP) a day but is less than \$2 (PPP) a day, managing to make a decent living is likely to be difficult. Further, as social protection measures are either absent or at best rudimentary in Asia-Pacific CSN, many of these people are vulnerable to slipping into extreme poverty due to economic/non-economic shocks affecting the country/parts of the country, or even just at the level of the individual household. Economic shocks could be a prolonged slowdown in the global economy, commodity price fluctuations etc. Many Asia-Pacific CSN are exposed to such shocks repeatedly; they cause enormous volatility in the countries' economic performance. Non-economic shocks could be political turmoil and conflict, natural disasters (earthquakes, floods, droughts, tsunamis), which can affect parts of the country or in the case of the Asia-Pacific SIDS the whole country or economy. At the household level, shocks are mainly diseases or the death of an earning member, which, in the absence of social protection/easy access to health care, can ruin a poor household in several ways, such as complete loss of income, starvation, distress sale of meagre assets and rise in high-cost debt.

A major reason for persistent poverty and vulnerability in many of these countries is that economic growth has not generated adequate productive employment. This is seen clearly in the fact that a significant number of those with employment are extremely poor (living with less than \$1.25 (PPP) per day) (table 1.5). The problem is particularly acute in the Asia-Pacific LDCs, which account for the bulk of extreme poverty among Asia-Pacific CSN.

The problem of inadequacy of productive employment is not confined only to those in extreme poverty. Many of those employed are also those who are just above the extreme poverty level but with a per capita daily income of less than \$2 (PPP) (table 1.5). This is seen not just in the Asia-Pacific LDCs, but also in the Asian LLDCs where extreme poverty is not very high, but \$2 (PPP) a day poverty is somewhat extensive. These are people who are vulnerable to economic shocks that can affect growth and employment.

Another dimension to the problem of inadequate availability of productive jobs is the high unemployment and underemployment rates among youth in Asia-Pacific CSN (table 1.5). With the sole exception of Kazakhstan, the youth unemployment rate is higher than the overall employment rate in all these countries for which data are available. This is true for females and males and both combined. The additional unemployment (females and males combined) among youth ranges between 2% and 20% across



Table 1.3. Shares of adults and children in population

Country/area	Adult population share (%)					Children population share (%)								
	2000	2010	2014	2020	2030	2040	2050	2000	2010	2014	2020	2030	2040	2050
<b>Least developed countries</b>														
Afghanistan	48.5	49.2	51.8	57.0	63.6	67.0	70.5	49.5	48.6	45.8	40.3	33.2	28.9	24.0
Bangladesh	59.0	63.7	65.7	68.2	69.6	69.2	66.5	37.0	31.7	29.5	26.5	22.8	19.5	17.3
Bhutan	55.6	65.7	67.6	69.2	70.8	70.8	66.6	40.6	29.8	27.5	25.4	21.8	18.6	16.7
Cambodia	55.4	63.1	63.5	62.9	64.4	65.3	63.0	40.8	31.8	31.1	30.5	26.5	22.8	20.9
Kiribati	56.7	62.5	64.4	65.2	64.4	66.1	66.8	39.9	33.6	31.3	29.8	28.5	25.1	22.4
Lao People's Democratic Republic	52.9	59.5	61.5	62.4	65.8	68.4	68.5	43.5	36.8	34.7	33.4	28.6	24.1	21.0
Myanmar	64.6	68.8	70.2	70.6	70.7	69.7	67.0	30.7	26.1	24.5	22.9	20.2	18.1	17.3
Nepal	55.8	58.0	60.9	65.0	67.7	68.4	68.4	40.4	37.1	33.8	29.0	24.8	21.7	19.0
Solomon Islands	55.2	56.0	56.7	58.8	62.0	63.0	64.1	41.9	40.7	39.9	37.7	33.7	31.2	28.5
Timor-Leste	47.8	49.6	51.5	52.0	53.5	58.7	63.8	49.8	47.3	45.2	44.3	42.7	37.8	32.9
Tuvalu	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Vanuatu	55.2	57.9	59.6	61.1	63.7	64.6	64.9	41.5	38.2	36.5	34.4	30.4	27.9	25.3
<b>Landlocked developing countries</b>														
Armenia	64.1	68.9	69.4	68.5	66.6	66.1	62.1	25.8	20.5	20.3	19.8	16.4	15.0	15.1
Azerbaijan	63.3	71.4	72.3	70.9	69.3	68.8	66.1	31.1	22.7	22.2	22.4	18.7	16.4	16.4
Kazakhstan	65.5	68.4	67.2	65.4	66.6	67.0	65.3	27.7	24.9	26.1	27.1	23.5	21.8	22.0
Kyrgyzstan	59.6	65.5	65.2	63.1	64.2	66.8	65.7	35.0	30.1	30.7	32.4	28.8	24.7	24.8
Mongolia	61.5	69.3	68.8	67.2	68.5	68.5	65.4	34.8	26.9	27.4	28.5	24.2	21.1	21.4
Tajikistan	53.6	60.8	60.9	59.6	61.7	64.1	63.5	42.9	35.9	35.9	36.9	33.0	29.4	28.8
Turkmenistan	59.4	66.6	67.5	68.1	68.6	69.8	68.5	36.3	29.2	28.4	27.0	23.9	20.7	19.5
Uzbekistan	58.4	65.8	67.4	67.7	68.7	69.9	68.2	37.3	29.8	28.3	27.3	23.4	20.1	18.8
<b>Small island developing States</b>														
American Samoa	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Cook Islands	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Fiji	61.5	66.1	65.6	65.1	65.5	65.7	64.5	35.1	29.0	28.8	27.9	24.5	22.4	20.9
French Polynesia	64.0	69.5	70.3	70.0	66.5	64.3	62.4	31.7	23.8	22.4	20.9	20.1	17.4	16.1
Guam	64.2	65.2	65.7	65.7	63.3	62.1	62.4	30.5	27.5	25.8	23.9	22.1	20.0	18.3
Maldives	54.9	65.0	66.7	67.3	69.4	69.9	65.4	41.3	30.0	28.4	27.5	22.3	17.7	16.3
Marshall Islands	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Micronesia (Federated States of)	56.0	59.2	61.2	62.6	62.3	66.7	69.4	40.3	36.9	34.6	31.9	31.0	27.5	23.1
Nauru	..	..	..	..	..	..	..	..	..	..	..	..	..	..
New Caledonia	65.4	67.0	67.6	67.5	66.0	64.2	63.6	28.6	23.5	22.4	21.5	20.0	18.4	17.4
Niue	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Northern Mariana Islands	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Palau	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Papua New Guinea	57.2	58.2	59.5	61.3	63.6	64.9	66.1	40.2	39.0	37.6	35.3	32.3	29.8	27.4
Samoa	54.8	56.7	57.3	58.3	60.1	59.2	60.7	40.7	38.3	37.5	35.7	31.6	30.3	27.9
Tonga	55.9	56.7	57.0	59.7	61.9	60.8	62.5	38.4	37.5	37.5	34.4	30.8	30.2	27.4

Source: Computed from data on children and old age dependency ratios reported in UN-DESA World Population Prospects: The 2012 Revision, extracted from ESCAP website.  
Note: Adult population refers to population in the age group 15 to 64, while children are in the age group 0 to 14 years age.

**Table 1.4. Poverty and income inequality in Asia-Pacific countries with special needs**

Country/area	\$ 1.25 poverty rate (%)			Annual rate of change (%)	\$ 2.00 poverty rate (%)			Annual rate of change (%)	\$ 1.25 poverty (000 persons)			Latest	\$ 2.00 poverty (000 persons)			Latest	Gini index		
	1990s	Latest	Annual rate of change (%)		1990s	Latest	Annual rate of change (%)		1990s	Latest	Annual rate of change (%)		1990s	Latest	Annual rate of change (%)		1990s	Latest	Annual rate of change (%)
<b>Least developed countries</b>																			
Afghanistan	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	27.8 (2008)
Bangladesh	70.2 (1992)	43.3 (2010)	-2.1	93.0 (1992)	76.5 (2010)	-1.0	78 927 (1992)	65 362 (2010)	104 561 (1992)	115 671 (2010)	27.6 (1991)	27.6 (1991)	27.6 (1991)	27.6 (1991)	27.6 (1991)	27.6 (1991)	27.6 (1991)	27.6 (1991)	32.1 (2010)
Bhutan	..	2.4 (2012)	..	..	15.2 (2012)	..	..	..	..	112 (2012)	..	..	..	..	..	..	..	..	38.7 (2012)
Cambodia	44.5 (1994)	10.1 (2011)	-4.5	75.2 (1994)	41.3 (2011)	-2.7	4 641 (1994)	1 468 (2011)	7 843 (1994)	6 026 (2011)	38.3 (1994)	38.3 (1994)	38.3 (1994)	38.3 (1994)	38.3 (1994)	38.3 (1994)	38.3 (1994)	38.3 (1994)	31.8 (2011)
Kiribati	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Lao People's Democratic Republic	55.7 (1992)	30.3 (2012)	-2.3	84.8 (1992)	62.0 (2012)	-1.3	2 505 (1992)	2 011 (2012)	3 814 (1992)	4 121 (2012)	30.4 (1992)	30.4 (1992)	30.4 (1992)	30.4 (1992)	30.4 (1992)	30.4 (1992)	30.4 (1992)	30.4 (1992)	36.2 (2012)
Myanmar	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Nepal	68.0 (1996)	23.7 (2010)	-4.7	89.0 (1996)	56.0 (2010)	-2.7	14 358 (1996)	14 358 (1996)	18 792 (1996)	1 5020 (2010)	35.2 (1995)	35.2 (1995)	35.2 (1995)	35.2 (1995)	35.2 (1995)	35.2 (1995)	35.2 (1995)	35.2 (1995)	32.8 (2010)
Solomon Islands	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Timor-Leste	..	34.9 (2007)	..	..	71.1 (2007)	..	..	..	..	736 (2007)	..	..	..	..	..	..	..	..	30.4 (2007)
Tuvalu	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Vanuatu	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
<b>Landlocked developing countries</b>																			
Armenia	17.5 (1996)	1.8 (2012)	-5.6	38.9 (1996)	15.5 (2012)	-3.8	555 (1996)	52 (2012)	1 234 (1996)	460 (2012)	44.4 (1996)	44.4 (1996)	44.4 (1996)	44.4 (1996)	44.4 (1996)	44.4 (1996)	44.4 (1996)	44.4 (1996)	30.3 (2012)
Azerbaijan	16.3 (1995)	0.3 (2008)	-7.6	39.1 (1995)	2.4 (2008)	-7.2	1 267 (1995)	28 (2008)	3 038 (1995)	211 (2008)	35 (1995)	35 (1995)	35 (1995)	35 (1995)	35 (1995)	35 (1995)	35 (1995)	35 (1995)	33 (2008)
Kazakhstan	4.2 (1993)	0.1 (2010)	-5.7	17.6 (1993)	0.8 (2010)	-5.6	669 (1993)	10 (2010)	2 804 (1993)	127 (2010)	32.7 (1993)	32.7 (1993)	32.7 (1993)	32.7 (1993)	32.7 (1993)	32.7 (1993)	32.7 (1993)	32.7 (1993)	28.6 (2010)
Kyrgyzstan	18.6 (1993)	5.1 (2011)	-4.0	30.1 (1993)	21.1 (2011)	-1.7	838 (1993)	276 (2011)	1 357 (1993)	1 138 (2011)	53.7 (1993)	53.7 (1993)	53.7 (1993)	53.7 (1993)	53.7 (1993)	53.7 (1993)	53.7 (1993)	53.7 (1993)	33.4 (2011)
Mongolia	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	36.5 (2008)
Tajikistan	49.4 (1999)	6.5 (2009)	-8.7	83.6 (1999)	27.4 (2009)	-6.7	3 011 (1999)	482 (2009)	5 095 (1999)	2 038 (2009)	30.8 (2009)	30.8 (2009)	30.8 (2009)	30.8 (2009)	30.8 (2009)	30.8 (2009)	30.8 (2009)	30.8 (2009)	30.8 (2009)
Turkmenistan	63.5 (1993)	..	..	85.7 (1993)	..	..	2 535 (1993)	..	3 421 (1993)	..	35.4 (1993)	35.4 (1993)	35.4 (1993)	35.4 (1993)	35.4 (1993)	35.4 (1993)	35.4 (1993)	35.4 (1993)	..
Uzbekistan	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	45.3 (1998)
<b>Small island developing States</b>																			
American Samoa	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Cook Islands	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Fiji	..	5.9 (2009)	..	..	22.9 (2009)	..	..	..	..	195 (2009)	..	..	..	..	..	..	..	..	42.8 (2009)
French Polynesia	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Guam	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Maldives	25.6 (1998)	1.5 (2004)	-15.7	37.0 (1998)	12.2 (2004)	-11.2	67 (1998)	4 (2004)	97 (1998)	97 (1998)	..	..	..	..	..	..	..	..	37.4 (2004)
Marshall Islands	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Micronesia (Federated States of)	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Nauru	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
New Caledonia	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Niue	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Northern Mariana Islands	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Palau	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Papua New Guinea	35.8 (1996)	..	..	57.4 (1996)	..	..	1 733 (1996)	..	2 779 (1996)	..	..	..	..	..	..	..	..	..	..
Samoa	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Tonga	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..

Source: ESCAP Online Statistical Database and staff computations.

**Table 1.5. Working poor and unemployment in selected Asia-Pacific countries with special needs**

Country/area	Working poor		Unemployment rate in 2012			Youth unemployment rate in 2012		
	\$1.25 poverty	\$2 poverty	Total (% of labour force)	Female (% of female labour force)	Male (% of male labour force)	Total (% of labour force aged 15-24)	Female (% of female labour force aged 15-24)	Male (% of male labour force aged 15-24)
<b>Least developed countries</b>								
Afghanistan	46.8 (2005)	28.9 (2005)	8.6	13.1	7.8	19.5	26.5	18.1
Bangladesh	41.7 (2010)	35.8 (2010)	4.5	5.2	4	8.9	9.3	8.6
Bhutan	10.7 (2007)	20.9 (2007)	2.1	2.3	1.9	6.4	6.4	6.4
Cambodia	19.9 (2008)	29.7 (2008)	1.5	1.6	1.5	3.8	4.1	3.5
Lao People's Democratic Republic	32.8 (2008)	34.6 (2008)	1.3	1.1	1.6	3.2	2.5	4
Myanmar	35.6 (2005)	31.9 (2005)	4.1	4.5	3.7	11.5	12.9	10.1
Nepal	21.9 (2010)	31.6 (2010)	2.7	2.4	3	4.5	3.3	5.9
Solomon Islands	23.6 (2005)	24.5 (2005)	4.6	5.3	4.1	11.5	13.3	10.1
Timor-Leste	30.9 (2007)	34.5 (2007)	4	5.6	3.2	12.6	18.3	9.2
<b>Landlocked developing countries</b>								
Armenia	0.6 (2008)	8.7 (2008)	18.5	20.7	17	38.3	45.7	34.1
Azerbaijan	0.3 (2008)	2.2 (2008)	5.4	6.5	4.4	14.2	14.2	14.3
Kazakhstan	0.1 (2009)	0.8 (2009)	5.3	6.4	4.3	4.2	4.7	3.8
Kyrgyzstan	5.0 (2009)	14.8 (2009)	8.4	9.6	7.4	15.4	19.1	13.1
Mongolia	..	..	5.2	4.8	5.6	11	10.6	11.2
Tajikistan	5.9 (2009)	21.3 (2009)	11.8	11.8	11.3	21.2	23	20
Turkmenistan	16.8 (1998)	21.8 (1998)	11.3	11.4	11.3	21.1	22.9	20.1
Uzbekistan	..	..	11.3	11.6	11.1	21.1	23.1	20
<b>Small island developing States</b>								
Fiji	5.0 (2008)	16.0 (2008)	8.4	8.4	6.6	19.9	26.1	16.2
Maldives	1.1 (2004)	8.6 (2004)	11.3	17.8	6.5	25.1	34.7	17.7
Papua New Guinea	34.2 (1996)	23.8 (1996)	2.3	2.8	1.8	5.1	6	4.2

Source: ESCAP Online Statistical Database.

these countries. Somewhat surprisingly, there is no clear evidence of gender bias. In several countries – Azerbaijan, Bangladesh, Bhutan, Kazakhstan, the Lao People's Democratic Republic and Nepal – youth unemployment among females is less than among males. With more and younger people expected to join the labour force in the coming decades, the higher youth unemployment rate – if not addressed quickly – will be a problem that has the potential to cause disruptive social turmoil in these countries.

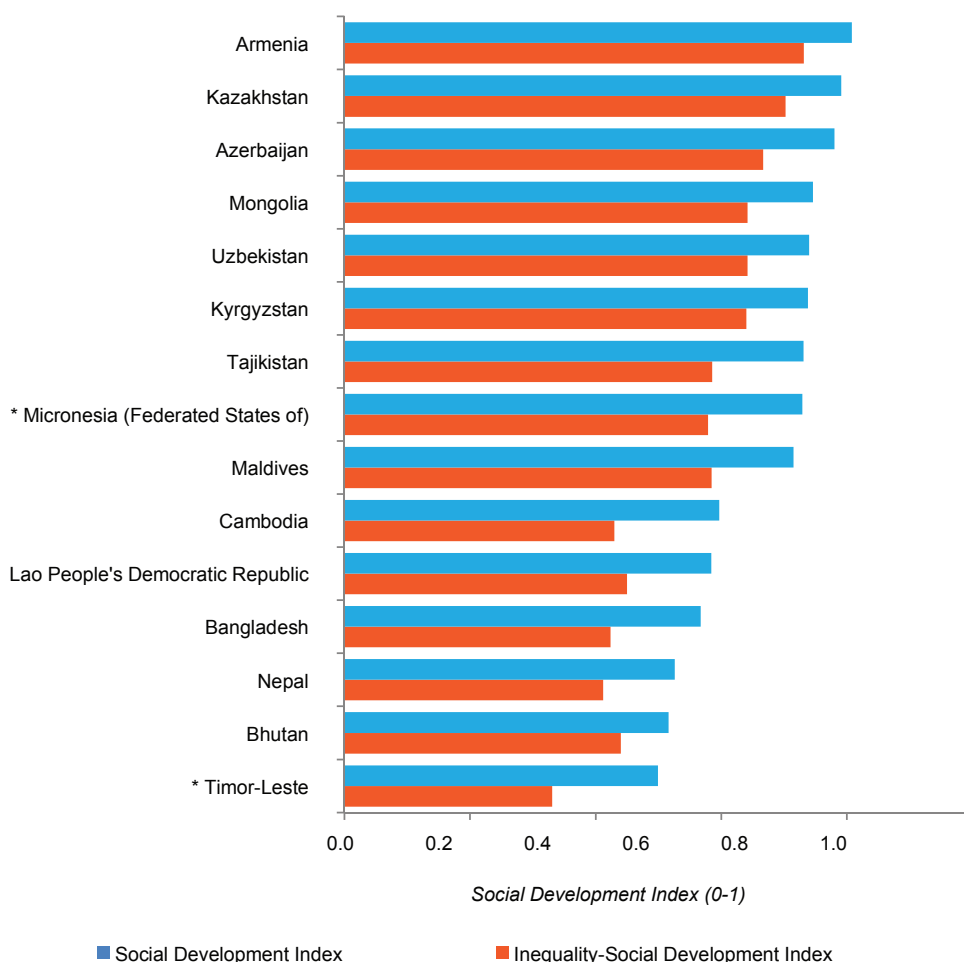
## HIGH INEQUALITY

The growth experience of Asia and the Pacific in general since the 1990s has shown that income inequality, as measured by the Gini index, has risen in several countries even as extreme poverty levels declined rapidly (ESCAP, 2013). The available estimates of the Gini index for the Asia-Pacific CSN shows that this is true only in a few countries, notably Bangladesh, the Lao People's Democratic Republic and Mongolia (table 1.4). Considering that Bangladesh alone accounted for about 41% of the total population in the Asia-Pacific CSN in 2013, the rise in income inequality in this country is a matter of concern.<sup>1</sup> In

most other countries for which comparable data are available, income inequality has declined since the 1990s. Nevertheless, even in those countries the level of the Gini index is fairly high, suggesting that income inequality is an issue that needs to be addressed.

Alongside such inequality in income is the non-income inequality in the social dimensions in these countries. These relate to the levels of consumption of food, educational attainment, health status, use of safe drinking water and sanitation, and decent housing. Low levels in these dimensions often reflect problems of access to food and other services. This non-income inequality was captured in a recent study that reported a —social development index<sup>11</sup> covering education and life expectancy similar to the inequality-adjusted human development index (figure 1.4) (ESCAP, ADB and UNDP, 2013). This shows that social development attainment drops significantly after discounting for inequality for several Asia-Pacific CSN, such as Azerbaijan, Bangladesh, Cambodia, Kyrgyzstan, the Lao People's Democratic Republic, Maldives, Micronesia (Federated States of), Nepal and Tajikistan. Income inequality often is at the root of inequality in several other dimensions of development, such as food

**Figure 1.4. Inequality-adjusted social development index for Asia-Pacific countries with special needs**



Sources: ESCAP (2015b) and ESCAP, ADB and UNDP (2013).

consumption and access to education, health, water and sanitation, and housing, although it is not the sole cause for such non-income inequality. In fact, deprivation in one or several of these non-income dimensions can often accentuate income poverty and vice versa. The reinforcing nature of the interactions among these social and economic dimensions can have a lasting intergenerational impact that could prove difficult to break. Indeed, the current state of affairs in itself may be viewed as the legacy of past inequalities with regard to both the income and social dimensions.

### FOOD INSECURITY, HUNGER AND MALNUTRITION

Food insecurity is the most glaring outcome of extreme poverty. Food insecurity is manifested in the form of

hunger and undernourishment among children and adults. Food insecurity is assessed in several ways. The FAO measure of undernourishment, which is used for assessments under the Millennium Development Goals, is to compare actual caloric intake against a minimum per capita dietary energy requirement of 1,800 calories per day. Measured against this norm, it can be seen that a significant number of people in the Asia-Pacific LDCs suffer from undernourishment (table 1.6). This stands in contrast with the situation in the Asian LLDCs, most of which, with the exception of Mongolia and Tajikistan, report very low levels of undernourishment. Data for the Asia-Pacific SIDS are not available, and the situation in these countries is difficult to assess. The food insecurity situation in the Asia-Pacific LDCs and Asia-Pacific LLDCs correlate very well with the poverty headcount in these economies.

**Table 1.6. Measures of food security in selected Asia-Pacific countries with special needs**

Country/area	Prevalence of undernourishment (%) 2012-2014	GHI-2014	GFI-2014
<b>Least developed countries</b>			
Afghanistan	24.7	..	..
Bangladesh	16.7	19.1	36.3
Cambodia	16.1	16.1	33.1
Kiribati	0.0	..	..
Lao People's Democratic Republic	21.8	20.1	..
Myanmar	16.7	..	37.6
Nepal	13.0	16.4	37.7
Solomon Islands	12.5	..	..
Timor-Leste	28.8	29.8	..
Vanuatu	7.2	..	..
<b>Landlocked developing countries</b>			
Armenia	5.7	<5	..
Azerbaijan	0.0	<5	50.3
Kazakhstan	0.0	<5	53.3
Kyrgyzstan	6.0	<5	..
Mongolia	22.4	9.6	..
Tajikistan	32.3	16.4	38.7
Turkmenistan	0.0	<5	..
Uzbekistan	5.8	<5	46.0
<b>Small island developing States</b>			
Fiji	0.0	<5	..
Maldives	6.2	..	..
Samoa	0.0	..	..

Source: Prevalence of undernourishment is from FAO, State of food insecurity in the world downloaded from ESCAP Online Statistical Database. GHI refers to Global Hunger Index published by the International Food Policy Research Institute, Washington DC. GFI refers to Global Food Security Index published by the Economist Intelligence Unit, Available at <http://foodsecurity.eiu.com/>.

Notes: Prevalence of undernourishment refers to the proportion of population estimated to be at risk of calorie deficiency. GHI is a simple average of three indicators, viz., percentage of undernourished population, percentage of under-five children underweight and under-five mortality rate. Lower the value of GHI less is hunger in a country. GFI is an index that combines food affordability, availability, quality and safety. The higher the value of GFI the greater is the food security in a country.

Undernourishment in children results in them being underweight for their age. In extreme cases, undernourishment debilitates a child's resistance to disease and increases his or her risk of death. An indicator of food insecurity reported by the International Food Policy Research Institute combines three indicators of undernourishment – percentage of population undernourished, percentage of under-five children underweight and a mortality rate for under-five children – into a composite index with equal weights called the global hunger index. High values in that index show a high degree of undernourishment/food insecurity. Again, it is the Asia-Pacific LDCs that show high index values (table 1.6).

The above-mentioned indicators of food insecurity enable a look at the situation at the level of individuals. However, food insecurity also refers to the national-level situation. Food affordability, availability, quality and safety are some of the important dimensions on which the national level of food insecurity is assessed. An index that combines these four attributes is the global food security index (GFI) reported by the Economist Intelligence Unit. GFI values that are closer to 100 show a high degree of food security. GFI data, however, are available only for a few Asia-Pacific LDCs

and Asian LLDCs and none of the Asian SIDS. The available estimates show that the Asia-Pacific LLDCs are relatively more food secure than the Asia-Pacific LDCs (table 1.6). From all these metrics, it emerges that food insecurity is a major problem mainly for the Asia-Pacific LDCs.

## HEALTH OUTCOMES

Health is an area where the performance of Asia-Pacific CSN has been poor. As seen previously, these countries have not made much progress in bringing down the rates of infant, under-five and maternal mortality. Most of them will fail to achieve the Millennium Development Goal targets for those indicators. Their poor performance is also evident in the prevalence of diseases, such as HIV infection, malaria and tuberculosis. These countries are home to substantial numbers of people living with HIV (table 1.7). Similarly, the prevalence of malaria and tuberculosis is also high. Occurrence of malaria is particularly high in island States, such as Papua New Guinea, Solomon Islands and Vanuatu.

Even as these countries struggle to cope with communicable diseases, there is a growing



**Table 1.7. Health outcomes and health sector indicators, 2012**

Country/area	Population living with HIV: total (number)	Tuberculosis prevalence rate (per 100 000 population)	Tuberculosis detection rate under DOTS (% of new tuberculosis cases)	Malaria cases (per 100 000 population)	Years of life lost (YLL) to communicable diseases (% of YLL)	Years of life lost (YLL) to non-communicable diseases (% of YLL)	Total health expenditure (% of GDP)	General government health expenditure (per capita PPP dollars)(a)	Out-of-pocket health expenditure (% of private health expenditure)	Number of physicians (per 10 000 population) (a)	Number of nursing and midwifery personnel (per 10 000 population) (a)	Number of hospital beds (per 10 000 population) (b)
<b>Least developed countries</b>												
Afghanistan	4 300	358	51	1 312	58	23	8.6	8	94	2	..	4
Bangladesh	8 000	434	47	19	45	43	3.6	25	96.6	4	2	0
Bhutan	1 100	225	85	11	34	41	3.8	198	94.7	3	10	1
Cambodia	76 000	764	64	306	48	37	5.4	30	82	..	..	1
Kiribati	..	628	80	..	..	..	10.7	204	0.5	..	..	14
Lao People's Democratic Republic	12 000	514	30	704	60	29	2.9	38	78.2	2	9	7
Myanmar	200 000	489	71	910	42	44	1.8	4	1.8	6	10	0
Nepal	49 000	241	78	256	44	42	5.5	27	81.4	..	..	0
Solomon Islands	..	151	67	10 425	41	46	8	246	56.7	..	..	0
Timor-Leste	..	758	69	552	62	27	4.3	59	15.4	1	11	59
Tuvalu	..	377	80	..	..	..	15.4	15.4	100	..	..	..
Vanuatu	..	89	78	14 846	..	..	3.6	168	56.7	..	..	0
<b>Landlocked developing countries</b>												
Armenia	3 500	79	79	0	8	83	4.5	89	93.8	27	49	3
Azerbaijan	10 000	124	72	0	24	67	5.4	112	89.3	34	67	1
Kazakhstan	..	189	81	..	12	71	4.2	309	98.8	36	82	2
Kyrgyzstan	8 700	217	80	0	23	63	7.1	96	87.2	20	61	1
Mongolia	1 100	380	66	..	20	65	144	93.1	..	..	..	58
Tajikistan	12 000	160	67	0	49	40	5.8	40	85.4	19	45	1
Turkmenistan	..	99	..	0	28	61	2	153	100	..	..	..
Uzbekistan	30 000	..	66	0	..	60	5.9	97	94	24	120	1
<b>Small island developing States</b>												
American Samoa	..	11	..	..	..	..	..	..	..	..	..	..
Cook Islands	..	7	87	..	..	..	3.4	458	100	..	..	..
Fiji	1 000	30	99	..	19	69	4	125	64.1	..	..	3
French Polynesia	..	26	87	..	..	..	..	..	..	..	..	..
Guam	..	66	87	..	..	..	..	..	..	..	..	..
Maldives	100	65	80	..	20	69	8.5	337	88.3	..	..	6
Marshall Islands	..	1079	47	..	..	..	15.6	319	75.2	..	..	27
Micronesia (Federated States of)	..	270	72	..	..	..	12.8	419	97.5	..	..	0
Nauru	..	91	..	..	..	..	7.5	208	58.4	..	..	50
New Caledonia	..	21	87	..	..	..	..	..	..	..	..	..
Niue	..	46	0	..	..	..	6.7	3 136	100	..	..	0
Northern Mariana Islands	..	97	87	..	..	..	..	..	..	..	..	..
Palau	..	65	80	..	..	..	9.5	1 196	46.1	..	57	48
Papua New Guinea	25 000	541	82	8 975	58	31	5.2	91	55.9	..	..	0
Samoa	..	30	66	..	..	..	6.8	286	62.6	..	..	5
Tonga	..	26	73	..	14	..	5.4	205	67.8	..	..	26

Source: ESCAP Online Statistical Database.

Notes: (a) Data on general government health expenditure per capita, number of physicians and nursing personnel pertain to 2011; (b) data on hospital beds pertain to 2010.

incidence of non-communicable diseases, such as cardiovascular conditions, cancer, chronic respiratory maladies and diabetes. Estimates of years of life lost show that a fairly high percentage of premature death in these countries is due to non-communicable diseases (table 1.7). In 2012, in the Asia-Pacific LDCs, the incidence of premature death ranges between 23% and 46%, while in the Asian LLDCs it is much higher at between 40% and 83%. Interestingly, for most of the Asian LDCs communicable diseases are a major reason for premature death compared with non-communicable diseases. The reverse is the case in the Asia-Pacific LLDCs, the sole exception being Tajikistan. Estimates of years of life lost are available only for a few Asia-Pacific SIDS, and these are fairly high for non-communicable diseases.

Overall health expenditure as a percentage of GDP shows large variance across the Asia-Pacific CSN – ranging from 1.8% in Myanmar in 2012 to 15.6% in Marshall Islands (table 1.7). Much of the health expenditure, however, is private expenditure in most of these countries. Indeed, most of this is actually out-of-pocket expenditures made by patients. In 2012, the share of out-of-pocket expenditure exceeded 90% in 13 of these countries, and is in the range of 50% to 90% in other 15 countries. Such a high burden on households naturally puts health services beyond the reach of most poor households, thus imposing a huge human cost on those households and on the countries themselves.

Government health expenditure per capita is quite low in most of the Asia-Pacific CSN. In 12 of the 31 Asia-Pacific CSN for which data are available for 2011, the public health expenditure per capita is less than \$100 (PPP), dropping to just \$4 in Myanmar and \$8 in Afghanistan. In 17 other countries, it ranges between \$100 and \$500. Only two economies, Niue and Palau, reported an amount exceeding \$1,000. The comparable amount is slightly more than \$2,500 in the three developed countries in the Asia-Pacific region, Australia, Japan and New Zealand. The low level of public health expenditure constricts the development of human and physical capital in the health sector. The number of physicians, nursing personnel and hospital beds per 10,000 persons is quite low in the Asia-Pacific CSN (table 1.7).

Low levels of public expenditure and inadequate health personnel and infrastructure no doubt are major reasons for the slow progress in the health indicators seen previously; however, these are not the only reasons. Several other reasons have been cited in the development literature, including the relatively high cost of health services compared with people's

income level, corruption, the poor quality of health infrastructure, inadequate infrastructure in general, such as roads and transport services, which makes it difficult for people to access health facilities, the overall levels of educational attainment in countries, especially the mother's education, and the mother's health status. These are major challenges that Asia-Pacific CSN have to overcome; doing so will require a significant reorientation in the pattern of public expenditure towards social sectors, such as health and education. That, however, has not happened in a major way in most of the Asia-Pacific CSN (ESCAP, 2010).

## ACCESS TO WATER AND SANITATION

Safe drinking water and sanitation facilities are essential for a healthy life. Several studies clearly show that it is the population without access to safe water and/or sanitation facilities that will suffer from communicable diseases relatively more than others. The consequences are especially adverse for children, causing malnutrition, frequent attacks of disease and premature death. Access to safe water and sanitation are both considered under Millennium Development Goal 7. Although the Asia-Pacific CSN have made significant progress on both these counts, large sections of the populations in Asia-Pacific CSN continue to suffer from lack of access to safe water and sanitation facilities.

In 2012, in only 5 of the 36 economies considered as Asia-Pacific CSN – Armenia, American Samoa, Cook Islands, French Polynesia and Guam – 100% of the population have access to safe water (table 1.8). Only in 3 of the 12 Asia-Pacific LDCs (Bhutan, Tuvalu and Vanuatu), 2 of the 8 Asian LLDCs (Armenia and Kazakhstan) does more than 90% of the population have access to safe water. In contrast, in 14 of the Asia-Pacific SIDS, more than 90% of the population has access to safe water. The situation is acute in Afghanistan where only 64% of the population have access to safe water, followed by Kiribati (67%) and Cambodia (69%). By and large this is indeed a major problem mainly in the Asia-Pacific LDCs. In almost all the countries where less than 100% of the population have access to safe water, the problem is relatively more severe in rural areas than in urban areas (table 1.8).

The situation with regard to sanitation is far worse in the Asia-Pacific LDCs when compared with access to safe water. Tuvalu at 83% has the highest percentage of population with toilets, followed by Myanmar at 77%. In 7 of the 12 Asia-Pacific LDCs, less than 50% of the population have access to toilets. The situation in the Asian LLDCs and Asia-Pacific SIDS is

far better. Everyone in Uzbekistan, nearly everyone in Turkmenistan (99%) and Kazakhstan (97%) has access to toilets, with Armenia, Kyrgyzstan and Tajikistan also reporting that access to toilets is more than 90%. Sanitation is a major problem only in Azerbaijan (82%) and Mongolia (56%), especially the latter. More than 90% of the population have access to toilets in 9 of the 16 Asia-Pacific SIDS, with three of them, New Caledonia, Niue and Palau, reporting complete coverage. At the other extreme is Papua New Guinea where only 19% of the population is covered. In fact, this is the lowest among all Asia-Pacific CSN.

As with water, there is a clear rural-urban divide in access to toilets as well with the problem being much

more acute in rural areas than in urban areas. The gap between rural and urban areas is particularly large in Nauru and Solomon Islands (66 percentage points each), Cambodia (57 percentage points), Bhutan (44 percentage points), Papua New Guinea (43 percentage points), Timor-Leste (42 percentage points) and the Lao People's Democratic Republic (40 percentage points). This large rural-urban gap in access to safe water and sanitation is another form of non-economic inequality afflicting these economies. Bridging this gap, however, is not impossible. It calls for focused investments with matching changes in the governance and institutions responsible for delivering those services. The experience of those Asia-Pacific CSN that have achieved universal coverage shows that this is a feasible target.

**Table 1.8. Access to safe water and sanitation, 2012**

Country/area	Water access (% of population)			Toilet access (% of population)		
	Total	Urban	Rural	Total	Urban	Rural
<b>Least developed countries</b>						
Afghanistan	64	90	56	29	47	23
Bangladesh	85	86	84	57	55	58
Bhutan	98	99	97	47	75	31
Cambodia	69	91	63	37	82	25
Kiribati	67	87	51	40	51	31
Lao People's Democratic Republic	72	84	65	65	90	50
Myanmar	86	95	81	77	84	74
Nepal	88	90	88	37	51	34
Solomon Islands	81	93	77	29	81	15
Timor-Leste	70	95	61	39	69	27
Tuvalu	98	98	97	83	86	80
Vanuatu	91	98	88	58	65	55
<b>Landlocked developing countries</b>						
Armenia	100	100	100	91	96	81
Azerbaijan	80	88	71	82	86	78
Kazakhstan	93	99	86	97	97	98
Kyrgyzstan	88	97	82	92	92	92
Mongolia	85	95	61	56	65	35
Tajikistan	72	93	64	94	94	95
Turkmenistan	71	89	54	99	100	98
Uzbekistan	87	98	81	100	100	100
<b>Small island developing States</b>						
American Samoa	100	100	100	62	62	62
Cook Islands	100	100	100	97	97	97
Fiji	96	100	92	87	92	82
French Polynesia	100	100	100	97	97	97
Guam	100	100	100	90	90	90
Maldives	99	100	98	99	97	100
Marshall Islands	95	93	98	76	84	56
Micronesia (Federated States of)	89	95	87	57	85	49
Nauru	96	96	0	66	66	0
New Caledonia	98	98	98	100	100	100
Niue	99	99	99	100	100	100
Northern Mariana Islands	98	98	98	80	80	80
Palau	97	97	0	100	100	100
Papua New Guinea	100	88	33	19	56	13
Samoa	99	97	99	92	93	91
Tonga	99	99	99	91	99	99

Source: ESCAP Online Statistical Database.

## GENDER INEQUALITY

Asia-Pacific CSN have made impressive progress in fostering gender parity in education, having already achieved or being on target for achieving the targets of the Millennium Development Goals. Gender parity at the school level has the potential of bringing about a positive social transformation over time, when today's children become tomorrow's adults free of gender bias. Such a bright possibility, however, is at risk if today's gender biases persist and adequate efforts are not made to correct them.

Gender biases in society are manifested in several ways, the most obvious of which is in the sex ratio in the population as a whole and crucially among children. The population sex ratio – the number of males per 100 females – in Asia-Pacific CSN in 2014 did not show any particular bias (table 1.9); the normal range in the sex ratio at birth is from 102 to 106 males per 100 females. Bhutan at 116 is perhaps the only country with a somewhat higher number of males than females. However, without exception in all the other countries the sex ratio – number of boys aged 0-14 per girls aged 0-14 – exceeds 100, revealing a

**Table 1.9. Gender parity indicators**

Country/area	Sex ratio			Family / own account employment		Gender wage gap (percentage)	Index of women's access to		
	Population (2014)	Child (2014)	Overall employment (2012)	Female (% of employed females)	Male 9% of employed females)		Credit	Land	Property other than land
<b>Least developed countries</b>									
Afghanistan	102.8	104.7	18.3	..	..	..	0.5	..	0.5
Bangladesh	102.3	104.7	66.1	86.5 (2005)	84.5 (2005)	..	0.5	0.5	0.5
Bhutan	116.1	103.2	70.7	67.5 (2012)	38.0 (2012)	..	0	0	0
Cambodia	95.4	105.0	100	69.7 (2012)	58.8 (2012)	27.4 (2009)	0.5	0	0.5
Kiribati	99.0	104.4	..	..	..	..	..	..	..
Lao People's Democratic Republic	99.2	104.3	100.9	91.7 (2005)	84.2 (2005)	..	0.5	0.5	0
Myanmar	94.4	101.2	98.5	..	..	12.2 (2008)	0.5	0.5	0
Nepal	93.5	105.6	104.1	83.5 (2001)	62.4 (2001)	40.5 (2008)	0.5	0.5	0
Solomon Islands	103.1	106.5	66.3	..	..	..	..	..	..
Timor-Leste	103.4	104.1	45.9	78.1 (2010)	65.7 (2010)	-1.7 (2010)	1	..	..
Tuvalu	..	..	..	1.6 (2002)	2.2 (2002)	..	..	..	..
Vanuatu	103.0	107.7	..	74.5 (2009)	66.6 (2009)	..	..	..	..
<b>Landlocked developing countries</b>									
Armenia	105.3	129.9	66.9	29.3 (2011)	30.2 (2011)	35.9 (2010)	0.5	0.5	0.5
Azerbaijan	98.9	114.9	94.1	62.1 (2008)	47.4 (2008)	45.2 (2010)	0.5	0.5	0.5
Kazakhstan	92.7	105.6	95.7	29.9 (2012)	28.5 (2012)	34.1 (2010)	0	0.5	0
Kyrgyzstan	97.3	104.1	72.8	47.1 (2006)	47.4 (2006)	..	0.5	0.5	0.5
Mongolia	98.1	102.2	84.9	52.4 (2011)	57.1 (2011)	18.9 (2011)	0	0.5	0
Tajikistan	100.6	104.5	76.9	41.1 (2009)	51.7 (2009)	..	0.5	0.5	0
Turkmenistan	96.7	102.9	64.5	..	..	..	0	0.5	0
Uzbekistan	98.9	103.5	65.2	..	..	..	0.5	0.5	0
<b>Small island developing States</b>									
American Samoa	..	..	..	..	..	..	..	..	..
Cook Islands	..	..	..	0.7 (2011)	1.1 (2011)	..	..	..	..
Fiji	103.6	106.6	47.7	42.6 (2008)	39.4 (2008)	..	0.5	0.5	0
French Polynesia	104.4	104.2	..	12.4 (2007)	18.4 (2007)	..	..	..	..
Guam	103.0	106.0	..	..	..	..	..	..	..
Maldives	101.3	105.7	63.7	47.0 (2006)	19.5 (2006)	..	..	..	..
Marshall Islands	..	..	..	..	..	..	..	..	..
Micronesia (Federated States of)	104.9	107.3	..	..	..	..	..	..	..
Nauru	..	..	..	..	..	..	..	..	..
New Caledonia	102.1	105.7	..	..	..	..	..	..	..
Niue	..	..	..	..	..	..	..	..	..
Northern Mariana Islands	..	..	..	..	..	..	..	..	..
Palau	..	..	..	..	..	..	..	..	..
Papua New Guinea	104.1	107.7	92.5	..	..	..	0.5	1	0.5
Samoa	106.5	107.2	..	5.6 (2008)	51.2 (2008)	..	..	..	..
Tonga	100.5	107.6	..	59.5 (2003)	52.2 (2003)	..	..	..	..

Source: ESCAP Online Statistical Database.

Notes: Employment sex ratio refers to employed females per 100 employed males; the index of women's access to credit, land and other assets ranges between 0 (full access) and 1 (impossible to access).

slight bias in favour of boys over girls. Armenia (130) and Azerbaijan (115) in particular show a greater preference for boys over girls.

Gender bias can also be seen in several other dimensions in these countries. In particular, gender bias in the labour market and women's access to credit and assets not only can hurt women's economic status and empowerment, but could also be below the optimum level for economic growth. With the exception of Cambodia and the Lao People's Democratic Republic, in most of the Asia-Pacific CSN the employment sex ratio – number of employed females per 100 employed males – is significantly less than 100 (table 1.9), implying that fewer women are employed than men. The situation is particularly acute in Afghanistan where there are only 18 employed women for 100 employed men.

Another important characteristic of the labour market in these countries that reveals gender bias is the place of employment. Across most of the Asia-Pacific CSN, the percentage of self-employed females in family/own account enterprises is much higher than that of self-employed males (table 1.9). Such jobs are informal in nature and do not come with assured remuneration; the returns, if any, are usually linked to the profitability of such enterprises. As a result, women are relatively more subject to market risks than men. Even where women are employed in jobs that carry a "wage" or "salary", there are significant differences in the rates paid to women compared with men. Data on the gender wage gap – the difference between the gross average nominal monthly wages of male and those of female employees expressed as a percentage of the gross average nominal monthly wages of male employees – are available for only a few Asia-Pacific CSN. These show that men receive significantly higher wages than women for comparable jobs in these countries, the sole exception being Timor-Leste (table 1.9).

The above-mentioned demographic and labour market indicators clearly point towards persistent and significant gender bias against women in Asia-Pacific CSN. Gender biases, however, are manifested in several other dimensions, such as women's access to credit or in their ownership of assets, including land. In addition, they can also be manifested in several other non-economic forms, such as in relatively poor health status, years of schooling and highest educational attainment and gender-based violence, including physical and sexual violence from intimate partners/persons known to the women. The challenge faced by Asia-Pacific CSN is immense in this regard. Concerted

action is required to correct these deeply entrenched biases, in which women's education and the sensitization of men/boys to gender inequalities perhaps play the most prominent role.

## ENERGY

The availability and use of energy not only is critical for all forms of modern economic activity but also plays a crucial role in determining the quality of human life in general. Data on energy-related variables are not available for any Asia-Pacific SIDS and for many of the Asia-Pacific LDCs. Table 1.10 presents some key statistics on energy supply and use for the countries for which data are available.

Total primary energy supply (TPES) per capita is significantly lower in the Asia-Pacific LDCs for which data are available than in Asian LLDCs, with the exception of Tajikistan (table 1.10). This is not surprising considering that many of the Asian LLDCs (Azerbaijan, Kazakhstan, Mongolia, Turkmenistan and Uzbekistan) have rich petroleum deposits and are net exporters of crude oil and/or natural gas. An exception is Myanmar, which has low TPES even though it is a net exporter of energy. At the other end are Armenia, Cambodia, Kyrgyzstan and Tajikistan, for which at least a third or more of the total energy supply comes from imports. The volatility in the price of oil in global markets means that both the net exporting and net importing countries are exposed to enormous energy price shocks, albeit in different ways. In line with TPES, electricity production per capita too shows a similar pattern across the Asia-Pacific LDCs and LLDCs, with the latter group reporting much higher electricity production per capita than others. With few exceptions, a very high percentage of electricity generated in the Asia-Pacific LDCs and LLDCs comes from the burning of fossil fuels – oil, gas and coal. The notable exceptions are Nepal, Kyrgyzstan and Tajikistan, where hydroelectricity accounts for most such energy.

Total final consumption of energy per capita is much higher in the Asian LLDCs than in the Asia-Pacific LDCs. However, energy use per \$1,000 of GDP (constant 2011 PPP) is not significantly different across these countries. Only Kazakhstan, Turkmenistan and Uzbekistan report significantly higher energy intensity of their GDP.

Household electricity consumption per capita across Asia-Pacific LDCs and LLDCs also shows a similar pattern as TPES and total final consumption of energy. One major reason for the low levels of electricity usage



**Table 1.10.** Energy supply and use in Asia-Pacific countries with special needs

Country/area	Total primary energy supply per capita	Net energy imports	Gross electricity production per capita	Electricity production from oil, gas and coal sources	Total final consumption per capita	Energy use per \$1,000 GDP (constant 2011 PPP)	Household electricity consumption per capita	Access to electricity	Population without electricity
	Kg of oil equivalent 2010	% of total energy use 2011	kWh 2012	% of total 2012	Kg of oil equivalent 2012	kg of oil equivalent 2011	kWh per capita 2012	% of population 2011	Millions 2011
<b>Least developed countries</b>									
Afghanistan	..	..	..	..	..	..	..	..	..
Bangladesh	214	17	317	98	161	79	96	59.6	60.8
Bhutan	..	..	..	..	..	..	..	..	..
Cambodia	369	29	96	94	318	138	103	34.0	9.4
Kiribati	..	..	..	..	..	..	..	..	..
Lao People's Democratic Republic	..	..	..	..	..	..	..	..	..
Myanmar	289	-59	203	30	274	..	69	48.8	24.7
Nepal	368	13	129	0.1	364	187	54	76.3	7.2
Solomon Islands	..	..	..	..	..	..	..	..	..
Timor-Leste	..	..	..	..	..	..	..	..	..
Tuvalu	..	..	..	..	..	..	..	..	..
Vanuatu	..	..	..	..	..	..	..	..	..
<b>Landlocked developing countries</b>									
Armenia	1 001	67	2 707	32	720	134	670	..	..
Azerbaijan	1 471	-377	2 469	87	837	87	698	..	..
Kazakhstan	4 600	-105	5 605	91	2 564	227	623	..	..
Kyrgyzstan	755	48	2 771	7	645	192	953	..	..
Mongolia	1 410	-435	1 722	100	1 051	175	325	88.2	0.3
Tajikistan	283	36	2 119	1	256	139	333	..	..
Turkmenistan	4 943	-164	3 431	100	3 243	426	394	..	..
Uzbekistan	1 692	-20	1 839	81	1 242	369	275	..	..

Source: ESCAP Online Statistical Database and World Bank's World Development Indicators.

Notes: Data on the above variables are not available for any of the SIDS countries.

in the Asia-Pacific LDCs is that not all households have access to electricity. Only 34% of households in Cambodia have access to electricity. Across the Asia-Pacific LDCs, approximately 102 million people do not have access to electricity, of whom nearly 61 million are in Bangladesh alone. Thus, these countries have a long way to go in terms of linking people to electricity grids and in raising energy usage levels, both of which steps require immense investments, including FDI, in the electricity sector, spanning electricity generation, transmission and distribution.

## INFORMATION AND COMMUNICATIONS TECHNOLOGY CONNECTIVITY

Information and communications technology (ICT) play a vital role in modern economies in several ways. ICT and the Internet have enabled people to access information on diverse subjects that make it possible for them to take informed decisions affecting their life, such as issues relating to health and livelihood/career choices. These technologies have enabled businesses

in developed countries to outsource several business processes to enterprises in faraway developing countries where skilled workers are available at lower cost than in their own countries, thus giving rise to new business and employment opportunities for people in developing countries.

Internet penetration in Asia-Pacific CSN shows wide variations across these economies. Internet users per 100 people range from as low as 5.9 in Afghanistan to as high as 66 in New Caledonia (table 1.11). By and large, Internet penetration is higher in many of the Asian LLDCs and Asia-Pacific SIDS than in Asia-Pacific LDCs, although there are several exceptions in the former two groups.

Connectivity is the key to the spread of Internet use and the information revolution that is sweeping the world today. The infrastructure for ICT connectivity is mainly through fixed-line telephone, mobile phones and wired broadband. Data on these three types of ICT connectivity show wide variation across countries (table 1.11). Again, the Asian LLDCs

**Table 1.11. Internet and ICT connectivity in Asia-Pacific countries with special needs**

Country/area	Internet users (per 100 population) 2013	Fixed telephone subscriptions (per 100 population) 2013	Mobilecellular subscriptions (per 100 population) 2013	Fixed (wired)- broadband subscriptions (per 100 population) 2013
<b>Least developed countries</b>				
Afghanistan	5.9	0.3	70.7	0
Bangladesh	6.5	0.7	74.4	1
Bhutan	29.9	3.5	72.2	2.7
Cambodia	6	2.8	133.9	0.2
Kiribati	11.5	8.8	16.6	1.1
Lao People's Democratic Republic	12.5	10.4	68.1	0.1
Myanmar	1.2	1	12.8	0.2
Nepal	13.3	3	76.8	1.1
Solomon Islands	8	1.4	57.6	0.3
Timor-Leste	1.1	0.3	57.4	0.1
Tuvalu	37	14.7	34.4	7.1
Vanuatu	11.3	2.2	50.3	0.1
<b>Landlocked developing countries</b>				
Armenia	46.3	19.4	112.4	7.9
Azerbaijan	58.7	18.7	107.6	17
Kazakhstan	54	26.7	184.7	11.3
Kyrgyzstan	23.4	8.3	121.4	2.4
Mongolia	17.7	6.2	124.2	4.9
Tajikistan	16	5.2	91.8	0.1
Turkmenistan	9.6	11.5	116.9	0
Uzbekistan	38.2	6.9	74.3	1.1
<b>Small island developing States</b>				
American Samoa	..	18.1	..	..
Fiji	37.1	8	105.6	1.2
French Polynesia	56.8	19.9	85.6	16.2
Guam	65.4	40.6	..	1.8
Maldives	44.1	6.5	181.2	5.8
Marshall Islands	11.7	..	..	..
Micronesia (Federated States of)	27.8	9.7	30.3	2
Nauru	..	0	..	0
Niue	..	..	..	..
Northern Mariana Islands	..	42.7	..	0
Palau	..	34.7	85.8	5.2
Papua New Guinea	6.5	1.9	41	0.2
Samoa	15.3	..	..	0.1
Tonga	35	29.4	54.6	1.6

Source: ESCAP Online Statistical Database.

have relatively more subscribers in each type than the Asia-Pacific LDCs. Interestingly, many of the Asia-Pacific SIDS have more fixed-line telephone subscriptions than the Asia-Pacific LDCs or LLDCs.

Across the three types of ICT connectivity, without exception, mobile telephony has greater reach in all Asia-Pacific CSN compared with the spread of fixed-

line telephones and wired broadband connections (table 1.11). The number of mobile subscriptions is more than the number of fixed-line and wired broadband connections put together in all the countries with data on all three types of connection. A major reason for this is that both fixed-line telephones and wired broadband are much more capital-intensive to lay out compared with mobile telephony. From the

user perspective too, mobile phones offer greater convenience and ease of access while on the move.

## SUSTAINABLE URBANIZATION

Urbanization in Asia-Pacific CSN has generally been slower than in the Asia-Pacific developing countries excluding China and India. In Asia-Pacific CSN as a whole, only one in three persons lived in urban areas as of 2014. Current projections suggest that urbanization will continue; by 2050, about half the population in Asia-Pacific CSN is expected to live in urban areas, while it is likely to be close to two thirds of the population for the Asia-Pacific developing countries excluding China and India (figure 1.5).

The anticipated rise in urbanization presents both an opportunity and a challenge. The opportunity lies in harnessing urbanization for socioeconomic development through policies and investments that foster decent employment. The current experience of the developed countries and several developing countries suggests that urbanization plays a crucial role in the economic development of countries. Indeed, cities and towns help create several categories of urban-specific jobs, such as urban public transport and urban infrastructure development/maintenance. Such activities not only create productive employment but also have several

externalities that facilitate a much higher level of economic activity in general.

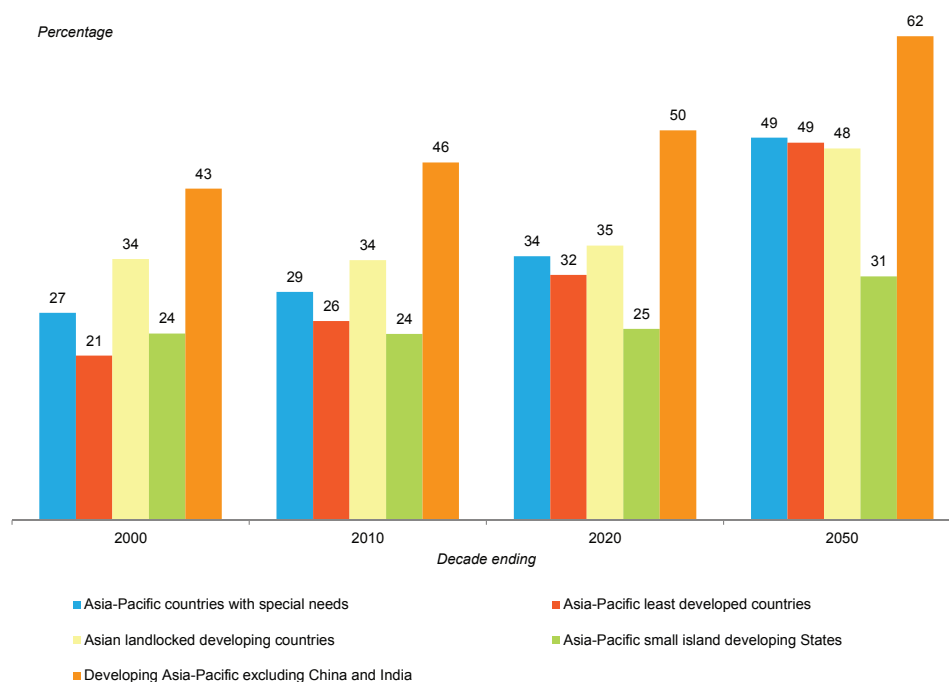
The challenge is to ensure that cities grow in a sustainable manner. Worldwide experience shows that cities face several problems relating to their environmental sustainability. Food, water and sanitation requirements of city dwellers, housing deficiencies/slums, waste management, and pollution of air, land and water bodies are some of the critical challenges in this regard.

Cities and towns of Asia-Pacific CSN in general have not fared well in tackling many of these challenges, especially those relating to housing, waste management and pollution of local natural resources. Indeed, with the anticipated growth in urban population the very sustainability of urban centres depends upon how these countries meet these pressing challenges.

## CLIMATE CHANGE, ENVIRONMENTAL STRESS AND NATURAL DISASTERS

In addition to the above-mentioned challenges faced by urban centres globally, in more recent times climate change poses new challenges in the form of flooding due to climate events and sea level rise. Many urban centres in the Asia-Pacific region in general and particularly in several Asia-Pacific LDCs and Asia-

**Figure 1.5. Urban population share in total population**



Source: Based on data from UN-DESA *World Population Prospects: The 2012 Revision*, extracted from ESCAP website.

Note: Urban population share (%) in each year is first calculated from the population data (including for the projections up to 2050) and average of the annual share (%) for decade ending (DE) 1960, 1970, etc., is plotted here.

Pacific SIDS are vulnerable to such risks. These vulnerabilities affect the urban poor disproportionately more as they tend to live in the more vulnerable parts of cities; another factor is their low economic base.

Climate change is also expected to result in more frequent freak weather events, longer summers, and shorter and more severe winters, which can adversely affect agriculture and rural livelihoods in several ways. Cultivation of crops that may not be able to cope with temperature and water stress (both flooding and drought-like conditions), stress on farm animals due to weather and volatility in the availability of animal feed, rises in the incidence of pest attacks, and crop and animal diseases can render agriculture an increasingly risky venture.

Whether disasters are related to climate or geology, Asia-Pacific CSN are subjected to natural disasters

every year in varying degrees (table 1.12). These natural disasters result in mortality and morbidity, affecting survivors in several ways, such as food and water scarcity in the immediate aftermath of these events, rising incidence of communicable diseases and deep economic damage from which many find it difficult to recover. The extent of economic damage from some of these events have been very large, for example up to 29% of GDP in Samoa, 16% in Tajikistan and 15% in Myanmar. Losses of up to 5% of GDP have not been uncommon in several countries (table 1.12).

The challenges due to climate change and natural disasters have risen in a context where Asia-Pacific CSN have not paid much attention to resource-use efficiency in general. Conservation of water, energy, minerals and ores has not figured very highly in the development strategy of these countries in general.

**Table 1.12. Natural disasters in selected Asia-Pacific countries with special needs, 2004-2013**

Country/area	Number of events	Mortalities (number per annum)	Number of people affected (per 1 000 population)	Maximum economic damage (% of GDP)
<b>Least developed countries</b>				
Afghanistan	72	368	17.1	0.7 (2011)
Bangladesh	66	826	51.2	3.1 (2007)
Bhutan	4	2	2.9	
Cambodia	15	70	28.9	4.1 (2011)
Kiribati	1	0	..	..
Lao People's Democratic Republic	9	18	22.7	1.8 (2009)
Myanmar	20	1 3921	6.3	15.5 (2008)
Nepal	32	192	10.5	0.5 (2009)
Solomon Islands	11	9	9.2	2.2 (2014)
Timor-Leste	5	2	0.9	0.7 (2011)
Tuvalu	1	0	0	..
Vanuatu	8	0	30.4	0.9 (2013)
<b>Landlocked developing countries</b>				
Armenia	3	0	2.5	0.6 (2013)
Azerbaijan	5	1	1.0	
Kazakhstan	8	10	0.6	0.1 (2008)
Kyrgyzstan	15	15	38.9	1.2 (2013)
Mongolia	4	8	29.6	1.4 (2009)
Tajikistan	25	22	44.7	16.3 (2008)
Uzbekistan	2	1	0	..
<b>Small island developing States</b>				
American Samoa	3	3	39.5	..
Cook Islands	3	0	20.2	..
Fiji	16	7	10.4	2.4 (2012)
French Polynesia	1	0	1.3	0.2 (2010)
Guam	2	0	0.2	..
Maldives	3	11	4.7	..
Marshall Islands	2	0	13.4	..
Micronesia (Federated States of)	2	0	5.7	..
Niue	1	0	13.0	..
Northern Mariana Islands	1	0	0.3	..
Palau	1	0	0.0	0.2 (2012)
Papua New Guinea	22	48	7.9	4.6 (2013)
Samoa	4	16	9.8	28.7 (2009)
Tonga	3	1	0.5	10.9 (2013)

Source : ESCAP Online Statistical Database.

Notes : Affected people are those requiring immediate assistance during an emergency including food, water, shelter, sanitation and immediate medical assistance. They also include cases of infectious disease introduced in a region or a population that is normally free from that disease.

Adequate investments in conservation technologies have not been made in these countries, and as a result there is tremendous scope to improve the economic efficiency of resource use not to mention environmental sustainability.

Many developing countries have tended to view economic development and environmental sustainability as an “either/or” choice. Investments to build climate resilience into agricultural, rural and urban infrastructure and local adaptation strategies have not attracted the desired level of policy attention. New thinking, new technologies, new institutions and organizational approaches show that socioeconomic development and environmental sustainability can mutually reinforce each other (UN-HABITAT and ESCAP, 2014). The challenge for Asia-Pacific CSN is to embark on a

bold development strategy that stresses sustainable economic development.

It is clear that Asia-Pacific CSN face enormous challenges in several dimensions regarding their socioeconomic development. Inclusive and sustainable development is no longer a matter of choice for these countries, but a fast-emerging necessity. Although the countries are making progress, their development is constrained by various factors. Geographic remoteness, lack of adequate transport, communication and energy infrastructure, poor-quality human capital, persistent poverty and inequality, all are some of the more critical structural rigidities that hamper long-run growth and sustainable poverty reduction.







# CHAPTER

# 2

## THE ECONOMIES OF THE ASIA-PACIFIC COUNTRIES WITH SPECIAL NEEDS

Asia-Pacific CSN have experienced relatively fast growth in the past decade, but in general that was not accompanied by significant change in the structure of these economies. In terms of employment in particular, agriculture still accounts for a large share of jobs. Most Asia-Pacific CSN have a narrow production base and remain highly reliant on exports of few commodities as well as the influx of external resources, particularly ODA and remittances.

At an aggregate level, the size of the Asia-Pacific CSN economies put together is far smaller than the economies of the Asia-Pacific developing countries excluding China and India (table 2.1). The size of the economy of individual Asia-Pacific CSN varies substantially. Bangladesh is the largest (\$100 billion in 2012) of these economies, while Tuvalu is the smallest (\$26 million in 2012). Indeed, as may be expected, most of the Asia-Pacific SIDS and the island States among the Asia-Pacific LDCs (Kiribati, Solomon Islands, Timor-Leste, Tuvalu and Vanuatu) are the smaller economies among the Asia-Pacific CSN.

Real GDP per capita however, shows a completely different picture, reflecting the large variation in the population size across Asia-Pacific CSN. All Asia-Pacific SIDS and the island States among the Asia-

Pacific LDCs have a real GDP per capita exceeding \$1,000 (table 2.1), and are considered as middle-income countries, according to the World Bank's country classification criteria. In contrast, the non-island States among the Asia-Pacific LDCs (except Bhutan) and Kyrgyzstan, Tajikistan and Uzbekistan among the Asian LLDCs have a per capita GDP of less than \$1,000, and are considered as low-income countries under the World Bank's classification system. Despite the contrasting picture between the Asia-Pacific SIDS and Asia-Pacific LDCs, at the aggregate level, the population-weighted per capita income in Asia-Pacific CSN as a whole was just \$1,017 in 2012, which is only 30% of that in the Asia-Pacific developing countries excluding China and India (\$3,418 in 2012). This clearly shows that the Asia-Pacific LDCs especially have a very long way to go to catch up.

The growth performance of Asia-Pacific CSN, however, compares much more favourably than the Asia-Pacific developing countries excluding China and India. Between 2003 and 2012, Asia-Pacific CSN grew at 7.3%, 1.5 times faster than the rest of the region. The 2008 global financial crisis, no doubt, has resulted in much slower economic growth, but Asia-Pacific CSN seem to have been less affected. The growth rate of Asia-Pacific CSN during the post-2008 global

**Table 2.1. Size and growth of selected economies of Asia-Pacific countries with special needs**

Country/area	Real GDP in	Real GDP	Real GDP growth rates (%)					Real GDP per capita	
	2012	per						growth rate (%)	
	(million 2005	capita in	2003-2012	2008-2012	2013	2014a	2015b	2003-2013	2008-2013
	US\$)	(2005 US\$)							
<b>Least developed countries</b>									
Afghanistan	11 973	401	8.3	7.5	3.6	3.2	4.5	5.5	6.6
Bangladesh	100 286	648	6.2	6.2	6.0	6.1	6.8	5.0	5.0
Bhutan	1 463	1 972	8.2	7.2	4.2	6.0	6.8	5.4	4.8
Cambodia	9 984	672	8.0	5.4	7.4	7.2	7.3	6.2	3.8
Kiribati	118	1 168	1.8	1.6	2.9	3.0	2.7	-0.7	-0.4
Lao People's Democratic Republic	4 650	700	7.6	7.9	8.2	7.5	7.2	5.8	5.8
Myanmar	22 854	433	11.0	8.7	8.3	7.8	8.5	9.5	7.4
Nepal	11 168	406	4.3	4.7	3.7	5.5	5.0	2.9	3.0
Solomon Islands	602	1 095	6.3	5.0	2.9	-1.0	3.0	4.3	2.3
Timor-Leste	3 491	3 134	26.8	4.3	8.1	6.6	6.8	17.0	-2.8
Tuvalu	26	2 600	0.9	1.7	1.3	2.0	2.0	1.0	0.3
Vanuatu	519	2 101	4.2	2.9	3.2	3.5	4.0	1.6	-0.1
<b>Landlocked developing countries</b>									
Armenia	6 640	2 236	7.2	1.3	3.5	2.6	1.2	6.1	0.4
Azerbaijan	28 405	3 051	13.3	5.0	5.8	3.0	1.5	10.9	2.8
Kazakhstan	87 463	5 375	7.2	4.8	6.0	3.0	1.5	5.7	4.2
Kyrgyzstan	3 209	586	4.1	3.2	10.5	3.6	2.0	3.4	2.4
Mongolia	4 557	1 630	8.8	8.8	11.7	7.8	6.0	7.6	7.5
Tajikistan	3 486	435	7.1	5.6	7.4	6.8	4.0	4.2	3.0
Turkmenistan	28 434	5 497	9.5	10.4	10.2	10.3	9.0	9.2	8.7
Uzbekistan	25 143	881	7.7	8.3	8.0	8.0	7.6	6.7	6.6
<b>Small island developing States</b>									
Cook Islands	188	8 952	0.9	-0.3	3.2	2.2	2.5	-0.1	0.7
Fiji	3 126	3 573	1.3	0.6	4.6	4.2	4.0	0.7	0.4
French Polynesia	6 552	23 912	2.1	2.3	..	..	..	-0.5	-1.6
Maldives	2 067	6 115	8.8	6.8	8.8	8.5	10.5	5.3	3.2
Marshall Islands	154	2 906	2.2	1.6	3.5	3.0	1.5	2.0	1.5
Micronesia (Federated States of)	255	2 476	0.2	0.9	-4.0	0.5	2.0	0.4	1.5
Nauru	56	5 600	9.7	26.5	4.5	10.0	8.0	8.5	11.3
New Caledonia	7 806	30 854	3.5	2.6	..	..	..	1.7	1.4
Palau	166	7 905	-0.1	-2.3	-0.2	2.3	5.0	-0.2	-1.2
Papua New Guinea	7 885	1 100	5.9	8.2	5.1	8.4	15.5	3.4	5.2
Samoa	458	2 423	2.1	-0.2	-0.5	2.0	2.5	1.0	0.1
Tonga	281	2 676	1.1	2.4	0.3	1.5	2.5	0.0	0.8
Developing Asia-Pacific	11 056 796	2 692	7.2	6.0	5.3	5.3	5.0	5.9	4.9
Developing Asia-Pacific excl. China and India	5 102 676	3 418	4.8	3.4	..	5.8	5.9	..	..
Least developed countries	167 134	578	7.0	6.4	5.4	5.6	6.0	5.6	5.0
Landlocked developing countries	187 337	2 385	8.2	5.9	6.2	4.4	3.2	6.3	4.5
Small island developing States	28 994	3 012	3.6	3.8	4.9	6.3	10.0	1.7	1.7
Asia-Pacific countries with special needs	383 465	1 017	7.3	5.9	..	..	..	5.9	4.7

Sources: Staff computations based on data from ESCAP Online Statistical Database; ESCAP (2015a).

Notes: a – estimates; b – forecasts (as of 15 March 2015).

crisis period was 1.7 times higher than that of the Asia-Pacific developing countries excluding China and India.

Within the Asia-Pacific CSN, growth has been fastest in the Asia-Pacific LDCs, followed by Asian LLDCs and Asia-Pacific SIDS. Economic growth has slowed in the Asia-Pacific LDCs and Asian LLDCs in the post-2008 period, and the near-term prospect does not

suggest that a turnaround is coming soon. In contrast, economic growth seems to be accelerating in the Asia-Pacific SIDS in the post-2008 period, and this trend is expected to continue into the near future. The growth acceleration in the Asia-Pacific SIDS is primarily driven by Papua New Guinea, the largest country among those States. The growth performance of these economies in terms of per capita GDP shows a similar pattern.

## SECTORAL COMPOSITION OF GDP AND EMPLOYMENT

Asia-Pacific CSN in general have not undergone considerable structural change, with agriculture and services sectors accounting for the bulk of the output and jobs. In all but 5 of the 36 Asia-Pacific CSN, the services sector is the dominant sector of the economy, albeit in varying degree (table 2.2). In half the Asia-Pacific CSN, the services sector accounts for more than half of GDP. In only two countries – Papua New Guinea and Timor-Leste – services account for less than a quarter of the economy. Industry is the dominant sector of the economy in the five exception countries, namely Bhutan and Timor-Leste (among the Asia-Pacific LDCs), Azerbaijan and Turkmenistan (among Asian LLDCs) and Papua New Guinea (among Asia-Pacific SIDS). Indeed, Timor-Leste appears to be an extreme case where more than four fifths of the economy are in the industrial sector, more specifically mining.

Agriculture is the second largest sector of the economy in the Asia-Pacific LDCs, the exceptions being Bangladesh (industry) and Bhutan and Timor-Leste (services). Of these, in Bangladesh and Bhutan agriculture had been the second largest sector until recently. In contrast, in the Asian LLDCs, industry is the second largest sector, mainly due to mining. Indeed, agriculture is the smallest of the three sectors in all the Asian LLDCs. This is also the case in most of the Asia-Pacific SIDS, except Federated States of Micronesia, Marshall Islands and Papua New Guinea, where agriculture is the second largest sector.

The pattern of structural transformation that these countries followed over the past decade shows the shift of output and employment from agriculture to services. The percentage of total value added in agriculture, including fisheries, has reduced in all these countries, except for six SIDS: Kiribati, Marshall Islands, Federated States of Micronesia, Nauru, Palau and Tuvalu. But such structural change does not reflect a process of industrialization in terms of increasing manufacturing.

In fact, manufacturing as share of total value added increased in the period 2000-2013 only in six countries: Bangladesh (14% to 17%), Bhutan (8% to 9%), Lao People's Democratic Republic (7.8% to 8.1%), Myanmar (7% to 20%), Nauru (2% to 34%) and Turkmenistan (33% to 38%). In other countries that experienced increase in share of industry in total value added, most of the growth came from the expansion of mining. In the extreme case of Timor-Leste, the

share of industry increased from 30% to 84%, while the share of manufacturing reduced from 2% to 0.2% as share of total value added. Structural change in Asia-Pacific CSN has also been usually characterized by the shift of output and employment to services, including construction, retail trade, transport, storage and communications.

The problem with the pattern of structural change that skips increases in manufacturing is that Asia-Pacific CSN risk to miss the opportunities for benefiting from economies of scale, technological learning, spillovers to other sectors and creating enough job opportunities for variously skilled levels of labour.

Data on employment across the sectors are not available for many of the Asia-Pacific CSN. In the Asia-Pacific LDCs and Asian LLDCs for which sectoral employment data are available, sectoral shares in total employment do not reflect the composition of GDP (table 2.2). Agriculture still accounts for more than half the employment in Bhutan, Cambodia, Timor-Leste and Vanuatu; however, in none of them is agriculture the dominant sector in GDP. Even in the Asian LLDCs, where agriculture is the smallest of the three sectors, the employment share of agriculture is disproportionately higher. Sectoral employment data are available only for French Polynesia and New Caledonia among the Asia-Pacific small island developing economies. In both of them, services have the highest shares both in GDP and total employment.

The mismatch in GDP and employment shares across sectors, with agriculture still being a very important source of employment in a situation where it is not the largest generator of income, is one of the main reasons why poverty levels are high in many of the Asia-Pacific LDCs. Thus, the main challenge for the Asia-Pacific LDCs and to a lesser extent for Asian LLDCs is to bring about a structural transformation in the employment pattern across sectors that correlate well with their GDP contributions.

## EXPENDITURE COMPOSITION OF GDP

The lack of structural transformation results in economies that are not diversified and are characterized by a narrow production base. Under such circumstances, domestic demand for products and services invariably exceeds the domestic capacity to supply them. This is reflected in the large share of final consumption in total GDP (table 2.3). In 29 of the 32 Asia-Pacific CSN for which data are available, well over 50% of GDP is accounted for by final consumption of households, and governmental and non-governmental agencies/institutions. This is the case

**Table 2.2. Sectoral composition of GDP and employment, selected economies of Asia-Pacific countries with special needs, 2000-2013**

Country/area	Share in total value added 2000			Share in total value added 2013			Share in total employment *		
	Agriculture	Industry (manufacturing)	Services	Agriculture	Industry (manufacturing)	Services	Agriculture	Industry	Services
<b>Least developed countries</b>									
Afghanistan	57.0	23.2 (16.8)	19.8	25.6	20.5 (11.4)	53.9	..	..	..
Bangladesh	24.4	23.1 (14.3)	52.5	16.3	27.6 (17.3)	56.1	..	..	..
Bhutan	27.4	36.0 (8.4)	36.6	17.1	44.6 (9.0)	38.3	61.8	7.7	30.4
Cambodia	37.8	23.0 (16.9)	39.1	33.5	25.6 (16.4)	40.8	58.2	15.2	26.6
Kiribati	23.6	14.2 (4.8)	62.2	25.8	9.6 (5.3)	64.6	..	..	..
Lao People's Democratic Republic	43.5	18.7 (7.8)	37.8	24.1	34.1 (8.1)	41.7	..	..	..
Myanmar	57.2	9.7 (7.2)	33.1	33.2	29.9 (19.8)	36.9	..	..	..
Nepal	37.7	17.3 (9.2)	45.0	34.7	14.9 (6.2)	50.3	..	..	..
Solomon Islands	34.7	12.7 (8.0)	52.6	28.4	15.2 (8.3)	56.4	..	..	..
Timor-Leste	22.5	30.2 (2.1)	47.3	3.9	83.7 (0.2)	12.4	50.6	9.2	39.8
Tuvalu	19.4	7.8 (0.8)	72.8	25.5	9.2 (1.1)	65.3	..	..	..
Vanuatu	25.6	12.5 (4.8)	61.9	24.3	10.5 (4.5)	65.2	60.5	7.0	31.1
<b>Landlocked developing countries</b>									
Armenia	25.1	38.3 (18.2)	36.5	21.2	30.5 (11.0)	48.3	38.7	17.8	43.6
Azerbaijan	17.0	45.1 (5.6)	37.9	5.6	61.8 (4.5)	32.5	38.1	13.5	48.4
Kazakhstan	8.6	40.1 (17.5)	51.3	4.9	37.8 (11.5)	57.2	28.0	19.0	53.1
Kyrgyzstan	36.6	31.5 (19.3)	31.9	17.1	26.8 (15.0)	57.1	34.0	20.6	45.3
Mongolia	30.9	25.0 (7.6)	44.1	16.5	33.3 (7.2)	50.3	36.6	15.9	47.3
Tajikistan	27.3	38.4 (36.1)	34.3	24.3	26.7 (15.0)	49.1	..	..	..
Turkmenistan	22.9	41.8 (33.0)	35.2	14.5	48.4 (38.0)	37.0	..	..	..
Uzbekistan	34.4	23.1 (13.6)	42.5	19.6	33.0 (21.9)	47.4	..	..	..
<b>Small island developing States</b>									
Cook Islands	10.3	8.3 (3.5)	81.4	4.6	8.8 (2.9)	86.5	..	..	..
Fiji	16.1	19.0 (14.5)	64.9	12.5	21.1 (14.7)	66.4	..	..	..
French Polynesia	5.1	13.9 (6.5)	81.0	2.5	12.8 (5.4)	84.6	3.5	8.4	86.8
Maldives	5.2	11.9 (4.8)	82.9	3.9	14.5 (5.7)	81.6	..	..	..
Marshall Islands	10.0	19.2 (4.6)	70.9	15.5	12.1 (1.9)	72.4	..	..	..
Micronesia (Federated States of)	25.5	8.7 (1.7)	65.8	27.9	8.7 (0.4)	63.3	..	..	..
Nauru	5.2	39.1 (1.7)	55.7	3.4	55.5 (33.6)	41.1	..	..	..
New Caledonia	2.4	26.0 (14.9)	71.6	1.4	25.0 (12.8)	73.6	2.7	22.4	43.0
Palau	3.9	12.0 (1.9)	84.1	6.0	5.3 (1.7)	88.6	..	..	..
Papua New Guinea	35.2	40.7 (7.4)	24.1	27.1	45.3 (7.3)	27.5	..	..	..
Samoa	16.7	26.8 (15.0)	56.6	9.3	27.7 (7.7)	63.0	..	..	..
Tonga	22.1	20.7 (10.2)	57.2	19.9	18.2 (7.1)	62.0	..	..	..

Source: Staff computations based on data from United Nations Statistics Division.

Note: \* Average for period 2008-2012.



**Table 2.3. Expenditure shares as a percentage of real GDP, average during the period 2008–2013**

Country/area	Final consumption	Household consumption	Government consumption	Gross capital formation	Net exports
<b>Least developed countries</b>					
Afghanistan	120.5	105.6	12.2	13.5	-34.0
Bangladesh	76.7	69.9	5.3	27.1	-3.9
Bhutan	60.9	40.1	19.5	60.0	-21.0
Cambodia	90.1	81.6	6.7	22.0	-12.1
Kiribati	138.5	99.1	38.1	43.2	-81.7
Lao People's Democratic Republic	66.6	55.6	9.5	41.8	-8.3
Myanmar	77.5	64.3	11.6	25.9	-3.5
Nepal	85.9	75.3	9.2	38.2	-24.0
Solomon Islands	88.4	52.6	35.9	22.2	-10.5
Timor-Leste	37.5	15.2	21.8	13.8	48.7
Tuvalu	100.3	23.3	75.5	52.0	-52.3
Vanuatu	77.3	63.8	12.6	32.5	-9.7
<b>Landlocked developing countries</b>					
Armenia	87.1	76.2	9.8	30.4	-17.5
Azerbaijan	44.3	37.1	6.0	25.9	29.8
Kazakhstan	66.1	47.9	9.7	29.9	3.9
Kyrgyzstan	103.4	87.8	14.6	26.1	-29.6
Mongolia	81.4	67.0	10.4	48.4	-29.7
Tajikistan	126.2	108.1	14.0	10.8	-37.0
Turkmenistan	22.9	13.7	9.1	47.3	29.8
Uzbekistan	71.6		17.8	27.4	1.1
<b>Small island developing States</b>					
Cook Islands	67.6	39.1	28.2	12.8	19.6
Fiji	90.7	75.0	15.3	18.8	-9.5
French Polynesia	94.5	62.1	32.4	22.8	-17.3
Maldives	64.1	37.8	24.7	27.2	8.7
Marshall Islands	144.5	90.2	53.5	56.1	-100.7
Micronesia (Federated States of)	126.7	74.5	70.9	33.5	-60.2
Nauru	137.6	95.0	36.1	40.9	-78.5
New Caledonia	87.3	62.3	24.2	38.4	-25.7
Palau	81.2	47.7	33.0	27.0	-8.1
Papua New Guinea	86.9	69.6	16.3	25.0	-11.9
Samoa	113.4	92.6	20.4	8.9	-22.3
Tonga	115.9	99.8	15.6	28.9	-44.7

Source: ESCAP Online Statistical Database.

across all Asia-Pacific SIDS and most of the Asia-Pacific LDCs and Asian LLDCs. The exceptions are Timor-Leste among the Asia-Pacific LDCs (37.5%), Azerbaijan (44.3%) and Turkmenistan (22.9%) among the Asian LLDCs. In fact, in 10 countries, final consumption exceeds those countries' GDP. These are Afghanistan, Kiribati and Tuvalu among the Asian LDCs; Kyrgyzstan and Tajikistan among the Asia-Pacific LLDCs; and the Federated States of Micronesia, Marshall Islands, Nauru, Samoa and Tonga among the Asia-Pacific small island developing States.

Within final consumption, household consumption is responsible for the dominant part compared with government consumption. Households account for well over half the final consumption in all but two countries, Timor-Leste and Tuvalu. In fact, in five countries, namely Afghanistan, Kiribati, Tajikistan, Nauru and Tonga, household consumption is equal to or exceeds the countries' GDP.

In the majority of Asia-Pacific CSN (23 in all), government consumption accounts for less than a quarter of GDP. This includes nine of the Asia-Pacific LDCs, all the Asian LLDCs and eight of the Asia-Pacific SIDS. At the other extreme are the Federated States of Micronesia and Tuvalu, wherein their Governments account for three quarters of GDP.

Gross capital formation is less than 25% of GDP in nine countries: Afghanistan, Cambodia, Solomon Islands and Timor-Leste among Asia-Pacific LDCs; Tajikistan among the Asian LLDCs; and Cook Islands, Fiji, French Polynesia and Samoa among the Asia-Pacific SIDS. In three countries, Bhutan, Tuvalu and Marshall Islands, gross capital formation exceeds 50% of GDP. In the rest of the economies, it ranges between 25% and 50% of GDP. The investment rate measured in national currency closely matches the rate in real terms in constant 2005 United States dollars (table 2.3).

With very high rates of final consumption, coupled also in some cases with high investment rates, this situation clearly implies that domestic demand in these countries is very high, sometimes far exceeding what they produce. Such high domestic demand is made possible by incurring a large trade deficit,<sup>3</sup> as seen in the negative share of net exports (total exports less total imports) in GDP in 25 economies (table 2.3). In only seven economies is the share positive for net exports, namely Azerbaijan, Cook Islands, Kazakhstan, Maldives, Timor-Leste, Turkmenistan and Uzbekistan.

## TRADE

The high dependence on foreign supplies to meet domestic demand is also seen in the import penetration ratio, defined as the ratio of imports to domestic

demand (table 2.4). This ratio is the least for Myanmar (15.4%) and highest for Cambodia (55.8%); it is well over 20% for most Asia-Pacific CSN.

Financing such large imports requires fairly robust export performance, apart from foreign inflows of various types. Of the Asia-Pacific CSN, 20 have reported a fairly high export-to-GDP ratio exceeding 20% (table 2.4). In fact, in 12 countries exports exceed 50% of GDP. Exports, however, are concentrated in a few primary commodities in many Asia-Pacific CSN, as may be observed in table 2.5, which lists the top three exports of those countries in the period 2012-2013 in terms of share of total exports. For example, the top three exports of Azerbaijan, Kazakhstan, Mongolia, Tajikistan and Turkmenistan are oil and minerals commodities; they account for between 64% and 93% of the total exports.

**Table 2.4. Percentage of trade and international financing, average during the period 2008-2012**

Country/area	Import penetration	Exports*	Trade openness	Current a/c balance*	ODA*	Remittances*	FDI inflows*	Net external debt*	Debt servicing
<b>Least developed countries</b>									
Afghanistan	25.2	18.0	71.3	3.4	40.7	1.4	0.7	16.3	0.4
Bangladesh	24.0	19.0	42.0	0.9	1.5	10.2	0.9	23.2	5.0
Bhutan	44.2	41.3	104.0	-11.2	8.3	0.6	2.4	61.6	12.3
Cambodia	55.8	77.6	167.5	-6.2	6.5	1.4	7.3	35.0	0.8
Kiribati	36.2	14.5	111.1	-24.4	26.1	..	1.1	..	..
Lao People's Democratic Republic	27.7	24.7	57.8	-20.3	6.5	0.8	3.7	86.2	4.9
Myanmar	15.4	5.7	14.6	-2.7	1.1	0.0	3.4	17.6	2.5
Nepal	25.5	11.0	46.2	1.7	5.4	23.4	0.4	25.2	9.6
Solomon Islands	46.1	43.5	98.1	-15.8	38.0	0.4	18.8	28.4	3.2
Timor-Leste	..	89.8	130.3	41.6	6.0	1.6	0.8	..	..
Tuvalu	38.9	1.5	55.5	0.9	63.1	..	..	..	..
Vanuatu	32.8	50.6	110.5	-7.7	14.9	2.4	6.3	30.6	1.3
<b>Landlocked developing countries</b>									
Armenia	31.2	20.1	58.2	-12.9	3.8	14.0	6.5	61.0	2.9
Azerbaijan	23.6	75.5	120.7	27.0	0.4	3.0	1.5	12.0	1.0
Kazakhstan	29.2	40.2	75.9	1.5	0.2	0.0	8.8	77.4	0.4
Kyrgyzstan	52.3	43.8	117.6	-9.2	7.5	26.0	7.2	85.2	3.1
Mongolia	52.8	66.3	162.7	-20.2	5.2	3.6	30.6	40.3	3.1
Tajikistan	39.7	72.1	183.7	-4.3	6.4	43.8	2.7	51.0	5.4
Turkmenistan	32.9	74.2	118.5	-1.4	0.1	..	13.2	2.4	..
Uzbekistan	26.4	35.4	69.5	4.8	0.5	..	2.8	18.6	..
<b>Small island developing States</b>									
Cook Islands	27.8	78.4	137.3	..	5.4	..	-2.6	..	..
Fiji	43.3	55.8	121.3	-6.4	2.2	4.8	9.2	17.5	1.4
French Polynesia	20.5	20.2	57.5	..	..	10.0	1.1	..	..
Maldives	38.4	96.0	183.2	-19.0	2.6	0.0	9.4	42.6	6.6
Marshall Islands	46.6	12.5	12.5	-13.4	40.3	..	13.0	..	..
Micronesia (Federated States of)	40.5	22.3	105.6	-15.8	40.1	..	-0.2	..	..
Nauru	..	14.0	112.3	..	47.5	..	3.1	..	..
New Caledonia	28.7	16.7	58.8	..	..	5.5	19.5	..	..
Palau	38.3	61.3	131.0	-7.6	14.0	..	2.0	..	..
Papua New Guinea	47.5	50.0	110.8	-20.5	4.6	0.0	0.6	69.3	1.9
Samoa	36.1	31.0	84.5	-6.7	15.9	21.4	3.3	51.7	5.0
Tonga	31.3	14.4	74.6	-5.9	15.2	19.8	2.2	38.1	8.6

Source: ESCAP Online Statistical Database.

Notes: \* Percentage of nominal GDP. Import penetration is the ratio of total imports to domestic demand (= GDP - Exports + Imports). Trade openness is the ratio of total trade (= Exports + Imports) to GDP. Debt servicing is the sum of interest payment and repayment of principal on international debt, divided by exports of goods and services and income from abroad.

Few primary products account for high shares of exports in many Asia-Pacific SIDS. Trade in three species of fish accounts for between 69% and 84% of merchandise exports in Maldives, Tuvalu and Vanuatu and more than 90% in the Federated States of Micronesia, Kiribati and Palau, while oil and mineral endowments are reflected in the high concentration of those exports in Timor-Leste (96%) and Papua New Guinea (58%) (table 2.5). Given such high shares, any volatility in the prices of those top three commodities has a commensurate impact on the exports of these countries. Other Asia-Pacific CSN show sizeable shares in the trade in low-value-added manufactured products, such as low-priced garments, with the top three of those exports accounting for 36% of total exports in Bangladesh, 21% in Cambodia and 25% in Nepal.

The excessive dependence on a few commodities also exposes many of the Asia-Pacific CSN to volatility in the global commodity markets. The prices for oil and several other commodities fell sharply in 2014, and the prospect of a recovery in commodity prices seems unlikely in the near term. Countries that are net importers of oil and other commodities no doubt are benefiting in the form of lower import bills, lower inflation rates and expansion of fiscal space. However, many Asia-Pacific CSN, especially the Asian LLDCs, are exporters of oil and other commodities, and these countries have been severely affected by low commodity prices (box 2.1).

With both exports and imports being large as a percentage of GDP, Asia-Pacific CSN show a very high degree of trade openness – defined as the ratio of total trade (exports plus imports) to GDP. The trade openness measure is often used to assess the degree of integration with the global economy. Of the Asia-Pacific CSN, 17 reported a trade openness measure exceeding 100%, implying that the trade sector in these countries is much larger than the domestic sector (table 2.4). Thus, Asia-Pacific CSN by and large show a very high degree of integration with the rest of the world. This also implies that the economic performance of these economies is crucially affected by the general state of affairs in the global economy. Since the global financial crisis that started in 2008, the global economy has not been growing very much, which not surprisingly has affected economic growth in Asia-Pacific CSN, where it has been lower than prior to 2008.

High trade deficits in many of the Asia-Pacific CSN do not automatically imply high current account deficits due to offsetting transfer flows. Data on current accounts are not available for all the countries for

which data on trade deficits are available. This is especially so for the Asia-Pacific SIDS. Of the 28 economies for which data on the current account are available, 20 run a current account deficit (table 2.4). Most of the Asia-Pacific CSN fall under two categories, where either the current account deficit is much smaller than the trade deficit, or the current account is in surplus even though the trade account is in deficit, implying that there is a net inflow into these economies' current accounts. Only in a few countries is there a net outflow to the rest of the world: (a) the Lao People's Democratic Republic, Solomon Islands and Vanuatu, where the trade deficit is smaller than the current account deficit; (b) Azerbaijan, Kazakhstan and Timor-Leste, where the trade surplus is larger than the current account surplus; and (c) Maldives and Turkmenistan, where there is a trade surplus and current account deficit.

## ODA AND INTERNATIONAL FINANCING

Official development assistance (ODA) is an important form of intergovernmental currency transfer in the balance of payments. Potentially, it can play an important role in helping developing countries to meet their socioeconomic development objectives. It can also play a major role in reducing the current account deficit of a country. In as many as 10 of the Asia-Pacific CSN, ODA as a percentage of GDP was less than 5% during the period 2008-2012 (table 2.4). In four of them – Azerbaijan, Kazakhstan, Turkmenistan and Uzbekistan – ODA was less than 1% of GDP. At the other end, 11 economies, 10 of which are Asia-Pacific SIDS and economies (including some LDCs), and Afghanistan received ODA in excess of 10% of their GDP. Tuvalu at 63% has the highest dependence on ODA.

Private remittances by migrant workers are another form of potentially important current transfer flow that can reduce current account deficits. Remittances are, however, an important source of foreign exchange earning only in a few of the Asia-Pacific CSN. Armenia, Bangladesh, Kyrgyzstan, Nepal, Samoa, Tajikistan and Tonga are countries where remittances exceeded 10% of GDP during the period 2008-2012 (table 2.4).

Many of the Asia-Pacific CSN receive FDI, which is a capital account transfer that can help bridge current account deficits. As a percentage of GDP, FDI exceeds 10% in five economies, namely Marshall Islands, Mongolia, New Caledonia, Solomon Islands and Turkmenistan, the highest being Mongolia at nearly 31% during the period 2008-2012 (table 2.4). In 16 other countries, FDI is in the range of 2% to 10%. At the

**Table 2.5. Main merchandize exports, Asia-Pacific countries with special needs, 2012-2013**

Country/area	Exports (description and share in percentages)	Share of top 3 exports in total exports (percentages)
<b>Asia-Pacific least developed countries</b>		
Afghanistan	Cotton (17), coal (10), ferrous waste and scrap (8)	35
Bangladesh	Men's/boys' trousers (14), T-shirts (14), women's/girls' trousers (8)	36
Bhutan	Ferro-silicon (58), carbides (8), bars and rods of iron/non-alloy steel (5)	71
Cambodia	Jerseys, pullovers (cotton) (9), jerseys, pullovers (man-made fibres) (6), men's/ boys' trousers (5)	21
Kiribati	Skipjack/stripe-bellied bonito frozen (67), yellowfin tuna frozen (19), bigeye tuna frozen (5)	91
Lao People's Democratic Republic	Cathodes and sections of cathodes (21), electrical energy (17), copper ores (14)	52
Myanmar	Natural gas (38), wood(7), tropical wood (6)	51
Nepal	Carpets (11), non-alcoholic beverages (8), articles of plastics (6)	25
Solomon Islands	Wood (62), gold (15), tuna, skipjack and bonito (6)	83
Timor-Leste	Crude oil (94), butane, liquefied gas (2), coffee (2)	98
Tuvalu	Skipjack/stripe-bellied bonito frozen (40), bigeye tuna frozen (20), yellowfin tuna frozen (16)	76
Vanuatu	Skipjack/stripe-bellied bonito frozen (34), drilling/production platforms (21), yellowfin tuna frozen (12)	67
<b>Selected Asia-Pacific landlocked developing countries</b>		
Armenia	Spirits (15), copper ores (11), aluminium foil (8)	34
Azerbaijan	Crude oil (92), refined petroleum oils (2), natural gas(1)	94
Kazakhstan	Crude oil (63), refined petroleum oils( 4), cathodes and sections of cathodes (4)	71
Kyrgyzstan	Copper waste and scrap (6), natural uranium (6), precious metal ores (5)	17
Mongolia	Bituminous coal (35), copper ores (23), iron ores (15)	73
Tajikistan	Aluminium (51), cotton(12), lead ores (6)	69
Turkmenistan	Natural gas (80), refined petroleum oils (9), cotton (2)	92
Uzbekistan	Natural gas (13), cotton (12), cathodes (8)	34
<b>Selected Asia-Pacific small island developing States</b>		
Fiji	Potable water (13), cane sugar (10), gold (9)	32
Maldives	Fish fillets (32), yellowfin tuna (22), skipjack/stripe-bellied bonito frozen (17)	71
Marshall Islands	Drilling/production platforms(40), vessels (23), skipjack/stripe-bellied bonito frozen (13)	76
Micronesia (Federated States of)	Skipjack/stripe-bellied bonito frozen (65), yellowfin tuna frozen (15), bigeye tuna frozen (8)	88
Nauru	Natural calcium phosphates (unground)(71), natural calcium phosphates (ground)(23), nickel alloys(1)	94
Palau	Bigeye tuna (59), yellowfin tuna (34), waste and scrap of gold (1)	94
Papua New Guinea	Gold (28), copper ores (17), crude petroleum oils (13)	58
Samoa	Ignition wiring sets used in vehicles (27), skipjack/stripe-bellied bonito frozen (7), metal furniture (6)	40
Tonga	Vegetables fresh/chilled (24), fish fresh/chilled (8), roots and tubers (7)	39

Source: ESCAP, based on trade data from UN Comtrade.

other end, there have been net outward investments from two economies, Cook Islands (-2.6%) and the Federated States of Micronesia (-0.2%), during this period.

In the face of current account deficits that FDI and other private capital flows do not bridge completely, Asia-Pacific CSN have to resort foreign borrowings.

Over the years, the stock of external debt has built up in several Asia-Pacific CSN. Data on net external debt are not available for many of the Asia-Pacific SIDS, including some of the LDCs among them. Of the 22 countries for which data are available, 15 of them reported net external debt in excess of 25% of GDP. It is highest in the Lao People's Democratic Republic at 86% closely followed by Kyrgyzstan at 85%. External

debt is also very high in Armenia (61%), Bhutan (62%), Kazakhstan (77%), Papua New Guinea (69%), Samoa (52%) and Tajikistan (51%). The lowest external debt is in Turkmenistan – just 2.4% of GDP. Not surprisingly,

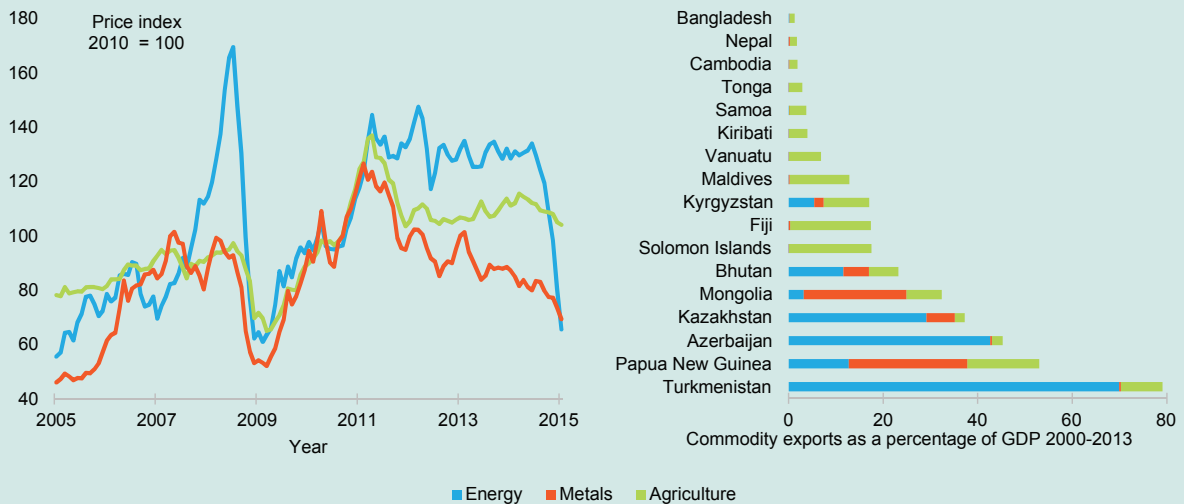
a significant amount of export earnings goes towards debt servicing in several of these countries. The debt servicing ratio is highest in Bhutan (12.3%) followed by Nepal (9.6%) and Tonga (8.6%).

### Box 2.1. Potential impact of recent commodity price volatility on least developed countries, landlocked developing countries and small island developing States

The recent sharp decline in the price of Brent crude oil was preceded by general downward volatility in the global prices of coal and industrial metals, such as copper, iron ore and nickel. Prices of agricultural commodities, such as palm oil, rubber and sugar, have also softened recently (see the left panel of the figure below). While various demand and supply factors are at play, some commentators believe that the recent decline in commodity prices may signal the end of a “commodity supercycle” after a decade-long commodity boom, which was only briefly interrupted by the global financial crisis which started in 2008.<sup>a</sup>

Although most economies in the Asia-Pacific region are expected to benefit from the recent trend, the region is also home to economies, the commodity exports of which account for a significant share of GDP.<sup>b</sup> Least developed countries, landlocked developing countries and small island developing States fall into both categories (see the right panel in the figure below); for instance, garment exporters, such as Bangladesh and Cambodia, which rely on imported fuel, will benefit from the positive terms of trade shock, while energy and metal exporters, such as Bhutan, Mongolia and Timor-Leste, are likely to witness negative impacts not only in their external balances but also in their fiscal balance, and potentially on prices and financial stability through the exchange rate channel. Output and employment growth may also become more volatile, if it does not start to decelerate.

Figure A. Commodity prices and export dependence on commodities



Source: ESCAP, based on data from CEIC Data and the World Bank, World Development Indicators database.

**Output and employment.** Landlocked developing countries, including Azerbaijan, Kazakhstan and Mongolia, could experience a drop in the real GDP growth rate by some four percentage points between 2013 and 2015.<sup>c</sup> For LLDCs in North and Central Asia, the direct impact from lower commodity prices will be compounded by the negative spillover from economic contraction in the Russian Federation, with which countries in that subregion have strong trade, investment and remittances linkages. As such, a number of countercyclical measures have been introduced. For instance, Azerbaijan lowered the reserve requirement for banks, while Kazakhstan announced a three-year fiscal stimulus package, with a focus on housing, utilities and transport infrastructure. Given the low employment-intensity of the energy sector, the potential impact on employment in these countries will be mostly through secondary effects, for instance, from slowing construction and services activities related to the energy sector. In contrast, agricultural commodity exporters, including many in SIDS, may experience more direct impacts on employment given the higher employment-intensity of their agricultural sector. It is difficult, however, to assess the full impact on their economies in view of the fact that many of them also rely heavily on imported food and fuel, which suggests some offsetting effects.

**External balance.** In countries such as Azerbaijan and Timor-Leste, current account surpluses narrowed markedly in 2014 compared with a year previously, although lower production volumes were also a factor. At the same time, it is difficult to identify precisely the impact of lower prices on the current account as there may be offsetting effects from the slowdown



**Box 2.1. (continued)**

in investment and thus capital imports, as in the case of Mongolia. For countries that rely heavily on external financing, a deteriorating current account may necessitate monetary tightening and thus further dampen the domestic economy. On the other hand, there may be some positive impacts if weak commodity exports result in the depreciation of the local currency and thereby make the manufacture of exports more competitive; however, this would be realized only in the long run, if at all, given that most least developed countries, landlocked developing countries and small island developing States do not have a strong manufacturing base in the first place.

**Fiscal balance.** Government revenues could be directly affected, as commodity-related tax and royalties often account for a significant share of the revenue base. A number of countries had to revise their 2015 government budgets, which were based initially on oil prices of \$100 or more per barrel. This could have a severe impact on such economies as Timor-Leste where government spending dominates the non-oil economy and private sector development is at a nascent stage. Even for countries where government spending is less critical to the economy, public debt-to-GDP ratios may climb higher or at least fall at a slower pace compared with the commodity boom period. Overall, however, the fiscal impact has been mitigated in most countries due to the prudent fiscal frameworks that had earlier been put into place. For instance, Kazakhstan's fiscal rule caps the annual transfer from the oil fund to the budget at \$8 billion plus

15% part of the previous paragraph, depending on the cyclical position of the economy. While fiscal rules can help curb procyclical tendencies in government spending and build fiscal buffers for so-called rainy days, they should be carefully balanced against the developmental role of fiscal policy given that the demand for basic public social services and infrastructure investment is very high in many LDCs, LLDCs and SIDS.<sup>d</sup>

**Price and financial stability.** For some countries, lower commodity revenues may trigger a sharp depreciation in the exchange rate, resulting in high inflation. At the same time, some studies suggest that the number of banking crises tends to increase during periods of sharp commodity price declines, perhaps due to higher servicing costs in dollar terms.<sup>e</sup> Given that many commodity exporters have quasi-fixed exchange rate regimes, however, these potentially negative impacts have so far been limited.

In conclusion, LDCs, LLDCs and SIDS which are commodity-dependent should carefully monitor and manage the impact of price swings while at the same time foster economic diversification through active macroeconomic and industrial policies. An enabling international environment will also be critical for these countries to access markets and strengthen their capacity in trade.

Source: ESCAP.

<sup>a</sup> For instance, see Auer and Vignold-Majal (2014). For an alternative, longer-term view, see Canuto (2014).

<sup>b</sup> This latter group includes major regional economies, such as Australia, Indonesia, the Islamic Republic of Iran, Malaysia and the Russian Federation, whereas China, India, Japan and the Republic of Korea are expected to benefit.

<sup>c</sup> This is based on GDP growth forecasts for 2015 contained in ESCAP (2015b).

<sup>d</sup> See A. Chowdhury and I. Islam, "Fiscal rules – help or hindrance?" VOX CEPR's Policy Portal. Available from <http://voxeu.org/debates/commentaries/fiscal-rules-help-or-hindrance>.

<sup>e</sup> For instance, see chapter 4 of the April 2012 issue of the IMF *World Economic Outlook: Growth Resuming, Dangers Remain*. Available from [www.imf.org/external/pubs/ft/weo/2012/01/pdf/text.pdf](http://www.imf.org/external/pubs/ft/weo/2012/01/pdf/text.pdf).

## FISCAL BALANCE AND INFLATION

Fiscal balance, especially fiscal deficit, plays an important role in macroeconomic management in several ways. High levels of fiscal deficit can result in crowding out of private investment, exert inflationary pressures in the economy, affect the exchange rate and hence the competitiveness of a country's exports and severely restrict the Government's ability to promote developmental goals. Data on the fiscal balance are available for only 26 of the Asia-Pacific CSN, of which half reported a fiscal deficit of varying degrees in 2013 (table 2.6). The fiscal deficit deteriorated by at least 0.5 percentage points in 2013 compared with the average for the period 2008-2012 in four countries, namely the Lao People's Democratic Republic, Myanmar, Papua

New Guinea and Timor-Leste. Three others – Armenia, Azerbaijan and Fiji – have witnessed a change in their situation, rising from deficit during the period 2008-2012 to surplus or balance in 2013. In most other countries, there has been either a small reduction in the fiscal deficit or a small rise in the fiscal surplus. It is, however, striking that in several countries there is enormous volatility in the fiscal balance as can be seen in the variance estimates in table 2.6.

An inflation rate in excess of 5% per annum has been common in most Asia-Pacific CSN since 2002 (table 2.6). The inflation rate during the period 2008-2012 was lower than during the period 2003-2012 in line with the fiscal consolidation seen in several countries, although still in excess of 5% per annum. The inflation

Table 2.6. Fiscal deficit and inflation rate

Country/area	Fiscal balance					Inflation rate					Variance	
	% of GDP					% per annum					2003-2012	2008-2012
	2003-2012	2008-2012	2013	2003-2012	2008-2012	2003-2012	2008-2012	2013a	2014b	2015c	2003-2012	2008-2012
<b>Least developed countries</b>												
Afghanistan	-2.3	1.3	2.3	18.4	4.3	8.6	8.1	7.4	6.1	5.5	121.7	208.1
Bangladesh	-3.4	-3.5	-3.3	0.3	0.5	7.2	7.9	7.7	7.4	6.5	2.8	4.5
Bhutan	-1.7	0.2	0.0	15.5	2.6	3.7	7.9	5.5	8.1	8.4	66.3	5.8
Cambodia	-2.3	-3.2	-1.8	3.9	4.9	5.9	7.3	3.0	3.9	3.5	50.0	102.7
Kiribati	..	..	..	..	..	..	..	1.5	2.5	2.5	..	..
Lao People's Democratic Republic	-2.9	-2.1	-5.6	1.8	0.6	7.3	5.1	6.4	4.2	6.0	16.5	10.0
Myanmar	-3.8	-3.7	-4.9	0.7	1.0	18.6	8.5	5.7	6.6	6.3	187.8	111.4
Nepal	-3.0	-3.7	-1.9	1.4	0.6	7.3	9.8	9.9	9.0	7.8	6.5	0.6
Solomon Islands	-0.6	2.6	3.2	19.9	24.2	8.3	7.7	5.4	6.0	5.0	16.9	34.9
Timor-Leste	-3.1	-8.4	-27.1	165.2	226.1	6.8	8.4	10.6	2.5	5.4	19.8	25.0
Tuvalu	..	..	..	..	..	..	2.0	2.0	2.5	2.0	..	..
Vanuatu	0.0	1.0	0.0	3.2	4.3	2.5	2.8	1.4	2.5	3.0	2.0	3.0
<b>Landlocked developing countries</b>												
Armenia	-2.4	-3.3	1.0	5.0	9.3	4.7	6.2	5.8	3.0	3.8	7.7	8.6
Azerbaijan	-0.2	-0.2	0.6	0.2	0.3	7.6	7.4	2.4	1.5	3.0	41.4	64.3
Kazakhstan	-1.3	-2.5	-2.1	1.9	0.2	8.3	9.0	5.8	6.7	6.0	11.5	22.4
Kyrgyzstan	-1.7	-3.4	-0.7	6.8	8.9	8.0	11.7	6.6	7.5	8.9	48.2	76.2
Mongolia	-2.3	-4.8	-1.7	17.0	10.9	9.7	13.2	8.6	12.8	9.5	35.9	53.9
Tajikistan	-3.3	-6.2	-4.8	15.0	3.4	10.7	10.3	5.0	6.0	8.3	24.8	39.8
Turkmenistan	3.7	3.7	1.1	3.5	3.5	..	..	9.0	11.0	8.3	..	..
Uzbekistan	0.2	0.5	0.3	0.5	0.2	..	..	11.2	11.0	11.2	..	..
<b>Small island developing States</b>												
American Samoa	..	..	..	..	..	..	..	..	..	..	..	..
Cook Islands	1.7	3.3	6.4	5.9	6.8	..	..	1.9	1.6	2.5	..	..
Fiji	-2.8	-1.7	0.0	3.0	2.8	4.2	5.8	3.4	1.5	3.5	4.7	5.6
French Polynesia	..	..	..	..	..	..	..	..	..	..	..	..
Guam	..	..	..	..	..	..	..	..	..	..	..	..
Maldives	-8.0	-12.8	-4.7	37.3	27.7	5.4	9.6	4.0	2.1	3.1	30.8	16.0
Marshall Islands	0.3	2.0	0.0	72.3	3.2	..	..	1.9	1.5	1.5	..	..
Micronesia (Federated States of)	-1.4	0.2	0.0	33.0	1.8	..	..	2.2	2.0	1.5	..	..
Nauru	3.8	2.6	0.0	12.0	16.8	..	..	1.4	5.0	7.0	..	..
New Caledonia	..	..	..	..	..	..	..	..	..	..	..	..
Niue	..	..	..	..	..	..	..	..	..	..	..	..
Northern Mariana Islands	..	..	..	..	..	..	..	..	..	..	..	..
Palau	..	..	..	..	..	..	..	2.8	4.0	4.0	..	..
Papua New Guinea	-0.1	-0.7	-7.2	2.9	1.3	6.2	6.9	5.0	5.9	5.5	21.1	10.1
Samoa	-3.7	-7.5	-4.4	25.8	23.6	5.6	5.2	-0.2	-1.2	2.0	26.0	17.9
Tonga	..	..	..	..	..	7.0	4.6	0.7	2.3	2.0	14.2	14.8

Source: ESCAP Online Statistical Database.  
Notes: a - ESCAP (2015a); b - estimates; c - forecasts (as of 5 January 2015).

situation in 2013 showed an improvement over the preceding five-year period, although in 2014 several countries were estimated to have witnessed a higher inflation rate. Again, as with the fiscal balance, there is quite a bit of volatility in the inflation rate in most of these countries.

## THE WAY AHEAD

Most Asia-Pacific CSN are highly open economies, and consequently their economic performance is linked to the performance of the global economy. However, their economic links are more with countries in Europe and with the United States, which have yet to recover fully from the financial crisis of 2008, and relatively less with the faster-growing countries in the Asia-Pacific region. Consequently, Asia-Pacific CSN are not yet well placed to benefit from the growth recovery happening in many of the Asian economies.

The way ahead for these countries is to diversify their economies in terms of products as well as export markets. They have to augment their productive capacities in other sectors and reorient their export markets to link up with the fast-growing countries in Asia and the Pacific. This is not a task that can be achieved in a short time. It requires substantial investments to improve physical infrastructure, especially transport and communication connectivity with countries within the region. In addition, they have to invest in social infrastructure – education, health, water and sanitation – to enhance their human capital and enable people to be more productive. The financing of such investments will require partnerships with the private and public sectors in other countries. For such partnerships to materialize, Asia-Pacific CSN have to reform their domestic policies, especially with regard to the labour market, and other rules and regulation that currently make it difficult for entrepreneurs to conduct business









# CHAPTER

# 3

## PATHWAYS TO SUSTAINABLE DEVELOPMENT

The process of economic development is always associated with changes in the structure of the economy. As new sectors emerge and attract capital investments, labour is reallocated towards them, and they start growing faster than other sectors, increasing their share in GDP. Sustainable development is also associated with changes in the structure of the economy, in this case by requiring more investment and employment to be allocated to the social sectors and to greener, less polluting technologies and industries.

From this perspective, it could be possible to define countries with special needs as countries and economies that face special impediments to change their economic structures.<sup>1</sup> Some of these special impediments, such as those related to geography, initial poverty conditions or high exposure to natural disasters, have already been discussed in chapter 1 of this report. Starting from the premise that the developmental challenges of Asia-Pacific CSN are not by any means insurmountable, this chapter contains an examination of how the Asia-Pacific countries with special needs are overcoming their special impediments as they progress towards sustainable development.

In this chapter, there are separate discussions on the pathways to sustainable development followed by

the three types of Asia-Pacific CSN: the Asia-Pacific LDCs, the Asian LLDCs and the Asia-Pacific SIDS and economies. For each of them, a selected number of indicators was chosen to track their progress over the last decade.

With regard to the LDCs, one of the stated aims of the 2011 Istanbul Programme of Action is to enable half of such countries to meet the criteria for graduation from that status by 2020. Therefore, the three indicators used by the Committee for Development Policy of the United Nations Secretariat to define least developed country status and determine the graduation of countries from that status – GNI per capita, the human assets index and the economic vulnerability index – are tracked for each of the 12 Asia-Pacific LDCs.

With regard to LLDCs, the 2014 Vienna Programme of Action expressed a commitment by Governments to reduce transit times, develop their infrastructure and promote economic diversification, among other goals. To capture progress in the attainment of those goals, 3 indicators are tracked for the 12 Asian LLDCs: time (net of land travel) for the delivery of goods between the main commercial centre of the country concerned and a ship at the nearest seaport; the share of the top 10 export commodities in total exports; and the number of fixed broadband Internet subscribers per 100 people.

With regard to small island developing States, the 2014 Samoa Pathway proposed a comprehensive set of actions to support the sustainable development of the SIDS, covering a large number of areas.<sup>2</sup> Owing to the unavailability of time series data on most of these areas, however, the selected indicators to track progress in the Asia-Pacific SIDS offer only a partial view of these economies' pathways to sustainable development. For this reason, additional analyses based on cross-sectional data are included in the chapter. The three chosen indicators are: an index of tourist arrivals; the number of fixed broadband Internet subscribers per 100 people; and the percentage of electricity generation that comes from renewable sources of energy.

This chapter, as part of the first issue of a new annual ESCAP publication, is exploratory in nature. In particular, the indicators to track progress in the LLDCs and SIDS are aimed at capturing important elements of their respective global programmes of action and cover very selected aspects of them. Future issues of the report may consider other indicators in order to gradually enhance the understanding of these countries' unique paths to sustainable development. More importantly, the present issue is focused on describing the facts and noticing success stories, but there is no attempt to explain such success stories. Future issues of the report will go beyond this descriptive approach and consider in-depth aspects of national policies or cooperative arrangements behind successful performances in specific countries and indicators. It is expected that these future analyses will provide useful lessons and options for other countries with special needs as they travel their own pathways to sustainable development.

## LEAST DEVELOPED COUNTRIES

The United Nations established the category of least developed country in 1971 to enable such countries to benefit from special support measures to alleviate the structural handicaps that affect their ability to develop. Since then, the least developed countries have been identified by the Committee for Development Policy through three indicators on: (a) income levels, currently measured by gross national income per capita (GNIpc); (b) social progress, currently measured by the human assets index; and (c) economic structure or vulnerability, currently measured by the economic vulnerability index. The latter two indices are meant to capture structural handicaps to sustainable development; specific thresholds on these indicators provide criteria for inclusion of a country into the least developed country category.

Since 1991, the Committee for Development Policy has identified countries that should be added to or removed from the category of least developed countries through triennial reviews of all developing countries. During such reviews, the three indicators for each least developed country are measured against specific graduation thresholds. If a country satisfies at least two of the three criteria for graduation in two consecutive triennial reviews, the Committee would recommend to the Economic and Social Council of the United Nations that the country should be considered for graduation. After endorsement by the Council, the case would be submitted to the General Assembly; graduation would become effective three years after the endorsement of the General Assembly. Since 2005, an exception to the two criteria rule was introduced for cases in which a country's GNIpc was more than two times higher than the ordinary GNIpc threshold.

Between 1991 and 2014, only four LDCs were thus graduated: Botswana in 1994; Cape Verde in 2007; Maldives in 2011; and Samoa in 2014. The Istanbul Programme of Action proposed increasing the number of countries graduating from least developed country status. The purpose was to enable half the LDCs to meet the criteria for graduation by 2020. In the Asian and Pacific region, there were 13 LDCs at the time when the Istanbul Programme of Action was adopted. Although the graduation goal in that Programme of Action is global in nature, it is useful to note that six Asia-Pacific LDCs in addition to Samoa should meet the conditions for graduation by 2020, which would cut in half the number of LDCs in the region.

It should be noticed that the three criteria for graduation from least developed country status, including the construction of the indices and the levels of the thresholds for graduation, have changed over time. For consistency, the charts showing the progress of Asia-Pacific LDCs towards graduation are based on the latest official criteria for the construction of the indicators, as well as the latest graduation thresholds. They differ from the official values in past triennial reviews due to data revisions, changes in data sources, methodological changes, changes in composition of composite indices and changes in the methods to determine the thresholds.<sup>3</sup> Box 3.1 provides details on the criteria for graduation from least developed country status.

To simplify the review of progress towards graduation, the 12 Asia-Pacific LDCs are divided into three groups: (a) LDCs that are neither landlocked nor small island developing States; (b) LDCs that are also LLDCs; and (c) LDCs that are also SIDS.

### Box 3.1. Least developed country graduation criteria

Graduation from least developed country status requires meeting two of three graduation criteria. The income criterion requires that the three-year moving average of the gross national income (GNI) per capita exceed the threshold for graduation, defined as 20% above the three-year average of the level of GNI per capita that the World Bank uses to identify low-income countries. This threshold is \$1,242 for the 2015 review.

The human assets criterion requires that the human assets index exceed a threshold level set at 66 for the 2015 review. That index combines four indicators using equal weights: the percentage of the population that is undernourished; the mortality rate for children aged five years or younger; the gross secondary enrolment ratio; and the adult literacy rate.

The economic vulnerability criterion requires that the economic vulnerability index be less than the threshold level set at 32 for the 2015 review. That index measures the structural vulnerability of countries to exogenous economic and environmental shocks. It is based on the following eight indicators (weights in parentheses): population (1/8); remoteness (1/8); merchandise export concentration (1/16); share of agriculture (1/16), forestry and fisheries in GDP (1/16); share of the population in low-elevation coastal zones (1/8); instability of exports of goods and services (1/4); victims of natural disasters (1/8); and instability of agricultural production (1/8).

As an option from the need to meet two of the three graduation criteria, the “income only criterion” established in 2005 allows least developed countries to graduate if they have a sustainable high level of GNI per capita, at least twice the normal graduation threshold. The “income only” threshold for the 2015 review is \$2,484.

This year’s Committee for Development Policy review is based on data for 2013 for most indicators, but the prevalence of undernourishment is based on data from FAO for the period 2012-2014. It should be noted that the different indicators also use different time frames. Some are based on the latest available year; others, on three-year moving averages, and still others, on functions of 20 years of data.

*Note:* For the files for the reviews undertaken in 2006, 2009 and 2012, see [www.un.org/en/development/desa/policy/cdp/ldc/ldc\\_data.shtml](http://www.un.org/en/development/desa/policy/cdp/ldc/ldc_data.shtml). For the latest available information on the three graduation criteria and thresholds, see [www.un.org/en/development/desa/policy/cdp/ldc/ldc\\_definitions.shtml](http://www.un.org/en/development/desa/policy/cdp/ldc/ldc_definitions.shtml).

The first group includes only Bangladesh, Cambodia and Myanmar (figure 3.1). GNIpc of the three countries are below the graduation threshold, but the gap<sup>4</sup> is shrinking fast: between 2010 and 2013, it decreased from 40% to 25% in Bangladesh, from 41% to 31% in Cambodia and from 53% to 14% in Myanmar. The group is performing better in the human assets index criterion, as two of them, Cambodia and Myanmar, have already surpassed the graduation threshold, and Bangladesh is making consistent progress, with its gap dropping from 9% in 2010 to 3% in 2013.

These countries have also made impressive progress in terms of the economic vulnerability index criterion: Bangladesh has already met the graduation threshold and Cambodia more than halved its gap from 56% in 2004 to 20% in 2013, mainly due to the reduced instability of exports and shorter distances from major world markets (expressed in the remoteness indicator of that index). In 2004, Europe and Asia were the destination of, respectively, 27% and 24% of Cambodia’s exports, while in 2012 these shares were 30% to Europe and 33% to Asia.<sup>5</sup> As for Myanmar, its economic vulnerability index dropped from 8% in 2010 to 5% in 2013.

While none of these countries is meeting two of the three graduation criteria yet, if they keep making the

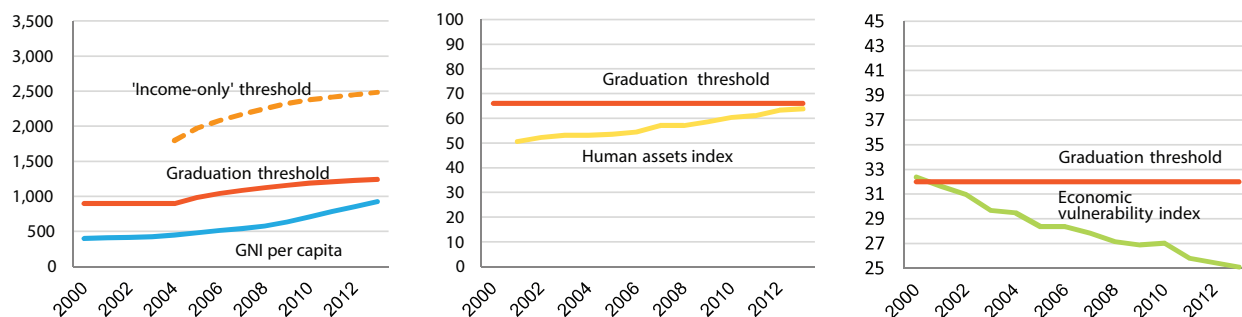
progress they have been making in the past few years – in particular Bangladesh with the human assets index criterion, Cambodia with the economic vulnerability index criterion and Myanmar with either GNIpc and the economic vulnerability index – it will be possible for them to meet the conditions for graduation during the 2018 review.

The second group includes four LDCs that are also LLDCs: Afghanistan, Bhutan, the Lao People’s Democratic Republic and Nepal (figure 3.2). Of these countries, only Bhutan has already met the GNIpc criterion, with a GNI per capita 83% higher than the regular graduation threshold and very close to the “income only” threshold. GNIpc of Afghanistan, the Lao People’s Democratic Republic and Nepal are below the threshold, but these countries are consistently reducing the gaps. Between 2010 and 2013, the gap dropped from 62% to 46% in Afghanistan, from 29% to 1% in the Lao People’s Democratic Republic and from 59% to 47% in Nepal. As for the human assets index criterion, Bhutan and Nepal have already met the threshold for the 2015 review; Afghanistan’s gap fell from 63% in 2004 to 35% in 2013, and the gap of the Lao People’s Democratic Republic fell from 26% to 8% in the same period.

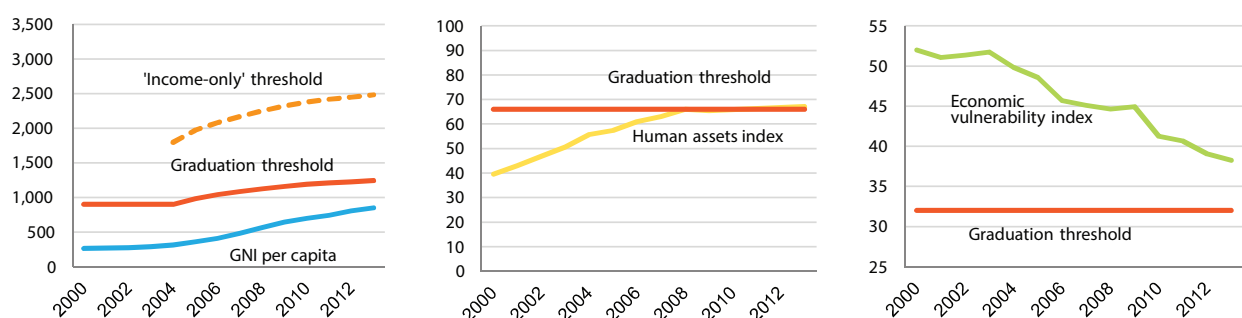
With regard to the economic vulnerability index criterion, within this group of countries only Nepal has

**Figure 3.1 Evolution of indicators for graduation from least developed country status – least developed countries that are not landlocked developing countries or small island developing States**

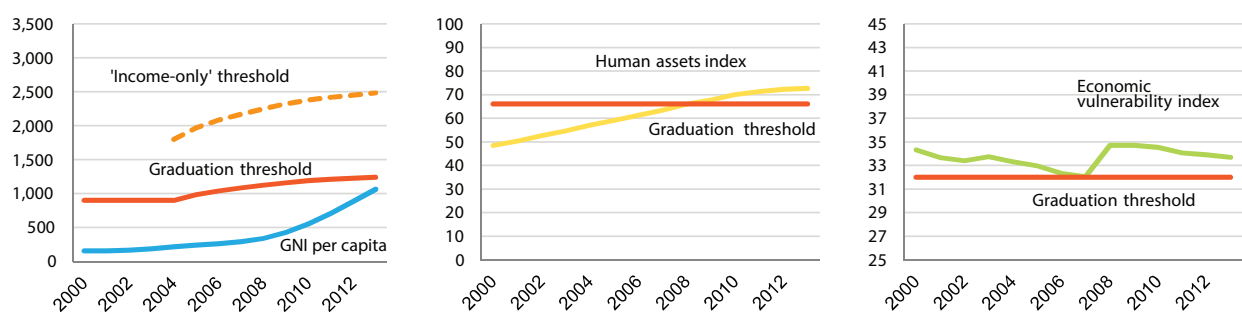
**A. Bangladesh**



**B. Cambodia**



**C. Myanmar**



Source: ESCAP, based on Committee for Development Policy of the United Nations Secretariat. Preliminary time series estimates of the least developed country criteria as of 12 March 2015.

Note: Indicators for graduation have been computed according to the current official Committee for Development Policy criteria. The graph shows the current thresholds for the human assets index and the economic vulnerability index, and the historical thresholds for GNI per capita (GNIpc).

met it, while the Lao People’s Democratic Republic has been making very good progress. The country reduced the share of agriculture, fisheries and forestry in GDP from 43% in 2000 to 27% in 2012, while increasing the participation of other sectors in GDP, such as mining, manufacturing and construction. The export instability of the Lao People’s Democratic Republic lessened in the period, and the country also shortened distances to major global markets by substantially increasing the share of its exports to Asia over Europe. In 2000,

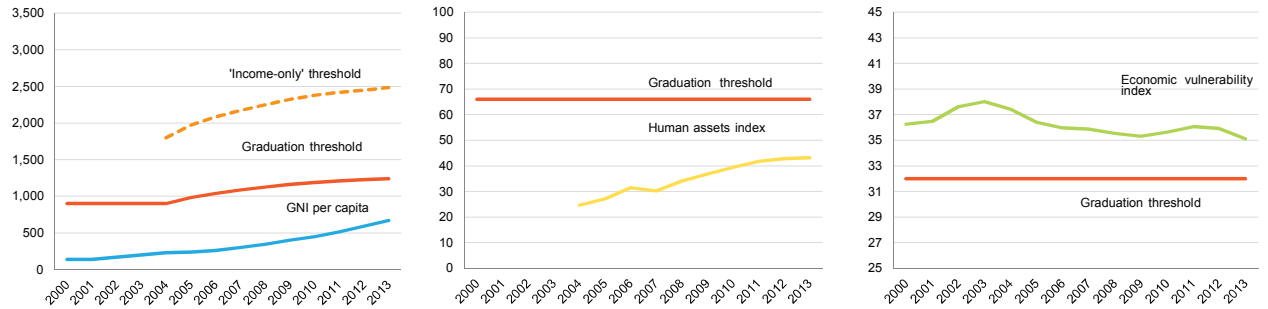
more than 55% of the exports of the Lao People’s Democratic Republic were destined for Europe and 38.5% for Asia. In 2012, these proportions switched to 15% and 81% respectively. Only China, which had previously been the recipient of 1% of the exports of the Lao People’s Democratic Republic, received more than 34% of them in 2012.<sup>6</sup>

In sum, two of the LDCs which are also LLDCs, Bhutan and Nepal, have already meet two of the three

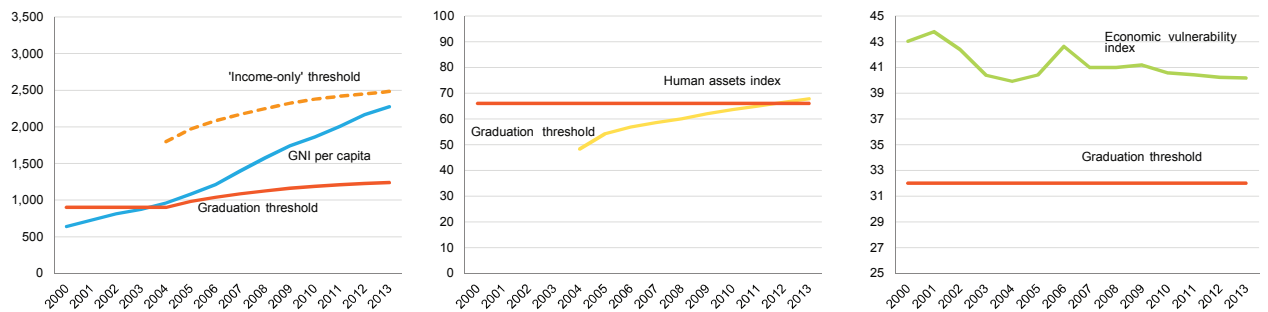


**Figure 3.2. Evolution of indicators for graduation from least developed country status – least developed countries that are also landlocked developing countries**

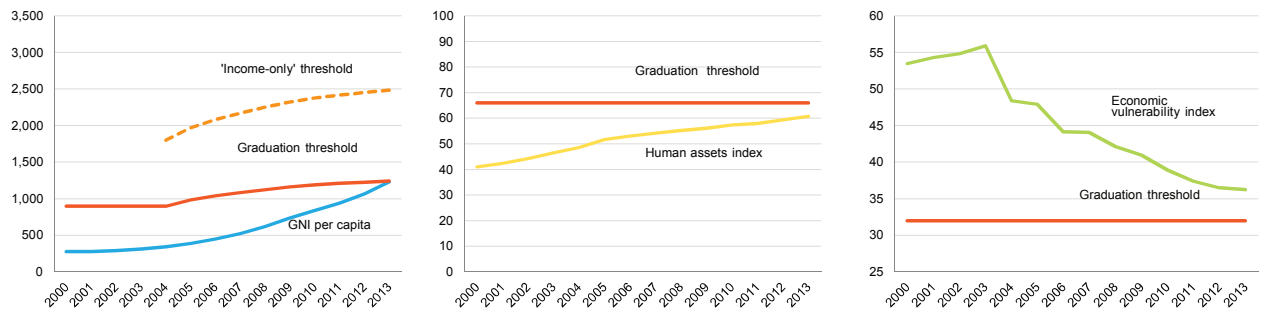
**A. Afghanistan**



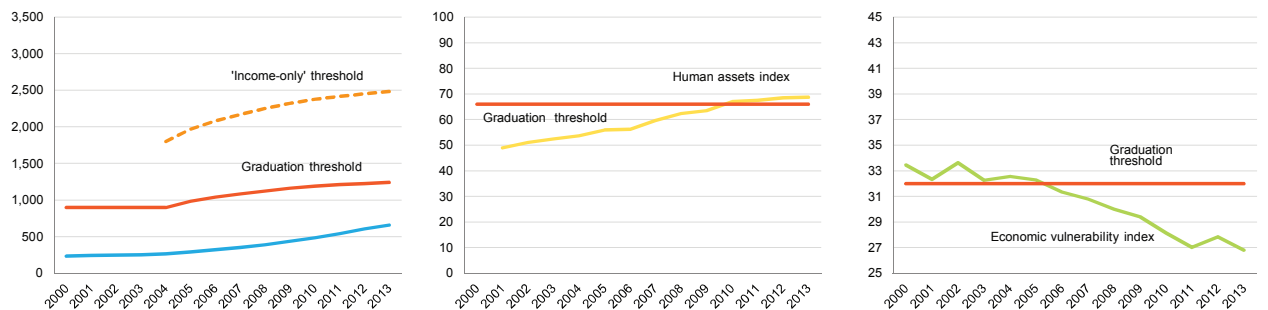
**B. Bhutan**



**C. Lao People's Democratic Republic**



**D. Nepal**



Source: ESCAP, based on Committee for Development Policy of the United Nations Secretariat. Preliminary time series estimates of the least developed country criteria are as of 12 March 2015.

Note: Indicators for graduation have been computed according to current official Committee for Development Policy criteria. The graph shows the current thresholds for the human assets index, the economic vulnerability index and the historical thresholds for GNI per capita (GNIpc).

criteria for graduation. The Lao People's Democratic Republic made very good progress with GNIpc, the human assets index and the economic vulnerability index criteria; if progress continues over the next three years, the country may be able to meet the graduation criteria during the 2018 review.

The third group of countries includes five LDCs that are also SIDS: Kiribati; Solomon Islands; Timor-Leste; Tuvalu; and Vanuatu (figure 3.3). All of them have met the GNIpc criterion for graduation, while four of them – Kiribati, Timor-Leste, Tuvalu and Vanuatu – have also met the thresholds for the “income only” graduation criterion. In addition, four countries – Kiribati, Solomon Islands, Tuvalu and Vanuatu – have met the human assets index criterion. Timor-Leste, which has not reached the human assets index threshold yet, has been making steady progress in recent years, halving the gap from 26% in 2008 to 13% in 2013. However, because Timor-Leste has already met the threshold for the “income only” graduation criterion, this means that the five Asia-Pacific LDCs that are also SIDS met the graduation criteria as of 2013.<sup>7</sup>

Nevertheless, in the case of Timor-Leste and Tuvalu it may be necessary to make some critical observations. Tuvalu's increasing GNI per person, nearing \$6,000 in 2015, is one of the highest in the Pacific, but that increase does not reflect a real increase in welfare. Official GDP and GNI data are overstated due to overestimation of the values and prices in the informal and subsistence non-market sectors, miscalculation of real growth rates of GDP in the government sector and unreliable data sources in production in the market sector. Tuvalu's revenues are mainly from overseas income in payment for the Internet domain “.tv”, ships registry and fishing licences; families' income is derived mostly from remittances.<sup>8</sup>

As for Timor-Leste, its sharp increase in GNI per capita since 2005 – to the point of surpassing the “income only” threshold in 2008 – is due exclusively to the revenues from offshore oil and gas reserves, which accounted for 79% of GDP and 92%<sup>9</sup> of the country's exports in 2012. The oil and gas sector have not generated major structural transformations or changes in employment distribution, thus the country's elevated GNI per capita does not necessarily represent an improvement in the welfare of the population at large.

The greatest challenges for the LDCs that are also SIDS is their economic vulnerability index, as none of these countries meet the criterion for graduation.

Kiribati (83.1) had the highest such index in 2013, 160% above the graduation threshold (set at 32), followed by Timor-Leste (55.3), Tuvalu (55.2), Solomon Islands (47.4) and Vanuatu (44.6). Such levels of economic vulnerability are higher than for any of the other LDCs; however, some of these countries have made significant progress towards the economic vulnerability index threshold. In particular, Tuvalu and Solomon Islands reduced that index, respectively, by 41% and 38% between 2005 and 2013. Solomon Islands' economic vulnerability index decline is mainly due to a decrease in the share of agriculture, forestry and fisheries in the GDP, from 35% to 29%, accompanied by an increase in participation in other activities, from 32% to 42% in the period 2000-2012. Finally, Vanuatu reduced its economic vulnerability index by 22% between 2005 and 2013, due a small decrease in the participation of agriculture in GDP over other activities, and mostly to a 27% increase in the small country's population in the period.

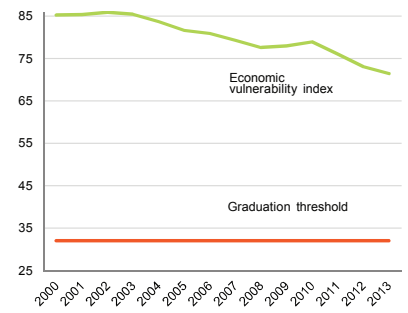
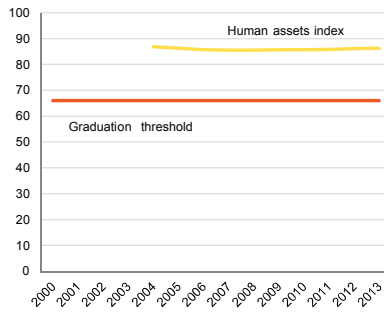
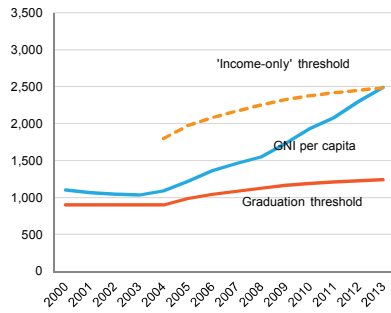
In sum, of the 12 Asia-Pacific LDCs, 7 – Bhutan, Kiribati, Nepal, Solomon Islands, Timor-Leste, Tuvalu and Vanuatu met the criteria for graduation as of 2013. This suggests that the region has already satisfied the Istanbul Programme of Action's goal of halving the number of LDCs. In addition, other countries, such as Bangladesh, Cambodia and the Lao People's Democratic Republic, have good chances of meeting the graduation criteria by 2018.

However, LDCs that will graduate by the end of this decade are expected to remain extremely vulnerable to the impacts of natural disasters, the ravages of climate change, and issues of insecurity, which could reverse some of their hard-won development gains (Box 3.2). Therefore, in recognition of the special challenges that these countries face, regardless of how well their economies perform, there is the need to strengthen the support to graduation and to smooth transition out of LDC status.

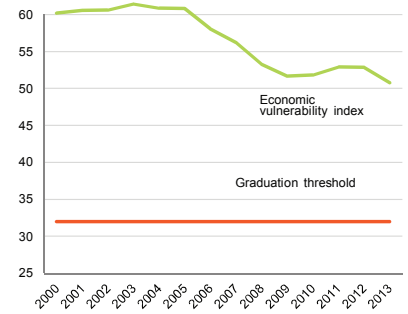
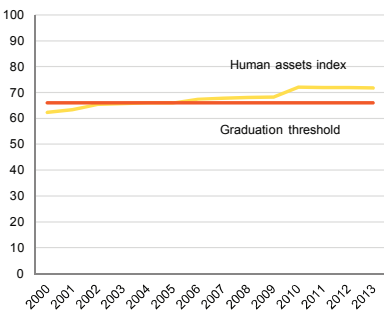
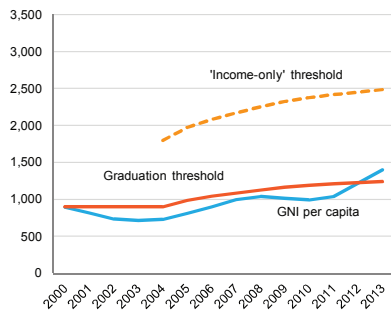
In any event, the indicators for graduation provide useful information for policymakers in these countries, whether they have met the thresholds or not. They can help focus policies and regional cooperation efforts to help these countries overcome structural impediments to sustainable development. In future issues of the *Asia-Pacific Countries with Special Needs: Development Report*, an attempt will be made to dig deeper into the policies that have a favorable impact on the graduation indicators by examining successful experiences that could be replicated in other countries.

**Figure 3.3. Evolution of indicators for graduation from least developed country status – least developed countries that are also small island developing States**

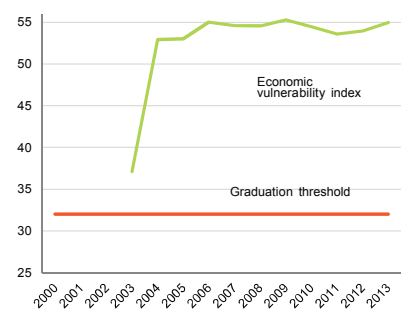
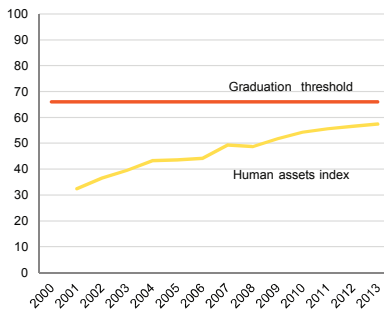
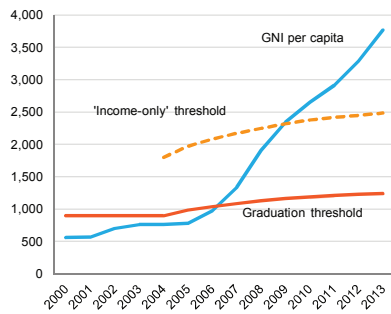
**A. Kiribati**



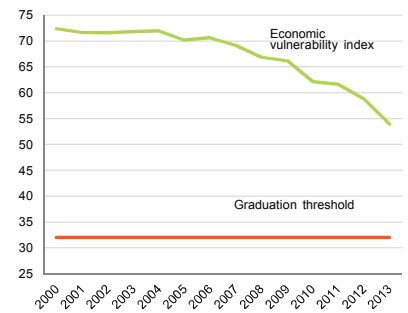
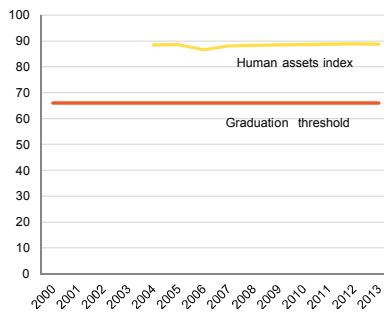
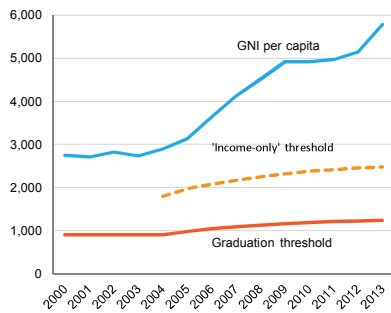
**B. Solomon Islands**



**C. Timor-Leste**

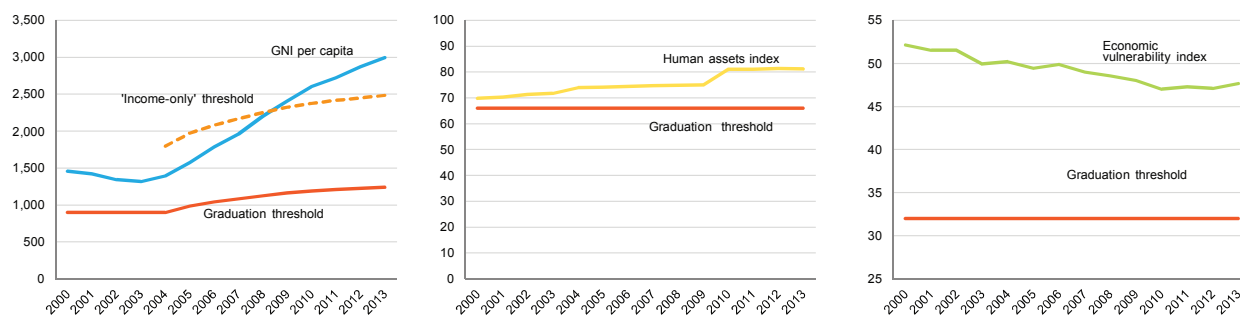


**D. Tuvalu**



**Figure 3.3. (continued)**

**E. Vanuatu**



Source: ESCAP, based on Committee for Development Policy of the United Nations Secretariat. Preliminary time series estimates of the least developed country criteria are as of 12 March 2015.

Note: Indicators for graduation have been computed according to the current official Committee for Development Policy criteria. The graphs show the current thresholds for the human assets index, the economic vulnerability index and the historical thresholds for GNI per capita (GNIPC).

**Box 3.2. Vulnerabilities of least developed countries to natural disasters**

Two major natural disasters hit Asia-Pacific LDCs in early 2015, exposing the high vulnerability of these countries.

On 13 March 2015, tropical cyclone Pam hit Vanuatu - one of the most powerful storms to ever make land fall in the Pacific. The category 5 cyclone caused widespread damage across all six provinces of the archipelago, with winds peaking at 320 km/h. Estimates suggested that 188,000 people - more than half the country's population - were affected by the cyclone with up to 15,000 homes destroyed or damaged with 75,000 people identified as in need of emergency shelter.<sup>a</sup> The cyclone caused 11 fatalities. In the aftermath of the disaster, people in the hardest-to-reach islands in Vanuatu were in serious risk of disease due to flooding and lack of clean water. Early warning systems and the provision of evacuation centres have prevented a higher death toll. The full impact of destruction by cyclone Pam on the economy will take some time to assess but it is clear that the economy will be negatively affected since the some infrastructure and agriculture production has been damaged, which will also have an impact on the tourism sector.

Kiribati, Nauru, Solomon Islands and Tuvalu were also affected by the cyclone Pam. In Kiribati hundreds of homes have been destroyed, and about half of the communities on the islands of Arorae and Tamana have been displaced. In Tuvalu, hundreds of people were living in evacuation centres in Nui, which was entirely flooded during cyclone Pam.

On 25 April 2015, eight million people were affected when Nepal was hit by a 7.8 magnitude earthquake. In the days that followed the disaster, over 8,000 people were reported dead and more than 13,500 injured. Hundreds of thousands of people were displaced and living in tents, while the villages closest to the epicentre of the earthquake were practically inaccessible.<sup>b</sup> Fatalities were expected to increase as search and rescue teams reach those areas. On 12 May 2015, another earthquake measuring 7.3 magnitude struck Nepal, causing more fatalities, panic and further damaging housing and infrastructure.

These two major disasters add to a long list of catastrophes that has hit the LDCs of the Asia-Pacific region. One of the worst disasters in terms of loss of life occurred in 1970, when Cyclone Bhola struck Bangladesh and caused a storm surge that killed 300,000 people and affected 3.6 million more. Around



**Box 3.2. (continued)**

twenty years later when a more severe cyclone struck the same region in Bangladesh, 138,000 people died and 15 million people were affected, becoming the second largest storm with respect to fatalities, though notably less people died due primarily to disaster risk management efforts in the country. Cyclone Nargis killed a similar number of people in Myanmar in 2008. Relative to the size of their economies, the devastation from disasters is more extensive in low-income countries when compared to developed countries.

LDCs and SIDS are particularly vulnerable. The estimated damage and loss from Cyclone Nargis in Myanmar was 15 per cent of GDP. Damage from an earthquake and tsunami in Samoa in 2009 amounted to 29 per cent of the country's GDP and hindered its graduation from the least developed country status. Samoa was again hardly hit in 2012 as the damage caused by Cyclone Evan represented 19.9 per cent of the country's GDP.

**Impact on graduation**

Severe shocks can knock countries off their growth trajectories as was the case in Maldives in 2004, hit by the Indian Ocean tsunami, and in Samoa hit by a tsunami in 2009. In both cases, graduation from LDC category was affected and resulted in a delay in actual graduation time for both countries. Maldives was initially removed from the LDC category on 20 December 2004. However, less than a week later, on 26 December, the Indian Ocean tsunami struck, causing economic damage and losses equivalent to around two thirds of the country's GDP and destroying key infrastructure. As a result of the nationwide damage caused by the Tsunami, the United Nations General Assembly granted an exceptional three-year moratorium to the Maldives in 2005 to provide breathing space for post-disaster recovery and reconstruction. Maldives graduated on 1 January 2011.

Samoa was also scheduled to graduate from LDC category in December 2010 but the General Assembly extended the transition period by three years, until 1 January 2014, due to the disruption caused to Samoa by the Pacific Ocean tsunami of 29 September 2009.

High vulnerability of LDCs to external shocks, both from natural disasters as well as from economic shocks, greatly affect their graduation from LDC category as well as their prospects post-graduation, as was the case with the Maldives and Samoa. It is therefore important for LDCs, with support of international community, to build resilient economies that can sustain and bounce back from these shocks.

<sup>a</sup> Cyclone Pam Emergency Response – VUT151 (29 April 2015). Available from [http://reliefweb.int/sites/reliefweb.int/files/resources/VUT151\\_Vanuatu\\_CyclonePamResponse%281%29.pdf](http://reliefweb.int/sites/reliefweb.int/files/resources/VUT151_Vanuatu_CyclonePamResponse%281%29.pdf).

<sup>b</sup> See <http://reliefweb.int/search/results?search=nepal> (accessed 30 April 2015).

**LANDLOCKED DEVELOPING COUNTRIES**

With regard to the Vienna Programme of Action, agreement was reached on six priorities for action to address the special development needs of the LLDCs, three of which were also included in the Almaty Programme of Action: transit policies; infrastructure development and maintenance; and international trade and trade facilitation. The three new priorities are: regional integration and cooperation; structural economic transformation; and means of implementation. It was suggested in a recent ESCAP

study that these priorities are highly relevant for the region's LLDCs.<sup>10</sup>

Improved regional connectivity is a precondition for the expansion of trade and the sharing of prosperity. However, establishing the right national infrastructure for international connectivity is a complex and expensive challenge for the Asian LLDCs, a challenge which requires strong political commitment and the involvement of the public and private sectors. As a group, the Asian LLDCs have performed relatively well over the past decade. ESCAP calculations show that

62% of the LLDCs' populations are located within 25 km of ICT infrastructure, compared with 59% for the entire ESCAP region. One of the success stories is Azerbaijan, which is leading efforts to build the Trans-Eurasian Information Superhighway. That facility is expected supply Central Asian countries with Internet and telecommunications systems and to serve as a major element of the East-West transport corridor.

However, physical infrastructure development is still inadequate and poses a major obstacle for the region's LLDCs to reach their full trade potential. In particular, new investments are needed to improve transport infrastructure and logistics services, especially along international intermodal transport corridors serving LLDCs. Moreover, there is a need to invest in terrestrial cross-border fibre-optic infrastructure to connect such countries as India and Bhutan, or Kazakhstan and Turkmenistan. Such bilateral investments would produce even greater benefits if they are integrated into a regional ICT network, such as the Asia-Pacific information superhighway initiative proposed by ESCAP. Energy is another area in which regional networks can be beneficial. The Asian energy highway proposed by ESCAP is a seamless power grid expected to cover the whole region to enhance energy security and increase the share of renewables.

In addition to the challenges posed by the need to boost infrastructure investment, the dependence of transit countries is a major obstacle to reaching international and regional markets. Landlocked developing countries depend on their neighbours' infrastructure, peace and stability, and administrative practices, as well as on sound cross-border political relations. Thus, the harmonization of legal regimes, the adoption of an integrated approach to trade and transport facilitation, and the elimination of physical and non-physical bottlenecks to transport remain major challenges for LLDCs. Domestic reforms are also necessary. Some LLDCs, such as Armenia and the Lao People's Democratic Republic, implemented extensive legislative reforms for the development of transport systems during last five years. These reforms resulted in simplified transport regulatory procedures, increased safety and service quality in freight and passenger transport, reductions of excessive administration costs and an improved business environment.

In addition to trade and transport facilitation, according to the Vienna Programme of Action more efforts are needed to diversify the production and export structure of LLDCs, in particular moving from low-value high-bulk commodities to high-value low-bulk commodities. This goal is aligned with the view that development is ultimately a process of economic transformation

in which labour shifts from low- to high-productivity activities. However, most LLDCs are highly trade-dependent on the export of a few key commodities, generally with low domestic value added. The question for policymakers is how to foster the emergence of more productive economic activities given the technological level of the current production base, the challenges posed by geographical constraints in linking to the global market, and the incentives to move away from diversification, which are created by global demand for their primary commodities. This issue is explored in detail in chapter 4.

One way for these countries to make progress in infrastructure development, transit policies and diversification is through regional cooperation and integration agreements. In addition to creating opportunities to expand trade among their members, under such agreements consideration can be given, in a comprehensive manner, to issues of policy harmonization, transit reforms, infrastructure overhaul and trade logistics and facilitation. Regional integration is important because the cost of trade is determined not only by national policies but also by those of the neighbouring countries. To be most effective, cooperation between the LLDCs and transit countries should be focused not only on physical infrastructure and transport but also on other dimensions of connectivity, such as ICT, energy, research and development and investment. Comprehensive regional cooperation may be able to trigger structural change and long-term economic growth among the Asian LLDCs, increasing their insertion into global markets.

Lack of adequate financial resources and capacity constraints are some of the major limitations faced by LLDCs in their efforts to achieve sustained growth and sustainable development. Financing is an obvious challenge given the considerable amount of resources required to expand and maintain new transport, ICT and energy infrastructure in LLDCs. A substantial increase in the mobilization of financing from all available sources, including public and private, domestic and international, is required. In this regard, development partners and international financial institutions might consider the establishment of national or regional innovative financing mechanisms and the provision of capacity-building to support the transformation of these countries from landlocked to land-linked.

In contrast to the Istanbul Programme of Action and its goal of 50% of the LDCs meeting the graduation criteria by 2020, the Vienna Programme of Action does not include quantitative goals for the LLDCs. These, however, are useful for tracking progress over time and for providing a focus for the prioritization of

national policies and cooperation arrangements. While generating a comprehensive set of indicators to capture the six priorities of the Vienna Programme of Action is beyond the possibilities of this report at this time, a selected set of three indicators has been included to capture important aspects of that Programme. These are the time – net of land travel – for delivery of goods between the main commercial centre of the country concerned and a ship at the nearest seaport, the share of the top 10 export commodities in total exports and the number of fixed broadband Internet subscribers per 100 people.

In the charts shown below, the three indicators are compared with a benchmark defined as the median for each indicator among a reference group of 17 Asia-Pacific developing countries that are not countries with special needs. This group comprises Brunei Darussalam, China, the Democratic People's Republic of Korea, Georgia, India, Indonesia, the Islamic Republic of Iran, Malaysia, Pakistan, the Philippines, the Republic of Korea, the Russian Federation, Singapore, Sri Lanka, Thailand, Turkey and Viet Nam. See box 3.3 for details on the construction of the indicators.

To simplify the review of progress towards achieving the selected indicators, the 12 Asia-Pacific LDCs are divided into two groups: LLDCs that are also LDCs and LLDCs that are not LDCs. The first group, shown in figure 3.4, is made up of Afghanistan, Bhutan, the Lao People's Democratic Republic and Nepal, the same countries included in figure 3.2.

With regard to the days to ship, it is interesting to note that the benchmark has steadily decreased over time, from 23 days in 2006 to 16 in 2015. However, this indicator remained constant or increased for Afghanistan, Bhutan and Nepal, resulting in an increasing gap with the benchmark. The notable exception is the Lao People's Democratic Republic, which decreased the time to ship from 59 days in 2006 to 23.5 in 2015, cutting its gap with the benchmark from more than 150% to less than 50% during those years.

The country's location in the heart of the Greater Mekong Subregion highlights the importance of the efforts of the Lao People's Democratic Republic to increase its transport connectivity. Considerable progress has been made in the last two decades in

### Box 3.3. Selected indicators for landlocked developing countries

The time – net of land travel – for the delivery of goods between the main commercial centre of a country and a ship at the nearest seaport is calculated as follows. First, indicators of the World Bank's Doing Business database on the average time to export and time to import are computed. Second, the number of days it takes to move goods between the main commercial centre of the country and the nearest seaport is estimated by assuming that the cargo is shipped by a truck that travels at 40 km/hr with two drivers who each drive 9 hours a day. Details of the calculation are shown in table below. Third, the estimated travel time is subtracted from the average number of days to export and days to import.

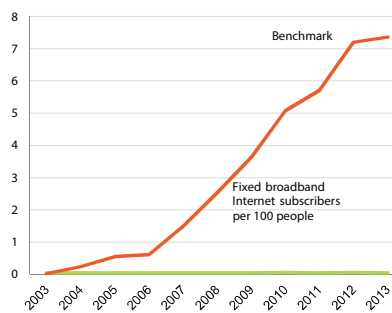
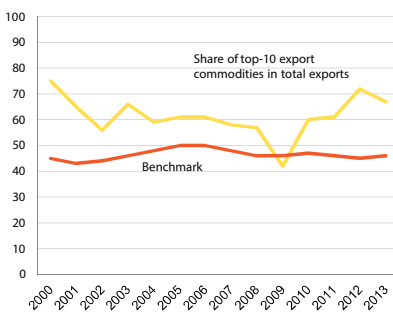
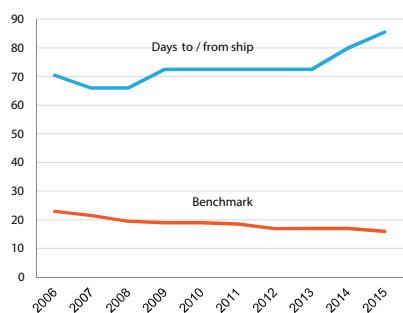
Country	Main commercial center	Nearest seaport	Distance to nearest seaport (km)	Days to ship	Days to ship (rounded up)
Afghanistan	Kabul	Karachi, Pakistan	1 960	2.72	3
Armenia	Yerevan	Poti, Georgia	693	0.96	1
Azerbaijan	Baku	Poti, Georgia	870	1.21	2
Bhutan	Thimphu	Calcutta, India	775	1.08	2
Kazakhstan	Almaty	Karachi, Pakistan	3 750	5.21	6
Kyrgyzstan	Bishkek	Karachi, Pakistan	3 600	5.00	5
Lao PDR	Vientiane	Bangkok, Thailand	620	0.86	1
Mongolia	Ulaanbaatar	Tianjin, China	1 693	2.35	3
Nepal	Kathmandu	Calcutta, India	1 160	1.61	2
Tajikistan	Dushanbe	Karachi, Pakistan	3 100	4.31	5
Uzbekistan	Tashkent	Karachi, Pakistan	2 950	4.10	5
Turkmenistan	Ashgabat	Bandar Abbas, Iran	1 700	2.36	3

Source: ESCAP, based on data from the website Landlocked Developing Countries Facts and Figures of the United Nations Office of the High Representative for the Least Developed Countries, Landlocked Developing Countries and Small Island Developing States.

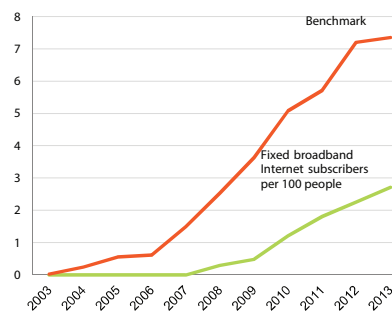
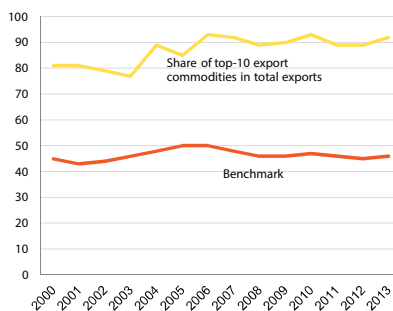
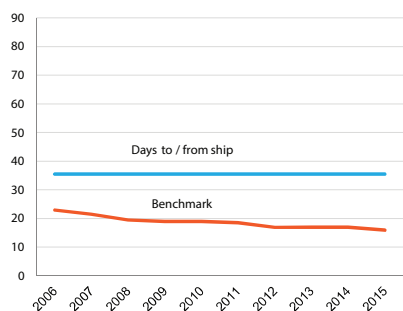
The share of the top 10 export commodities in total exports was constructed using disaggregated commodity trade data downloaded from the UN Comtrade database. To ensure compatibility of the commodity descriptions over a period of more than a decade, the Standard International Trade Classification, Revision 2, was used. The number of fixed broadband Internet subscribers per 100 people was obtained from the World Bank World Development Indicators database. The source is the International Telecommunication Union, *World Telecommunication/ICT Development Report*.

**Figure 3.4. Selected structural indicators of landlocked developing countries that are also least developed countries**

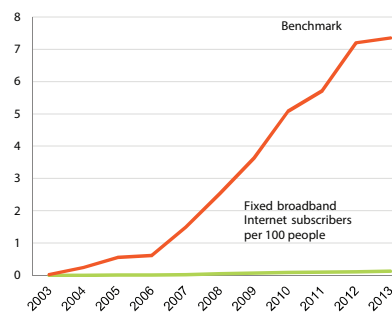
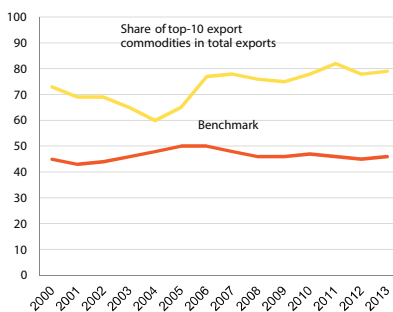
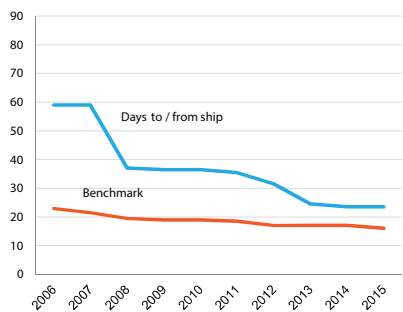
**A. Afghanistan**



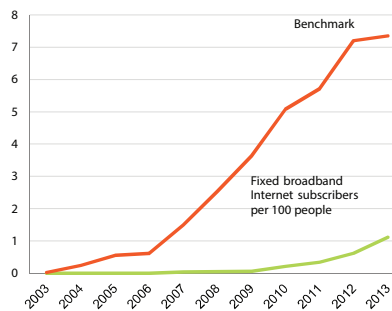
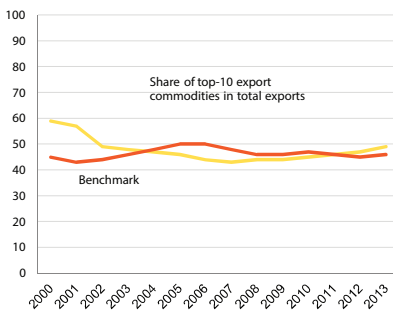
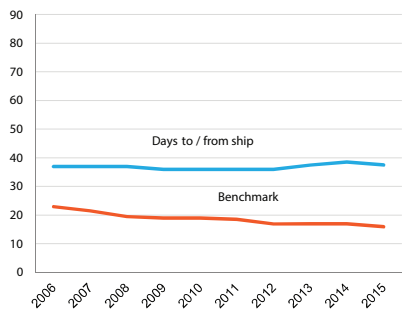
**B. Bhutan**



**C. Lao People's Democratic Republic**



**D. Nepal**



Source: ESCAP, based on data from UN Comtrade database and the World Bank Doing Business and World Development Indicators databases.



developing and improving the national road network, which has had its length increased from 20,000 km in 1997 to 31,300 km in 2004, reaching 43,600 km in 2012.<sup>11</sup> Moreover, in 2005 the vast majority of the paved roads were considered to be in fair, good or excellent condition, and in 2011 almost 60% of the national roads were paved, which had a positive impact on the almost 90% of weight-kilometres of freight in the Lao People's Democratic Republic, which is moved via roads transport (ADB, 2011).

With regard to diversification, the best performer has been Nepal, where the share of the top 10 exports in the total decreased from 59% in 2000 to about 45% between 2004 and 2011, which is lower than the benchmark. In contrast, the trends for Bhutan and the Lao People's Democratic Republic in recent years have been more towards export concentration, with the share of the top 10 export commodities representing about 90% in Bhutan and close to 80% in the Lao People's Democratic Republic. With regard to access to fixed broadband Internet, Bhutan and Nepal have made the most progress. They increased the number of subscribers per 100 population to 2.7% and 1.1% respectively in 2013. These figures, however, are low compared with the benchmark of 7.4% in the same year.

The landlocked developing countries that are not LDCs – Armenia, Azerbaijan, Kazakhstan, Kyrgyzstan, Mongolia, Tajikistan, Turkmenistan and Uzbekistan – are shown in figure 3.5. Within this group, the country that made the most progress in cutting its time to ship was Armenia, from 36 days in 2007 to only 16 days in 2015. In fact, this country has performed better than the benchmark over the last few years. Azerbaijan also made good progress, cutting its time to ship from 33 days in 2009 to 24 in 2015. Countries that made some progress but are still far from the benchmark are Kazakhstan – from 76.5 days in 2009 to 67 days in 2015 – and Uzbekistan – from 87.5 days in 2013 to 74 days in 2015.

Within this group of countries, only Kyrgyzstan has a level of export diversification comparable to the benchmark. In that country, the share of the top 10 export commodities in the total decreased from 72% in 2001 to 46% in 2013. In contrast, this indicator increased in Kazakhstan, Azerbaijan and Mongolia, reaching close to 100% in the latter two countries. Most of the countries in this group have high and stable levels of export concentration.

Several countries in this group have made great progress in building their Internet infrastructure. Three of them – Armenia (7.8), Azerbaijan (17.0)

and Kazakhstan (11.3) – had a higher number of subscriptions to fixed broadband Internet than the benchmark (7.4) as of 2013. Mongolia (4.9) and Kyrgyzstan (2.5) are also making progress in enhancing their Internet connectivity, followed by Uzbekistan (1.2).

Azerbaijan, specifically, has strongly supported and developed the ICT sector. The country has been fulfilling its National Information and Communication Technologies Strategy for the Development of Azerbaijan (2003-2012) and the State Program (E-Azerbaijan) on the Development of ICT in Azerbaijan, in addition to considering wide applications of ICT within the framework of an additional 20 State programmes. Moreover, Azerbaijan has been responsible for the implementation two major initiatives for the construction of large-scale fibre-optic highways designed to connect Europe and Asia through shorter routes: one initiative is the already operating Europe-Persia Express Gateway, and the country has been leading efforts in the implementation of the Trans-Eurasian Information Superhighway project.<sup>12</sup>

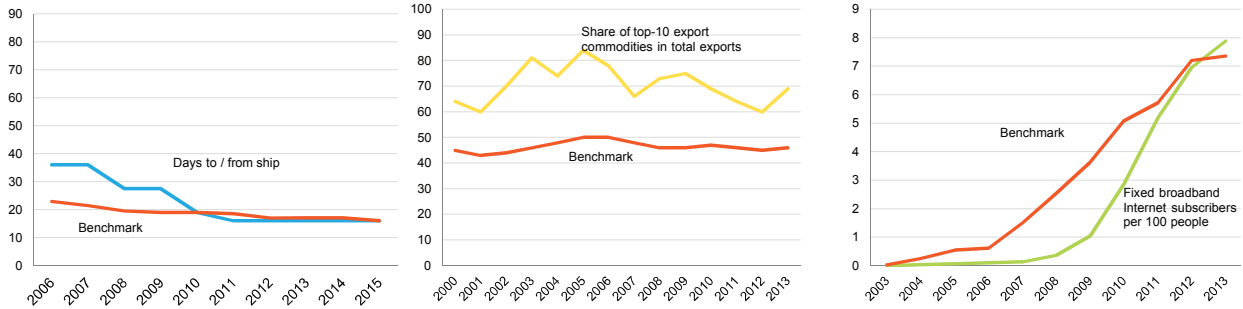
In sum, the time it takes for goods to be moved between the main commercial centres and a ship in the nearest seaport is still rather lengthy for most Asian LLDCs. However, a few countries have managed to reduce this time considerably, most notably Armenia and the Lao People's Democratic Republic. Because the construction of this indicator accounts for differences in land travel times, it captures basically procedural delays, including at border-crossing points, as well as operational inefficiencies at the seaport. Such delays and inefficiencies can be addressed through concerted efforts of the Asian LLDCs and neighbouring transit countries.

Similarly, export diversification is uncommon among the Asian LLDCs, with only Kyrgyzstan and Nepal having a share of the top 10 export commodities in total exports similar to that of the benchmark. Enhancing specialization in primary commodities, such as minerals or fuels, has indeed been a profitable strategy for several Asian LLDCs, and the rents obtained from exporting primary commodities could be effectively utilized to fund necessary investments in infrastructure, social development and research and development. Further discussion on the importance and possible ways to enhance export diversification is included in chapter 4 of this report.

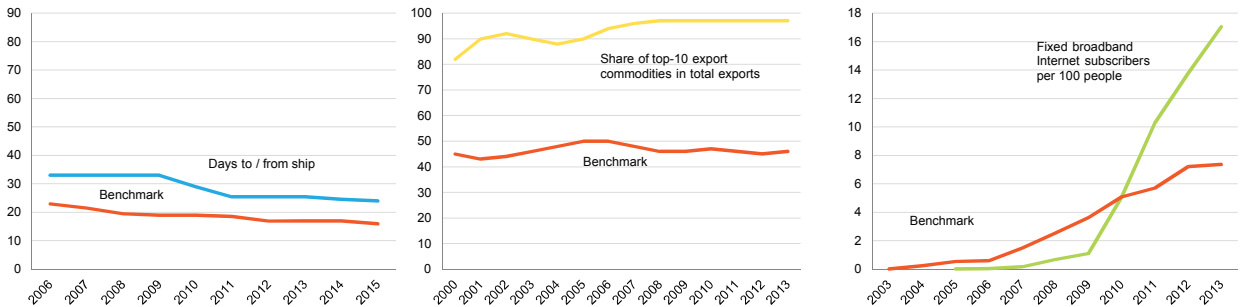
Finally, in the light of their distance to sea shipping networks, investing in Internet infrastructure is

**Figure 3.5. Selected structural indicators of landlocked developing countries that are not least developed countries.**

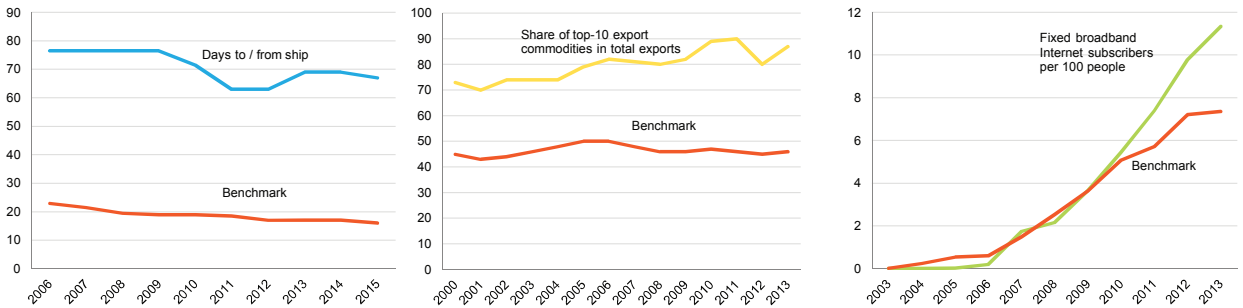
**A. Armenia**



**B. Azerbaijan**



**C. Kazakhstan**



**D. Kyrgyzstan**

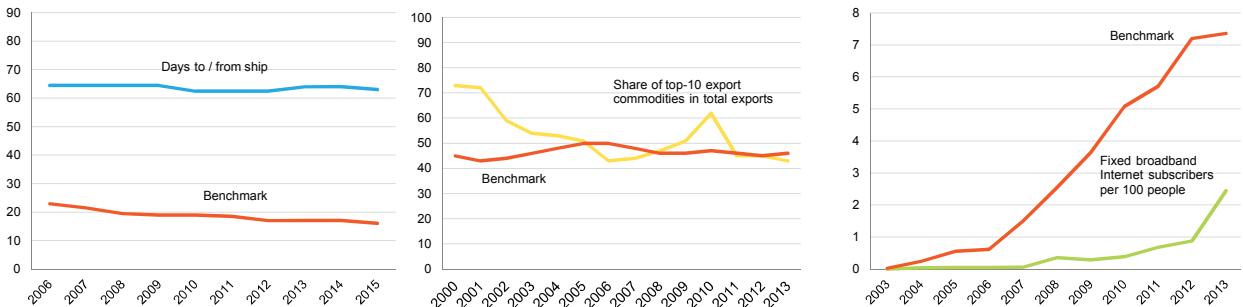
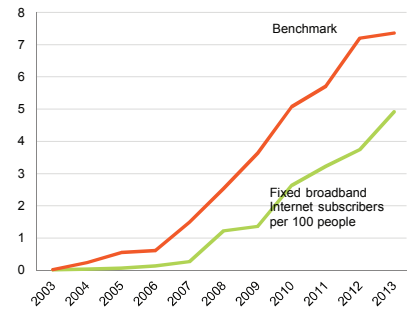
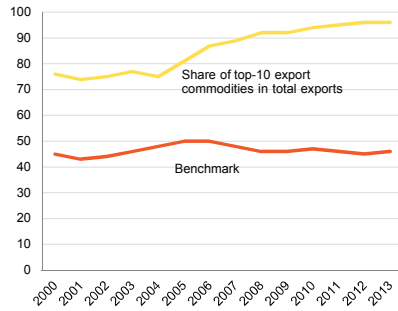
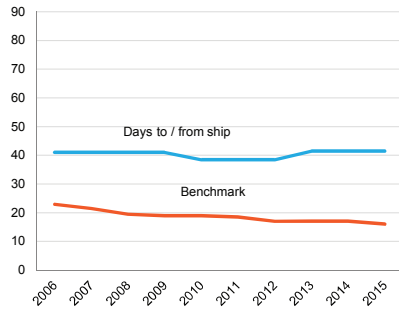
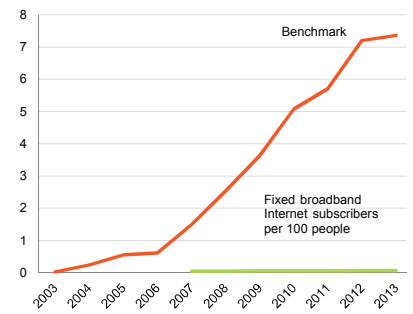
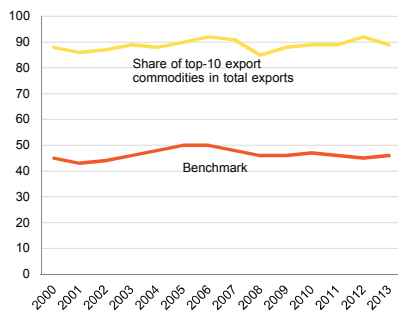
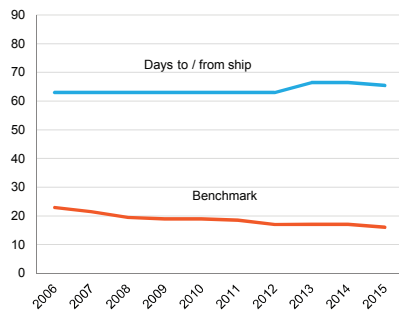


Figure 3.5. (continued)

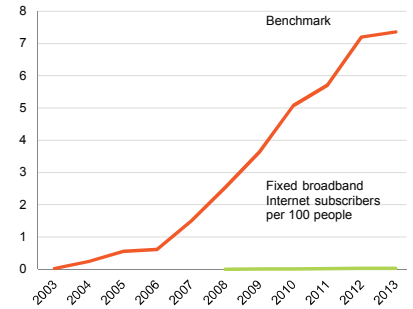
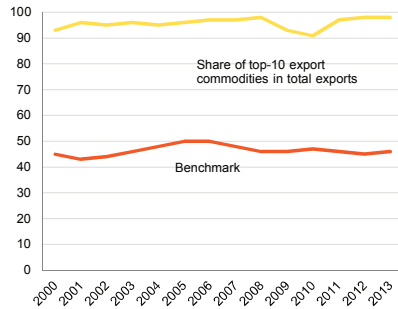
E. Mongolia



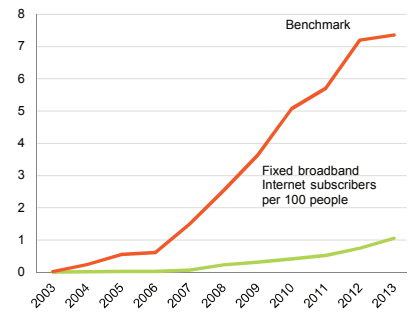
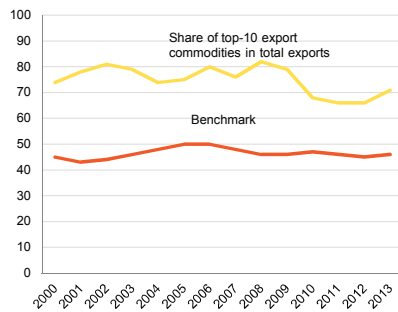
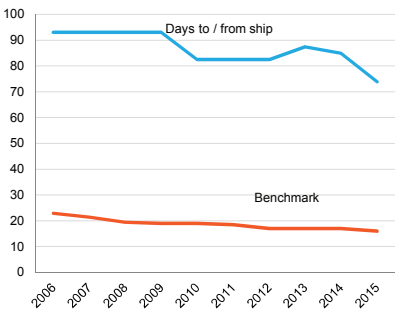
F. Tajikistan



G. Turkmenistan



H. Uzbekistan



Source: ESCAP, based on data from COMTRADE and the World Bank's Doing Business and World Development Indicators databases.

particularly important to connect the Asia-Pacific LLDCs with major global and regional markets. In this respect, some Asian LLDCs, such as Armenia, Azerbaijan and Kazakhstan, are doing better than the median developing country of the region captured in the charts by the benchmark. Others, such as Bhutan, Kyrgyzstan and Mongolia, are also making steady progress in increasing access to broadband Internet services. Future issues of the the Asia-Pacific Countries with Special Needs: Development Report will contain detailed studies on the policies and regional cooperation arrangements that supported Asian LLDCs in terms of their success in attaining the three indicators considered in this section.

### SMALL ISLAND DEVELOPING STATES

The three global development agendas for the small island development States, namely the Programme of Action for the Sustainable Development of Small Island Developing States (Barbados Programme of Action) of 1994; the Mauritius Strategy for the Further Implementation of the Programme of Action for the Sustainable Development of Small Island Developing States of 2005; and the Samoa Pathway of 2014 coincide in their focus on sustainable, equitable and resilient development. They emphasize the need for sustainable and green exploitation of coastal and marine resources so that long-term and short-term benefits are balanced. In those instruments, a number of points are advocated: equitable sharing of the gains from economic growth; the fostering of an enabling environment to promote value-added business activities; and undertaking multilateral collaboration to confront mutual challenges.

The Samoa Pathway, in particular, has a strong focus on addressing the three pillars of sustainable development. For that reason, three indicators representative of each of the three pillars were chosen to track progress in the Asia-Pacific SIDS. They cover two priority areas and one means of implementation of the Samoa Pathway: health and non-communicable diseases, which in this Report are measured through the percentage of out-of-pocket health expenditures in total health expenditures; technology through the number of fixed broadband Internet subscribers per 100 people; and sustainable energy through the percentage of electricity generation based on renewables. Box 3.4 includes details on these indicators. The discussion of the performance of the Asia-Pacific SIDS with regard to the selected indicators is divided into two groups: SIDS that are also LDCs and SIDS that are not LDCs. Owing to limitations in the availability of data, not all the small island developing States are included. The SIDS included had available at least two of the three selected indicators.<sup>13</sup> As in the analysis of the LLDCs, the three indicators are compared with a benchmark defined as the median for each indicator among a reference group of 17 Asia-Pacific developing countries that are not countries with special needs.

With regard to the first indicator, out-of-pocket health expenditures as a percentage of total health expenditures, it is remarkable that all Asia-Pacific SIDS, with one exception, are doing significantly better than the benchmark. Indeed, the median value of this indicator for the developing countries in Asia and the Pacific that are not countries with special needs had a value of between 44% and 47% in most of the years

#### Box 3.4. Selected indicators for small island developing States

Out-of-pocket expenditure is any direct outlay by households, including gratuities and in-kind payments, to health practitioners and suppliers of pharmaceuticals, therapeutic appliances and other goods and services, the primary intent of which is to contribute to the restoration or enhancement of the health status of individuals or population groups. It is a part of private health expenditure. This indicator conveys information on the extent to which the health system protects a population against the financial risks associated with ill health. Deficiencies in such protection have two potentially adverse consequences: the possibility of impoverishment as a result of catastrophic health expenditures; and the inaccessibility of health services among poor segments of the population. The data were obtained from the World Development Indicators database of the World Bank, and the source is the national health accounts database of the World Health Organization.

The number of fixed broadband Internet subscribers per 100 people was obtained from the World Development Indicators database.

The share of renewables in total energy generation was obtained from the website of the Energy Information Agency of the United States Department of Energy, which compiles a number of energy statistics from national agencies around the world. The indicator was calculated as the ratio of total renewable electricity net generation over total net energy generation. Renewables include: (a) hydroelectricity; (b) geothermal; (c) wind; (d) solar, tide and wave; and (e) biomass and waste.



considered, with the exception of 2005/06, when it increased to more than 50%. In contrast, the median out-of-pocket health expenditures over total health expenditures for the 11 Asia-Pacific SIDS included in the figures below ranges between 9% and 12%. This, then, is an area where the rest of Asia and the Pacific could learn lessons from the Asia-Pacific SIDS.

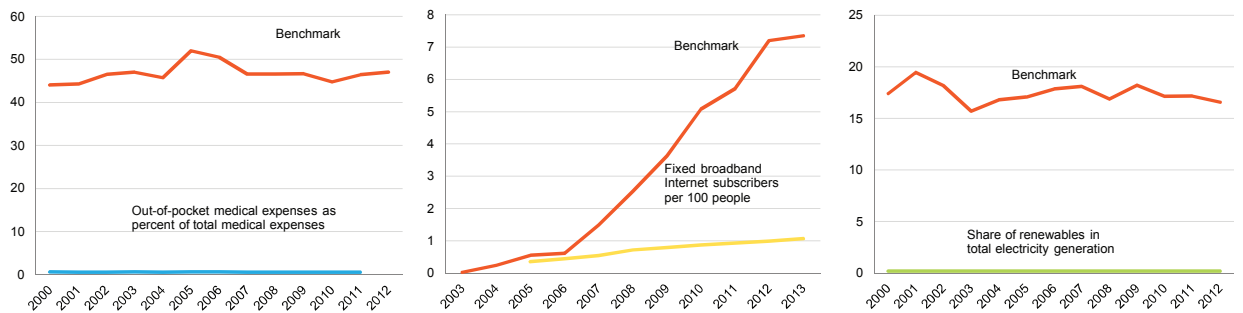
Figure 3.6 is focused on Asia-Pacific SIDS that are also LDCs and economies. It is notable, that even for these countries, the percentage of out-of-pocket health expenditures in total health expenditures is very low. For Kiribati, Solomon Islands and Tuvalu, the value of this indicator was close to zero in the period examined, while in Vanuatu it decreased from 19.4%

in 2005 to 7.6% in 2012. For these countries, access to broadband Internet is uneven, with the number of subscribers to broadband Internet per 100 people having increased the most in Tuvalu, to 7.1 in 2013, almost the same as the benchmark (7.4). None of the three countries in this group with data on electricity generation – Kiribati, Solomon Islands and Vanuatu – show any development in the area of renewables.

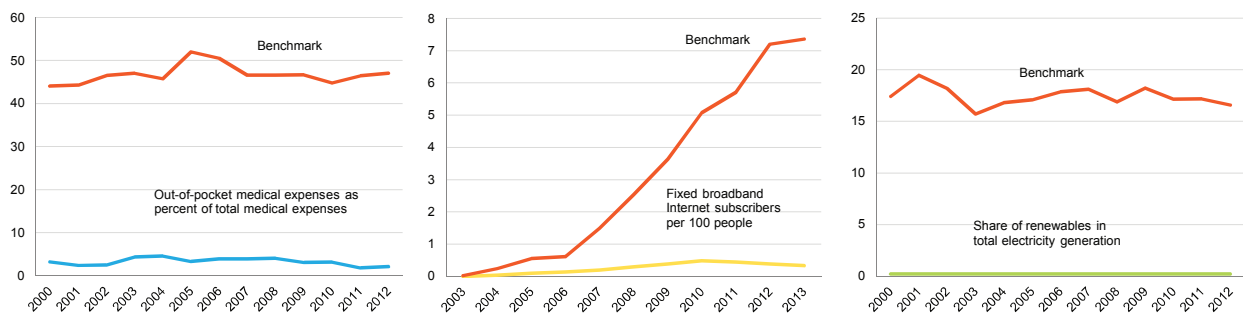
In figure 3.7, a number of the Asia-Pacific LDCs that are not SIDS are considered: the Federated States of Micronesia, Fiji, Maldives, Palau, Papua New Guinea, Tonga and Samoa. Among these countries, three show an important decrease in the percentage of out-of-pocket health expenditures in total health

**Figure 3.6. Selected structural indicators of small-island developing States that are also least developed countries**

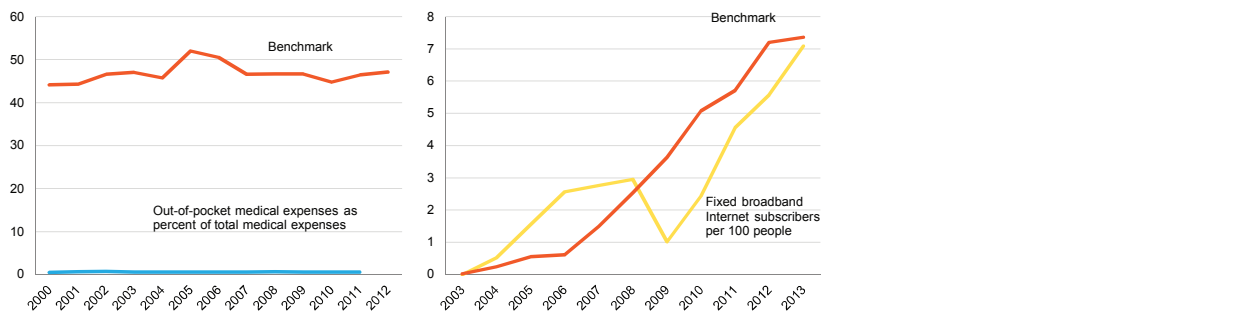
**A. Kiribati**



**B. Solomon Islands**

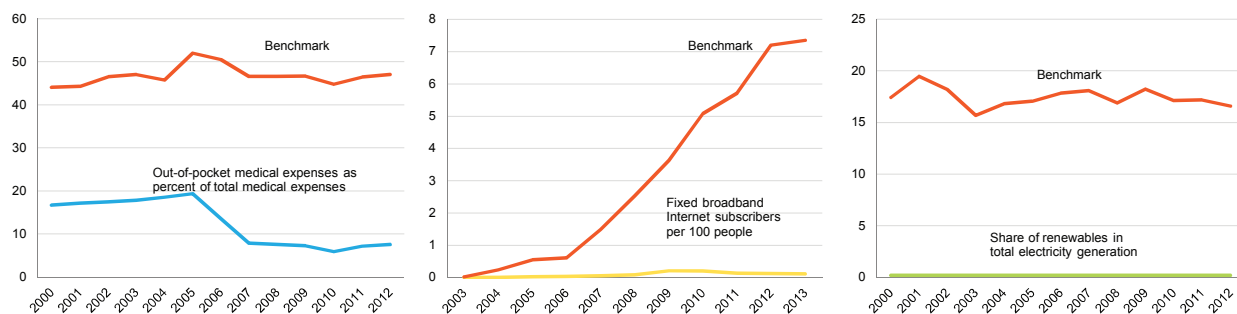


**C. Tuvalu**



**Figure 3.6. (continued)**

**D. Vanuatu**



Source: ESCAP, based on data from the World Bank World Development Indicators database and from the website of the Energy Information Agency of the United States Department of Energy.

expenditures: Palau, where it dropped from 30% to 14% between 2000 and 2001, remaining at a similar level since; Tonga, where it declined from 19% in 2002 to 11% in 2012; and Samoa, where it decreased from 19% in 2003 to 7% in 2012. However, other countries in this group experienced increases in this indicator: Fiji from 12% in 2005 to 23% in 2012; and Maldives, from 20% in 2009 to 48% in 2012. Maldives is the only Asia-Pacific small island developing State where the percentage of out-of-pocket health expenditures in total health expenditures exceeded the benchmark in 2011 and 2012.

Maldives and Palau are the countries in this group which had the highest number of subscriptions to fixed broadband Internet per 100 people in 2013: 5.84 and 5.19, respectively. They are followed by the Federated States of Micronesia (2), Tonga (1.6) and Fiji (1.2). The latter is the only country

that experienced a decrease in broadband access in recent years, from 2.7 in 2011 to 1.2 in 2013. Three of the five countries in this group with data on electricity generation – Fiji, Papua New Guinea and Samoa – rely strongly on renewables. The share of renewables in their total generation of electricity in 2012 was 67.5% in Fiji, 38.3% in Samoa and 32.8% in Papua New Guinea. These figures are significantly higher than the benchmark of 16.6% that year.

In sum, the Asia-Pacific SIDS account for a number of success stories, starting with their very low percentage of out-of-pocket health expenditures in total health expenditures, broadband Internet connectivity in Maldives, Palau and Tuvalu, and renewable energy in Fiji, Papua New Guinea and Samoa. Future issues of this report will be focused on the reasons for such successes and the lessons they make available.

**Figure 3.7. Selected structural indicators of small-island developing States that are not least developed countries**

**A. Federated States of Micronesia**

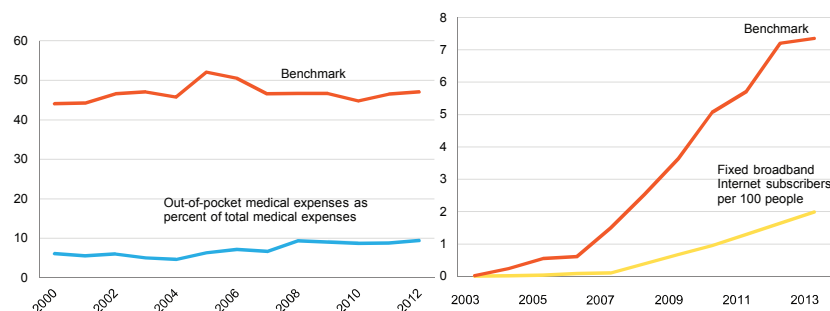
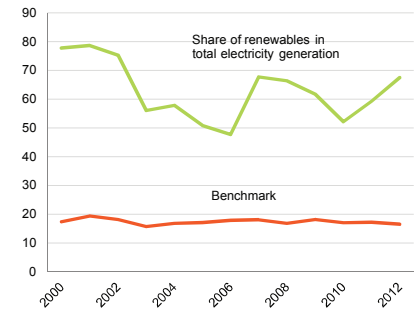
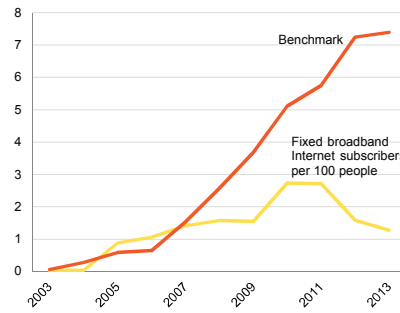
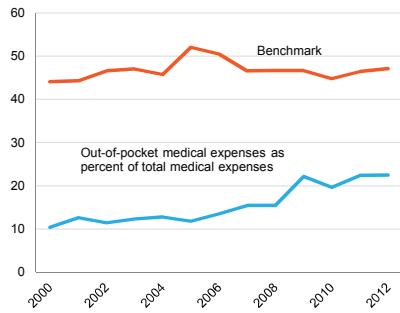
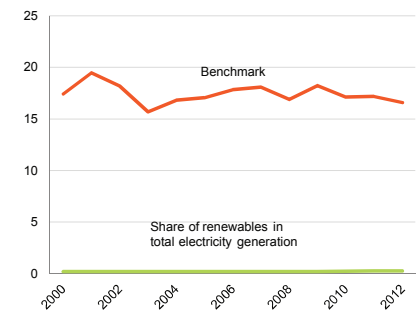
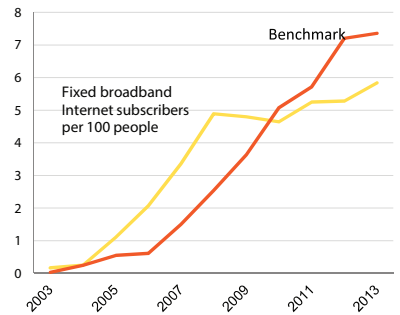
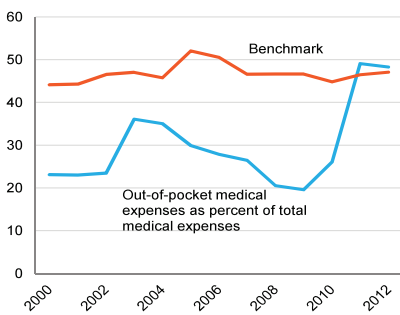


Figure 3.7. (continued)

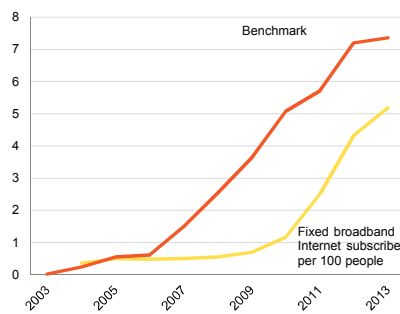
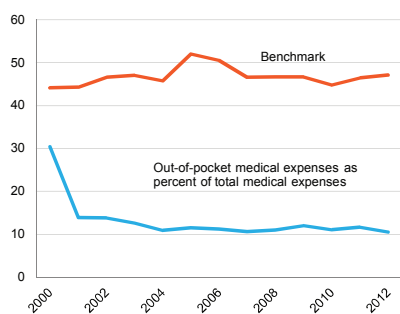
B. Fiji



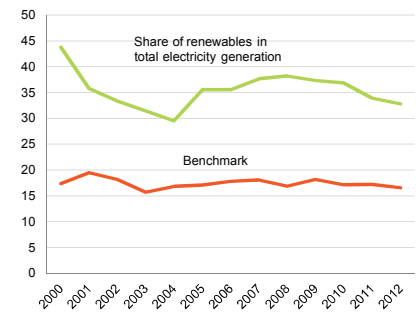
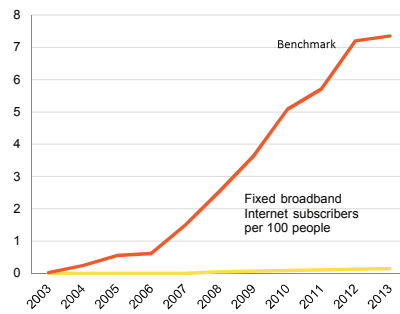
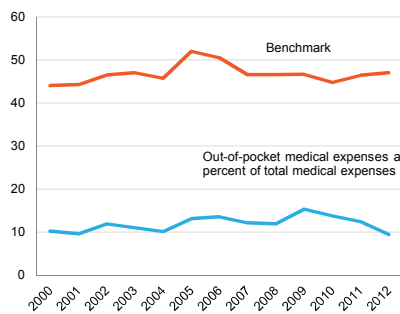
C. Maldives



D. Palau

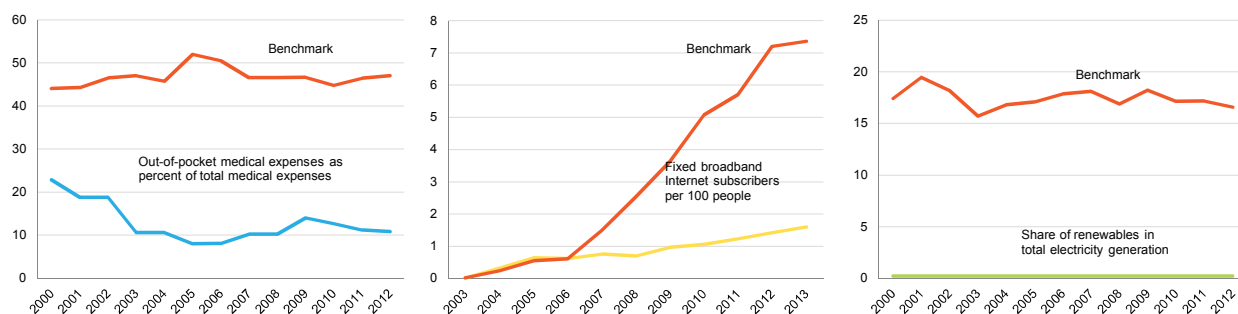


E. Papua New Guinea

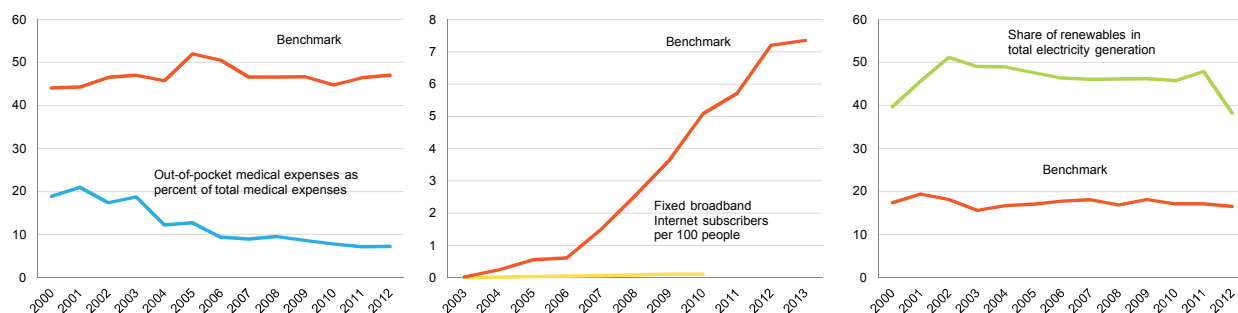


**Figure 3.7. (continued)**

**F. Tonga**



**G. Samoa**



Source: ESCAP, based on data from the World Bank World Development Indicators database and from the website of the Energy Information Agency of the United States Department of Energy.

**CONCLUSIONS**

The Asia-Pacific countries with special needs are following a variety of pathways to overcome their structural impediments to sustainable development. This chapter has offered a bird's-eye view of some of these pathways by tracking a selected number of indicators. While these indicators offer only a very partial view of how the region's LDCs, LLDCs and SIDS

are moving forward, they have uncovered a number of interesting success stories. Detailed analyses of the national policies and cooperation arrangements that made such success stories possible will be included in future issues of the *Asia-Pacific Countries with Special Needs: Development Report*.



## Endnotes

- 1 For example, see *Economic and Social Survey of Asia and the Pacific 1989*, p. 103.
- 2 The following areas are highlighted in the Samoa Pathway: sustainable tourism; climate change; sustainable energy; disaster risk reduction; oceans and seas; food security and nutrition; water and sanitation; sustainable transportation; sustainable consumption and production; management of chemicals and waste, including hazardous waste; health and non-communicable diseases; gender equality and women's empowerment; social development; culture and sports; promoting peaceful societies and safe communities; education; biodiversity; desertification; land degradation and drought; forests; and invasive alien species (A/CONF.223/3).
- 3 The thresholds for GNlpc shown in the charts are based on historical values for 2001, 2004, 2007, 2010 and 2013, which were used, respectively, for the triennial reviews of 2003, 2006, 2009, 2012 and 2015. Observations for the years between the reviews, such as 2011 and 2012, were calculated for the chart as linear interpolations.
- 4 The gap is defined as the difference between the graduation threshold and the value of the indicator divided by the graduation threshold.
- 5 The source for this is the Observatory of Economic Complexity, the data for which information was retrieved on 16 March 2015. Details may be accessed through the portal at <https://atlas.media.mit.edu/en/>.
- 6 Ibid.
- 7 It is important to keep in mind that, when a least developed country meets the criteria for graduation, this does not mean that the Committee for Development Policy of the United Nations Secretariat will automatically recommend it for graduation. The Committee considers other aspects, including how sustainably the indicators are likely to remain above or below the graduation thresholds. As an example, Kiribati met the GNlpc and human assets index criteria for graduation at the 2015 review, but the Committee did not recommend this country for graduation, postponing a decision to the 2018 review.
- 8 Ministry of Finance and Economic Development. Presentation on the Implementation of the Istanbul Programme of Action, which was held in Tuvalu on 22 July 2013. Available from <http://unohrlls.org/custom-content/uploads/2013/11/Tuvalu.pdf>.
- 9 The source for this information is the Observatory of Economic Complexity, the data for which was retrieved on 18 March 2015. Details may be accessed through the portal at <https://atlas.media.mit.edu/en/>.
- 10 For further information, see *Bridging Transport, ICT and Energy Infrastructure Gaps for Seamless Regional Connectivity* (ST/ESCAP/2703/Bangkok). Available from [www.unescap.org/sites/default/files/LLDCs%20paper.pdf](http://www.unescap.org/sites/default/files/LLDCs%20paper.pdf).
- 11 For further details, see Asian Development Bank, Greater Mekong Subregion Statistics. Available from [www.gms-eoc.org/gms-statistics/lao-pdr](http://www.gms-eoc.org/gms-statistics/lao-pdr) (accessed 17 March 2015.)
- 12 Information provided by Minister of Communications and Information Technology of Azerbaijan on 5 February 2014.
- 13 The small island developing States excluded due to limitations in data availability are Nauru, Marshall Islands and Timor-Leste.



กลบ เสด็จต  
สุขของคนกรุงเทพฯ

**หยุด! ถิ่นชุมชน**  
ชก.กรุงเทพฯ

UN Photo/ Kibae Park



# CHAPTER

# 4

## BUILDING PRODUCTIVE CAPACITIES OF ASIA-PACIFIC COUNTRIES WITH SPECIAL NEEDS: THE ROLE OF ECONOMIC DIVERSIFICATION<sup>1</sup>

Building productive capacities is critical for countries with special needs in the Asia-Pacific region to overcome their structural challenges and to benefit from greater integration into regional and global economies, increase resilience to shocks, sustain inclusive and sustainable growth as well as poverty eradication, achieve structural transformation and generate full and productive employment for all.

The importance of the transformation of productive capacities has received growing attention from the international community, and it was given priority among the goals and actions agreed in recent major United Nations conferences related to countries with special needs (table 4.1). The focus in national and international policy on developing productive capacities and the related expansion of productive employment is also seen as being critical for achieving sustained development.

It has been argued by ESCAP that for countries to build their productive capacity they need to aim beyond increasing the output of existing products; instead, they need to produce and trade in new and more sophisticated products (ESCAP, 2011). The reason is

that economic development is ultimately a process of structural transformation with the expansion of variety of economic activities (Imbs and Wacziarg, 2003; Saviotti and Pyka, 2004) and the shift in output and distribution of employment from low- to high-value-added economic activities (ECAFE, 1959; 1964; 1965; ESCAP, 1976; 1990; Kuznets, 1979; Amsden, 2001; McMillan and Rodrick, 2011).

In developing countries, economic diversification is usually associated with the innovative process of absorbing technologies and learning by doing to emulate more productive industries that were the result of previous innovation in more developed countries (Reinert, 2007; Akamatsu, 1962; Cimoli, Dosi and Stiglitz, 2008). However, diversification is a path-dependent process; possibilities for emulation are not equally available at any given time (Hausmann and Klinger, 2007; Hausmann and Hidalgo, 2010). Path-dependence exists because new economic activities tend to emerge through the combination of productive capacities that were previously developed for other activities (Arthur, 2009). Therefore, the activities that are more likely to be emulated are those that require a set of productive capacities that overlap largely

**Table 4.1. Building productive capacities as part of internationally agreed development goals for countries with special needs**

Productive capacity goals	
<b>Programme of Action for the Least Developed Countries for the Decade 2011-2020</b>	Achieve sustained, equitable and inclusive economic growth in least developed countries, to at least the level of 7% per annum, by strengthening their productive capacity in all sectors through structural transformation and overcoming their marginalization through their effective integration into the global economy, including through regional integration.
<b>Vienna Programme of Action for Landlocked Developing Countries for the Decade 2014-2024</b>	To promote growth and increased participation in global trade, through structural transformation related to enhanced productive capacity development, value addition, diversification and reduction of dependency on commodities.
<b>Samoa Pathway</b>	To develop and strengthen partnerships to enhance the participation of small island developing States in the international trade in goods and services, build their productive capacities and address their supply-side constraints.

Source: ESCAP.

with the set required by existing economic activities. On the other hand, the incentives for creation and combination of productive capacities are shaped by economic institutions and the expected demand for new products (Lall, 1992; Acemoglu and Robinson, 2012; Bresser-Pereira, 2012). A strategy for countries to build their productive capacities is to let them be generated or acquired as part of the process of such strategic diversification through the combined efforts of the State and the private sector.

The objective of this chapter is to present a comprehensive analysis of the effect of economic diversification on structural transformation and the increase in productive capacities and to propose tailored diversification strategies for each CSN in the region. In this chapter, use is made of trade data as a proxy for production data, given the scarcity of internationally comparable disaggregated production data related to Asia-Pacific CSN. There are many advantages to that approach but also challenges related to data quality, which are duly recognized up front, but they do not change the main conclusions and key recommendations of the chapter.

The next section presents briefly the status of productive capacities of Asia-Pacific CSN. It is followed by a discussion of the role of economic diversification in increasing productive capacities in terms of achieving higher output and reducing the competition faced in international markets. The path dependence that characterizes the diversification process is also discussed. Used in the chapter is a methodology to identify opportunities for economic diversification in Asia-Pacific CSN. The result of that analysis is a tailored list of sectors/markets that present greater opportunities for the successful diversification

of those countries. A discussion follows on the role of markets and Governments in creating incentives for entrepreneurs to find those good opportunities for diversification; presented also is an analysis of the combination of laissez-faire and strategic diversification that would be more likely to foster successful diversification among Asia-Pacific CSN.

Specific challenges are faced by these countries in building productive capacities through economic diversification: (a) CSN that are exporters of primary commodities, particularly oil and minerals, face demand incentives to further specialize in extractive sectors; (b) these economies also have the tendency towards exchange rate appreciation, which hinders the expansion of tradable sectors and (c) landlocked developing countries and small island developing States face high costs of trade. In this chapter, a set of policy recommendations is provided to facilitate country-level efforts to build productive capacities through fostering diversification by improving the business environment and supporting entrepreneurship, and to nudge the private sector towards new economic activities.

## PRODUCTIVE CAPACITIES IN COUNTRIES WITH SPECIAL NEEDS IN ASIA AND THE PACIFIC

Productive capacities are usually defined as a combination of productive resources, entrepreneurial capabilities and production linkages, which together determine the capacity of a country to produce and effectively compete in global markets, and enable it to grow and develop (box 4.1). Analysis of common measures of production and trade shows that the Asia-Pacific CSN have in general low productive capacities.



**Box 4.1. Definitions of productive capacities**

The *Least Developed Countries Report 2006* defines productive capacities as “productive resources, entrepreneurial capabilities and production linkages which together determine the capacity of a country to produce goods and services and enable it to grow and develop” (UNCTAD, 2006).

There are other definitions and perspectives also:

“*Productive capabilities* are personal and collective skills, productive knowledge and experiences embedded in physical agents and organizations needed for firms to perform different productive tasks as well as to adapt and undertake in-house improvements across different technological and organizational functions” (Andreoni, 2011).

“[A]bility to produce efficiently and to compete globally...” (OHRLLS, 2013).

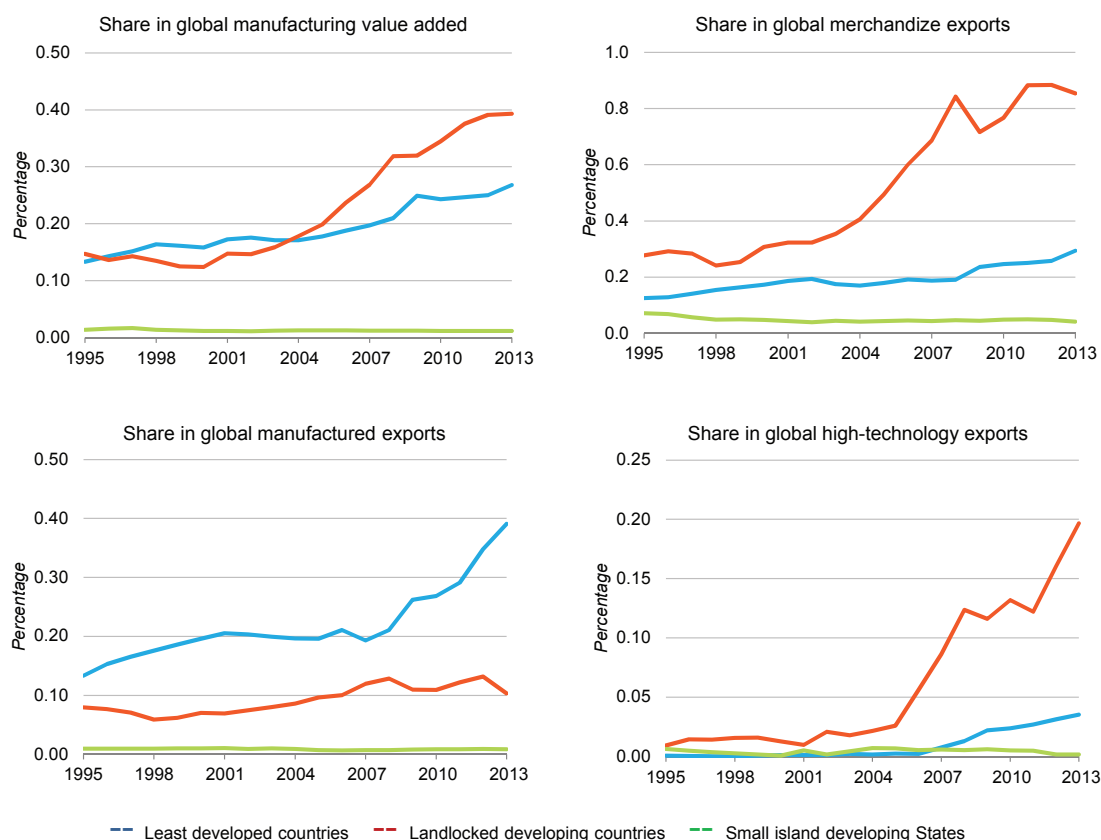
“[T]he productivity of a country resides in the diversity of its available non-tradable ‘capabilities’...”. These non-tradable capabilities include such elements as “property rights, regulation, infrastructure, specific labor skills, etc.” (Hidalgo and Hausmann, 2009).

The Asia-Pacific CSN contribute to less than 0.4% of global manufacturing production, 1.1% of merchandize exports, 0.5% of manufactured exports and 0.25% of high-technology exports (figure 4.1).

Among the Asia-Pacific CSN, the LLDCs have higher productive capacities, followed by the LDCs. These groups have also shown some progress in the past

10 years in increasing their participation in production and trade. The higher and more recent increase was in the share of high-technology exports of LLDCs, which went from 0.03% to 0.20% from 2005 to 2013, although that increase can be traced back to one single country, Kazakhstan. Also noticeable is the increase in the share of Asia-Pacific LDCs since 2006, which is mainly due to the emergence of the pharmaceutical

**Figure 4.1. Productive capacities in Asia-Pacific countries with special needs measured as their percentage share in international production and trade**



Source: ESCAP, based on trade data from ESCAP Online Database and World Bank World Development Indicators database.

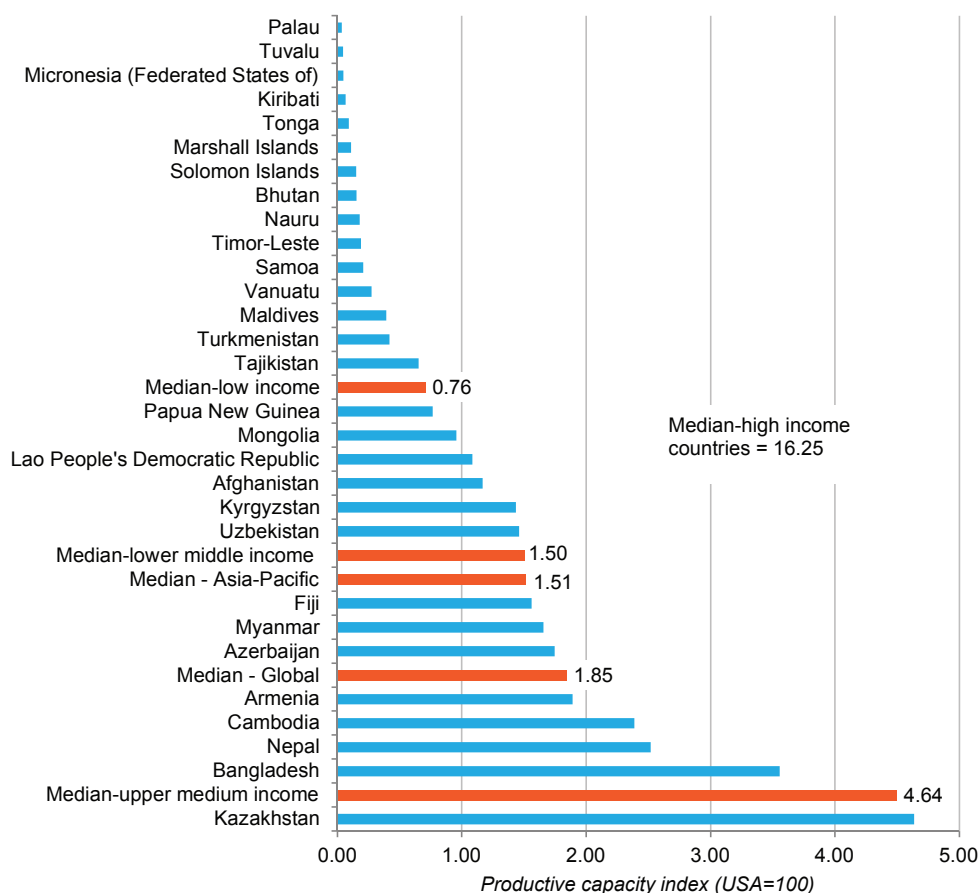
industry in Bangladesh. On the other hand, the group of small island developing countries in Asia and the Pacific have contributed only marginally, that is, less than 0.01% to those measures. More worryingly, their participation has been declining steadily over the past two decades.

In principle, countries could increase their productive capacities by simply producing more of the same products and services – making more T-shirts and extracting more oil, for example. However, implicit in the goal of increasing productive capacities is the idea of moving up on the technological ladder of production and being able to produce different, more sophisticated goods and services. ESCAP has constructed a productive capacity index combining measures of export diversification (ESCAP, 2011). In using that index for 2013, it is shown in figure 4.2 that the productive capacity in Asia-Pacific CSN represents only a few percentage points of the productive capacity of the United States, which is the country with the highest productive capacity in the world. The Asia-Pacific CSN with the highest levels of productive capacity in decreasing order

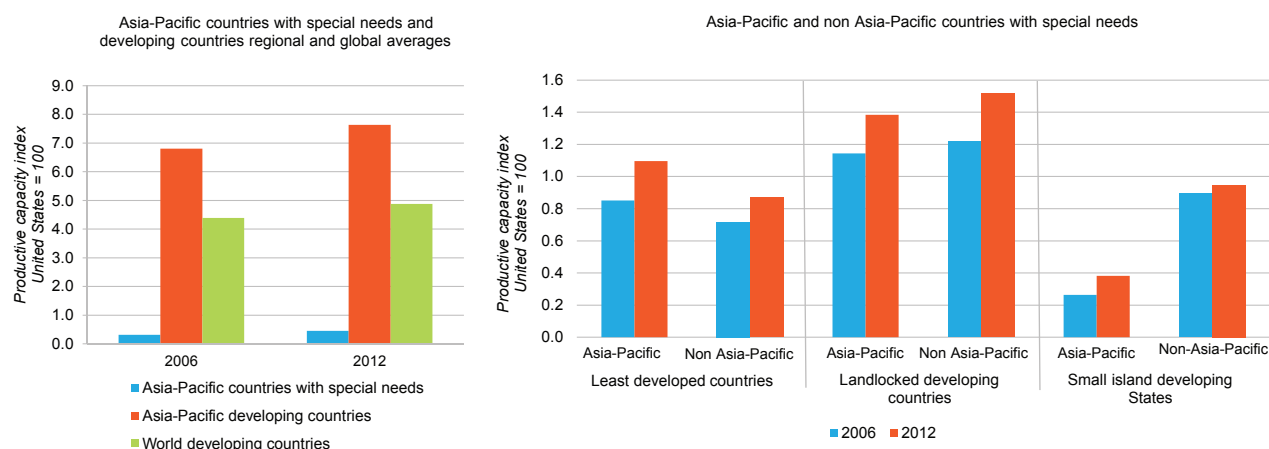
are Kazakhstan (4.64), Bangladesh (3.55), Nepal (2.52), Cambodia (2.38) and Armenia (1.89), which is slightly above the global median productive capacity. Azerbaijan (1.74), Fiji (1.56) and Myanmar (1.66) have productive capacities below the global median but above the median for the Asia-Pacific region, which is slightly above the median productive capacity of lower-middle income countries. The other 21 countries with special needs in Asia and the Pacific have productive capacity below that line, and in 15 of them productive capacity is below the median of the group of low-income countries (0.76). Asia-Pacific CSN with the lowest productive capacities according to that measure are the Federated States of Micronesia (0.05), Tuvalu (0.05) and Palau (0.03).

Analysis of the evolution of productive capacities in Asia-Pacific CSN suggests that these countries have made slow progress when compared with the global and regional averages (figure 4.3). When compared with CSN in other regions, the Asia-Pacific LDCs have shown higher productive capacities than their counterparts, while Asian LLDCs and SIDS trailed

**Figure 4.2. Productive capacity, Asia-Pacific countries with special needs, 2013**



Source: ESCAP, based on trade data from UN Comtrade database.

**Figure 4.3. Evolution of average productive capacity, 2006–2012, country groupings**

behind. The biggest difference is between SIDS in Asia and the Pacific and those from other regions, the former accounting on average for only a quarter of the average productive capacity of the latter.

Analysis of the evolution of the three-year average productive capacities of Asia-Pacific CSN in the period 2006–2012 shows that, while the majority of these countries have not moved out of a narrow band of low levels of productive capacity, some countries have shown noticeable progress (figure 4.4). Among the Asia-Pacific LDCs, productive capacity increased markedly since 2009, in Cambodia from 1.5 to 2.1 in 2012, in Myanmar from 1.2 to 1.7 and in Bangladesh from 3.0 to 3.6. Nepal has experienced slower but steady progress since 2006, while Afghanistan has since 2009 lost the gains made in the period 2006–2008. Also noticeable is the increase in productive capacity in Fiji, from 2007 (1.2) to 2011 (2.2). Among the Asian LLDCs, Kazakhstan has made remarkable progress since 2010, increasing its productive capacity from 2.2 to 3.4.

In countries endowed with natural resources, high trade costs and low productive capacities create incentives for specialization in primary commodities with relative inelastic demand in the trade costs. In fact, the production and trade structure of most Asia-Pacific CSN is characterized by product baskets that are highly dominated by primary commodities. Many of these countries have become more exposed to commodity-related risks compared with the situation that existed a decade ago, making their economies more vulnerable to declines in commodity prices in the global market (ESCAP, 2012), indicating the need for creating a more diversified production base in these countries.

In addition to reducing the volatility of economic and export growth, economic diversification has also been associated with higher economic output and lower average number of competitors in the global market, as suggested by the results of recent empirical literature presented in the following section.

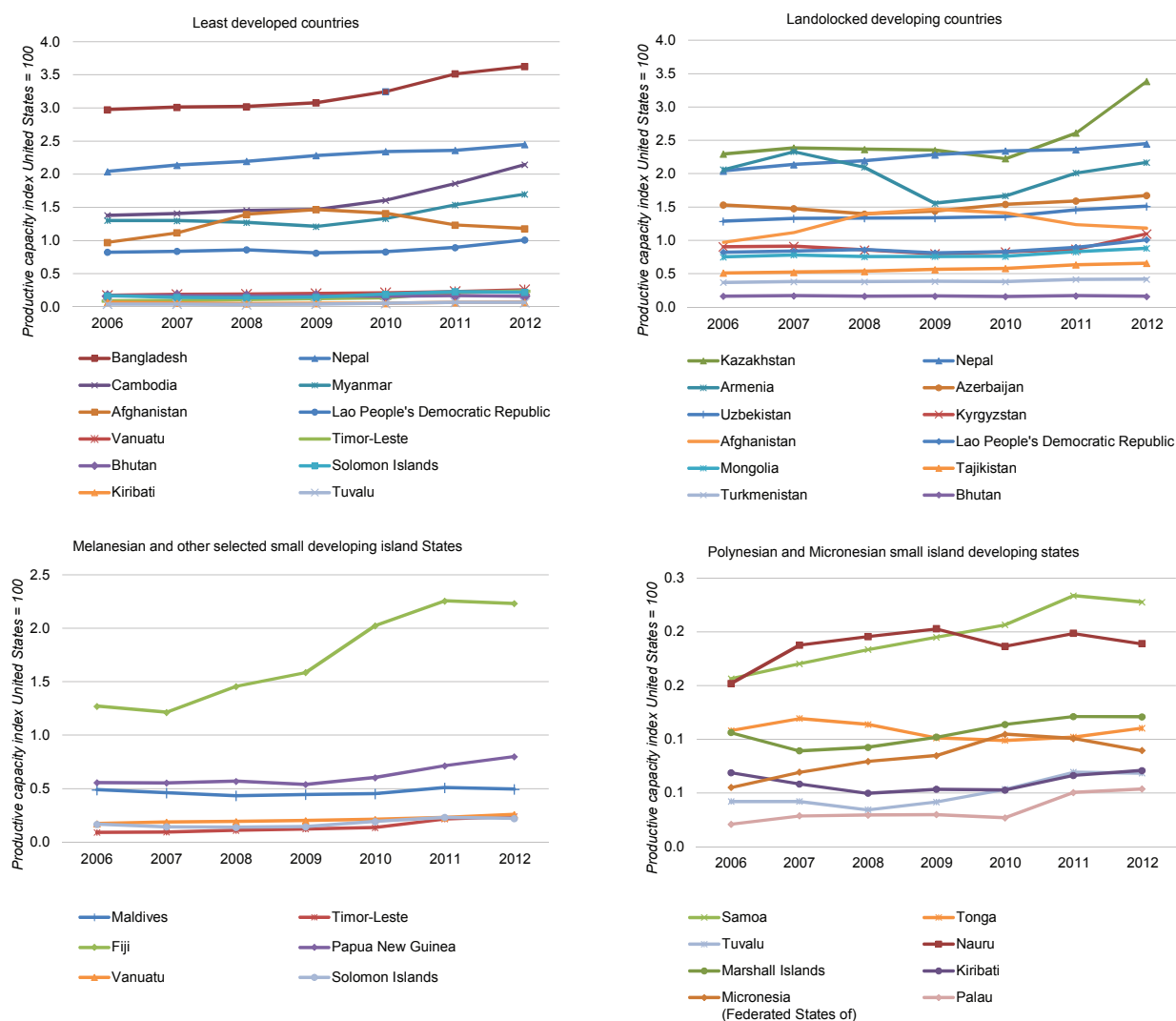
## THE LINK BETWEEN PRODUCTIVE CAPACITIES AND DIVERSIFICATION

### Diversification and output

Empirical evidence shows that increasing productive capacities, as reflected by higher economic output, is associated with a higher set of products produced and exported. Economic growth is thus accompanied by a process of expansion in the range of goods and services in the economy, not simply by producing more of the same products.<sup>2</sup> Such a pattern holds up to a fairly high level of income per capita and suggests that, for most of their development path, countries diversify their production base and do not follow the pattern of permanent specialization in the same set of products based on an earlier comparative advantage.<sup>3</sup>

A related empirical regularity between diversification and income was discussed in the ESCAP Survey for 2011, which was focused on building the productive capacities of the LDCs (ESCAP, 2011). In fact, the association is very strong between diversification and total GDP when considering diversification as the number of categories of products produced further disaggregated by price. The idea is to differentiate these products not by the broad industry to which they belong, such as textiles or tourism, but by the

**Figure 4.4. Evolution of average productive capacity, 2005-2013, Asia-Pacific countries with special needs**



Source: ESCAP, based on trade data from UN Comtrade.  
 Note: Three-year averages in the period 2005-2013.

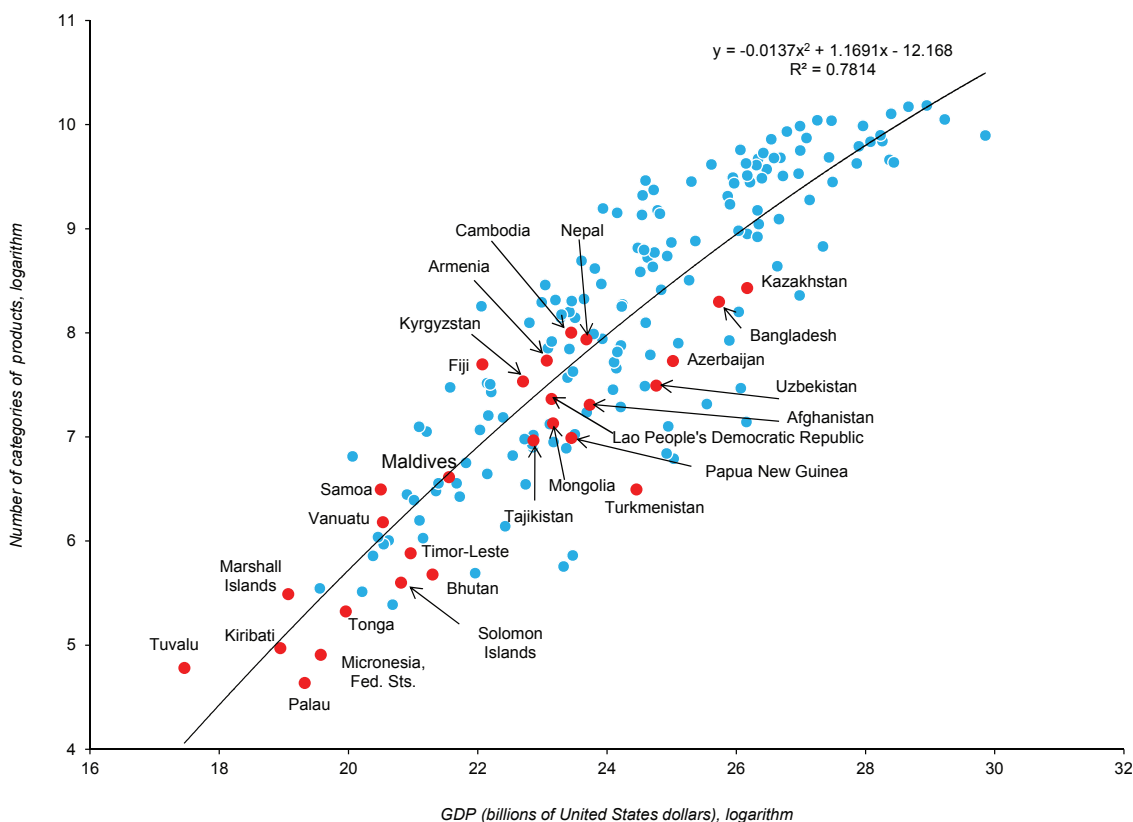
specificities of their production methods, which are assumed to be reflected in different qualities and prices. For example, a \$2.00 T-shirt is a different product from a \$10.00 T-shirt. To produce them, each requires a specific combination of “productive capacities” which are methods, processes, devices and infrastructure required for production.

Figure 4.5 illustrates the pattern regarding the association between GDP and diversification. The figure shows that the more diversified countries are associated with higher levels of GDP. These results also suggest that richer economies do not stop to diversify; rather, they diversify through differentiating their production, which is usually not captured by more

aggregated production and trade classifications. For example, when such countries as Japan, the Republic of Korea and Singapore were catching up, their firms in the garment industry did not simply reduce their production of low-unit value products that they were used to making; instead, they started to focus on different markets – diversifying into medium- and high-unit-value products.

Asia-Pacific CSN, shown in darker markers in figure 4.5, also have followed the same pattern of GDP associated with diversification. The majority of these countries have higher GDP than might be expected given their level of diversification, which is common to economies that have a higher reliance on oil and mineral resources or tradable



**Figure 4.5. Higher output in association with diversification: diversification and GDP, 2013**

Source: ESCAP, based on data from UN Comtrade and WDI.

Notes: Red marks represent Asia-Pacific CSN. Products are originally classified using six-digit HS 2002 classifications. Products under the same six-digit classification are further differentiated based on their unit value. See technical annex for details.

services, such as tourism, since the latter is not covered in the analysis. That pattern suggests that there are still gains to be made by such countries through economic diversification.

## DIVERSIFICATION AND STRUCTURAL TRANSFORMATION

Economic diversification is also associated with faster structural transformation. Low-income countries that are more diversified have experienced larger reductions in agricultural share in GDP, a faster increase in aggregate labour productivity growth and larger contributions of intersectoral reallocation in aggregate productivity (IMF, 2014).

Figure 4.6 shows the association between diversification and the share of agriculture in total employment and output. Each circle in the graphs represents a country, with the Asia-Pacific CSN in red. The figure shows that countries that are more diversified have also in general fewer workers in agriculture and lower participation of that sector

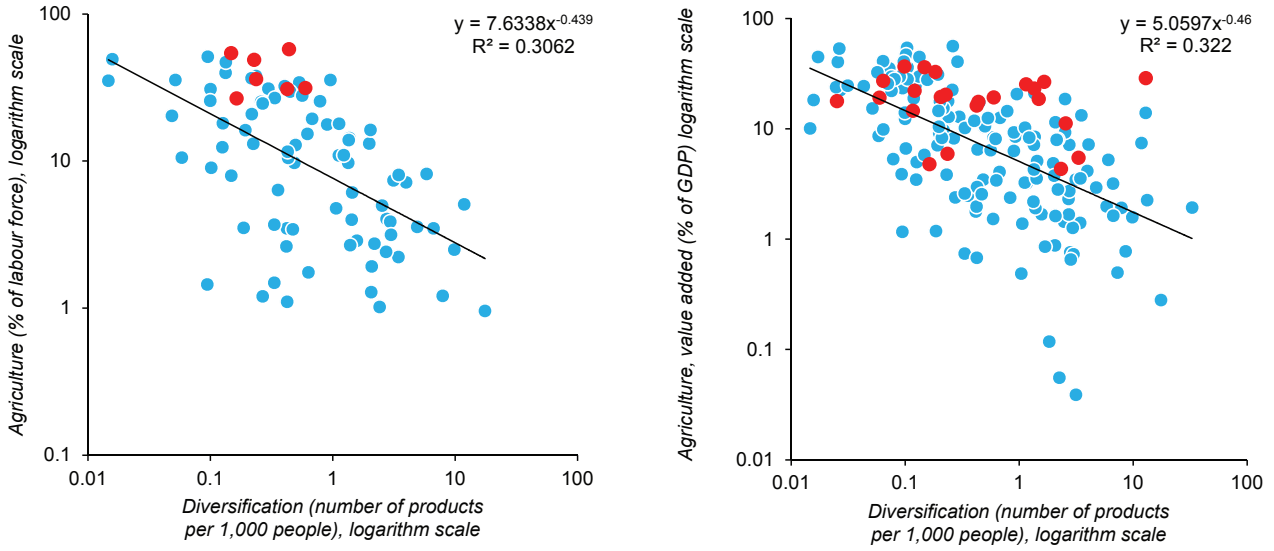
in total GDP, the usual characteristics of structural transformation.

## DIVERSIFICATION AND COMPETITION

Another pattern presented in ESCAP (2011) is that economies that are more diversified tend to export products that are less ubiquitous, meaning that they are not produced by many other countries (figure 4.7). This result remains robust to changes in trade classification and the methodology used to classify into different price ranges the goods that are within the same product category.<sup>4</sup> This fact suggests that, as countries diversify their exports, they face lower competition, thus improving their chances for increasing gains.

In the *Survey* for 2011, it is shown that the world's average diversification has increased over time, doubling in the past 25 years (ESCAP, 2011). Countries, therefore, should continue to diversify even if just to keep up. If economies in poorer countries do not diversify, they do not remain in the same position related to the other countries; they fall further behind.

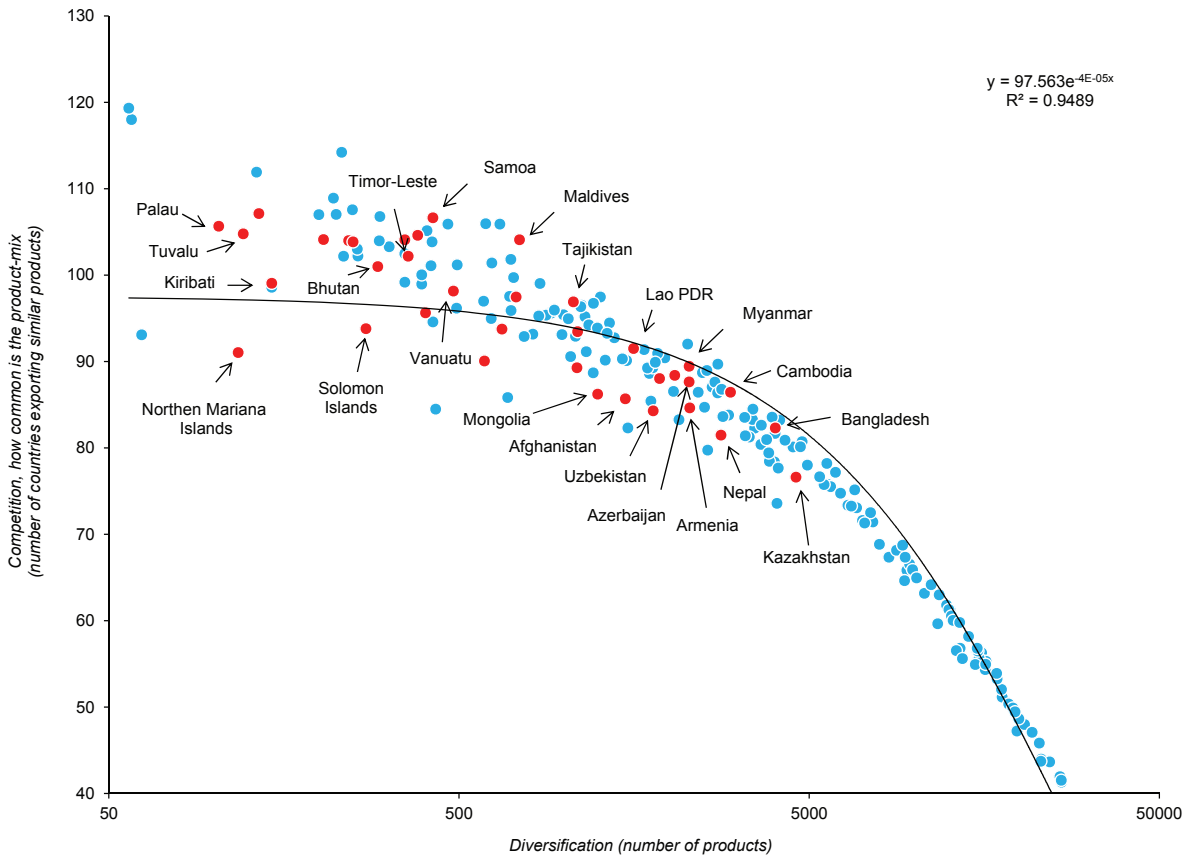
**Figure 4.6. Lower share of agriculture in employment and output is associated with diversification, 2013**



Source: ESCAP, based on data from COMTRADE and WDI.

Notes: Red marks represent Asia-Pacific countries with special needs.

**Figure 4.7. Association between diversification and numbers of countries exporting similar products, 2013**



Source: ESCAP, based on ESCAP (2011) and data from UN Comtrade and WDI.

Notes: Darker marks represent Asia-Pacific CSN. Products are originally classified using six-digit HS 2002 classifications. Products under the same six-digit classification are further differentiated based on their unit value. See technical annex for details.

## PRODUCT COMPLEXITY

In the *Survey* for 2011, these two types of measures were combined — diversification and competition faced by the countries — to create a measure of the “complexity” for each product.

The rationale here is that a larger set of productive capacities is required for producing more “complex” products, which are consequently produced by fewer and more diversified economies. In the *Survey* for 2012, it was shown that rich countries produced within a wide range of complexity, from low to high-complexity products, but poorer countries’ production is limited to low-complexity products. Other studies have found that the major exporters of more complex products are high-income countries and the major exporters of less complex products are low-income countries. In addition, export shares of the more complex products increase with income (Filipe and others, 2012).

The range of complexity of products produced by countries is illustrated in figure 4.8, which shows the distribution of complexity of the products produced in Bangladesh, Japan and Thailand. In the figure, 0 indicates the average product complexity considering all products in the world, and 1 indicates the standard deviation of the global distribution. The figure shows that, as in the case of Bangladesh, Thailand produces goods with below-average complexity, represented by the distribution below zero in the horizontal axis. However, in a manner different from that of Bangladesh, a significant share of Thailand’s product mix has above-average

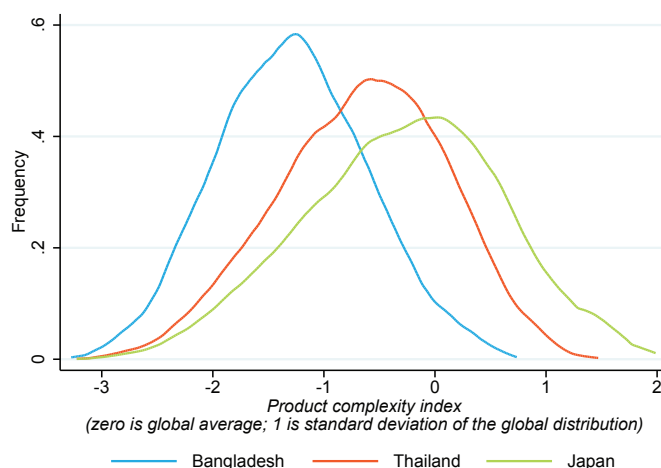
complexity. The distribution of product complexity in Japan is even more skewed to the right, towards more complex products.

Figure 4.9 presents the distribution of product complexity of the Asia-Pacific CSN in 2013. The figure shows that all these countries produce products within a wide range of product complexities, but usually the share of products with complexity above the global average is small, meaning that they produce products that are generally produced by other less diversified countries.

## DIVERSIFICATION PATHS

Another pattern related to diversification is that the existing product mix of a country affects the potential new products that could emerge in the economy. Diversification, therefore, seems to be path dependent. Such empirical regularity is illustrated by “product space” maps, the graphical representation of the likelihood that pairs of products would be jointly exported (Hausmann and Klinger, 2007; Hidalgo and others, 2007). The type of question answered when constructing those maps is “what is the probability that, in a country, firms could produce cell phones given that firms in that country produce garments?” The idea is to answer that type of question for all pairs of products and considering all products produced in the world.<sup>5</sup> Figure 4.10 illustrates that fact using HS six-digit trade classification further disaggregated by price range. Each small circle in the figure represents a product and the links between products represent the likelihood that the pair of products is jointly produced.

**Figure 4.8. The more developed the country, the greater is the complexity of its product range: distribution of product complexity of selected Asian countries, 2013**

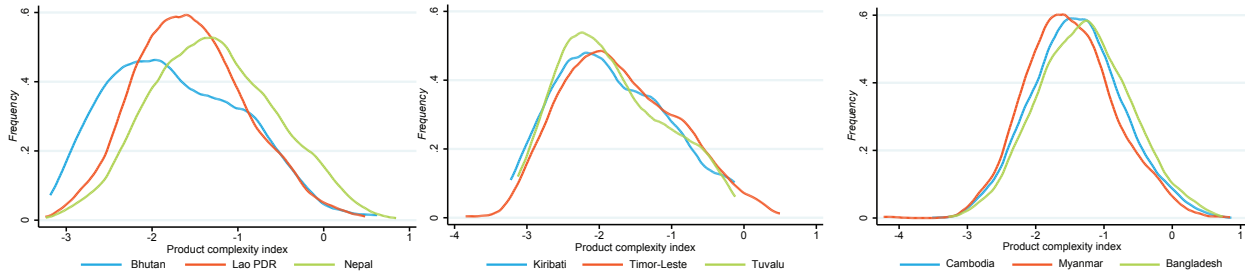


Source: ESCAP, based on ESCAP (2011) and data from UN Comtrade.

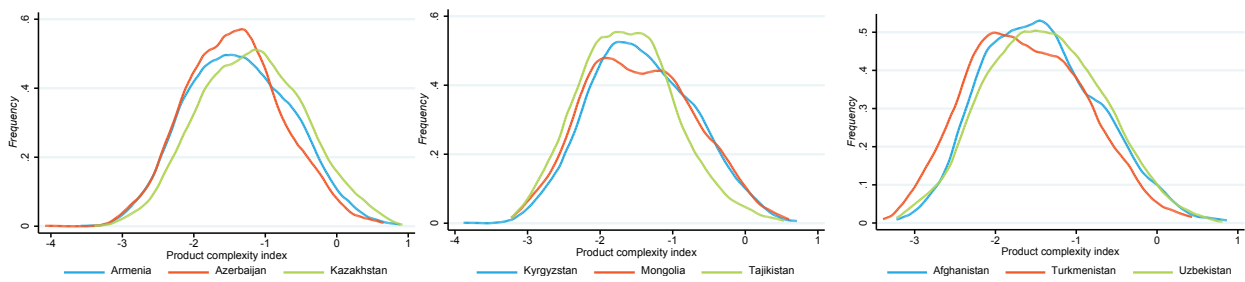
Note: Graphs are normalized so that products with average complexity are measured as zero complexity and the standard deviation from the average is one. See technical annex for details of the calculation of the product complexity.

**Figure 4.9. Product complexity of Asia-Pacific countries with special needs, 2013**

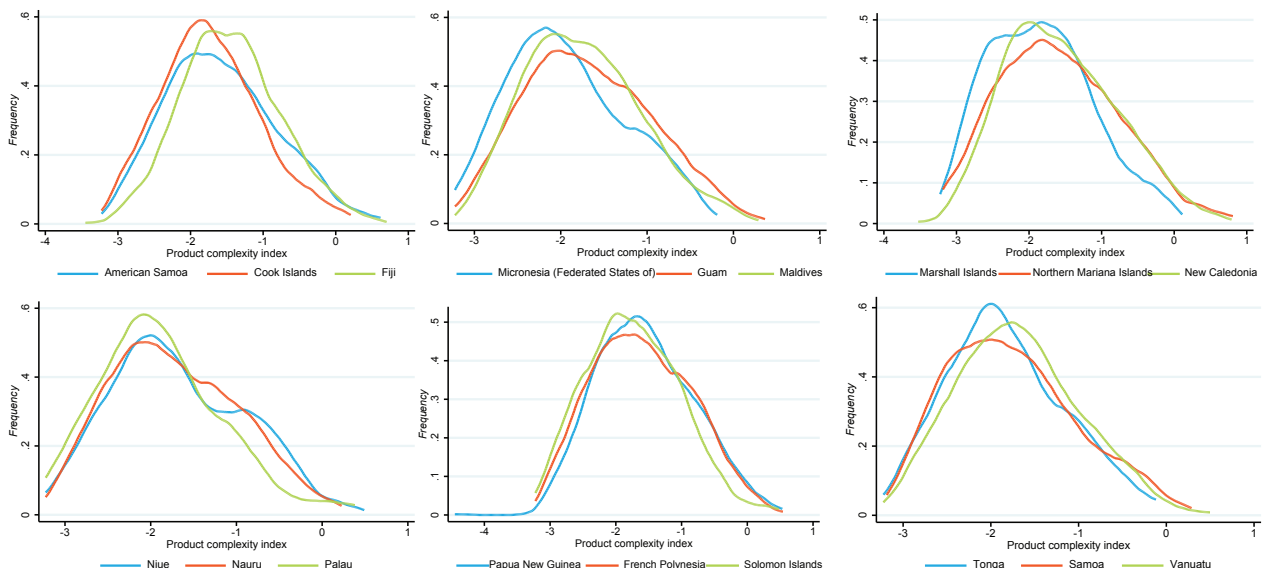
Selected Asia-Pacific least developed countries



Selected Asian landlocked developing countries



Selected Asia-Pacific small island developing States



Source: ESCAP, based on ESCAP (2011) and data from COMTRADE.

Note: Graphs are normalized so that products with average complexity are measured as zero complexity and the standard deviation from the average is one. See technical annex for details of the calculation of the product complexity.

The figure shows only the pairs that are produced with higher than 85% probability. The figure suggests that, given a set of products produced in a country, the potential new products that could emerge through diversification with higher probability are those that are directly connected to the existing products in the product space.

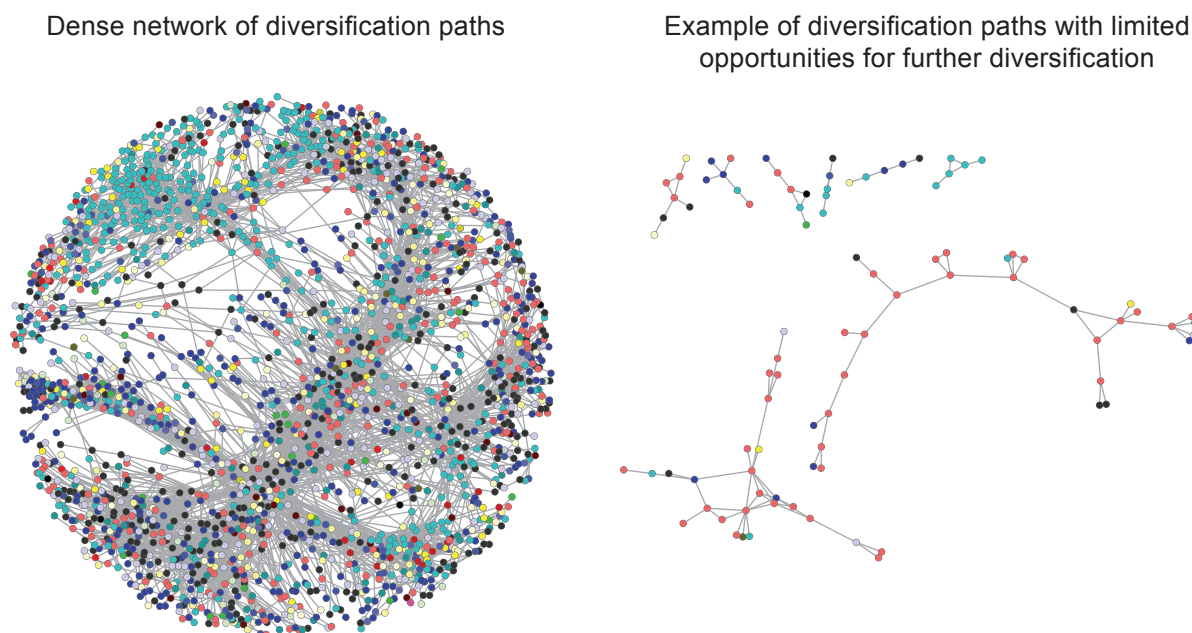
An empirical regularity revealed in figure 4.10 by the product space map is that some products are connected to many others, thus their production increases the likelihood of further diversification. On the other hand, the production of a product that belongs to a pair that is isolated in the product space map gives fewer opportunities for diversification towards new products.

A result of the path dependency of the diversification process is that it seems difficult for countries to “leapfrog”, moving directly from the production of one product to another that is distant in the product space. For example, if a country has its production base concentrated in primary products and they are far from, say, mobile phones, then the probability of a country diversifying in the short term towards the latter is reduced.

Another way to illustrate that empirical regularity is to consider how products of a certain complexity are connected to other products, as illustrated in figure 4.11. The figure shows in the horizontal axis the complexity of all products produced in 2013 classified at the six-digit level HS 2002 and further disaggregated by unit value. The scale is normalized in such a way that the average global complexity is 0 and the standard deviation of the distribution of product complexity is 1. In the vertical axis, the graph shows the complexity of potential new products. Therefore, each dot in the graph represents a pair composed by an existing and a potential new product. The colour of the dots indicates the proximity of the existing and new products in the product space.

The graph shows that, up to the level of global average complexity, the complexity of potential new products is close to the complexity of existing products, that is, half a standard deviation above and below), while for products with above-average complexity the distribution is more diffused with opportunities one standard deviation above and below. That result suggests that, for most products produced in developing countries, the potential new products that could emerge with high probability are those very close in terms of productive capacities required to be produced.

**Figure 4.10.** The global “product space” map for 2013 and the path-dependent process of diversification: some paths lead to many potential new products; others yield fewer options

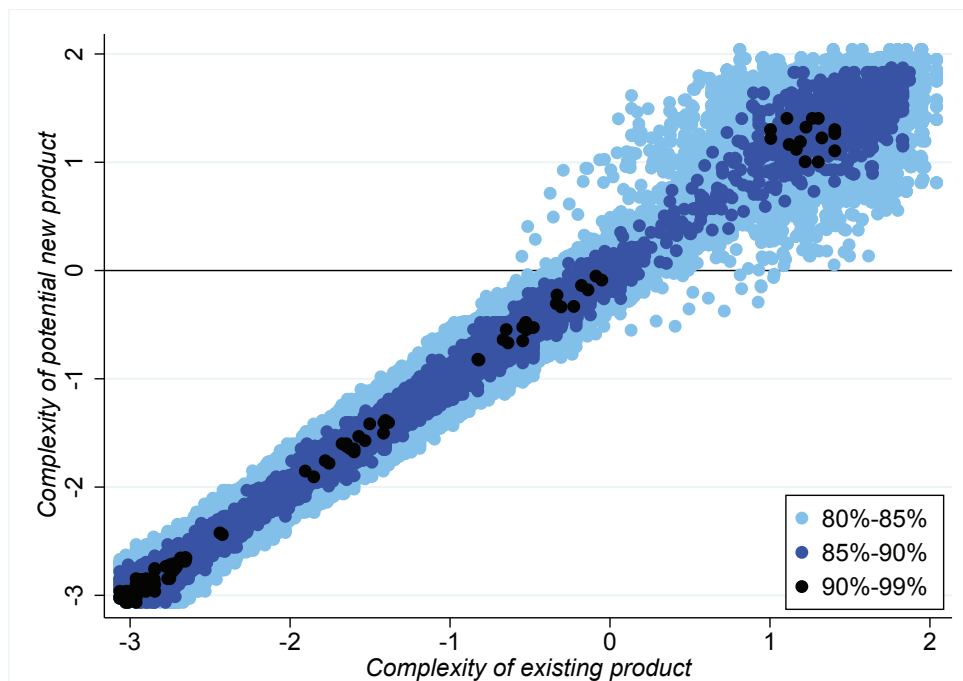


Source: ESCAP (2014a), based on Hidalgo and others (2007) and on trade data from UN Comtrade.

Notes: This map indicates products and the links between products. The overall shapes they form are arbitrary. The map was produced using the open-source software platform Cytoscape, which is available from [www.cytoscape.org/](http://www.cytoscape.org/).



**Figure 4.11. Diversification in short steps rather than leaps: map of potential new products for diversification by proximity to the existing product mix**



Source: ESCAP, based on data from the UN Comtrade database.

Note: The scale is normalized: the average global complexity is 0 and the standard deviation of the distribution of product complexity is 1. See technical annex for details of the calculation of the product complexity.

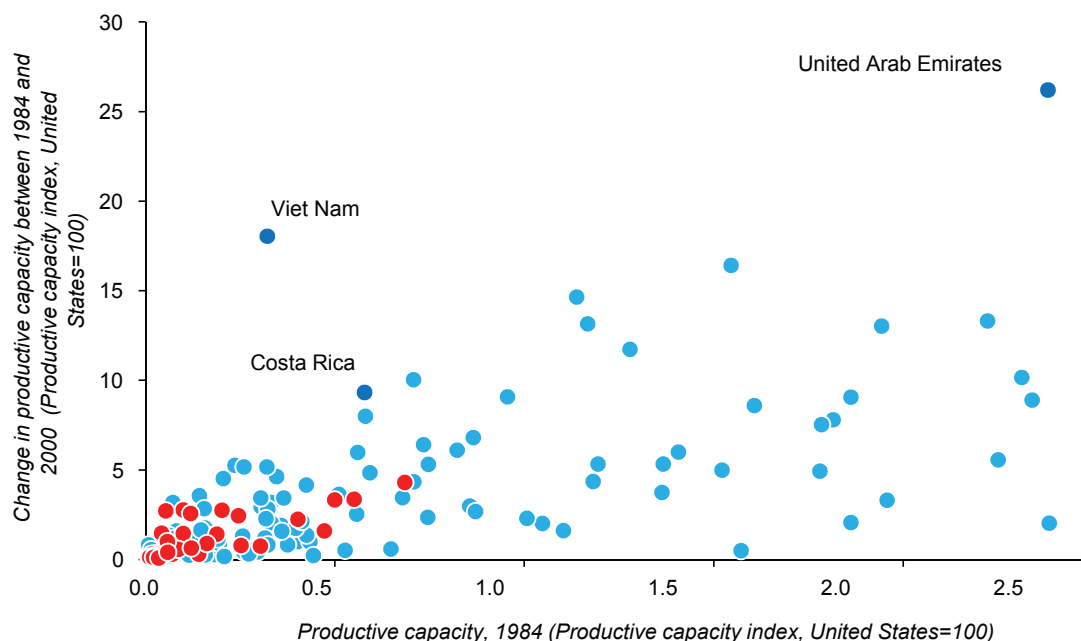
An optimum path of diversification of economic activities may exist, consisting of the continuous move to selected activities that are more complex and that are closely related to the existing productive capacities of the country. The literature on developmental States suggests that the approach of selecting economic activities is a prime role for the State (Johnson, 1982; Amsden, 1989; Wade, 2003). The main instrument for doing so is industrial policy, which is usually associated with targeted governmental interventions that foster specific manufacturing sectors and is aimed at accelerating structural transformation by promoting industrialization (Chang, 2009; Shapiro, 2007; Lall, 2005). On the other hand, the rent-seeking view of the selection process argues that Governments cannot and should not pick winners because the process of economic activity identification and promotion is full of self-fulfilling incompetence and corruption (Krueger, 2011; Noland and Pack, 2003; Pack, 2003).

A factor that may have contributed to the failure of some of the industrial policies in the past is the inability of Governments to identify the appropriate industries to target based on a country's endowment structure and level of development (Lin and Monga, 2011). In the next section, this report uses the product space to find potential products for diversification for each of the 36 Asia-Pacific CSN that are likely to require a set of capacities similar to those existing in each country.

## FOSTERING DIVERSIFICATION AND BUILDING PRODUCTIVE CAPACITIES: EXPERIENCE FROM SELECTED COUNTRIES

As discussed in previous sections, some Asia-Pacific CSN, such as Cambodia, Fiji and Kazakhstan, were able to increase their productive capacities recently. Their experience could be very informative for other CSN. Other countries that were able to substantially increase their productive capacities in the past few decades can also provide useful lessons to Asia-Pacific CSN on strategies and policies for fostering economic diversification to build their own productive capacities.

Figure 4.12 shows the countries that had low levels of productive capacity three decades ago and the change in productive capacities that they experienced up to the year 2000. Two countries underwent rapid increases in productive capacity in that period. The United Arab Emirates started with factor endowments comparable to the Asia-Pacific CSN that are oil exporters which had a productive capacity level of 2.4 in 1984, increasing to 26.2 by 2000. Costa Rica had factor endowments similar to resource-poor Asia-Pacific CSN and a level of productive capacity in 1984 of 0.5, which was a level well below the productive capacity of Nepal in 2013; the

**Figure 4.12. Fast transformers, 1984-2000**

Source: ESCAP, based on trade data from UN Comtrade.

Note: Darker markers indicate Asia-Pacific CNS.

level of productive capacity reached 9.3 by 2000. A clear outlier in figure 4.11 is Viet Nam. It confirms the analysis presented in the Survey for 2011, showing that Viet Nam was one of the few countries able to transform their productive capacities when starting from such low levels.

### The experience of these countries shows that reducing resource dependency is a key motivation for diversification

As is the case with some Asia-Pacific CSN, the United Arab Emirates has large oil and gas reserves,<sup>6</sup> and a large share of its gross domestic product (40%) is directly based on oil and gas output.<sup>7</sup> Following the oil price shocks during the 1970s and early 1980s and their aftermath, the United Arab Emirates undertook structural reforms to base its economy on more stable and reliable income sources. This led to the development of strategies directed towards the growth of the non-oil sector and a shift in government expenditures. In the case of Costa Rica, the country experienced a significant debt crisis in the early 1980s, and its diversification strategy was motivated by the awareness of the vulnerability of its commodity-export model to external shocks. The country has been able to drastically switch its export mix from agricultural commodities (bananas and coffee were responsible, respectively, for 28% and 24% of the total exports of the country in the 1980s) to goods with a higher technology profile. In 2012, electronic microcircuits

and computer parts and accessories accounted for almost 60% of the country's exports, while bananas and coffee together accounted for only about 7% of the export mix.

### With small domestic markets, countries have followed trade-led diversification strategies

In the early 1980s, Costa Rica and the United Arab Emirates had small populations similar to some Asia-Pacific CSN – Costa Rica (2.6 million) and the United Arab Emirates (1.2 million). Costa Rica opted for an export-led development strategy, based on export diversification, foreign direct investment and international economic integration. The policies of the United Arab Emirates were focused mostly on sectors amenable to foreign trade, especially re-exporting trade.

In Viet Nam, exports benefited greatly from improved market access, which started to play a leading role in the country's economic growth: the normalization of relations between China and Viet Nam in 1991; enhanced trade between them; and rapidly increasing exports. In 1992, Viet Nam signed a textile trade agreement with the European Union and later a broader cooperation agreement.<sup>8</sup> In 1995, it acceded to ASEAN and started to implement AFTA commitments; in 2001 Viet Nam signed a bilateral trade agreement with the

United States, which strengthened trade liberalization and export growth in the country. In 2007, the country acceded to WTO.

### The use of industrial policy

Much of the progress achieved in Kazakhstan in increasing its productive capacity can be traced to the 2010-2014 State Program of Accelerated Industrial and Innovative Development, which set specific targets for industrial and export diversification, labour productivity and energy efficiency improvement, innovation and decreased transportation costs. During the implementation of the State Program, more than 670 projects were launched with the creation of 67,000 permanent new jobs. Some successful projects were power lines, polycrystalline diamond compact drill bits, chemicals and cement factories (Studl, 2014). The number of products exported by Kazakhstan (classified by the Harmonized System six digit level)<sup>9</sup> almost doubled, from 480 in 2010 to 858 in 2013. About 70% of FDI has been attracted into the manufacturing sector, while the productivity of the manufacturing sector increased by 60% in real terms.<sup>10</sup>

Industrial policies are not static and should evolve with the increase in productive capacity. In Viet Nam, early policies supported the development of agriculture, the production of consumer goods and the promotion of foreign investment relations. Between 1986 and 1991, rice production sharply increased, transforming Viet Nam from being a rice importer to becoming the third largest rice exporter in the world. In addition, the country's crude oil exports rose from 40,000 tons in 1986 to 2.7 million tons in 1990. At the second stage, the heavy industries of cement, steel, oil and mining, as well as the labour-intensive textiles and food product industries, were considered a strategic sector for receiving support. Later on, policies were aimed at further developing the export-oriented and cheap labour-intensive industries of garments, footwear and leather products, key industries in which Viet Nam had comparative advantages. From 1985 to 1995, the share of oil and garments in the country's total exports increased, respectively, from 0% and 2%, to 20% and 30%. More recently, export-oriented policies were focused on the expansion of new manufacturing industries in high-technology sectors, such as electronics. A law to promote technology transfer via foreign investment was implemented, and high-technology zones and open economic zones were opened in order to attract foreign capital into the sector. These measures are reflected in the increase in the exports of electronics from 6% in 2006 to 24% in 2012.<sup>11</sup> In Kazakhstan, the previously mentioned State Program in the period 2010-2014 identified several

priority sectors to facilitate focused actions and State support: the oil and gas sector; ore mining and smelting complex; atomic and chemical industry; machinery, pharmaceuticals, agro-industrial complex; light industry; tourism; information and communications technologies; biotechnologies; alternative energies; and space activities. The State Program has been revised and the second five-year programme, starting in 2015, will be focused further on innovations and on industries such as metallurgy, oil processing, petrochemicals, chemicals, food processing, machinery engineering and construction material (ADB, 2013c).

In Costa Rica, recent policies to attract foreign direct investment have been focused on four specific areas: the electronics industry; the medical devices sector; information technology-based services; and tourism. That strategy has generated growth in employment opportunities and the transfer of technology and know-how, and has led to higher productivity. The Government's strategy for diversifying foreign direct investment has helped to increase and diversify exports, reform the country's productive structure and boost its participation in global value chains.

### Investment in infrastructure aligned with the diversification strategy is critical to complement and attract private investment

The Government of the United Arab Emirates invested intensively in infrastructure with the strategy to attract more domestic and foreign investment. Its focus on foreign trade required building large ports. Public investments in infrastructure, utilities and basic segments, as well as subsidizing basic supplies, such as water and electricity, also promoted exports. As for the communications and logistical services sector, which currently represent a significant share of its domestic product, the sector's development was also made possible thanks to large investments in airport and road infrastructure, and communications networks.

### Facilitating foreign direct investment, including through the creation of special economic zones and industrial parks, is critical to finance and foster diversification

In the United Arab Emirates, free trade zones were established, which offered investors 100% foreign ownership with no taxation, freedom to repatriate capital and profits, low import duties and no restrictions on hiring foreign employees.

In Costa Rica, the 1981 Law of Export Processing Zones and Industrial Parks was implemented as the

first step in promoting the export of non-traditional products. A set of incentives and benefits were granted to companies making new investments in the country for export purposes. These benefits were later extended to firms set up in rural areas. Policies targeting small and medium-sized enterprises were also implemented, such as programmes providing credit and technical assistance, and promoting innovation. Another programme, Costa Rica Provee, is aimed at creating backward linkages between high-technology multinational companies and small and medium-sized enterprises.<sup>12</sup>

The free zone system policies implemented in Costa Rica attracted important investments from multinational companies.<sup>13</sup> Overall, FDI flowing into export processing zones (EPZs) has contributed greatly to export growth, investment, employment, technology transfer and foreign exchange earnings. Costa Rica has been successful in attracting high-technology FDI due to the cumulative results of past development policies, especially those related to human capital formation. It has been aided also by its geographical proximity to the United States market, zero profit taxes in EPZs and a private organization dedicated to attract FDI and support the new export-led economic model.<sup>14</sup> There are currently 9 EPZs in the country, hosting 256 active companies, 44% of which are in the manufacturing sector and 47% are service providers.<sup>15</sup> In 2010, the companies in EPZs generated more than 58,000 new jobs directly. In the period 2005-2010, services in EPZs corresponded on average to a quarter of the total of the country's exports of services, while manufacturing produced in EPZs corresponded to more than half of the country's exports of goods. Moreover, 75% of the value of exported goods corresponds to specialized products for medical supply, integrated microcircuits, electrical wires, cameras and video projectors.<sup>16</sup>

In Viet Nam, selected strategic sectors and labour-intensive industries were supported by the establishment of EPZs and by foreign investment laws, which were aimed at creating a favourable business environment for FDI enterprises and at broadening the rights of foreign investors. The annual value of foreign investment increased dramatically, from \$366 million in 1988 to \$7 billion in 1995.<sup>17</sup>

### Resource rents used to finance diversification

Kazakhstan's experience shows the potential role of the State in promoting diversification and the importance of prudential allocation of oil revenues. It has been reported that 152 projects, with total

investments approaching \$500 billion in value, were planned for the period up to 2015 to improve connectivity and decrease the cost of doing business.<sup>18</sup> Domestic development financing institution, such as Samruk-Kazyna, Kazakhstan's sovereign wealth fund, and the Development Bank of Kazakhstan, are actively engaged in supporting this national diversification strategy. Private and external resources are also mobilized to support strategic infrastructure projects (Kazakhstan, 2010).

### Diversification in services sectors complements the diversification strategy

In the United Arab Emirates, considerable efforts were also made in developing infrastructure for tourism and promoting conferences, shopping festivals, film festivals and major sports events. Tourism is now a major driver of growth as its full economic impact, including tourism capital investment and indirect impacts, contributed 7.4% of GDP and 11.7% of non-oil GDP in 2009. As a result, the United Arab Emirates became a global air travel hub in the 2000s. All these measures supported long-term growth in the non-oil sector.<sup>19</sup>

On the services side, Costa Rica has developed a successful and innovative tourism industry. Ecotourism in Costa Rica has helped diversify the national economy, which previously depended on the export of a few agricultural products.<sup>20</sup> Medical tourism is a new development with high potential; Costa Rica is already second among the top destinations offered by medical tourism facilitation companies to United States residents.

### Stable and competitive macroeconomic policy and competitive exchange rate in particular is fundamental to promote diversification

In Costa Rica, a key policy reform was the introduction of a crawling peg exchange rate regime based on frequent devaluations of the national currency. From 1999, the crawling peg system increasingly boosted the tourism sector and enhanced the competitiveness of the export sector by undervaluing the domestic currency, which lowered the price of the goods being exported.

In Viet Nam, the macroeconomic environment was adjusted following a prescription full of orthodox elements, including increased interest rates, budget cuts and devaluation. Interest and exchange rates were adjusted (Litvack and Rondinelli, 1999) to raise domestic savings and to attract foreign capital, periodic treasury bill auctions were launched and a



two-tier banking system was developed. From 1991 to 1995, a rapid devaluation of the Vietnamese dong and a reduced agricultural tax in 1991/92 helped to stimulate agricultural growth, and the exchange rate also helped small and medium-sized enterprises in the garments sector to gain important markets (FAO, 2006).

### Lessons learned

This brief presentation of the strategies, policies and programmes that have shaped the productive transformation in selected countries shows the fundamental active role of the State in facilitating the movement of the economy from a lower to a higher level of development. That is observed in the national and local policies to create an enabling environment to attract FDI and to strategically target sectors that could drive a constant increase in productive capacities of the economy. It also stresses the central role of the market in resource allocation and the need for the State to play a facilitating role to assist firms in the process of industrial upgrading by addressing externalities and coordination issues.

## CHALLENGES AND OPPORTUNITIES FOR ECONOMIC DIVERSIFICATION OF ASIA-PACIFIC COUNTRIES WITH SPECIAL NEEDS

The prospects for diversification in Asia-Pacific CSN depend not only on structural factors, such as their

high costs of trade and transport and the smallness of the populations in SIDS, but also on medium- to long-term changes in the global and regional economic landscape that influence the incentives for productive investment in CSN.

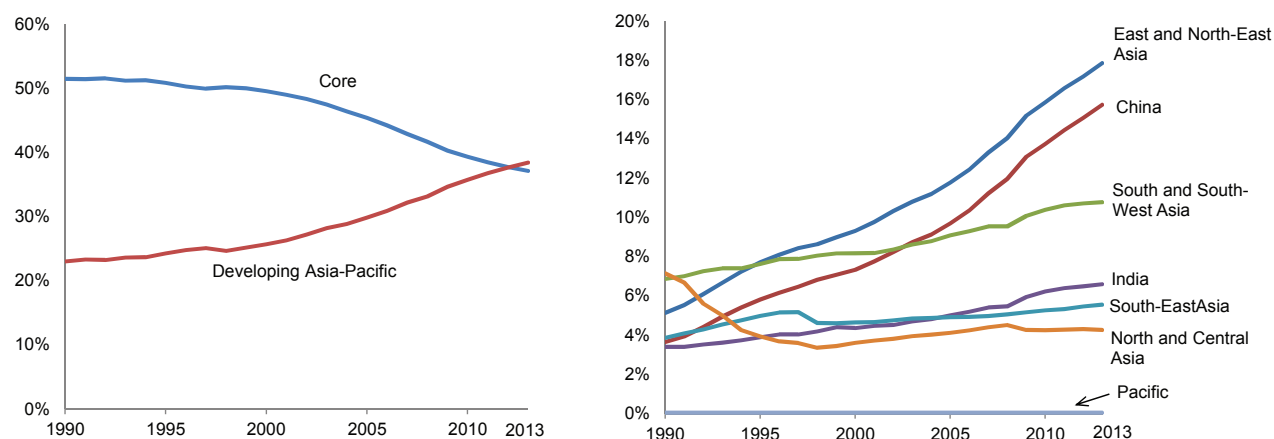
In that regard, the rise of Asia and the Pacific is a key factor for CSN to consider when devising an economic diversification strategy. In terms of purchasing power parity, the total GDP in the developing Asia-Pacific region has surpassed the sum of GDP in the “core” countries that first industrialized (those in Western Europe, the United States, Canada, Australia, New Zealand and Japan) (figure 4.13). The share of developing Asia-Pacific economies in the world’s GDP increased from 23% in 1990 to 38% in 2013, while in the same period the share of that group of core countries reduced from 52% to 37%. The main contributor for the rise of the developing Asia-Pacific countries was China; its share in the world’s GDP increased fourfold in that period, from 4% to 16%, driven by manufacturing-led growth. The implications of the rise of Asia and the Pacific for CSN diversification in the medium- to long-term are discussed in the following sections.

### Prices of commodities and manufacturing

One effect of the rise of Asia is the boom in commodity terms of trade. As discussed in the *Survey for 2012*, in breaking the historical downward trend in the prices of commodities, from 2000 to 2010 the average annual price growth rates ranged from 8.5% for raw materials to 17.4% for metals and minerals.<sup>21</sup> Prices

**Figure 4.13. Rise of the Asia-Pacific region: share of global GDP**

Share of world's GDP in PPP (constant 2005 international \$)

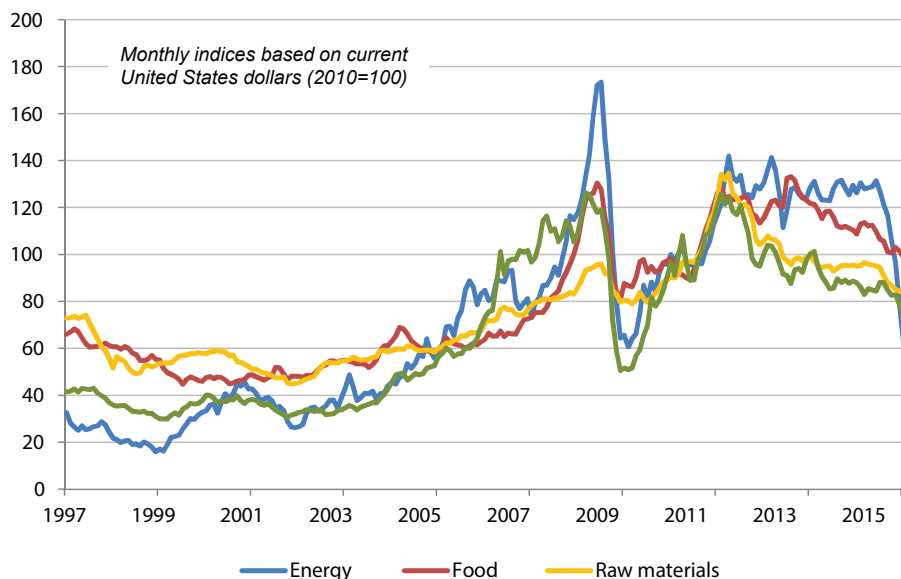


Source: ESCAP, based on trade data from the World Bank WDI.

Note: “Core” correspond to Western Europe (i.e. Austria, Belgium, Denmark, Finland, France, Germany, Italy, Netherlands, Norway, Sweden, Switzerland and United Kingdom), its Western offshoots (i.e. Australia, New Zealand, Canada, United States), and Japan.



**Figure 4.14. Historically high prices of commodities**



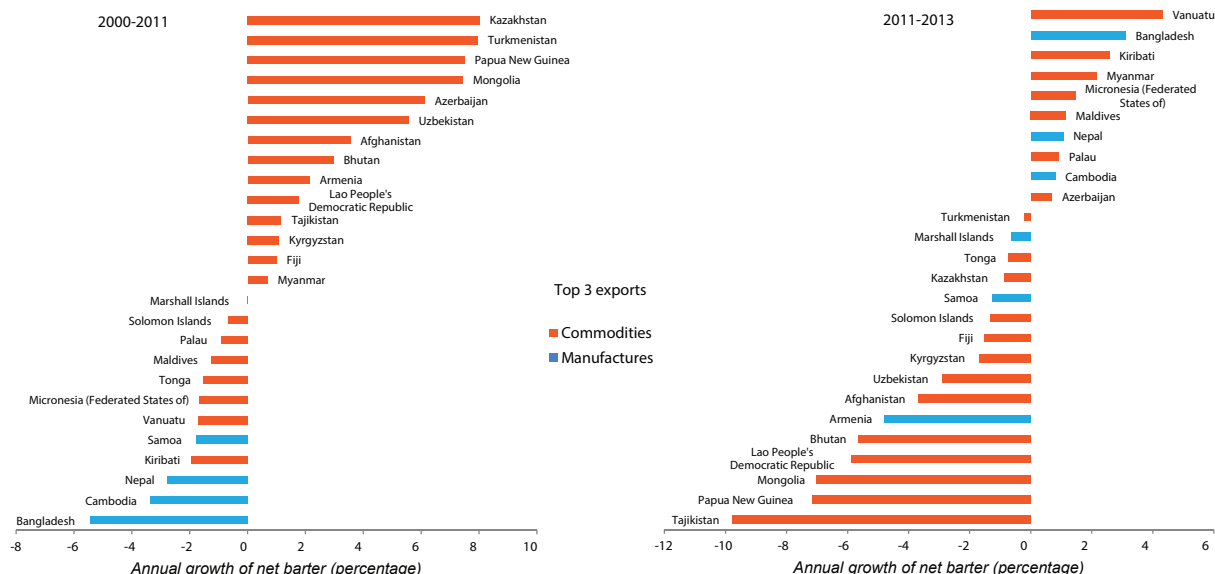
Source: ESCAP, based on data from World Bank Commodity Markets, Annual world prices of commodities and indices. Available from <http://go.worldbank.org/4ROCCIEQ50> (accessed 17 March 2015).

have reduced in the past two years, but they are still higher than a decade ago, as shown in figure 4.14. The boom in commodities has ended a secular decline in commodity terms of trade. The countries that experienced the highest increase in their terms of trade in the past decade were the major exporters of energy resources or minerals. On the other hand, during that period, the emergence of China and South-East Asian countries as

manufacturing powerhouses has driven down the price of manufactures, reducing the terms of trade of countries that rely on low-wage manufacturing production.

That phenomenon is illustrated in figure 4.15, which shows the annual growth of net barter terms of trade of Asia-Pacific CSN between 2000 and 2011 and between 2011 and 2013. That measure indicates

**Figure 4.15. Increases in commodity terms of trade, Asia-Pacific countries with special needs**



Source: ESCAP, based on data from WDI (accessed 7 October 2014).

increases in the price of their exports compared with the price of their imports. The first period corresponds to increasing prices of commodities, while the second corresponds to reducing prices. The figure shows that the majority of these countries that have increased their terms of trade in the first period are also commodity exporters of oil or minerals. Faced with these price changes, entrepreneurs and firms in these countries had the incentive to further specialize in producing primary products. That creates the long-term risks in which the commodity-boom countries get trapped while specializing in fewer economic activities that are more volatile and prone to rent-seeking behaviour, thus reducing the prospects for long-term growth.

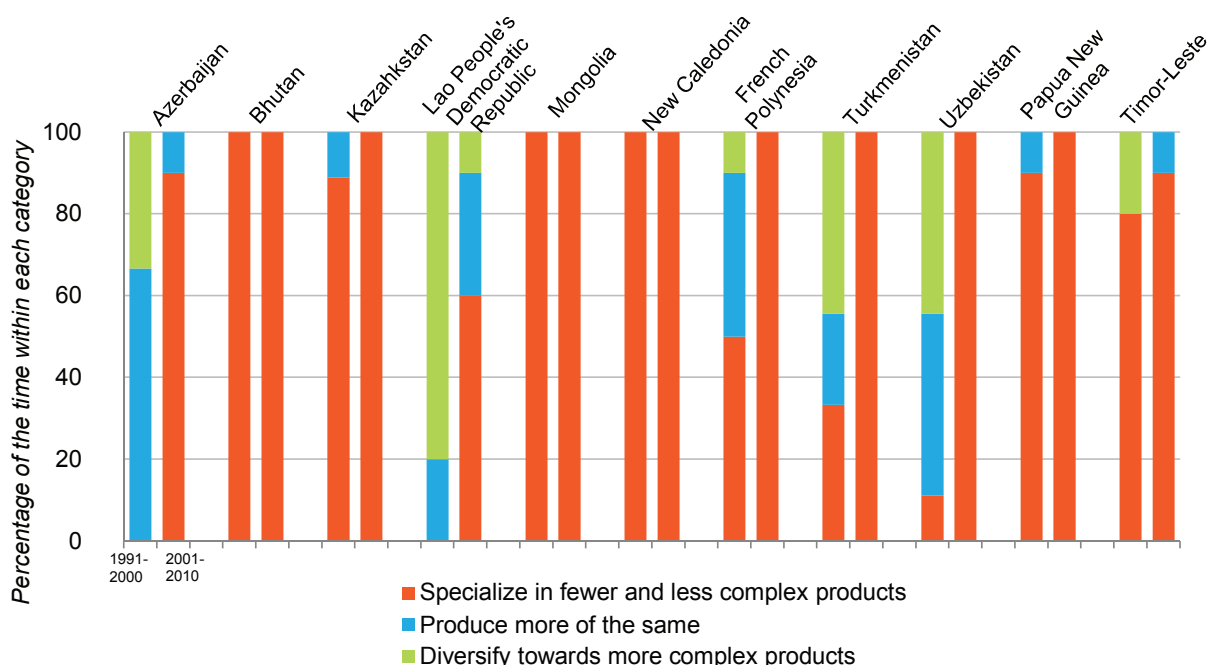
Figure 4.16 illustrates how the shifts in the prices of commodities and manufactures have created incentives towards or away from diversification. It shows the results of the analysis that compares the periods 1991-2000 and 2001-2010 and estimates the percentage of time when each country had the incentive to specialize in fewer and less complex products, produce more of the same, or diversify towards more complex products. The results suggest that many Asia-Pacific CSN have had the incentive to specialize. Azerbaijan, the Lao People's Democratic Republic, French Polynesia, Nepal, Tajikistan, Turkmenistan and Uzbekistan have experienced

large shifts from diversification incentives in the 1990s to specialization in the 2000s. Other countries, such as Bhutan, Kazakhstan, Mongolia and New Caledonia, have dealt with incentives to specialize in both periods. As discussed, despite recent moderation, the prices for commodities are still at historically high levels, and Asia-Pacific CSN that are oil and mineral exporters are expected to continue to face incentives to specialize in fewer and less complex products.

### Exchange rate appreciation

Increases in terms of trade, as experienced by many Asia-Pacific CSN in the past decade, tend to over-appreciate the real exchange rate. The mechanism is popularly known as the "Dutch Disease". High prices for primary commodities drive resources to that sector and out of manufacturing. Increases in income create excess demand for non-tradable products and imports, driving up prices. That reduces profits in the domestic tradable sectors, which use non-tradables and imports as inputs but have to sell the output at international prices. The appreciation of the exchange rate is defined as the change in relative prices that favour non-tradable goods. Figure 4.17 illustrates such appreciation in the period 2000-2010. The increase was moderate in Kazakhstan (7) and Kyrgyzstan (4),

**Figure 4.16.** Price shifts for manufactures and commodities have created incentives away from diversification, selected economies, 1991-2000 and 2001-2010



Source: ESCAP, based on data from WDI (accessed 7 October 2014).

but the real effective exchange rate increased by 27% in Azerbaijan, 22 in Armenia and 13% in Papua New Guinea.

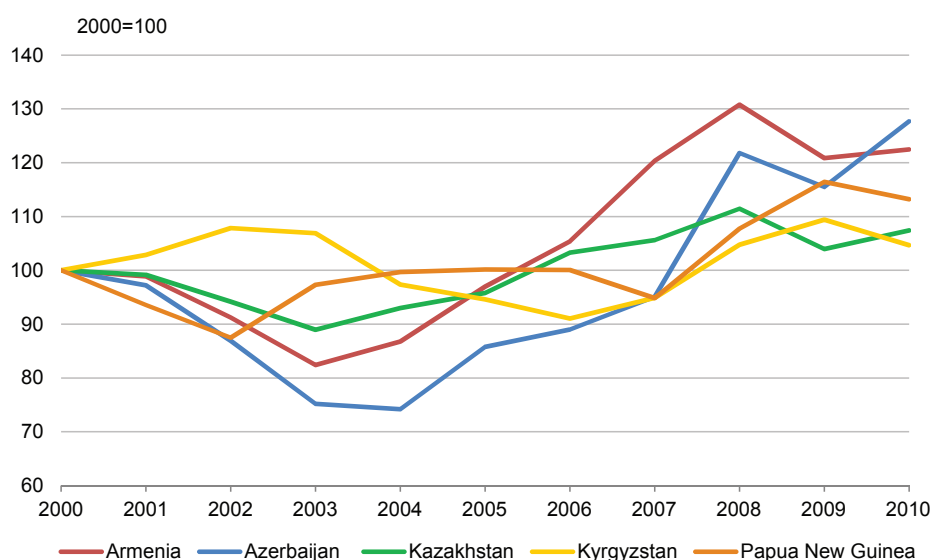
To illustrate the effect of exchange rate appreciation on diversification, this report presents the results of a macroeconomic modelling exercise.<sup>22</sup> In the model, it is assumed that countries trade with each other and that each individual economy is composed of a set of production sectors, each making a specific and highly differentiated consumption good. The model with 15 countries and up to 60 sectors that could emerge during 100 time periods is simulated 1,200

times. Figure 4.18 shows the results of the analysis by presenting the effect of an increase in the nominal exchange rate on the average diversification of a country. The figure shows that diversification reduces steadily with appreciations in the exchange rate. In the simulations, after 6% appreciation only about 50% of the potential diversification emerges in the economy.

## THE NEED FOR STRATEGIC DIVERSIFICATION

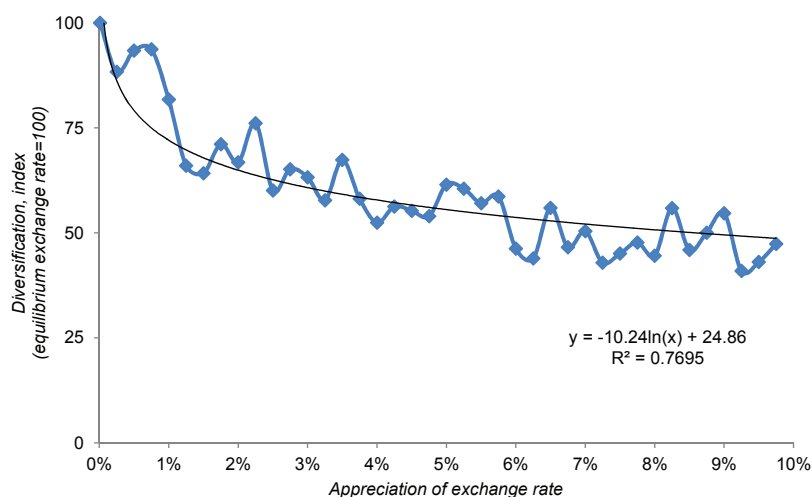
To foster economic diversification, countries could choose between laissez-faire strategies, those in which

**Figure 4.17.** Real effective exchange rate, selected Asia-Pacific countries with special needs



Source: ESCAP, based on data from World Bank WDI (accessed 7 October 2014).

**Figure 4.18.** Simulation of the effect of exchange rate appreciation on diversification



Source: ESCAP (2014a).

the market guides the identification of opportunities for diversification, and strategic diversification approaches that nudge the private sector towards targeted economic activities that are more likely to increase the productive capacities in the country.

Table 4.2 shows that eight Asia-Pacific CSN have more than 50% of potential new products with above-average product complexity for the country, which would contribute towards pushing the distribution of complexity of the country's product mix towards more complex products. This is illustrated in figure 4.19, which shows in the vertical axis the percentage of potential new products with above-average complexity for the country, and in the horizontal axis the number of existing products in the country's product mix. Thus,

it is suggested that the more diversified the economy is, the higher will be the likelihood that entrepreneurs and firms, when investing in new activities, on average would push the product mix of the country towards more complex products. It is important to note that, in the less diversified economies, exactly the ones that have the higher number of potential new sectors for diversification when compared with the size of their existing product-mix, it is less likely that the private sector would find more complex sectors in which to invest.

Export and import replacement opportunities add another layer to the analysis. Figure 4.20 shows the number of existing products in the country's product mix in the horizontal axis and the share in percentage

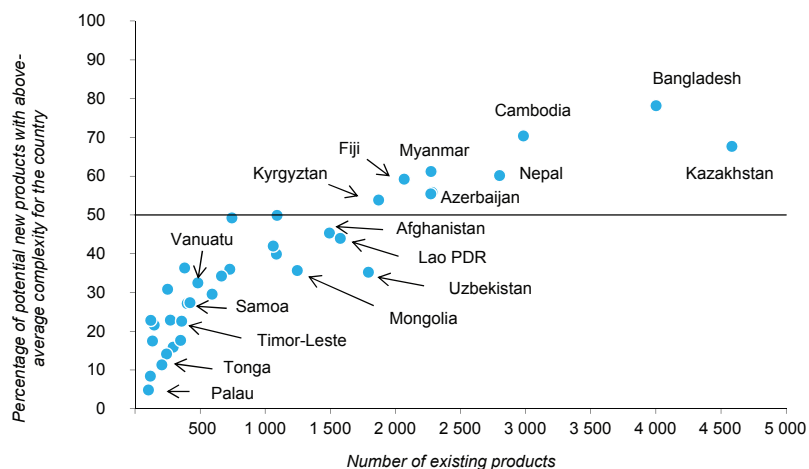
**Table 4.2. Potential new products related to those already produced, Asia-Pacific countries with special needs, 2013**

Country/area	Number of existing products	Number of potential new products for emulation	Percentage of potential new products with above country's average complexity	Percentage of export opportunities with above country's average complexity	Percentage of import replacement opportunities with above country's average complexity
Afghanistan	1 492	486	45%	6%	10%
American Samoa	728	328	36%	7%	8%
Armenia	2 280	511	56%	22%	32%
Azerbaijan	2 271	453	55%	20%	36%
Bangladesh	4 001	393	78%	23%	19%
Bhutan	293	240	16%	2%	1%
Cambodia	2 982	320	70%	30%	54%
Cook Islands	381	314	36%	5%	2%
Fiji	2 067	534	59%	24%	0%
French Polynesia	591	271	30%	4%	1%
Guam	401	284	27%	4%	1%
Kazakhstan	4 583	603	68%	49%	59%
Kiribati	146	139	22%	1%	0%
Kyrgyzstan	1 870	565	54%	17%	34%
Lao People's Democratic Republic	1 576	296	44%	11%	7%
Maldives	744	370	49%	16%	7%
Marshall Islands	242	163	14%	2%	0%
Micronesia (Federated States of)	134	149	17%	1%	0%
Mongolia	1 245	376	36%	6%	1%
Myanmar	2 272	350	61%	18%	9%
Nauru	350	216	18%	2%	0%
Nepal	2 799	411	60%	12%	3%
New Caledonia	1 090	379	50%	11%	2%
Niue	249	286	31%	3%	0%
Northern Mariana Islands	117	131	8%	0%	10%
Palau	103	104	5%	1%	0%
Papua New Guinea	1 086	301	40%	8%	5%
Samoa	421	245	27%	5%	3%
Solomon Islands	271	175	23%	2%	3%
Tajikistan	1 061	365	42%	12%	32%
Timor-Leste	358	204	23%	3%	1%
Tonga	205	159	11%	1%	1%
Turkmenistan	663	342	34%	7%	8%
Tuvalu	121	193	23%	2%	0%
Uzbekistan	1 792	398	35%	9%	29%
Vanuatu	482	262	32%	4%	1%

Source: ESCAP, based on data from UN Comtrade database.

Note: Number of products exported is the number of the category of products exported, classified using HS 2002 trade data disaggregated at the six-digit level and further disaggregated by unit price.



**Figure 4.19. Percentages of new products with above-average complexity, Asia-Pacific countries with special needs, 2013**

Source: ESCAP, based on data from UN Comtrade database.

of the export opportunities of potential new products with above-average product complexity for the country in the vertical axis. For example, in the Lao People's Democratic Republic, the sum of export opportunities of potential new products with above-average product complexity for that country represents 11% of the export opportunities of the whole set of potential new products given the existing product mix.

Assuming that entrepreneurs and firms take into consideration the potential demand for new products when deciding between potential new economic activities and also assuming that new exports that have a higher export opportunity have higher chances of success, a higher proportion of new economic activities might be expected to have below-average product complexity. Although this outcome makes perfect sense in the short term as the one that maximizes efficient use of limited economic resources, in the long run it perpetuates the relatively lower level of productive capacities and opportunities of productive employment in the economy, reducing the chances of the country to catch up with developed economies.

Figure 4.20 shows that the effect of export opportunities on all Asia-Pacific CSN is to reduce the likelihood of a positive outcome of a laissez-faire approach to the promotion of new exports. All these countries are more likely to lose than gain in the longer term if they let the market alone create the incentives for export diversification.

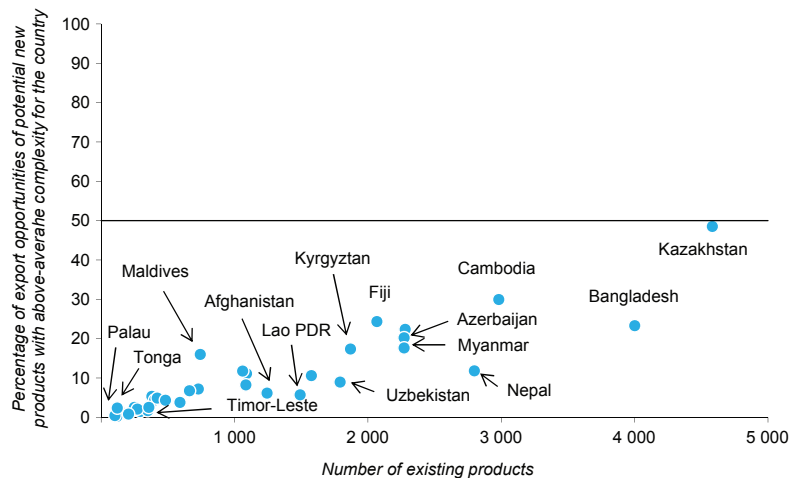
Similarly, opportunities for import replacement also create incentives either for increasing or for reducing the average complexity of a country's product mix. Figure

4.21 illustrates this effect for Asia-Pacific CSN by showing the number of existing products in the countries' product mix in the horizontal axis and the share in percentage of the import replacement opportunities of potential new products with countries' above-average product complexity in the vertical axis. The figure shows that only Cambodia and Kazakhstan are more likely to benefit from a laissez-faire approach to import replacement. The Governments of the other Asia-Pacific CSN, therefore, have to create strategically targeted incentives to nudge entrepreneurs in import replacement economic activities with above-average complexity.

The joint analysis of export and import replacement incentives is illustrated in figure 4.22, which shows in the vertical axis the percentage share of the import replacement opportunities of potential new products with above-average product complexity for the country and the share of export opportunities in the horizontal axis. The graph is divided into four quadrants. In the first quadrant are the countries that could adopt a laissez-faire approach to import replacement, but should adopt a strategic diversification approach towards new export opportunities to facilitate the private sector's discovery of new economic activities leading to the desirable social objective of increasing the economy's productive capacity. Cambodia and Kazakhstan are located in that quadrant with shares of import replacement opportunities of the potential new products with above-average product complexity for the countries accounting for 54% and 59%, respectively.

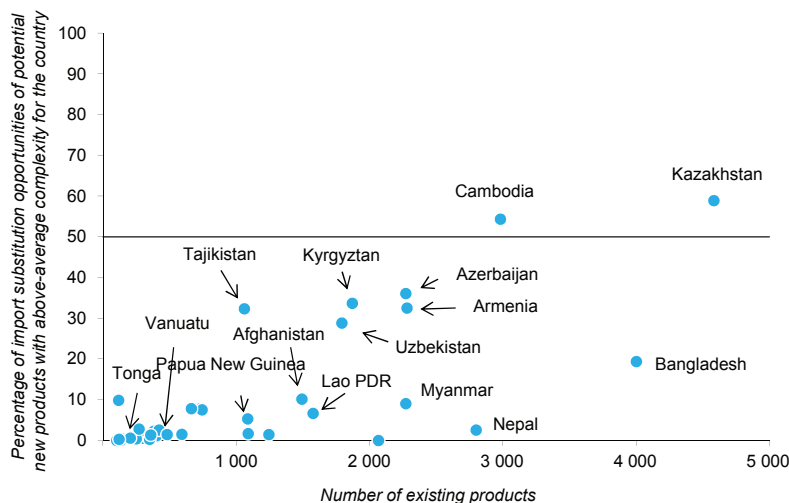
In the second quadrant would be the countries that could adopt a laissez-faire approach that is focused on facilitating the discovery process by providing an

**Figure 4.20. Effect of export opportunities on the incentives for diversification towards products of above-average complexity, Asia-Pacific countries with special needs, 2013**



Source: ESCAP, based on data from UN Comtrade database.

**Figure 4.21. Effect of import substitution opportunities on the incentives for diversification towards products of aboveaverage complexity, Asia-Pacific countries with special needs, 2013**



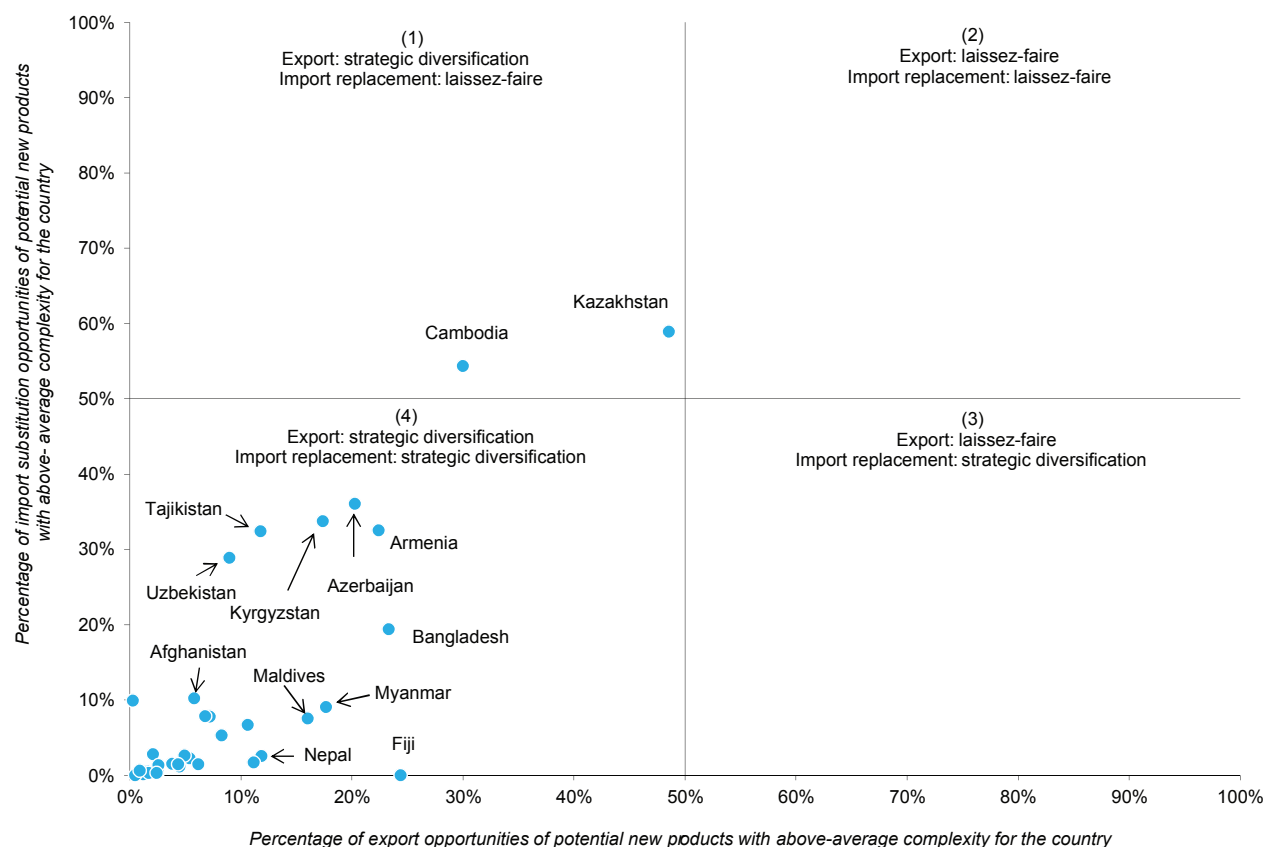
Source: ESCAP, based on data from UN Comtrade database.

enabling environment for a business that creates incentives for entrepreneurs to start new economic activities. In the third quadrant would be the countries that could adopt a laissez-faire approach towards export diversification but would need a strategic approach towards import substitution.

All other Asia-Pacific CSN are located in the fourth quadrant. They are in the difficult position of not being able to rely on market incentives to drive the economy towards increasing productive capacities. If left to the market alone, the new economic activities, either exports or import replacement that emulate the production of more developed countries, are more likely to have below-average product complexity for the country. These countries have to adopt an approach based on strategic diversification to prod the private sector and create incentives towards

economic activities with higher complexity.

Governments can play a role in nudging the discovery process towards the new products that have higher complexity. Successful diversification towards these new products will generate new capabilities that will increase the country's productive capacity. They will also facilitate the process of diversification towards other products with higher complexity. That process of increasing product complexity, and consequently increasing productive capacity, has a social benefit of facilitating future diversification. Such a benefit is not quantifiable a priori and, thus, cannot be captured by the private entrepreneur. Society would benefit if a larger proportion of entrepreneurs would take their chances with those products of higher complexity, but that benefit is not internalized by the entrepreneurs

**Figure 4.22. Strategies for economic diversification, Asia-Pacific countries with special needs, 2013**


Source: ESCAP, based on data from UN Comtrade database.

themselves; thus, the diversification towards those products is likely to be below the optimum social level. Governments should, therefore, support and facilitate, through selective policies including industrial and trade policies and infrastructure development, diversification towards those new products of above-average complexity for which there is high demand.

## POTENTIAL SECTORS FOR DIVERSIFICATION

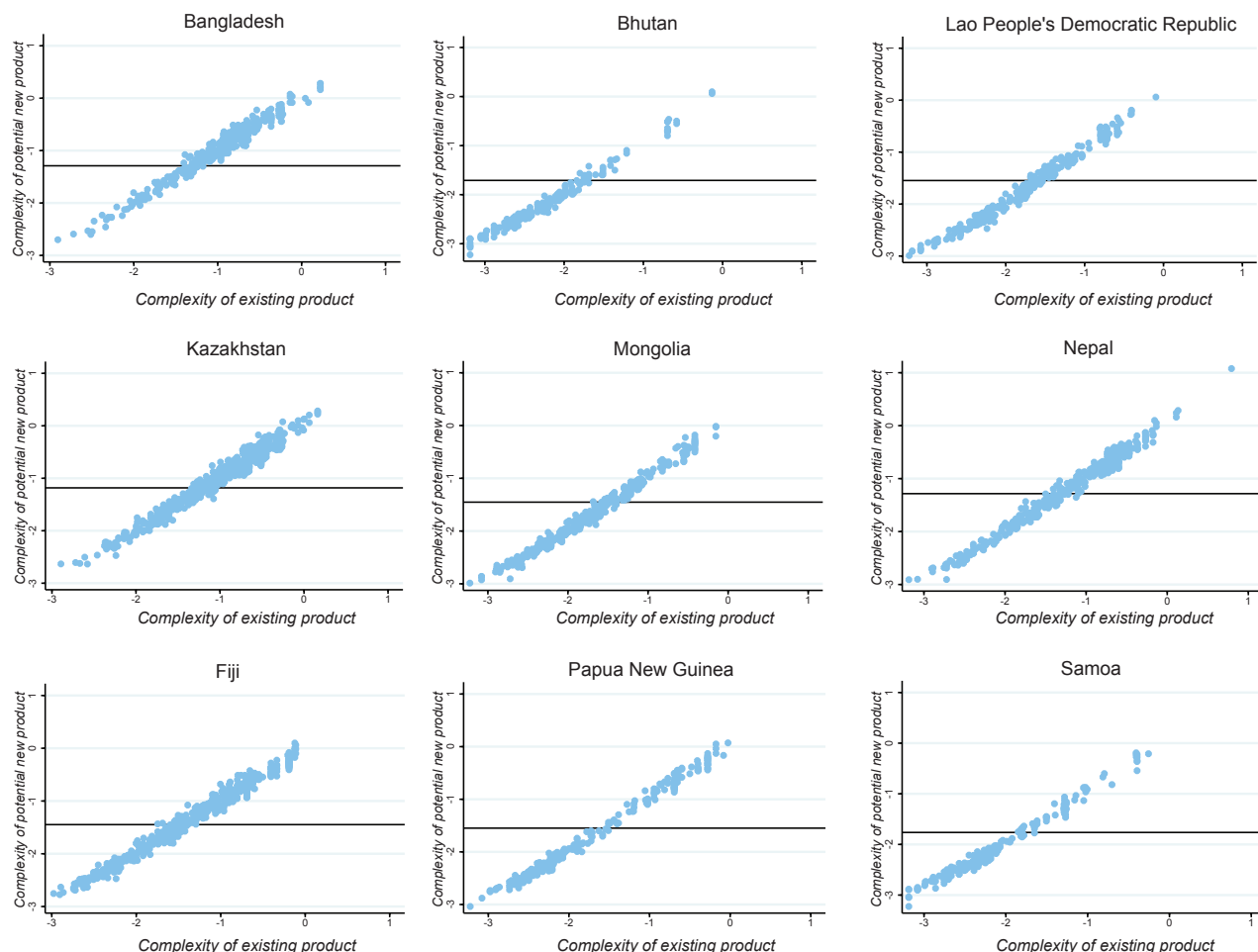
The opportunities for CSN in Asia and the Pacific to diversify their economies with higher probability are in products that are more complex and that are nearby in the product space to the existing product mix.

Figure 4.23 illustrates the map of potential new exports in the case of selected Asia-Pacific CSN. In the graph for each country, the horizontal line marks the average complexity of the country's product-mix; thus, new products with complexity above that level would contribute to pushing the distribution of complexity of the country's product mix towards more complex products.

Based on the analysis of the data to construct these maps, figure 4.24 displays the top five industries of each Asia-Pacific CSN with the highest shares in the percentages of potential new products. For Afghanistan, the top five industries with potential new products of above-average complexity are base metals and articles made of base metals (18%); textiles and textile articles (18%); plastic and rubber and articles made thereof (16%); machinery and electrical equipment (14%);<sup>23</sup> and chemicals (11%).

Those same five industries comprise the top five in almost all Asia-Pacific CSN. The concentration of opportunities within a few industries is a common phenomenon among these countries, with five industries accounting for 72% or more of the potential new products with above-average complexity for the country. In particular, textiles and textile articles, such as apparel, account for a high share of potential new opportunities in the Federated States of Micronesia (46%), French Polynesia (31%), Bhutan (47%), the Lao People's Democratic Republic (38%), Guam (36%), Maldives (37%), Mongolia (30%), Nauru (58%), Samoa (39%), Solomon Islands (35%), Tajikistan (39%),

**Figure 4.23. Map of potential new products for diversification, selected Asia-Pacific countries with special needs, 2013**



Source: ESCAP, based on data from UN Comtrade database.

Note: The scale is normalized: the average global complexity is 0 and the standard deviation of the distribution of product complexity is 1. See technical annex for details of the calculation of the product complexity.

Turkmenistan (40%) and Tuvalu (32%).

The analysis of opportunities for diversification by industry, as presented in figure 4.24, shed some light on the potential target areas for diversification. However, in addition to the identification of promising areas, it is important to identify the factors that could facilitate or prevent the process of discovery of these new economic activities by the business sector.

### EXPORT OPPORTUNITIES

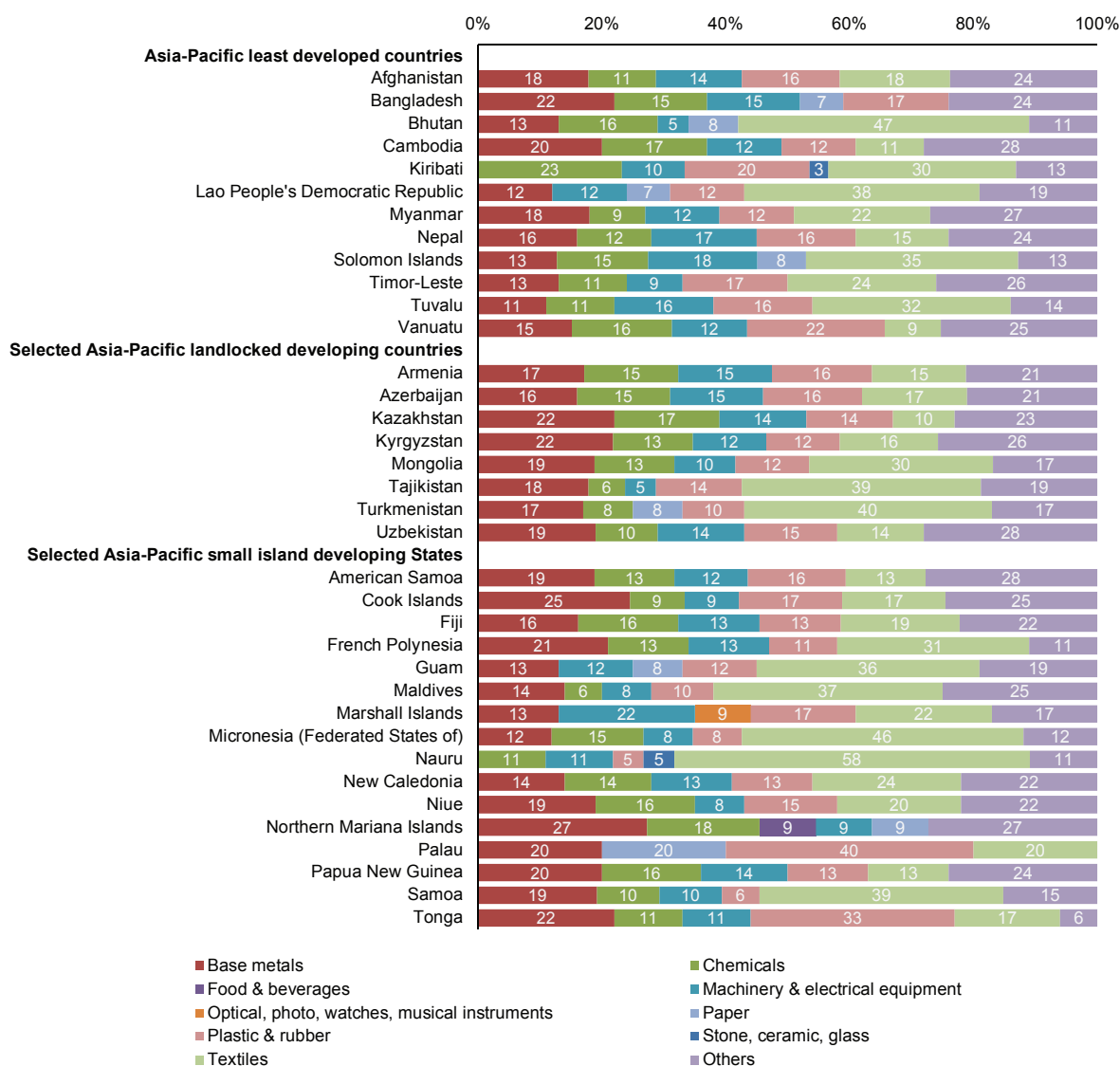
It seems reasonable to assume that products that are in high demand are more likely to attract entrepreneurs, and that entrepreneurs who take risks in these sectors that are characterized by high demand are also more likely to succeed. This report presents the result of the analysis of the potential new sectors for diversification that have both higher product complexity and offer export opportunity. To estimate export opportunity,

consideration is given in the analysis to the increase in global imports of each sector in 2012/13. The export opportunity is presented as the monetized annual increase in imports (see annex). Figure 4.25 shows the potential new sectors for diversification with a higher share of export opportunities for each of the Asia-Pacific CSN.

### Asia-Pacific least developed countries

In Afghanistan, with over 60% in export opportunities, the top new sectors are plastics and articles made of plastic; machinery and mechanical appliances; organic chemicals; paper and paperboard, and articles made of pulp, paper and board; and iron and steel. The first two account for more than 35% of the new opportunities.

In Bhutan, articles of apparel and accessories account for a quarter of the export opportunities. Other sectors with higher potential are iron and steel; organic chemicals; and

**Figure 4.24. Top five industries with highest percentages of potential new products, Asia-Pacific least developed countries, 2013**


Source: ESCAP, based on data from UN Comtrade database.

stone, plaster, cement, asbestos, mica, and similar articles.

Machinery and mechanical appliances, plastic and paper sectors also are among the top export opportunities of potential new sectors in the Lao People's Democratic Republic. Two new sectors also have been included among the top five: stone and ceramic products, and articles of apparel. In Nepal, electrical and electronic equipment (at 5%) made it into the top five potential new sectors. Other sectors are plastics, machinery, articles made of iron and steel, and paper.

#### Asian landlocked developing countries

The sectors of plastic and articles made of plastic and of machinery and mechanical appliances also offer greater export opportunities for potential new products in Armenia; the other top sectors are iron and steel; paper and paperboard, and articles of pulp, paper and board; and copper and articles made of copper.

Similarly, in Azerbaijan, plastic and articles made of plastic, and of machinery and mechanical appliances

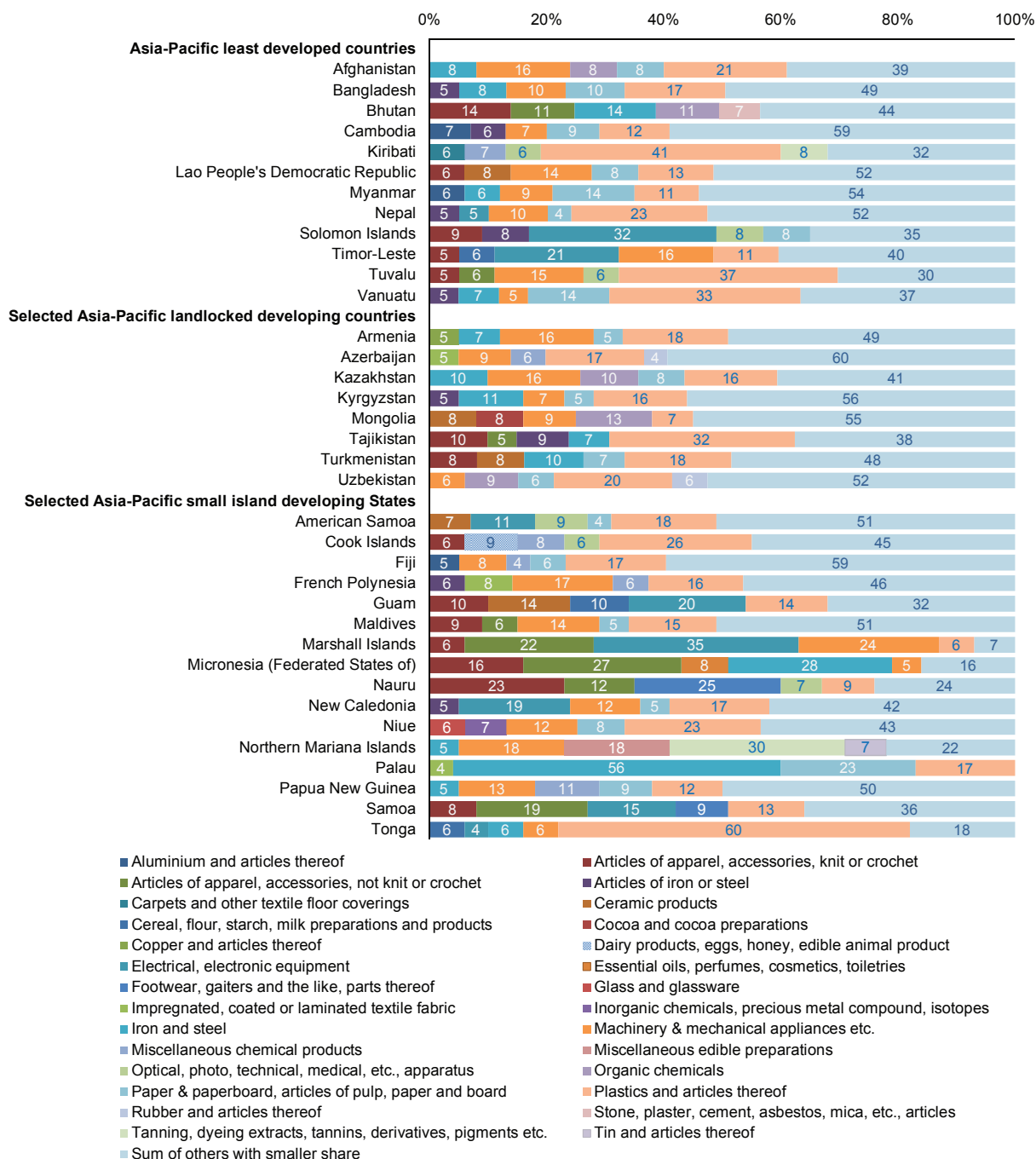


are the top two potential new sectors in terms of export opportunities. However, the set of potential sectors is less concentrated, and the top five sectors, which include miscellaneous chemical products; impregnated, coated or laminated textile fabrics; and rubber and articles made of rubber, account for just over 40% of total export opportunities.

In the case of Kazakhstan, plastics and articles made of plastic, and machinery and mechanical appliances account for more than 30% of the export opportunities followed by the sectors of iron and steel, and organic chemicals, both of which are at 10%.

In Kyrgyzstan, the sectors that account for higher export opportunities are iron and steel and articles

**Figure 4.25. Potential new sectors for diversification with higher percentage share of export opportunities, Asia-Pacific countries with special needs, 2013**



Source: ESCAP, based on data from UN Comtrade.

made of iron and steel together with the sector of plastics and articles made of plastic.

In Mongolia, the top five potential new sectors with higher export opportunities are: organic chemicals, machinery and mechanical appliances, ceramic products, confectioneries and the plastics sector. The top five in Tajikistan account for 62% of export opportunities. The plastics sector offers higher opportunities at 32%, followed by articles of apparel and accessories (15%). In Turkmenistan, the top sectors are plastics, iron and steel, ceramic products, articles of apparel and accessories, and the paper sector; in Uzbekistan, they are plastics, organic chemicals, paper, rubber, and machinery and mechanical appliances.

### Asia-Pacific small island developing States

Diversification of many of the Asia-Pacific SIDS is challenged by the small population of these countries; in many cases, these countries could improve their productive capacities and create jobs by supporting

sustainable tourism, fisheries and aquaculture (box 4.2). However, if diversification strategies are considered, the results presented in figure 4.25 could support the identification of potential new products. The figure shows that articles of apparel and accessories offer opportunities for diversification with high potential for export gains in Cook Islands (6%), Guam (10%), Maldives (15%), Marshall Islands (28%), Micronesia (Federated States of) (43%), Nauru (35%), Samoa (27%), Solomon Islands (9%), Timor-Leste (5%) and Tuvalu (11%).

Other sectors that are common to the top five potential new sectors with higher shares of export opportunities are electrical and electronic equipment (American Samoa, Guam, Marshall Islands, New Caledonia, Samoa, Solomon Islands, Timor-Leste and Tonga), and machinery and mechanical appliances (Fiji, French Polynesia, Maldives, Marshall Islands, Micronesia (Federated States of), New Caledonia, Niue, Northern Mariana Islands, Papua New Guinea, Timor-Leste, Tonga, Tuvalu, and Vanuatu).

#### Box 4.2. The Pacific

Three areas that have good potential for increasing the productive capacity of small island developing States are sustainable tourism, sustainable fisheries and aquaculture.

##### **Sustainable tourism**

Tourism is an essential economic sector for many SIDS, given its contribution to national income, foreign exchange earnings and investment. International tourism arrivals in the Asia-Pacific SIDS exceeded 2.25 million people in 2012, with Maldives accounting for more than 40% of the total. Fiji is second to Maldives and registered 661,000 international tourist arrivals in the same year. Pacific SIDS as a whole comprise one of the fastest-growing tourism markets in the world, having nearly doubled between 2000 and 2011. In 2012, tourism receipt of the Asia-Pacific SIDS totalled \$3.6 billion. The share of tourism receipts as a percentage of GDP varies significantly among these countries, ranging from 0.1% in Papua New Guinea to as high as 88.6% in Maldives. In terms of investment, flows targeting the tourism sector in the Asia-Pacific SIDS quickly recovered after the great recession of 2008/09, with greenfield foreign direct investment in hotels and restaurants having reached \$475 million in 2012, 44% more than in 2011.

Tourism is a labour-intensive sector that contributes significantly to employment creation in the Asia-Pacific SIDS. However, such employment is mostly concentrated in urban and coastal areas, leading to geographic disparities in income distribution. Environmental vulnerability is another challenge, if tourism is to be sustainable in the Asia-Pacific SIDS. Many of these countries lack land space to absorb the pollution and waste generated by the expanding tourism sector. Their fragile coastal and shallow-sea ecological system, which happens to be their greatest tourist attraction as well, is also threatened by pollution, overexploitation and rising sea level and temperature.

Greater synergy of the tourism sector with social and environmental requirements can be achieved through small innovations in the business model. The concept of ecotourism and cultural tourism started in some Asia-Pacific SIDS. It not only promotes harmony with the environment but also connects the tourism sector with the livelihood and culture of the local population. In addition, the potential to increase the supply of local, especially agricultural, products for the tourism sector remains largely untapped. Better production coordination, quality control and processing capacity would help local businesses to access this important market. Policy guidance to generate incentives for the tourism sector to fully explore such opportunities, and broader advocacy to educate consumers and companies in these areas would be needed to nurture the desired transformation.

**Box 4.2. (continued)****Sustainable fisheries**

Fisheries play a major role in the economies of many Asia-Pacific SIDS. They contributed \$258 million to GDP of the Pacific SIDS and more than 14,000 formal jobs, primarily in the tuna industry. Fish are also an important source of food for the local population. Fish account for between 50% and 90% of animal protein in the diet of coastal communities, and national per capita fish consumption in the Asia-Pacific SIDS is between 3 and 4 times higher than the global average. Small-scale coastal fisheries often play a vital role in food security and livelihoods of local rural communities.

The waters of the Pacific islands subregion hold the world's largest stocks of tuna, which during their migratory journey pass through the exclusive economic zones (EEZ) of the Pacific SIDS. Of the 2.4 million tons of tuna caught in the western Pacific Ocean, 1.4 million tons worth \$2.8 billion are caught in the waters of the Pacific SIDS. The share caught by domestic fleets or processed in the facilities of Asia-Pacific SIDS remains relatively small, but it has grown in the past decade. Further development of domestic industrial tuna fleets and tuna-processing operations in the Asia-Pacific SIDS is a worthy goal.

However, the sustainability of the fisheries in the Asia-Pacific SIDS faces a number of challenges, including pollution, habitat loss and alteration, destructive harvesting methods, overexploitation, invasive alien species, oceanic acidification, natural disasters and climate change. At the global level, it has been estimated that 32% of fish stocks are currently overexploited, depleted or recovering from depletion and a further 50% have been already fully exploited. Part of the problem has been fuelled by excessive fishing subsidies. UNEP has estimated the aggregate value of fishing subsidies worldwide to be between \$15 billion and \$35 billion annually. Meanwhile, data from the European Union clearly show that, of the €12.9 billion in fishing subsidies that it granted since 2000, only 1% was for the marine environment.

Significant efforts are required to ensure the future sustainability of the important fishery sector. They include better regulation of subsidies and strengthened monitoring and prevention of illegal, unreported and unregulated fishing activities. They should also include enhanced international cooperation to tackle cross-cutting environmental challenges, such as marine pollution and climate change, which may indirectly affect fisheries through changing water temperature and erosion of marine ecosystems.

**Aquaculture**

Aquaculture is one of the fastest-growing animal/food-production sectors. It comprises both small-scale family businesses and large commercial-based projects that showcase substantial technological, labour and capital inputs. Aquaculture plays a crucial role in supplying fresh food and high-quality proteins, as well as in improving livelihoods in remote, isolated coastal and atoll communities in most Asia-Pacific SIDS. For example, more than 500 farmers are involved in seaweed farming in Solomon Islands, more than 15,000 tilapia farmers are operating in Papua New Guinea, and there are more than 1,000 farmers employed in seaweed and giant-clam farms in Kiribati. This sector also generates tax revenue for local governments.

As the demand for fish continues to grow and the availability of wild-capture fish decreases, there will be a greater role for aquaculture to play in augmenting the fish supply and ensuring that ocean fish stocks are conserved and well-managed. At the global level, it is estimated that farmed fish account for 49% of total seafood consumption; global demand for farmed fish is expected to increase to 62% by 2030. However, aquaculture in the Asia-Pacific SIDS lags far behind this global trend. The total value of the sector remains insignificant in the region. In 2013, FAO estimated that total aquaculture production in the Caribbean and the Pacific together represented less than 1% of global aquaculture production, while the Pacific SIDS accounted for only about 10% of this small share.

Although the sector is still very underdeveloped in the Asia-Pacific SIDS, the experience of Latin America and Asia shows its potential. On the bright side, aquaculture in Asia-Pacific SIDS is relatively diversified, with products ranging from shrimp and fish to oysters and pearls. In contrast, in the Caribbean it is generally limited to freshwater tilapia. This implies that it can be easier for the aquaculture sector in the Asia-Pacific SIDS to establish linkages with other local sectors by supplying a variety of inputs for further processing. Aquaculture can also be linked with tourism as is the case in Fiji, which generates new tourism potential by combining tourism activities with aquaculture sites and the traditional culture of coastal fishing villages.

Source: Gillet (2014).

<sup>a</sup> UNCTAD (2014).

<sup>b</sup> Hezel (2012).

<sup>c</sup> UNEP, UN-DESA and FAO (2012).

<sup>d</sup> UNEP and others (2012).

<sup>e</sup> Vulperhorst and others (2013).

<sup>f</sup> UNCTAD (2014).

<sup>g</sup> FAO (2013).

<sup>h</sup> FAO (2014).

## EXPORT OPPORTUNITIES IN AGRICULTURE AND AGRO-INDUSTRIES

The list in figure 4.26 suggests that there are no agricultural and agro-industrial sectors among the top five potential new sectors with higher export opportunities. However, given the large share of agriculture in employment in many of the Asia-Pacific CSN, it is important to consider the opportunities of diversification that have backward linkages with the existing agricultural sector in these countries. New agro-industrial sectors could increase the demand for agricultural produce and create incentives for increasing productivity in that sector (box 4.3).

Figure 4.26 shows the result of the analysis of the top potential new sectors in agriculture and agro-industries with higher export opportunities. These results suggest that cereal, flour, starch, and milk preparations and products have made it into the top five opportunities in two thirds of the Asia-Pacific CSN, and they account for the top opportunities in Afghanistan (52%), American Samoa (47%), Armenia (54%), Azerbaijan (55%), Cambodia (32%), French Polynesia (100%), Guam (81%), Kazakhstan (44%), Myanmar (67%), Nepal (32%), New Caledonia (59%), Niue (88%), Papua New Guinea (57%), Tajikistan (31%), Timor-Leste (52%), Tonga (100%) and Vanuatu (75%).

In the sector, diversification of miscellaneous edible

### Box 4.3. Diversification into agriculture and agro-industries to promote increased agricultural productivity

In principle, there are two ways to promote increased agricultural productivity: through —labour push and —labour pull strategies. Labour push strategy points to the following chain of dynamic events: improvements in agricultural technology lessen labour intensity but increase incomes in that sector; higher incomes in agriculture change consumption patterns of the workers who remain in that sector and increase their demand for manufactured goods; this, in turn, increases labour demand in manufacturing and helps absorb surplus labour in agriculture and further increases agricultural productivity.<sup>a</sup> The second way to improve agricultural productivity is the labour pull strategy: expansion of the manufacturing sector and improvements in manufacturing technology increase wages, pulling labour into that sector and reducing labour surplus in agriculture, which, if sustained, eventually would trigger increases in agricultural productivity. The labour pull channel can then be viewed as a roundabout way of increasing agricultural productivity by first promoting increases in manufacturing productivity.<sup>b</sup>

There is no consensus on which is the best method: labour push or labour pull. Some empirical evidence, based on data from 12 industrialized economies that have completed their structural transformation out of agriculture, suggests that both channels play a role that varies over time and with a country's stage in structural transformation.<sup>c</sup> Results also suggest that there is a “first pull, then push” tendency indicating that the “pull” channel mattered more for countries in their early stages of structural transformation – when the share of employment in agriculture was more than 40%. This finding has great implications for the choice of strategy for agricultural development in Asia-Pacific CSN given that in many of these economies the proportion of workers engaged in agriculture is above the suggested threshold of 40%. Similar analysis conducted by ESCAP, focusing on Asia-Pacific countries, confirms that both pull and push channels play a role.<sup>d</sup>

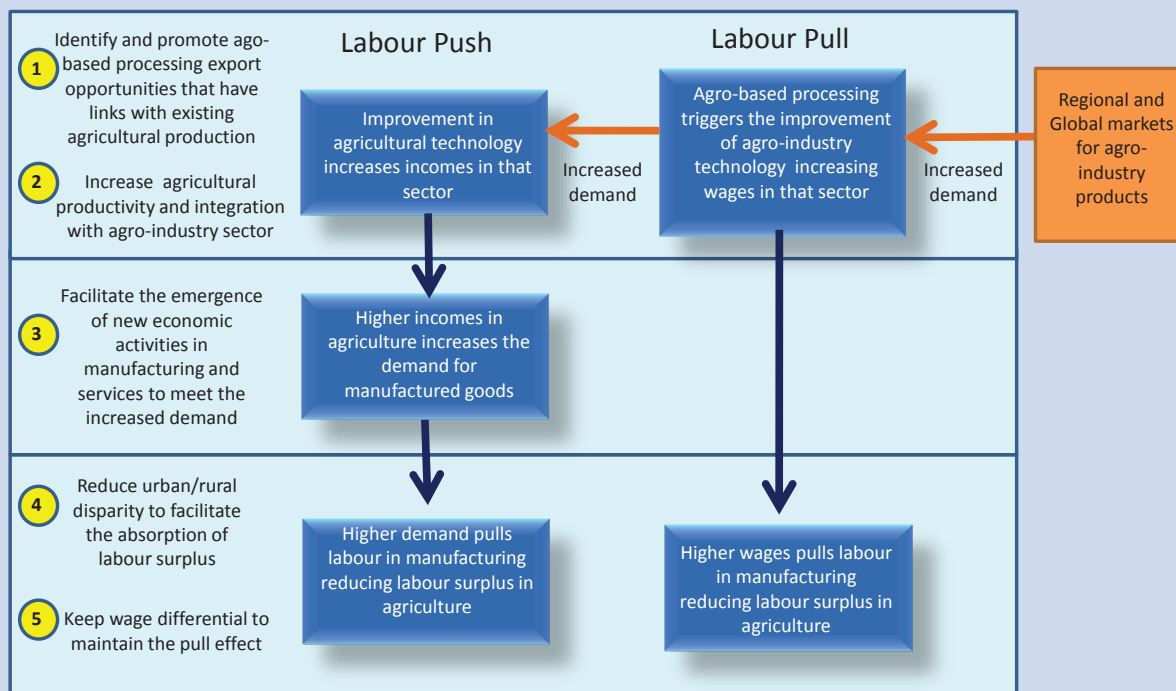
If the interlinkages between agriculture and manufacturing, especially agro-based processing activities, and the role of demand are taken into consideration, both pull and push factors could be put to work in promoting balanced and inclusive development in Asia-Pacific CSN. Policies that facilitate the emergence of productive economic activities in dynamic industries and services that use agricultural products as inputs, and that at the same time raise productivity in both agriculture and manufacturing, combine the benefits of pull and push channels and have the potential for creating a virtuous cycle. The integrated strategy for balanced development, illustrated below, has been advocated time and again by ESCAP.<sup>e</sup>

That strategy is composed of five steps. First, the Government and the private sector should identify and promote export opportunities in agro-based processing activities that have links with existing agricultural production in order to create demand and encourage investment in agriculture.

The second step is to increase agricultural productivity to meet the demand created. That would require dissemination of sustainable agricultural technologies and best practices and investment in infrastructure to reduce transaction and transport costs, minimize post-harvest loss, provide storage/refrigeration and better marketing facilities. Higher productivity in agriculture raises rural incomes and shifts consumption patterns towards manufactured goods. The third step is to facilitate the emergence of new economic activities to meet that demand. It requires an environment conducive to business. This may also require some protection conditional on eventual graduation into export markets and macroeconomic interventions that promote tradables, such as exchange rate policies. The fourth step is to address rural-urban disparities to facilitate the transition of workers out of agriculture. The higher are the disparities, the lower will be the capability of people to make the transition and the lower their prospects of finding jobs outside of agriculture. The fifth step is to tackle the challenge of surplus labour in subsistence agriculture, which holds the wage rate in manufacturing at a lower level, reducing the “pull effect”. Wage policies are, therefore, needed to keep the wage rates in manufacturing from falling behind productivity gains. That would afford the additional benefit of maintaining the domestic demand at a pace in line with the increases in productivity, thus creating the condition for the emergence of a more diversified economy.

**Box 4.3. (continued)**

**Figure A. Integrated strategy for balanced development**



Source: ESCAP.

<sup>a</sup> The labour push strategy may be traced back to the classical four-stages theory presented by Adam Smith and by Anne-Robert-Jacques Turgot in the eighteenth century. Following that tradition, in the 1960s W.W. Rostow proposed that increases in agricultural productivity are a necessary condition for economic take-off.

<sup>b</sup> Famous examples of models that follow the labour pull tradition include the dual economy model presented by W. Arthur Lewis in the 1950s and the two-sector model proposed by Harris and Todaro in the 1970s.

<sup>c</sup> Alvarez-Cuadrado and Poschke (2011).

<sup>d</sup> ESCAP (2014b)

<sup>e</sup> See ECAFE (1965; 1970).

preparations presents a sizeable share of export opportunities in Afghanistan (14%), Armenia (12%), Azerbaijan (27%), Bangladesh (15%), Lao People’s Democratic Republic (17%), Nepal (17%), Northern Mariana Islands (100%), Papua New Guinea (31%), Samoa (61%), Turkmenistan (21%) and Vanuatu (25%).

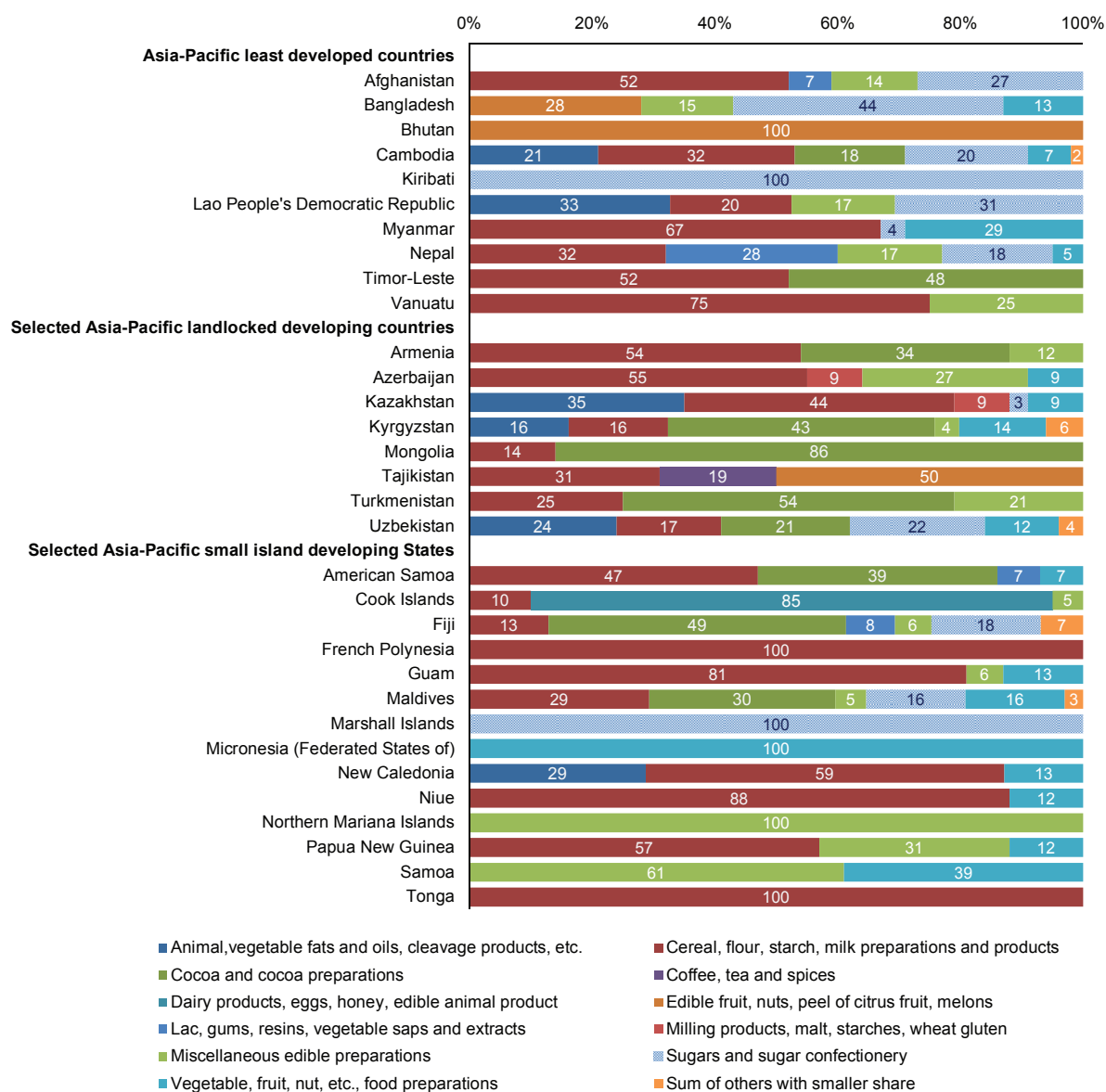
Other potential new agricultural and agro-industrial sectors in Asia-Pacific CSN include: animal, vegetable fats and oils, cleavage products; coffee, tea and spices; dairy products, eggs, honey, edible animal products; edible fruit, nuts, peel of citrus fruit, melons; gums, resins, vegetable saps and extracts; milling products, malt, starches, wheat gluten; sugars and sugar confectionery; and vegetable, fruit, nut food preparations.

**TOP EXPORT MARKETS FOR DIVERSIFICATION OF ASIA-PACIFIC COUNTRIES WITH SPECIAL NEEDS**

The top export markets for the potential new products of the Asia-Pacific CSN are presented in table 4.3. The result suggests that trade links with the markets in Europe and North America remain very important. However, the Asia-Pacific region also offers about a quarter of the export opportunities for these potential new sectors. Therefore, intraregional integration and cooperation in Asia and the Pacific is critical for fostering diversification among the Asia-Pacific CSN.

Table 4.3 shows the subregional percentage share of export opportunities for potential new products



**Figure 4. 26. Potential new sectors for diversification in agriculture and agro-industries with higher share of export opportunities, Asia-Pacific countries with special needs, 2013**


Source: ESCAP, based on data from UN Comtrade database.

of Asia-Pacific CSN. In the majority of these countries and areas, those in the East Asian and South-East Asian subregions account for more than 70% of the export opportunities.

## IMPORT REPLACEMENT OPPORTUNITIES

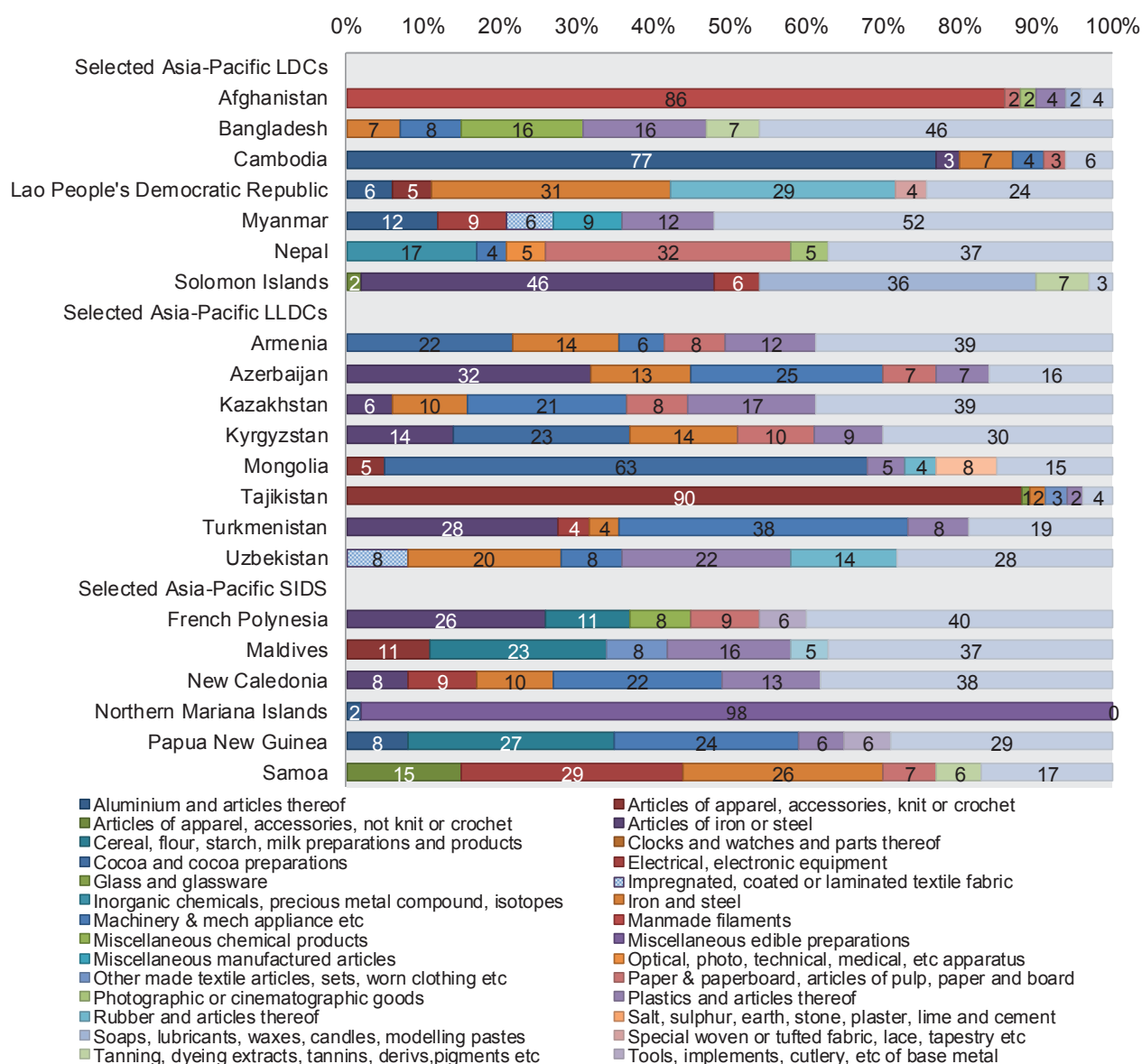
In addition to export opportunities, the potential for import replacement of new products may also drive the investment decision of entrepreneurs and firms. This effect is more important in more populous countries,

such as Bangladesh and Kazakhstan, but would not be an option for the majority of Asia-Pacific small island developing States given the small size of their populations.

Figure 4.27 presents the top five potential new sectors with import replacement opportunities higher than \$500,000. The list by country is very heterogeneous. Some sectors have remarkably high shares, such as man-made filaments in Afghanistan (86%); the sectors of furniture, lighting, signs and prefabricated

**Table 4.3. Global and regional export markets for potential new products of Asia-Pacific countries with special needs, 2013**

Country/area	Top global export markets (percentage)			Share of regional export markets (percentage)				
	Europe	Asia-Pacific	North America	East Asia	South-East Asia	South Asia	Central Asia	Pacific
<b>Least developed countries</b>								
Afghanistan	50	25	11	36	44	12	4	4
Bangladesh	48	24	14	46	38	8	4	4
Bhutan	34	23	24	52	30	9	4	4
Cambodia	48	23	16	39	39	13	4	4
Kiribati	45	27	7	48	41	7	4	..
Lao People's Democratic Republic	45	26	19	50	35	12	..	4
Myanmar	48	25	15	48	32	12	4	4
Nepal	45	26	15	50	35	12	4	..
Solomon Islands	39	21	28	33	48	14	..	5
Timor-Leste	59	13	18	54	31	8	..	8
Tuvalu	41	30	14	73	17	7	..	3
Vanuatu	43	28	14	57	29	11	..	4
<b>Landlocked developing countries</b>								
Armenia	45	28	13	46	36	11	4	4
Azerbaijan	46	24	17	42	42	13	4	..
Kazakhstan	46	28	13	46	36	11	4	4
Kyrgyzstan	43	24	18	38	42	13	4	4
Mongolia	51	22	16	41	32	14	5	9
Tajikistan	45	27	11	52	30	11	4	4
Turkmenistan	43	27	12	48	30	11	7	4
Uzbekistan	49	22	20	45	36	14	5	..
<b>Small island developing States</b>								
American Samoa	44	21	21	38	38	14	5	5
Cook Islands	42	28	17	57	29	7	4	4
Fiji	43	29	15	52	31	10	3	3
French Polynesia	44	27	20	41	37	15	4	4
Guam	50	31	11	68	23	6	..	3
Maldives	45	29	16	52	31	10	3	3
Marshall Islands	57	36	2	92	8	..	..	..
Micronesia (Federated States of)	40	42	4	76	17	2	5	..
Nauru	54	29	11	86	14	..	..	..
New Caledonia	45	29	15	55	28	10	3	3
Niue	45	29	13	52	28	17	3	..
Northern Mariana Islands	38	33	17	21	55	15	6	3
Palau	50	29	1	..	48	38	14	..
Papua New Guinea	48	27	11	44	33	15	4	4
Samoa	42	28	16	64	21	7	4	4
Tonga	52	25	8	36	36	20	8	..

**Figure 4.27. Potential new sectors for diversification with higher share of import replacement opportunities, Asia-Pacific CSN, 2013**


Source: ESCAP, based on data from COMTRADE.

Note: Potential new sectors with higher than \$500 thousand of import replacement opportunity.

buildings in Bhutan (100%); aluminium and articles made thereof in Cambodia (77%); cocoa and cocoa preparations in Mongolia (63%); miscellaneous edible preparations in Northern Mariana Islands (96%); articles made of iron or steel in Solomon Islands (46%); and articles of apparel, accessories, knit or crochet in Tajikistan (90%). Other sectors that are part of the top five import replacement opportunities in many countries are plastics, paper, iron and steel, and machinery and mechanical appliances.

## POLICY RECOMMENDATIONS<sup>24</sup>

As discussed in the previous sections of this report, economic diversification requires the adoption of strategic policies by Asia-Pacific CSN. The implementation of such strategic diversification involves the selective promotion of new economic activities over traditional ones through the use of targeted industrial, infrastructural, trade, investment and private sector development policies. Analysis of empirical evidence, as presented in this report, can

be used in the process of identification of the strategic direction of diversification. Information similar to the list of potential products presented in the annex could serve as a public good that could be made available to the private sector. It would reduce the cost of discovery of potential successful new economic activities by informing entrepreneurs of the new products that require productive capacities similar to those already available in the country.

Also critical is an environment conducive to private sector activities that allow for an easier transition to a more diversified economy. In this process, it is essential to strengthen national institutions and good governance in order to provide a stable environment for evolution of the economy, the curbing of cronyism and the promotion of development goals.

There is no “one-size-fits-all” set of policies that could address the specific binding constraints that hinder private sector investments in new economic activities in each of the 36 Asia-Pacific CSN. Tailored policy advice for each of those countries would entail fact-based diagnosis and context-specific policy design, identifying reform priorities based on expected impact, as well as considerations on potentially adverse second-best interactions between different policy reforms, which are outside of the scope of this report.

However, some general recommendations are presented in this section to facilitate countries’ efforts to foster diversification by improving the business environment and supporting entrepreneurship and to nudge the private sector towards new economic activities producing more complex products.

### **Stable investment-friendly and competitive macroeconomic policy framework**

Overall, the exchange rate plays a critical role in promoting tradables and the emergence of new economic sectors. The main set of policies is to neutralize the tendency towards appreciation and to maintain a competitive exchange rate. That strategy is compatible with a floating but managed exchange rate regime. Two basic instruments that are used by many countries, although not openly admitted, are: (a) maintaining the domestic interest rate at a low level; and (b) buying international reserve currencies. Commodity-dependent countries that face the threat of the so-called Dutch disease could levy tax on exports of the primary commodities that cause the tendency towards appreciation of the currency and the creation of an international fund (sovereign wealth fund) to neutralize the potential re-appreciation of the currency due to the inflow of tax revenue. In situations

of extreme pressure on the exchange rate, countries could also consider imposing temporary controls on capital inflows (see Bresser-Pereira, 2010).

Other monetary policies also play a supportive role in increasing productive investments in new sectors. Favourable credit conditions for productive sectors and for the promotion of new economic activities in particular are helpful for job creation and diversification. Macroeconomic stability, including moderate and stable inflation, and sustainable domestic and external imbalances also create an environment conducive to private sector investment in diversifying the economy. In this connection, when facing domestic or external shocks, countries need to consider using the full scope of appropriate countercyclical policies to maintain economic and financial stability and to avoid sudden economic fluctuations.

### **Industrial, trade and investment policy policies**

A stable investment-friendly and competitive macroeconomic environment will facilitate economic diversification but will not automatically result in diversification towards the economic sectors that have higher potential for promoting development. To accomplish that, after setting the strategic direction for diversification with the identification of potential new sectors to promote, the Government should establish a process designed to identify areas where policy actions are most likely to make a difference — a process whereby the Government and the private sector jointly come up with the required supportive policies, incentive structure and institutional arrangement to ensure the flow of private investment in the identified niche (Rodrik, 2004; Hausmann and Rodrik, 2006).

Therefore, implementation of such strategic diversification requires an industrial policy – the selective promotion of certain economic activities over others. In this case, this means the promotion of new economic activities/products that are more complex and that allow for further diversification in the future. Such a policy has to be much sharper than most current policies that provide incentives for any new investment regardless of its potential to spawn new economic activities.

Active public intervention is required with the objective to support infant industry, create the necessary complementary productive infrastructure, including industrial estates and economic zones, and promote marketing and export market development expand participation in regional and global value chains, attract foreign investment while ensuring meaningful linkages and spillovers into the local economy, and

other promotional measures that are covered under industrial, trade and investment policies.

### **Infant industry**

An important aspect of industrial policy is the infant industry protection afforded to domestic industry in the early stages of development, which was extensively employed as a policy tool by most developed countries and newly industrialized countries in the early stages of their development.<sup>25</sup> Asia-Pacific CSN, as is the case with other developing countries, have every right to use infant industry protection to diversify their economies into new areas and provide fledgling productive capacities with some space to grow. Productive capabilities are also acquired through the process of learning by doing; therefore, it takes time for the private sector to raise productivity of new economic activities to international levels. In such cases, new economic activities will need to be nurtured until firms are ready to compete with those in countries with higher productive capacity. Support is also needed to foster the growth of the scale and scope and the ability of infant industries to partner with global enterprises and with production networks.

As in any entrepreneurial venture, some of these new activities may fail due to lack of demand or higher than expected costs of production, and when the resulting profits do not justify the investment. Ideally, there should be clear benchmarks for success so that there is a sunset time frame for infant industry protection. Ultimately, markets are in better position than the Government to establish such benchmarks. In that connection, a pragmatic measure of success is progress in foreign markets – the strategy followed by East Asian countries during their industrialization development. In the case of import-substituting products, the Government needs a sunset plan for the removal of protection. An important element is the timeframe for assessment of performance. Different economic activities require different periods in order to come to fruition. The greater is the jump in complexity from existing to new products, the longer it will take the private sector to acquire the required capabilities.

### **Infrastructure development**

Policies related to the infrastructure have to be selective in terms of the economic activities that they will promote. When a new road is built, it will inevitably benefit some activities and not others. Those that can use the new road will benefit while those that are not connected to it will not. Therefore, infrastructure policies should not be generic; instead, they should be focused on directly facilitating tradable production, in agriculture and industry, and in facilitating the shift of the country's product-mix towards more complex economic activities.

In some Asia-Pacific CSN, development of the basic infrastructure of transport, telecommunications and energy is still required and should be provided before and in support of the more targeted infrastructure projects to promote the sectors selected for strategic diversification. However, in commodity-rich countries with higher income, a construction boom should be avoided.

### **Fiscal policy**

Fiscal policy is an important instrument to promote diversification. Tax incentives for first movers into new targeted sectors create incentives for private sector investment. The Government's procurement expenditure can also contribute significantly towards achieving the goal of economic diversification. In many countries, the Government spends substantial amounts on procurement. As emphasized in the Survey for 2013, government procurement expenses, because of their quantitative importance, have the potential to leverage the private sector towards socially beneficial sectors. By buying from companies that produce new and more complex products, the Government can support their expansion.

### **Trade**

Asia-Pacific CSN should continuously explore new markets and formulate policies that assist in expanding the participation and increasing technological content in regional and global value chains.

In order to diversify markets and products, Asia-Pacific CSN need to explore intra-regional initiatives through regional trade agreements (RTAs). RTAs can be important tool for market diversification as it can be used to promote trade in goods through dismantling tariffs and NTBs, attract investments, promote trade in services and reduce trade transaction cost through trade facilitation measures. This would also assist in reducing supply side constraints which will ensure development of regional value chains, promote intra-regional investment and technology flows.

### **Foreign direct investment**

Another way to facilitate strategic diversification is through the attraction of foreign investment while ensuring meaningful linkages and spillovers into the local economy and local enterprises (Shapiro, 2007). Multinationals bring in new productive capacities for the country but that does not mean that such productive capacities would naturally spread throughout the economy. They may just stay within the limits of the multinational – with no spillover. If the company that comes into the country requires parts and components that the domestic economy is not able to provide – which require productive capacities that the



country does not have available – the new plant will not create opportunities for diversification. Countries should seek FDI not only for the sake of more investment but also to use FDI to promote diversification of the economy. For any FDI that comes into the country, there should be a clear strategy on how to use it for domestic production and for promoting further diversification.

### Domestic resource mobilization

It is vital for Asia-Pacific CSN to have access to a variety of financial services and products in support of private investment in new economic activities. This requires a diversified, well-regulated and inclusive financial system that promotes savings and channels them into productive investments.

The domestic supply of long-term capital also needs to be increased by developing domestic capital markets, venture capital funds, term-lending institutions and industrial development banks. It is important to facilitate the development of domestic finance sources to avoid the tendency towards exchange appreciation due to the inflow of foreign savings. On the revenue side, policies need to be focused on broadening the tax base and introducing direct taxes. In commodity boom countries, that strategy will reduce excessive dependence on resource revenue.

There is scope for reform of public finance. For Asia-Pacific CSN, there is substantial scope for domestic resource mobilization. For example, in 2011, on average, the tax-to-GDP ratio in Asia-Pacific least developed countries was only 10.4% of GDP for central government revenues, compared with 17.1% of GDP in Latin America and the Caribbean and 16.3% in sub-Saharan Africa. Subject to broadening of the tax base and strengthening tax administrations to curb tax evasion and avoidance, Asia-Pacific CSN can mobilize additional tax revenues worth between 4% and 5% of GDP.

### Global partnership to support development of countries with special needs<sup>26</sup>

Collectively, there is a need for stepping up global partnerships to support CSN development and for bringing about fresh impetus for advancing implementation of the international action programmes for CSN.

In that regard, there is need for action on multiple fronts. On 7 December 2013, the adoption of the so-called Bali Package at the Ninth Ministerial Conference of WTO reaffirmed the commitment of WTO member countries to duty-free quota-free market access for least developed countries without inducing greater flexibility in

its coverage and rules of origin. In addition to advanced countries, the expansion of emerging markets in terms of their duty-free quota-free schemes would be useful. In moving forward, there is a need to consider promoting simplification and harmonization of rules of origin across all schemes (reciprocal and non-reciprocal preferential rules of origin) that grant preferential access to least developed countries alike. Only with such harmonized rules, which move from bilateral to “culmination of value added” (allowing producers to export one product under the same value-added condition in all markets), least developed country producers could have the opportunity to better integrate and participate in global value chains, exploit potential economies of scale, substituting among markets in accordance with changes in demand and achieve greater stability in earnings.

At the same time, regional aid for trade initiatives should be focused more on projects covering trade infrastructure and other aid-for-trade projects. In addition, it is desirable to give more attention to aid-for-trade projects demanded by CSN (rather than those driven by donors). Technical assistance will help CSN meet the standards and regulatory requirements of developed countries. Current regional trade agreement initiatives, in particular the proposed trans-Pacific partnership, the regional comprehensive economic partnership and the free trade area of the Asia-Pacific, do not include many countries with special needs. Yet, when such countries are included, there is a lack of special preferential treatment – ASEAN has none, for example.

ODA, even though smaller than private foreign flows such as FDI and remittances, has the power to catalyse development. If developed countries are to follow up on their commitments, and there is a focused strategy to strengthen and recalibrate ODA flows to enhance their support for physical and social infrastructure development, the prospects and opportunities made possible by ODA inflows can effectively provide a boost to bridge the resource gap for the development of Asia-Pacific CSN. However, the financing of graduation gaps will mean going beyond ODA. Countries could explore alternative sources of financing by harnessing private investment through an enabling policy environment and appropriate incentives to attract sufficient long-term private investment and remittances, the inflow of which totalled \$23 billion in Asia-Pacific least developed countries in 2013. In addition to recognizing climate finance as an integral part of development finance, adequate fiscal provision for addressing climate adaptation and mitigation will reinforce development.

## Endnotes

- 1 This chapter is an extension of the analysis presented in ESCAP (2014a).
- 2 A much-quoted work is the 2003 paper by Imbs and Wacziarg (2003), which shows that economies become more diversified as incomes increase. See also IMF (2014).
- 3 This empirical regularity is a robust feature of the data. It has been supported by subsequent work using disaggregated export data. See, for example, Klinger and Lederman (2004); Cadot, Carrere and Strauss-Khan (2011).
- 4 This empirical regularity is also presented and discussed in Hausmann and Hidalgo (2011) using different trade classifications.
- 5 Trade data are used as a proxy for products; thus, in reality, the product space shows the likelihood of products being jointly exported.
- 6 For further information, see 2014 BP statistical review of world energy.
- 7 For details, see OPEC 2013 Annual Statistical Bulletin.
- 8 For further information, see “EU-Viet Nam economic and trade relations”, 2012, Directorate-General for External Policies, European Parliament.
- 9 World Bank, World Integrated Trade Solution. Available from <http://wits.worldbank.org/countrysnapshot/KAZ> (accessed 25 March 2015).
- 10 Statement by the Prime Minister of Kazakhstan, reflecting on the first five years of the “Industrial-Innovative Development Programme”. Available from [www.astanatimes.com/2014/11/nazarbayev-reflects-first-five-years-industrial-innovative-development-programme](http://www.astanatimes.com/2014/11/nazarbayev-reflects-first-five-years-industrial-innovative-development-programme).
- 11 Observatory of Economic Complexity. Available from [https://atlas.media.mit.edu/en/explore/tree\\_map/hs/export/vnm/all/show/2012/](https://atlas.media.mit.edu/en/explore/tree_map/hs/export/vnm/all/show/2012/) (accessed 25 March 2015).
- 12 In the mid-1980s, one of the key instruments for export promotion was a subsidy known as a “Certificado de Ahorro Tributario” (CAT). This certificate was an asset tradable in the financial market, which could be used as a credit at tax payment time. Exporters would be issued a CAT worth 15% of the gross value whenever they shipped a new product to a new market. CATs lasted for nearly a decade, until the late-1990s, when it became clear that they were too expensive and a major source of corruption. Nevertheless, in other places where there has been little room for entrepreneurship and the initial risks associated with entry into export activities would be large, something like this incentive could play a role.
- 13 In the period 2006-2010, FDI inflows had an annual growth of 27.8%, and 54% of FDI inflows were to enterprises operating in the EPZs. Exports of goods and services from the EPZs accounted for more than 50% of the country’s total exports. (Gamboa and Calderon, 2011).
- 14 The Costa Rican Investment Promotion Agency (CINDE) is a private and non-profit organization funded in 1982 and is responsible for the attraction of FDI into Costa Rica. Available from <http://www.cinde.org/en/cinde>.
- 15 For details, see PROCOMER: Promotora del Comercio Exterior de Costa Rica. Balance de las Zonas Francas: beneficio neto del regimen para Costa Rica 2006-2010, August 2011 (in Spanish). Available from [www.procomer.com/contenido/descargables/balance-zf/balance-zonas-francas.pdf](http://www.procomer.com/contenido/descargables/balance-zf/balance-zonas-francas.pdf).
- 16 Ibid.
- 17 For further information, see Global Investment Center (2013).
- 18 For details, see Pavlova (2011).
- 19 Information obtained from Zemol and Cervantes (2009).
- 20 Namely coffee, bananas, meat and sugar for about 65% of its exports. See [www.oecd.org/countries/costarica/E-book%20FDI%20to%20Costa%20Rica.pdf](http://www.oecd.org/countries/costarica/E-book%20FDI%20to%20Costa%20Rica.pdf).
- 21 Based on data from World Bank Commodity Price Data. Available from <http://go.worldbank.org/4ROCCIEQ50> (accessed 7 October 2014). Values for other commodity indices are energy (15.1%) and food (9.2%).
- 22 The model is based on Pasinetti (1993), as described in the annex to the present publication.

- <sup>23</sup> Includes machinery and mechanical appliances, electrical equipment and parts, sound recorders and reproducers, television image and sound recorders and reproducers, and parts and accessories for such articles.
- <sup>24</sup> Based on ESCAP (2014) and ESCAP (2011).
- <sup>25</sup> For example, see Wade (2003); Chang (2002); and Reinert (2007).
- <sup>26</sup> From keynote address by Ms. Shamshad Akhtar at High-level Exchange on Implementation of the Istanbul Programme of Action: Challenges and Way Forward for Asia-Pacific LDCs: “Asia Pacific LDCs at the Mid-Point: Achievements, Challenges and Way Forward”.

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# ANNEX – TECHNICAL NOTES

Opportunities for diversification in Asian landlocked developing countries are identified in this report following the methodology described in Freire (2013), by identifying products that are more complex and closer in the product space to the existing product-mix in the respective countries.

## **Product complexity**

To measure product complexity, the method of reflections proposed by Hidalgo and Hausmann (2009) with modifications by Freire (2011; 2013) is used. In that method, a bipartite network of countries and products that they produce is constructed, and a generalized measure of diversification and ubiquity is iteratively calculated as follows:

$$K_{c,N} = \frac{1}{K_{c,0}} \sum_p M_{cp} K_{p,N-1} \quad (\text{Generalized measure of diversification})$$

$$K_{p,N} = \frac{1}{K_{p,0}} \sum_c M_{cp} K_{c,N-1} \quad (\text{Generalized measure of ubiquity})$$

where  $M_{cp}$  is 1 if country  $c$  makes product  $p$  and 0 otherwise,  $K_{c,0}$  is the number of products produced by country  $c$  and  $K_{p,0}$  is the number of countries that make product  $p$ .

The measure of product complexity (*PCOMP*) is taken as the normalized value of the  $K_p$  value of the 5<sup>th</sup> iteration of the method of reflections:

$$PCOMP = \frac{K_{p5} - \langle K_{p5} \rangle}{sd(K_{p5})}$$

where  $\langle K_{p5} \rangle$  is the mean and  $sd(K_{p5})$  is the standard deviation of the distribution of  $K_{p5}$ . The  $K_{p5}$  is used because such interactive analysis is carried out until no further information is obtainable from this method, which depends on the structure of the network and for the dataset used happens on the 5<sup>th</sup> iteration.

## **Product space map**

The measure of proximity between products A and B ( $\Phi_{AB}$ ) in the product space is calculated using a method similar to that proposed by Hidalgo and others (2007), as the minimum value between the conditional probability  $P(A|B)$  of a country producing A given that it produces B and the conditional probability  $P(B|A)$  of a country producing B given that it produces A:

$$\Phi_{AB} = \Phi_{BA} = \min(P(A|B), P(B|A))$$



The proximity between two products, therefore, ranges from 0%, in the case in which no country produces both products, to 100% in the case in which all countries that produce one good also produce the other. This report adopted the threshold of 85% proximity to an existing product of a country's product mix to identify potential new products for diversification.

**Export opportunity**

The report also contains analyses of the price incentives that entrepreneurs face in choosing between different potential new economic activities, by estimating the potential growth of exports of different products based on the index proposed by Freire (2013). The index is calculated as follows:

$$\sum_i G_{isd}^{t0,t1} \times M^{2013}, \text{ where } G_{isd}^{t0,t1} = \frac{m_{id}^{t1}}{M^{t1}} - \frac{m_{id}^{t0}}{M^{t0}} \text{ if } \Phi_{ij} > 80\% \text{ for some product } j \text{ in the country's existing}$$

product mix and  $\frac{m_{id}^{t1}}{M^{t1}} > \frac{m_{id}^{t0}}{M^{t0}}$ , and zero otherwise.

Where s is the source country, d is the destination country,  $G_{isd}^{t0,t1}$  is the growth in the share of imports m of industry i in country d in between t0 (2012) and t1 (2013).  $M^{2013}$  is the total imports by all countries

in all products in year 2013, and  $\frac{m_{id}^{t1}}{M^{t1}}$  is the share of imports of product i by country d in total world's imports of all products in the period t1.

The report uses, as a proxy for country's production, disaggregated trade data from the UN Comtrade database using Harmonized System code (HS 2002) at the six-digit level, further disaggregated by quantity unit code and by unit price range, covering 221 economies for the year 2013, following the methodology described in Freire (2013).

**Model of trade and economic diversification**

The model is based on work by Pasinetti (1993). An economy is composed by an ensemble of m production sectors, each making a specific and highly differentiated consumption good, which is produced by means of labour alone. One household sector provides labour to the production sectors and consumes the commodities that those sectors produce. These commodities could be either goods or services. Each individual in the population is engaged in the production of a single commodity and obtains through exchange the commodities that she or he consumes. The unit of labour is remunerated by a wage rate. The labour productivity in each sector is represented by a labour coefficient (l), and the consumption per capita of each commodity is portrayed by a consumption coefficient (c).

The relationship between labour and consumption coefficients, and prices and quantities is given by a production scheme according to Leontief's closed model (1973), consisting of two systems. The physical quantity system is provided by:

$$\begin{bmatrix} 1 & 0 & \dots & 0 & -c_1 \\ 0 & 1 & \dots & 0 & -c_2 \\ \vdots & \vdots & \ddots & \vdots & \vdots \\ 0 & 0 & \dots & 1 & -c_m \\ -l_1 & -l_2 & \dots & -l_m & 1 \end{bmatrix} \begin{bmatrix} q_1 \\ q_2 \\ \vdots \\ q_m \\ 1 \end{bmatrix} = \begin{bmatrix} 0 \\ 0 \\ \vdots \\ 0 \\ 0 \end{bmatrix} \tag{1}$$

while the price system is given by (2), setting the wage w = 1, which means that prices are represented in terms of wage rates:

$$\begin{bmatrix} 1 & 0 & \dots & 0 & -l_1 \\ 0 & 1 & \dots & 0 & -l_2 \\ \vdots & \vdots & \ddots & \vdots & \vdots \\ 0 & 0 & \dots & 1 & -l_m \\ -c_1 & -c_2 & \dots & -c_m & 1 \end{bmatrix} \begin{bmatrix} p_1 \\ p_2 \\ \vdots \\ p_m \\ 1 \end{bmatrix} = \begin{bmatrix} 0 \\ 0 \\ \vdots \\ 0 \\ 0 \end{bmatrix} \quad (2)$$

All magnitudes that appear in (1) and (2) are function of time, but the notation was suppressed for simplification.

The necessary condition that has to be satisfied in order that there are non-trivial solutions for (1) and (2) is that the determinant of the coefficient matrix is zero. That condition is the same for both systems and is given by:

$$\sum_{i=1}^m c_i l_i = 1 \quad (3)$$

When the condition is fulfilled, the solution for the physical quantities is:

$$q_i(t) = c_i(t) \quad i=1,2,\dots,m, \quad (4)$$

$$Q_i(t) = c_i(t)N(t) \quad i=1,2,\dots,m, \quad (5)$$

The solution for the price systems, when making the wage explicit, is:

$$p_i(t) = l_i(t)w(t) \quad i=1,2,\dots,m, \quad (6)$$

On the dynamic formulation of the model, the economy changes with: (a) with the exogenous change of consumption patterns, which also change the quantities of the commodities demanded; (b) the exogenous change in labour productivity, which also change the prices of the commodities traded; and (c) the emergence of new sectors.

A country  $x$  would import products from other countries if: (a) the consumption per capita coefficient for that product is positive; (b) the price of domestic production is higher than the importing price, which include trade costs. The model considers different trade costs for each bilateral trade in each sector.

New sectors emerge (diversification) when income reaches a level that triggers consumption of that product.



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A total 36 economies in the Asia-Pacific region are classified as countries with special needs. They comprise least developed countries, landlocked developing countries and small island developing States. These economies are home to more than a quarter of the population of Asia-Pacific developing countries, excluding China and India, but they account for less than one tenth of the GDP of that group.

These economies are diverse in size and stage of socioeconomic development, but they share similar structural constraints. All but three of them are landlocked or small island States, facing remoteness and isolation from international markets. Despite the relatively rapid growth over the past decade, most of these economies have not experienced significant structural change. They remain concentrated on a narrow set of commodities and sectors, with large share of their population engaged in low productive work.

Asia-Pacific countries with special needs have strived to overcome their structural challenges and to achieve the goals agreed in the respective global programmes of action. The least developed countries want to graduate out of that category; the landlocked developing countries want to land-link their economies for rapid growth and development; while the small island developing States aspire to foster sustainable blue ocean economies.

The *Asia-Pacific Countries with Special Needs Development Report 2015* covers these countries in terms of their current social and economic status, how quickly they are progressing towards their agreed goals and aspirations and their policy options to accelerate their progress. It highlights the message that these economies need to build their productive capacities and diversify to overcome their structural challenges. It also maps potential new products and markets that could increase the chances for success in diversification in these economies.

The report calls for a stable investment-friendly and competitive macroeconomic policy framework that promotes the emergence of new economic activities supported by industrial, trade and investment policies to create the necessary complementary productive infrastructure and regulatory framework. It also stresses the need to step up global partnerships to support the development of countries with special needs, which would bring fresh impetus to the implementation of the respective international programmes of action.

